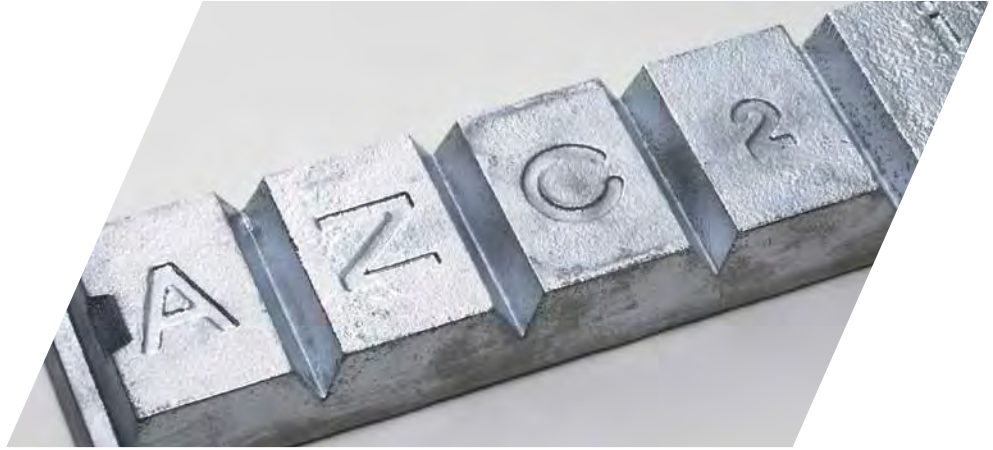


# DOWA



DOWA HOLDINGS CO., LTD.

**Annual Report 2016**

For the year ended March 31, 2016

# Through its business operations on the world stage, Dowa seeks to contribute to a high standard of living and the emergence of a resource-recycling society.



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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 2015 represents the year ended March 31, 2016.

## The Dowa Resource Recycling Loop

Operations at the Dowa Group, established in 1884, are based on our unique resource recycling loop. The loop begins with our production of nonferrous metal materials and progresses through the manufacture of a variety of value-added products to recycling.

In our Nonferrous Metals business, we extract useful metals from a variety of recyclable raw materials in addition to natural resources. After being processed by our Electronic Materials, Metal Processing and Heat Treatment businesses, these metals are incorporated in our user end products, including automotive and electronic devices, after being given sophisticated functionality. In our Environmental Management & Recycling business, we make waste materials harmless and recover metals from products after they have been used. These recovered metals are then refined again for re-use.

In this manner, the Dowa Group will continue to develop its business activities, contributing to the building of a society based on the recycling of resources.

### Environmental Management & Recycling Business

### Nonferrous Metals Business

### Electronic Materials Business

### Metal Processing Business

### Heat Treatment Business

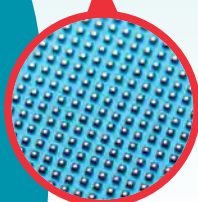
Resource recycling



Metal-ceramic substrates



High-performance copper alloys



LEDs

# Our Five Core Business Segments

## Environmental Management & Recycling Business

### DOWA ECO-SYSTEM CO., LTD.

**Waste treatment business:** Integrated and comprehensive services from collection and transport of municipal and industrial waste through intermediate waste treatment to controlled landfilling.

**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.

## Nonferrous Metals Business

### 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:** Recovery of platinum group metals from used exhaust gas catalyst material from automobiles.

**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 Co., Ltd., the largest zinc smelting plant in Japan, with an annual output of 200,000 tons.

## Electronic Materials Business

### DOWA ELECTRONICS MATERIALS CO., LTD.

**Semiconductors business:** Leading manufacturer of 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 new energy facilities and manufacturer of copper powders for electronics parts and zinc powder and silver oxide for batteries.

**Advanced fine materials business:** Dominant share in the world market for magnetic materials used in high-capacity data storage tape, and producer of a range of products from carrier powder for copying machines to ferrite powder used in printers and copiers.

## Metal Processing Business

### DOWA METALTECH CO., LTD.

**Copper rolled products business:** Manufactures copper, brass, and copper alloy strips used in terminals and connectors for automobiles; brass rods; and forged brass products.

**Electroplating business:** Precious metal electroplating of connectors and switches for automobiles.

**Metal-ceramic substrates business:** Manufactures metal-ceramic substrates employed in industrial machinery such as power management devices.

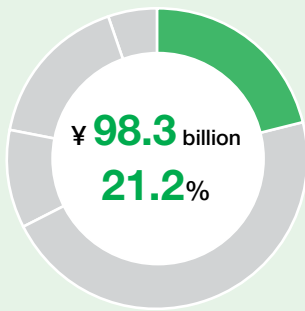
## Heat Treatment Business

### DOWA THERMOTECH CO., LTD.

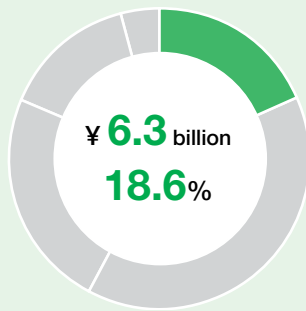
**Industrial furnace business:** Employs expertise in heat treatment to offer complete services ranging from facilities design to startup and maintenance.

**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.

**Net Sales and Composition Ratios**  
(Fiscal year ended March 31, 2016)



**Operating Income and Composition Ratios**  
(Fiscal year ended March 31, 2016)

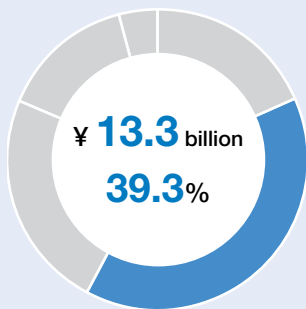
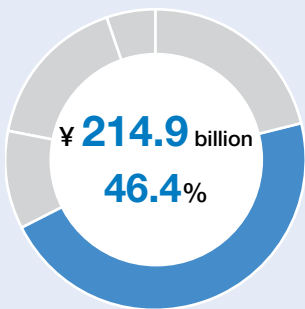


**Segment Policy**

**Secure the top position in Asia in a bid to help improve the global environment as one of the leading environmental companies in the world**

Dowa Eco-System Co., Ltd. is expanding operations in Japan and abroad by furnishing comprehensive and reliable waste management, soil remediation, and recycling services. As the leading environmental and recycling company in Asia, we are strengthening our business foundations and increasing operating bases overseas to help improve the environment in Asia.

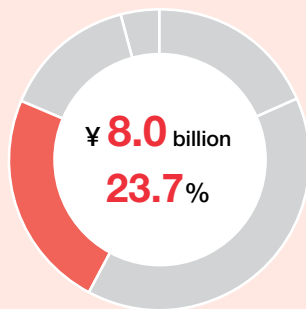
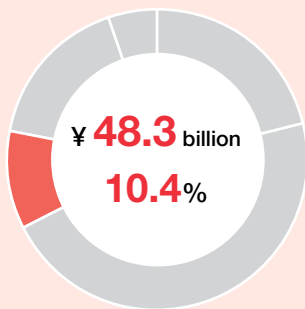
**P. 10**



**Establish the world's best recycling smelting complex**

Dowa Metals & Mining Co., Ltd. is establishing unique recycling and smelting complexes that focus mainly on the smelting and refining of copper and zinc using its mining, smelting, and refining capabilities honed over many years. We are helping to develop a resource recycling society by furnishing steady supplies of copper, zinc, precious metals, rare metals, and other metals recovered from the processing of raw materials as we work to further strengthen recycling and smelting operations.

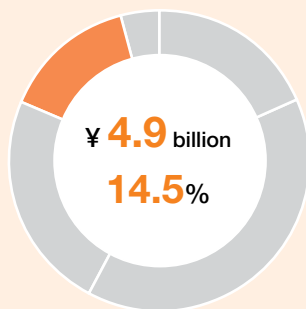
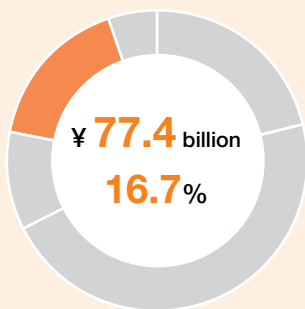
**P. 12**



**Become the world's top-class material manufacturer with many niche / top products**

Dowa Electronics Materials Co., Ltd. is engaged in various businesses—semiconductor materials such as high-purity gallium, compound semiconductor wafers, and LEDs, electronic materials that use electrical conducting materials, and functional materials that use magnetic materials—and provides its characteristic products worldwide. In the rapidly changing market for electronic materials, we are always working to further bolster competitiveness in line with our policy of being a leading technological company.

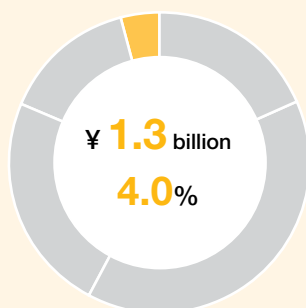
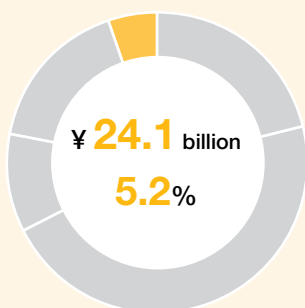
**P. 14**



**Promote business expansion in growth fields and growth areas**

Dowa Metaltech Co., Ltd. supplies value-added products for automobiles, information communication devices, and power semiconductors from each of its metal processing, electroplating, and substrate businesses. In addition to the development of new products, we are promoting operations in growth regions with a focus on Asia in response to market trends.

**P. 16**



**Make a leap forward as a global manufacturer engaged in comprehensive heat treatment company**

Dowa Thermotech Co., Ltd. is engaged in heat treatment processing activities that help extend the life of metal materials. Drawing on the know-how gained through these activities, the company is also active in the manufacture and maintenance of industrial furnaces. Moving forward, Dowa Thermotech will work vigorously to expand business overseas and in regions where the automobile industry is experiencing growth.

**P. 18**

# Financial Highlights

Dowa Holdings Co., Ltd. and its Consolidated Subsidiaries

For the years ended March 31	2012	2013	2014	2015	(Billions of yen)	(Millions of U.S. dollars*2)
					2016*1	2016*1
<b>Financial Performance</b>						
Net Sales	¥392.4	419.3	443.9	464.2	¥406.5	\$3,608
Operating Income	22.0	24.5	31.7	39.0	35.0	311
Ordinary Income	20.9	27.2	35.0	42.0	35.0	311
Net Income Attributable to Owners of the Parent	10.6	15.2	23.3	26.5	21.8	193
Capital Expenditures	15.9	18.4	16.5	17.2	22.9	203
Depreciation	18.3	16.9	16.2	15.5	15.1	134
R&D Expenses	4.6	4.6	4.6	5.3	5.5	49
<b>Financial Condition</b>						
Equity	121.8	142.4	166.9	195.6	203.3	1,804
Total Assets	319.6	349.7	358.7	379.1	364.4	3,234
Interest-bearing Debt*3	117.6	107.1	99.6	86.6	81.1	720
<b>Cash Flows</b>						
Cash Flows from Operating Activities	31.4	34.9	30.1	38.3	45.7	406
Cash Flows from Investing Activities	(19.4)	(19.3)	(18.6)	(20.3)	(23.4)	(208)
Free Cash Flows	12.0	15.6	11.4	18.0	22.2	197
<b>Ratios</b>						
Return on Assets*4 (%)	6.34	8.15	9.90	11.39	9.43	
Equity Ratio (%)	35.60	38.19	44.12	49.35	53.49	
Debt Equity Ratio (Times)	1.03	0.80	0.63	0.46	0.42	

\*1. The years stated in the text are ended March 31 of the respective year. Thus "2016" refers to the fiscal year that ran from April 1, 2015 through March 31, 2016.

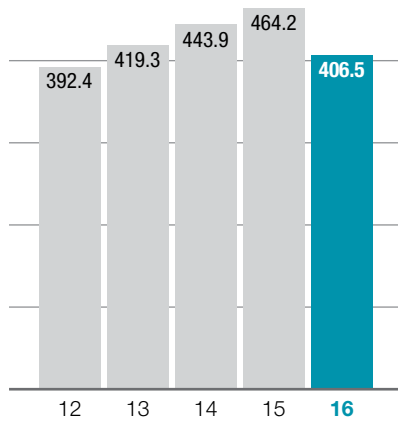
2. ¥112.68=US\$1, the rate of exchange on March 31, 2016, is used.

3. Interest-bearing debt does not include lease obligations.

4. ROA is Ordinary Income divided by the average of Total Assets (the sum total of the balance of Total Assets as of the beginning of the period and the end of the period divided by 2).

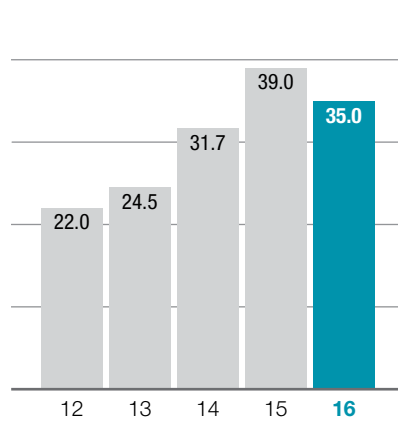
### Net Sales

(Billions of yen)



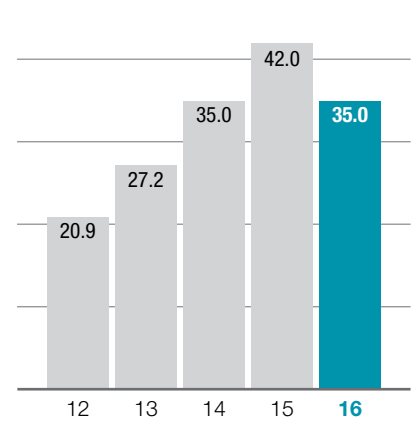
### Operating Income

(Billions of yen)



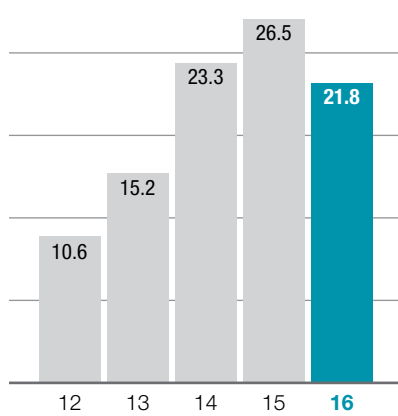
### Ordinary Income

(Billions of yen)



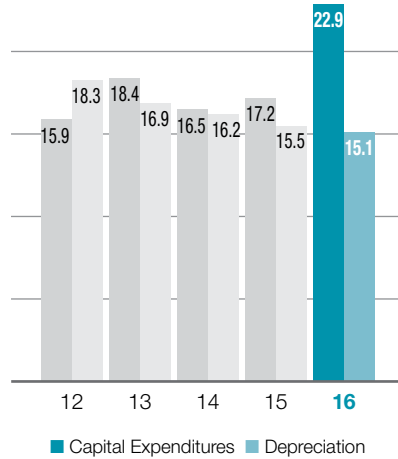
### Net Income Attributable to Owners of the Parent

(Billions of yen)



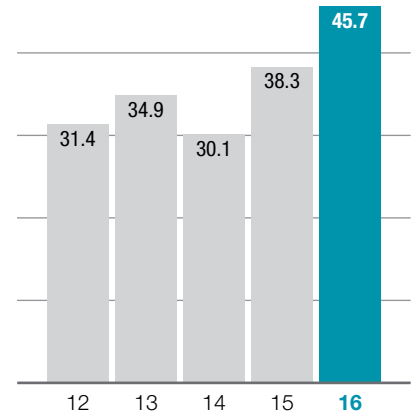
### Capital Expenditures / Depreciation

(Billions of yen)



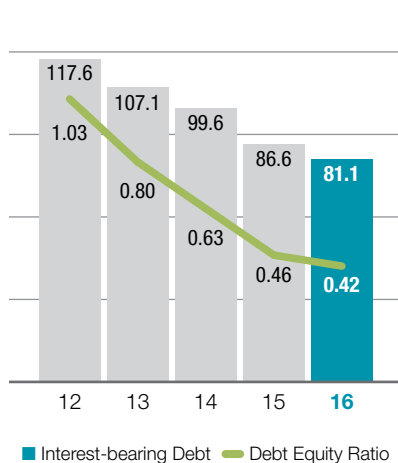
### Cash Flows from Operating Activities

(Billions of yen)



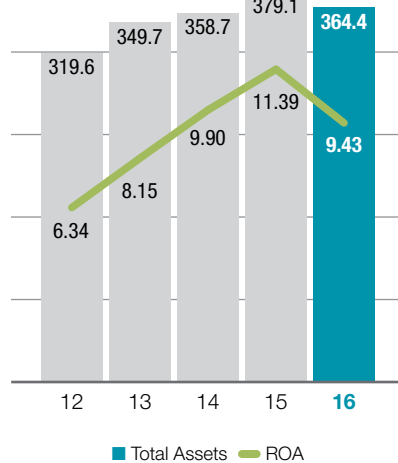
### Interest-bearing Debt / Debt Equity Ratio

(Billions of yen / Times)



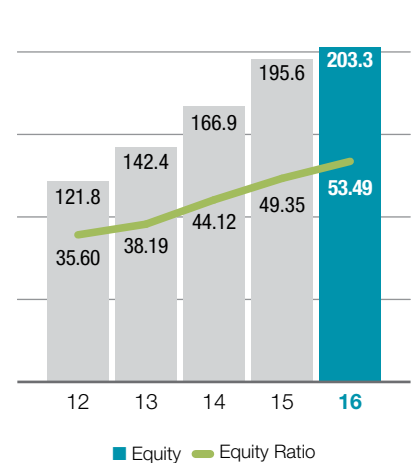
### Total Assets / ROA

(Billions of yen / %)



### Equity / Equity Ratio

(Billions of yen / %)



## Message from the Management

The Dowa Group will pursue further growth by expanding its operations in Asia and other emerging markets where growth is ongoing, continuing to invest in growth fields such as new energy and recycling, and steadily carrying out policies directed at improving productivity and increasing orders.



**Masao Yamada**

President and  
Representative Director



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## Business Environment

In fiscal 2015, the fiscal year ended March 31, 2016, the Japanese economy exhibited a modest positive turnaround. While the upswing in consumer spending fell short of a full-scale recovery, favorable economic conditions were mainly due to a pickup in corporate sector results. Looking at conditions outside Japan, the United States and the global economy as a whole continued to experience mild growth. The future, however, remains shrouded in a cloud of uncertainty owing to the prolonged economic slowdown in China and Southeast Asia, the persistent drop in such product prices as crude oil, and other factors.

Turning to the business environment in which the Dowa Group operates, demand for certain automotive-related products was impacted by the decline in automobile production in Japan and Asia. Certain products for use in the manufacture of smartphones were also affected by inventory adjustments by customers. Trends in new energy-related products remained robust. As far as the commodities markets were concerned, the prices of metals continued to decline in overall terms. This largely reflected concerns surrounding a drop in demand and the upswing in U.S. interest rates. Looking at movements in foreign currency exchange rates, the yen hovered above ¥120 to the dollar for most of the fiscal year under review. This was mainly attributable to firm economic conditions in the United States. In the fourth quarter of fiscal 2015, however, the value of the yen appreciated sharply.

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## Financial Performance in Fiscal 2015

Under these circumstances, the Dowa Group pushed forward measures in line with the basic policies of its new Medium-Term Plan, which commenced in fiscal 2015. In specific terms, the Group took steps to further expand its overseas business and promote business expansion by entering growth markets and related fields, while continuously reinforcing its business competitiveness. Due to this business environment, the Group reported a downturn in revenue and earnings in fiscal 2015 on a consolidated basis. Net sales came to ¥406.5 billion, down 12% compared with the previous fiscal year. Operating income was ¥35.0 billion, a decrease of 10%. Ordinary income also amounted to ¥35.0 billion, down 17%, and net income attributable to owners of the parent declined 18%, to ¥21.8 billion.

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## Financial Condition

As of March 31, 2016, total equity increased ¥7.7 billion compared with the end of the previous fiscal year, to ¥203.3 billion. The equity ratio rose 4.1 percentage points compared with the end of the previous fiscal year, to 53.5%. In addition, the balance of interest-bearing debt stood at ¥81.1 billion, down ¥5.5 billion compared with the previous fiscal year-end.

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## Fiscal 2015 Initiatives

Here, I would like to outline details of certain initiatives undertaken in fiscal 2015 in line with the three basic policies of the Group's Medium-Term Plan: further expansion of overseas business, business expansion by entering growth markets and related fields, and the continual reinforcement of business competitiveness.

### Further Expansion of Overseas Business

In the Environmental Management & Recycling business, we set up controlled landfill facilities for waste in Myanmar. In addition, we pushed forward measures in a bid to upgrade and expand bases in Indonesia and Thailand. In the Nonferrous Metals business, we strengthened efforts in our exhaust catalyst collection system for discarded automobiles. Moreover, we expanded sales

## Message from the Management

of zinc products in Southeast Asia by utilizing our zinc processing plant in Thailand. In the Metal Processing business, we made every effort to expand our business in overseas regions that were exhibiting growth. This included the construction of a press working plant in Taiwan and the establishment of a precious metals electroplating base in Mexico. In the Heat Treatment business, we took our first steps to enter the Mexican market by expanding sales of industrial furnaces. At the same time, we undertook various activities including breaking ground on a new base in India and we worked diligently to expand business in regions where the automobile industry is experiencing growth.



Controlled landfill facility for waste, constructed in Myanmar

### Business Expansion by Entering Growth Markets and Related Fields

In the automotive field, which includes hybrid cars, we made progress in developing and expanding sales of copper alloys that are distinguished by their high conductive properties, strength, and other attributes. At the same time, we commenced production of precious metal plated products that offer improved abrasion resistance. In smartphones, we increased the productivity of high-output LEDs used in sensors and expanded sales of high-strength copper alloys for use in connectors. In the power semiconductors field, we undertook sample work on materials for joining semiconductor chips as a substitute for lead solder. We also made headway in the volume production of new compact and lightweight metal-ceramic substrates that boast high heat dissipation performance. In our new product development activities, we achieved some success with the early commercialization of various products including deep ultraviolet LEDs for use in sterilization and disinfection equipment and electrode materials for fuel cell use.



High-performance copper alloys

### Continual Reinforcement of Business Competitiveness

In the Environmental Management & Recycling business, we took steps to increase our treatment capacity in Okayama, completed construction of a new treatment facility in Akita, and acquired certification and licensing as a part of efforts to expand our low-contaminated PCB waste treatment operations. In the Nonferrous Metals business, we initiated steps to increase our impurities treatment capacity with the aim of expanding the treatment of recyclable raw materials in Akita as well as the recovery of precious and other metals including tin. In order to secure long-term and stable supplies of raw materials for use in our network of smelters, we are promoting exploration activities in Alaska in the United States and Mexico. In the Electronic Materials business, we increased our production capacity of magnetic materials for the tapes used in data backup. In the Heat Treatment business, we promoted such initiatives as the integration of our heat treatment furnace design, manufacturing, and maintenance bases in Japan. At the same time, we pushed forward efforts to develop small-scale, cost-competitive heat treatment furnaces.



