

DOWA HOLDINGS CO., LTD.

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DOWA



Printed in Japan

DOWA HOLDINGS CO., LTD.

Annual Report 2018

For the year ended March 31, 2018

Cover Photo:
Employees of DOWA METANIX CO., LTD.

Corporate Philosophy

DOWA helps to create an affluent, recycling-oriented society through its 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.

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Cautionary Note Regarding Forward-looking Statements

Within this report, present plans, forecasts, strategies, beliefs, and other statements relating to the Company and the Group that are not historical facts are forward-looking statements about future performance. These forward-looking statements are based on assessments by the Company's management using information available at the time of writing, and many assumptions and opinions that form the basis for these statements derive from information that carries significant risk and uncertainty. Due to a variety of factors, actual performance may differ materially from the performance expressed or implied in these statements.

Actual performance may be influenced by such factors as economic conditions, particularly changes in consumer trends and exchange rates, changes in legal and administrative systems, pressure due to competitors' price and product strategies, a reduction in the salability of the Company's existing and new products, interruption of production, infringement of the Company's intellectual property rights, rapid technological innovation, and damaging court rulings in major lawsuits. However, factors that may influence performance are not only limited to those listed here.

In this report, fiscal 2017 represents the year ended March 31, 2018.

Business Model



DOWA's Businesses and SDGs

In September 2015, the United Nations General Assembly adopted the 2030 Agenda for Sustainable Development that includes 17 Sustainable Development Goals (SDGs). For DOWA, which aims to operate resource recycling style businesses, the most relevant of these goals is SDG 12, "Ensure sustainable consumption and production patterns." DOWA views the effective use of resources as an important social issue and strives to make progress in this area.



Corporate History

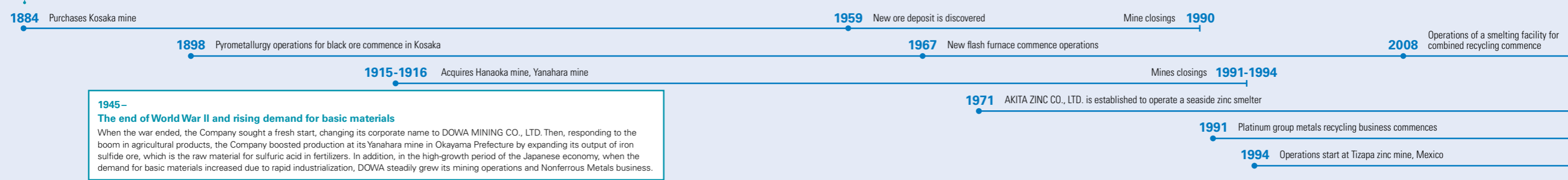


Founding (September 18, 1884)
 The Company was established as a nonferrous metal mining and smelting company through the purchase from the Meiji government of the Kosaka mine in Akita Prefecture, which was Japan's leading silver mine at the time. Just over a decade later, the Company fell into financial crisis due to the depletion of silver ore reserves. Nonetheless, it succeeded in developing a technology for refining a complex sulfide ore, known as "black ore," which helped the Company revive itself.



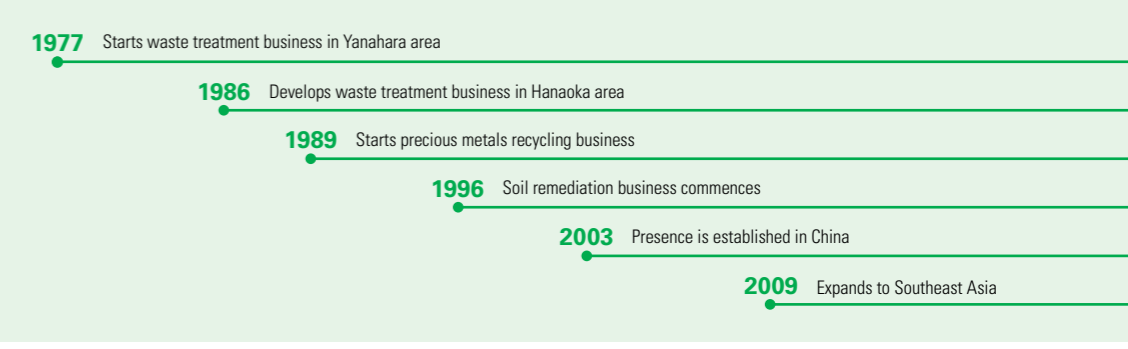
Overall view of the Kosaka mine smelting site (1907)

Nonferrous Metals Business



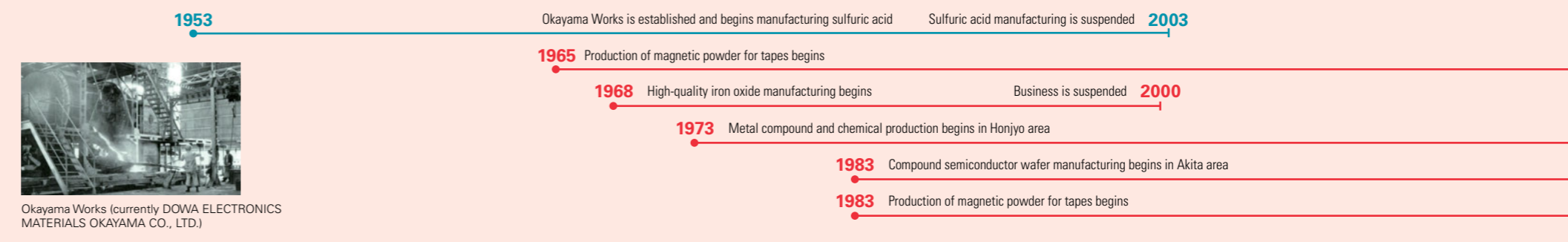
1945- The end of World War II and rising demand for basic materials
 When the war ended, the Company sought a fresh start, changing its corporate name to DOWA MINING CO., LTD. Then, responding to the boom in agricultural products, the Company boosted production at its Yanahara mine in Okayama Prefecture by expanding its output of iron sulfide ore, which is the raw material for sulfuric acid in fertilizers. In addition, in the high-growth period of the Japanese economy, when the demand for basic materials increased due to rapid industrialization, DOWA steadily grew its mining operations and Nonferrous Metals business.

Environmental Management & Recycling Business



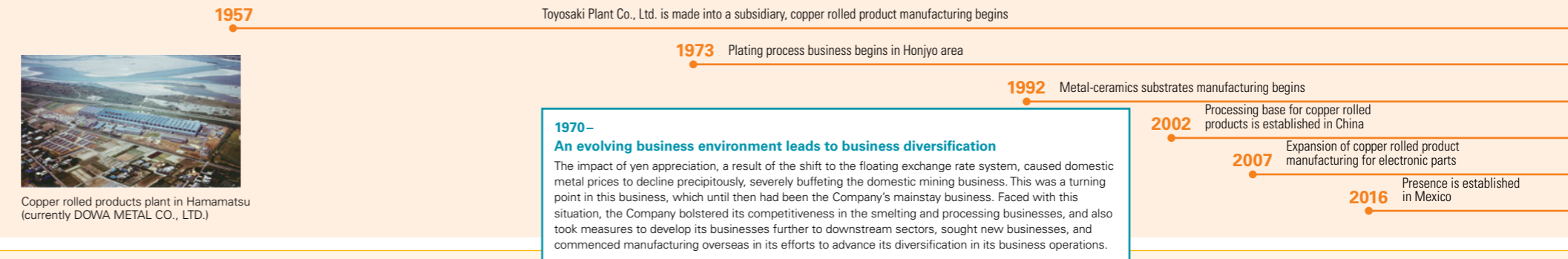
As the Company was a witness to a turning point in Japan's domestic mining industry, it took steps toward business diversification, with the environmental conservation technologies and infrastructure accumulated in the Nonferrous Metals business becoming a cornerstone of the Environmental Management & Recycling business. Together with the utilization of recovered metals and initiatives taken to raise the added value of metals, these efforts have become the source of the Electronic Materials business, the Metal Processing business, and the Heat Treatment business.

Electronic Materials Business



Okayama Works (currently DOWA ELECTRONICS MATERIALS OKAYAMA CO., LTD.)

Metal Processing Business



Copper rolled products plant in Hamamatsu (currently DOWA METAL CO., LTD.)

1970- An evolving business environment leads to business diversification
 The impact of yen appreciation, a result of the shift to the floating exchange rate system, caused domestic metal prices to decline precipitously, severely buffeting the domestic mining business. This was a turning point in this business, which until then had been the Company's mainstay business. Faced with this situation, the Company bolstered its competitiveness in the smelting and processing businesses, and also took measures to develop its businesses further to downstream sectors, sought new businesses, and commenced manufacturing overseas in its efforts to advance its diversification in its business operations.

Heat Treatment Business



Tokyo Heat Treatment Co., Ltd., headquarters and plant

2000- Concentration on core business segments and global development
 Economic activities have become globalized, and corporate activities have undergone dramatic change, such as with the shift of manufacturing sites to locations around the world. The Company has positioned five of its diversified business divisions as core business segments, and together with concentrating its management resources in those divisions, thereby improving its competitiveness, it has been expanding its business areas in and outside of Japan.

Our Five Core Business Segments

Operating Companies and Business Operations

Fiscal 2017 Results*

Environmental Management & Recycling Business

⇨ P.16



DOWA ECO-SYSTEM CO., LTD.

Waste Treatment Business:

Integrated and comprehensive services extending from the collection and transport of municipal and industrial waste to intermediate waste treatment and landfill.

Soil Remediation Business:

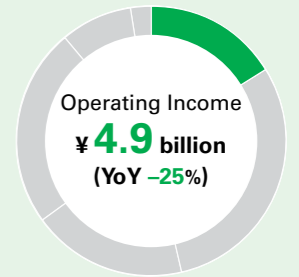
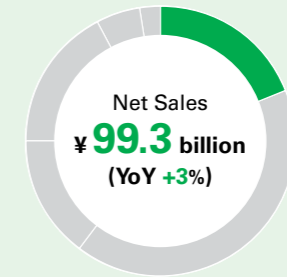
Provision of total support services ranging from soil survey and remediation to monitoring.

Recycling Business:

Recovery of a variety of valuable metals from scrap generated during production processes, consumer electronics, automobiles, and other discarded products.

In waste treatment, soil remediation, and recycling, we offer comprehensive services throughout the process that encompasses transportation to controlled landfilling.

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



Nonferrous Metals Business

⇨ P.18



DOWA METALS & MINING CO., LTD.

Precious Metals and Copper Smelting Business:

One of the few smelting operations worldwide that can recover a wide variety of metals including gold, silver, and copper from recyclable raw materials.

Platinum Metals Smelting Business:

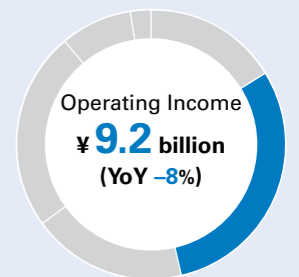
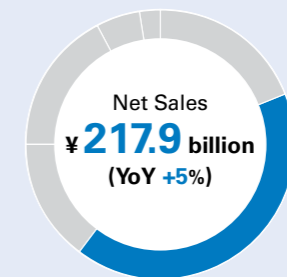
Recycling of platinum and other platinum group metals from used automobile exhaust gas catalyst materials.

Zinc Smelting Business:

Integrated business structure that covers every phase from the mining of raw ore to bullion production and sales of finished goods centered on Akita Zinc, the largest zinc smelting plant in Japan, with an annual output of 200,000 tons.

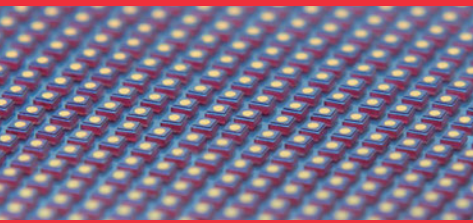
Through unique technologies and a network of multiple smelting facilities, we recover over 20 types of metal from various raw materials.

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



Electronic Materials Business

⇨ P.20



DOWA ELECTRONICS MATERIALS CO., LTD.

Semiconductors Business:

Manufacturers semiconductor materials such as high-purity gallium and indium, compound semiconductor wafers, and high-intensity, high-output LEDs.

Electronic Materials Business:

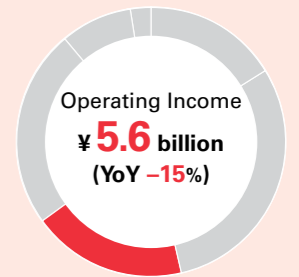
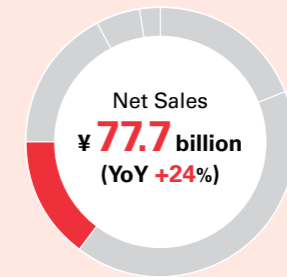
Largest producer of silver powder used in electrode materials for solar panels and manufacturer of copper powders for electronic components and zinc powder and silver oxide for batteries.

Advanced Fine Materials Business:

Boasts a dominant share of the world market for magnetic powder used in data storage tapes for archive, and is a producer of carrier powder for copying machines and ferrite powder used in printers and other equipment.

Collaborating with major electronics companies, we have developed cutting-edge technologies in making unique semiconductor, electronic, and magnetic materials.

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



Metal Processing Business

⇨ P.22



DOWA METALTECH CO., LTD.

Copper Rolled Products Business:

Manufactures copper, brass, and copper alloy strips used in terminals and connectors for automobiles and smartphones; brass rods; and forged brass products.

Electroplating Business:

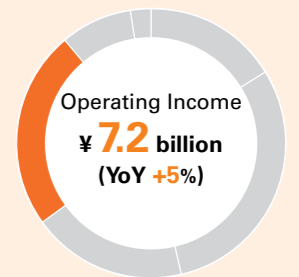
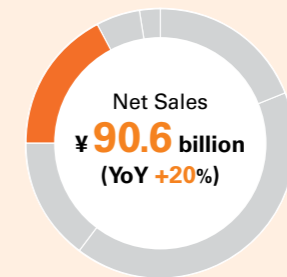
Precious metal electroplating of connectors and switches for automobiles.

Metal-Ceramics Substrates Business:

Manufactures metal-ceramics substrates employed in industrial machinery such as power management devices.

We supply high-performance copper alloys, electroplated products, and metal-ceramics substrates that are mainly used in automobiles and information communication equipment.

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



Heat Treatment Business

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DOWA THERMOTECH CO., LTD.

Industrial Furnaces Business:

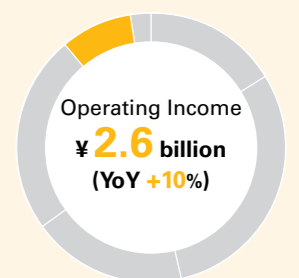
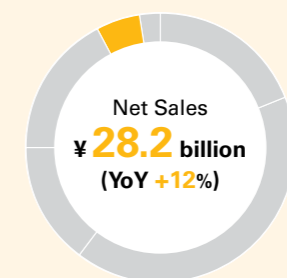
Employs expertise in heat treatment to offer complete services ranging from facilities design to startup and maintenance.

Heat Treatment Processing Business:

Provides surface treatment for metal parts adapted for different applications and used in automobile engines and transmission parts to increase factors including abrasion resistance, fatigue resistance, and seizure resistance.

Heat treatment is an essential process to improve the durability of metallic components. We design and manufacture heat treatment furnaces and offer commercial heat treatment services.

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



* Excluding adjustments.

Message from Management

In addition to expanding its businesses in growth markets such as automobiles, information communication, and environment and energy, the DOWA Group will become more competitive in its existing businesses. By steadily implementing these measures, we will respond to changes in the business environment and continue to achieve further growth.



Akira Sekiguchi

President and
Representative
Director

The Company was founded in 1884 as a mining and smelting company. Since then, the Company has developed its businesses in response to changing times and transformed into a unique recycling-oriented company consisting of five core businesses. Today, guided by the corporate philosophy of the DOWA Group—“DOWA helps to create an affluent, recycling-oriented society through its business activities worldwide.”—we are contributing to the creation of a sustainable society. We will continue to leverage our many years of experience to respond appropriately to the changes in the business environment we face in order to achieve sustained growth and steadily increase corporate value.

Conditions in Fiscal 2017

Business Environment

The Japanese economy followed a gradual recovery track in fiscal 2017, the fiscal year ended March 31, 2018. Meanwhile the global economy continued to expand at a moderate rate and, despite ongoing uncertainty regarding the U.S. administration's policies, the economy remained relatively firm.

Turning to the business environment in which the DOWA Group operates, demand for automotive-related products remained relatively firm both in Japan and overseas. We also note that demand, particularly in East Asia, expanded for electronic components and new energy-related products. As for the commodities markets, prices for metals, including for zinc, copper, and precious metals, rose during the fiscal year under review. With regard to foreign exchange rates, the yen remained in the ¥110–¥115/\$ range until the third quarter of the fiscal year under review and the trend then shifted to yen appreciation.

Financial Performance in Fiscal 2017

Under the aforementioned circumstances, in fiscal 2017, consolidated net sales improved 11% compared with the previous fiscal year, to ¥454.7 billion, while operating income dropped 9%, to ¥30.9 billion. Ordinary income remained steady from the previous year at ¥36.3 billion, as equity-method investment profit rose on lower mineral exploration costs and profit growth at mining companies, and net income attributable to owners of the parent decreased 6%, to ¥24.6 billion.

Financial Condition

As of March 31, 2018, total equity increased ¥19.9 billion compared with the end of the previous fiscal year, to ¥247.7 billion. The balance of interest-bearing debt increased ¥29.9 billion compared with the end of the previous fiscal year, to ¥109.8 billion, as more capital was required for business expansion, including investment in mine development. As a result of these factors, the equity ratio was 52.2%.

Message from Management

Fiscal 2018 Initiatives

The DOWA Group is utilizing the overall strength of its five distinctive core business divisions to build a solid earnings structure that can withstand changes in the operating environment. We are also focused on stabilizing earnings by reducing the risk of losses due to fluctuations in metal prices or foreign exchange rates.

In Midterm Plan 2020, our medium-term business plan that started in April 2018, we aim to strengthen the business base and aggressively invest management resources to achieve further growth by following our basic policies, which are to “expand businesses in growth markets” and “increase competitiveness of existing businesses.” Based on this plan, we target in fiscal 2020 ordinary income of ¥50 billion, operating income of ¥45 billion, ROE of 12% or more, and ROA of 10% or more.

Our targets for fiscal 2018 are as shown below.

Expand Businesses in Growth Markets

Automotive Field

In the Nonferrous Metals business, we plan to increase sales of processed zinc products in the Southeast Asian market by increasing zinc production and making full use of our production facilities in Thailand. We will also strengthen our exhaust catalyst collection for discarded automobiles in Europe and North America and expand metal recovery efforts at Nippon PGM.

In the Metal Processing business, we will work to improve productivity in high-performance copper alloys featuring advanced properties, such as heat resistance, conductivity, and strength, as we aim to meet growing demand for electric vehicles and intelligent vehicles. Furthermore, we will work toward full-scale production at the new electroplating process plant in Mexico and increase production of metal-ceramics substrates.

In the Heat Treatment business, we will increase sales of heat treatment processing facilities to automobile component manufacturers, mainly in Japan. We will also steadily capture growing demand for heat treatment and increase our production capacity both in Japan and overseas.

Information Communication Field

In the Metal Processing business, we aim to meet growing demand for electronic components driven by increasing transmission speeds of smartphones and development of the Internet of Things (IoT). We also intend to promote an increase in sales of high-performance copper alloys in Asia using our facilities in China, Thailand, and Taiwan.

In the Electronic Materials business, we will improve the functionality of conductive or magnetic atomized powder so that it can be used in electrical circuit components for smartphones and other devices.



Processed zinc products



Heat treatment processing facility



High-performance copper alloys

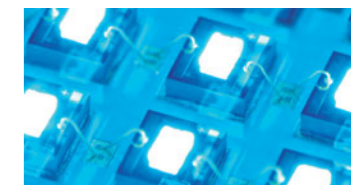
Environment and Energy Field

In the Environmental Management & Recycling business, we will focus on the construction of a new landfill in Indonesia and the expansion of our hazardous waste treatment operations in Thailand in order to further grow our waste treatment business in Southeast Asia.

In the Electronic Materials business, we will develop and increase sales of silver powder used in highly efficient new solar panels.

Medical and Healthcare Field

In the Electronic Materials business, we will improve the properties of new LEDs under development and expand providing sample products in healthcare devices. We will also increase light output and extend the life of deep ultraviolet LEDs for use in sterilization equipment and increase their use in water sterilization devices and equipment.



Deep ultraviolet LEDs

Increase Competitiveness of Existing Businesses

Improve the Responsiveness of Our Businesses in the Japanese Market

In the Environmental Management & Recycling business, we will strengthen the treatment capacity at the low-contaminated PCB waste facilities of ECO-SYSTEM AKITA and ECO-SYSTEM SANYO. In addition, having commenced full-scale operations at newly established Meltec Iwaki, we will expand waste treatment and resource recovery operations. Further, beyond accepting more orders for soil remediation, we will work to build new landfill and expand existing one.

In the Electronic Materials business, we will increase sales of magnetic powder used in next-generation data storage tapes for archives. We will also improve the properties of iron powder to expand their range of applications and increase sales for use in thermal products.

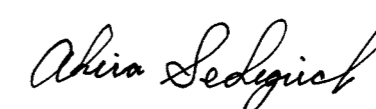


ECO-SYSTEM SANYO

Strengthening the Functionality of Recycling and Smelting Complex

In the Nonferrous Metals business, at Kosaka Smelting & Refining, we will strengthen our impurities separation facilities and increase our capacity to handle recyclable materials and increase production of by-product metal tin. Also, in order to secure a long-term stable supply of raw materials for our smelting operations, we will proceed with mine construction at the Los Gatos Silver, Zinc, and Lead Project in Chihuahua, Mexico, and continue mineral exploration at the Palmer Zinc and Copper Project in the U.S. state of Alaska.

By steadily implementing these policies, the DOWA Group intends to achieve continued growth and contribute to the creation of a sustainable society.



Akira Sekiguchi

President and Representative Director

Consolidated Financial Highlights

For the years ended March 31	2014	2015	2016	2017	2018*1	2018
					(Billions of yen)	(Millions of U.S. dollars*6)
Financial Performance						
Net Sales	¥443.9	¥464.2	¥406.5	¥410.5	¥454.7	\$4,280
Operating Income	31.7	39.0	35.0	33.9	30.9	291
Ordinary Income	35.0	42.0	35.0	36.5	36.3	342
Net Income Attributable to Owners of the Parent	23.3	26.5	21.8	26.1	24.6	232
Capital Expenditures	16.5	17.2	22.9	26.5	24.6	231
Depreciation	16.2	15.5	15.1	15.7	17.2	162
R&D Expenses	4.6	5.3	5.5	5.6	5.3	50
Financial Condition						
Equity	¥166.9	¥195.6	¥203.3	¥227.8	¥247.7	\$2,332
Total Assets	358.7	379.1	364.4	404.6	457.8	4,309
Interest-Bearing Debt*2	99.6	86.6	81.1	79.8	109.8	1,033
Cash Flows						
Cash Flows from Operating Activities	¥ 30.1	¥ 38.3	¥ 45.7	¥ 29.3	¥ 11.1	\$ 104
Cash Flows from Investing Activities	(18.6)	(20.3)	(23.4)	(25.9)	(34.0)	(320)
Free Cash Flow	11.4	18.0	22.2	3.4	(22.8)	(215)
Ratios						
Return on Assets*3 (%)	9.90	11.39	9.43	9.49	8.43	
Return on Equity*4 (%)	15.97	15.37	11.43	12.64	10.78	
Equity Ratio*5 (%)	44.12	49.35	53.49	54.20	52.16	
Debt / Equity Ratio (Times)	0.63	0.46	0.42	0.36	0.46	

*1 The years stated in the table are ended March 31. Thus "2018" refers to the fiscal year that ran from April 1, 2017 through March 31, 2018.