Tin ingot

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## Fiscal 2016 Policies

Taking into consideration market trends throughout the fiscal year ending March 31, 2017, we will steadily implement the following policies.

### Further Expansion of Overseas Business

In the Environmental Management & Recycling business, we will pursue the construction of new waste treatment facilities in Indonesia and Thailand. In the Nonferrous Metals business, we will expand the collection of platinum group metal recyclable raw materials utilizing bases in Europe, Southeast Asia, and the United States. Following our recent entry into Mexico, we will push forward the construction of a new precious metal electroplating line in the Metal Processing business. At the same time, we will strengthen our cutting, press, and other activities in the Metal Processing business in China, Thailand, and Taiwan. In the Heat Treatment business, we will expand sales of industrial furnaces in India and Mexico, where demand is increasing. We will also construct a new heat treatment processing plant.

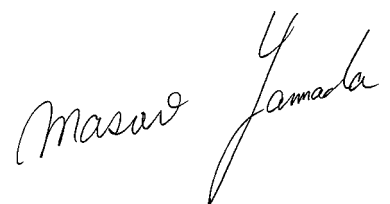
### Business Expansion by Entering Growth Markets and Related Fields

In the next-generation automobiles field including hybrid cars, which are expected to experience future growth, we will develop and expand sales of high-performance copper alloys for use in connectors. Amid the upswing in demand for advanced features including increasingly compact and thin products, we will expand sales of copper alloys for lead frames and connectors in the information communication equipment field. In the power semiconductors field, we will improve the features of new materials for joining semiconductor chips as a substitute for lead solder and expand applications for metal-ceramic substrates, which boast high heat dissipation properties as well as reliability. Moving forward, we will develop new products and engage in sample work in such new market fields as LEDs for use in healthcare equipment.

### Continual Reinforcement of Business Competitiveness

In the Environmental Management & Recycling business, we will set up a new low-contaminated PCB waste treatment facility in Akita. In the Nonferrous Metals business, we will pursue the new construction and replacement of a zinc smelting and refining facility at Akita Zinc Co., Ltd. We will also increase impurities handling capacity at Kosaka Smelting & Refining. In this manner, we will reinforce collaboration between the two smelters and actively promote the treatment of recyclable raw materials. In the Electronic Materials business, we will expand sales of silver powder for alternative energy use where demand continues to climb and new electrical conducting materials. We will increase copper alloy, precious metal electroplating, and metal-ceramic substrate productivity in the Metal Processing business while at the same time bolstering cost competitiveness. In the Heat Treatment business, we will expand new heat treatment processing orders in Japan and integrate production processes in line with market trends.

By steadily implementing these policies, the Dowa Group intends to achieve continued growth.



**Masao Yamada**

President and Representative Director

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

Waste Treatment

Soil Remediation

Recycling

### Main Products and Services

Waste treatment, controlled landfilling, soil remediation, metal recycling, household appliance recycling, automobile recycling, consulting on environmental matters, logistics

### Medium-Term Plan VISION

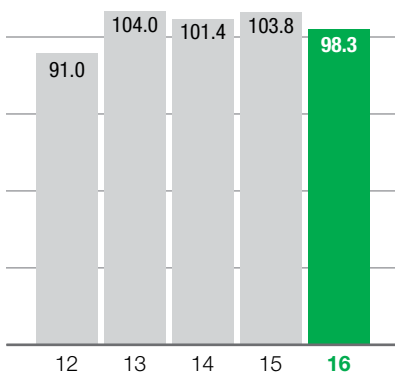
Secure the top position in Asia in a bid to help improve the global environment as one of the leading environmental companies in the world

Dowa Eco-System Co., Ltd. offers one-stop integrated services with high traceability. These services range from the collection and transport of waste, contaminated soil, and metal recycling material to intermediate waste treatment, such as compacting/detoxification and metal recycling or controlled landfilling. By expanding into the consultation business, such as conducting environmental impact assessments, and responding to a wide range of environmental needs both in Japan and overseas, we aim to become the leading company in the environmental and recycling businesses.

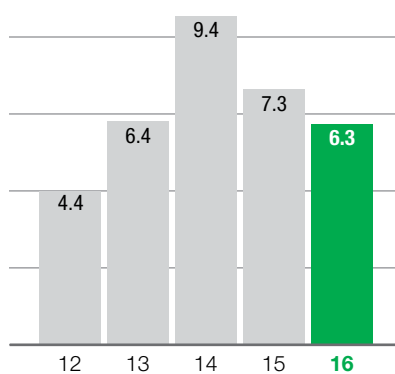


**Kenichi Sasaki**  
President

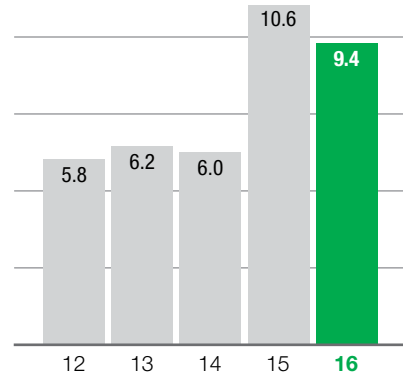
**Net Sales**  
(Billions of yen)



**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 2015

The waste treatment business enhanced its collection network and expanded its orders. The soil remediation business took steps to develop its unique soil remediation method and expand orders, but sales were sluggish. The recycling business was affected by a fall in prices for precious metals. In Southeast Asia, our environmental management & recycling business was impacted by stagnation in oil and natural gas development.

As a result of these factors, segment consolidated sales decreased 5% year on year to ¥98.3 billion, and segment operating income fell 14% to ¥6.3 billion.

## Key Initiatives for the Future

In the waste treatment business, we will increase the treatment of low-contaminated PCB waste in Japan. In the soil remediation business, we will work to expand domestic orders for on-site remediation services using our unique remediation method. In the recycling business, we will increase the collection of metal recycling materials from overseas, primarily from the United States and Asia. In Southeast Asia, we will make progress with initiatives toward the construction of new treatment facilities in Indonesia and Thailand.

## Initiatives in Each Business

### Waste Treatment

Through a range of initiatives, such as launching new facilities at Eco-System Akita Co., Ltd. and increasing treatment at Eco-System Sanyo Co., Ltd., we are expanding the treatment of low-contaminated PCB waste. The construction of new facilities at Meltec Iwaki Co., Ltd. is just one of the initiatives we are taking to increase the treatment of municipal waste.



Eco-System Akita Co., Ltd.'s facilities for the treatment of low-contaminated PCB waste

### Soil Remediation

Faced with demand for soil remediation relating to large-scale public investment in Japan, we are leveraging our unique soil remediation method and working to increase orders for on-site remediation services.



Eco-System Hanaoka Co., Ltd.'s soil remediation facilities, for which a unique remediation method was adopted

### Recycling

By leveraging the Group's bases in the United States and Southeast Asia, we will expand our collection of materials for recycling on a global basis and enhance our metal recycling business.



Metal scrap that is turned into recyclable materials

### Southeast Asia

We will make progress with initiatives toward the construction of new waste treatment facilities in Indonesia and Thailand.



Waste treatment facility in Thailand

## Nonferrous Metals

# 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, sulfuric acid, and other metals

### Medium-Term Plan VISION

#### Establish the world's best recycling smelting complex

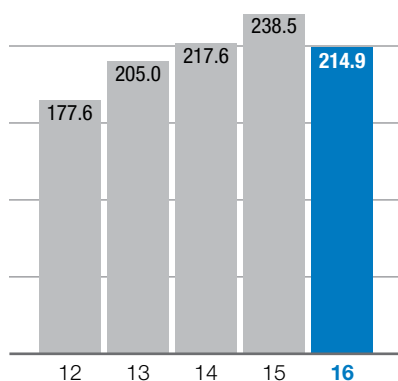
Utilizing its engineering capabilities honed over many years, Dowa Metals & Mining Co., Ltd. recovers more than 20 kinds of metal from a variety of raw materials, such as from ore and metal recycling materials, at its proprietary smelting complexes that focus mainly on the smelting and refining of copper as well as zinc. In the years to come, we will bolster our business base by promoting the further strengthening of such areas as the efficiency of our metal recovery and our raw material procurement.



**Akira Sekiguchi**  
President

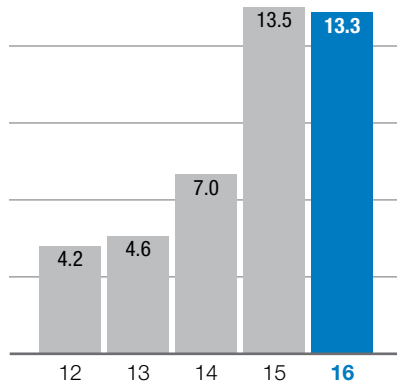
#### Net Sales

(Billions of yen)



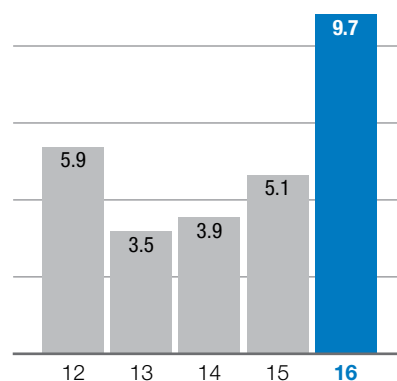
#### Operating Income

(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 2015

The overall downward trend in metal prices continued, and on the foreign currency markets the yen was generally traded at around ¥120 to the U.S. dollar, a weaker level than in the previous fiscal year. Under such circumstances, each smelter secured production volumes that included by-product metals and those of platinum group material. While working to reduce costs, such as the electric power consumption rate and the costs of goods, the Nonferrous Metals business derived benefits from the cuts in electricity prices brought about by the fall in oil prices.

As a result of these factors, segment consolidated sales

decreased 10% year on year to ¥214.9 billion, and segment operating income dipped 2% to ¥13.3 billion.

## Key Initiatives for the Future

In the precious metals and copper smelting business, we will actively promote the processing of metal recycling materials and work to improve our profitability. In the platinum materials smelting business, we will engage in initiatives to launch the new Akita facilities and expand the collection of materials from overseas while strengthening the recovery of platinum group metals. In the zinc smelting business, we will work to increase production by promoting the building or renewing of important facilities. We will also give additional backing to overseas prospecting projects.

## Initiatives in Each Business

### Precious Metals and Copper Smelting

Kosaka Smelting & Refining Co., Ltd. will actively process recycling materials and intermediate materials from Akita Zinc Co., Ltd. by enhancing its ability to treat impurities, while promoting the expansion of metal collection and improvements in productivity.



Kosaka Smelting & Refining Co., Ltd.'s recycling-compatible smelting facilities

### Platinum Metals Smelting

In addition to expanding our raw material collection operations on a global scale by leveraging our sampling facilities, such as those in the United States and the Czech Republic, we will launch Nippon PGM Co., Ltd.'s new facilities and further expand the recovery of platinum group metals from used automobile exhaust catalysts.



Used automobile exhaust catalysts

### Zinc Smelting

In addition to engaging in the building or renewing of important facilities such as roasting furnaces that are used at the time of refining at Akita Zinc Co., Ltd., we will promote the increased treatment of metal recycling materials and increase zinc production. Including further improvements in the rate at which we consume electric power, ongoing initiatives will enhance our cost competitiveness.



Akita Zinc Co., Ltd.'s electrolytic process

### Resource and Raw Material Procurement

Giving added impetus to both of our mineral exploration projects—the Los Gatos Silver, Zinc, and Lead Project in Mexico and the Palmer Zinc and Copper Project in the U.S. state of Alaska—we will work to increase the proportion of zinc that we mine ourselves.



Los Gatos Silver, Zinc, and Lead Project, Mexico

Electronic Materials

# DOWA ELECTRONICS MATERIALS CO., LTD.

Semiconductors

Electronic Materials

Advanced Fine Materials

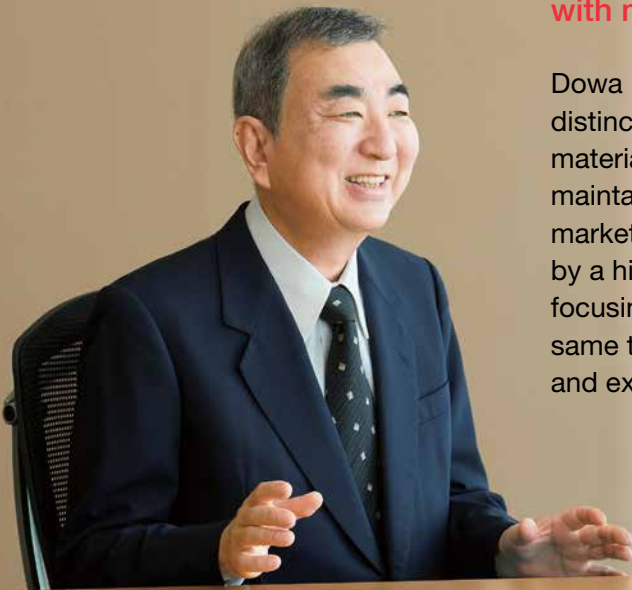
**Main Products and Services**

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

**Medium-Term Plan VISION**

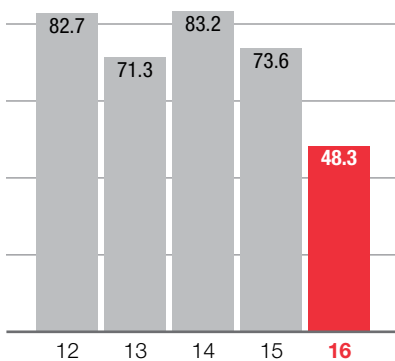
**Become the world's top-class material manufacturer with many niche / top products**

Dowa Electronics Materials Co., Ltd. supplies products with distinctive features in each of the semiconductors, electronic materials, and advanced fine materials fields. We continue to maintain a high market share by striving to meet ever-changing market needs. Based on these products, which are supported by a high level of technological capability, we are currently focusing management resources on priority products. At the same time, we are advancing the development of new products and expediting the start-up of innovative businesses.



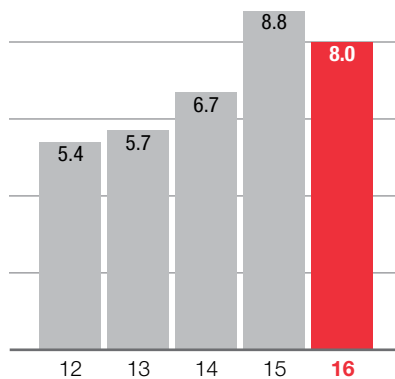
**Akira Otsuka**  
President

**Net Sales\***  
(Billions of yen)

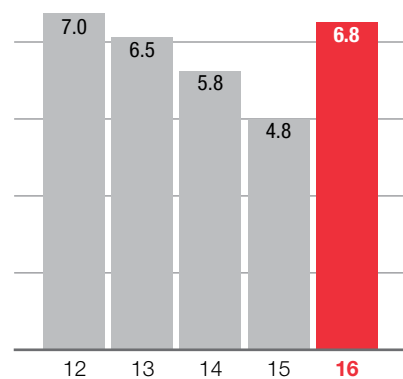


\* The decrease in sales from fiscal 2015 is mainly attributable to the change in classification of silver powder sales to contracted processing costs.

**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 2015

In the semiconductors business, there was a drop in the sales volumes of LEDs for smartphones. In the electronic materials business, sales of silver powder for new energy grew but net sales decreased, affected by transactions having been partly shifted to contracted processing not containing silver metal prices. The advanced fine materials business worked to expand sales of next-generation magnetic materials for data tapes. Ongoing initiatives addressed the development of new products to meet market needs.

As a result of these factors, segment consolidated sales fell 34% year on year to ¥48.3 billion, and segment operating income decreased 9% to ¥8.0 billion.

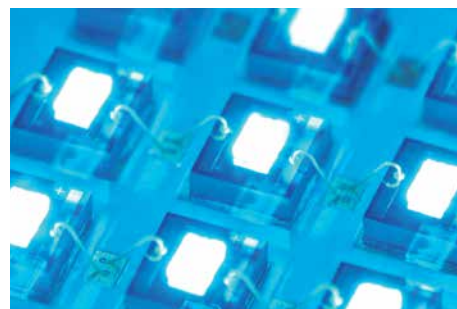
## Key Initiatives for the Future

In the semiconductors business, we will work to expand the applications of our products into healthcare, such as the LEDs for sensors. In the electronic materials business, we will expand sales of silver powder for new energy and new electrode materials. In the advanced fine materials business, we will strengthen our production system by expanding the capacity for next-generation magnetic materials for data tapes. We will also work on the early commercialization of deep ultraviolet LEDs for sterilization and antibacterial equipment, and of electrode materials for fuel cells, the market demand for all of which is expected to grow in the years ahead.

## Initiatives in Each Business

### Semiconductors

We will promote further improvements in the properties of LEDs for sensors as well as their development and expanded application in healthcare equipment and other areas. We will also work to improve the properties of deep ultraviolet LEDs for sterilization and antibacterial equipment as well as on their early commercialization, such as by sample work expansion.



Deep ultraviolet LEDs for sterilization and antibacterial equipment

### Electronic Materials

We will promote sales of silver powder for new energy, for which there is burgeoning demand. We will also work to expand and upgrade our product lineup by developing new products for which we will have painstakingly pinpointed user needs, such as improved properties in new semiconductor bonding materials that can be used as an alternative to solder.



Silver nano paste for use as an alternative to solder

### Advanced Fine Materials

In next-generation magnetic materials for data tapes used by archives, we will work to strengthen our production system to meet demand and continue to hold the top share of the global market. Also advancing improvements in the properties of the electrode materials for use in fuel cells, we will strive to expand sales.



Magnetic powders for data tapes

Metal Processing

# DOWA METALTECH CO., LTD.

Copper Rolled Products

Electroplating

Metal-Ceramic 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-ceramic substrates

**Medium-Term Plan VISION**

**Promote business expansion in growth fields and growth areas**

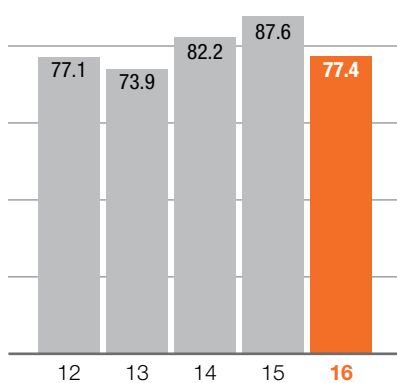
Dowa Metaltech Co., Ltd. is developing business in its mainstay products—high-performance copper rolled products and electroplated products as well as metal-ceramic substrates—for growth fields such as next-generation automobiles. In concert with advancing the development of new products to meet market needs, such as for high conductivity and strength, we are expanding our business by, for example, upgrading and expanding our bases in Asia, where growth is forecast for the coming years, and augmenting our production capabilities.



**Akira Sugawara**  
President

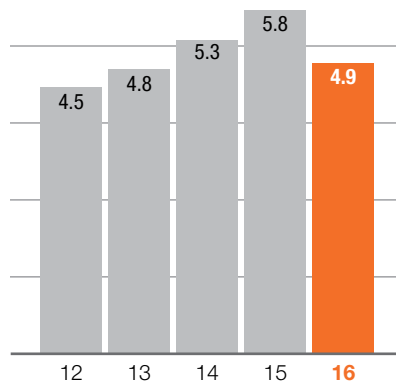
**Net Sales**

(Billions of yen)



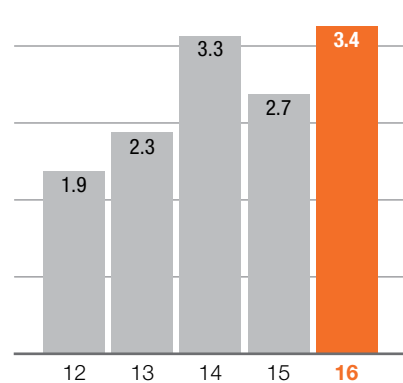
**Operating Income**

(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 2015

The copper rolled products business worked to expand copper alloy sales, centered on those for hybrid cars and smartphones, but its efforts were hampered by partial adjustments made to production in those industries in Japan and elsewhere in Asia. Having addressed demand for in-vehicle equipment, the electroplating business expanded its orders. The metal-ceramic substrates business was buffeted by decreased capital investment, including in China.

As a result of these factors, segment consolidated sales decreased 12% year on year to ¥77.4 billion, and segment operating income decreased 15% to ¥4.9 billion.

## Key Initiatives for the Future

In the copper rolled products business, we will develop and boost sales of high-performance copper alloys. In addition to ongoing efforts to improve productivity in Japan, we will promote business expansion elsewhere in Asia. In the electroplating business, we will enhance our global supply system, centered on the automobile industry. In the metal-ceramic substrates business, we will work to expand the applications of new products and address cost reductions, while enhancing our earning potential.

## Initiatives in Each Business

### Copper Rolled Products

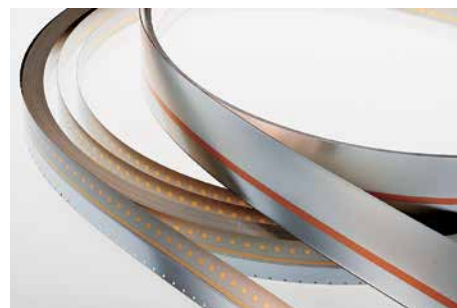
In the face of ongoing burgeoning demand for hybrid cars and smartphones, we will develop and boost sales of high-performance copper alloys featuring advanced properties, such as heat resistance, conductivity, and strength. We will address ongoing initiatives, including the improvement of productivity in Japan. Overseas, we will start mass production at a press working plant in Taiwan and expand business elsewhere in Asia, such as by increasing production in China and Thailand.



Dowa Metanix Co., Ltd.'s rolled copper product plant

### Electroplating

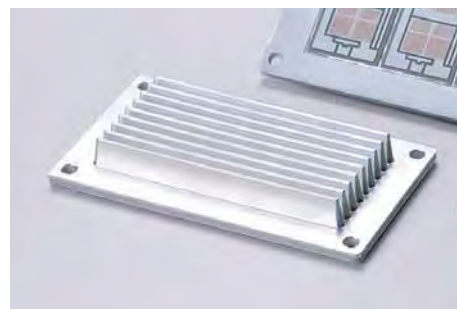
We will strengthen our global supply system, which is centered on the automotive industry, by advancing the construction of our precious metal electroplating plant in Mexico—a market we have only recently entered—and working to increase production by improving productivity in Japan and Thailand.



Precious metal-electroplated products

### Metal-Ceramic Substrates

We will work to expand sales channels to new industrial machinery and rail transportation users. With regard to base-integrated substrates that are compact, lightweight, and possess advanced heat dissipation properties, we will also expand applications in areas such as automobiles.



Base-integrated substrates

Heat Treatment

# DOWA THERMOTECH CO., LTD.

Industrial Furnaces

Heat Treatment Processing

**Main Products and Services**

Various types of heat treatment, various types of surface treatment, design, manufacture, marketing, and maintenance of various types of heat treatment furnaces and ancillary equipment

**Medium-Term Plan VISION**

**Make a leap forward as a global manufacturer engaged in comprehensive heat treatment company**

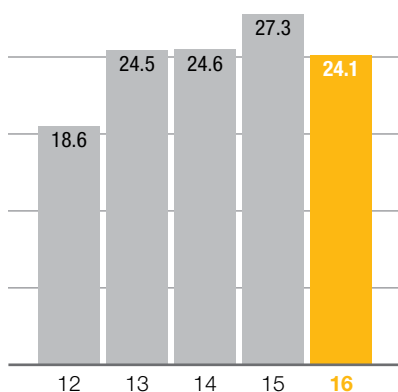
In the field of heat treatment, which increases the durability of metal parts, for example, in automobiles, Dowa Thermotech Co., Ltd. undertakes the manufacture, sales, and maintenance of heat treatment facilities as well as contracted heat treatment processing. In addition to advancing overseas business expansion in geographical areas where growth is expected in the years ahead, in Japan we are promoting R&D and production efficiency through process integration while strengthening our business competitiveness.



**Toshiro Sumida**  
President

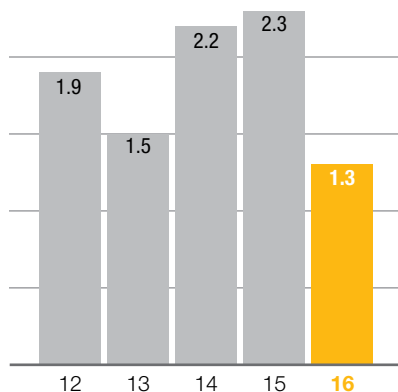
**Net Sales**

(Billions of yen)



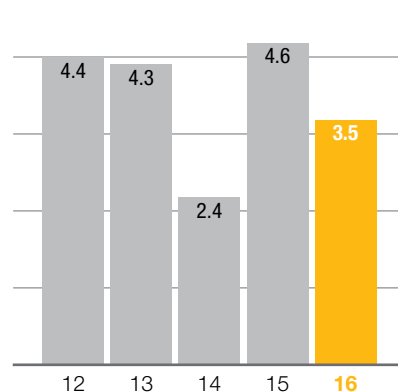
**Operating Income**

(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 2015

In the industrial furnace business, we promoted improvements in productivity by integrating our manufacturing bases in Japan and worked to expand overseas equipment sales and maintenance orders, but were also hampered by the adjustments made to automobile production in Japan and elsewhere in Asia. In the heat treatment processing business, we worked to expand orders in India, Thailand, and China.

As a result of these factors, segment consolidated sales decreased 12% year on year to ¥24.1 billion, and segment operating income fell 43% to ¥1.3 billion.

## Key Initiatives for the Future

The industrial furnace business will work to expand sales in India, the United States, and Mexico, where demand is growing. Efforts will also be made to enhance its ability to handle maintenance for customers in Southeast Asia. The heat treatment processing business will seek to enhance its production capabilities in overseas regions where the automobile industry is experiencing growth. In Japan, the heat treatment processing business will pursue new orders and promote the consolidation of production processes in response to market trends.

## Initiatives in Each Business

### Industrial Furnaces

In India and Mexico, where the automobile industries continue to grow, we will work to expand sales of heat treatment facilities. In Thailand and Indonesia, where we will procure for heat treatment facilities, we will enhance our ability to handle maintenance for customers in Southeast Asia. In Japan, our efforts will include promoting the development of cost-competitive, compact heat treatment furnaces.



The heat treatment furnaces manufacturing process at Dowa Thermoengineering Co., Ltd., Hamamatsu-kita Plant

### Heat Treatment Processing

The heat treatment processing business will seek to increase its overseas production capacity, for example, by advancing the construction of new bases in India and Mexico. In Japan, in addition to devising plans to gain new orders, we will promote the consolidation of production processes in response to market trends. We will also engage in the development of surface treatment that offers superior resistance to both abrasion and oxidation.

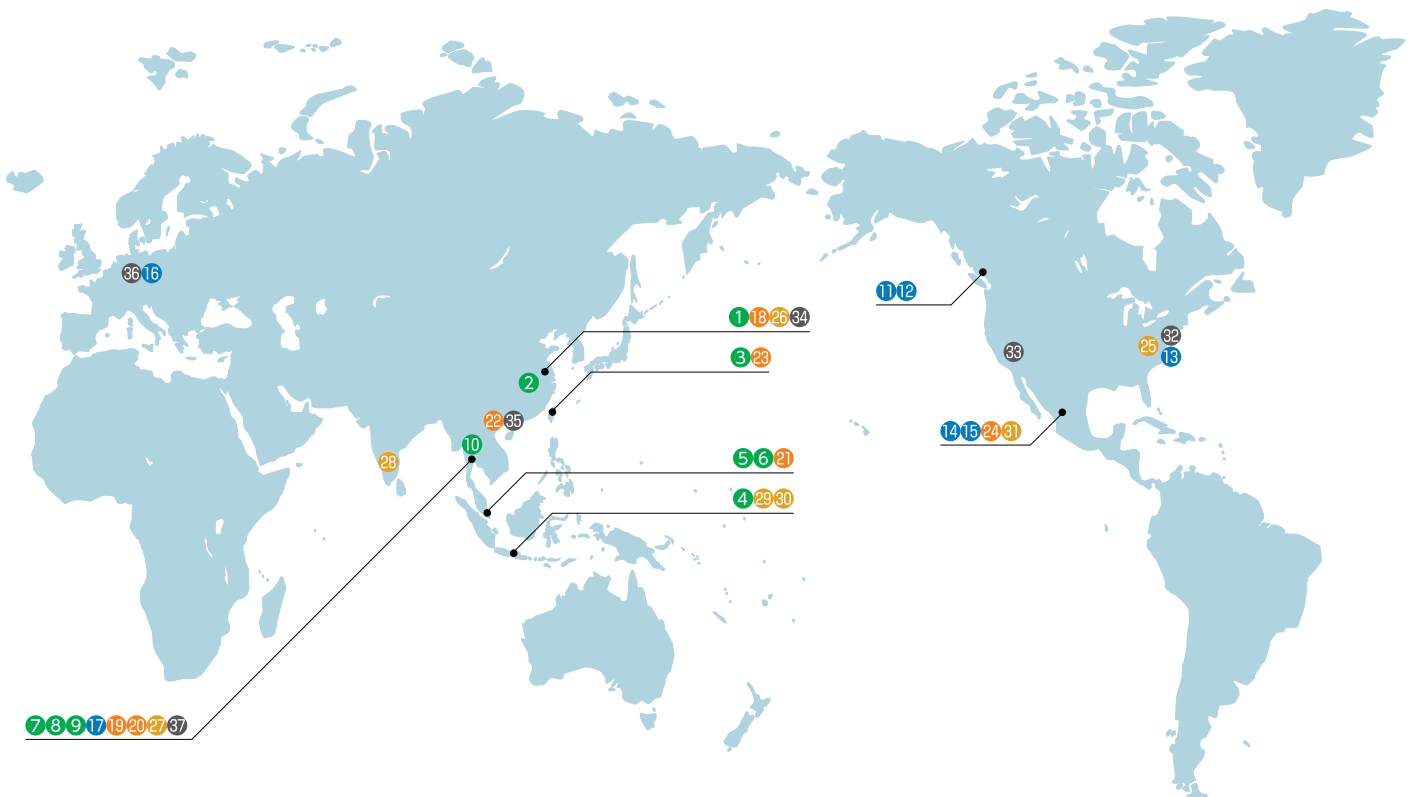


Components that have undergone heat treatment processing

# Global Network

As of March 31, 2016

## Overseas



### Dowa Eco-System Co., Ltd.

- ① Dowa Environmental Management Co., Ltd. (China)
- ② Jiangxi Dowa Environmental Management Co., Ltd. (China)
- ③ Dowa Eco-System Co., Ltd. Taiwan Office
- ④ PT. Prasadha Pamunah Limbah Industri (PPLi) (Indonesia)
- ⑤ Technochem Environmental Complex Pte. Ltd. (TEC) (Singapore)
- ⑥ DOWA ECO-SYSTEM SINGAPORE PTE. LTD. (Singapore)
- ⑦ Waste Management Siam Ltd. (WMS) (Thailand)
- ⑧ Bangpoo Environmental Complex Ltd. (BPEC) (Thailand)
- ⑨ Eastern Seaboard Environmental Complex Co., Ltd. (ESBEC) (Thailand)
- ⑩ GOLDEN DOWA ECO-SYSTEM MYANMAR COMPANY LIMITED (Myanmar)

### Dowa Metals & Mining Co., Ltd.

- ⑪ Dowa Metals & Mining Co., Ltd. Vancouver Office (Canada)
- ⑫ Cariboo Copper Corporation (Canada)
- ⑬ NIPPON PGM AMERICA, INC. (U.S.A.)
- ⑭ Dowa Metals & Mining Co., Ltd. Mexico Office
- ⑮ MINERA TIZAPA, S.A. DE C.V. (Mexico)
- ⑯ Nippon PGM Europe s.r.o. (Czech Republic)
- ⑰ Dowa Metals & Mining (Thailand) Co., Ltd. (Thailand)

### Dowa Metaltech Co., Ltd.

- ⑱ Dowa Advanced Materials Shanghai Co., Ltd. (China)
- ⑲ DOWA METALTECH (THAILAND) CO., LTD. (Thailand)
- ⑳ DOWA Precision (Thailand) Co., Ltd. (Thailand)
- ㉑ Dowa Metaltech Co., Ltd. Singapore Branch
- ㉒ Dowa Metaltech Co., Ltd. Shenzhen Sales Office (China)
- ㉓ DOWALI PRECISION CO., LTD. (Taiwan)
- ㉔ DOWA METALTECH MEXICO, S.A. DE C.V. (Mexico)

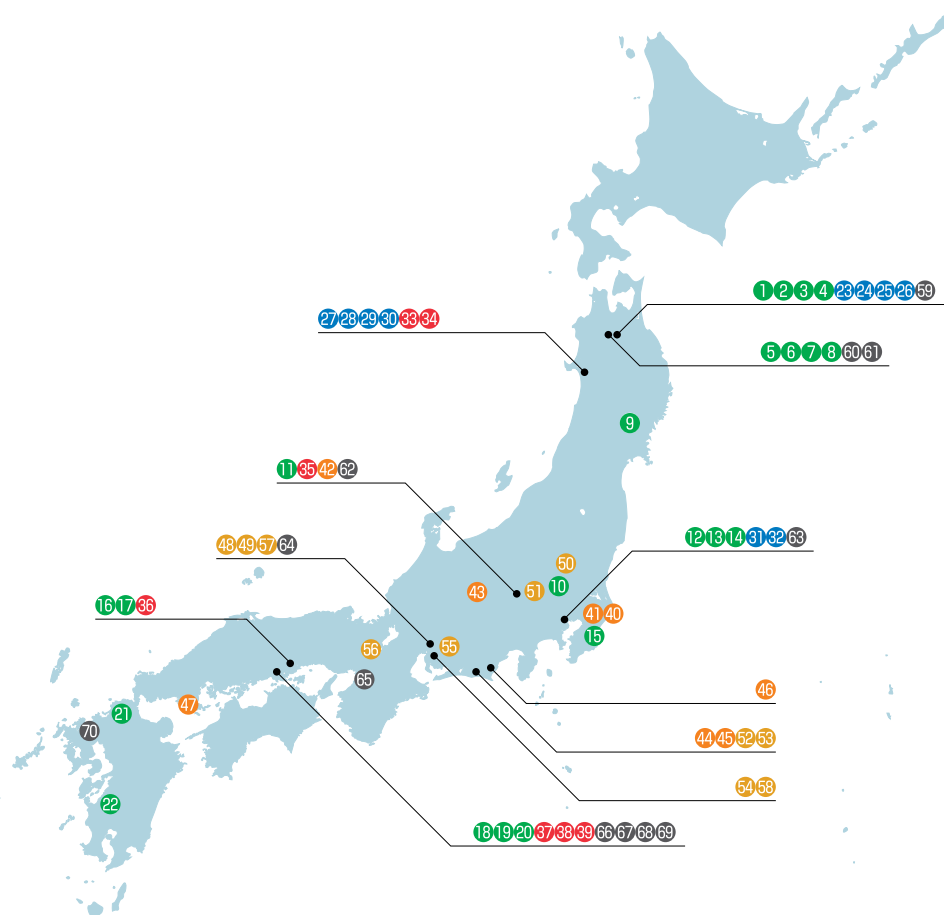
### Dowa Thermotech Co., Ltd.

- 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 THERMOTEC 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 Environmental Protection Laboratory
- 6 Eco-System Akita Co., Ltd.
- 7 Eco-System Hanaoka Co., Ltd.
- 8 Eco-Recycle Co., Ltd.
- 9 Dowa-Tsuun Co., Ltd.
- 10 Meltec Co., Ltd.
- 11 Eco-System Recycling Co., Ltd. East Japan Plant
- 12 Eco-System Japan Co., Ltd.
- 13 Geotechnos Co., Ltd.
- 14 E&E Solutions Inc.
- 15 Eco-System Chiba Co., Ltd.
- 16 Eco-System Sanyo Co., Ltd.
- 17 Okayama Koyu Co., Ltd.
- 18 Eco-System Recycling Co., Ltd. West Japan Plant
- 19 Eco-System Okayama Co., Ltd.
- 20 Biodiesel Okayama Co., Ltd.
- 21 Kowa Seiko Co., Ltd.
- 22 Act-B Recycling Co., Ltd.

## Dowa Metals & Mining Co., Ltd.

- 23 Metallurgical Laboratory
- 24 Kosaka Smelting & Refining Co., Ltd.
- 25 Nippon PGM Co., Ltd.
- 26 Akita Recycle & Finepack Co., Ltd.

- 27 Akita Zinc Co., Ltd.
- 28 Akita Zinc Solutions Co., Ltd.
- 29 Akita Rare Metals Co., Ltd.
- 30 Akita Zinc Recycling Co., Ltd.
- 31 Acids Co., Ltd.
- 32 Zinc Excel Co., Ltd.

## Dowa Electronics Materials Co., Ltd.

- 33 Semiconductor Materials Laboratory
- 34 Dowa Semiconductor Akita Co., Ltd.
- 35 Electronics Materials Laboratory
- 36 Dowa F-Tec Co., Ltd.
- 37 Advanced Fine Materials Laboratory
- 38 Dowa Electronics Materials Okayama Co., Ltd.
- 39 Dowa IP Creation Co., Ltd.

## Dowa Metaltech Co., Ltd.

- 40 New Nippon Brass Co., Ltd.
- 41 Hoei Shoji Co., Ltd.
- 42 Dowa Hightech Co., Ltd.
- 43 Dowa Power Device Co., Ltd.
- 44 Technology Center
- 45 Dowa Metal Co., Ltd.
- 46 Dowa Metanix Co., Ltd.
- 47 TOKUYAMA-DOWA Power Material Co., Ltd.

## Dowa Thermotech Co., Ltd.

- 48 GRD Center
- 49 Technical Solution & Research Center
- 50 Dowa Thermoengineering Co., Ltd. Mooka Plant

- 51 Dowa Thermoengineering Co., Ltd. Ohta Plant
- 52 Dowa Thermoengineering Co., Ltd. Hamamatsu Plant
- 53 Dowa Thermoengineering Co., Ltd. Hamamatsu-kita Plant
- 54 Dowa Thermoengineering Co., Ltd. Chukyo Handa Plant
- 55 Dowa Thermoengineering Co., Ltd. Toyota Plant
- 56 Dowa Thermoengineering Co., Ltd. Shiga Plant
- 57 CEMM Co., Ltd.
- 58 Tonetsu Kosan Co., Ltd.

## Headquarters, Others

- 59 Dowa Techno-Research Co., Ltd.
- 60 Unekura Mining Co., Ltd.
- 61 Akita Kouei Co., Ltd.
- 62 Dowa Technology Co., Ltd. Kanto Techno Center
- 63 Headquarters
- 64 Dowa Group Nagoya Branch
- 65 Dowa Group Osaka Branch
- 66 Dowa Technology Co., Ltd. Seibu Techno Center
- 67 Dowa Techno Engineering Co., Ltd.
- 68 Yowa Kouei Co., Ltd.
- 69 Dowa Kohsan Co., Ltd.
- 70 Dowa Group Kyushu Branch

# CSR Policy & Planning

## Strengthening Initiatives for Realizing “Our Vision”

The Dowa Group works diligently to realize its Corporate Philosophy through its CSR activities. In order to strengthen our CSR activities, we have identified medium-term objectives as a part of our “Vision for 2020” in each of the safety, environmental, social, and governance (S+ESG) fields. These objectives are incorporated into the activity plans for each fiscal year and subsequently put into practice.

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

### The Dowa Group’s CSR Policy & Planning

Area	CSR Policy	Medium-Term Plan “Vision for 2020”
Corporate Governance	<ul style="list-style-type: none"> <li>We will aim to be an open and transparent company.</li> <li>We will endeavor in anti-corruption efforts including anti-bribery measures taking into consideration of the international agreement.</li> <li>We will take CSR into consideration in our procurement.</li> </ul>	<ul style="list-style-type: none"> <li>Healthy business management is promoted by ensuring sufficient functions, appropriate information disclosure and transparency in the internal control system.</li> <li>Business management which 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.”</li> <li>CSR is promoted throughout the supply chain by building partnerships with business connections.</li> </ul>
Safety	<ul style="list-style-type: none"> <li>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.”</li> <li>We are committed to preventing accidents at work and to supporting the health of our employees.</li> </ul>	<ul style="list-style-type: none"> <li>The occupational safety risks of the workplace are managed and minimized appropriately, and a comfortable and safe working environment is realized.</li> </ul>
Environmental	<ul style="list-style-type: none"> <li>We will provide customers with products and services that contribute to building a resource recycling society.</li> <li>We will reduce environmental burdens and risks in our business activities.</li> <li>The management and employees together take part in environmental conservation activities.</li> <li>We will promote business activities in consideration of biodiversity.</li> </ul>	<ul style="list-style-type: none"> <li>Responsible for the core of the international resources recycling network in Asia and the Pacific Rim area.</li> <li>Effective reduction of specific CO<sub>2</sub> emissions per unit has been achieved by various energy-saving measures and active use of renewable energy.</li> <li>The environmental risks of the workplace are managed properly, and environmental accident-generation risks are minimized.</li> <li>Biodiversity conservation activities are promoted in collaboration with the upstream and downstream of the supply chain.</li> </ul>
Social	<ul style="list-style-type: none"> <li>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.</li> <li>We will promote social contributions, reflecting unique characteristics of each local community.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>A culture of fair evaluation &amp; 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.</li> <li>Social contributions reflecting each local community are deployed in Japan and outside Japan.</li> </ul>



### “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, through minimization of management risks and improvement of corporate value at the same time.



Focus Measures	Target	FY2020 Goal
Strengthening of internal control and governance	Number of important deficiencies to be disclosed	0
Strengthening of compliance and risk management	Implementation rate of internal education and briefings	100%
CSR procurement promotion	Supplier survey coverage rate *Excludes contractors	Transaction amount base 80%
Raising the company-wide safety level	Frequency rate Severity rate	0.1 or less 0.01 or less
Strengthening of safety education in subsidiaries outside Japan	Number of times education is implemented Number of persons educated	Total 20 times Total 200 persons
Strengthening of recycle business: Collection volume / Recycling volume / Increase in no. of elements, etc.	Collection volume of materials for recycling	Increase from the preceding fiscal year
Improving the utilization rate of renewable energy Strengthening energy-saving initiatives	Emission amount of CO <sub>2</sub> emissions per unit	15% reduction as compared to FY1990
Minimization of environmental accident risk 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
Understanding of biodiversity risks of suppliers Status confirmation of biodiversity considerations in mines	Suppliers and mines survey rate	100%
Promoting diversity management	Employment of disabled people Promotion of participation by women	2.0% 100%
Promoting work-life balance	Education attendance rate	70%
Training of both appraisers and persons being appraised Strengthening in-house education of human resources Voluntary career development support for employees	Annual paid leave acquisition rate Operational satisfaction (Business planning system) (Education system and content)	90% 70%
Promoting social contribution	–	–

# Corporate Governance

The Dowa Group has made strengthening of corporate governance (corporate control) one of its most important management priorities, and every Group company is engaged in contributing to society as well as in developing and operating effective and efficient internal controls based on the Dowa Group's Values and Standards of Conduct.

For more details, please see our Corporate Governance Report at: [http://www.dowa.co.jp/jp/about\\_dowa/governance.html](http://www.dowa.co.jp/jp/about_dowa/governance.html)  
(In Japanese only)

## Outline of Corporate Governance System

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. Managerial responsibilities are clearly maintained by keeping the term of office at one year.

As of June 27, 2016, there were seven directors (including two outside directors). The Board of Directors meeting is held once every month, in principle. There are also six executive officers as of June 27, 2016 (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, 2016 (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, 2016)

Organization Form	Company with Auditors
Number of Directors	7 (Number of the Company's Articles of Incorporation: 13)
Among these, Outside Directors	2 (including 1 designated Independent Director)
Articles of Incorporation	1 year
Chairman of the Board of Directors	President
Number of Audit & Supervisory Board members	4 (Number of the Company's Articles of Incorporation: 5)
Among these, Outside Auditors	3

## Status of Internal Audits and Auditor Audits

The Company and all the companies of the Dowa Group have stipulated internal audit regulations and implemented internal audits based on them. The audits cover accounting and legal audits as well as all corporate activities, including those involving safety and the environment. At the time of an audit, the Company's CSR Department, relevant divisions, and Group companies coordinate with one another and allocate employees with a wealth of practical experience depending on the subject of the audit. The findings of such audits are reported to directors, Audit & Supervisory Board members, the CSR Department, and relevant departments.

In accordance with the audit policies and audit plans for the term stipulated by the Audit & Supervisory Board, the Audit & Supervisory Board members attend Board of Directors' meetings and other important meetings, and audit the execution of directors' duties, such as reviewing status reports on such tasks from directors. They also monitor the independence of the independent auditors and work with them to explain the audit plans of the independent auditors and report audit findings.

Audit & Supervisory Board members, independent auditors, and the CSR Department regularly set up discussion

forums and work closely with one another in order to further improve internal audits. The results of these audits are reported to the CSR Department as appropriate, and any necessary corrective measures are implemented.

## Development and Overview of Internal Control Systems

### Approach Regarding 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 fulfill management responsibilities conferred by 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, 2006.

The holding company structure raises the level of specialization of each business group and the speed at which policies can be executed. However, 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 continually be revised in line with changes in business activities and the social environment, so the Company and Group companies intend to promote the system even more robustly.

### **Overview of Internal Control Systems**

The Company will work to strengthen oversight of the Board of Directors by appointing executive officers and separating the execution function from the Board.