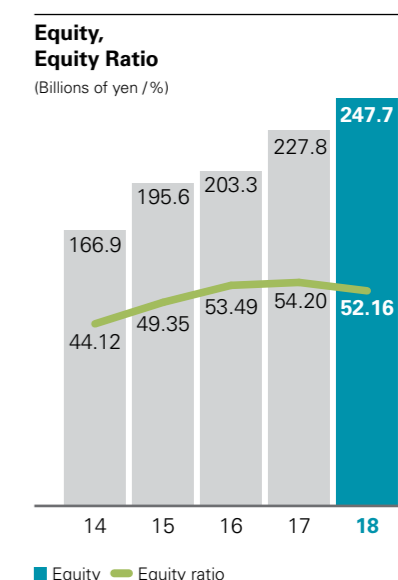
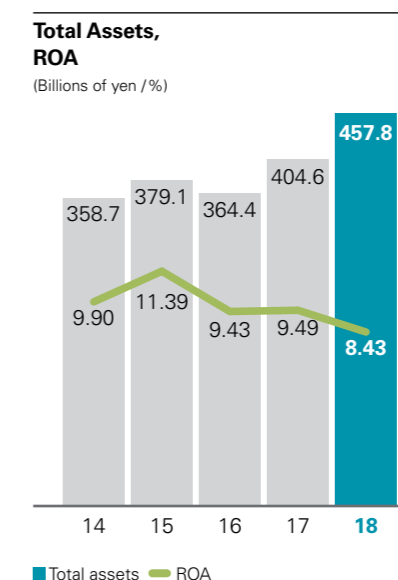
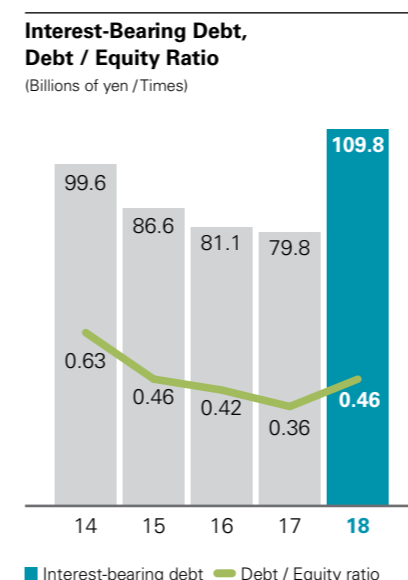
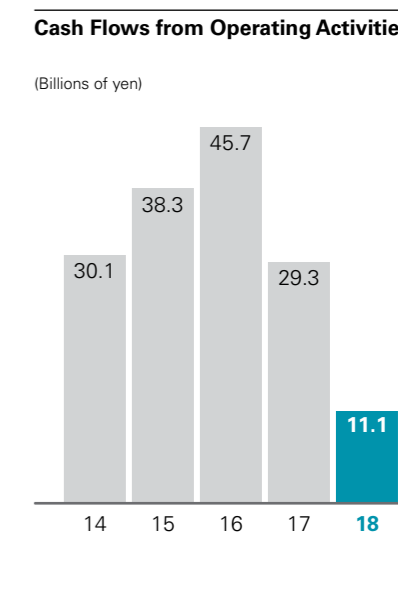
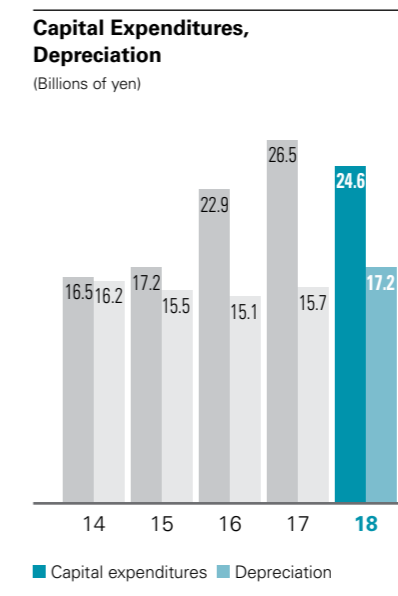
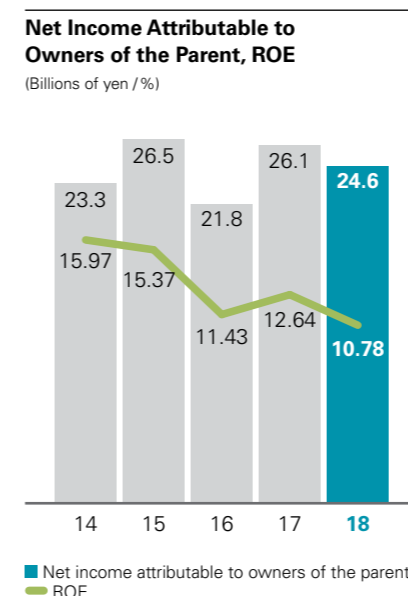
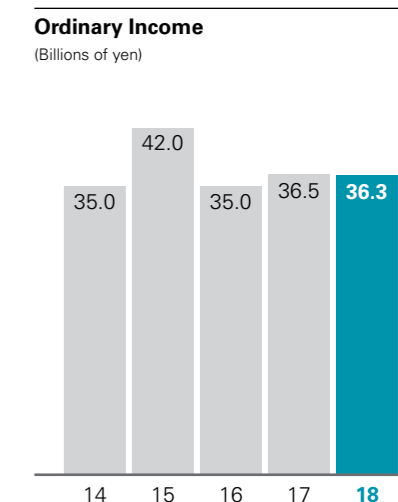
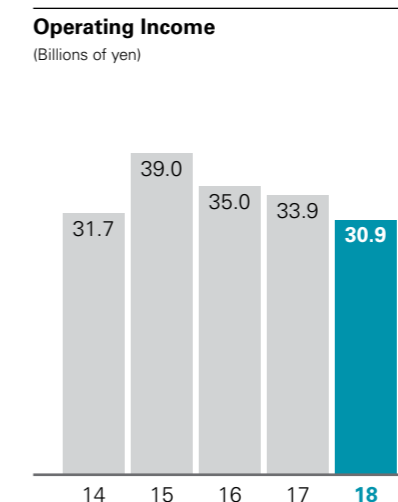
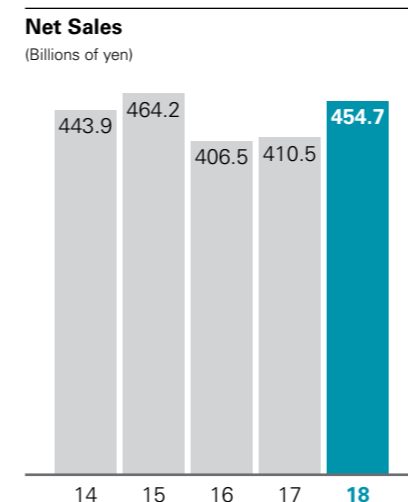
*2 Interest-bearing debt does not include lease obligations.

*3 Ordinary income divided by the average of total assets at the start and end of the year.

*4 Net income attributable to owners of the parent divided by the average of shareholders' equity (the amounts after deducting non-controlling interests amounts from equity amounts) at the start and end of the year.

*5 The ratios have been calculated using shareholders' equity (the amounts after deducting non-controlling interests amounts from equity amounts).

*6 ¥106.24=US\$1, the rate of exchange on March 31, 2018, is used.



Midterm Plan

In Midterm Plan 2020, our medium-term business plan that started in April 2018, we aim to achieve further growth by following our basic policies, which are to “expand businesses in growth markets” and “increase competitiveness of existing businesses.”

Measures Taken

Foreign exchange rates and metal prices have strongly impacted sales and income in the DOWA Group’s original business, the Nonferrous Metals business. We are therefore focused on strengthening our management systems in order to stabilize earnings by reducing the risk of losses due to fluctuations in metal prices and foreign exchange rates. We are working to expand not only the Nonferrous Metals business, but other businesses in growth markets including the Environmental Management & Recycling business, the Electronic Materials business, the Metal Processing business, and the Heat Treatment business.

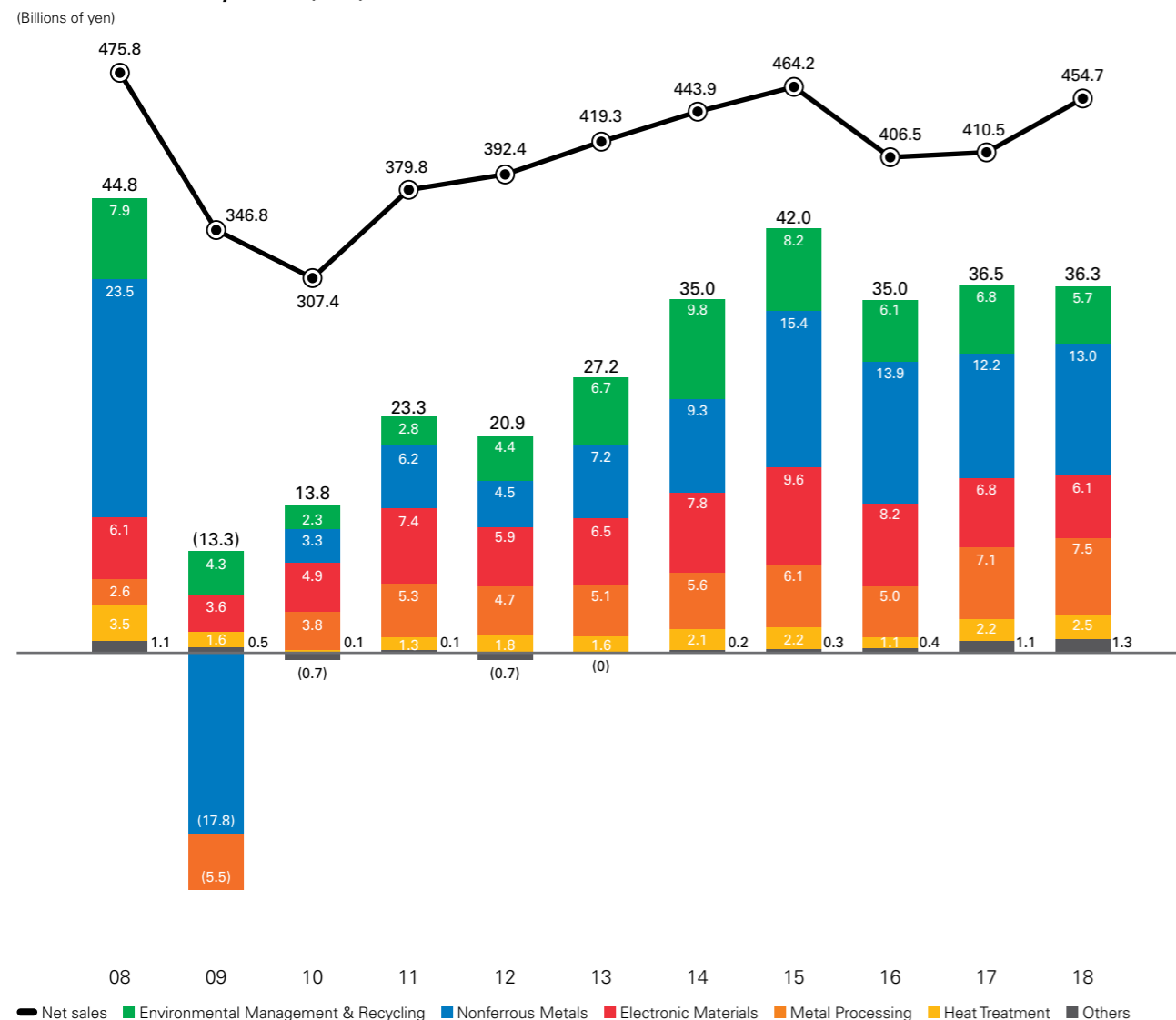
By steadily implementing these policies, the DOWA Group has built a business structure that can produce stable earnings and withstand changes in operating environments.

Success of Medium-Term Business Plans

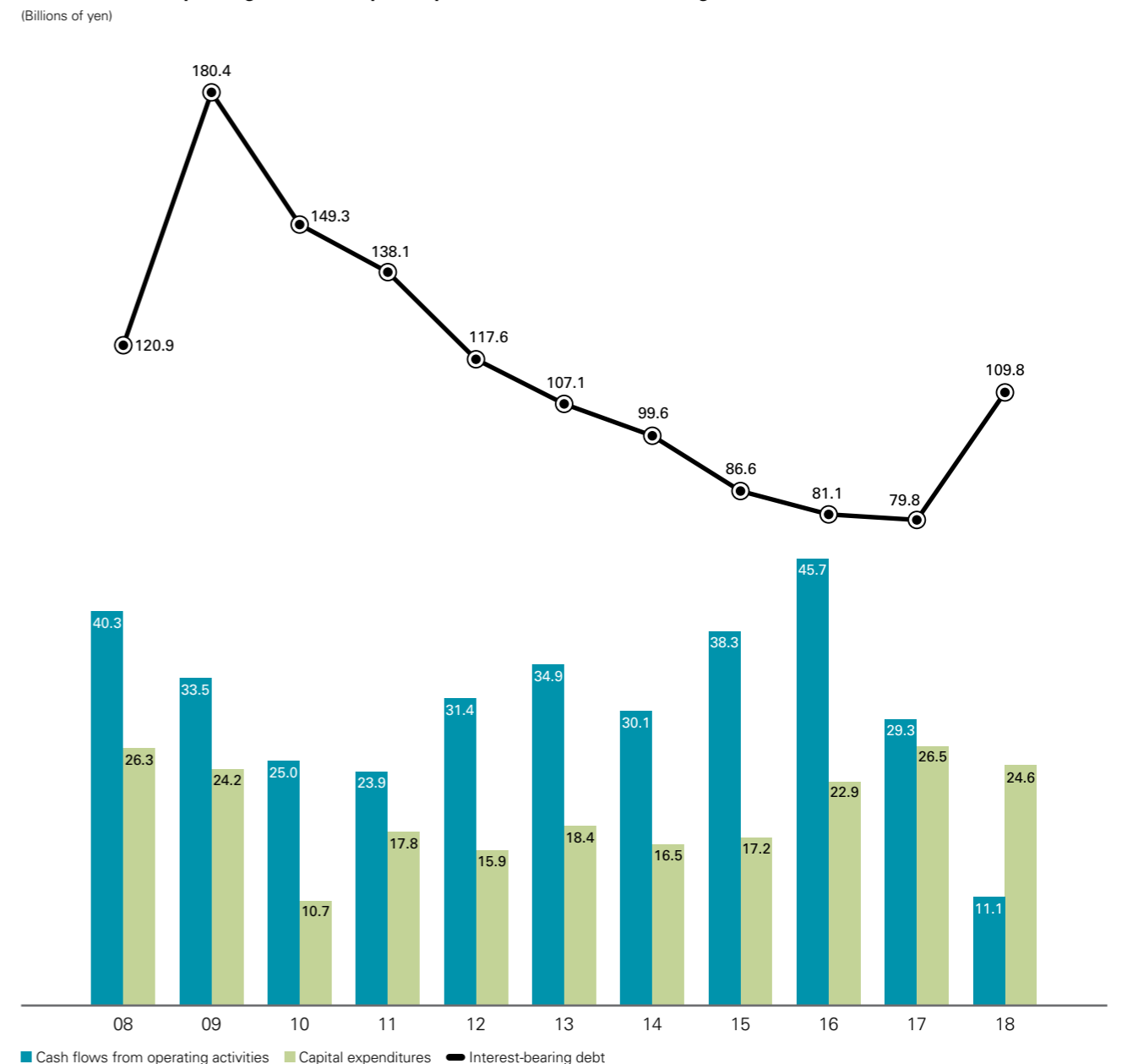
In order to build a business structure that can produce stable earnings, every three years, the DOWA Group establishes a medium-term business plan. In our medium-term business plans, each business in the Group focuses on what measures it should implement to achieve growth and formulates targets based on the expected impact of these measures.

The Group has steadily implemented the main measures in its medium-term business plans and therefore has been able to bring a variety of highly competitive products and services to market. By continuously building up the earnings potential of our businesses, we have also created a business structure that consistently produces high levels of profits and cash flows from operating activities. Furthermore, by using cash flows generated by our businesses to pay dividends, invest in growth, and reduce interest-bearing debt, we have not only maximized shareholder returns and grown our businesses but also strengthened our financial position.

Net Sales and Ordinary Income (Loss)



Cash Flows from Operating Activities, Capital Expenditures, and Interest-Bearing Debt



Midterm Plan

Overview of Midterm Plan 2020

In "Midterm Plan 2020," we plan to leverage our business structure that can withstand changes in operating environments and our strong financial position as a base to become a company that can achieve both stability and growth by aggressively investing management resources in high-growth business fields and regions.

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 recycling and smelting complex.

Financial Forecasts for Fiscal Year Ended March 31, 2021

Ordinary Income

¥50 billion

ROE

12% or more

Cash Flows from Operating Activities
(Total for 3 years)

¥120 billion

Operating Income

¥45 billion

ROA

10% or more

Investment (Total for 3 years)

¥110 billion

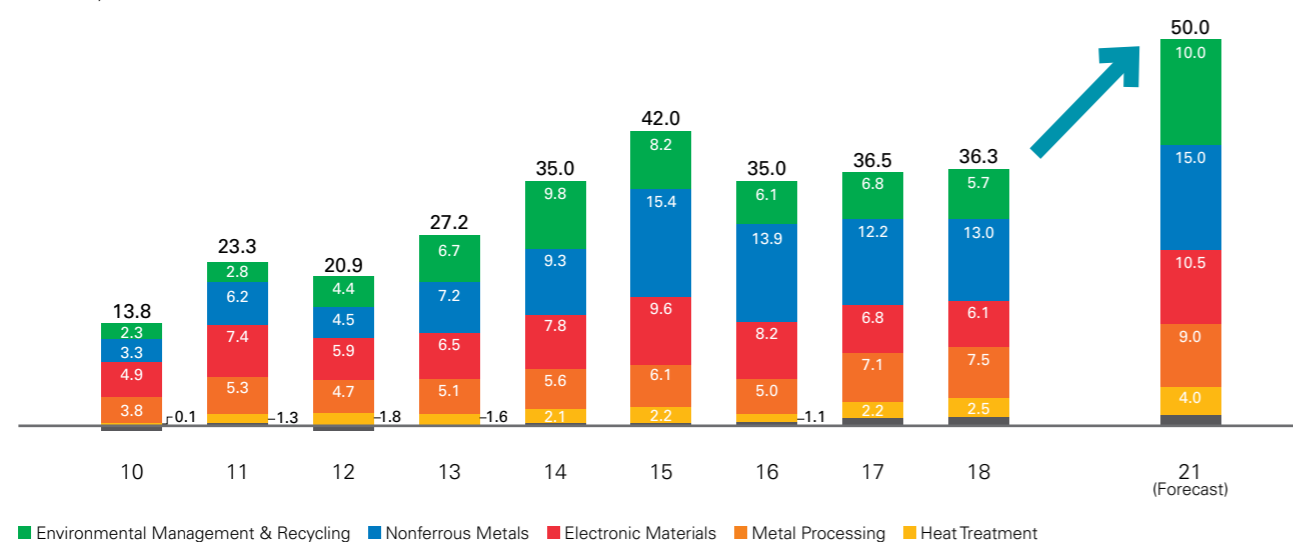
R&D Expenses (Total for 3 years)

¥20 billion

Expected Exchange Rate and Metal Prices	Exchange Rate (¥/\$)	Zinc (\$/t)	Copper (\$/t)
	115	2,700	5,500

Ordinary Income

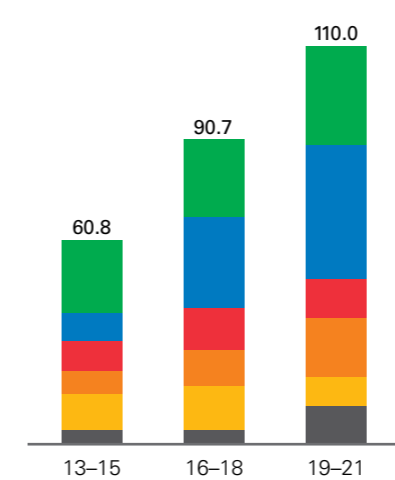
(Billions of yen)



Investment / R&D Expenses

Investment (Total for 3 years)

(Billions of yen)



Main Initiatives

Environmental Management & Recycling

- Construction of new landfill in Indonesia
- Expansion of waste treatment and recycling business

Nonferrous Metals

- Construction of new zinc mine in Mexico
- Enhancement of ability to treat impurities in zinc smelting

Electronic Materials

- Establishment of facilities for mass production of new products

Metal Processing

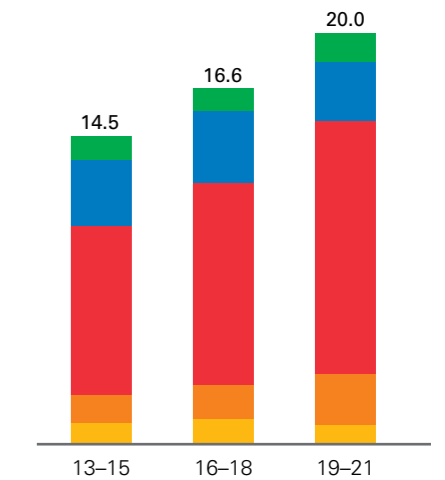
- Enhancement of copper alloy production capacity

Heat Treatment

- Construction of new heat treatment plants in India

R&D Expenses (Total for 3 years)

(Billions of yen)



Summary of Each Business Segment

	Business Strategies	Financial Data			
		Ordinary Income (March 31, 2021)	Operating Income (March 31, 2021)	Investment (Total for 3 years)	R&D Expenses (Total for 3 years)
Environmental Management & Recycling	<ul style="list-style-type: none"> ▶ Increase competitiveness of existing businesses to establish a No. 1 position 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 become future mainstays businesses in light of global trends in environmental management. 	¥10.0 billion	¥10.0 billion	¥29.4 billion	¥1.4 billion
Nonferrous Metals	<ul style="list-style-type: none"> ▶ Strengthen the business by improving the functionality of recycling and smelting complex. 	¥15.0 billion	¥10.0 billion	¥40.1 billion	¥2.9 billion
Electronic Materials	<ul style="list-style-type: none"> ▶ Launch new businesses, develop new niche/top products, and make them major sources of earnings. ▶ Expand business domains further to growth markets such as automobiles and healthcare. 	¥10.5 billion	¥10.0 billion	¥11.6 billion	¥12.3 billion
Metal Processing	<ul style="list-style-type: none"> ▶ Expand businesses by focusing efforts on automobiles and IoT-related fields. ▶ Increase earnings potential further by establishing a business base that is resistant to changes in the business environment. 	¥9.0 billion	¥9.0 billion	¥17.7 billion	¥2.5 billion
Heat Treatment	<ul style="list-style-type: none"> ▶ Increase revenues further by taking advantage of the strengths of the current business model. ▶ Pursue initiatives in new business domains. 	¥4.0 billion	¥4.0 billion	¥8.7 billion	¥0.9 billion

Environmental Management & Recycling Business
DOWA ECO-SYSTEM CO., LTD.



Waste Treatment

Soil Remediation

Recycling

○ Main Products and Services

Waste treatment, landfill, soil remediation, metal recycling, household appliance recycling, automobile recycling, consulting on environmental matters, and logistics

DOWA ECO-SYSTEM offers one-stop integrated services with high traceability. These services range from the collection and transport of waste, contaminated soil, and metal recycling materials to intermediate waste treatment, such as compacting / detoxification and metal recycling or landfill. By expanding into the consultation business, including conducting environmental impact assessments, we aim to help solve a wide range of environmental problems both in Japan and overseas.

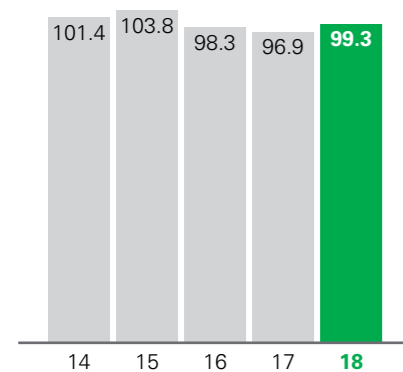
We also aim to increase the competitiveness of our existing businesses, gain market share in all business fields and regions, and accelerate new development in order to secure the top position in Asia. By scoping out future global environmental trends, we will also create new businesses that will play a pivotal role in the future of our industry.



Minoru Tobita President

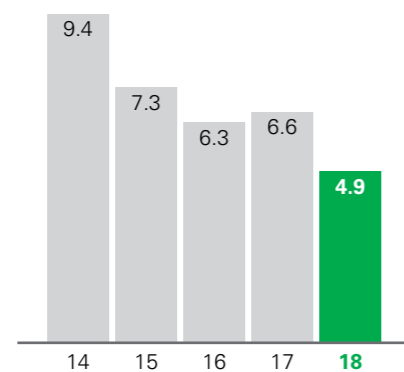
Net Sales

(Billions of yen)



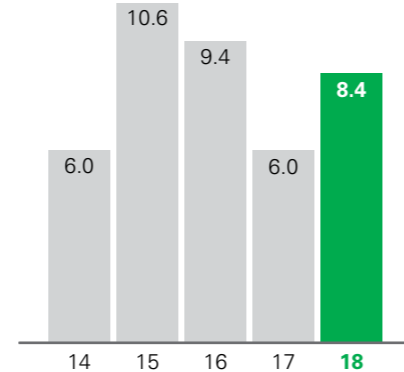
Operating Income

(Billions of yen)



Investment*

(Billions of yen)



* The total of investments in property, plant and equipment, and R&D expenses.

Business Conditions and Financial Performance in Fiscal 2017

In the waste treatment business, some waste treatment facilities experienced a decline in capacity utilization. In the soil remediation business, we made efforts to increase orders using our remediation method to deal with naturally occurring soil contamination. In the recycling business, we pursued increased collection of scrap material from discarded electronic substrates and home electronics. In overseas businesses, waste treatment orders increased, but there was a temporary decline in high-margin projects. As a result of these factors and rising metal prices, segment consolidated sales increased 3% year on year, to ¥99.3 billion, and segment operating income decreased 25%, to ¥4.9 billion.

Key Initiatives for the Future

In the waste treatment business, we will expand facilities for the treatment of low-contaminated PCB waste. In addition, having commenced operations at Meltec Iwaki, we will increase waste treatment and recycling. In the soil remediation business, in addition to increasing orders, we will move forward with efforts to build new landfill and expand existing one. In the recycling business, we will expand collection of recyclable material from Europe and Asia. In overseas businesses, we will build new waste treatment facilities and expand existing ones while working to broaden the range of our operations.

Initiatives in Each Business

Waste Treatment

We are making progress in expanding treatment capacities at ECO-SYSTEM SANYO and ECO-SYSTEM AKITA so as to advance the treatment of low-contaminated PCB waste. In addition, we are increasing collection volume by broadening our customer base.



ECO-SYSTEM AKITA's low-contaminated PCB waste treatment facility

Soil Remediation

We are moving forward with the construction of new soil remediation facility for which ECO-SYSTEM HANAOKA received approval in 2017 and promoting long-term stable soil remediation.



ECO-SYSTEM HANAOKA

Recycling

In response to changes in the waste collection environment resulting from stronger environmental regulations around the world, we are expanding collection of recyclable materials from Europe and Asia.



Materials for recycling

Southeast Asia

In order to respond to the need for proper waste treatment, in Indonesia and Thailand, we are expanding our businesses by building new landfill and expanding our range of operations by moving into hazardous waste treatment.



Landfill site in Indonesia

Nonferrous Metals Business

DOWA METALS & MINING CO., LTD.



Precious Metals and Copper Smelting

Platinum Metals Smelting

Zinc Smelting

Main Products and Services

Gold, silver, copper, zinc, zinc alloy, lead, platinum, palladium, indium, gallium, germanium, tin, antimony, nickel, bismuth, tellurium, and sulfuric acid

Utilizing its engineering capabilities honed over many years, DOWA METALS & MINING recovers over 20 kinds of valuable metals from a variety of raw materials, such as from ore and metal recycling materials, at its proprietary recycling and smelting complexes that focus mainly on the smelting and refining of copper and zinc.

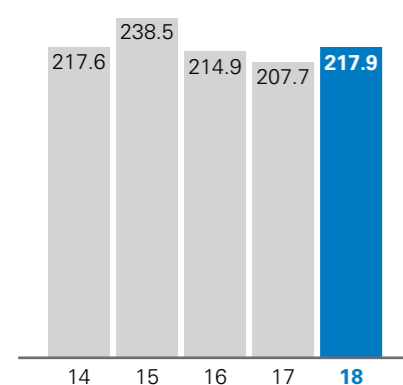
In the years to come, in order to further improve the functionality of our recycling and smelting complexes and strengthen our businesses, we will improve our capabilities in terms of handling impurities in raw materials and work to develop mines overseas.



Toshiaki Suyama President

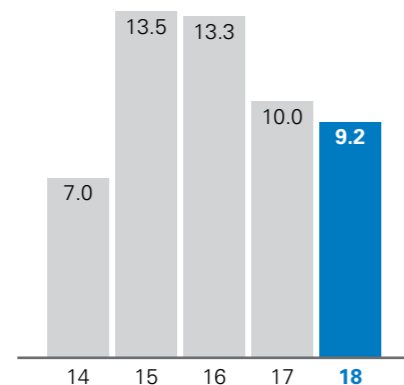
Net Sales

(Billions of yen)



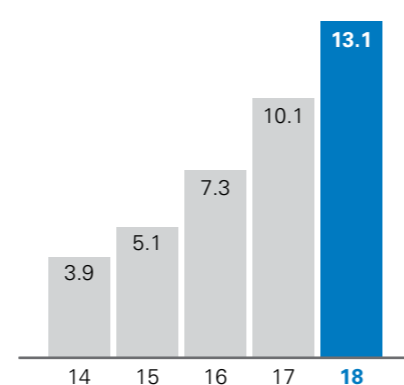
Operating Income

(Billions of yen)



Investment*

(Billions of yen)



* The total of investments in property, plant and equipment, and R&D expenses.

Business Conditions and Financial Performance in Fiscal 2017

Zinc and copper prices rose overall, and on the foreign currency markets, the value of the yen depreciated compared with the previous fiscal year. We increased recovery of antimony, tin, and other by-product metals and increased collection and processing of used automobile exhaust gas catalysts. However, we saw negative impacts from less favorable terms of purchase for raw material zinc, higher depreciation costs, and rising electric power prices. As a result of these factors, segment consolidated sales increased 5% year on year, to ¥217.9 billion, and segment operating income declined 8%, to ¥9.2 billion.

Key Initiatives for the Future

In the precious metals and copper smelting business, we will boost recycling volume and increase production of tin and other by-product metals. At Nippon PGM, we will increase collection of used automobile exhaust gas catalyst materials in Europe and North America and thereby further increase metal recovery volume. In the zinc smelting business, we will boost zinc production and increase sales of processed zinc products in Southeast Asia. In the area of resource and raw material procurement, we will move forward with mine construction at the Los Gatos Silver, Zinc, and Lead Project in Mexico and continue with mineral exploration at the Palmer Zinc and Copper Project in the U.S.

Initiatives in Each Business

Precious Metals and Copper Smelting

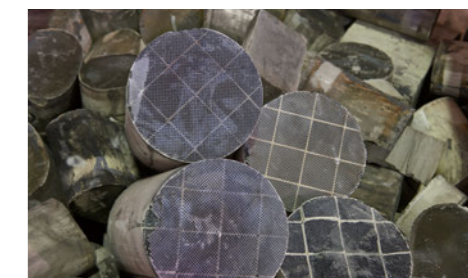
At Kosaka Smelting & Refining, we will work to expand our recycling capabilities and increase production of tin and other by-product metals.



Kosaka Smelting & Refining

Platinum Metals Smelting

By increasing our collection volume in North America and Europe, we will boost collection of automobile exhaust gas catalysts. Also, we will increase metal collection volume at Nippon PGM.



Automobile exhaust gas catalysts

Zinc Smelting

At Akita Zinc, we are improving our impurities treatment facilities with the aim of increasing zinc production. In Thailand, we are working to boost production of processed zinc products and increase sales in Southeast Asia.



Processed zinc products

Resource and Raw Material Procurement

In order to secure a long-term, stable supply of raw material zinc for our smelting operations, we will steadily proceed with mine construction at the Los Gatos Silver, Zinc, and Lead Project in Chihuahua, Mexico, and continue mineral exploration at the Palmer Zinc and Copper Project in the U.S. state of Alaska.



Mine construction at the Los Gatos Silver, Zinc, and Lead Project

Electronic Materials Business

DOWA ELECTRONICS MATERIALS CO., LTD.

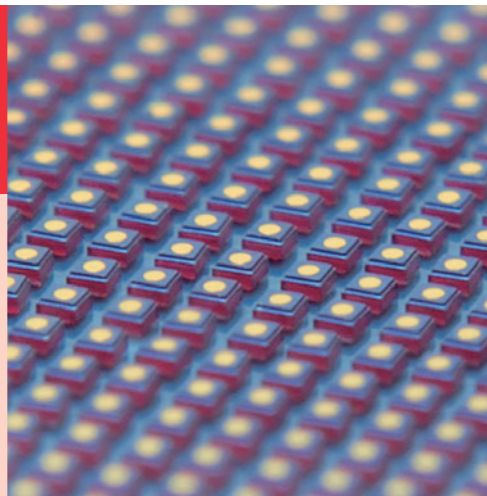
Semiconductors

Electronic Materials

Advanced Fine Materials

◉ Main Products and Services

High-purity gallium, indium, compound semiconductor wafers, light-emitting diodes (LEDs), silver powders, copper powders, silver oxide powders, metal powders, carrier powders, and ferrite powders



DOWA ELECTRONICS MATERIALS leverages its technological prowess to supply a wide range of top niche products in the semiconductors, electronic materials, and advanced fine materials fields. In order to meet the ever-changing needs of the electronic materials market, we continuously invest management resources in research and development in order to maintain the competitive advantage of our products.

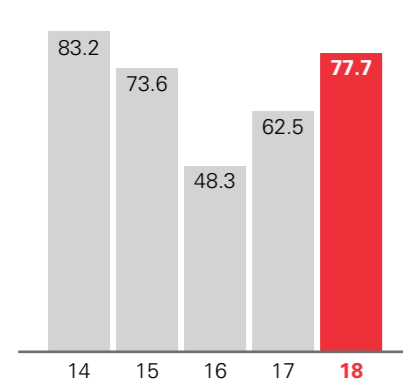
By speeding up the development of new products, we will create new top niche products that form the linchpin for future earnings. We will also work to grow our businesses in areas where we expect market growth, such as the automotive and healthcare fields.



Koji Suzuki President

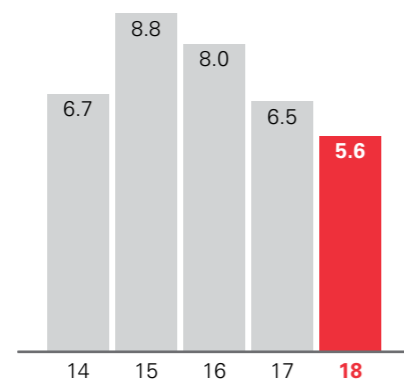
Net Sales

(Billions of yen)



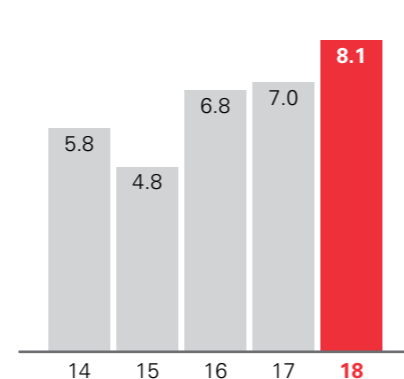
Operating Income

(Billions of yen)



Investment*

(Billions of yen)



* The total of investments in property, plant and equipment, and R&D expenses.

Business Conditions and Financial Performance in Fiscal 2017

Demand for LEDs used in smartphones was strong in fiscal 2017. Depreciation costs for silver powder used in solar panels rose owing to capital investment. In order to quickly launch new products, we also aggressively invested in research and development of deep ultraviolet LEDs for in equipment used in resin curing and skin therapy. As a result of these factors, transactions (including in silver price) increased and segment sales rose 24% year on year, to ¥77.7 billion, and segment operating income decreased 15%, to ¥5.6 billion.

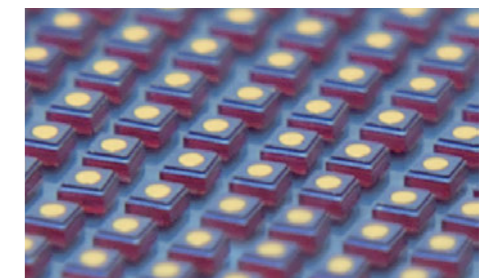
Key Initiatives for the Future

In the semiconductors business, we will work to improve the properties of new LEDs and expand providing sample products for new healthcare devices. In the electronic materials business, we will work to increase sales of silver powder used in highly efficient new solar panels. In the advanced fine materials business, we will endeavor to expand sales of magnetic powder for next-generation data storage tapes and expand the range of applications and increase sales of iron powder for use in thermal products. In order to quickly launch new products, we will also increase sales of electrode materials for fuel cells for residential use and expand providing sample products for deep ultraviolet LEDs used in sterilization equipment.

Initiatives in Each Business

Semiconductors

We will expand providing sample products by improving the properties of new LEDs and develop new applications for LEDs for sensors in the healthcare and industrial fields, including for use in smartphone sensors.



Infrared LEDs

Electronic Materials

As we expect greater adoption of new, highly efficient solar panels, we are developing new types of silver powder tailored to meet the specifications of these new panels.



Silver powder

Advanced Fine Materials

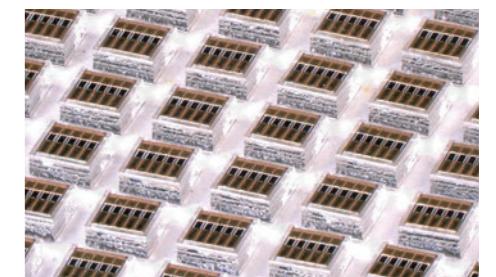
In addition to expanding sales of magnetic powders for next-generation data storage tapes used by archives, we are working to expand the range of applications and increase sales of iron powder for use in thermal products.



Iron powder

New Developments

In the area of electrode materials for fuel cells, we are focusing on increasing sales of materials used in residential fuel cells. We aim to quickly increase light output and extend the product life of deep ultraviolet LEDs in order to develop them for use in water sterilization equipment.



Deep ultraviolet LEDs

Metal Processing Business

DOWA METALTECH CO., LTD.

Copper Rolled Products

Electroplating

Metal-Ceramics Substrates

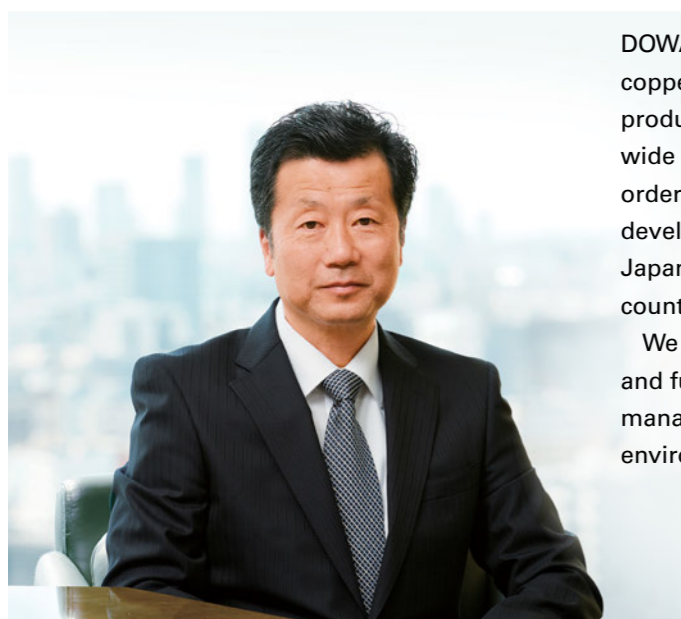
◀ Main Products and Services

Copper, brass, copper alloy strips, nickel alloy strips, reflow tin plated strips, brass rods, forged brass products, electroplated products, and metal-ceramics substrates

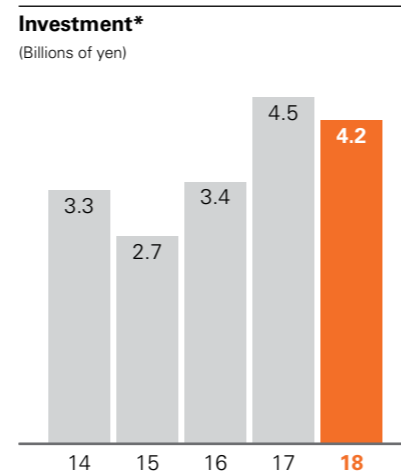
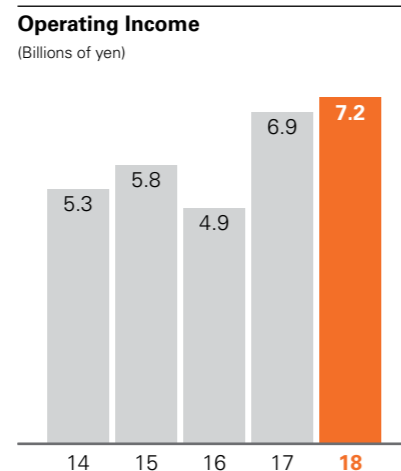
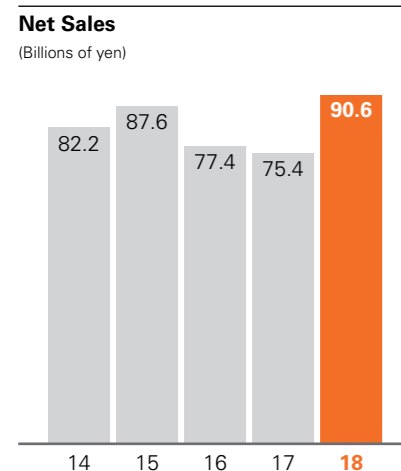


DOWA METALTECH's mainstay products—high-performance copper rolled products and electroplating processing products as well as metal-ceramics substrates—are used in a wide range of fields such as automobiles and smartphones. In order to further expand our businesses, we are also developing new products, increasing production capacity in Japan, and expanding our production facilities in other Asian countries, where growth continues.

We will continue to focus on the automotive and IoT fields and further increase our earnings potential by building a solid management base that can withstand changes in operating environments.



Akira Sugawara President



* The total of investments in property, plant and equipment, and R&D expenses.

Business Conditions and Financial Performance in Fiscal 2017

In the copper rolled products business, sales for automobile and smartphone applications increased. The electroplating business experienced steady growth in sales both in Japan and overseas. The metal-ceramics substrates business captured demand from the expanding industrial machinery market and also increased sales to the rail transport and automotive industries. As a result of these factors and rising copper prices, segment consolidated sales increased 20% year on year, to ¥90.6 billion, and segment operating income rose 5%, to ¥7.2 billion.

Key Initiatives for the Future

In the copper rolled products business, we will work to develop and expand sales of new copper alloys and capture demand for electronic parts with applications such as in-vehicle electronics, intelligent vehicles, and the IoT. We will also boost production by improving productivity and expanding and upgrading production facilities and leverage our overseas bases to promote sales expansion in Asia. In the electroplating business, we will start full-scale operations at our new plant in Mexico and work to improve productivity on our electroplating lines in Japan and Thailand. In the metal-ceramics substrates business, we will work to increase production of mainstay products and new products and expand sales for applications such as industrial machinery, rail transport, and automobiles.

Initiatives in Each Business

Copper Rolled Products

Amid growth in demand driven by the development of in-vehicle electronics, intelligent vehicles, and the IoT, we will work to develop and boost sales of high-performance copper alloys with high heat resistance, conductivity, and strength, among other properties. We will also make efforts to grow sales in Asia through the boosting of production by improving productivity and expanding and upgrading our production facilities.



Copper alloys

Electroplating

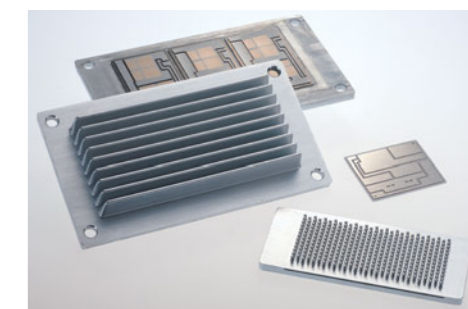
We will start full-scale operations at our new plant in Mexico and work to improve productivity on our electroplating lines in Japan and Thailand. We will also endeavor to capture growing demand for in-vehicle electronics.



New electroplating plant in Mexico

Metal-Ceramics Substrates

We will work to expand facilities and increase production of metal-ceramics substrates and increase sales for applications for which demand remains strong, such as industrial machinery, rail transport, and automobiles.



Metal-ceramics substrates

Heat Treatment Business

DOWA THERMOTECH CO., LTD.

Industrial Furnaces

Heat Treatment Processing

Main Products and Services

Heat treatment, surface treatment, design, manufacture, marketing, and maintenance of heat treatment furnaces and ancillary equipment



In the field of heat treatment, which increases the durability of metal parts, such as automobile components, DOWA THERMOTECH undertakes the manufacture, sale, and maintenance of heat treatment furnaces as well as contracted heat treatment processing. In addition, we are advancing overseas business expansion in geographical areas where growth in automobile production is expected in the years ahead, such as Southeast Asia and India.

One of our strengths is that we not only conduct contracted heat treatment processing but also build heat treatment furnaces. We will strive to achieve further earnings growth by taking full advantage of this strength in the global market. In addition, we will anticipate changes in the automotive industry and work to develop new business fields to take advantage of these changes.



Ryuji Tsuji President

Business Conditions and Financial Performance in Fiscal 2017

In the industrial furnaces business, equipment sales and maintenance orders increased, especially in Japan. In the heat treatment processing business, contracted heat treatment processing orders for automobile components rose in China, India, and Indonesia. In Japan, we were able to take advantage of firm demand not only from the automotive industry but also from the industrial machinery and construction machinery industries. As a result of these factors, segment consolidated sales increased 12% year on year, to ¥28.2 billion, and segment operating income rose 10%, to ¥2.6 billion.

Key Initiatives for the Future

In the industrial furnaces business, in addition to capturing demand from automobile component manufacturers, especially in Japan, we will work to increase sales of small-scale, low-cost heat treatment furnaces. We will also boost the earnings potential of the maintenance business by making progress in cutting costs by increasing the ratio of components sourced from overseas. In the heat treatment processing business, we will work to secure orders from customers that are expanding their businesses and to increase our overseas production capacity. Also, in addition to heat treatment, we will work to develop new business domains by developing and commercializing new surface treatment methods.

Initiatives in Each Business

Industrial Furnaces

Amid growth in demand related to capital investment by Japanese and overseas automobile component manufacturers resulting from rising automobile production, we will strive to boost sales of new facilities. We will also work to cut costs by increasing the ratio of components sourced from overseas and strengthen the competitiveness of our overseas maintenance business.



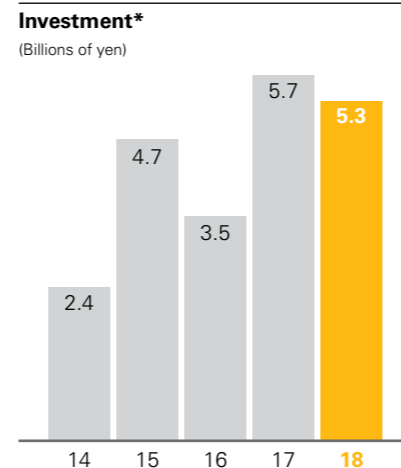
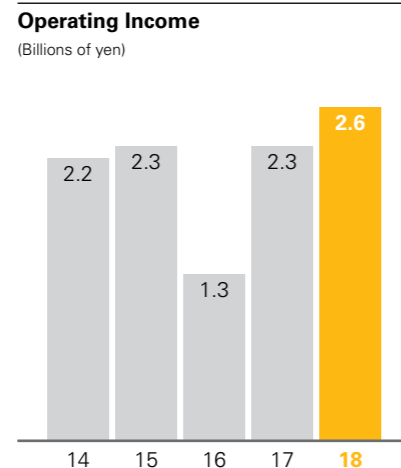
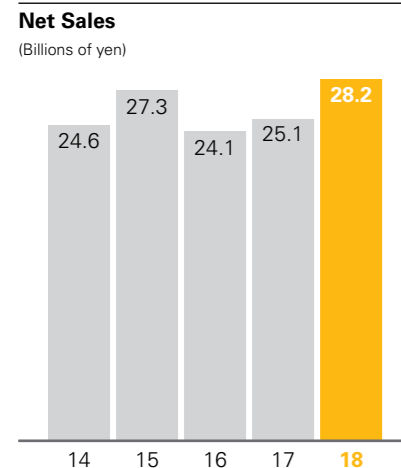
Heat treatment furnace

Heat Treatment Processing

In order to capture demand growth resulting from the increasing prevalence of automatic transmission vehicles around the world, we will move forward with efforts to increase production capacity at our heat treatment processing facilities both in Japan and overseas. We will also expand into new business domains by working to develop and commercialize new surface treatment methods.



Components that have undergone heat treatment processing



* The total of investments in property, plant and equipment, and R&D expenses.

CSR Policy and Planning

Roots of Our CSR Policy

The Company was founded in 1884 as a mining and smelting company. At the time, mining companies not only built social capital that had a direct impact on the success of their businesses, such as waterworks, electric power plants, railways, and roads, but also helped build communities by constructing housing, hospitals, theaters, and other leisure facilities. Also, if mining and smelting are not conducted with great care, this can lead to the destruction of nature, including deforestation, and environmental contamination, including pollution of the air and water. Since its inception, the Company has therefore worked to develop and improve technologies and know-how to minimize its environmental impact. In addition, by building relationships of trust with local residents through information disclosure, we have continued with activities that are closely rooted in local communities.

Because of our history, CSR activities are an integral aspect of management in the DOWA Group.

CSR Planning

With regard to its CSR Policy, the DOWA Group has identified medium-term objectives as part of its "Vision for 2020" in the four key fields of corporate governance, safety, the environment, and society. To realize this vision, we have developed key measures for priority issues that should be addressed, and tackle them as initiatives and targets that are incorporated into the activity plans for each fiscal year so that they can be put into practice.

"Vision for 2020"

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



CSR Report

For more details, please see our CSR Report at <http://www.dowa-csr.jp/en/report/index.html>.

Area	CSR Policy	Medium-Term Plan "Vision for 2020"	Focus Measures	Indicator	Goal for 2020	Activities in Fiscal 2017
Corporate Governance	<ul style="list-style-type: none"> We will aim to be an open and transparent company. We will endeavor in anti-corruption efforts including anti-bribery measures taking into consideration the international agreement. We will take CSR into consideration in our procurement 	<ul style="list-style-type: none"> Sound business management is promoted by ensuring sufficient functions, appropriate information disclosure, and transparency in the internal control system. Business management that does not give rise to fraud and corruption of any kind is promoted by individual employees carrying out appropriate activities based on the DOWA Group's Values and Standards of Conduct. CSR is promoted throughout the supply chain by building partnerships with business connections. 	Strengthening of internal controls and governance	Number of important deficiencies to be disclosed	0	Held briefing on internal control system
			Strengthening of compliance and risk management	Implementation rate of internal education and briefings	100%	Supported internal control system activities of domestic and overseas Group companies
			CSR procurement promotion	Supplier survey coverage rate* * Excludes contractors	Transaction amount base 80%	Created easy-to-answer surveys Expanded range of surveys
Safety	<ul style="list-style-type: none"> All employees will take part spontaneously in safety activities to improve the level of health and safety in the workplace, based on our basic philosophy of "Safety is the top priority." We are committed to preventing accidents at work and to supporting the health of our employees. 	<ul style="list-style-type: none"> The occupational safety risks of the workplace are managed and minimized appropriately, and a comfortable and safe working environment is realized. 	Raising the Companywide safety level	Frequency rate Severity rate	0.1 or less 0.01 or less	Strengthened shared efforts at the regional level
			Strengthening of safety education in subsidiaries outside Japan	Number of times education is implemented Number of persons educated	Total 20 times Total 200 persons	Continuously implemented training and follow-up confirmation for people coming to and leaving Japan
Environment	<ul style="list-style-type: none"> We will provide customers with products and services that contribute to building a resource-recycling society. We will reduce environmental burdens and risks in our business activities. The management and employees together take part in environmental conservation activities. We will promote business activities that take into consideration biodiversity. 	<ul style="list-style-type: none"> Responsible for the core of the international resources-recycling network in Asia and the Pacific Rim area. Effective reduction of CO₂ emissions per unit has been achieved by various energy-saving measures and active use of renewable energy. The environmental risks of the workplace are managed properly, and environmental accident-generation risks are minimized. Biodiversity conservation activities are promoted in collaboration with the upstream and downstream of the supply chain. 	Strengthening of recycling business: Collection volume / Recycling volume / Increase in no. of elements, etc.	Collection volume of materials for recycling	Increase from the preceding fiscal year	Strengthened efforts to collect raw materials for recycling overseas
			Improving the utilization rate of renewable energy Strengthening energy-saving initiatives	Emission amount of CO ₂ emissions per unit	15% reduction as compared with fiscal 1990	At site of business with large-scale emissions, upgraded highly efficient facilities
			Minimization of environmental accident risks and strengthening of response capabilities * Environmental accidents: Incidents whose impact is felt outside the Company, and reported to the competent administration	Number of environmental accident occurrences	0	Held class on environmental protection for people outside the Company
			Understanding of biodiversity risks of suppliers Status confirmation of biodiversity considerations in mines	Suppliers and mines survey rate	100%	Strengthened measures to mitigate damage to wastewater management facilities from abnormal weather and natural disasters
Society	<ul style="list-style-type: none"> We will aim to create a workplace where diversity and the human rights of employees are respected, and each person can demonstrate maximum capacity with satisfaction and pride. 	<ul style="list-style-type: none"> While diverse human resources mutually respect each other, employees themselves select the diverse work styles commensurate with their respective life stages and styles, and the Company and teams support each other. A culture of fair evaluation and treatment, and fostering, is established, and employees experience growth, results, and satisfaction. And, an organization in which employees compete with each other and support each other is created by the employees themselves. Social contributions reflecting each local community are deployed in and outside Japan. 	Promoting diversity	Employment rate of people with disabilities Attendance rate of education in the promotion of participation by women	2% 100%	Expanded global human resources Improved training for overseas local hires Proactive development of career hires Conducted training of female employees for management positions
			Promoting work-life balance	Annual paid leave acquisition rate	70%	Improved knowledge of internal systems Encouraged employees to use annual leave days Promotion of management and reduction of work hours
			Training of both appraisers and persons being appraised Strengthening in-house education of human resources Voluntary career development support for employees	Employee satisfaction (Business planning system) (Education system and content)	90% 70%	Conducted training for appraisers and persons being appraised Conducted survey of systems New employee training (until third year of employment)
			Promoting social contribution	—	—	Educational activities for children, our next generation Educational activities to contribute to local communities
			—	—	—	—

Corporate 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.

Outline of Corporate Governance

The Company uses a system of executive officers and a holding company structure that separates business divisions 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 at one year.