The Company and all the companies of the Dowa Group will clarify the authority and responsibilities of personnel for each rank based on Company rules such as Board regulations and administrative authority regulations and will rigorously ensure compliance with the law, the articles of incorporation, and social norms through independent study and educational programs for directors and employees.

The Company will continue to design and operate systems at the Company and all the companies of the Dowa Group to ensure the reliability of financial reporting.

The Company and all the companies of the Dowa Group will adopt a firm stance across the organization toward anti-social forces. In addition, we will coordinate efforts with all relevant organizations, including the police and legal advisors.

By establishing the Dowa Consultation Desk and implementing internal audits, the Company has introduced measures to prevent any improprieties or misconduct and to quickly discover any such incidents at the Company and all the companies of the Dowa Group, and will take appropriate action as necessary.

In gathering information relating to the execution of directors' duties, the Company will manage the information in accordance with Company regulations, such as the Dowa Group IT Systems Management Regulations and Intellectual Property Management Regulations.

In order to identify and avoid risk, the Company will have the Board of Directors and other bodies conduct rigorous reviews when decisions are made on important matters of the Company and of all the companies of the Dowa Group. We will also work to build a communication system to facilitate coordination among Group companies and improve our emergency response capabilities.

By means of Company regulations such as Board regulations and administrative authority regulations, the Company will clarify the authority and responsibilities of the Company and of all the companies of the Dowa Group.

The Company and all the companies of the Dowa Group will share important regulation systems and items, including

Board regulations and those covering administrative authority, accounting, documentation, purchasing, and systems management, at the Company and all the companies of the Dowa Group, and clarify the responsibilities and authority as well as the (approval) procedures of people in each position of employment.

Having established technical support companies that facilitate improvements in technological capabilities as well as business support companies that improve efficiency and transparency of indirect operations, such as accounting, finance and IT systems for the Company, business companies and business subsidiary companies, positive steps are being taken to promote internal controls within the corporate Group.

In the event that an Audit & Supervisory Board member requests the assignment of an employee to assist the member in his or her duties, the Company will promptly assign an employee who possesses expertise in an Audit & Supervisory Board member's duties.

In the event of an employee being assigned to assist in response to a request from an Audit & Supervisory Board member, the selection and personnel evaluation of a suitable employee will respect the Audit & Supervisory Board member's opinion.

In the event that a director or employee of the Company and of all the companies of the Dowa Group discovers a fact that may cause significant damage to the Company or loss of trust in the Company, he or she will promptly provide a suitable report for the Audit & Supervisory Board. In addition, in the event that the Company implements an internal audit of all Group companies, the conditions under which the audit was implemented and any results will be reported to the Audit & Supervisory Board.

With regard to any person who reports a matter to the Audit & Supervisory Board, neither the Company nor any of the companies of the Dowa Group will engage in treatment detrimental to that person for having submitted the report.

The costs relating to a routine audit will be budgeted with respect to the amount requested by the Audit & Supervisory Board.

There will be cooperation in the maintaining of auditing environments to facilitate discussion forums between the Internal Audit Division and the independent auditors, between directors, for interviews with individual employees, and for on-site audits at the Company or any company of the Dowa Group.

## Corporate Governance

### Remuneration for Directors and Auditors

Remuneration for directors and Audit & Supervisory Board members is determined by resolution of the general meeting of shareholders. Specific amounts and payment dates for directors are determined by the resolution of the Board of Directors based on the recommendations of the Remuneration Committee, which includes outside members. Specific amounts and payment dates for Audit & Supervisory Board members are decided through Audit & Supervisory Board member deliberations.

### Total Remuneration Amount of Individual Directors and Audit & Supervisory Board Members for Fiscal 2015

Position	Number	Remuneration Amounts
Directors	7	¥303 million
Audit & Supervisory Board members	6	¥64 million
(Among these, Outside Directors and Audit & Supervisory Board members)	(6)	(¥50 million)

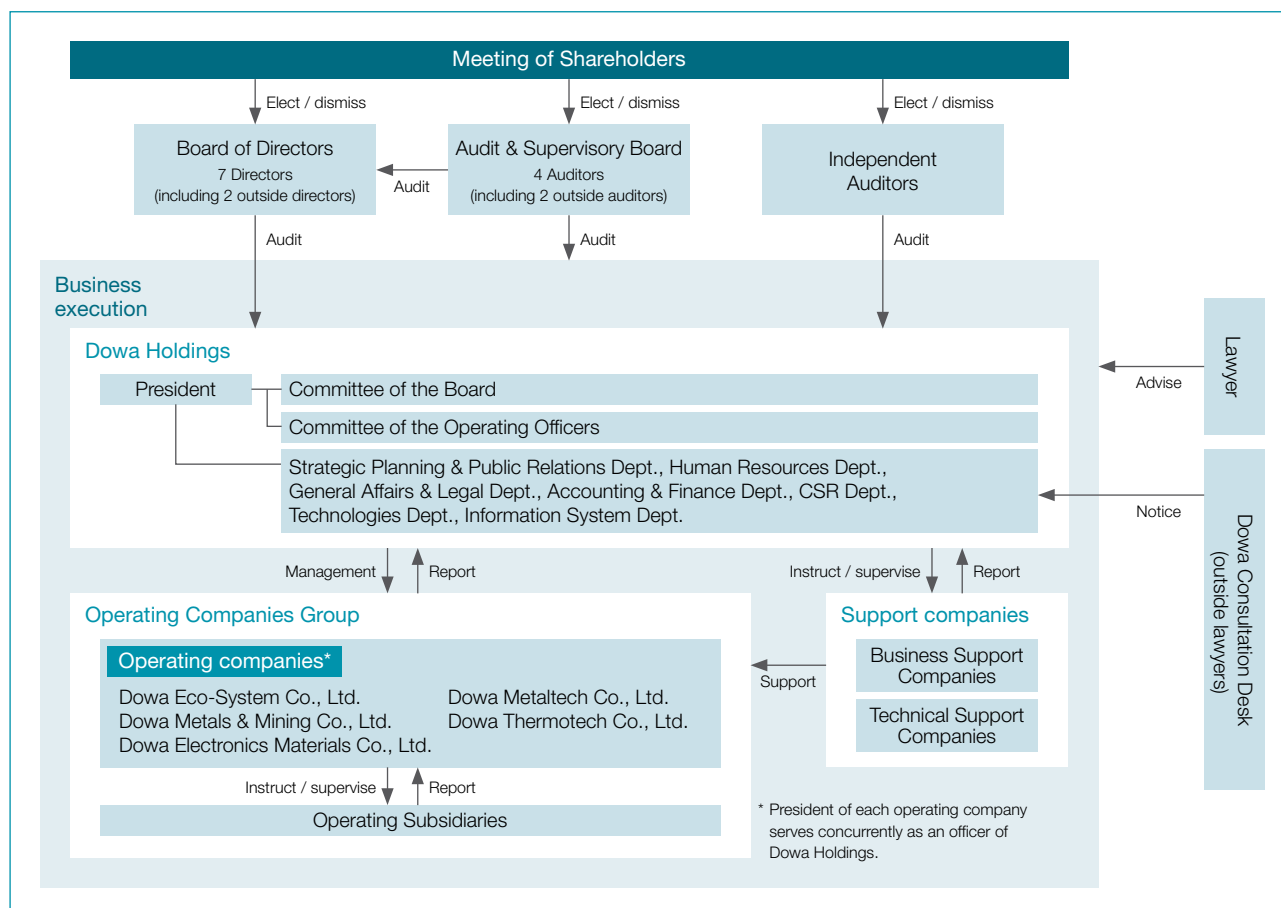
### Disclosure Based on Principles of Corporate Governance Code

With regard to disclosure on the basis of the principles of the Corporate Governance Code, please see our Corporate Governance Report at: [http://www.dowa.co.jp/jp/about\\_dowa/governance.html/](http://www.dowa.co.jp/jp/about_dowa/governance.html/)

(In Japanese only)

### The Dowa Group Corporate Governance Structure

(As of June 27, 2016)



# Board of Directors and Officers

As of June 27, 2016

## Directors



**Masao Yamada**  
President and  
Representative Director



**Yutaka Mitsune**  
Director



**Hiroshi Nakashio**  
Director



**Katsuji Matsushita**  
Director



**Susumu Kagaya**  
Director



**Eiji Hosoda**  
Outside Director

Professor at Faculty of  
Economics, Keio University  
Council member of Central  
Environmental Council,  
Ministry of the Environment



**Yoshiko Koizumi**  
Outside Director

Attorney  
Councilor of International Civil  
and Commercial Law Center  
Partner of City-Yuwa Partners  
Director of Japan Bar  
Association  
Director of Taiheiyo Cement  
Corporation  
Outside Audit & Supervisory  
Board Member of Sumitomo  
Bakelite Co., Ltd.

## Auditors



**Junichi Iwabuchi**  
Corporate Auditor  
(full-time)



**Katsuya Yukitake**  
Corporate Auditor  
(full-time)



**Jin Takeda**  
Corporate Auditor  
(part-time)  
  
Attorney  
Partner of Marunouchi Sogo  
Law Office  
Audit & Supervisory Board  
Member of Sanken Electric  
Co., Ltd.



**Kazuo Nakasone**  
Corporate Auditor  
(part-time)  
  
Audit & Supervisory Board  
Member of Fujita Kanko Inc.

## Officers



**Kenichi Sasaki**  
Senior Officer  
(part-time)  
President and  
Representative Director,  
Dowa Eco-System  
Co., Ltd.



**Toshiro Sumida**  
Senior Officer  
(part-time)  
President and  
Representative Director,  
Dowa Thermotech  
Co., Ltd.



**Akira Sekiguchi**  
Officer (part-time)  
President and  
Representative Director,  
Dowa Metals & Mining  
Co., Ltd.



**Akira Otsuka**  
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.



**Kiyoshi Yamada**  
Officer (part-time)  
President and  
Representative Director,  
Dowa Technology  
Co., Ltd.

# Financial Review

Fiscal year ended March 31, 2016

## Financial Performance

The Japanese economy continued to follow a modest recovery path throughout fiscal 2015, the fiscal year ended March 31, 2016. While business conditions benefited from a mild pickup in consumption, after an earlier downturn in the wake of Japan's consumption tax rate hike, and other factors including an upswing in corporate-sector results, the positive turnaround fell short of a full-fledged recovery. Turning to conditions outside Japan, the global economy as a whole including the United States experienced moderate growth. Despite this favorable environment, however, the general outlook for the future remained uncertain. This was largely due to the economic slowdown in such countries and regions as China and Southeast Asia as well as the prolonged drop in commodity prices including crude oil.

Against this backdrop, conditions throughout the markets in which the Dowa Group operates were mixed. Demand for certain automotive-related products declined on the back of a downturn in automobile production in Japan and Asia. The Group's performance was also impacted by clients' decisions to adjust inventories for certain products used in the manufacture of multifunction mobile terminals. In contrast, trends in alternative energy-related products remained firm. As far as the commodity markets are concerned, the prices of metals exhibited a persistent overall decline. This was mainly attributable to concerns surrounding a downturn in demand and moves in the United States to lift interest rates. In the fourth quarter of the fiscal year under review, however, signs of a pickup in metal prices began to emerge. Looking at foreign currency exchange rates, the U.S. dollar continued to hover above the ¥120 level. This was mainly due to robust economic conditions in the United States. Despite this period of stability, the value of the yen appreciated sharply in the fourth quarter.

Taking into consideration each of the aforementioned factors, the Dowa Group took steps to implement various measures under its new Medium-Term Plan, launched in fiscal 2015. Guided by the basic policy of the Plan, the Group worked diligently to further expand overseas businesses, expand business by entering growth markets and related fields, and continually reinforce business competitiveness.

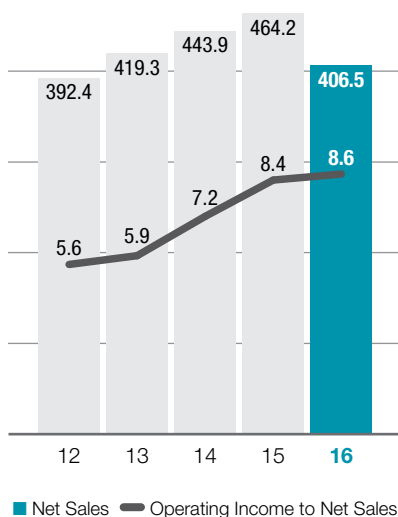
As a result, net sales amounted to ¥406,598 million in the fiscal year under review, a decrease of 12% compared with the previous fiscal year. From a profit perspective, operating income declined 10% year on year to ¥35,067 million; ordinary income also fell, declining 17% to ¥35,056 million; and net income attributable to owners of the parent fell 18% to ¥21,826 million.

## Forecasts for the Next Fiscal Year

Spearheaded by the United States, the global economy is expected to remain on an overall recovery path. China and Southeast Asia, however, are projected to experience a continued downturn in their

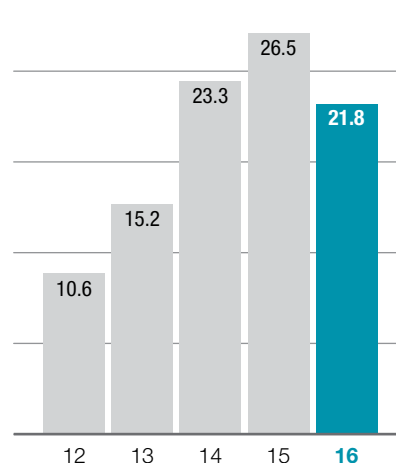
### Net Sales / Operating Income to Net Sales

(Billions of yen / %)



### Net Income Attributable to Owners of the Parent

(Billions of yen)



rates of economic growth. Coupled with such factors as a persistently strong yen and a decline in metal prices, the outlook for the future is anticipated to remain uncertain.

Under these circumstances, the Dowa Group will continue to steadfastly carry out various measures and strengthen business operations while working to identify global market trends.

For the fiscal year ending March 31, 2017, net sales are forecast to reach ¥385.0 billion while operating income, ordinary income, and net income attributable to owners of the parent are expected to total ¥29.0 billion, ¥29.0 billion, and ¥20.0 billion, respectively. These forecasts assume an average U.S. dollar exchange rate of ¥115 and a market price for copper and zinc of \$4,800/ton and \$1,800/ton, respectively.

## Analysis of Financial Position

### Assets

Total assets as of the end of the fiscal year under review stood at ¥364,420 million, down ¥14,772 million compared with the end of the previous fiscal year. Current assets declined ¥11,552 million and fixed assets decreased ¥3,220 million. While the balance of cash and time deposits increased ¥10,847 million, the drop in current assets was due mainly to decreases in such accounting line items as raw materials and supplies as well as notes and accounts receivable, which declined ¥11,036 million and ¥10,924 million, respectively. The downturn in fixed assets largely reflected decreases in investments in securities of ¥5,991 million as well as machinery and equipment of ¥1,491 million, which more than offset the upswing in construction in progress of ¥4,392 million.

### Liabilities

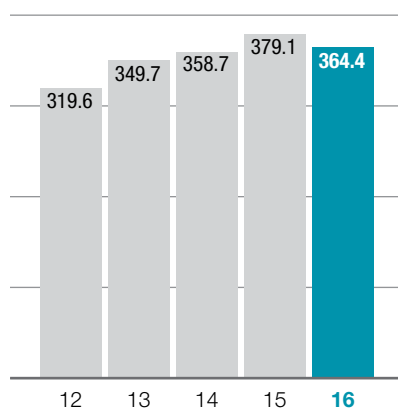
Liabilities decreased ¥22,493 million compared with the previous fiscal year-end. This decline was due primarily to lower balances of accrued income taxes, interest-bearing debt, and other current liabilities, which declined ¥6,117 million, ¥5,532 million, and ¥4,437 million, respectively.

### Equity

While net income attributable to owners of the parent came in at ¥21,826 million, the payment of cash dividends and other factors meant that the increase in equity was held to ¥16,480 million. Accumulated other comprehensive income declined ¥8,681 million, due mainly to decreases in unrealized gain on available-for-sale securities and foreign currency translation adjustments. In contrast, total equity was ¥7,720 million higher than the balance as of the end of the previous fiscal year, with the equity ratio rising to 53.5%.

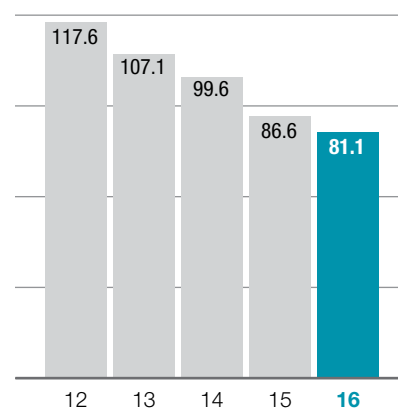
#### Total Assets

(Billions of yen)



#### Interest-bearing Debt

(Billions of yen)



## Financial Review

### Analysis of Cash Flows

Consolidated cash and cash equivalents (“cash”) increased ¥10,857 million compared with the end of the previous fiscal year to ¥18,902 million.

Net cash provided by operating activities came to ¥45,751 million (up ¥7,406 million year on year). Principal cash inflows were income before income taxes and minority interests of ¥31,822 million (down ¥9,993 million), the non-financial expenses of depreciation and amortization of ¥15,145 million, the decrease in inventories of ¥11,860 million, and the decrease in trade receivables of ¥10,609 million. The major cash outflow was income taxes paid of ¥16,980 million.

Net cash used in investing activities was ¥23,486 million (up ¥3,165 million). This was primarily due to capital expenditures of ¥20,664 million, mainly in the Environmental Management & Recycling business.

Net cash used in financing activities was ¥11,159 million (down ¥5,746 million). This largely reflected the repayment of interest-bearing debt totaling ¥5,438 million and cash dividends paid of ¥5,556 million.

### (For reference) Cash Flow-related Indicator Trends

	2012.3	2013.3	2014.3	2015.3	2016.3
Equity ratio	35.6	38.2	44.1	49.3	53.5
Market price-based equity ratio	50.9	62.3	71.1	80.2	50.9
Interest-bearing debt-to-cash flow ratio	3.7	3.1	3.3	2.4	1.8
Interest coverage ratio	15.7	19.9	19.3	31.2	50.6

\*1. Equity ratio: shareholders' equity / total assets

Market price-based equity ratio: market capitalization / total assets

Interest-bearing debt-to-cash flow ratio: interest-bearing debt / cash flows

Interest coverage ratio: cash flows / total interest paid

2. Each ratio is calculated on a consolidated basis.

3. Market capitalization is calculated based on the number of outstanding shares excluding treasury stock.

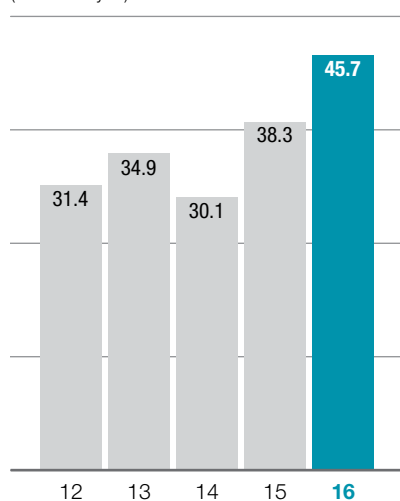
4. Cash flows are the cash flows from operating activities on the Consolidated Statement of Cash Flows.

5. Interest-bearing debt includes all liabilities (except lease obligations) bearing interest posted on the Consolidated Balance Sheet.

The total interest paid is the increase (decrease) in interest payable on the Consolidated Statement of Cash Flows.

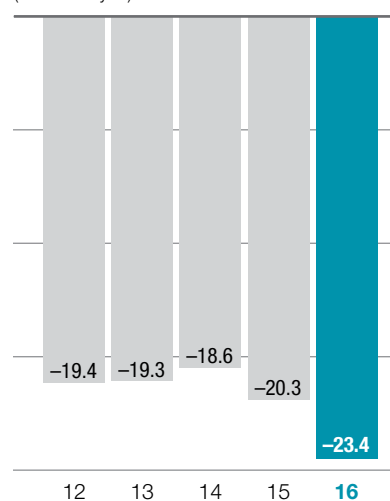
### Cash Flows from Operating Activities

(Billions of yen)



### Cash Flows from Investing Activities

(Billions of yen)





## 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 ¥18 per share, unchanged from the previous fiscal year. At present, the Company also plans to pay the same dividend of ¥18 per share in the fiscal year ending March 31, 2017.

## 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, 2016.

### 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 non-ferrous 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 ¥24.9 billion in marketable securities it held as of March 31, 2016. These securities primarily represent stock held in Group business partners.

### Interest Rate Fluctuations

As of March 31, 2016, the Group's balance of interest-bearing debt was ¥81.1 billion, with external fund procurement accounting for 22% 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 11-Year Summary

Dowa Holdings Co., Ltd. and its Consolidated Subsidiaries

For the years ended March 31	2016*1	2015	2014	2013
<b>Financial Performance</b>				
Net Sales .....	¥406,598	¥464,219	¥443,985	¥419,390
Cost of Sales.....	337,314	391,509	382,079	365,963
Selling, General and Administrative Expenses .....	34,216	33,616	30,111	28,863
Operating Income (Loss) .....	35,067	39,094	31,794	24,564
Operating Income by Segment (%) .....				
Environmental Management & Recycling (2000~) .....	18.01%	18.80%	29.86%	26.37%
Nonferrous Metals .....	38.00	34.69	22.20	19.09
Electronic Materials (2007~) .....	22.89	22.55	21.12	23.58
Metal Processing (2007~) .....	14.01	14.85	16.96	19.89
Electronic Materials & Metal Processing (2003~2006) .....	—	—	—	—
Heat Treatment (2000~) .....	3.86	6.02	7.12	6.33
Others and Elimination .....	3.24	3.09	2.74	4.74
EBITDA*2 .....	¥50,213	¥54,667	¥48,000	¥41,551
Net Income (loss) Attributable to Owners of the Parent .....	21,826	26,543	23,310	15,213
Capital Expenditures .....	22,936	17,247	16,549	18,422
Depreciation .....	15,145	15,572	16,205	16,987
R&D Expenses .....	5,594	5,320	4,651	4,604
<b>Exchange Rate and Metal Prices</b>				
Copper (Price quoted, Average) .....	¥622,829	¥765,775	¥757,633	¥696,375
Zinc (Price quoted, Average) .....	269,383	285,983	240,325	208,675
U.S. Dollar (Average) .....	120.14	109.93	100.23	83.11
<b>Financial Position</b>				
Equity*3 .....	¥203,370	¥195,649	¥166,987	¥142,400
Non-controlling Interests .....	8,449	8,528	8,733	8,807
Total Assets*3 .....	364,420	379,193	358,717	349,787
Interest-bearing Debt*4.....	81,135	86,668	99,663	107,198
<b>Per Share (Yen)</b>				
Basic Net Income (Loss) .....	¥ 73.75	¥ 89.69	¥ 78.77	¥ 51.41
Fully Diluted Net Income*5 .....	—	—	—	—
Fully Diluted Equity*5.....	658.66	632.30	534.75	451.41
Cash Dividends.....	18.00	18.00	15.00	12.00
<b>Cash Flows</b>				
Cash Flows from Operating Activities.....	¥ 45,751	¥ 38,345	¥ 30,189	¥ 34,970
Cash Flows from Investing Activities .....	(23,486)	(20,321)	(18,689)	(19,354)
Cash Flows from Financing Activities.....	(11,159)	(16,905)	(12,341)	(14,982)
Free Cash Flows .....	22,265	18,024	11,499	15,615
Cash and Cash Equivalents at End of Year .....	18,902	8,044	5,823	6,129
<b>Ratios</b>				
Return on Assets*6 .....	9.43%	10.60%	8.98%	7.34%
Return on Equity*7 *8.....	11.43	15.37	15.97	12.30
Operating Income (Loss) to Net Sales .....	8.62	8.42	7.16	5.86
Equity Ratio*8 .....	53.49	49.35	44.12	38.19
Operating Income Growth .....	(10.30)	22.96	29.43	11.60
Interest Coverage (Times) .....	39.04	34.23	21.41	14.82
Debt / Equity Ratio (Times)*8 .....	0.42	0.46	0.63	0.80
Debt / Capacity Ratio (Times).....	1.00	1.06	1.28	1.37
Return on Invested Capital*8 .....	7.91	9.70	9.04	6.32

\*1. The years stated in the text are ended March 31 of the year. Thus "2016" refers to the fiscal year that ran from April 1, 2015 through March 31, 2016.