As of June 27, 2018, 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 as of June 27, 2018 (none of whom are also directors), with a Committee of the Operating Officers held once every month, in principle, for directors and executive officers to share information regarding the status of business execution. We also have an Audit & Supervisory Board, comprising four Audit & Supervisory Board members as of June 27, 2018 (including three outside Audit & Supervisory Board members) who conduct audits of business execution by directors, reporting to the Audit & Supervisory Board meeting, held once every month, in principle, ensuring audit effectiveness and efficiency.

Corporate Governance System (As of June 27, 2018)

Organization Form	Company with Auditors
Number of directors	8 (Number of the Company's Articles of Incorporation: 13)
Among these, outside directors	2 (including 2 designated independent directors)
Articles of Incorporation	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)
Among these, outside auditors	3 (including 2 designated independent auditors)

Board of Directors and Officers

The Board of Directors consists of six directors, two of whom are outside directors, and its meetings are also attended by four auditors, three of whom are outside auditors. In fiscal 2017, the Board of Directors met 15 times and both outside directors attended all meetings.

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 auditors also contribute by meeting regularly to exchange opinions.

Of the eight members, including the two outside directors, of the Board of Directors, seven are men and one (outside director) is a woman.

The directors select a nominee for president and representative director and, in consultation with the Board of Directors, submit the nominee proposal to the General Meeting of Shareholders for approval. When selecting

nominees for the position of director, in conformity with the basic policy below, care is taken to ensure that the nominee is of excellent character, has established a good track record in the work he or she has done thus far, is well-versed in corporate management, and has a high level of specialized knowledge. In addition, because each director has different principal duties, nominees for the position of director must have not only comprehensive knowledge and abilities suitable to the position, but also knowledge and experience suitable to the carrying out of his or her principal duties. Director nominees must therefore have well-balanced job experience and knowledge that are not overly concentrated in one area.

Basic Policy for Selection of Director Nominees

Directors nominated from inside the Company	Nominees selected will be persons with abilities and knowledge gained through their work in Group companies.
Outside directors	Discussions and exchanges of opinions regarding nominees' specialized knowledge and experience will be held to ensure that nominees are able to actively express opinions and raise issues from the point of view of conducting business management reflecting a variety of values and ways of thinking.

Reasons for Nominating Outside Directors

Name	Current Position / Reasons for Nomination
Eiji Hosoda	Professor at Faculty of Economics, Keio University Council member of Central Environmental Council, Ministry of the Environment Representative Director of Automobile Recycling Advancement Institute Mr. Hosoda has specialized knowledge gained from his experience working as a researcher in the field of environmental economics and possesses a wide range of experience and knowledge gained from his activities as a member of both the Central Environmental Council of the Ministry of the Environment and the Industrial Structure Council of the Ministry of Economy, Trade and Industry.
Yoshiko Koizumi	Attorney Partner of City-Yuwa Partners Director of Japan Bar Association Director of Taiheiyō Cement Corporation Audit & Supervisory Board Member of Sumitomo Bakelite Co., Ltd. Audit & Supervisory Board Member of Nippon Koei Co., Ltd. As an attorney, Ms. Koizumi has extensive knowledge and experience regarding compliance issues and has also handled overseas transactions for many years. In addition, she has a broad range of knowledge and experience from her wide-ranging activities as an officer of the Inter-Pacific Bar Association and chair of the Women Business Lawyers Committee of the Inter-Pacific Bar Association.

Evaluation of Effectiveness of the Board of Directors

Starting in 2017, a survey (self-evaluation) was conducted and responses were received from all directors (including outside directors) and auditors. The effectiveness of the Board of Directors as a whole is analyzed and evaluated based on the results of this survey. Based on the survey conducted in April

2018, it was determined that the Board of Directors was conducting free and open discussions and that it was sufficiently effective in terms of its structure, operations, and agenda items covered.

In addition, based on the fiscal 2016 survey, it was determined that improvement has been made on the issue brought up in the previous fiscal year of allowing the Board of Directors sufficient time to study submitted materials.

As the opinion was expressed that further improvement was required in the areas of consideration of evaluation methods for companywide risk and analysis and review of implementation of measures in the medium-term business plan, it was determined that the Board of Directors will continue to strive to further improve effectiveness in these areas.

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.

Committee of the Board

- The representative director shall serve as the chairperson of the Board of Directors. Meetings shall be attended by directors, executive officers, and the directors of each operating company and, in principle, shall be held once per month.
- Each month, a report on business activities, including earnings information of each operating company, will be presented to the Board of Directors and swift responses will be made in response to any changes in the business environment.
- The executive officer in charge shall personally take charge of any important items and report to the Management and Executive Committee and the Board of Directors.

Committee of the Operating Officers

- The representative director shall serve as the chairperson of the Committee of the Operating Officers. Meetings shall be attended by directors and executive officers and be held irregularly.
- The Committee of the Operating Officers deliberates and decides on the most important items related to medium- and long-term management strategy. In accordance with internal regulations known as "official regulations of administrative authority," the Committee of the Operating Officers will deliberate on items requiring deliberation and decisions by the Board of Directors before submitting the items to the Board of Directors.

Audit & Supervisory Board and Auditors

Auditors will implement audits related to directors and executive officers and, in principle, report to the Audit & Supervisory Board once per month, thereby ensuring effective and efficient oversight. In accordance with the audit policies

and audit plans for the term stipulated by the Audit & Supervisory Board, 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 auditors and work with them to explain the audit plans of the independent auditors and report audit findings.

The selection of nominees for the position of auditor shall be conducted in accordance with the basic policy of enhancing and strengthening auditing activities. Nominee selection shall be conducted based on personnel selected by the representative director as nominees for the position of auditor after discussion and an exchange of opinions by the Audit & Supervisory Board, which will then request that the representative director present the nominations to the General Meeting of Shareholders.

Remuneration for Directors and Auditors

The compensation system for directors is based on objective factors such as the Group's consolidated business results, dividends distributed to shareholders, and levels of compensation outside the Company, while remuneration for directors is based on the recommendations of the Remuneration Committee, which includes outside directors and outside experts. The Remuneration Committee consists of the head of the Human Resources Department, who serves as the chair of the committee, two outside directors, two outside advisors, and one internal auditor. In principle, the Remuneration Committee shall meet at least once per year. Remuneration for directors consists of fixed remuneration and performance-based remuneration. In order to ensure the independence of their work, auditor remuneration consists of fixed remuneration only.

Remuneration for all directors and Audit & Supervisory Board members is determined by resolution of the General Meeting of Shareholders. Fixed remuneration for directors shall be based on the director's position and results and performance-based remuneration shall be paid reflecting individual performance based on the "standard performance-based remuneration," which is determined in accordance with net income and dividends distributed to shareholders. Decisions concerning individual remuneration are entrusted to the representative director. However, regarding outside directors, in order to ensure the independence and objectivity of their work, remuneration shall not be paid reflecting individual performance.

With a view to ensuring the independence of their work, auditor remuneration consists of fixed remuneration only and is determined by deliberation among the auditors within the limits approved by the General Meeting of Shareholders.

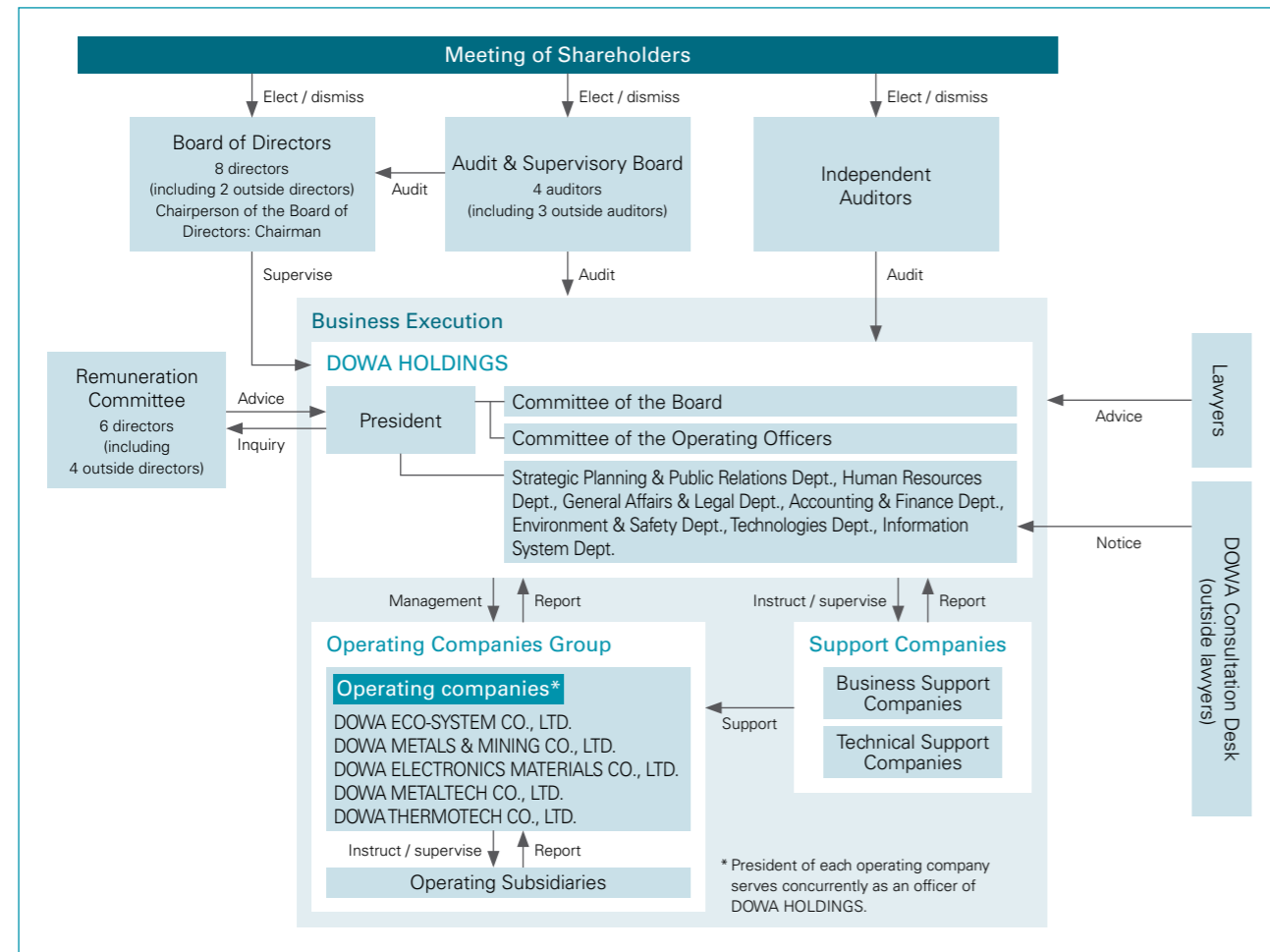
Total Remuneration Amounts of Individual Directors and Audit & Supervisory Board Members for Fiscal 2017

Position	Number	Remuneration Amounts
Directors	7	¥287 million
Audit & Supervisory Board members	5	¥70 million
(Among these, outside directors and Outside Audit & Supervisory Board members)	(6)	¥(70) million

Corporate Governance

The DOWA Group Corporate Governance Structure

(As of June 27, 2018)



Internal Control Systems

In accordance with the DOWA Group's Values and Standards 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. Given these trends, the Company converted to a holding company structure on October 1, 2016.

The Company uses 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 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, the internal control system must continuously be revised in line with changes in business activities and the social environment, so we are working to further strengthen the system.

Disclosure Based on Corporate Governance Code Regulations

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

Board of Directors and Officers

As of June 27, 2018

Directors



Masao Yamada
Chairman and Representative Director



Akira Sekiguchi
President and Representative Director



Yutaka Mitsune
Director



Katsuji Matsushita
Director



Susumu Kagaya
Director



Jun Kawaguchi
Director



Eiji Hosoda
Outside Director
Professor at Faculty of Economics, Keio University



Yoshiko Koizumi
Outside Director
Attorney
Partner of City-Yuwa Partners

Auditors



Katsuya Yukitake
Corporate Auditor (Full-Time)



Hidefumi Kobayashi
Outside Corporate Auditor (Full-Time)



Jin Takeda
Outside Corporate Auditor (Part-Time)
Attorney
Partner of Marunouchi Sogo Law Office



Kazuo Nakasone
Outside Corporate Auditor (Part-Time)
Audit & Supervisory Board
Member of Fujita Kanko Inc.

Officers



Minoru Tobita
Officer (Part-Time)
President and Representative Director,
DOWA ECO-SYSTEM CO., LTD.



Toshiaki Suyama
Officer (Part-Time)
President and Representative Director,
DOWA METALS & MINING CO., LTD.



Koji Suzuki
Officer (Part-Time)
President and Representative Director,
DOWA ELECTRONICS MATERIALS CO., LTD.



Akira Sugawara
Officer (Part-Time)
President and Representative Director,
DOWA METALTECH CO., LTD.



Ryuji Tsuji
Officer (Part-Time)
President and Representative Director,
DOWA THERMOTECH CO., LTD.



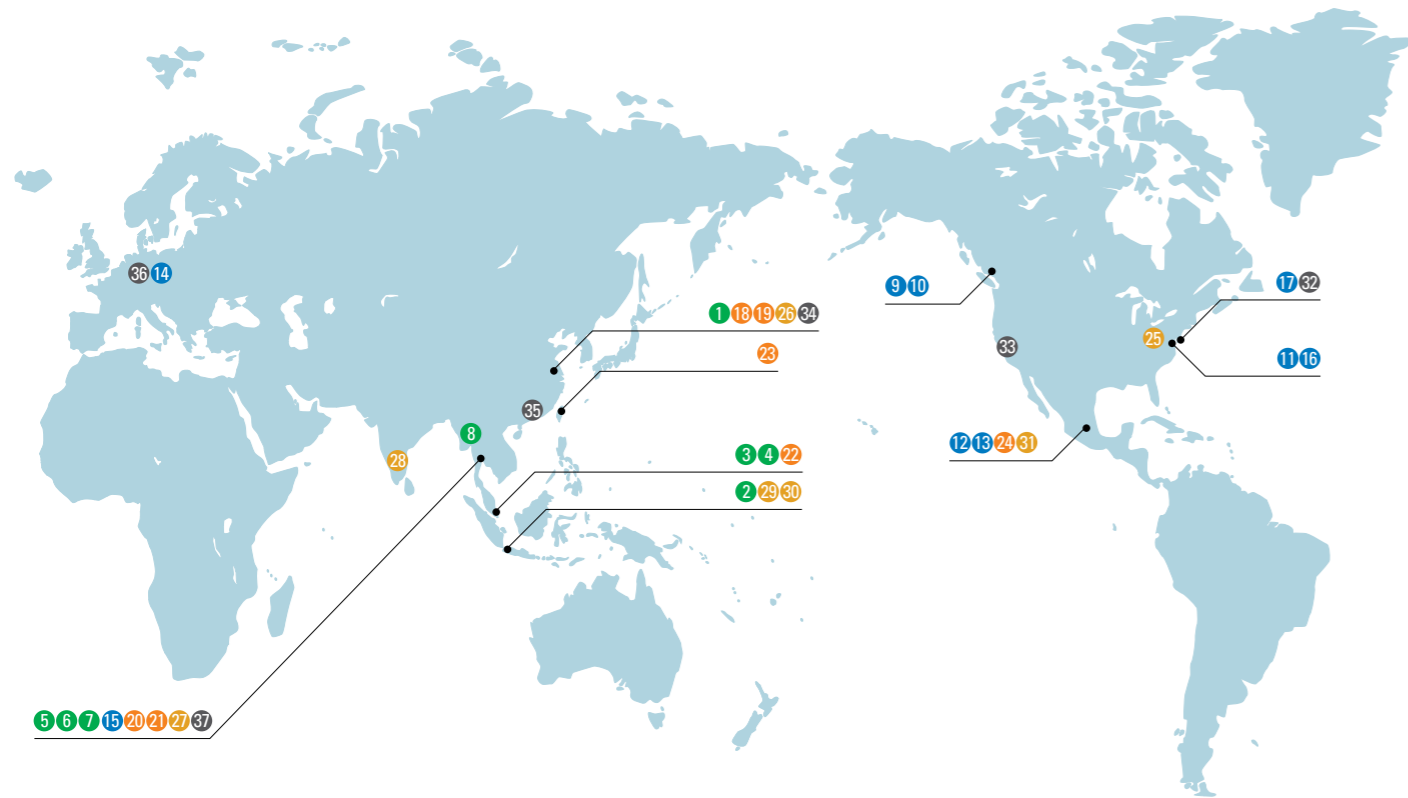
Kiyoshi Yamada
Officer (Part-Time)
President and Representative Director,
DOWA TECHNOLOGY CO., LTD.



Eiichi Wakabayashi
Officer (Part-Time)
President and Representative Director,
DOWA MANAGEMENT SERVICES CO., LTD.

Global Network

Overseas



DOWA ECO-SYSTEM CO., LTD.

- 1 DOWA ENVIRONMENTAL MANAGEMENT CO., LTD. (China)
- 2 PT. PRASADHA PAMUNAH LIMBAH INDUSTRI (PPLI) (Indonesia)
- 3 TECHNOCHEM ENVIRONMENTAL COMPLEX PTE. LTD. (TEC) (Singapore)
- 4 DOWA ECO-SYSTEM SINGAPORE PTE. LTD. (Singapore)
- 5 WASTE MANAGEMENT SIAM LTD. (WMS) (Thailand)
- 6 BANGPOO ENVIRONMENTAL COMPLEX LTD. (BPEC) (Thailand)
- 7 EASTERN SEABOARD ENVIRONMENTAL COMPLEX CO., LTD. (ESBEC) (Thailand)
- 8 GOLDEN DOWA ECO-SYSTEM MYANMAR COMPANY LIMITED (Myanmar)

DOWA METALS & MINING CO., LTD.

- 9 Vancouver Office (Canada)
- 10 Cariboo Copper Corporation (Canada)
- 11 NIPPON PGM AMERICA, INC. (U.S.A.)
- 12 Mexico Office (Mexico)
- 13 MINERA TIZAPA, S.A. DE C.V. (Mexico)
- 14 Nippon PGM Europe s.r.o. (Czech Republic)
- 15 DOWA METALS & MINING (THAILAND) CO., LTD. (Thailand)
- 16 KEY METAL REFINING, LLC (U.S.A.)
- 17 DOWA METALS & MINING AMERICA INC. (U.S.A.)

DOWA METALTECH CO., LTD.

- 18 DOWA ADVANCED MATERIALS (SHANGHAI) CO., LTD. (China)
- 19 DOWA NEW MATERIALS (SHANGHAI) CO., LTD. (China)
- 20 DOWA METALTECH (THAILAND) CO., LTD. (Thailand)
- 21 Dowa Precision (Thailand) Co., Ltd. (Thailand)
- 22 Singapore Branch (Singapore)
- 23 DOWALI PRECISION CO., LTD. (Taiwan)
- 24 DOWA METALTECH MEXICO, S.A. de C.V. (Mexico)

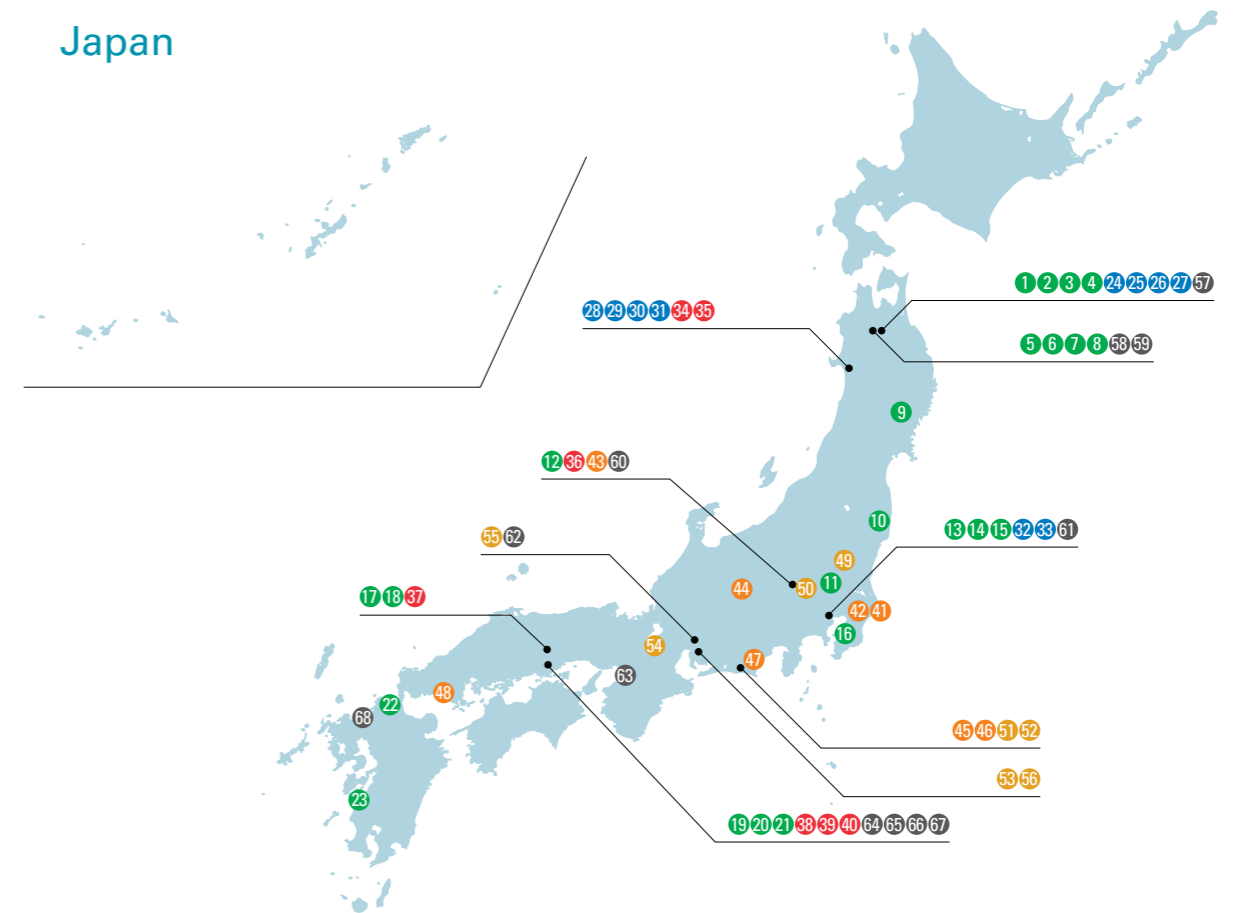
DOWA THERMOTECH CO., LTD.

- 25 DOWA THT AMERICA, INC. (U.S.A.)
- 26 KUNSHAN DOWA THERMO FURNACE CO., LTD. (China)
- 27 Dowa Thermotech (Thailand) Co., Ltd. (Thailand)
- 28 HIGHTEMP FURNACES LTD. (India)
- 29 PT. DOWA THERMOTECH INDONESIA (Indonesia)
- 30 PT. DOWA THERMOTECH FURNACES (Indonesia)
- 31 DOWA THERMOTECH MEXICO, S.A. DE C.V. (Mexico)

Headquarters, Others

- 32 DOWA INTERNATIONAL CORPORATION (U.S.A.)
- 33 DOWA INTERNATIONAL CORPORATION San Jose Branch (U.S.A.)
- 34 DOWA HOLDINGS (SHANGHAI) CO., LTD. (China)
- 35 DOWA HOLDINGS (SHANGHAI) CO., LTD. Shenzhen Branch (China)
- 36 DOWA HD Europe GmbH (Germany)
- 37 DOWA HOLDINGS (THAILAND) CO., LTD. (Thailand)

Japan



DOWA ECO-SYSTEM CO., LTD.

- 1 GREEN FILL KOSAKA CO., LTD.
- 2 ECO-SYSTEM RECYCLING CO., LTD. Northern Japan Plant
- 3 ECO-SYSTEM KOSAKA CO., LTD.
- 4 AUTO RECYCLE AKITA CO., LTD.
- 5 Research and Development Center
- 6 ECO-SYSTEM AKITA CO., LTD.
- 7 ECO-SYSTEM HANAOKA CO., LTD.
- 8 ECO-RECYCLE CO., LTD.
- 9 DOWA-TSUUN CO., LTD.
- 10 MELTEC IWAKI Co., Ltd.
- 11 MELTEC Ltd.
- 12 ECO-SYSTEM RECYCLING CO., LTD. East japan plant
- 13 ECO-SYSTEM JAPAN CO., LTD.
- 14 GEOTECHNOS CO., LTD.
- 15 E & E Solutions Inc.
- 16 ECO-SYSTEM CHIBA CO., LTD.
- 17 ECO-SYSTEM SANYO CO., LTD.
- 18 OKAYAMA KOYU CO., LTD.
- 19 ECO-SYSTEM RECYCLING CO., LTD. West Japan Plant
- 20 ECO-SYSTEM OKAYAMA CO., LTD.
- 21 BIODIESEL OKAYAMA CO., LTD.
- 22 KOWA SEIKO CO., LTD.
- 23 Act-B Recycling Co., Ltd.

DOWA METALS & MINING CO., LTD.

- 24 Metallurgical Laboratory
- 25 KOSAKA SMELTING & REFINING CO., LTD.
- 26 NIPPON PGM CO., LTD.

- 27 AKITA RECYCLE & FINEPACK CO., LTD.
- 28 AKITA ZINC CO., LTD.
- 29 AKITA ZINC SOLUTIONS CO., LTD.
- 30 AKITA RARE METALS CO., LTD.
- 31 AKITA ZINC RECYCLING CO., LTD.
- 32 Acids Co., Ltd.
- 33 ZINC EXCEL CO., LTD.

DOWA ELECTRONICS MATERIALS CO., LTD.

- 34 Semiconductor Materials Laboratory
- 35 DOWA SEMICONDUCTOR AKITA CO., LTD.
- 36 Electronics Materials Laboratory
- 37 DOWA F-TEC CO., LTD.
- 38 Advanced Fine Materials Laboratory
- 39 DOWA ELECTRONICS MATERIALS OKAYAMA CO., LTD.
- 40 DOWA IP CREATION CO., LTD.

DOWA METALTECH CO., LTD.

- 41 NEW NIPPON BRASS CO., LTD.
- 42 HOEI SHOJI CO., LTD.
- 43 DOWA HIGHTECH CO., LTD.
- 44 DOWA POWER DEVICE CO., LTD.
- 45 Technology Center
- 46 DOWA METAL CO., LTD.
- 47 DOWA METANIX CO., LTD.
- 48 TOKUYAMA-DOWA POWER MATERIAL CO., LTD.

DOWA THERMOTECH CO., LTD.

- 49 DOWA THERMOENGINEERING CO., LTD. Moka Plant
- 50 DOWA THERMOENGINEERING CO., LTD. Ota Plant
- 51 DOWA THERMOENGINEERING CO., LTD. Hamamatsu Plant
- 52 DOWA THERMOENGINEERING CO., LTD. Hamamatsu-kita Plant
- 53 DOWA THERMOENGINEERING CO., LTD. Chukyo-Handa Plant
- 54 DOWA THERMOENGINEERING CO., LTD. Shiga Plant
- 55 CEMM CO., LTD.
- 56 TONETSU KOHSAN CO., LTD.

Headquarters, Others

- 57 DOWA TECHNO RESEARCH CO., LTD.
- 58 UNEKURA MINING CO., LTD.
- 59 AKITA ENGINEERING CO., LTD.
- 60 DOWA TECHNOLOGY CO., LTD. Kanto Techno Center
- 61 Headquarters
- 62 DOWA Group Nagoya Branch
- 63 DOWA Group Osaka Branch
- 64 DOWA TECHNOLOGY CO., LTD. Seibu Techno Center
- 65 DOWA TECHNO ENGINEERING CO., LTD.
- 66 YOWA ENGINEERING CO., LTD.
- 67 DOWA KOHSAN CO., LTD.
- 68 DOWA Group Kyushu Branch

Subsidiaries and Affiliates

80 Consolidated Subsidiaries and 18 Affiliates Accounted for by the Equity Method

(As of March 31, 2018)

Name	Issued Share Capital (Millions of Yen)	Percentage Owned Directly or Indirectly by the Company*1 (%)	Principal Business
Environmental Management & Recycling			
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 waste treatment
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, personal computers
ECO-RECYCLE CO., LTD.	150	66.7	Recovery of discarded household appliances, personal computers
GREEN FILL KOSAKA CO., LTD.	100	100.0	Waste treatment
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 treatment and resources 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, scraping and recycling of used cars
BIODIESEL OKAYAMA CO., LTD.	99	100.0	Manufacturing of biodiesel
ECO-SYSTEM CHIBA CO., LTD.	90	100.0	Waste treatment
MELTEC Ltd.	90	100.0	Waste treatment and metals recovery
ECO-SYSTEM AKITA CO., LTD.	50	100.0	Waste treatment and resources recycling
ECO-SYSTEM KOSAKA CO., LTD.	50	100.0	Industrial waste treatment, recycling of ferrous and nonferrous metals
ECO-SYSTEM JAPAN CO., LTD.	30	100.0	Sales of waste treatment and resources recycling, collection and transportation of waste
DOWA-TSUUN CO., LTD.	20	100.0	Vehicle transportation, forwarding, and warehousing
MODERN ASIA ENVIRONMENTAL HOLDINGS, INC.	16,392 thousand U.S. dollars	100.0	Holding company of waste treatment businesses
EASTERN SEABOARD ENVIRONMENTAL COMPLEX CO., LTD.	100 million Thai baht	100.0	Landfill of non-hazardous waste
BANGPOO ENVIRONMENTAL COMPLEX LTD.	80 million Thai baht	100.0	Incineration of non-hazardous waste
TECHNOCHEM ENVIRONMENTAL COMPLEX PTE. LTD.	3,500 thousand Singapore dollars	100.0	Incineration of hazardous waste
PT. PRASADHA PAMUNAH LIMBAH INDUSTRI	49,578 million Indonesia 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
DOWA ECO-SYSTEM SINGAPORE PTE. LTD.	3,000 thousand Singapore dollars	100.0	Recycling of precious and nonferrous metals
Nonferrous Metals			
DOWA METALS & MINING CO., LTD.	1,000	100.0	Manufacturing and sales 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.	2,860	61.9	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 disposable catalysts
ZINC EXCEL CO., LTD.	200	100.0	Sales 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
DOWA METALS & MINING ALASKA LTD.	25,600 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 sales 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			
DOWA ELECTRONICS MATERIALS CO., LTD.	1,000	100.0	Manufacturing and sales of semiconductors, electronic and advanced fine materials
DOWA HIGHTECH CO., LTD. (Conductive materials and battery materials)	450	100.0	Manufacturing of metal compounds, 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 powders and carrier powders
DOWA F-TEC CO., LTD.	300	100.0	Manufacturing of ferrite powders
DOWA ELECTRONICS MATERIALS OKAYAMA CO., LTD.	100	100.0	Manufacturing of metal powders

Name	Issued Share Capital (Millions of Yen)	Percentage Owned Directly or Indirectly by the Company*1 (%)	Principal Business
Metal Processing			
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 strip
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 sales 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
DOWA ADVANCED MATERIALS (SHANGHAI) CO., LTD.	2,500 thousand U.S. dollars	100.0	Processing and sales of copper strip products
DOWA METALTECH (THAILAND) CO., LTD.	475 million Thai baht	100.0	Processing and sales of copper strip products
DOWA NEW MATERIALS (SHANGHAI) CO., LTD.	1,000 thousand Chinese Yuan	100.0	Sales of copper strip products
Dowa Precision (Thailand) Co., Ltd.	70 million Thai baht	100.0	Processing of copper strip products
Heat Treatment			
DOWA THERMOTECH CO., LTD.	1,000	100.0	Heat treatment processing and sales of heat treatment equipment
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
KUNSHAN DOWA THERMO FURNACE CO., LTD.	12,000 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	279,573 million Indonesia rupiah	100.0	Heat treatment processing and surface processing
PT. DOWA THERMOTECH FURNACES	11,666 million Indonesia rupiah	100.0	Imports and sales and maintenance of heat treatment equipment
HIGHTEMP FURNACES LTD.	90 million Indian rupee	93.3	Design, manufacturing and maintenance of heat treatment equipment, heat treatment processing, surface processing and processing of machine components
Others			
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	Providing 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, providing of analysis and evaluation services
DOWA TECHNO RESEARCH CO., LTD.	10	100.0	Providing of analysis and evaluation services, environmental measurement
Five Other Companies			
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. Acids Co., Ltd.	7,000	31.6	Copper smelting and refining, waste treatment
Cariboo Copper Corporation	150	50.0	Sale of sulfuric acid
Cariboo Copper Corporation	9,100 thousand Canadian dollars	25.0	Mining and sales 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 sales of conductive pastes
TOKUYAMA-DOWA POWER MATERIALS CO., LTD.	250	35.0	Manufacturing of ceramic substrates
JAPAN COPPER CASTING CO., LTD.	200	30.0	Manufacturing and sales of copper products
Fujita Kanko Inc.*2	12,081	31.8	Lodging and hotel management, real estate agent
NIPPON ANFO MANUFACTURING Co., Ltd.	91	29.1	Manufacturing and sales of industrial explosives

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

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

Financial Review

Fiscal year ended March 31, 2018

Financial Performance

The Japanese economy followed a gradual recovery track in fiscal 2017, the fiscal year ended March 31, 2018. The global economy continued to expand at a moderate rate and, despite ongoing uncertainty regarding the U.S. administration's policies, the economy remained relatively firm.

Turning to the business environment in which the DOWA Group operates, demand for automotive-related products was firm both in Japan and overseas. We also note that demand, particularly in East Asia, expanded for electronic materials and new energy-related products. As for the commodities markets, the prices of metals, including for zinc and copper alloys, rose during the fiscal year under review. With regard to foreign exchange rates, the yen remained in the ¥110–¥115/\$ range until the third quarter of the fiscal year under review and the trend then shifted to yen appreciation.

The DOWA Group is committed to fostering an expansion in each of its five distinctive business divisions, utilizing the overall strength of the Group to build a solid earnings structure that can withstand changes in the operating environments of each of the mainstay businesses. We are also focused on stabilizing earnings by reducing the risk of losses due to fluctuations in metal prices or foreign exchange rates.

Under the aforementioned circumstances, in fiscal 2017, consolidated net sales improved 11% compared with the previous fiscal year, to ¥454,754 million, while operating income dropped 9%, to ¥30,948 million. Ordinary income remained steady from the previous year at ¥36,355 million, as equity-method investment profit rose on lower exploration costs and profit growth at mining companies, and net income attributable to owners of the parent decreased 6%, to ¥24,693 million.

Analysis of Financial Position

Assets

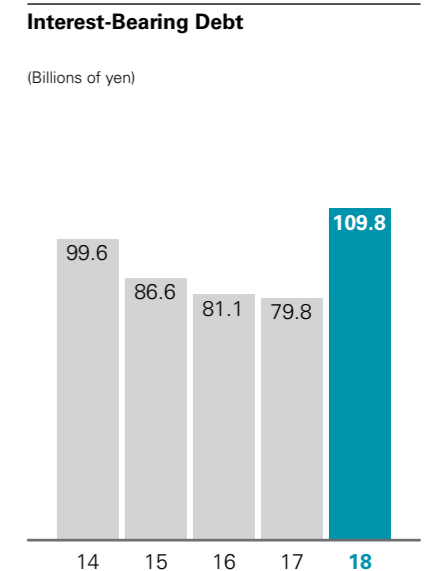
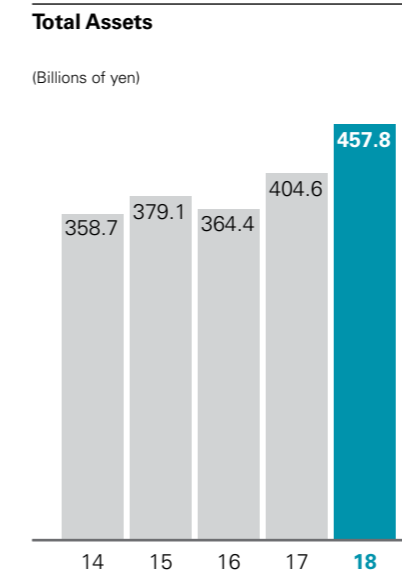
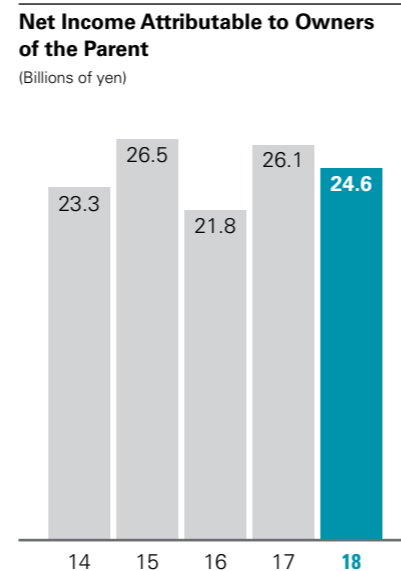
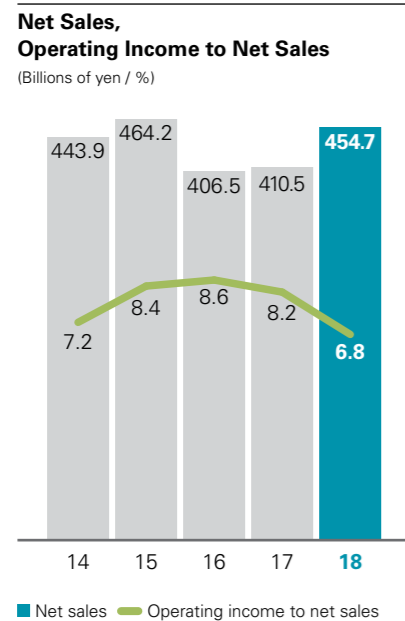
Total assets as of the end of the fiscal year under review stood at ¥457,841 million, up ¥53,237 million compared with the end of the previous fiscal year. Current assets were up ¥37,467 million and fixed assets increased ¥15,769 million. Current assets increased due mainly to increases of ¥19,462 million in raw materials and supplies, ¥7,445 million in notes and accounts receivable, and ¥4,214 million in other current assets. Fixed assets increased due to a ¥10,938 million rise in investments and other assets and a ¥5,771 million rise in tangible fixed assets.

Liabilities

Liabilities increased ¥33,296 million compared with the previous fiscal year-end. This increase was due primarily to increases in interest-bearing debt of ¥29,943 million and other current liabilities of ¥3,590 million.

Equity

While net income attributable to owners of the parent came in at ¥24,693 million, the payment of cash dividends and other factors meant that the increase in equity was held to ¥19,085 million. Accumulated other comprehensive income was up ¥426 million, due mainly to increases in deferred gains on hedges, and total equity was ¥19,940 million higher than the balance as of the end of the previous fiscal year, with the equity ratio at 52.2%.



Analysis of Cash Flows

Consolidated cash and cash equivalents (“cash”) increased ¥1,346 million compared with the end of the previous fiscal year, to ¥16,472 million.

Net cash provided by operating activities came to ¥11,125 million (down ¥18,264 million year on year). Principal cash inflows were income before income taxes and minority interests of ¥34,974 million (down ¥1,760 million), the non-financial expenses of depreciation and amortization of ¥17,212 million, and the increase in trade payables of ¥2,646 million. Major cash outflows were an increase in inventories of ¥23,936 million, an increase in trade receivables of ¥7,308 million, and income taxes paid of ¥12,462 million.

Net cash used in investing activities was ¥34,010 million (up ¥8,055 million). This was primarily due to capital expenditures of ¥24,037 million, mainly in the Environmental Management & Recycling business.

Net cash provided by financing activities was ¥24,087 million (compared with net cash used in financing of ¥7,155 million in the previous fiscal year). This reflected an increase in interest-bearing debt of ¥30,371 million and cash dividends paid of ¥5,555 million.

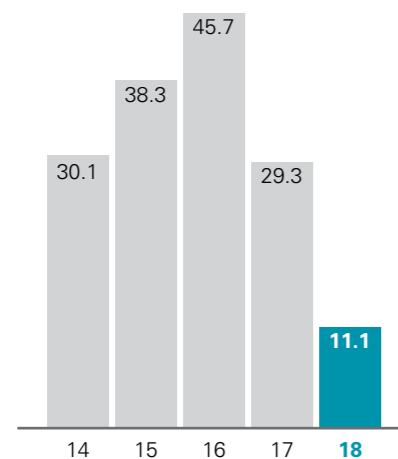
Basic Dividend Policy and Dividends for the Fiscal Year under Review and the Next Fiscal Year

DOWA views the payment of dividends to shareholders as one of its most important management issues. The Company’s policy is to pay a dividend commensurate with performance, having appropriated sufficient retained earnings to bolster the Group’s business position and support future business development.

After comprehensive consideration of its performance in the fiscal year under review as well as the need to pursue business development and strengthen its financial structure, the Company intends to pay an annual dividend of ¥90 per share. This is materially the same level of dividend distributions as in the previous fiscal year because, on October 1, 2017, the Company conducted a 5-for-1 reverse stock split of its common stock.

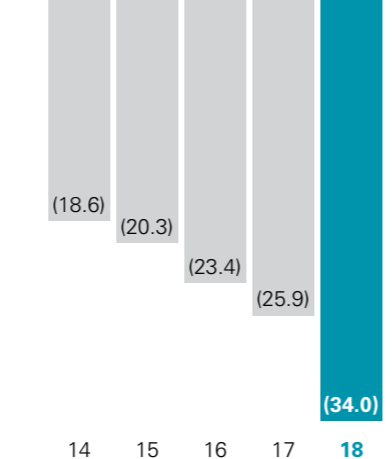
Cash Flows from Operating Activities

(Billions of yen)



Cash Flows from Investing Activities

(Billions of yen)



Business Risks

The 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.

Forward-looking statements among the risk items that follow reflect the opinion of the Group as of March 31, 2018.

Economic Conditions

The Group’s business performance and financial condition may be negatively affected by economic recessions in its principal markets, which include Japan, North America, Asia, and Europe, or by shrinking demand accompanying such changes.

Metal and Currency Markets

Among its products, the Group handles gold, silver, copper, and zinc, the prices for which are set by international markets. The unprocessed ore for these metals is also procured from overseas. For these reasons, the Group is confronted with risks due to changes in international market conditions and fluctuations in currency exchange rates. The Group employs a variety of hedging measures, including nonferrous metal commodity forward contracts and forward exchange contracts, in an attempt to mitigate these risks.

Public Regulations

The Group is subject to a variety of legal regulations. In Japan, these include laws pertaining to the environment and recycling, as well as anti-trust laws. Overseas, the Group must comply with legal regulations present in the countries where it operates, for example, regulations regarding customs, imports and exports, and laws concerning the control of foreign currency. The Group, for its part, takes every legal precaution to protect its rights with respect to these laws. Nevertheless, business performance may be adversely affected if Group business operations are restricted as a result of mandates stipulated by the establishment of presently unforeseen regulations.

Stock Price Fluctuations

The Group is subject to risks due to fluctuations in stock prices stemming from the approximately ¥29.7 billion in marketable securities it held as of March 31, 2018. These securities primarily represent stock held in Group business partners.

Interest Rate Fluctuations

As of March 31, 2018, the Group’s balance of interest-bearing debt was ¥109.8 billion, with external fund procurement accounting for 24% of total assets. Consequently, a sharp rise in interest rates could adversely affect business performance.

Disasters and Power Outages

The Group conducts disaster prevention and equipment inspections at all of its facilities in an attempt to minimize any possible negative effects that could result from sudden production line stoppages. Nevertheless, the Group may experience a dramatic decline in production capacity should a disaster, power outage, or other type of interruption occur at its production facilities.

Consolidated Performance Trends

(Millions of yen)

For the years ended March 31	2018*1	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Financial Performance											
Net Sales.....	¥454,754	¥410,503	¥406,598	¥464,219	¥443,985	¥419,390	¥392,468	¥379,816	¥307,462	¥346,885	¥475,826
Cost of Sales.....	387,831	341,177	337,314	391,509	382,079	365,963	343,015	330,380	268,738	329,340	399,901
Selling, General and Administrative Expenses.....	35,975	35,335	34,216	33,616	30,111	28,863	27,443	26,511	25,022	26,042	31,605
Operating Income (Loss).....	30,948	33,990	35,067	39,094	31,794	24,564	22,009	22,924	13,701	(8,497)	44,319
Operating Income by Segment											
Environmental Management & Recycling (%).....	16.06	19.50	18.01	18.80	29.86	26.37	20.34	12.22	15.35	—	18.11
Nonferrous Metals (%).....	29.74	29.58	38.00	34.69	22.20	19.09	19.25	22.56	21.95	—	50.74
Electronic Materials (%).....	18.17	19.36	22.89	22.55	21.12	23.58	24.95	31.16	35.12	—	14.23
Metal Processing (%).....	23.54	20.49	14.01	14.85	16.96	19.89	20.59	23.66	24.00	—	6.86
Heat Treatment (%).....	8.47	7.00	3.86	6.02	7.12	6.33	8.95	6.18	1.07	—	8.11
Others and Elimination (%).....	4.01	4.06	3.24	3.09	2.74	4.74	5.92	4.21	2.51	—	1.93
EBITDA*2.....	¥ 48,161	¥ 49,787	¥ 50,213	¥ 54,667	¥ 48,000	¥ 41,551	¥ 40,354	¥ 41,410	¥ 32,978	¥ 19,268	¥ 18,657
Net Income (Loss) Attributable to Owners of the Parent.....	24,693	26,169	21,826	26,543	23,310	15,213	10,610	8,521	4,359	(28,138)	24,520
Capital Expenditures.....	24,608	26,526	22,936	17,247	16,549	18,422	15,910	17,820	10,763	24,213	26,324
Depreciation.....	17,212	15,796	15,145	15,572	16,205	16,987	18,344	18,486	19,276	18,612	13,974
R&D Expenses.....	5,380	5,670	5,594	5,320	4,651	4,604	4,623	4,266	4,099	4,980	7,996
Exchange Rate and Metal Prices											
Copper (Price Quoted, Average).....	¥756,683	¥603,917	¥657,483	¥765,775	¥757,633	¥696,375	¥717,816	¥738,200	¥609,483	¥657,408	¥915,950
Zinc (Price Quoted, Average).....	386,733	305,633	269,383	285,983	240,325	208,675	211,683	231,858	222,575	202,725	388,183
U.S. Dollar (Average).....	110.85	108.38	120.14	109.93	100.23	83.11	79.08	85.72	92.85	100.53	114.28
Financial Position											
Equity.....	¥247,762	¥227,821	¥203,370	¥195,649	¥166,987	¥142,400	¥121,807	¥113,785	¥111,667	¥103,830	¥150,281
Non-Controlling Interests.....	8,946	8,518	8,449	8,528	8,733	8,807	7,999	6,942	5,663	5,263	6,078
Total Assets.....	457,841	404,604	364,420	379,193	358,717	349,787	319,665	340,161	330,720	343,208	367,931
Interest-Bearing Debt.....	109,827	79,883	81,135	86,668	99,663	107,198	117,670	138,119	149,371	180,496	120,953
Per Share*3, *4 (Yen)											
Basic Net Income (Loss).....	¥ 417.21	¥ 88.43	¥ 73.75	¥ 89.69	¥ 78.77	¥ 51.41	¥ 35.86	¥ 28.80	¥ 14.96	¥ (94.36)	¥ 81.86
Fully Diluted Net Income.....	—	—	—	—	—	—	—	—	—	—	77.91
Fully Diluted Equity.....	4,035.35	741.06	658.66	632.30	534.75	451.41	384.55	361.18	358.33	339.93	481.85
Cash Dividends.....	90.00	18.00	18.00	18.00	15.00	12.00	10.00	10.00	10.00	10.00	20.00
Cash Flows											
Cash Flows from Operating Activities.....	¥ 11,125	¥ 29,389	¥ 45,751	¥ 38,345	¥ 30,189	¥ 34,970	¥ 31,499	¥ 23,955	¥ 25,011	¥ 33,593	¥ 40,398
Cash Flows from Investing Activities.....	(34,010)	(25,954)	(23,486)	(20,321)	(18,689)	(19,354)	(19,491)	(19,257)	(14,602)	(36,477)	(39,138)
Cash Flows from Financing Activities.....	24,087	(7,155)	(11,159)	(16,905)	(12,341)	(14,982)	(24,134)	(15,070)	(33,888)	49,303	(1,820)
Free Cash Flow.....	(22,884)	3,434	22,265	18,024	11,499	15,615	12,007	4,698	10,408	(2,883)	1,259
Cash and Cash Equivalents at End of Year.....	16,472	15,126	18,902	8,044	5,823	6,129	4,788	16,741	27,115	50,681	4,294
Ratios											
Return on Assets*5 (%).....	7.18	8.84	9.43	10.60	8.98	7.34	6.67	6.83	4.07	—	12.31
Return on Equity*6 (%).....	10.78	12.64	11.43	15.37	15.97	12.30	9.62	8.01	4.26	(23.18)	17.45
Operating Income (Loss) to Net Sales (%).....	6.81	8.28	8.62	8.42	7.16	5.86	5.61	6.04	4.46	(2.45)	9.31
Equity Ratio*7 (%).....	52.16	54.20	53.49	49.35	44.12	38.19	35.60	31.41	32.05	28.72	39.19
Operating Income Growth (%).....	(8.95)	(3.07)	(10.30)	22.96	29.43	11.60	(3.99)	67.31	—	—	(9.06)
Interest Coverage (Times).....	55.57	43.12	39.04	34.23	21.41	14.82	11.52	10.55	5.12	(2.79)	21.10
Debt / Equity Ratio*7 (Times).....	0.46	0.36	0.42	0.46	0.63	0.80	1.03	1.29	1.41	1.83	0.84
Debt / Capacity Ratio (Times).....	1.05	0.83	1.00	1.06	1.28	1.37	1.83	1.90	1.91	2.11	1.48
Return on Invested Capital*7 (%).....	7.08	8.75	7.91	9.70	9.04	6.32	4.58	3.48	1.71	(10.08)	9.25

*1 The years stated in the table are ended March 31. Thus "2018" refers to the fiscal year that ran from April 1, 2017 through March 31, 2018.

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

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

*4 Fully diluted net income is not stated from 2010 to 2018 because no diluted shares existed. Fully diluted net income is not stated for 2009 although diluted shares existed because a net loss per share was incurred.

*5 Operating income divided by the average of total assets at the start and end of the year.

*6 Net income attributable to owners of the parent divided by the average of shareholders' equity (the amounts after deducting non-controlling interests 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 interests amounts from equity amounts).

Consolidated Balance Sheet

DOWA HOLODINGS CO., LTD. and Its Consolidated Subsidiaries
For the years ended March 31, 2018 and 2017

Assets	Millions of yen		Thousands of U.S. dollars (Note 1)
	2018	2017	2018
Current Assets:			
Cash and time deposits (Notes 3, 6, and 14)	¥ 16,935	¥ 15,589	\$ 159,410
Notes and accounts receivable: (Note 14)			
Trade	85,718	77,957	806,839
Nonconsolidated subsidiaries and associates	2,728	3,167	25,683
Others	5,447	4,805	51,272
Subtotal	93,894	85,930	883,794
Inventories: (Note 13)			
Merchandise and finished products	27,550	23,336	259,323
Work in process	5,663	4,799	53,306
Raw materials and supplies	73,127	53,664	688,321
Subtotal	106,341	81,801	1,000,952
Deferred tax assets (Note 9)	3,957	3,953	37,250
Other current assets	11,354	7,658	106,879
Allowance for doubtful accounts	(191)	(109)	(1,804)
Total current assets	232,291	194,824	2,186,482
Property, Plant, and Equipment (Notes 5 and 6):			
Land	24,638	23,483	231,912
Buildings and structures	119,288	115,930	1,122,825
Machinery and equipment	242,390	233,452	2,281,541
Construction in progress	8,491	7,615	79,929
Others	16,602	15,657	156,273
Subtotal	411,412	396,139	3,872,481
Accumulated depreciation	(287,087)	(277,586)	(2,702,255)
Net property, plant, and equipment	124,324	118,553	1,170,226
Investments and Other Assets:			
Investments in securities (Notes 4, 6, and 14)	30,669	31,490	288,684
Investments in and advances to nonconsolidated subsidiaries and associates (Notes 4, 6, and 14)	54,306	42,943	511,166
Deferred tax assets (Note 9)	3,783	3,723	35,617
Goodwill	5,250	5,706	49,424
Other assets	7,314	7,460	68,846
Allowance for doubtful accounts	(100)	(98)	(948)
Total investments and other assets	101,224	91,226	952,790
Total assets	¥ 457,841	¥ 404,604	\$ 4,309,498

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

2. ¥106.24 = U.S. \$1, the rate of exchange on March 31, 2018.