2. EBITDA is calculated by adding Operating Income and Depreciation.

3. The Equity and Total Assets for 2006 have been reclassified to reflect the "Accounting Standards for Presentation of Net Assets in the Balance Sheet."

4. From 2008, in the balance sheets, long-term loans payable and current portion of long-term loans payable were stated including lease obligations. However, interest-bearing debt amounts stated in the Consolidated 11-Year Summary do not include lease obligations.

(Millions of yen)

	2012	2011	2010	2009	2008	2007	2006
	¥392,468	¥379,816	¥307,462	¥346,885	¥475,826	¥458,701	¥316,388
	343,015	330,380	268,738	329,340	399,901	383,136	253,389
	27,443	26,511	25,022	26,042	31,605	26,830	26,101
	22,009	22,924	13,701	(8,497)	44,319	48,733	36,897
	20.34%	12.22%	15.35%	—%	18.11%	16.31%	16.32%
	19.25	22.56	21.95	—	50.74	51.55	45.58
	24.95	31.16	35.12	—	14.23	14.31	—
	20.59	23.66	24.00	—	6.86	9.37	—
	—	—	—	—	—	—	28.15
	8.95	6.18	1.07	—	8.11	7.37	8.90
	5.92	4.21	2.51	—	1.93	1.08	1.04
	¥40,354	¥41,410	¥32,978	¥ 19,268	¥18,657	¥14,023	¥ 9,934
	10,610	8,521	4,359	(28,138)	24,520	26,337	14,532
	15,910	17,820	10,763	24,213	26,324	21,821	12,497
	18,344	18,486	19,276	18,612	13,974	9,897	9,316
	4,623	4,266	4,099	4,980	7,996	4,689	4,100
	¥717,816	¥738,200	¥609,483	¥657,408	¥915,950	¥867,400	¥517,308
	211,683	231,858	222,575	202,725	388,183	461,633	228,191
	79.08	85.72	92.85	100.53	114.28	117.02	113.31
	¥121,807	¥113,785	¥111,667	¥103,830	¥150,281	¥141,276	¥114,869
	7,999	6,942	5,663	5,263	6,078	4,491	3,833
	319,665	340,161	330,720	343,208	367,931	352,299	303,029
	117,670	138,119	149,371	180,496	120,953	114,757	99,653
	¥ 35.86	¥ 28.80	¥ 14.96	¥ (94.36)	¥ 81.86	¥ 87.82	¥ 48.12
	—	—	—	—	77.91	83.59	—
	384.55	361.18	358.33	339.93	481.85	456.10	382.69
	10.00	10.00	10.00	10.00	20.00	20.00	14.00
	¥ 31,499	¥ 23,955	¥ 25,011	¥ 33,593	¥ 40,398	¥ 13,700	¥ 17,783
	(19,491)	(19,257)	(14,602)	(36,477)	(39,138)	(24,387)	(15,616)
	(24,134)	(15,070)	(33,888)	49,303	(1,820)	9,634	(1,758)
	12,007	4,698	10,408	(2,883)	1,259	(10,686)	2,167
	4,788	16,741	27,115	50,681	4,294	4,792	5,813
	6.67%	6.83%	4.07%	—%	12.31%	14.87%	13.07%
	9.62	8.01	4.26	(23.18)	17.45	20.93	13.87
	5.61	6.04	4.46	(2.45)	9.31	10.62	11.66
	35.60	31.41	32.05	28.72	39.19	38.83	37.91
	(3.99)	67.31	—	—	(9.06)	32.08	33.48
	11.52	10.55	5.12	(2.79)	21.10	30.18	29.23
	1.03	1.29	1.41	1.83	0.84	0.84	0.87
	1.83	1.90	1.91	2.11	1.48	1.42	1.91
	4.58	3.48	1.71	(10.08)	9.25	10.47	6.77

5. Fully diluted net income is not stated for 2006 and from 2010 to 2016 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.

6. Operating Income divided by average of Total Assets at the start and end of the year.

7. Net Income Attributable to Owners of the Parent divided by average of Equity at the start and end of the year.

8. From 2007, the ratios have been calculated using shareholders' equity (the amounts after deducting Noncontrolling Interests amounts from equity amounts).

# Consolidated Balance Sheet

Dowa Holdings Co., Ltd. and its Consolidated Subsidiaries  
For the years ended March 31, 2016 and 2015

Assets	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
<b>Current Assets:</b>			
Cash and time deposits (Notes 3, 6 and 14) .....	¥19,364	¥8,517	\$171,856
Notes and accounts receivable (Note 14):			
Trade .....	60,590	70,866	537,720
Nonconsolidated subsidiaries and affiliates .....	1,985	2,527	17,618
Others .....	5,453	6,133	48,401
Subtotal .....	68,029	79,527	603,740
Inventories: (Note 13):			
Merchandise and finished products .....	21,586	22,306	191,577
Work in process .....	4,186	4,750	37,152
Raw materials and supplies .....	43,504	54,540	386,087
Subtotal .....	69,277	81,597	614,816
Deferred tax assets (Note 9) .....	4,171	5,248	37,024
Other current assets .....	7,992	5,488	70,933
Allowance for doubtful accounts .....	(174)	(163)	(1,547)
<b>Total current assets .....</b>	<b>168,662</b>	<b>180,215</b>	<b>1,496,824</b>
<b>Property, Plant and Equipment</b> (Notes 5 and 6):			
Land .....	23,390	23,666	207,586
Buildings and structures .....	109,156	105,728	968,730
Machinery and equipment .....	220,668	216,606	1,958,365
Construction in progress .....	11,036	6,644	97,948
Others .....	15,207	14,154	134,966
Subtotal .....	379,460	366,801	3,367,596
Accumulated depreciation .....	(268,853)	(259,126)	(2,385,992)
<b>Net property, plant and equipment .....</b>	<b>110,607</b>	<b>107,675</b>	<b>981,604</b>
<b>Investments and Other Assets:</b>			
Investments in securities (Notes 4, 6 and 14) .....	25,913	34,888	229,973
Investments in and advances to nonconsolidated subsidiaries and affiliates (Notes 4, 6 and 14) .....	40,852	37,332	362,549
Deferred tax assets (Note 9) .....	3,939	3,372	34,961
Goodwill .....	6,179	6,970	54,840
Other assets .....	8,366	8,872	74,246
Allowance for doubtful accounts .....	(99)	(134)	(881)
<b>Total investments and other assets .....</b>	<b>85,151</b>	<b>91,302</b>	<b>755,689</b>
<b>Total assets .....</b>	<b>¥364,420</b>	<b>¥379,193</b>	<b>\$3,234,118</b>

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

\*2. The years stated in the text are for fiscal years, which run from April 1 of the previous year through March 31. Thus, 2016 refers to the year ended March 31, 2016.

\*3. ¥112.68 = U.S. \$1, the rate of exchange on March 31, 2016, is used.

Liabilities and Equity	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
<b>Current Liabilities:</b>			
Short-term borrowings (Notes 6 and 14) .....	¥20,553	¥15,223	\$182,404
Commercial paper (Notes 6 and 14) .....	14,000	18,000	124,245
Current maturities of long-term debt (Notes 6 and 14) .....	12,296	15,549	109,130
Notes and accounts payable (Note 14):			
Trade .....	27,935	29,140	247,922
Nonconsolidated subsidiaries and affiliates .....	834	1,974	7,408
Others .....	5,774	6,011	51,244
Subtotal .....	34,544	37,127	306,574
Accrued expenses .....	8,287	7,927	73,551
Accrued income taxes .....	2,506	8,623	22,241
Accrued bonuses .....	3,905	3,702	34,657
Accrued directors' bonuses .....	250	235	2,224
Other current liabilities .....	4,301	12,428	38,174
Total current liabilities .....	100,646	118,817	893,203
<b>Long-term Liabilities:</b>			
Long-term debt (Notes 6 and 14) .....	35,757	39,108	317,335
Liability for employees' retirement benefits (Note 12) .....	15,880	14,508	140,933
Retirement allowance for directors' and corporate auditors' retirement benefits .....	841	691	7,466
Deferred tax liabilities (Note 9) .....	2,072	4,420	18,395
Other long-term liabilities .....	5,851	5,997	51,934
Total long-term liabilities .....	60,403	64,725	536,064
Total liabilities .....	161,049	183,543	1,429,267
<b>Contingent Liabilities (Note 7)</b>			
<b>Equity (Note 8):</b>			
Common stock:			
Authorized: 1,000,000 thousand shares in 2016 and 2015			
Issued: 309,946 thousand shares in 2016 and 2015 .....	36,437	36,437	323,370
Capital surplus .....	26,426	26,362	234,526
Retained earnings .....	125,049	108,630	1,109,772
Treasury stock, at cost (14,010 thousand shares in 2016 and 14,008 thousand shares in 2015) .....	(5,701)	(5,699)	(50,597)
<b>Accumulated Other Comprehensive Income:</b>			
Unrealized gain on available-for-sale securities .....	10,649	15,801	94,513
Deferred loss on derivatives under hedge accounting (Note 15).....	(227)	(197)	(2,022)
Foreign currency translation adjustments .....	3,378	6,167	29,983
Defined retirement benefit plans (Note 12).....	(1,091)	(381)	(9,682)
Total .....	194,921	187,121	1,729,863
<b>Noncontrolling interests .....</b>	<b>8,449</b>	<b>8,528</b>	<b>74,987</b>
Total equity .....	203,370	195,649	1,804,850
<b>Total liabilities and equity .....</b>	<b>¥364,420</b>	<b>¥379,193</b>	<b>\$3,234,118</b>

# Consolidated Statement of Income

Dowa Holdings Co., Ltd. and its Consolidated Subsidiaries  
For the years ended March 31, 2016 and 2015

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
<b>Net Sales</b> .....	<b>¥406,598</b>	¥464,219	<b>\$3,608,435</b>
<b>Cost of Sales</b> (Notes 11 and 13) .....	<b>337,314</b>	391,509	<b>2,993,565</b>
Gross profit .....	<b>69,283</b>	72,710	<b>614,870</b>
<b>Selling, General and Administrative Expenses</b> (Notes 10 and 11) .....	<b>34,216</b>	33,616	<b>303,657</b>
Operating income .....	<b>35,067</b>	39,094	<b>311,212</b>
<b>Other Income (Expenses):</b>			
Interest and dividend income .....	<b>949</b>	816	<b>8,422</b>
Interest expense .....	<b>(922)</b>	(1,165)	<b>(8,188)</b>
(Loss) gain on sales and disposal of property, plant and equipment, net.....	<b>(857)</b>	2,689	<b>(7,614)</b>
Foreign exchange (loss) gain.....	<b>(901)</b>	585	<b>(7,997)</b>
Equity in earnings of affiliates .....	<b>75</b>	1,973	<b>665</b>
Royalty income .....	<b>1,252</b>	747	<b>11,117</b>
Gain on sales of investments in securities, net.....	<b>1,320</b>	142	<b>11,716</b>
Loss on devaluation of investments in securities .....	<b>(1,676)</b>	(1,853)	<b>(14,879)</b>
Environmental expenses.....	<b>(1,146)</b>	(551)	<b>(10,176)</b>
Loss on impairments (Note 5) .....	<b>(1,796)</b>	(536)	<b>(15,941)</b>
Loss from natural disaster .....	<b>—</b>	(637)	<b>—</b>
Other, net .....	<b>459</b>	510	<b>4,078</b>
Subtotal .....	<b>(3,244)</b>	2,721	<b>(28,796)</b>
Income before income taxes .....	<b>31,822</b>	41,816	<b>282,415</b>
<b>Income Taxes</b> (Note 9):			
Current .....	<b>9,755</b>	14,628	<b>86,573</b>
Deferred .....	<b>344</b>	485	<b>3,056</b>
Total income taxes .....	<b>10,099</b>	15,113	<b>89,630</b>
Net income .....	<b>21,723</b>	26,702	<b>192,785</b>
<b>Net Income Attributable to Noncontrolling Interests</b> .....	<b>(103)</b>	158	<b>(920)</b>
Net income attributable to owners of the parent .....	<b>¥21,826</b>	¥26,543	<b>\$193,705</b>

<b>Per Share</b> (Note 17):	Yen		U.S. dollars (Note 1)
	2016	2015	2016
Basic net income .....	<b>¥73.75</b>	¥89.69	<b>\$0.65</b>
Cash dividends .....	<b>18.00</b>	18.00	<b>0.15</b>

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

\*2. The years stated in the text are for fiscal years, which run from April 1 of the previous year through March 31. Thus, 2016 refers to the year ended March 31, 2016.

\*3. ¥112.68 = U.S. \$1, the rate of exchange on March 31, 2016, is used.

# Consolidated Statement of Comprehensive Income

Dowa Holdings Co., Ltd. and its Consolidated Subsidiaries  
For the years ended March 31, 2016 and 2015

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
<b>Net income</b> .....	<b>¥21,723</b>	¥26,702	<b>\$192,785</b>
<b>Other comprehensive income</b> (Note 16):			
Unrealized (loss) gain on available-for-sale securities .....	<b>(5,400)</b>	4,791	<b>(47,928)</b>
Deferred loss on derivatives under hedge accounting .....	<b>(27)</b>	(508)	<b>(247)</b>
Foreign currency translation adjustments .....	<b>(1,920)</b>	3,023	<b>(17,046)</b>
Defined retirement benefit plan .....	<b>(567)</b>	91	<b>(5,035)</b>
Share of other comprehensive income in affiliates .....	<b>(846)</b>	812	<b>(7,515)</b>
Total other comprehensive income .....	<b>(8,763)</b>	8,211	<b>(77,774)</b>
<b>Comprehensive income</b> .....	<b>¥12,959</b>	¥34,913	<b>\$115,011</b>
<b>Total comprehensive income attributable to:</b>			
Owners of the parent .....	<b>¥13,145</b>	¥34,590	<b>\$116,664</b>
Noncontrolling interests .....	<b>(186)</b>	322	<b>(1,653)</b>

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

\*2. The years stated in the text are for fiscal years, which run from April 1 of the previous year through March 31. Thus, 2016 refers to the year ended March 31, 2016.

\*3. ¥112.68 = U.S. \$1, the rate of exchange on March 31, 2016, is used.

# Consolidated Statement of Changes in Equity

Dowa Holdings Co., Ltd. and its Consolidated Subsidiaries  
For the years ended March 31, 2016 and 2015

	Thousands	Millions of yen			
	Number of Shares of Common Stock Outstanding	Shareholders' Equity			
		Common Stock	Capital Surplus	Retained Earnings	Treasury Stock, at Cost
<b>Balance, April 1, 2014 (as previously reported)</b> .....	295,941	¥36,437	¥26,362	¥87,806	¥(5,695)
Cumulative effect of accounting change .....	—	—	—	(1,331)	—
<b>Balance, April 1, 2014 (as restated)</b> .....	295,941	¥36,437	¥26,362	¥86,475	¥(5,695)
Cash dividends paid .....	—	—	—	(4,507)	—
Net income attributable to owners of the parent .....	—	—	—	26,543	—
Purchases of treasury stock.....	(3)	—	—	—	(3)
Decrease in retained earnings due to increase in number of consolidated subsidiaries .....	—	—	—	(74)	—
Increase in retained earnings due to change in ownership interest of a consolidated subsidiary .....	—	—	—	193	—
Net changes of items other than shareholders' equity.....	—	—	—	—	—
<b>Balance, April 1, 2015</b> .....	<b>295,937</b>	<b>¥36,437</b>	<b>¥26,362</b>	<b>¥108,630</b>	<b>¥(5,699)</b>
Cash dividends paid .....	—	—	—	(5,409)	—
Net income attributable to owners of the parent .....	—	—	—	21,826	—
Net change in treasury stock held by affiliates during year .....	(0)	—	—	1	—
Purchases of treasury stock.....	(2)	—	—	—	(2)
Change in the parent's ownership interest due to transactions with noncontrolling interests.....	—	—	64	—	—
Net changes of items other than shareholders' equity.....	—	—	—	—	—
<b>Balance, March 31, 2016</b> .....	<b>295,935</b>	<b>¥36,437</b>	<b>¥26,426</b>	<b>¥125,049</b>	<b>¥(5,701)</b>

	Thousands	Thousands of U.S. dollars (Note 1)			
	Number of Shares of Common Stock Outstanding	Shareholders' Equity			
		Common Stock	Capital Surplus	Retained Earnings	Treasury Stock, at Cost
<b>Balance, April 1, 2015</b> .....	<b>295,937</b>	<b>\$323,370</b>	<b>\$233,958</b>	<b>\$964,062</b>	<b>\$(50,577)</b>
Cash dividends paid .....	—	—	—	(48,006)	—
Net income attributable to owners of the parent .....	—	—	—	193,705	—
Net change in treasury stock held by affiliates during year .....	(0)	—	—	11	—
Purchases of treasury stock.....	(2)	—	—	—	(19)
Change in the parent's ownership interest due to transactions with noncontrolling interests.....	—	—	568	—	—
Net changes of items other than shareholders' equity.....	—	—	—	—	—
<b>Balance, March 31, 2016</b> .....	<b>295,935</b>	<b>\$323,370</b>	<b>\$234,526</b>	<b>\$1,109,772</b>	<b>\$(50,597)</b>

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

\*2. The years stated in the text are for fiscal years, which run from April 1 of the previous year through March 31. Thus, 2016 refers to the year ended March 31, 2016.

\*3. ¥112.68 = U.S. \$1, the rate of exchange on March 31, 2016, is used.

# Consolidated Statement of Changes in Equity

	Millions of yen						
	Accumulated Other Comprehensive Income				Total	Noncontrolling Interests	Total Equity
	Unrealized Gain on Available-for-Sale Securities	Deferred (Loss) Gain on Derivatives under Hedge Accounting	Foreign Currency Translation Adjustments	Defined Retirement Benefit Plans			
<b>Balance, April 1, 2014 (as previously reported)</b> .....	¥10,947	¥315	¥2,604	¥(523)	¥158,253	¥8,733	¥166,987
Cumulative effect of accounting change .....	—	—	—	—	(1,331)	—	(1,331)
<b>Balance, April 1, 2014 (as restated)</b> .....	¥10,947	¥315	¥2,604	¥(523)	¥156,922	¥8,733	¥165,655
Cash dividends paid .....	—	—	—	—	(4,507)	—	(4,507)
Net income attributable to owners of the parent .....	—	—	—	—	26,543	—	26,543
Purchases of treasury stock .....	—	—	—	—	(3)	—	(3)
Decrease in retained earnings due to increase in number of consolidated subsidiaries ..	—	—	—	—	(74)	—	(74)
Increase in retained earnings due to change in ownership interest of a consolidated subsidiary .....	—	—	—	—	193	—	193
Net changes of items other than shareholders' equity .....	4,854	(513)	3,563	142	8,047	(205)	7,842
<b>Balance, April 1, 2015</b> .....	<b>¥15,801</b>	<b>¥(197)</b>	<b>¥6,167</b>	<b>¥(381)</b>	<b>¥187,121</b>	<b>¥8,528</b>	<b>¥195,649</b>
Cash dividends paid .....	—	—	—	—	(5,409)	—	(5,409)
Net income attributable to owners of the parent .....	—	—	—	—	21,826	—	21,826
Net change in treasury stock held by affiliates during year .....	—	—	—	—	1	—	1
Purchases of treasury stock .....	—	—	—	—	(2)	—	(2)
Change in the parent's ownership interest due to transactions with noncontrolling interests.....	—	—	—	—	64	—	64
Net changes of items other than shareholders' equity .....	(5,152)	(30)	(2,789)	(709)	(8,681)	(78)	(8,759)
<b>Balance, March 31, 2016</b> .....	<b>¥10,649</b>	<b>¥(227)</b>	<b>¥3,378</b>	<b>¥(1,091)</b>	<b>¥194,921</b>	<b>¥8,449</b>	<b>¥203,370</b>

	Thousands of U.S. dollars (Note 1)						
	Accumulated Other Comprehensive Income				Total	Noncontrolling Interests	Total Equity
	Unrealized Gain on Available-for-Sale Securities	Deferred (Loss) Gain on Derivatives under Hedge Accounting	Foreign Currency Translation Adjustments	Defined Retirement Benefit Plans			
<b>Balance, April 1, 2015</b> .....	<b>\$140,235</b>	<b>\$(1,755)</b>	<b>\$54,736</b>	<b>\$(3,384)</b>	<b>\$1,680,645</b>	<b>\$75,686</b>	<b>\$1,736,332</b>
Cash dividends paid .....	—	—	—	—	(48,006)	—	(48,006)
Net income attributable to owners of the parent .....	—	—	—	—	193,705	—	193,705
Net change in treasury stock held by affiliates during year .....	—	—	—	—	11	—	11
Purchases of treasury stock .....	—	—	—	—	(19)	—	(19)
Change in the parent's ownership interest due to transactions with noncontrolling interests.....	—	—	—	—	568	—	568
Net changes of items other than shareholders' equity .....	(45,722)	(267)	(24,753)	(6,298)	(77,041)	(698)	(77,740)
<b>Balance, March 31, 2016</b> .....	<b>\$94,513</b>	<b>\$(2,022)</b>	<b>\$29,983</b>	<b>\$(9,682)</b>	<b>\$1,729,863</b>	<b>\$74,987</b>	<b>\$1,804,850</b>



# Consolidated Statement of Cash Flows

Dowa Holdings Co., Ltd. and its Consolidated Subsidiaries  
For the years ended March 31, 2016 and 2015