Liabilities and Equity	Millions of yen		Thousands of U.S. dollars (Note 1)
	2018	2017	2018
Current Liabilities:			
Short-term borrowings (Notes 6 and 14).....	¥ 37,613	¥ 29,862	\$ 354,040
Commercial paper (Notes 6 and 14)	25,000	12,000	235,316
Current maturities of long-term debt (Notes 6 and 14)	7,094	9,813	66,778
Notes and accounts payable: (Note 14)			
Trade	36,655	33,068	345,025
Nonconsolidated subsidiaries and associates	715	1,227	6,735
Others	5,309	7,201	49,973
Subtotal	42,680	41,497	401,734
Accrued expenses	7,983	7,136	75,142
Accrued income taxes	2,680	5,871	25,226
Accrued bonuses	4,050	3,777	38,125
Accrued directors' bonuses	232	208	2,184
Other current liabilities	15,622	10,947	147,051
Total current liabilities	142,956	121,114	1,345,600
Long-term Liabilities:			
Long-term debt (Notes 6 and 14)	40,659	29,356	382,717
Liability for employees' retirement benefits (Note 12)	17,411	16,428	163,890
Retirement allowance for directors and audit & supervisory board members	719	753	6,774
Deferred tax liabilities (Note 9)	3,821	3,293	35,966
Other long-term liabilities	4,509	5,835	42,447
Total long-term liabilities	67,122	55,667	631,796
Total liabilities	210,078	176,782	1,977,396
Contingent Liabilities (Note 7)			
Equity: (Note 8)			
Common stock:			
Authorized: 200,000 thousand shares in 2018 and 2017			
Issued: 61,989 thousand shares in 2018 and 2017	36,437	36,437	342,972
Capital surplus	26,222	26,350	246,822
Retained earnings	165,029	145,809	1,553,362
Treasury stock, at cost (2,804 thousand shares in 2018 and 2,802 thousand shares in 2017) ..	(5,708)	(5,703)	(53,733)
Accumulated Other Comprehensive Income:			
Unrealized gain (loss) on available-for-sale securities	14,164	14,466	133,327
Deferred gain (loss) on derivatives under hedge accounting (Note 15)	1,199	139	11,289
Foreign currency translation adjustments	2,124	2,516	19,997
Defined retirement benefit plans (Note 12)	(653)	(713)	(6,149)
Total	238,815	219,303	2,247,888
Noncontrolling interests	8,946	8,518	84,214
Total equity	247,762	227,821	2,332,102
Total liabilities and equity	¥ 457,841	¥ 404,604	\$ 4,309,498

*1. The number of shares has been restated, as appropriate, to reflect a one-for-five reverse stock split effected on October 1, 2017.

Consolidated Statement of Income

DOWA HOLODINGS CO., LTD. and Its Consolidated Subsidiaries
For the years ended March 31, 2018 and 2017

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2018	2017	2018
Net Sales	¥ 454,754	¥410,503	\$ 4,280,445
Cost of Sales (Notes 11 and 13)	387,831	341,177	3,650,518
Gross profit (loss)	66,923	69,325	629,927
Selling, General, and Administrative Expenses (Notes 10 and 11) ...	35,975	35,335	338,620
Operating income (loss)	30,948	33,990	291,307
Other Income (Expenses):			
Interest and dividend income	1,148	847	10,813
Interest expense	(578)	(808)	(5,446)
Gain (loss) on sales and disposals of property, plant and equipment, net	(665)	(250)	(6,268)
Foreign exchange gain (loss)	(159)	(306)	(1,504)
Share of profit (loss) of entities accounted for using equity method	3,723	2,029	35,052
Royalty income	1,074	1,066	10,114
Gain (loss) on sales of investments in securities, net	96	383	905
Environmental expenses	(466)	(556)	(4,395)
Loss on impairments (Note 5)	(270)	(377)	(2,543)
Loss from natural disaster	(165)	—	(1,554)
Compensation for loss.....	(409)	—	(3,849)
Other, net	698	716	6,574
Subtotal	4,026	2,744	37,898
Income (loss) before income taxes	34,974	36,735	329,205
Income Taxes: (Note 9)			
Current	9,329	10,468	87,816
Deferred	381	(207)	3,587
Total income taxes	9,710	10,260	91,404
Net Income (loss)	25,264	26,474	237,801
Net Income (Loss) Attributable to Noncontrolling Interests	570	304	5,373
Net income (loss) attributable to owners of the parent	¥ 24,693	¥ 26,169	\$ 232,428

Per Share: (Notes 8 and 17)	Yen		U.S. dollars (Note 1)
	2018	2017	2018
Basic net income	¥ 417.21	¥ 442.16	\$ 3.92
Cash dividends	90.00	90.00	0.84

- *1. The accompanying notes are an integral part of these consolidated financial statements.
 2. ¥106.24 = U.S. \$1, the rate of exchange on March 31, 2018.
 3. Per share figures has been restated, as appropriate, to reflect a one-for-five reverse stock split effected on October 1, 2017.

Consolidated Statement of Comprehensive Income

DOWA HOLODINGS CO., LTD. and Its Consolidated Subsidiaries
For the years ended March 31, 2018 and 2017

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2018	2017	2018
Net Income (loss)	¥ 25,264	¥26,474	\$237,801
Other comprehensive income: (Note 16)			
Unrealized gain (loss) on available-for-sale securities	(449)	4,219	(4,233)
Deferred gain (loss) on derivatives under hedge accounting	1,122	359	10,567
Foreign currency translation adjustments	(604)	(370)	(5,685)
Defined retirement benefit plans	40	331	377
Share of other comprehensive income in affiliates	182	(876)	1,715
Total other comprehensive income	291	3,663	2,741
Comprehensive income	¥ 25,555	¥30,137	\$240,543
Total comprehensive income attributable to:			
Owners of the parent	¥ 25,119	¥29,869	\$236,441
Noncontrolling interests	435	267	4,102

- *1. The accompanying notes are an integral part of these consolidated financial statements.
 2. ¥106.24= U.S. \$1, the rate of exchange on March 31, 2018.

Consolidated Statement of Changes in Equity

DOWA HOLODINGS CO., LTD. and Its Consolidated Subsidiaries
For the years ended March 31, 2018 and 2017

	Thousands	Millions of yen			
		Shareholders' Equity			
	Number of Shares of Common Stock Outstanding (Note 8)	Common Stock	Capital Surplus	Retained Earnings	Treasury Stock, at Cost
Balance, April 1, 2016	59,187	¥ 36,437	¥ 26,426	¥ 125,049	¥ (5,701)
Cash dividends paid	—	—	—	(5,409)	—
Net Income (loss) attributable to owners of the parent	—	—	—	26,169	—
Net change in treasury stock held by affiliates	(0)	—	—	0	—
Purchases of treasury stock	(0)	—	—	—	(2)
Change of scope of consolidation	—	—	—	0	—
Change in the parent's ownership interest due to transactions with noncontrolling interests	—	—	(75)	—	—
Net changes of items other than shareholders' equity	—	—	—	—	—
Balance, April 1, 2017	59,186	¥ 36,437	¥ 26,350	¥ 145,809	¥ (5,703)
Cash dividends paid	—	—	—	(5,409)	—
Net Income (loss) attributable to owners of the parent	—	—	—	24,693	—
Purchases of treasury stock	(1)	—	—	—	(5)
Disposal of treasury stock	0	—	0	—	0
Change of scope of consolidation	—	—	—	(65)	—
Change in the parent's ownership interest due to transactions with noncontrolling interests	—	—	(128)	—	—
Net changes of items other than shareholders' equity	—	—	—	—	—
Balance, March 31, 2018	59,185	¥ 36,437	¥ 26,222	¥ 165,029	¥ (5,708)

	Thousands	Thousands of U.S. dollars (Note 1)			
		Shareholders' Equity			
	Number of Shares of Common Stock Outstanding (Note 8)	Common Stock	Capital Surplus	Retained Earnings	Treasury Stock, at Cost
Balance, April 1, 2017	59,186	\$342,972	\$248,032	\$1,372,458	\$ (53,686)
Cash dividends paid	—	—	—	(50,913)	—
Net Income (loss) attributable to owners of the parent	—	—	—	232,428	—
Purchases of treasury stock	(1)	—	—	—	(47)
Disposal of treasury stock	0	—	0	—	0
Change of scope of consolidation	—	—	—	(612)	—
Change in the parent's ownership interest due to transactions with noncontrolling interests	—	—	(1,210)	—	—
Net changes of items other than shareholders' equity	—	—	—	—	—
Balance, March 31, 2018	59,185	\$342,972	\$246,822	\$1,553,362	\$ (53,733)

- *1. The accompanying notes are an integral part of these consolidated financial statements.
 2. ¥106.24= U.S. \$1, the rate of exchange on March 31, 2018.
 3. The number of shares has been restated, as appropriate, to reflect a one-for-five reverse stock split effected on October 1, 2017.

	Millions of yen						
	Accumulated Other Comprehensive Income					Total	Non-controlling Interests
	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, 2016	¥ 10,649	¥ (227)	¥ 3,378	¥ (1,091)	¥ 194,921	¥ 8,449	¥ 203,370
Cash dividends paid	—	—	—	—	(5,409)	—	(5,409)
Net Income (loss) attributable to owners of the parent	—	—	—	—	26,169	—	26,169
Net change in treasury stock held by affiliates	—	—	—	—	0	—	0
Purchases of treasury stock	—	—	—	—	(2)	—	(2)
Change of scope of consolidation	—	—	—	—	0	—	0
Change in the parent's ownership interest due to transactions with noncontrolling interests	—	—	—	—	(75)	—	(75)
Net changes of items other than shareholders' equity	3,817	367	(861)	377	3,699	68	3,768
Balance, April 1, 2017	¥ 14,466	¥ 139	¥ 2,516	¥ (713)	¥ 219,303	¥ 8,518	¥ 227,821
Cash dividends paid	—	—	—	—	(5,409)	—	(5,409)
Net Income (loss) attributable to owners of the parent	—	—	—	—	24,693	—	24,693
Purchases of treasury stock	—	—	—	—	(5)	—	(5)
Disposal of treasury stock	—	—	—	—	0	—	0
Change of scope of consolidation	—	—	—	—	(65)	—	(65)
Change in the parent's ownership interest due to transactions with noncontrolling interests	—	—	—	—	(128)	—	(128)
Net changes of items other than shareholders' equity	(302)	1,060	(392)	60	426	428	854
Balance, March 31, 2018	¥ 14,164	¥ 1,199	¥ 2,124	¥ (653)	¥ 238,815	¥ 8,946	¥ 247,762

	Thousands of U.S. dollars (Note 1)						
	Accumulated Other Comprehensive Income					Total	Non-controlling Interests
	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, 2017	\$136,172	\$ 1,309	\$23,688	\$ (6,718)	\$2,064,228	\$80,179	\$2,144,408
Cash dividends paid	—	—	—	—	(50,913)	—	(50,913)
Net Income (loss) attributable to owners of the parent	—	—	—	—	232,428	—	232,428
Purchases of treasury stock	—	—	—	—	(47)	—	(47)
Disposal of treasury stock	—	—	—	—	0	—	0
Change of scope of consolidation	—	—	—	—	(612)	—	(612)
Change in the parent's ownership interest due to transactions with noncontrolling interests	—	—	—	—	(1,210)	—	(1,210)
Net changes of items other than shareholders' equity	(2,844)	9,979	(3,691)	569	4,012	4,034	8,047
Balance, March 31, 2018	\$133,327	\$11,289	\$19,997	\$ (6,149)	\$2,247,888	\$84,214	\$2,332,102

Consolidated Statement of Cash Flows

DOWA HOLODINGS CO., LTD. and Its Consolidated Subsidiaries
For the years ended March 31, 2018 and 2017

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2018	2017	2018
Cash Flows from Operating Activities			
Income (loss) before income taxes.....	¥ 34,974	¥ 36,735	\$ 329,205
Adjustments for:			
Income taxes (paid) refund	(12,462)	(5,999)	(117,303)
Depreciation and amortization	17,740	16,297	166,984
Loss (gain) on sales and disposals of property, plant, and equipment, net.....	665	250	6,268
Share of (profit) loss of entities accounted for using the equity method	(3,723)	(2,029)	(35,052)
Loss (gain) on sales of investment securities, net	(96)	(383)	(905)
Loss on impairments (Note 5)	270	377	2,543
Changes in assets and liabilities			
Decrease (increase) in notes and accounts receivable	(7,308)	(18,222)	(68,796)
Decrease (increase) in inventories	(23,936)	(12,730)	(225,306)
Increase (decrease) in notes and accounts payable	2,646	5,724	24,911
Increase (decrease) in allowance for doubtful accounts	86	(62)	809
Increase (decrease) in net defined benefit liability	883	597	8,314
Decrease (increase) in interest and dividend receivables	2,426	2,248	22,837
Increase (decrease) in interest payable	46	7	438
Other, net	(1,086)	6,580	(10,225)
Net cash provided by operating activities	11,125	29,389	104,722
Cash Flows from Investing Activities:			
Acquisition of property, plant, and equipment	(23,680)	(25,264)	(222,894)
Proceeds from sales of property, plant, and equipment	516	1,674	4,865
Acquisition of intangible fixed assets.....	(356)	(700)	(3,359)
Acquisition of investments in securities	(7)	(17)	(67)
Proceeds from sales of investments in securities	35	675	336
Acquisition of investments in subsidiaries and associates	(2,881)	(2,125)	(27,119)
Proceeds from sales of shares of subsidiaries and associates	—	157	—
Purchase of shares of subsidiaries resulting in change in scope of consolidation	(171)	—	(1,615)
Proceeds from sales of shares of subsidiaries resulting in change in scope of consolidation.....	14	—	134
Payments for loans	(8,444)	(2,030)	(79,485)
Proceeds from collection of loans	825	880	7,771
Proceeds from subsidies	448	946	4,225
Other, net	(309)	(150)	(2,917)
Net cash used in investing activities	(34,010)	(25,954)	(320,124)
Cash Flows from Financing Activities:			
Net increase (decrease) in short-term loans payable	8,200	9,564	77,188
Net increase (decrease) in commercial papers	13,000	(2,000)	122,364
Proceeds from long-term debt	18,351	3,380	172,731
Repayment of long-term debt	(9,179)	(11,944)	(86,404)
Cash dividends paid	(5,555)	(5,555)	(52,294)
Proceeds from stock issuance to noncontrolling shareholders	—	370	—
Repayment of lease obligations	(723)	(453)	(6,806)
Purchases of treasury stock	(5)	(2)	(47)
Proceeds from sales of treasury stock	0	—	0
Payments from changes in ownership interests in subsidiaries that do not result in change in scope of consolidation	—	(498)	—
Other, net	—	(17)	—
Net cash provided by (used in) financing activities	24,087	(7,155)	226,731
Foreign Currency Translation Adjustment on Cash and Cash Equivalents	(115)	(54)	(1,083)
Net Increase (Decrease) in Cash and Cash Equivalents	1,088	(3,775)	10,245
Cash and Cash Equivalents of Newly Consolidated Subsidiaries ..	257	—	2,424
Cash and Cash Equivalents at Beginning of Year	15,126	18,902	142,384
Cash and Cash Equivalents at End of Year (Note 3)	¥ 16,472	¥ 15,126	\$155,054

*1. The accompanying notes are an integral part of these consolidated financial statements.
2. ¥ 106.24 = U.S. \$1, the rate of exchange on March 31, 2018.

Notes to Consolidated Financial Statements

DOWA HOLODINGS CO., LTD. and Its Consolidated Subsidiaries
For the years ended March 31, 2018 and 2017

1. Basis of Presentation of the Consolidated Financial Statements

The accompanying consolidated financial statements have been prepared in accordance with the provisions set forth in the Japanese Financial Instruments and Exchange Act and its related accounting regulations and in accordance with accounting principles generally accepted in Japan (“Japanese GAAP”), which are different in certain respects as to the application and disclosure requirements of International Financial Reporting Standards.

Japanese yen figures less than a million yen are rounded down to the nearest million yen, except for per share data.

In preparing these consolidated financial statements, certain reclassifications and rearrangements have been made to the consolidated financial statements issued domestically in order to present them in a form which is more familiar to readers outside Japan. In addition, certain reclassifications have been made in the 2017 consolidated financial statements to conform to the classifications used in 2018.

The consolidated financial statements are stated in Japanese yen, the currency of the country in which Dowa Holdings Co., Ltd. (the “Company”) is incorporated and operates. The translations of Japanese yen amounts into U.S. dollar amounts are included solely for the convenience of readers outside Japan and have been made at the rate of ¥106.24 to U.S. \$1, the approximate rate of exchange at March 31, 2018. Such translations should not be construed as representations that the Japanese yen amounts could be converted into U.S. dollars at that or any other rate.

2. Summary of Significant Accounting Policies

(1) Consolidation

The consolidated financial statements as of March 31, 2018, include the accounts of the Company and its 80 (78 in 2017) significant subsidiaries (together, the “Group”).

Under the control and influence concepts, those significant companies in which the Company, directly or indirectly, is able to exercise control over operations are fully consolidated, and those companies over which the Group has the ability to exercise significant influence are accounted for by the equity method.

Investments in 18 (17 in 2017) associated companies are accounted for by the equity method.

Investments in the remaining nonconsolidated subsidiaries and associated companies are stated at cost. If the equity method of accounting had been applied to the investments in these companies, the effect on the accompanying consolidated financial statements would not be material.

The excess of the cost of acquisition over the fair value of the net assets of an acquired subsidiary at the date of acquisition is amortized on a straight-line basis within 20 years.

(a) Note Regarding Consolidation

(2018)

The consolidated financial statements for the year ended March 31, 2018 (fiscal 2018), newly included Dowa Precision (Thailand) Co., Ltd. and Dowa Metals & Mining America, Inc., which were nonconsolidated subsidiaries in the consolidated financial statements for the year ended March 31, 2017, from the viewpoint of materiality. Also, Key Metal Refining, LLC was newly included in the Company’s scope of consolidation for fiscal 2018 due to the acquisition of additional equity. Furthermore, Jiangxi Dowa Environmental Management Co., Ltd. “JDEM” has been excluded from the scope of consolidation because the Company sold all of its investments in JDEM.

Because Dowa Metals & Mining Alaska Ltd. acquired equity in Constantine Mining LLC during fiscal 2018, Constantine Mining LLC was included in the scope of equity-method accounting.

(2017)

The consolidated financial statements for the fiscal year ended March 31, 2017, newly included Dowa New Materials (Shanghai) Co., Ltd., which was a nonconsolidated subsidiary in the consolidated financial statements for the fiscal year ended March 31, 2016, from the viewpoint of materiality.

Notes to Consolidated Financial Statements

(b) Accounting Period of Foreign Subsidiaries

In preparing the consolidated financial statements for the year ended March 31, 2018, the Company used financial statements with an account closing date of December 31, 2017, for 19 foreign subsidiaries, including Modern Asia Environmental Holdings, Inc.; Dowa Environmental Management Co., Ltd.; Dowa Advanced Materials (Shanghai) Co., Ltd.; and other companies. Material transactions that occurred between January 1, 2018, and March 31, 2018, were adjusted in the consolidated financial statements, as necessary.

(c) Unification of Accounting Policies Applied to Foreign Subsidiaries for the Consolidated Financial Statements

Under Accounting Standards Board of Japan (“ASBJ”) Practical Issues Task Force (“PITF”) No. 18, “Practical Solution on Unification of Accounting Policies Applied to Foreign Subsidiaries for the Consolidated Financial Statements,” the accounting policies and procedures applied to a parent company and its subsidiaries for similar transactions and events under similar circumstances should in principle be unified for the preparation of the consolidated financial statements. However, financial statements prepared by foreign subsidiaries in accordance with either International Financial Reporting Standards or generally accepted accounting principles in the United States of America (Financial Accounting Standards Board Accounting Standards Codification—“FASB ASC”) tentatively may be used for the consolidation process, except for the following items that should be adjusted in the consolidation process so that net income is accounted for in accordance with Japanese GAAP, unless they are not material: (a) amortization of goodwill; (b) scheduled amortization of actuarial gain or loss of pensions that has been recorded in equity through other comprehensive income; (c) expensing capitalized development costs of R&D; and (d) cancellation of the fair value model of accounting for property, plant and equipment and investment properties and incorporation of the cost model of accounting.

(2) Cash Equivalents

Cash equivalents are short-term investments that are readily convertible into cash and that are exposed to insignificant risk of changes in value.

Cash equivalents include time deposits, certificates of deposit, commercial paper and bond funds, all of which mature or become due within three months of the date of acquisition.

(3) Investment Securities

Investment securities held by the Group are classified into two categories.

Available-for-sale securities with market quotations are stated at fair value. Unrealized gains and losses on these securities are stated, net of applicable taxes, as “unrealized gain (loss) on available-for-sale securities” on the consolidated balance sheet. The fair value is determined based on the average market price during the month before the balance sheet date.

Available-for-sale securities without market quotations are stated at cost by using the moving-average method.

In cases where the fair value of equity securities issued by nonconsolidated subsidiaries and associates, or available-for-sale securities, has declined significantly and such impairment is deemed other than temporary, those securities are written down to the fair value and the resulting losses are included in net profit or loss for the period.

(4) Inventories

Inventories are stated at the lower of cost or market value. The costs of the primary finished products such as gold, silver, copper, zinc, lead, platinum, palladium, rhodium, cadmium, and other metals, and imported raw materials are determined by the first-in, first-out method. The costs of other finished products and other raw materials are determined by the moving-average method or the specific identification method, etc.

(5) Property, Plant and Equipment

Property, plant and equipment, including significant renewals and additions, are stated at cost. Repairs and maintenance expenses are charged to current income. Depreciation is mainly computed by the declining-balance method based on the estimated useful lives of the respective assets.

The Company and domestic consolidated subsidiaries have computed the depreciation for buildings (excluding leasehold improvements and building improvements) acquired on or after April 1, 1998, as well as for building improvements and structures acquired on or after April 1, 2016, by the straight-line method.

Depreciation of the landfill is computed using the production method, while the straight-line method is applied to all property, plant and equipment of consolidated foreign subsidiaries.

(6) Long-lived Assets

The Group reviews its long-lived assets for impairment whenever events or changes in circumstances indicate the carrying amount of an asset or asset group may not be recoverable.

An impairment loss would be recognized if the carrying amount of an asset or asset group exceeds the sum of the undiscounted future cash flows expected to result from the continued use and eventual disposition of the asset or asset group.

The impairment loss would be measured as the amount by which the carrying amount of the asset exceeds its recoverable amount, which is the higher of the discounted cash flows from the continued use and eventual disposition of the asset or the net selling price at disposition.

(7) Leases

Finance lease transactions are capitalized to recognize lease assets and lease obligations in the balance sheet.

(8) Research and Development

Research and development costs are charged to income as incurred.

(9) Allowance for Doubtful Accounts

The allowance for doubtful accounts is stated in amounts considered to be appropriate based on the Group’s past credit loss experience and an evaluation of potential losses in the receivables outstanding.

(10) Accrued Bonuses

Accrued bonuses to employees are provided for at the estimated amounts, which the Group is obliged to pay to employees after the year-end.

(11) Accrued Directors’ Bonuses

Accrued bonuses to directors, including bonuses for the portion corresponding to the corporate performance-based remuneration system, are provided for at the estimated amounts, which the Group is obliged to pay to directors after the year-end.

(12) Retirement and Pension Plans

The Company and consolidated subsidiaries have unfunded retirement benefit plans for employees.

The Company accounts for the liability for retirement benefits based on the projected benefit obligations at the balance sheet date. The projected benefit obligations are attributed to periods on a benefit formula basis. Actuarial gains and losses are amortized on a straight-line basis over five years within the average remaining service period.

(13) Retirement Allowances for Directors and Audit & Supervisory Board Members

Retirement allowance for directors and Audit & Supervisory Board members of some of the Company’s subsidiaries are recorded as a liability at the amount that would be required if all directors and Audit & Supervisory Board members retired at each balance sheet date.

Notes to Consolidated Financial Statements

(14) Allowance for Environmental Measures

The Group adopted the Act Concerning Special Measures against PCB Waste (Act No. 65 of June 22, 2001) and recorded the estimated cost for the disposal of polychlorinated biphenyl waste. Those amounts are included in other long-term liabilities in the consolidated balance sheet.

(15) Construction Contracts

In December 2007, the ASBJ issued ASBJ Statement No. 15, "Accounting Standard for Construction Contracts," and ASBJ Guidance No. 18, "Guidance on Accounting Standard for Construction Contracts." Under this accounting standard, construction revenue and construction costs should be recognized by the percentage-of-completion method if the outcome of a construction contract can be estimated reliably. When total construction revenue, total construction costs, and the stage of completion of the contract at the balance sheet date can be reliably measured, the outcome of a construction contract is deemed to be estimated reliably. If the outcome of a construction contract cannot be reliably estimated, the completed-contract method should be applied. When it is probable that the total construction costs will exceed total construction revenue, an estimated loss on the contract should be immediately recognized by providing for a loss on construction contracts.

(16) Accounting Treatment for Consumption Tax

All transactions are recorded net of consumption tax.

(17) Income Taxes

The provision for income taxes is computed based on the pretax income included in the consolidated statements of income. The asset and liability approach is used to recognize deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amounts and the tax bases of assets and liabilities. Deferred taxes are measured by applying currently enacted income tax rates to the temporary differences.

(18) Consolidated Tax Return

The Group files a tax return under the consolidated corporate-tax system, which allows companies to base tax payments on the combined profits or losses of the parent company and its wholly owned domestic subsidiaries.

(19) Foreign Currency Translations

All monetary receivables and payables denominated in foreign currencies are translated into Japanese yen at the spot exchange rates as of the balance sheet date and foreign exchange gains and losses from translation are recognized in the consolidated statement of income. Assets and liabilities of foreign subsidiaries are converted into Japanese yen at the spot exchange rates prevailing on the balance sheet date of the foreign subsidiaries. Revenues and expenses of foreign subsidiaries are converted into Japanese yen at the average exchange rate for the accounting period of foreign subsidiaries. Translation differences are included as non-controlling interests and foreign currency translation adjustments in equity.

Revenues and expenses of foreign subsidiaries was previously converted into Japanese yen at the spot exchange rates prevailing on the balance sheet date of the foreign subsidiaries. Starting from the fiscal year ended March 31, 2018, revenues and expenses of foreign subsidiaries are converted into Japanese yen at the average exchange rate for the accounting period of foreign subsidiaries.

This accounting policy change was applied from the viewpoint of materiality of foreign subsidiaries in order to spread out the impact of temporary fluctuations in foreign exchange rates in the consolidated statement of income for the accounting period of foreign subsidiaries and to more appropriately reflect income and losses occurring during the accounting period of foreign subsidiaries in the consolidated financial statements.

The impact on the consolidated statement of income for the fiscal year ended March 31, 2018 from this accounting policy change was immaterial. As the quantitative impact from this accounting policy change on the consolidated statement of income for the fiscal year ended March 31, 2017 is also immaterial, this accounting policy change was not applied retrospectively and the consolidated financial statements for the fiscal year ended March 31, 2017, was not restated.

(20) Derivatives and Hedging Activities

The Group uses derivative financial instruments to manage its exposures to fluctuations in nonferrous metal, foreign exchange, and interest rates.

Nonferrous metal forward contracts, foreign exchange forward contracts, and interest rate swaps are utilized by the Group to reduce risks of fluctuation in nonferrous metal rates, foreign currency exchange, and interest rates. The Group does not enter into derivatives for trading or speculative purposes.

Derivative financial instruments and foreign currency transactions are classified and accounted for as follows:

- a) All derivatives are recognized as either assets or liabilities and measured at fair value and gains or losses on derivative transactions are recognized in the consolidated statement of income.
- b) For derivatives used for hedging purposes, if derivatives qualify for hedge accounting because of high correlation and effectiveness between the hedging instruments and the hedged items, gains or losses on derivatives are deferred until maturity of the hedged transactions.

Foreign exchange forward contracts employed to hedge foreign exchange exposures for export sales and import purchases are measured at fair value and the unrealized gains or losses are mainly recognized in income.

Forward contracts applied for forecasted (or committed) transactions are also measured at fair value, but the unrealized gains or losses are deferred until the underlying transactions are completed.

Interest rate swaps which qualify for hedge accounting and meet specific matching criteria are not remeasured at market value but the differential paid or received under the swap agreements is recognized and included in interest expense.

(21) Per Share Information

Basic net income per share is based on the weighted-average number of shares of common stock of the Company issued and outstanding during the respective year.

The Company effected a one-for-five reverse split of common stock on October 1, 2017.

All prior year share and per share figures have been restated to reflect the impact of this reverse stock split and to provide data on a basis comparable to the year ended March 31, 2018. Such restatements include calculations regarding basic net income per share and cash dividends per share.

(22) New Accounting Pronouncements

On March 30, 2018, the ASBJ issued ASBJ Statement No. 29, "Accounting Standard for Revenue Recognition," and ASBJ Guidance No. 30, "Implementation Guidance on Accounting Standard for Revenue Recognition." The core principle of the standard and guidance is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. An entity should recognize revenue in accordance with that core principle by applying the following steps:

- Step 1: Identify the contract(s) with a customer
- Step 2: Identify the performance obligations in the contract
- Step 3: Determine the transaction price
- Step 4: Allocate the transaction price to the performance obligations in the contract
- Step 5: Recognize revenue when (or as) the entity satisfies a performance obligation

The accounting standard and guidance are effective for annual periods beginning on or after April 1, 2021. Earlier application is permitted for annual periods beginning on or after April 1, 2018.

The Company expects to apply the accounting standard and guidance for annual periods beginning on or after April 1, 2021, and is in the process of measuring the effects of applying the accounting standard and guidance in future applicable periods.

Notes to Consolidated Financial Statements

3. Cash and Cash Equivalents

Cash and cash equivalents at March 31, 2018 and 2017, consisted of the following:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2018	2017	2018
Cash and time deposits	¥16,935	¥15,589	\$159,410
Time deposits with deposit terms of over three months	(462)	(462)	(4,355)
Cash and cash equivalents	¥16,472	¥15,126	\$155,054

4. Investment

Investment securities as of March 31, 2018 and 2017, consisted of the following:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2018	2017	2018
Investments in and advances to nonconsolidated subsidiaries and associates	¥54,306	¥42,943	\$511,166
Available-for-sale securities with market quotations	29,788	30,582	280,389
Unlisted securities	881	908	8,295
Total	¥84,976	¥74,433	\$799,850

The net unrealized gains on the available-for-sale securities with market quotations as of March 31, 2018 and 2017, were ¥18,456 million (U.S. \$173,726 thousand) and ¥19,258 million, respectively.

The information for available-for-sale securities which were sold during the years ended March 31, 2018 and 2017, is as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2018	2017	2018
Proceeds from sales	¥141	¥724	\$1,336
Gain on sales	102	445	967
Loss on sales	—	22	—

5. Long-lived Assets

(2018)

The Group reviewed its long-lived assets for impairment as of March 31, 2018. As a result, the Group recognized an impairment loss of ¥270 million (U.S. \$2,543 thousand) in other expense related to the machinery and equipment asset group for advanced fine materials production in Okayama City due to significant decreases of business profitability, and the idle asset group due to significant decreases in fair value. The carrying amount of the relevant assets were written down to the recoverable amount for the year ended March 31, 2018.

(2017)

The Group reviewed its long-lived assets for impairment as of March 31, 2017. As a result, the Group recognized an impairment loss of ¥377 million in other expense related to the machinery and equipment asset group for semiconductor production in Akita City, the land asset group for soil remediation in Shiogama City, the machinery and equipment asset group for waste treatment in Thailand due to significant decreases in business profitability, and the idle asset group due to significant decreases in fair value. The carrying amounts of the relevant assets were written down to their recoverable amounts for the year ended March 31, 2017.

6. Short-term Borrowings and Long-term Debt

Short-term borrowings from banks and other financial institutions were represented by short-term borrowings bearing interest at 0.35% to 4.79% (an approximate average rate of 0.73%) per annum at March 31, 2018, and 0.33% to 10.80% (an approximate average rate of 0.62%) per annum at March 31, 2017.

Commercial paper was represented by commercial paper bearing interest at an approximate average rate of -0.01% per annum at March 31, 2018, and an approximate average rate of -0.02% per annum at March 31, 2017.

It is customary in Japan for short-term borrowings to be rolled over each year.

At March 31, 2018 and 2017, long-term debt consisted of the following:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2018	2017	2018
0.00% to 1.60% loans, principally from banks and due between 2018 and 2027:			
Collateralized	¥11,981	¥10,700	\$112,770
Unsecured	25,233	17,320	237,511
0.20% straight bonds due 2020	10,000	10,000	94,126
Lease obligations	540	1,148	5,089
Total	47,754	39,169	449,496
Long-term debt, bonds, and lease obligations (due within one year)	7,094	9,813	66,778
Long-term debt (due after one year)	¥40,659	¥29,356	\$382,717

At March 31, 2018 and 2017, the following assets were pledged as collateral for short-term borrowings and the long-term debt of the Group:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2018	2017	2018
Cash and time deposits	¥451	¥451	\$4,252
Property, plant, and equipment, less accumulated depreciation, and land	245	247	2,309
Investments in and advances to affiliates	15,536	15,040	146,243
Investments in securities	10,080	11,105	94,884
Total	¥26,314	¥26,844	\$247,688

Annual maturities of long-term debt excluding lease obligations as of March 31, 2018, for the next five years and thereafter were as follows:

	Millions of yen	Thousands of U.S. dollars (Note 1)
2019	¥6,789	\$63,905
2020	18,113	170,494
2021	6,569	61,833
2022	5,215	49,093
2023 and thereafter	10,526	99,081
Total	¥47,213	\$444,407

Notes to Consolidated Financial Statements

7. Contingent Liabilities

At March 31, 2018 and 2017, the Group guaranteed loans incurred by nonconsolidated subsidiaries and associates in the amount of ¥4,096 million (U.S. \$38,557 thousand) and ¥3,020 million, respectively.

The Company sold notes and accounts receivable amounts to a finance company. As part of the finance agreement, under certain circumstances, the Company has the obligation to repurchase a part of these amounts. At March 31, 2018 and 2017, in connection with this structured finance agreement and the maximum repurchase commitment, the Company's exposure was ¥304 million (U.S. \$2,861 thousand) and ¥396 million, respectively.

8. Equity

Japanese companies are subject to the Companies Act of Japan (the "Companies Act"). The significant provisions in the Companies Act that affect financial and accounting matters are summarized below:

(a) Dividends

Under the Companies Act, companies can pay dividends at any time during the fiscal year in addition to the year-end dividend upon resolution at the shareholders' meeting. Additionally, for companies that meet certain criteria including (1) having a Board of Directors, (2) having independent auditors, (3) having an Audit & Supervisory Board, and (4) the term of service of the directors being prescribed as one year rather than the normal two-year term by its articles of incorporation, the Board of Directors may declare dividends (except for dividends in kind) at any time during the fiscal year if the company has prescribed so in its articles of incorporation.

The Company meets all the above criteria and accordingly, the Board of Directors may declare dividends (except for dividends-in-kind) at any time during the fiscal year.

Semiannual interim dividends may also be paid once a year upon resolution by the board of directors if the articles of incorporation of the company so stipulate. The Companies Act provides certain limitations on the amounts available for dividends or the purchase of treasury stock. The limitation is defined as the amount available for distribution to the shareholders, but the amount of net assets after dividends must be maintained at no less than ¥3 million.

(b) Increases/decreases and transfer of common stock, reserve, and surplus

The Companies Act requires that an amount equal to 10% of dividends must be appropriated as a legal reserve (a component of retained earnings) or as additional paid-in capital (a component of capital surplus), depending on the equity account charged upon the payment of such dividends, until the aggregate amount of legal reserve and additional paid-in capital equals 25% of the common stock.

Under the Companies Act, the total amount of additional paid-in capital and legal reserve may be reversed without limitation. The Companies Act also provides that common stock, legal reserve, additional paid-in capital, other capital surplus, and retained earnings can be transferred among the accounts within equity under certain conditions upon resolution of the shareholders.

(c) Treasury stock and treasury stock acquisition rights

The Companies Act also provides for companies to purchase treasury stock and dispose of such treasury stock by resolution of the board of directors. The amount of treasury stock purchased cannot exceed the amount available for distribution to the shareholders, which is determined by a specific formula. Under the Companies Act, stock acquisition rights are presented as a separate component of equity. The Companies Act also provides that companies can purchase both treasury stock acquisition rights and treasury stock. Such treasury stock acquisition rights are presented as a separate component of equity or deducted directly from stock acquisition rights.

The Company effected a one-for-five reverse split of common stock on October 1, 2017.

9. Income Taxes

The Company and its domestic subsidiaries are subject to Japanese national and local income taxes which, in the aggregate, resulted in normal effective statutory tax rates of approximately 31.5% for each of the years ended March 31, 2018 and 2017.

The tax effects of significant temporary differences and tax loss carryforwards which resulted in deferred tax assets and liabilities at March 31, 2018 and 2017, are as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2018	2017	2018
Deferred tax assets			
Reserve for employees' retirement benefits	¥ 5,266	¥ 4,976	\$ 49,570
Unrealized earnings	2,924	2,939	27,523
Loss on devaluation of investment securities	1,919	1,945	18,068
Loss on impairments of property, plant and equipment	1,645	1,819	15,485
Consolidated subsidiaries' deficit	1,256	1,936	11,828
Accrued bonus	1,240	1,170	11,673
Loss on devaluation of inventories	1,115	1,177	10,499
Accrued enterprise tax	340	453	3,203
Loss on disposal of property, plant and equipment	285	319	2,684
Reserve for directors' and Audit & Supervisory Board members' retirement benefits	225	236	2,120
Excess depreciation	146	163	1,374
Allowance for doubtful accounts	36	40	341
Deferred losses on derivatives under hedge accounting	1	3	15
Unrealized gain on available-for-sale securities	—	0	—
Others	2,981	3,229	28,061
Total	19,383	20,410	182,450
Valuation allowance	(6,182)	(7,619)	(58,190)
Total deferred tax assets	13,201	12,791	124,260
Deferred tax liabilities			
Unrealized gain on available-for-sale securities	(5,040)	(5,392)	(47,444)
Unrealized gain on land	(732)	(732)	(6,890)
Deferred gain on derivatives under hedge accounting	(553)	(63)	(5,212)
Reserve for overseas investment loss	(52)	—	(496)
Enterprise tax receivable	(18)	(12)	(171)
Special depreciation reserve	(4)	(6)	(45)
Others	(3,034)	(2,212)	(28,566)
Total deferred tax liabilities	(9,437)	(8,419)	(88,828)
Net deferred tax assets	¥ 3,764	¥ 4,371	\$ 35,431

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The components of net deferred tax assets and liabilities at March 31, 2018 and 2017, were as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2018	2017	2018
Deferred tax assets, current	¥ 3,957	¥ 3,953	\$ 37,250
Deferred tax assets, noncurrent	3,783	3,723	35,617
Deferred tax liabilities, current	(156)	(12)	(1,469)
Deferred tax liabilities, noncurrent	(3,821)	(3,293)	(35,966)

A reconciliation between the normal effective statutory tax rates and the actual effective tax rates reflected in the accompanying consolidated statement of income for the year ended March 31, 2018 with the corresponding figures for 2017, is as follows:

	2018	2017
Normal effective statutory tax rate	31.5 %	31.5 %
Equity in earnings of affiliates	(3.6)	(1.7)
Valuation allowance	(2.6)	(1.8)
Tax credits	(2.4)	(1.7)
Nontaxable items, including dividend income	(0.1)	(0.1)
Retained earnings of affiliated companies	2.5	0.2
Nondeductible items, including entertainment expenses	0.8	0.6
Inhabitants' tax	0.3	0.3
Others	1.3	0.6
Actual effective tax rate	27.8 %	27.9 %

10. Research and Development Costs

Research and development costs charged to income were ¥4,874 million (U.S. \$45,886 thousand) and ¥4,834 million for the years ended March 31, 2018 and 2017, respectively.

11. Leases

The minimum rental commitments under noncancelable operating leases due at March 31, 2018 and 2017, were as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2018	2017	2018
Operating leases (lessee)			
Within one year	¥ 333	¥ 274	\$ 3,135
Over one year	793	755	7,464
Total	¥1,126	¥1,030	\$10,599

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2018	2017	2018
Operating leases (lessor)			
Within one year	¥ 3	¥12	\$29
Over one year	—	2	—
Total	¥ 3	¥14	\$29

12. Retirement and Pension Plans

The Company and its consolidated subsidiaries have adopted lump-sum benefit plans as their defined benefit pension plans and the Company and certain consolidated subsidiaries have adopted contributory defined benefit pension plans. In addition, certain consolidated subsidiaries have adopted the Smaller Enterprise Retirement Allowance Mutual Aid (SERAMA) Scheme. Moreover, the payment of a premium severance amount that falls outside the scope of retirement benefit obligations based on computations that comply with accounting standards for retirement benefits may arise at the time of an employee's retirement.

Further, the lump-sum benefit plans adopted by certain consolidated subsidiaries calculate the liabilities for employees' retirement benefits and retirement benefit expenses using the simplified method.

Defined benefit plans excluding plans applying the simplified method

(1) The changes in defined benefit obligations relating to defined benefit plans in the consolidated fiscal years ended March 31, 2018 and 2017, were as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2018	2017	2018
Balance at beginning of year	¥10,463	¥10,054	\$ 98,492
Service cost	840	793	7,909
Interest expense	43	29	409
Actuarial (gains) losses	155	(69)	1,459
Benefits paid	(308)	(357)	(2,901)
Other	(23)	12	(220)
Balance at end of year	¥11,170	¥10,463	\$105,148

(2) Reconciliation between the liability recorded in the consolidated balance sheet and the balances of defined benefit obligation and plan assets was as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2018	2017	2018
Funded defined benefit obligation	¥ —	¥ —	\$ —
Plan assets	—	—	—
Unfunded defined benefit obligation	11,170	10,463	105,148
Net liability arising from defined benefit obligation	¥11,170	¥10,463	\$105,148

(3) The components of net periodic benefit costs for the years ended March 31, 2018 and 2017, were as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2018	2017	2018
Service cost	¥ 840	¥ 793	\$ 7,909
Interest expense	43	29	409
Recognized actuarial (gains) losses	238	357	2,244
Other	0	0	1
Net periodic benefit costs	¥1,122	¥1,181	\$10,564

Notes to Consolidated Financial Statements

(4) Amounts recognized in other comprehensive income (before income tax effect) in respect of defined retirement benefit plans for the years ended March 31, 2018 and 2017, were as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2018	2017	2018
Actuarial (gains) losses	¥ 57	¥456	\$540
Total	¥ 57	¥456	\$540

(5) Amounts recognized in accumulated other comprehensive income (before income tax effect) in respect of defined retirement benefit plans as of March 31, 2018 and 2017, were as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2018	2017	2018
Unrecognized actuarial (gains) losses	¥756	¥814	\$7,122
Total	¥756	¥814	\$7,122

(6) Matters concerning the assumptions for the main actuarial calculations related to defined benefit plans as of March 31, 2018 and 2017, were as follows:

	2018	2017
Discount rate	0.08 %	0.08 %

The Company used the index of salary increases by age at March 31, 2018 and 2017, as the expected rate of future salary increases.

Defined benefit plans applying the simplified method

(7) The changes in defined benefit obligations related to defined benefit plans to which the simplified method is applied in the consolidated fiscal years ended March 31, 2018 and 2017, were as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2018	2017	2018
Balance at beginning of year	¥5,965	¥5,826	\$56,146
Retirement benefit expenses	704	672	6,628
Benefits paid	(401)	(529)	(3,775)
Other	(27)	(3)	(257)
Balance at end of year	¥6,240	¥5,965	\$58,742

(8) Reconciliation between the liability recorded in the consolidated balance sheet and the balances of defined benefit obligation and plan assets that apply the simplified method as of March 31, 2018 and 2017, were as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2018	2017	2018
Funded defined benefit obligation	¥ —	¥ —	\$ —
Plan assets	—	—	—
Unfunded defined benefit obligation	6,240	5,965	58,742
Net liability arising from defined benefit obligation	¥6,240	¥5,965	\$58,742

(9) The retirement benefit costs related to defined benefit plans calculated by the simplified method in the consolidated fiscal years ended March 31, 2018 and 2017, were as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2018	2017	2018
Retirement benefit costs calculated by the simplified method	¥704	¥672	\$6,628

Defined contribution plans

(10) The required contributions to defined contribution plans of the Company and its consolidated subsidiaries in the consolidated fiscal years ended March 31, 2018 and 2017, were as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2018	2017	2018
Required contributions to defined contribution plans	¥504	¥490	\$4,744

13. Loss on Devaluation of Inventories

The Group recorded the following loss on devaluation of inventories held for ordinary sales purposes due to impairments reflecting a drop in profitability for the years ended March 31, 2018 and 2017:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2018	2017	2018
Cost of sales	¥2,085	¥647	\$19,633

Notes to Consolidated Financial Statements

14. Financial Instruments

(1) Status of Financial Instruments

(a) Policy for financial instruments

The Group manages its funds using short-term deposits and bond repurchase agreements.

Financial instruments used for financing are mainly bank loans and other instruments, including corporate bonds and electronic commercial paper, based on the Group's policy of diversifying financing methods, sources, and maturities, etc.

Derivatives are used to avoid the market fluctuation risks of interest on borrowings and the sale and purchase prices of inventories, etc., only within the range of the hedged items, and the Group's policy is to not use derivatives for speculative purposes.

(b) Nature, extent of risks, and risk management for financial instruments

Notes and accounts receivable, which are operating receivables, are exposed to customer credit risk. The Group manages the credit risk of receivables by monitoring the payment terms and balances for each customer.

Listed securities, which are among the equity instruments in investments in securities, are exposed to the risk of market price fluctuations. The Group has a system to periodically monitor and assess the fair values of listed securities, although the securities are held neither for pure investment purposes nor short-term trading purposes.

Payment terms of notes and accounts payable, which are operating debt, are mostly less than one year.

Borrowings are exposed to liquidity risk and interest rate fluctuation risk. In order to mitigate these risks, the Group uses multiple financial institutions and staggers the redemption dates of loans. With regard to a portion of long-term debt, the Group uses interest rate swaps as hedging instruments to avoid fluctuation risks of interest rates. The Group periodically compiles cash flow plans and performance and the status of financing is reported at the management meeting monthly.

In addition to interest rate swaps, the Group enters into derivative financial instruments, namely foreign exchange forward contracts and nonferrous metal forward contracts. The former are used to avoid risks of foreign exchange fluctuations associated with the sale of finished products and purchases of inventories (mainly imported raw materials), which are denominated in foreign currencies. The latter are used to avoid fluctuation risks in market prices for raw materials and finished goods that are influenced by nonferrous metal market prices.

Monthly meetings are held regarding derivative transactions, with the attendance of directors who are in charge of hedge transactions and the head of each business division. At the meetings, the implementation policies for hedge transactions are determined, the execution of derivative transactions is managed and reported, and hedge effectiveness is evaluated. In accordance with the policies, each derivative transaction is executed based on internal guidelines, which regulate the credit limit amount and procedures of transactions and reporting. Evaluation of hedge effectiveness is omitted for interest rate swaps as the swaps qualify for hedge accounting and meet specific matching criteria for interest rate swaps. The Group has a policy to diversify transactions through multiple counterparties with high credit standings in order to mitigate credit risk.

(c) Supplementary explanation to fair values of financial instruments

Fair values of financial instruments are based on quoted prices in active markets. If a quoted price is not available, other rational valuation techniques are used instead. Such techniques include variable factors, and the results of valuation may differ depending on prerequisites. The contract or notional amounts of derivatives which are shown in Note 15. Derivatives do not represent the amounts exchanged by the parties and do not measure the Group's exposure to credit or market risk.

(2) Fair Value of Financial Instruments

The table below shows the amounts of financial instruments recorded in the consolidated balance sheet and their fair values. Financial instruments whose fair values are not readily determinable are not included (refer to (b) below).

As of March 31, 2018	Millions of yen			Thousands of U.S. dollars (Note 1)		
	Carrying amount	Fair value	Difference	Carrying amount	Fair value	Difference
(1) Cash and time deposits	¥ 16,935	¥ 16,935	¥ —	\$ 159,410	\$ 159,410	\$ —
(2) Notes and accounts receivable (*1)	87,615	87,615	—	824,691	824,691	—
(3) Investments in securities (*2)	45,325	41,546	(3,778)	426,634	391,065	(35,569)
Total	¥ 149,876	¥ 146,097	¥ (3,778)	\$1,410,735	\$1,375,166	\$(35,569)
(1) Notes and accounts payable (*3)	37,338	37,338	—	351,456	351,456	—
(2) Short-term borrowings	37,613	37,613	—	354,040	354,040	—
(3) Commercial paper	25,000	25,000	—	235,316	235,316	—
(4) Long-term debt (including repayments due within one year) (*4)	47,213	47,212	(1)	444,407	444,392	(15)
Total	¥ 147,165	¥ 147,164	¥ (1)	\$1,385,220	\$1,385,205	\$ (15)
Derivatives (*5)	¥ 2,045	¥ 2,045	¥ —	\$ 19,251	\$ 19,251	\$ —

As of March 31, 2017	Millions of yen		
	Carrying amount	Fair value	Difference
(1) Cash and time deposits	¥ 15,589	¥ 15,589	¥ —
(2) Notes and accounts receivable (*1)	80,169	80,169	—
(3) Investments in securities (*2)	45,623	44,078	(1,545)
Total	¥141,382	¥139,837	¥(1,545)
(1) Notes and accounts payable (*3)	34,268	34,268	—
(2) Short-term borrowings	29,862	29,862	—
(3) Commercial paper	12,000	12,000	—
(4) Long-term debt (including repayments due within one year) (*4)	38,020	38,126	105
Total	¥114,152	¥114,257	¥ 105
Derivatives (*5)	¥ 121	¥ 121	¥ —

(*1) Assets (2): Notes and accounts receivable as of March 31, 2018 and 2017, stated above, are obtained by subtracting advances paid of ¥304 million (U.S. \$2,870 thousand) and ¥350 million, respectively, accounts receivable other of ¥5,283 million (U.S. \$49,731 thousand) and ¥4,547 million, respectively, and loans of ¥690 million (U.S. \$6,501 thousand) and ¥862 million, respectively, from the amount of notes and accounts receivable of ¥93,894 million (U.S. \$883,794 thousand) and ¥85,930 million, respectively, presented in the consolidated balance sheet.

(*2) Assets (3): Investments in securities as of March 31, 2018 and 2017, stated above, are obtained by subtracting financial instruments whose fair values are not readily determinable of ¥29,741 million (U.S. \$279,949 thousand) and ¥30,582 million, respectively, and long-term loans of ¥9,908 million (U.S. \$93,266 thousand) and ¥2,493 million, respectively, from the sum of investments in securities of ¥30,669 million (U.S. \$288,684 thousand) and ¥31,490 million, respectively, and investments in and advances to nonconsolidated subsidiaries and associates of ¥54,306 million (U.S. \$511,166 thousand) and ¥42,943 million, respectively, presented in the consolidated balance sheet.

(*3) Liabilities (1): Notes and accounts payable as of March 31, 2018 and 2017, stated above are obtained by subtracting accounts payable other of ¥4,620 million (U.S. \$43,495 thousand) and ¥6,384 million, respectively, and deposits received of ¥720 million (U.S. \$6,783 thousand) and ¥844 million, respectively, from notes and accounts payable of ¥42,680 million (U.S. \$401,734 thousand) and 41,497 million, respectively, presented in the consolidated balance sheet.

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(*4) Liabilities (4): Long-term debt as of March 31, 2018 and 2017, stated above, is obtained by subtracting lease obligations of ¥540 million (U.S. \$5,089 thousand) and ¥1,148 million, respectively, from the sum of current maturities of long-term debt of ¥7,094 million (U.S. \$66,778 thousand) and ¥9,813 million, respectively, and long-term debt of ¥40,659 million (U.S. \$382,717 thousand) and ¥29,356 million, respectively, presented in the consolidated balance sheet.

(*5) Derivative transactions stated above are stated net of assets and liabilities.

(a) Fair value measurement of financial instruments and matters regarding securities and derivatives

Assets

(1) Cash and time deposits and (2) Notes and accounts receivable

The fair value of these accounts approximates their book value because of their short maturities.

(3) Investments in securities

The fair value of equity instruments is measured using market prices from stock exchanges.

Liabilities

(1) Notes and accounts payable, (2) Short-term borrowings, and (3) Commercial paper

The fair value of these accounts approximates their book value because of their short maturities.

(4) Long-term debt (including repayment due within one year)

The fair value of long-term debt is determined by discounting the future cash flows related to the debt at the Group's assumed corporate borrowing rate for loans from banks and the market price for bonds. Long-term debt with variable interest rates qualifies for special treatment under hedge accounting (refer to Note 15. Derivatives). The fair value of these accounts is calculated by discounting the total of interest and principal, including the relevant interest rate swap, by an interest rate reasonably estimated assuming similar borrowings are taken out.

Derivatives

Refer to Note 15. Derivatives.