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
<b>Cash Flows from Operating Activities:</b>			
Income before income taxes .....	¥31,822	¥41,816	\$282,415
Adjustments for:			
Income taxes paid .....	(16,980)	(13,846)	(150,695)
Depreciation and amortization .....	15,688	16,075	139,231
Loss (gain) on sales and disposal of property, plant, and equipment, net.....	857	(2,689)	7,614
Equity in earnings of affiliates .....	(75)	(1,973)	(665)
Gain on sales of investments in securities, net .....	(1,320)	(142)	(11,716)
Loss on devaluation of investments in securities .....	1,676	1,853	14,879
Loss on impairments (Note 5) .....	1,796	536	15,941
Changes in assets and liabilities:			
Decrease (increase) in trade receivables .....	10,609	(437)	94,155
Decrease (increase) in inventories .....	11,860	(3,338)	105,256
Decrease in trade payables .....	(1,705)	(4,104)	(15,135)
(Decrease) increase in allowance for doubtful accounts .....	(24)	73	(217)
Increase in reserve for employees' retirement benefits .....	425	390	3,773
Decrease in interest and dividend receivables .....	152	1,532	1,353
Increase (decrease) in interest payable .....	18	(14)	163
Other, net .....	(9,050)	2,616	(80,319)
Net cash provided by operating activities .....	45,751	38,345	406,033
<b>Cash Flows from Investing Activities:</b>			
Acquisition of property, plant, and equipment .....	(19,912)	(16,302)	(176,719)
Proceeds from sales of property, plant, and equipment .....	450	4,861	3,998
Acquisition of intangible fixed assets.....	(752)	(536)	(6,675)
Acquisition of investments in securities .....	(9)	(1,452)	(85)
Proceeds from sales of investments in securities .....	2,433	232	21,596
Acquisition of investments in subsidiaries and affiliates .....	(4,636)	(4,802)	(41,147)
Proceeds from sales of shares of subsidiaries and associates .....	136	—	1,209
Purchase of shares of subsidiaries resulting in change in scope of consolidation ...	(46)	—	(409)
Payments for loans .....	(1,239)	(1,122)	(10,998)
Proceeds from collection of loans .....	608	674	5,399
Proceeds from subsidy.....	867	234	7,701
Acquisition of other investments.....	(708)	(1,502)	(6,285)
Other, net .....	(678)	(605)	(6,020)
Net cash used in investing activities .....	(23,486)	(20,321)	(208,436)
<b>Cash Flows from Financing Activities:</b>			
Net increase (decrease) in short-term borrowings.....	5,379	(10,306)	47,740
Net (decrease) increase in commercial paper .....	(4,000)	8,000	(35,498)
Proceeds from long-term debt .....	8,542	5,394	75,811
Repayment of long-term debt .....	(15,360)	(15,892)	(136,315)
Redemption of bonds.....	—	(10,000)	—
Proceeds from issuance of bonds.....	—	10,000	—
Cash dividends paid .....	(5,556)	(4,653)	(49,308)
Proceeds from stock issuance to noncontrolling shareholders.....	320	400	2,839
Increase in lease obligations by sale and leaseback .....	—	369	—
Repayment of lease obligations .....	(483)	(213)	(4,287)
Purchases of treasury stock .....	(2)	(3)	(19)
Net cash used in financing activities .....	(11,159)	(16,905)	(99,038)
Foreign Currency Translation Adjustment on Cash and Cash Equivalents .....	(248)	855	(2,201)
<b>Net Increase in Cash and Cash Equivalents .....</b>	<b>10,857</b>	<b>1,973</b>	<b>96,356</b>
<b>Cash and Cash Equivalents of Newly Consolidated Subsidiaries .....</b>	<b>—</b>	<b>450</b>	<b>—</b>
<b>Decrease in Cash and Cash Equivalents due to Exclusion of Subsidiaries from Consolidation.....</b>	<b>—</b>	<b>(202)</b>	<b>—</b>
<b>Cash and Cash Equivalents at Beginning of Year .....</b>	<b>8,044</b>	<b>5,823</b>	<b>71,394</b>
<b>Cash and Cash Equivalents at End of Year (Note 3) .....</b>	<b>¥18,902</b>	<b>¥8,044</b>	<b>\$167,750</b>

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

\*2. The years stated in the text are for fiscal years, which run from April 1 of the previous year through March 31. Thus, 2016 refers to the year ended March 31, 2016.

\*3. ¥112.68 = U.S. \$1, the rate of exchange on March 31, 2016, is used.

# Notes to Consolidated Financial Statements

Dowa Holdings Co., Ltd. and its Consolidated Subsidiaries  
For the years ended March 31, 2016 and 2015

## 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 2015 consolidated financial statements to conform to the classifications used in 2016.

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 ¥112.68 to U.S. \$1, the approximate rate of exchange at March 31, 2016. 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, 2016, include the accounts of the Company and its 77 (77 in 2015) 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 17 (15 in 2015) 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

(2016)

Dowa Olin Metal Corporation, an associated company accounted for by the equity method up until the fiscal year ended March 31, 2015, was newly included in the Company's scope of consolidation due to the acquisition of additional shares. Dowa Olin Metal Corporation was then excluded from consolidation owing to its liquidation on January 29, 2016.

(2015)

The consolidated financial statements for the year ended March 31, 2015, newly include Dowa Metals & Mining (Thailand) Co., Ltd., PT. Dowa Thermotech Indonesia and PT. Dowa Thermotech Furnaces, which were nonconsolidated subsidiaries in the consolidated financial statements for the year ended March 31, 2014, from the viewpoint of materiality. Newly established during this fiscal year, DMM Palmer Co., Ltd. has been included within the scope of consolidation. Furthermore, Tianjin Dowa Green Angel Summit Recycling Co., Ltd. has been excluded from the scope of consolidation because substantive control over the company was not recognized.

#### (b) Accounting Period of Foreign Subsidiaries

In preparing the consolidated financial statements for the year ended March 31, 2016, the Company used the financial statements with an account closing date of December 31, 2015, in the cases of 17 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, 2016, and March 31, 2016, were adjusted in the consolidated financial statements, as necessary.

(c) Unification of Accounting Policies Applied to Foreign Subsidiaries for the Consolidated Financial Statements In May 2006, the Accounting Standards Board of Japan (the "ASBJ") issued ASBJ Practical Issues Task Force ("PITF") No. 18, "Practical Solution on Unification of Accounting Policies Applied to Foreign Subsidiaries for the Consolidated Financial Statements," which was subsequently revised in February 2010 and March 2015 to reflect revisions of the relevant Japanese GAAP or accounting standards in other jurisdictions. PITF No. 18 prescribes that 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) Business Combinations**

In October 2003, the Business Accounting Council issued a Statement of Opinion, "Accounting for Business Combinations," and in December 2005, the ASBJ issued ASBJ Statement No. 7, "Accounting Standard for Business Divestitures" and ASBJ Guidance No. 10, "Guidance for Accounting Standard for Business Combinations and Business Divestitures."

In December 2008, the ASBJ issued a revised accounting standard for business combinations, ASBJ Statement No. 21, "Accounting Standard for Business Combinations." Major accounting changes under the revised accounting standard are as follows: (1) The revised standard requires accounting for business combinations only by the purchase method. As a result, the pooling-of-interests method of accounting is no longer allowed. (2) The previous accounting standard required research and development costs to be charged to income as incurred. Under the revised standard, in-process research and development costs (IPR&D) acquired in the business combination are capitalized as an intangible asset. (3) The previous accounting standard provided for a bargain purchase gain (negative goodwill) to be systematically amortized over a period not exceeding 20 years. Under the revised standard, the acquirer recognizes the bargain purchase gain in profit or loss immediately on the acquisition date after reassessing and confirming that all of the assets acquired and all of the liabilities assumed have been identified after a review of the procedures used in the purchase price allocation. The revised standard was applicable to business combinations undertaken on or after April 1, 2010.

In September 2013, the ASBJ issued revised ASBJ Statement No. 21, "Accounting Standard for Business Combinations," revised ASBJ Guidance No. 10, "Guidance on Accounting Standards for Business Combinations and Business Divestitures," and revised ASBJ Statement No. 22, "Accounting Standard for Consolidated Financial Statements." Major accounting changes are as follows:

(a) Transactions with noncontrolling interest—A parent's ownership interest in a subsidiary might change if the parent purchases or sells ownership interests in its subsidiary. The carrying amount of noncontrolling interest is adjusted to reflect the change in the parent's ownership interest in its subsidiary while the parent retains its controlling interest in its subsidiary. Under the previous accounting standard, any difference between the fair value of the consideration received or paid and the amount by which the noncontrolling interest is adjusted is accounted for as an adjustment of goodwill or as profit or loss in the consolidated statement of income. Under the revised accounting standard, such difference is accounted for as capital surplus as long as the parent retains control over its subsidiary.

(b) Presentation of the consolidated balance sheet—In the consolidated balance sheet, "minority interest" under the previous accounting standard is changed to "noncontrolling interest" under the revised accounting standard.

## Notes to Consolidated Financial Statements

(c) Presentation of the consolidated statement of income—In the consolidated statement of income, "income before minority interest" under the previous accounting standard is changed to "net income" under the revised accounting standard, and "net income" under the previous accounting standard is changed to "net income attributable to owners of the parent" under the revised accounting standard.

(d) Provisional accounting treatments for a business combination—If the initial accounting for a business combination is incomplete by the end of the reporting period in which the business combination occurs, an acquirer shall report in its financial statements provisional amounts for the items for which the accounting is incomplete. Under the previous accounting standard guidance, the impact of adjustments to provisional amounts recorded in a business combination on profit or loss is recognized as profit or loss in the year in which the measurement is completed. Under the revised accounting standard guidance, during the measurement period, which shall not exceed one year from the acquisition, the acquirer shall retrospectively adjust the provisional amounts recognized at the acquisition date to reflect new information obtained about facts and circumstances that existed as of the acquisition date and that would have affected the measurement of the amounts recognized as of that date. Such adjustments shall be recognized as if the accounting for the business combination had been completed at the acquisition date.

(e) Acquisition-related costs—Acquisition-related costs are costs, such as advisory fees or professional fees, which an acquirer incurs to effect a business combination. Under the previous accounting standard, the acquirer accounts for acquisition-related costs by including them in the acquisition costs of the investment. Under the revised accounting standard, acquisition-related costs shall be accounted for as expenses in the periods in which the costs are incurred.

The above accounting standards and guidance for (a) transactions with noncontrolling interest, (b) presentation of the consolidated balance sheet, (c) presentation of the consolidated statement of income, and (e) acquisition-related costs are effective for the beginning of annual periods beginning on or after April 1, 2015. Earlier application is permitted from the beginning of annual periods beginning on or after April 1, 2014, except for (b) presentation of the consolidated balance sheet and (c) presentation of the consolidated statement of income. In the case of earlier application, all accounting standards and guidance above, except for (b) presentation of the consolidated balance sheet and (c) presentation of the consolidated statement of income, should be applied simultaneously.

Either retrospective or prospective application of the revised accounting standards and guidance for (a) transactions with noncontrolling interest and (e) acquisition-related costs is permitted. In retrospective application of the revised standards and guidance, the accumulated effects of retrospective adjustments for all (a) transactions with noncontrolling interest and (e) acquisition-related costs which occurred in the past shall be reflected as adjustments to the beginning balance of capital surplus and retained earnings for the year of the first-time application. In prospective application, the new standards and guidance shall be applied prospectively from the beginning of the year of the first-time application.

The revised accounting standards and guidance for (b) presentation of the consolidated balance sheet and (c) presentation of the consolidated statement of income shall be applied to all periods presented in financial statements containing the first-time application of the revised standards and guidance.

The revised standards and guidance for (d) provisional accounting treatments for a business combination are effective for a business combination which occurs on or after the beginning of annual periods beginning on or after April 1, 2015. Earlier application is permitted for a business combination which occurs on or after the beginning of annual periods beginning on or after April 1, 2014.

The Company applied the revised accounting standards and guidance for (a) transactions with noncontrolling interest, (b) presentation of the consolidated balance sheet, (c) presentation of the consolidated statement of income, and (e) acquisition-related costs above, effective April 1, 2015, and (d) provisional accounting treatments for a business combination above for a business combination which occurred on or after April 1, 2015. The revised accounting standards and guidance for (a) transactions with noncontrolling interest and (e) acquisition-related costs were applied prospectively.

With respect to (b) presentation of the consolidated balance sheet and (c) presentation of the consolidated statement of income, the applicable line items in the 2015 consolidated financial statements have been accordingly reclassified and presented in line with those in 2016.

As a result, operating income and income before income taxes for the year ended March 31, 2016, decreased by ¥64 million (\$568 thousand) and capital surplus at March 31, 2016, increased by ¥64 million (\$568 thousand).

### **(3) 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.

### **(4) 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 gains on available-for-sale securities" on the consolidated balance sheet. The fair value is determined based on the average market price during one 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 affiliates or available-for-sale securities has declined significantly and such impairment of the value 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.

### **(5) 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.

### **(6) 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 computed by the declining-balance method based on the estimated useful lives of the respective assets. 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.

The Company and domestic consolidated subsidiaries have computed the depreciation for buildings (excluding leasehold improvements and auxiliary facilities attached to buildings) that were acquired on or after April 1, 1998, by the straight-line method.

# Notes to Consolidated Financial Statements

## **(7) 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.

## **(8) Leases**

The Company applied the revised accounting standard effective April 1, 2008.

(a) Lease Assets Pertaining to Finance Leases that are Deemed to Transfer Ownership of the Leased Property to the Lessee

These are calculated using the same method as the depreciation method that applies to fixed assets owned by the Group.

(b) Lease Assets Pertaining to Finance Leases that are not Deemed to Transfer Ownership of the Leased Property to the Lessee

These use a method of calculation that takes the lease period to be the useful life and the salvage value to be zero.

All other leases are accounted for as operating leases.

## **(9) Research and Development**

Research and development costs are charged to income as incurred.

## **(10) Allowance for Doubtful Accounts**

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

## **(11) 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.

## **(12) 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.

## **(13) Retirement and Pension Plans**

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

Effective April 1, 2000, the Company adopted a new accounting standard for retirement benefits and accounted 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 straight-line basis. Actuarial gains and losses are amortized on a straight-line basis over 5 years within the average remaining service period.

In May 2012, the ASBJ issued ASBJ Statement No. 26, "Accounting Standard for Retirement Benefits" and ASBJ Guidance No. 25, "Guidance on Accounting Standard for Retirement Benefits," which replaced the accounting standard for retirement benefits that had been issued by the Business Accounting Council in 1998 with an effective date of April 1, 2000, and the other related practical guidance, and were followed by partial amendments from time to time through 2009.

(a) Under the revised accounting standard, actuarial gains and losses and past service costs that are yet to be recognized in profit or loss are recognized within equity (accumulated other comprehensive income), after adjusting for tax effects, and any resulting deficit or surplus is recognized as a liability (liability for retirement benefits) or asset (asset for retirement benefits).

(b) The revised accounting standard does not change how to recognize actuarial gains and losses and past service costs in profit or loss. Those amounts are recognized in profit or loss over a certain period no longer than the expected average remaining service period of the employees. However, actuarial gains and losses and past service costs that arose in the current period and have not yet been recognized in profit or loss are included in other comprehensive income and actuarial gains and losses and past service costs that were recognized in other comprehensive income in prior periods and then recognized in profit or loss in the current period shall be treated as reclassification adjustments (see Note 16).

(c) The revised accounting standard also made certain amendments relating to the method of attributing expected benefit to periods and relating to the discount rate and expected future salary increase

This accounting standard and the guidance for (a) and (b) above are effective for the end of annual periods beginning on or after April 1, 2013, and for (c) above are effective for the beginning of annual periods beginning on or after April 1, 2014, or for the beginning of annual periods beginning on or after April 1, 2015, subject to certain disclosure in March 2015, both with earlier application being permitted from the beginning of annual periods beginning on or after April 1, 2013. However, no retrospective application of this accounting standard to consolidated financial statements in prior periods is required.

The Company applied the revised accounting standard and guidance for retirement benefits for (a) and (b) above, effective March 31, 2014, and for (c) above, effective April 1, 2014.

#### **(14) Retirement Allowance for Directors' and Corporate Auditors' Retirement Benefits**

Retirement allowance for directors and corporate auditors of some of the company's subsidiaries is recorded as a liability at the amount that would be required if all directors and corporate auditors retired at each balance sheet date.

#### **(15) 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.

#### **(16) 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.

#### **(17) Foreign Currency Translations**

All short-term and long-term monetary receivables and payables denominated in foreign currencies are translated into Japanese yen at the exchange rates at the balance sheet date. The foreign exchange gains and losses from translation are recognized in the consolidated statement of income to the extent that they are not hedged by forward exchange contracts. Assets and liabilities, and revenues and expenses of foreign subsidiaries are converted into Japanese yen at the spot exchange rates prevailing on the balance sheet date of the foreign subsidiaries in question, and translation differences are included as noncontrolling interests and foreign currency translation adjustments in equity.

## Notes to Consolidated Financial Statements

### (18) Derivatives and Hedging Activities

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

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.

### (19) Accounting Treatment for Consumption Tax

All transactions are recorded net of consumption tax.

### (20) 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.

### (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.

### (22) New Accounting Pronouncements

**Tax Effect Accounting**—On December 28, 2015, the ASBJ issued ASBJ Guidance No. 26, "Guidance on Recoverability of Deferred Tax Assets," which included certain revisions of the previous accounting and auditing guidance issued by the Japanese Institute of Certified Public Accountants. While the new guidance continues to follow the basic framework of the previous guidance, it provides new guidance for the application of judgment in assessing the recoverability of deferred tax assets.

The previous guidance provided a basic framework which included certain specific restrictions on recognizing deferred tax assets depending on the company's classification in respect of its profitability, taxable profit and temporary differences, etc.

The new guidance does not change such basic framework but, in limited cases, allows companies to recognize deferred tax assets even for a deductible temporary difference for which it was specifically prohibited to recognize a deferred tax asset under the previous guidance, if the company can justify, with reasonable grounds, that it is probable that the deductible temporary difference will be utilized against future taxable profit in some future period.

The new guidance is effective for the beginning of annual periods beginning on or after April 1, 2016. Earlier application is permitted for annual periods ending on or after March 31, 2016. The new guidance shall not be applied retrospectively and any adjustments from the application of the new guidance at the beginning of the reporting period shall be reflected within retained earnings or accumulated other comprehensive income at the beginning of the reporting period.

The Company expects to apply the new guidance on recoverability of deferred tax assets effective April 1, 2016, and is in the process of measuring the effects of applying the new guidance in future applicable periods.



### 3. Cash and Cash Equivalents

Cash and cash equivalents at March 31, 2016 and 2015, consisted of the following:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
Cash and time deposits	¥19,364	¥8,517	\$171,856
Time deposits with deposit terms of over three months	(462)	(472)	(4,105)
Cash and cash equivalents	¥18,902	¥8,044	\$167,750

### 4. Investment

Investment securities as of March 31, 2016 and 2015, consisted of the following:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
Investments in and advances to nonconsolidated subsidiaries and affiliates	¥40,852	¥37,332	\$362,549
Available-for-sale securities with market quotations	24,979	32,721	221,688
Unlisted securities	933	2,167	8,284
Total	¥66,675	¥72,221	\$592,522

The net unrealized gains on the available-for-sale securities with market quotations as of March 31, 2016 and 2015, were ¥13,509 million (U.S. \$119,890 thousand) and ¥21,028 million, respectively.

The information for available-for-sale securities which were sold during the years ended March 31, 2016 and 2015, is as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
Proceeds from sales	¥2,516	¥223	\$22,334
Gain on sales	1,328	160	11,789
Loss on sales	—	—	—

### 5. Long-lived Assets

(2016)

The Group reviewed its long-lived assets for impairment as of March 31, 2016. As a result, the Group recognized an impairment loss of ¥1,796 million (U.S. \$15,941 thousand) as other expense for buildings and machinery group for recycling business in China, buildings and machinery group for semiconductor production in Akita City, and idle assets due to a continuous operating loss of that asset group. The carrying amount of the relevant assets were written down to the recoverable amount for the year ended March 31, 2016.

(2015)

The Group reviewed its long-lived assets for impairment as of March 31, 2015. As a result, the Group recognized an impairment loss of ¥536 million as other expenses for idle assets, due to a decline of market value. The carrying amount of the relevant assets were written down to the recoverable amount for the year ended March 31, 2015.

## Notes to Consolidated Financial Statements

### 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 0.09% to 5.60% (an approximate average rate of 0.78%) per annum at March 31, 2016, and 0.53% to 5.60% (an approximate average rate of 0.93%) per annum at March 31, 2015.

Commercial paper was represented by commercial paper bearing interest at an approximate average rate of 0.02% per annum at March 31, 2016, and an approximate average rate of 0.09% per annum at March 31, 2015.

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

At March 31, 2016 and 2015, long-term debt consisted of the following:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
0.10% to 11.10% loans, principally from banks and due between 2016 and 2031:			
Collateralized	<b>¥15,453</b>	¥18,381	<b>\$137,140</b>
Unsecured	<b>21,129</b>	25,063	<b>187,515</b>
0.20% straight bonds due 2019	<b>10,000</b>	10,000	<b>88,746</b>
Lease obligations	<b>1,471</b>	1,214	<b>13,062</b>
Total	<b>48,054</b>	54,658	<b>426,465</b>
Long-term debt, bonds, and lease obligations (due within one year)	<b>12,296</b>	15,549	<b>109,130</b>
Long-term debt (due after one year)	<b>¥35,757</b>	¥39,108	<b>\$317,335</b>

At March 31, 2016 and 2015, 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)
	2016	2015	2016
Cash and time deposits	<b>¥447</b>	¥447	<b>\$3,973</b>
Property, plant and equipment, less accumulated depreciation, land	<b>250</b>	253	<b>2,220</b>
Investments in and advances to affiliates	<b>2,401</b>	2,411	<b>21,311</b>
Investments in securities	<b>7,527</b>	4,072	<b>66,808</b>
Total	<b>¥10,627</b>	¥7,185	<b>\$94,313</b>

Annual maturities of long-term debt as of March 31, 2016, for the next five years and thereafter were as follows:

	Millions of yen	Thousands of U.S. dollars (Note 1)
2017	<b>¥11,854</b>	<b>\$105,204</b>
2018	<b>9,172</b>	<b>81,406</b>
2019	<b>6,701</b>	<b>59,473</b>
2020	<b>4,203</b>	<b>37,307</b>
2021 and thereafter	<b>4,649</b>	<b>41,264</b>
Total	<b>¥36,582</b>	<b>\$324,656</b>

### 7. Contingent Liabilities

At March 31, 2016 and 2015, the Group guaranteed loans incurred by nonconsolidated subsidiaries and affiliates in the amount of ¥1,661 million (U.S. \$14,747 thousand) and ¥3,824 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 these amounts. At March 31, 2016 and 2015, in connection with this structured finance agreement and the maximum repurchase commitment, the Company's exposure was ¥458 million (U.S. \$4,064 thousand) and ¥580 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, such as: (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 is prescribed as one year rather than the two years of normal 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 of the above criteria.