(b) Financial instruments whose fair values are not readily determinable

Classification	Millions of yen		Thousands of U.S. dollars (Note 1)
	2018	2017	2018
Unlisted securities and others (carrying amount)	¥29,741	¥26,316	\$279,949

These financial instruments are not included in Assets (3) Investments in securities, as they have no quoted market prices and their fair values are not readily determinable.

(c) Maturity analysis for financial assets with contractual maturities

As of March 31, 2018	Millions of yen			
	Due in one year or less	Due after one year through five years	Due after five years through ten years	Due after ten years
Cash and time deposits	¥ 1,195	¥—	¥—	¥—
Notes and accounts receivable	87,615	—	—	—
Total	¥88,811	¥—	¥—	¥—

As of March 31, 2018	Thousands of U.S. dollars (Note 1)			
	Due in one year or less	Due after one year through five years	Due after five years through ten years	Due after ten years
Cash and time deposits	\$ 11,255	\$—	\$—	\$—
Notes and accounts receivable	824,691	—	—	—
Total	\$835,946	\$—	\$—	\$—

As of March 31, 2017	Millions of yen			
	Due in one year or less	Due after one year through five years	Due after five years through ten years	Due after ten years
Cash and time deposits	¥ 761	¥—	¥—	¥—
Notes and accounts receivable	80,169	—	—	—
Total	¥80,931	¥—	¥—	¥—

(d) Maturity analysis for long-term debt

See Note 6. Short-term Borrowings and Long-term Debt

15. Derivatives

(1) Derivative Transactions to which Hedge Accounting is Not Applied

Currency-related transactions (2018)

Type	Millions of yen				Thousands of U.S. dollars (Note 1)			
	Contract amount	Over one year	Fair value	Unrealized gains/losses	Contract amount	Over one year	Fair value	Unrealized gains/losses
Forward Exchange Contract Transactions								
Selling								
U. S. dollars	¥ 19,791	¥—	¥469	¥469	\$186,290	\$—	\$4,419	\$4,419
Thai baht	1,794	—	22	22	16,893	—	214	214
Total	¥ —	¥—	¥ —	¥492	\$ —	\$—	\$ —	\$4,634

Commodity-related transactions (2018)

Type	Millions of yen				Thousands of U.S. dollars (Note 1)			
	Contract amount	Over one year	Fair value	Unrealized gains/losses	Contract amount	Over one year	Fair value	Unrealized gains/losses
Nonferrous Metal Forward Contracts								
Selling								
Gold	¥ 1,084	¥—	¥ 9	¥ 9	\$10,209	\$—	\$ 93	\$ 93
Silver	1,992	—	84	84	18,752	—	798	798
Zinc	1,025	—	8	8	9,655	—	83	83
Copper	2,662	—	116	116	25,064	—	1,099	1,099
Nickel	42	—	0	0	404	—	6	6
Total	¥ —	¥—	¥ —	¥221	\$ —	\$—	\$ —	\$2,081

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Currency-related transactions (2017)

Type	Millions of yen			
	Contract amount	Over one year	Fair value	Unrealized gains/losses
Forward Exchange Contract Transactions				
Selling				
U. S. dollars	¥14,757	¥—	¥ 58	¥ 58
Thai baht	1,279	—	(36)	(36)
Total	¥ —	¥—	¥ —	¥ 21

Commodity-related transactions (2017)

Type	Millions of yen			
	Contract amount	Over one year	Fair value	Unrealized gains/losses
Nonferrous Metal Forward Contracts				
Selling				
Gold	¥1,250	¥—	¥ (13)	¥ (13)
Silver	2,060	—	(52)	(52)
Zinc	663	—	4	4
Copper	2,219	—	15	15
Nickel	41	—	2	2
Total	¥ —	¥—	¥ —	¥ (43)

(Note) Fair value was calculated using quotations obtained from the commodity futures market and the exchange futures market as of March 31, 2018 and 2017.

(2) Derivative Transactions to which Hedge Accounting is Applied

Currency-related transactions (2018)

Treatment	Type	Hedged item	Millions of yen			Thousands of U.S. dollars (Note 1)		
			Contract amount	Over one year	Fair value	Contract amount	Over one year	Fair value
Standard treatment	Forward exchange contract transactions	Accounts receivable						
	Selling							
	U. S. dollars		¥ 17,463	¥—	¥ 383	\$164,374	\$—	\$3,611
	Thai baht		404	—	(8)	3,807	—	(83)
Currency swaps under designated hedge accounting	Forward exchange contract transactions	Accounts receivable						
	Selling							
	U. S. dollars		¥ 2,399	¥—	(*1)	\$ 22,590	\$—	(*1)
	Thai baht		1,026	—	(*1)	9,657	—	(*1)
Total			¥ —	¥—	¥ —	\$ —	\$—	\$ —

Interest-related transactions (2018)

Treatment	Type	Hedged item	Millions of yen			Thousands of U.S. dollars (Note 1)		
			Contract amount	Over one year	Fair value	Contract amount	Over one year	Fair value
Interest rate swaps under special accounting treatment	Interest rate swaps	Long-term debt						
	Fixed rate payment, Floating rate receipt		¥ 5,672	¥ 4,835	(*2)	\$53,391	\$45,512	(*2)
Total			¥ —	¥ —	¥ —	\$ —	\$ —	\$ —

Commodity-related transactions (2018)

Treatment	Type	Hedged item	Millions of yen			Thousands of U.S. dollars (Note 1)		
			Contract amount	Over one year	Fair value	Contract amount	Over one year	Fair value
Standard treatment	Nonferrous Metal Forward Contracts	Inventory						
	Selling							
	Gold		¥ 3,628	¥—	¥ 30	\$ 34,154	\$ —	\$ 290
	Silver		4,352	—	211	40,965	—	1,989
	Zinc		12,575	—	270	118,368	—	2,548
	Copper		10,875	—	524	102,371	—	4,936
	Lead		120	—	0	1,132	—	2
	Buying							
	Silver		¥ 761	¥—	¥ (24)	\$ 7,172	\$ —	\$ (231)
	Zinc		1,251	9	(18)	11,783	91	(171)
	Copper		1,156	—	(37)	10,886	—	(357)
Total			¥ —	¥—	¥ —	\$ —	\$—	\$ —

Notes to Consolidated Financial Statements

Currency-related transactions (2017)

Treatment	Type	Hedged item	Millions of yen		Fair value
			Contract amount	Over one year	
Standard treatment	Forward exchange contract transactions	Accounts receivable			
	Selling				
	U. S. dollars		¥15,791	¥—	¥134
	Thai baht		381	—	(5)
Currency swaps under designated hedge accounting	Forward exchange contract transactions				
	Selling				
	U. S. dollars		¥ 2,154	¥—	(*1)
	Thai baht		778	—	(*1)
Total			¥ —	¥—	¥ —

Interest-related transactions (2017)

Treatment	Type	Hedged item	Millions of yen		Fair value
			Contract amount	Over one year	
Interest rate swaps under special accounting treatment	Interest rate swaps	Long-term debt			
	Fixed rate payment, Floating rate receipt		¥9,932	¥8,752	(*2)
Total			¥ —	¥ —	¥ —

Commodity-related transactions (2017)

Treatment	Type	Hedged item	Millions of yen		Fair value
			Contract amount	Over one year	
Standard treatment	Nonferrous Metal	Inventory			
	Forward Contracts				
	Selling				
	Gold		¥6,404	¥—	¥ (130)
	Silver		3,450	—	(83)
	Zinc		9,161	—	65
	Copper		4,973	—	35
	Lead		141	—	0
	Buying				
	Silver		¥ 638	¥—	¥ 34
	Zinc		770	—	(19)
	Copper		3,085	62	111
Total			¥ —	¥—	¥ —

(Note) Fair value was calculated using quotations obtained from the commodity futures market and the exchange futures market as of March 31, 2018 and 2017.

(*1) The fair values of currency swaps under designated hedge accounting are included in the fair values of accounts receivable because they are accounted for as an integral part of accounts receivable, which are hedged items.

(*2) The fair values of interest rate swaps under special accounting treatment are included in the fair values of long-term debt because they are accounted for as an integral part of long-term debt, which are hedged items.

16. Comprehensive Income

The components of other comprehensive income for the years ended March 31, 2018 and 2017, were as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2018	2017	2018
Unrealized gain (loss) on available-for-sale securities:			
Gain (loss) arising during the year	¥ (801)	¥ 6,117	\$ (7,544)
Reclassification adjustments to profit or loss	—	(368)	—
Amount before income tax effect	(801)	5,748	(7,544)
Income tax effect	351	(1,529)	3,311
Total	¥ (449)	¥ 4,219	\$ (4,233)
Deferred gain (loss) on derivatives under hedge accounting:			
Gain (loss) arising during the year	¥ (240)	¥(5,011)	\$ (2,268)
Reclassification adjustments to profit or loss	1,856	5,526	17,469
Adjustment for cost of asset acquisition	—	(4)	—
Amount before income tax effect	1,615	510	15,201
Income tax effect	(492)	(151)	(4,633)
Total	¥ 1,122	¥ 359	\$ 10,567
Foreign currency translation adjustments:			
Adjustments arising during the year	¥ (510)	¥ (370)	\$ (4,809)
Reclassification adjustments to profit or loss	(93)	—	(876)
Amount before income tax effect	(604)	(370)	(5,685)
Income tax effect	—	—	—
Total	¥ (604)	¥ (370)	\$ (5,685)
Defined retirement benefit plan:			
Adjustments arising during the year	¥ (156)	¥ 71	\$ (1,471)
Reclassification adjustments to profit or loss	213	384	2,012
Amount before income tax effect	57	456	540
Income tax effect	(17)	(124)	(162)
Total	¥ 40	¥ 331	\$ 377
Share of other comprehensive income in associates:			
Gain (loss) arising during the year	¥ 427	¥ (434)	\$ 4,022
Reclassification adjustments to profit or loss	(245)	(441)	(2,307)
Total	¥ 182	¥ (876)	\$ 1,715
Total other comprehensive income	¥ 291	¥ 3,663	\$ 2,741

Notes to Consolidated Financial Statements

17. Subsequent Event

The following appropriation of retained earnings at March 31, 2018, was approved at the Board of Directors' meeting held on May 18, 2018:

	Millions of yen	Thousands of U.S. dollars (Note 1)
Year-end cash dividends, ¥90 (U.S. \$0.8) per share	¥5,409	\$50,914

18. Segment Information

(1) Outline of reporting segments

The Company's reporting segments are the components of the Group about which separate financial information is available. These segments are subject to periodic examinations to enable the Company's Board of Directors to decide how to allocate resources and assess performance.

The Company's operations are classified into five product and service segments based on its operating companies.

Each segment's businesses are as follows:

In the Environmental Management & Recycling segment, the Group conducts waste treatment, soil remediation, resource recycling, logistics, and other operations.

In the Nonferrous Metals segment, the Group produces and sells copper, zinc, lead, gold, silver, zinc alloys, platinum, palladium, rhodium, indium, sulfuric acid, tin, antimony, and other materials.

In the Electronic Materials segment, the Group produces and sells high-purity metal materials, compound semiconductor wafers, LEDs, conductive materials, battery materials, magnetic materials, reduced iron powder, and other materials.

In the Metal Processing segment, the Group produces and sells copper, brass and copper alloy strips, electroplated products, brass rods, metal-ceramic substrates, and other materials.

In the Heat Treatment segment, the Group provides heat and surface treatment of metallic materials, such as automobile components, and manufactures, sells, and provides maintenance of industrial furnaces and ancillary equipment.

(2) Method for calculating sales, income (loss), assets, liabilities, and other items by reporting segment

The accounting treatment and methods for the reporting segments are largely consistent with Note 1. Basis of Presentation of the Consolidated Financial Statements, and Note 2. Summary of Significant Accounting Policies.

Segment income for each reporting segment is presented on an operating income basis.

Intersegment sales and transfers are measured based on prices that reflect actual market conditions.

(3) Information on sales, income (loss), assets, liabilities, and other items by reporting segment

Segment information as of March 31, 2018 and 2017, are summarized as follows:

2018	Millions of yen									
	Reporting segment							Reconciliations		Consolidated
	Environmental Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Total	Others (*1)	Total	(*2)	
Net sales										
Outside customers	¥ 60,256	¥ 197,370	¥ 75,441	¥ 90,486	¥ 28,208	¥ 451,764	¥ 2,990	¥ 454,754	¥ —	¥ 454,754
Intersegment	39,120	20,535	2,352	138	0	62,147	9,244	71,391	(71,391)	—
Total	¥ 99,377	¥ 217,905	¥ 77,794	¥ 90,624	¥ 28,208	¥ 513,911	¥ 12,234	¥ 526,145	¥ (71,391)	¥ 454,754
Segment income (*3)	¥ 4,971	¥ 9,205	¥ 5,623	¥ 7,284	¥ 2,622	¥ 29,706	¥ 730	¥ 30,437	¥ 511	¥ 30,948
Segment assets	91,901	180,585	58,584	73,814	42,919	447,805	8,809	456,614	1,226	457,841
Other items:										
Depreciation	4,325	4,625	2,717	2,423	2,064	16,157	221	16,378	833	17,212
Amortization of goodwill	348	26	—	—	152	528	—	528	—	528
Investment in affiliates accounted for by the equity method	3,221	14,238	249	375	—	18,085	—	18,085	15,656	33,742
Increase in property, plant, and equipment and intangible fixed assets	¥ 8,229	¥ 3,431	¥ 4,687	¥ 2,862	¥ 4,547	¥ 23,757	¥ 266	¥ 24,024	¥ 583	¥ 24,608

2018	Thousands of U.S. dollars (Note 1)									
	Reporting segment							Reconciliations		Consolidated
	Environmental Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Total	Others (*1)	Total	(*2)	
Net sales										
Outside customers	\$ 567,172	\$ 1,857,782	\$ 710,106	\$ 851,719	\$ 265,518	\$ 4,252,298	\$ 28,146	\$ 4,280,445	\$ —	\$ 4,280,445
Intersegment	368,228	193,289	22,147	1,300	1	584,968	87,013	671,982	(671,982)	—
Total	\$ 935,401	\$ 2,051,071	\$ 732,253	\$ 853,019	\$ 265,520	\$ 4,837,267	\$ 115,160	\$ 4,952,427	\$ (671,982)	\$ 4,280,445
Segment income (*3)	\$ 46,792	\$ 86,647	\$ 52,927	\$ 68,569	\$ 24,680	\$ 279,617	\$ 6,877	\$ 286,495	\$ 4,811	\$ 291,307
Segment assets	865,039	1,699,786	551,435	694,792	403,985	4,215,038	82,917	4,297,955	11,543	4,309,498
Other items:										
Depreciation	40,715	43,536	25,582	22,811	19,436	152,083	2,082	154,165	7,847	162,012
Amortization of goodwill	3,282	252	—	—	1,436	4,971	—	4,971	—	4,971
Investment in affiliates accounted for by the equity method	30,324	134,026	2,348	3,533	—	170,232	—	170,232	147,372	317,604
Increase in property, plant, and equipment and intangible fixed assets	\$ 77,459	\$ 32,297	\$ 44,120	\$ 26,944	\$ 42,800	\$ 223,623	\$ 2,509	\$ 226,132	\$ 5,495	\$ 231,628

Notes to Consolidated Financial Statements

2017	Millions of yen										
	Reporting segment									Reconcili- ations (*2)	Consolidated
	Environmen- tal Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Total	Others (*1)	Total			
Net sales											
Outside customers	¥60,239	¥187,517	¥60,122	¥75,456	¥25,118	¥408,454	¥ 2,048	¥410,503	¥ —	¥410,503	
Intersegment	36,707	20,260	2,460	25	0	59,454	10,159	69,614	(69,614)	—	
Total	¥96,947	¥207,778	¥62,583	¥75,481	¥25,119	¥467,909	¥12,208	¥480,117	¥(69,614)	¥410,503	
Segment income (*3)	¥ 6,629	¥ 10,055	¥ 6,579	¥ 6,966	¥ 2,378	¥ 32,610	¥ 944	¥ 33,554	¥ 436	¥ 33,990	
Segment assets	87,111	144,423	53,059	63,163	39,779	387,538	8,569	396,107	8,496	404,604	
Other items:											
Depreciation	4,586	3,859	2,398	2,038	1,998	14,881	203	15,085	711	15,796	
Amortization of goodwill	348	—	—	—	152	501	—	501	—	501	
Investment in affiliates accounted for by the equity method	3,026	11,994	168	319	—	15,508	—	15,508	15,160	30,668	
Increase in property, plant, and equipment and intangible fixed assets	¥ 5,582	¥ 8,125	¥ 3,781	¥ 3,273	¥ 3,338	¥ 24,101	¥ 310	¥ 24,411	¥ 2,115	¥ 26,526	

(*1) The Others segment comprises business operations that are not included in the reporting segments. These operations primarily comprise intergroup transactions, including real estate leasing, plant construction, civil engineering, construction and engineering, office administration services, technological development support, and other operations.

(*2) Reconciliations for the fiscal years ended March 31, 2018 and 2017, were as follows:

(1) The reconciliations to segment income of ¥511 million (U.S. \$4,811 thousand) and ¥436 million include intersegment eliminations of ¥467 million (U.S. \$4,397 thousand) and ¥623 million, respectively, and eliminations for intersegment unrealized earning of ¥44 million (U.S. \$414 thousand) and ¥187 million, respectively.

(2) The reconciliations to segment assets of ¥1,226 million (U.S. \$11,543 thousand) and ¥8,496 million include corporate assets of ¥57,580 million (U.S. \$541,981 thousand) and ¥59,870 million that are not allocated to any reporting segment, respectively, and intersegment eliminations of ¥56,353 million (U.S. \$530,438 thousand) and ¥51,373 million, respectively. The main components of corporate assets are surplus working capital (cash and deposits), long-term investments (investments in securities), and assets of administrative departments.

(*3) Segment income is reconciled with operating income on the consolidated statement of income.

Related Information

1. Information by product and service (2018)

The Company has omitted such disclosure herein because equivalent information appears in the segment information.

2. Information by geographic region (2018)

(1) Net sales

Millions of yen						
Japan	North America	Europe	China	Asia (excluding Japan and China)	Other	Total
¥346,532	¥4,933	¥16,432	¥36,432	¥49,529	¥ 894	¥454,754

Thousands of U.S. dollars (Note 1)						
Japan	North America	Europe	China	Asia (excluding Japan and China)	Other	Total
\$3,261,792	\$46,436	\$154,670	\$342,929	\$466,200	\$ 8,414	\$4,280,445

(2) Total property, plant, and equipment

Millions of yen						
Japan	North America	Europe	China	Asia (excluding Japan and China)	Other	Total
¥105,263	¥1,552	¥193	¥691	¥16,623	¥—	¥124,324

Thousands of U.S. dollars (Note 1)						
Japan	North America	Europe	China	Asia (excluding Japan and China)	Other	Total
\$ 990,806	\$14,612	\$1,824	\$6,508	\$156,473	\$—	\$1,170,226

3. Information by major customer (2018)

Name of corporate customer	Net sales (Note 1)	Name of involved segment
TANAKA KIKINZOKU KOGYO K.K.	¥52,981 million (U.S. \$498,691 thousand)	Mainly the Nonferrous Metals segment

4. Information on impairment losses on fixed assets by reporting segment (2018)

2018	Millions of yen										
	Reporting segment									Eliminations	Consolidated
	Environmen- tal Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Total	Others	Total			
Impairment losses on fixed assets	¥—	¥—	¥249	¥9	¥—	¥259	¥—	¥259	¥11	¥270	

2018	Thousands of U.S. dollars (Note 1)										
	Reporting segment									Eliminations	Consolidated
	Environmen- tal Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Total	Others	Total			
Impairment losses on fixed assets	\$ —	\$ —	\$2,344	\$93	\$ —	\$2,438	\$ —	\$2,438	\$105	\$2,543	

Notes to Consolidated Financial Statements

5. Amortization of goodwill and unamortized balance of goodwill by reporting segment (2018)

Millions of yen										
Reporting segment										
2018	Environmental Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Total	Others	Total	Eliminations	Consolidated
Unamortized balance at fiscal year end	¥3,835	¥108	¥—	¥—	¥1,306	¥5,250	¥—	¥5,250	¥—	¥5,250

Thousands of U.S. dollars (Note 1)										
Reporting segment										
2018	Environmental Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Total	Others	Total	Eliminations	Consolidated
Unamortized balance at fiscal year end	\$36,106	\$1,018	\$—	\$—	\$12,299	\$49,424	\$—	\$49,424	\$—	\$49,424

(Note) The Company has omitted disclosure of amortization of goodwill because equivalent information appears in the segment information.

1. Information by product and service (2017)

The Company has omitted such disclosure herein because equivalent information appears in the segment information.

2. Information by geographic region (2017)

(1) Net sales (*1)

Millions of yen						
Japan	North America	Europe	China	Asia (excluding Japan and China)	Other	Total
¥327,271	¥3,941	¥10,018	¥23,367	¥44,227	¥1,676	¥410,503

(*1) The figures for (1) Net sales have been restated due to errors. These errors have no effect on the consolidated financial statement other than this information.

(2) Total property, plant, and equipment

Millions of yen						
Japan	North America	Europe	China	Asia (excluding Japan and China)	Other	Total
¥100,874	¥1,545	¥204	¥665	¥15,262	¥—	¥118,553

3. Information by major customer (2017)

Name of corporate customer	Net sales	Name of involved segment
TANAKA KIKINZOKU KOGYO K.K.	¥64,027 million	Mainly the Nonferrous Metals segment

4. Information on impairment losses on fixed assets by reporting segment (2017)

Millions of yen										
Reporting segment										
2017	Environmental Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Total	Others	Total	Eliminations	Consolidated
Impairment losses on fixed assets	¥194	¥—	¥169	¥9	¥—	¥374	¥—	¥374	¥3	¥377

5. Amortization of goodwill and unamortized balance of goodwill by reporting segment (2017)

Millions of yen										
Reporting segment										
2017	Environmental Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Total	Others	Total	Eliminations	Consolidated
Unamortized balance at fiscal year end	¥4,184	¥—	¥—	¥—	¥1,522	¥5,706	¥—	¥5,706	¥—	¥5,706

(Note) The Company has omitted disclosure of amortization of goodwill because equivalent information appears in the segment information.

19. Related Party Disclosures

Transactions with related parties

Type	Company	Address	Capital or contribution to capital	Contents of business	Ratio of voting rights ownership	Relationship with related parties	Content	Transaction amount	Account items	Balance at the end of the period
Affiliate	MINERA PLATA REAL, S. DE R.L. DE C.V.	LOMAS DE CHAPULTEPEC 11000, MEXICO, D.F.	\$168,867 thousand	Smelting	30.0% indirectly	Fund loan	Long-term fund loan	¥7,117 million (\$66,992 thousand)	Long-term loan	¥7,117 million (\$66,992 thousand)
							Interest on loans	¥33 million (\$313 thousand)	—	—

(Note) The interest rate of the loan is determined taking market interest rate into account.



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INDEPENDENT AUDITOR'S REPORT

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

We have audited the accompanying consolidated balance sheet of Dowa Holdings Co., Ltd. and its consolidated subsidiaries as of March 31, 2018, and the related consolidated statements of income, comprehensive income, changes in equity, and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information, all expressed in Japanese yen.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these 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.

Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in Japan. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements 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 entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Dowa Holdings Co., Ltd. and its consolidated subsidiaries as of March 31, 2018, and the consolidated results of their operations and their 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.

Deloitte Touche Tohmatsu LLC

June 26, 2018

Member of
 Deloitte Touche Tohmatsu Limited

Corporate Data

As of March 31, 2018

Company Name	DOWA HOLDINGS CO., LTD.	Authorized Shares	200,000,000 shares																						
Head Office	14-1, Sotokanda 4-chome, Chiyoda-ku, Tokyo 101-0021, Japan	Shares Issued	61,989,206 shares																						
Founded	September 18, 1884	Number of Shares per Unit	100																						
Incorporated	March 11, 1937	Stock Listing	Common stock is listed on the Tokyo, Nagoya, and Sapporo stock exchanges and the Fukuoka Securities Exchange.																						
Common Stock	¥36,437 million	Number of Shareholders	11,268																						
Main Businesses	Environmental Management & Recycling, Nonferrous Metals, Electronic Materials, Metal Processing, and Heat Treatment	Principal Shareholders	<table border="1"> <thead> <tr> <th></th> <th>Percentage of Outstanding Shares (%)</th> </tr> </thead> <tbody> <tr> <td>The Master Trust Bank of Japan, Ltd. (Trust Account)</td> <td>11.24</td> </tr> <tr> <td>Japan Trustee Services Bank, Ltd. (Trust Account)</td> <td>10.22</td> </tr> <tr> <td>FUJITA KANKO INC.</td> <td>4.79</td> </tr> <tr> <td>National Mutual Insurance Federation of Agricultural Cooperatives</td> <td>3.06</td> </tr> <tr> <td>J.P. MORGAN BANK LUXEMBOURG S.A. 380578</td> <td>2.65</td> </tr> <tr> <td>Japan Trustee Services Bank, Ltd. (Trust Account 9)</td> <td>2.15</td> </tr> <tr> <td>JFE Steel Corporation</td> <td>1.87</td> </tr> <tr> <td>Mizuho Bank, Ltd.</td> <td>1.60</td> </tr> <tr> <td>Japan Trustee Services Bank, Ltd. (Trust Account 5)</td> <td>1.59</td> </tr> <tr> <td>Nippon Life Insurance Company</td> <td>1.54</td> </tr> </tbody> </table> <p>*1 The Company holds 1,887 thousand shares of treasury stock. *2 Ownership ratios are calculated after deducting treasury stock from outstanding shares.</p>		Percentage of Outstanding Shares (%)	The Master Trust Bank of Japan, Ltd. (Trust Account)	11.24	Japan Trustee Services Bank, Ltd. (Trust Account)	10.22	FUJITA KANKO INC.	4.79	National Mutual Insurance Federation of Agricultural Cooperatives	3.06	J.P. MORGAN BANK LUXEMBOURG S.A. 380578	2.65	Japan Trustee Services Bank, Ltd. (Trust Account 9)	2.15	JFE Steel Corporation	1.87	Mizuho Bank, Ltd.	1.60	Japan Trustee Services Bank, Ltd. (Trust Account 5)	1.59	Nippon Life Insurance Company	1.54
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Main Subsidiaries	DOWA ECO-SYSTEM CO., LTD. DOWA METALS & MINING CO., LTD. DOWA ELECTRONICS MATERIALS CO., LTD. DOWA METALTECH CO., LTD. DOWA THERMOTECH CO., LTD.	Fiscal Year-End	March 31																						
Employees	Approx. 6,400	General Meeting of Shareholders	June																						

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