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 equity 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 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.

## Notes to Consolidated Financial Statements

### 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 33.5% and 35.0% for the years ended March 31, 2016 and 2015, respectively.

The provision for income taxes is computed based on the pretax income included in the consolidated statement 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 tax laws to the temporary differences.

The tax effects of significant temporary differences and tax loss carryforwards which resulted in deferred tax assets and liabilities at March 31, 2016 and 2015, are as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
Deferred tax assets			
Reserve for employees' retirement benefits	<b>¥4,827</b>	¥4,646	<b>\$42,840</b>
Unrealized earnings	<b>2,729</b>	2,713	<b>24,220</b>
Consolidated subsidiaries' deficit	<b>2,510</b>	3,882	<b>22,283</b>
Loss on devaluation of investment securities	<b>2,006</b>	2,386	<b>17,804</b>
Loss on impairments of property, plant and equipment	<b>1,818</b>	1,375	<b>16,138</b>
Loss on devaluation of inventories	<b>1,311</b>	1,542	<b>11,637</b>
Accrued bonus	<b>1,211</b>	1,199	<b>10,750</b>
Accrued enterprise tax	<b>378</b>	582	<b>3,357</b>
Loss on disposal of property, plant and equipment	<b>299</b>	332	<b>2,661</b>
Reserve for directors' and corporate auditors' retirement benefits	<b>263</b>	226	<b>2,340</b>
Excess depreciation	<b>190</b>	167	<b>1,694</b>
Deferred losses on derivatives under hedge accounting	<b>101</b>	93	<b>901</b>
Allowance for doubtful accounts	<b>47</b>	64	<b>423</b>
Unrealized gains on available-for-sale securities	<b>2</b>	—	<b>19</b>
Others	<b>3,281</b>	3,296	<b>29,124</b>
Total	<b>20,980</b>	22,508	<b>186,198</b>
Valuation allowance	<b>(8,167)</b>	(9,780)	<b>(72,486)</b>
Total deferred tax assets	<b>12,813</b>	12,728	<b>113,712</b>
Deferred tax liabilities			
Unrealized gains on available-for-sale securities	<b>(3,865)</b>	(5,976)	<b>(34,301)</b>
Unrealized gains on land	<b>(732)</b>	(765)	<b>(6,497)</b>
Enterprise tax receivable	<b>(87)</b>	(7)	<b>(774)</b>
Deferred gains on derivatives under hedge accounting	<b>(11)</b>	(0)	<b>(99)</b>
Special depreciation reserve	<b>(8)</b>	(10)	<b>(73)</b>
Others	<b>(2,071)</b>	(1,767)	<b>(18,382)</b>
Total deferred tax liabilities	<b>(6,775)</b>	(8,528)	<b>(60,129)</b>
Net deferred tax assets	<b>¥6,037</b>	¥4,200	<b>\$53,582</b>

The components of net deferred tax assets (liabilities) at March 31, 2016 and 2015, were as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
Deferred tax assets, current	<b>¥4,171</b>	¥5,248	<b>\$37,024</b>
Deferred tax assets, noncurrent	<b>3,939</b>	3,372	<b>34,961</b>
Deferred tax liabilities, current	<b>0</b>	—	<b>8</b>
Deferred tax liabilities, noncurrent	<b>2,072</b>	(4,420)	<b>18,395</b>

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, 2016, is as follows:

	2016
Normal effective statutory tax rate	33.5%
Tax credits	(3.0)
Valuation allowance	(2.1)
Nontaxable items, including dividend income	(0.3)
Nondeductible items, including entertainment expenses	0.8
Amount of adjusted decrease in deferred tax assets as of the fiscal year-end attributable to a change in the tax rate	0.7
Retained earnings of affiliated companies	0.4
Inhabitants' tax	0.3
Equity in earnings of affiliates	0.1
Others	1.2
<b>Actual effective tax rate</b>	<b>31.7%</b>

(Note) For the year ended March 31, 2015, the difference between the normal effective statutory tax rate and the actual effective tax rate after the application of deferred tax accounting was less than 5% of the normal effective statutory tax rate. Accordingly, disclosure of the reconciliation has been omitted.

New tax reform laws enacted in 2016 in Japan changed the normal effective statutory tax rate for the fiscal year beginning on or after April 1, 2016, to approximately 31.5% and for the fiscal year beginning on or after April 1, 2018, to approximately 31.3%. The effect of these changes was to decrease deferred tax assets, net of deferred tax liabilities, by ¥46 million (U.S.\$409 thousand) and deferred loss on derivatives under hedge accounting by ¥3 million (U.S.\$31 thousand), and increase accumulated other comprehensive income for unrealized gain on available-for-sale securities by ¥178 million (U.S.\$1,581 thousand), and defined retirement benefit plan by ¥2 million (U.S.\$23 thousand) in the consolidated balance sheet as of March 31, 2016, and to increase income taxes—deferred by ¥223 million (U.S.\$1,982 thousand) in the consolidated statement of income for the year then ended.

## 10. Research and Development Expenses

Research and development costs charged to income were ¥4,552 million (U.S. \$40,404 thousand) and ¥4,199 million for the years ended March 31, 2016 and 2015, respectively.

## 11. Leases

The minimum rental commitments under noncancelable operating leases due at March 31, 2016 and 2015, are as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
Operating leases (lessee)			
Within one year	¥300	¥250	\$2,671
Over one year	827	868	7,344
Total	¥1,128	¥1,118	\$10,015
	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
Operating leases (lessor)			
Within one year	¥35	¥35	\$311
Over one year	6	29	60
Total	¥41	¥64	\$371

## Notes to Consolidated Financial Statements

### 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.

(1) The changes in defined benefit obligations relating to defined benefit plans in the consolidated fiscal years ended March 31, 2016 and 2015, are as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
Balance at beginning of year (as previously reported)	¥8,797	¥6,677	\$78,070
Cumulative effect of accounting change	—	1,823	—
Balance at beginning of year (as restated)	8,797	8,501	78,070
Service cost	668	591	5,929
Interest expense	92	75	821
Actuarial gains and losses	981	55	8,714
Benefit paid	(478)	(432)	(4,244)
Other	(7)	6	(64)
Balance at end of year	¥10,054	¥8,797	\$89,227

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

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
Funded defined benefit obligation	¥—	¥—	\$—
Plan assets	—	—	—
Unfunded defined benefit obligation	10,054	8,797	89,227
Net liability arising from defined benefit obligation	¥10,054	¥8,797	\$89,227

(3) The components of net periodic benefit costs for the years ended March 31, 2016 and 2015, are as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
Service cost	¥668	¥591	\$5,929
Interest expense	92	75	821
Recognized actuarial gains and losses	193	210	1,714
Other	0	0	2
Net periodic benefit costs	¥954	¥877	\$8,467

(4) Amounts recognized in other comprehensive income (before income tax effect) in respect of defined retirement benefit plans for the years ended March 31, 2016 and 2015, are as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
Actuarial gains and losses	¥(771)	¥130	\$(6,851)
Total	¥(771)	¥130	\$(6,851)

(5) Amounts recognized in accumulated other comprehensive income (before income tax effect) in respect of defined retirement benefit plans as of March 31, 2016 and 2015, are as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
Unrecognized actuarial gains and losses	¥1,270	¥498	\$11,272
Total	¥1,270	¥498	\$11,272

(6) Matters concerning the assumptions for the main actuarial calculations related to defined benefit plans as of March 31, 2016 and 2015, are as follows:

	2016	2015
Discount rate	0.08%	0.88%

The Company uses the index of salary increases by age at March 31, 2016 as the expected rate of future salary increases.

(Note) Excluding 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, 2016 and 2015, are as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
Balance at beginning of year	¥5,711	¥5,552	\$50,685
Retirement benefit expenses	613	521	5,448
Benefit paid	(492)	(363)	(4,374)
Other	(6)	(0)	(54)
Balance at end of year	¥5,826	¥5,711	\$51,705

(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, 2016 and 2015, is as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
Funded defined benefit obligation	¥—	¥—	\$—
Plan assets	—	—	—
Unfunded defined benefit obligation	5,826	5,711	51,705
Net liability arising from defined benefit obligation	¥5,826	¥5,711	\$51,705

## Notes to Consolidated Financial Statements

(9) The retirement benefit costs related to defined benefit plans calculated by the simplified method in the consolidated fiscal years ended March 31, 2016 and 2015, are as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
Retirement benefit costs calculated by simplified method	¥613	¥521	\$5,448

(10) The required contributions to defined contribution plans of the Company and its consolidated subsidiaries in the consolidated fiscal years ended March 31, 2016 and 2015, are as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
Required contributions to defined contribution plans	¥478	¥458	\$4,249

### 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, 2016 and 2015:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
Cost of sales	¥1,205	¥773	\$10,699

### 14. Financial Instruments

#### (1) Status of Financial Instruments

##### (a) Policy on 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 the 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 its 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 price.

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. The 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 contracted amounts related to derivatives, mentioned in 15. Derivatives, in and of themselves should not be considered indicative of the market risks associated with the derivatives.

**(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 value is deemed extremely difficult to assess are not included (refer to (b) below).

As of March 31, 2016	Millions of yen			Thousands of U.S. dollars (Note 1)		
	Carrying amount	Fair value	Unrealized gains (losses)	Carrying amount	Fair value	Unrealized gains (losses)
(1) Cash and time deposits	¥19,364	¥19,364	¥—	\$171,856	\$171,856	\$—
(2) Notes and accounts receivable (*1)	62,202	62,202	—	552,027	552,027	—
(3) Investments in securities (*2)	40,302	45,736	5,434	357,669	405,897	48,227
Total	¥121,869	¥127,303	¥5,434	\$1,081,553	\$1,129,781	\$48,227
(1) Notes and accounts payable (*3)	28,720	28,720	—	254,883	254,883	—
(2) Short-term borrowings	20,553	20,553	—	182,404	182,404	—
(3) Commercial paper	14,000	14,000	—	124,245	124,245	—
(4) Long-term debt (including repayments due within one year) (*4)	46,582	46,692	110	413,403	414,379	976
Total	¥109,855	¥109,965	¥110	\$974,936	\$975,913	\$976
Derivatives (*5)	¥363	¥363	¥—	\$3,222	\$3,222	\$—

## Notes to Consolidated Financial Statements

As of March 31, 2015	Millions of yen		
	Carrying amount	Fair value	Unrealized gains (losses)
(1) Cash and time deposits	¥8,517	¥8,517	¥—
(2) Notes and accounts receivable (*1)	73,126	73,126	—
(3) Investments in securities (*2)	48,108	51,451	3,343
<b>Total</b>	<b>¥129,752</b>	<b>¥133,095</b>	<b>¥3,343</b>
(1) Notes and accounts payable (*3)	31,041	31,041	—
(2) Short-term borrowings	15,223	15,223	—
(3) Commercial paper	18,000	18,000	—
(4) Long-term debt (including repayments due within one year) (*4)	53,444	53,500	56
<b>Total</b>	<b>¥117,709</b>	<b>¥117,766</b>	<b>¥56</b>
Derivatives (*5)	¥(755)	¥(755)	¥—

(\*1) Assets (2): Notes and accounts receivable as of March 31, 2016 and 2015, stated above are obtained by subtracting advances paid of ¥524 million (U.S. \$4,653 thousand) and ¥367 million, accounts receivable-other of ¥5,055 million (U.S. \$44,864 thousand) and ¥5,758 million, and loans of ¥247 million (U.S. \$2,194 thousand) and ¥274 million from the amount of notes and accounts receivable of ¥68,029 million (U.S. \$603,740 thousand) and ¥79,527 million, presented in the consolidated balance sheet.

(\*2) Assets (3): Investments in securities as of March 31, 2016 and 2015, stated above are obtained by subtracting financial instruments whose fair values are deemed extremely difficult to assess of ¥24,470 million (U.S. \$217,171 thousand) and ¥22,655 million and long-term loans of ¥1,992 million (U.S. \$17,681 thousand) and ¥1,456 million from the sum of investments in securities of ¥25,913 million (U.S. \$229,973 thousand) and ¥34,888 million, and investments in and advances to nonconsolidated subsidiaries and affiliates of ¥40,852 million (U.S. \$362,549 thousand) and ¥37,332 million presented in the consolidated balance sheet.

(\*3) Liabilities (1): Notes and accounts payable as of March 31, 2016 and 2015, stated above are obtained by subtracting accounts payable-other of ¥5,348 million (U.S. \$47,462 thousand) and ¥5,617 million and deposits received of ¥476 million (U.S. \$4,228 thousand) and ¥468 million from notes and accounts payable of ¥34,544 million (U.S. \$306,574 thousand) and ¥37,127 million presented in the consolidated balance sheet.

(\*4) Liabilities (4): Long-term debt as of March 31, 2016 and 2015, stated above is obtained by subtracting lease obligations of ¥1,471 million (U.S. \$13,062 thousand) and ¥1,214 million from the sum of current maturities of long-term debt of ¥12,296 million (U.S. \$109,130 thousand) and ¥15,549 million and long-term debt of ¥35,757 million (U.S. \$317,335 thousand) and ¥39,108 million 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 cash flows related to the debt at the Group's assumed corporate borrowing rate. 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 value is deemed extremely difficult to measure

Classification	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
Unlisted securities and others (carrying amount)	¥24,470	¥22,655	\$217,171

These financial instruments are not included in Assets (3) Investments in securities, as they have no quoted market prices and it is deemed extremely difficult to measure their fair values.

### (c) Maturity analysis for financial assets with contractual maturities

As of March 31, 2016	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	¥685	¥—	¥—	¥—
Notes and accounts receivable	62,202	—	—	—
Total	¥62,887	¥—	¥—	¥—

As of March 31, 2016	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	\$6,079	\$—	\$—	\$—
Notes and accounts receivable	552,027	—	—	—
Total	\$558,106	\$—	\$—	\$—

As of March 31, 2015	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	¥1,252	¥—	¥—	¥—
Notes and accounts receivable	73,126	—	—	—
Total	¥74,379	¥—	¥—	¥—

### (d) Maturity analysis for long-term debt

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

## 15. Derivatives

The Group had the following derivative contracts outstanding at March 31, 2016 and 2015:

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

#### Currency-related transactions (2016)

Transactions not conducted on the open market

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.\$	¥13,882	¥—	¥363	¥363	\$123,202	\$—	\$3,223	\$3,223
Thai Baht	497	—	17	17	4,419	—	158	158
Buying								
U.S.\$	¥0	¥—	¥0	¥0	\$4	\$—	\$0	\$0
Total	¥—	¥—	¥—	¥381	\$—	\$—	\$—	\$3,382

## Notes to Consolidated Financial Statements

### Commodity-related transactions (2016)

#### Transactions not conducted on the open market

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	¥1,008	¥—	¥(16)	¥(16)	\$8,952	\$—	\$(147)	\$(147)
Silver	2,123	—	(24)	(24)	18,849	—	(217)	(217)
Zinc	253	—	0	0	2,250	—	2	2
Copper	8,872	—	111	111	78,736	—	986	986
Lead	35	—	1	1	319	—	13	13
Nickel	28	—	0	0	253	—	5	5
Buying								
Copper	¥7,019	¥—	¥229	¥229	\$62,298	\$—	\$2,037	\$2,037
Total	¥—	¥—	¥—	¥302	\$—	\$—	\$—	\$2,680

### Currency-related transactions (2015)

#### Transactions not conducted on the open market

Type	Millions of yen			
	Contract amount	Over one year	Fair value	Unrealized gains/losses
Forward exchange contract transactions				
Selling				
U.S.\$	¥17,882	¥—	¥(222)	¥(222)
Thai Baht	761	—	(46)	(46)
Total	¥—	¥—	¥—	¥(268)

### Commodity-related transactions (2015)

#### Transactions not conducted on the open market

Type	Millions of yen			
	Contract amount	Over one year	Fair value	Unrealized gains/losses
Nonferrous metal forward contracts				
Selling				
Gold	¥501	¥—	¥(4)	¥(4)
Silver	2,830	—	(22)	(22)
Zinc	425	—	(4)	(4)
Copper	12,194	—	(85)	(85)
Lead	6	—	(0)	(0)
Nickel	41	—	4	4
Buying				
Copper	¥10,237	¥—	¥(108)	¥(108)
Total	¥—	¥—	¥—	¥(221)

(Note) Fair value was calculated using quotations obtained from the commodity futures market and the exchange futures market as of March 31, 2016 and 2015.

## (2) Derivative Transactions to which Hedge Accounting is Applied

## Currency-related transactions (2016)

## Transactions not conducted on the open market

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.\$	¥1,055	¥—	¥19	\$9,370	\$—	\$170
			Thai Baht	198	—	(5)	1,758	—	(52)
Currency swaps under designated hedge accounting	Forward exchange contract transactions	Accounts receivable							
			Selling						
			U.S.\$	¥1,509	¥—	(*1)	\$13,392	\$—	(*1)
			Thai Baht	755	—	(*1)	6,701	—	(*1)
Total				¥—	¥—	¥—	\$—	\$—	\$—

## Interest-related transactions (2016)

## Transactions not conducted on the open market

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	¥15,184	¥13,637	(*2)	\$134,757	\$121,028
Total			¥—	¥—	¥—	\$—	\$—	\$—

## Commodity-related transactions (2016)

## Transactions not conducted on the open market

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	¥6,329	¥—	¥(142)	\$56,173	\$—	\$(1,260)
			Silver	4,888	—	(10)	43,382	—	(89)
			Zinc	5,963	—	(56)	52,923	—	(497)
			Copper	6,434	—	(50)	57,102	—	(447)
			Lead	48	—	2	432	—	19
			Buying						
			Silver	¥686	¥—	¥(6)	\$6,094	\$—	\$(56)
			Zinc	512	—	(3)	4,552	—	(29)
Copper	2,733	—	(67)	24,257	—	(596)			
Total			¥—	¥—	¥—	\$—	\$—	\$—	

## Notes to Consolidated Financial Statements

### Currency-related transactions (2015)

#### Transactions not conducted on the open market

Treatment	Type	Hedged item	Millions of yen			
			Contract amount	Over one year	Fair value	
Standard treatment	Forward exchange contract transactions	Accounts receivable				
			Selling U.S.\$	¥701	¥—	¥(4)
			Thai Baht	216	—	(5)
Currency swaps under designated hedge accounting	Forward exchange contract transactions	Accounts receivable				
			Selling U.S.\$	¥1,454	¥—	(*1)
			Thai Baht	894	—	(*1)
Total			¥—	¥—	¥—	

### Interest-related transactions (2015)

#### Transactions not conducted on the open market

Treatment	Type	Hedged item	Millions of yen		
			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	¥19,877	¥17,752
Total			¥—	¥—	¥—

### Commodity-related transactions (2015)

#### Transactions not conducted on the open market

Treatment	Type	Hedged item	Millions of yen			
			Contract amount	Over one year	Fair value	
Standard treatment	Nonferrous metal forward contracts	Inventory				
			Selling			
			Gold	¥5,276	¥—	¥10
			Silver	6,757	—	(74)
			Zinc	8,662	—	(16)
			Copper	5,699	—	(300)
			Lead	122	—	(1)
			Buying			
			Silver	¥590	¥—	¥11
			Zinc	571	—	2
Copper	4,467	—	111			
Total			¥—	¥—	¥—	

(Note) Fair value was calculated using quotations obtained from the commodity futures market and the exchange futures market as of March 31, 2016 and 2015.

(\*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, 2016 and 2015, were as follows:

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
Unrealized (loss) gain on available-for-sale securities:			
(Loss) gain arising during the year	¥(6,272)	¥6,314	\$(55,670)
Reclassification adjustments to profit or loss	(1,241)	(55)	(11,014)
Amount before income tax effect	(7,514)	6,258	(66,684)
Income tax effect	2,113	(1,467)	18,756
Total	¥(5,400)	¥4,791	\$(47,928)
Deferred loss on derivatives under hedge accounting:			
Gain (loss) arising during the year	¥2,922	¥(2,068)	\$25,933
Reclassification adjustments to profit or loss	(2,976)	1,330	(26,413)
Amount before income tax effect	(54)	(738)	(480)
Income tax effect	26	230	233
Total	¥(27)	¥(508)	\$(247)
Foreign currency translation adjustments:			
Adjustments arising during the year	¥(1,920)	¥3,162	\$(17,046)
Reclassification adjustments to profit or loss	—	(139)	—
Amount before income tax effect	(1,920)	3,023	(17,046)
Income tax effect	—	—	—
Total	¥(1,920)	¥3,023	\$(17,046)
Defined retirement benefit plan:			
Adjustments arising during the year	¥(981)	¥(56)	\$(8,706)
Reclassification adjustments to profit or loss	209	186	1,855
Amount before income tax effect	(771)	130	(6,851)
Income tax effect	204	(38)	1,815
Total	¥(567)	¥91	\$(5,035)
Share of other comprehensive income in associates:			
(Loss) gain arising during the year	¥(577)	¥1,214	\$(5,123)
Reclassification adjustments to profit or loss	(269)	(402)	(2,392)
Total	¥(846)	¥812	\$(7,515)
Total other comprehensive income	¥(8,763)	¥8,211	\$(77,774)

# Notes to Consolidated Financial Statements

## 17. Subsequent Event

The following appropriation of retained earnings at March 31, 2016, was approved at the Board of Directors' meeting held on May 19, 2016:

	Millions of yen	Thousands of U.S. dollars (Note 1)
Year-end cash dividends, ¥18 (U.S. \$0.1) per share	¥5,409	\$48,005

## 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 and Loss, Assets and Liabilities, and Other Amounts 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 and Loss, Assets and Liabilities, and Other Amounts by Reporting Segment

Segment information as of March 31, 2016 and 2015, is summarized as follows:

Millions of yen

2016	Reporting segment							Total	Reconcili- ations (*2)	Consolidated
	Environmen- tal Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Total	Others (*1)			
Net sales										
Outside customers	¥62,357	¥194,664	¥46,317	¥77,401	¥24,186	¥404,927	¥1,670	¥406,598	¥—	¥406,598
Intersegment	35,948	20,277	2,017	11	1	58,255	9,592	67,848	(67,848)	—
Total	¥98,306	¥214,941	¥48,335	¥77,412	¥24,187	¥463,183	¥11,263	¥474,446	¥(67,848)	¥406,598
Segment income (*3)	¥6,314	¥13,325	¥8,026	¥4,911	¥1,352	¥33,931	¥503	¥34,434	¥632	¥35,067
Segment assets	86,825	129,255	42,295	51,698	37,135	347,209	7,823	355,033	9,386	364,420
Other items:										
Depreciation	4,723	2,929	2,461	2,079	2,009	14,203	203	14,407	738	15,145
Amortization of goodwill	348	—	—	44	149	543	—	543	—	543
Investment in equity method affiliates	2,820	12,332	161	296	—	15,611	—	15,611	15,445	31,056
Increase in property, plant and equipment and intangible fixed assets	¥7,900	¥5,277	¥3,882	¥2,629	¥2,467	¥22,156	¥143	¥22,299	¥636	¥22,936

Thousands of U.S. dollars (Note 1)

2016	Reporting segment							Total	Reconcili- ations (*2)	Consolidated
	Environmen- tal Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Total	Others (*1)			
Net sales										
Outside customers	\$553,407	\$1,727,585	\$411,057	\$686,913	\$214,644	\$3,593,609	\$14,825	\$3,608,435	\$—	\$3,608,435
Intersegment	319,030	179,956	17,901	101	9	516,999	85,130	602,130	(602,130)	—
Total	\$872,438	\$1,907,541	\$428,959	\$687,015	\$214,653	\$4,110,609	\$99,956	\$4,210,565	\$(602,130)	\$3,608,435
Segment income (*3)	\$56,040	\$118,263	\$71,234	\$43,585	\$12,007	\$301,131	\$4,467	\$305,598	\$5,613	\$311,212
Segment assets	770,549	1,147,105	375,355	458,804	329,563	3,081,379	69,434	3,150,813	83,305	3,234,118
Other items:										
Depreciation	41,921	25,998	21,847	18,453	17,831	126,052	1,807	127,859	6,552	134,412
Amortization of goodwill	3,094	—	—	394	1,330	4,819	—	4,819	—	4,819
Investment in equity method affiliates	25,034	109,445	1,433	2,633	—	138,545	—	138,545	137,071	275,617
Increase in property, plant and equipment and intangible fixed assets	\$70,118	\$46,832	\$34,451	\$23,331	\$21,898	\$196,632	\$1,271	\$197,904	\$5,650	\$203,554

# Notes to Consolidated Financial Statements

2015	Millions of yen										
	Reporting segment						Total	Others (*1)	Total	Reconcili- ations (*2)	Consolidated
	Environmen- tal Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Total					
<b>Net sales</b>											
Outside customers	¥65,671	¥209,796	¥71,580	¥87,670	¥27,344	¥462,062	¥2,157	¥464,219	¥—	¥464,219	
Intersegment	38,179	28,759	2,066	15	0	69,021	8,424	77,445	(77,445)	—	
<b>Total</b>	<b>¥103,850</b>	<b>¥238,556</b>	<b>¥73,646</b>	<b>¥87,685</b>	<b>¥27,344</b>	<b>¥531,083</b>	<b>¥10,582</b>	<b>¥541,665</b>	<b>¥(77,445)</b>	<b>¥464,219</b>	
<b>Segment income (*3)</b>	<b>¥7,349</b>	<b>¥13,562</b>	<b>¥8,814</b>	<b>¥5,804</b>	<b>¥2,354</b>	<b>¥37,885</b>	<b>¥349</b>	<b>¥38,235</b>	<b>¥859</b>	<b>¥39,094</b>	
<b>Segment assets</b>	<b>83,806</b>	<b>141,926</b>	<b>45,204</b>	<b>57,222</b>	<b>37,270</b>	<b>365,429</b>	<b>7,574</b>	<b>373,004</b>	<b>6,189</b>	<b>379,193</b>	
<b>Other items:</b>											
Depreciation	4,651	3,427	2,534	2,217	1,838	14,669	205	14,875	697	15,572	
Amortization of goodwill	348	—	—	—	154	502	—	502	—	502	
Investment in equity method affiliates	2,540	10,876	224	958	—	14,599	—	14,599	15,509	30,109	
Increase in property, plant and equipment and intangible fixed assets	¥5,937	¥2,411	¥2,230	¥1,880	¥4,334	¥16,794	¥169	¥16,963	¥284	¥17,247	

(\*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, 2016 and 2015, were as follows:

(1) The reconciliations to segment income of ¥632 million (U.S. \$5,613 thousand) and ¥859 million include intersegment eliminations of ¥719 million (U.S. \$6,386 thousand) and ¥775 million, respectively, and reconciliations for intersegment unrealized losses of ¥87 million (U.S. \$773 thousand) and unrealized earning of ¥83 million, respectively.

(2) The reconciliations to segment assets of ¥9,386 million (U.S. \$83,305 thousand) and ¥6,189 million include corporate assets of ¥58,536 million (U.S. \$519,494 thousand) and ¥57,810 million that are not allocated to any reporting segment, respectively, and intersegment eliminations of ¥49,149 million (U.S. \$436,189 thousand) and ¥51,621 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 (2016)

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

### 2. Information by geographic region (2016)

#### (1) Net sales

Millions of yen						
Japan	North America	Europe	China	Asia (excluding Japan and China)	Other	Total
¥341,573	¥5,796	¥7,375	¥15,007	¥35,587	¥1,258	¥406,598

Thousands of U.S. dollars (Note 1)						
Japan	North America	Europe	China	Asia (excluding Japan and China)	Other	Total
\$3,031,359	\$51,441	\$65,455	\$133,186	\$315,826	\$11,166	\$3,608,435

#### (2) Total property, plant and equipment

Millions of yen						
Japan	North America	Europe	China	Asia (excluding Japan and China)	Other	Total
¥93,242	¥1,584	¥260	¥968	¥14,551	¥—	¥110,607

Thousands of U.S. dollars (Note 1)						
Japan	North America	Europe	China	Asia (excluding Japan and China)	Other	Total
\$827,495	\$14,062	\$2,316	\$8,590	\$129,139	\$—	\$981,604

### 3. Information by major customer (2016)

Name of corporate customer	Net sales (Note 1)	Name of involved segment
TANAKA KIKINZOKU KOGYO K.K.	¥64,853 million (U.S. \$575,551 thousand)	Mainly the Nonferrous Metals segment

### 4. Information on impairment losses on fixed assets by reporting segment (2016)

Millions of yen										
Reporting segment										
2016	Environmental Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Total	Others	Total	Eliminations Consolidated	
Impairment losses on fixed assets	¥1,306	¥—	¥444	¥32	¥—	¥1,783	¥—	¥1,783	¥12	¥1,796

Thousands of U.S. dollars (Note 1)										
Reporting segment										
2016	Environmental Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Total	Others	Total	Eliminations Consolidated	
Impairment losses on fixed assets	\$11,594	\$—	\$3,943	\$291	\$—	\$15,830	\$—	\$15,830	\$110	\$15,941

### 5. Amortization of goodwill and unamortized balance of goodwill by reporting segment (2016)

Millions of yen										
Reporting segment										
2016	Environmental Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Total	Others	Total	Eliminations Consolidated	
Unamortized balance at fiscal year-end	¥4,533	¥—	¥—	¥—	¥1,645	¥6,179	¥—	¥6,179	¥—	¥6,179

Thousands of U.S. dollars (Note 1)										
Reporting segment										
2016	Environmental Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Total	Others	Total	Eliminations Consolidated	
Unamortized balance at fiscal year-end	\$40,232	\$—	\$—	\$—	\$14,607	\$54,840	\$—	\$54,840	\$—	\$54,840

# Notes to Consolidated Financial Statements

## 1. Information by product and service (2015)

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

## 2. Information by geographic region (2015)

### (1) Net sales

Millions of yen						
Japan	North America	Europe	China	Asia (excluding Japan and China)	Other	Total
¥376,337	¥10,721	¥6,627	¥15,588	¥54,943	¥1	¥464,219

### (2) Total property, plant and equipment

Millions of yen						
Japan	North America	Europe	China	Asia (excluding Japan and China)	Other	Total
¥88,454	¥1,848	¥323	¥2,540	¥14,509	¥—	¥107,675

## 3. Information by major customer (2015)

Name of corporate customer	Net sales	Name of involved segment
TANAKA KIKINZOKU KOGYO K.K.	¥64,656 million	Mainly the Nonferrous Metals segment

## 4. Information on impairment losses on fixed assets by reporting segment (2015)

Millions of yen											
		Reporting segment									
		Environmen- tal Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Total	Others	Total	Eliminations	Consolidated
2015	Impairment losses on fixed assets	¥—	¥290	¥—	¥629	¥—	¥920	¥—	¥920	¥(383)	¥536

## 5. Amortization of goodwill and unamortized balance of goodwill by reporting segment (2015)

Millions of yen											
		Reporting segment									
		Environmen- tal Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Total	Others	Total	Eliminations	Consolidated
2015	Unamortized balance at fiscal year-end	¥4,926	¥—	¥—	¥—	¥2,043	¥6,970	¥—	¥6,970	¥—	¥6,970

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

# Report of Independent Auditors

# Deloitte.

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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, 2016, 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, 2016, 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 24, 2016

Member of  
Deloitte Touche Tohmatsu Limited

# Subsidiaries and Affiliates

As of March 31, 2016

Name / 77 Consolidated Subsidiaries and 17 Affiliates Accounted for by the Equity Method	Issued Share Capital (Millions of Yen)	Percentage Owned Directly or Indirectly by the Company (%) <sup>*)</sup>	Principal Business
<b>Environmental Management &amp; Recycling</b>			
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, and other items
Eco-Recycle Co., Ltd.	150	66.7	Recovery of discarded household appliances, personal computers, and other items
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, environmental consulting, etc.
Okayama Koyu Co., Ltd.	100	100.0	Industrial waste intermediate treatment, sales of recycled oil, real estate leasing
Auto Recycle Akita Co., Ltd.	100	70.0	Recovery, scrapping, and recycling of used cars
Biodiesel Okayama Co., Ltd.	99	100.0	Manufacturing of biodiesel
Eco-System Chiba Co., Ltd.	90	100.0	Waste treatment
Meltec Co., Ltd.	90	100.0	Treatment and resource recycling of waste
Eco-System Akita Co., Ltd.	50	100.0	Waste treatment and resources recycling
Eco-System Kosaka Co., Ltd.	50	100.0	Waste treatment; recycling of ferrous and nonferrous metals
Eco-System Japan Co., Ltd.	30	100.0	Operation of waste and resources recycling; collection and transportation of industrial 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	Final treatment of harmless waste
Bangpoo Environmental Complex Ltd.	80 million Thai baht	100.0	Incineration of harmless waste
Technochem Environmental Complex Pte. Ltd.	3,500 thousand Singapore dollars	100.0	Incineration of harmful waste
PT. Prasadha Pamunah Limbah Industri	49,578 million Indonesia rupiah	95.0	Final treatment of harmful and harmless waste
Dowa Environmental Management Co., Ltd.	13,200 thousand U.S. dollars	90.0	Recycling of precious and nonferrous metals, recycling of discarded household appliances and electronic devices
DOWA ECO-SYSTEM SINGAPORE PTE. LTD.	3 million Singapore dollars	100.0	Recycling of precious and nonferrous metals
Jiangxi Dowa Environmental Management Co., Ltd.	30 million Chinese yuan	90.0	Recycling of discarded household appliances and electronic devices
<b>Nonferrous Metals</b>			
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.	1,870	61.5	Nonferrous metal resource development
Akita Zinc Solutions Co., Ltd.	375	85.0	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	85.0	Sales of zinc, cadmium, zinc alloy, zinc wire, and other products
Akita Zinc Recycling Co., Ltd.	100	100.0	Recovery of zinc from iron and steel dust, and other byproducts; outsourcing of zinc secondaries processing
Akita Recycle & Finepack Co., Ltd.	40	100.0	Pretreatment of nonferrous
Akita Rare Metals Co., Ltd.	20	100.0	Recovery of indium and other products
Dowa Metals & Mining Alaska Ltd.	16,850 thousand U.S. dollars	100.0	Nonferrous metal resource development
NIPPON PGM AMERICA, INC.	1 million 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.	22,825 thousand Czech koruna	51.0	Spent catalyst shredding and sampling
<b>Electronic Materials</b>			
Dowa Electronics Materials Co., Ltd.	1,000	100.0	Manufacturing and sales of semiconductors, and electronic and advanced fine materials
Dowa Hightech Co., Ltd. (Chemical)	450	100.0	Manufacturing of metal compounds, chemical and other products
Dowa Semiconductor Akita Co., Ltd.	300	100.0	Manufacturing of high-purity metal materials, compound semiconductor wafers and light-emitting diodes
Dowa IP Creation Co., Ltd.	300	70.0	Manufacturing of iron 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, copper powders, and other materials

Name / 77 Consolidated Subsidiaries and 17 Affiliates Accounted for by the Equity Method	Issued Share Capital (Millions of Yen)	Percentage Owned Directly or Indirectly by the Company (%)**	Principal Business
<b>Metal Processing</b>			
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 and other products
Dowa Metanix Co., Ltd.	400	90.0	Manufacturing of mainly nickel alloys, copper alloys, and electronics parts
Hoei Shoji Co., Ltd.	110	100.0	Processing and sales of copper strip, aluminum, and other products
Dowa Power Device Co., Ltd.	100	100.0	Metal-ceramic substrates manufacturing
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 METALTEC (THAILAND) CO., LTD.	475 million Thai baht	100.0	Processing and sales of copper strip products
<b>Heat Treatment</b>			
Dowa Thermotech Co., Ltd.	1,000	100.0	Heat treatment processing
Dowa Thermoengineering Co., Ltd.	100	100.0	Design, manufacturing, maintenance, and improvement of heat treatment equipment, heat treatment processing, surface processing, surface improvement
CEMM Co., Ltd.	55	100.0	Heat treatment processing and surface processing
Tonetsu Kosan Co., Ltd.	30	100.0	Heat treatment processing
Kunshan Dowa Thermo Furnace Co., Ltd.	12 million U.S. dollars	70.0	Design, manufacturing, maintenance, and improvement of heat treatment equipment, heat treatment processing, surface processing
DOWA THT AMERICA, INC.	5 million 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	211,498 million Indonesia rupiah	100.0	Heat treatment processing and surface processing
PT. DOWA Thermotech Furnaces	11,666 million Indonesia rupiah	100.0	Imports, maintenance, and maintenance of heat treatment equipment
HIGHTEMP FURNACES Ltd.	90 million Indian rupee	93.3	Design, manufacturing, maintenance, and improvement of heat treatment equipment, heat treatment processing, surface processing, processing of machine components
<b>Others</b>			
Dowa Techno Engineering Co., Ltd.	400	100.0	Plant construction
Dowa Kohsan Co., Ltd.	305	100.0	Outsourcing and management of golf courses and real estate, brokerage
Dowa Management Service Co., Ltd.	100	100.0	Outsourcing of general indirect business services
Akita Kouei Co., Ltd.	95	100.0	Construction of machinery and electronics, maintenance of plants
Yowa Kouei Co., Ltd.	20	100.0	Construction, maintenance of machinery and electronics, heavy concrete works business
Dowa Technology Co., Ltd.	10	100.0	Technological development support; outsourcing of analysis and evaluation services
Dowa Techno-Research Co., Ltd.	10	100.0	Environmental measurement
Five other companies	-	-	-
<b>Affiliates Accounted for by the Equity Method</b>			
Kowa Seiko Co., Ltd.	1,000	50.0	Waste treatment, recovery of ferrous and nonferrous materials
Akagi Kouyu Co., Ltd.	99	20.0	Waste treatment
Okayama Rinko Co., Ltd.	98	32.7	Warehousing; other business activities
Onahama Smelting & Refining Co., Ltd.	7,000	31.6	Copper smelting and refining, waste treatment
Acids Co., Ltd.	150	50.0	Sale of sulfuric acid and others
Cariboo Copper Corporation	91 million 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 million 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.	122,295 thousand U.S. dollars	26.3	Nonferrous metal resource development
OPERACIONES SAN JOSÉ DE PLATA, S. DE R.L. DE C.V.	100 thousand U.S. dollars	26.3	Nonferrous metal resource development
SERVICIOS SAN JOSÉ DE PLATA, S. DE R.L. DE C.V.	13 thousand U.S. dollars	26.3	Nonferrous metal resource development
Kyoto Elex Co., Ltd.	80	49.9	Manufacturing and sales of pastes
TOKUYAMA-DOWA Power Material Co., Ltd.	250	35.0	Ceramic substrates manufacturing
Japan Copper Casting Co., Ltd.	200	30.0	Various types of copper manufacturing and production
Fujita Kanko Inc.*2	12,081	31.8	Lodging and hotel management; real estate agent
Nippon AN-FO Manufacturing Co., Ltd.	91	29.1	Production and marketing 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.

# Corporate History

As of March 31, 2016

1884	<ul style="list-style-type: none"> <li>The Japanese government sells the Kosaka mine to Fujita Gumi, which was established by Dowa's founder Denzaburo Fujita.</li> </ul>
1898	<ul style="list-style-type: none"> <li>Fujita Gumi begins using a dry-refining method for refining kuroko (complex sulfide ores) at the Kosaka mine.</li> </ul>
1899	<ul style="list-style-type: none"> <li>Fujita Gumi begins land drainage and reclamation work in Kojima Bay, Okayama Prefecture.</li> </ul>
1902	<ul style="list-style-type: none"> <li>Fujita Gumi begins using a revolutionary method for processing kuroko, thereby restoring the commercial viability of the Kosaka mine.</li> </ul>
1912	<ul style="list-style-type: none"> <li>Production of electrolytic zinc is begun at the Kosaka mine.</li> </ul>
1915	<ul style="list-style-type: none"> <li>Fujita Gumi acquires the Hanaoka mine.</li> </ul>
1916	<ul style="list-style-type: none"> <li>Fujita Gumi acquires the Yanahara mine.</li> </ul>
1919	<ul style="list-style-type: none"> <li>Fujita Gumi establishes the Toyosaki Plant (currently Dowa Metal Co., Ltd.).</li> </ul>
1937	<ul style="list-style-type: none"> <li>Fujita Gumi and Fujita Mining Co., Ltd. merge to create Fujita Gumi Co., Ltd.</li> </ul>
1945	<ul style="list-style-type: none"> <li>Corporate name is changed to Dowa Mining Co., Ltd.</li> </ul>
1953	<ul style="list-style-type: none"> <li>Okayama Works (currently Dowa Electronics Materials Okayama Co., Ltd.) is established.</li> </ul>
1957	<ul style="list-style-type: none"> <li>Dowa Mining absorbs Fujita Kogyo Co., Ltd.</li> </ul>
1967	<ul style="list-style-type: none"> <li>Kosaka Plant is completely equipped with flash furnaces.</li> </ul>
1971	<ul style="list-style-type: none"> <li>Akita Zinc Co., Ltd. is established.</li> </ul>
1976	<ul style="list-style-type: none"> <li>Kosaka Plant begins producing indium.</li> </ul>
1980	<ul style="list-style-type: none"> <li>Kosaka Lead Smelting facility is completed, commencing operations.</li> </ul>
1986	<ul style="list-style-type: none"> <li>Hanaoka and Kosaka mining operations are transferred from the parent company to two newly established subsidiaries—Hanaoka Mining Co., Ltd. and Uchinotai Mining Co., Ltd., respectively.</li> </ul>
1989	<ul style="list-style-type: none"> <li>New York-based DOWA INTERNATIONAL CORPORATION is established.</li> <li>Kosaka Plant is separated from the parent company in the form of a subsidiary—Kosaka Smelting &amp; Refining Co., Ltd.</li> </ul>
1991	<ul style="list-style-type: none"> <li>Dowa Mining absorbs Tokyo Heat Treating Co., Ltd. (currently Dowa Thermotech Co., Ltd.).</li> </ul>
1992	<ul style="list-style-type: none"> <li>Mexico-based MINERA TIZAPA, S.A. DE C.V. is established.</li> </ul>
1993	<ul style="list-style-type: none"> <li>Okayama Clean Works is established (currently Eco-System Sanyo Co., Ltd.).</li> <li>Shiojiri Works (currently Dowa Power Device Co., Ltd.) is completed.</li> </ul>
1994	<ul style="list-style-type: none"> <li>Kyushu Branch is established.</li> <li>MINERA TIZAPA, S.A. DE C.V. (Mexico) starts operations.</li> </ul>
1997	<ul style="list-style-type: none"> <li>DOWA THT AMERICA, Inc. is established.</li> </ul>
1998	<ul style="list-style-type: none"> <li>Okayama Clean Works (currently Eco-System Sanyo Co., Ltd.) starts operation of new incinerator for industrial waste.</li> </ul>
1999	<ul style="list-style-type: none"> <li>Eco-Recycle Co., Ltd. is established.</li> </ul>
2000	<ul style="list-style-type: none"> <li>Dowa acquires Nippon Purle Limited (currently Eco-System Chiba Co., Ltd.).</li> </ul>
2001	<ul style="list-style-type: none"> <li>Dowa acquires E&amp;E Solutions Inc.</li> <li>Equity interest is increased in Recycle Systems Japan Co., Ltd. (currently Eco-System Recycling Co., Ltd.), and is subsequently made a subsidiary.</li> </ul>
2002	<ul style="list-style-type: none"> <li>Shanghai office is established in China.</li> <li>Akita Zinc Solutions Co., Ltd. is established.</li> <li>Dowa Advanced Materials (Shanghai) Co., Ltd. is established in China.</li> </ul>
2003	<ul style="list-style-type: none"> <li>Zinc Excel Co., Ltd. and Acids Co., Ltd. are established.</li> <li>Dowa Environmental Management Co., Ltd. is established in China.</li> </ul>
2004	<ul style="list-style-type: none"> <li>Dowa Techno-Research Co., Ltd. is established.</li> <li>Landfill site "Green Fill Kosaka" starts operations.</li> </ul>
2006	<ul style="list-style-type: none"> <li>Dowa acquires Act-B Recycling Co., Ltd.</li> <li>Dowa relocates Head Office to Akihabara, Tokyo.</li> <li>Dowa acquires CEMM Co., Ltd.</li> <li>Dowa adopts a holding company system.</li> <li>Dowa Mining changes its name to Dowa Holdings Co., Ltd.</li> <li>Dowa Mining's five business divisions are spun off to become core operating companies.</li> <li>DOWA METALTECH (THAILAND) CO., LTD. is established in Thailand.</li> </ul>
2007	<ul style="list-style-type: none"> <li>Tokuyama-Dowa Power Materials Co., Ltd. is established.</li> <li>DOWA Thermotech (Thailand) Co., Ltd. is established in Thailand.</li> <li>Dowa Eco-System Co., Ltd. Taiwan office is established.</li> <li>Auto Recycle Akita Co., Ltd. is established.</li> <li>Dowa acquires Yamaha Metanix Corporation (now Dowa Metanix Co., Ltd.) and Yamaha-Olin Metal Corporation.</li> <li>DOWA HD Europe GmbH is established in Germany.</li> </ul>
2008	<ul style="list-style-type: none"> <li>Akita Zinc Recycling Co., Ltd. is established.</li> <li>At Kosaka Smelting &amp; Refining Co., Ltd., commercial operations of a smelting facility for combined recycling commences.</li> <li>Biodiesel Okayama Co., Ltd. is established.</li> </ul>
2009	<ul style="list-style-type: none"> <li>Dowa acquires Modern Asia Environmental Holdings, Inc. (MAEH)</li> <li>Construction completed of new incinerator at Eco-System Chiba Co., Ltd.</li> <li>Dowa acquires Meltec Co., Ltd.</li> </ul>
2010	<ul style="list-style-type: none"> <li>Kunshan Dowa Thermo Furnace Co., Ltd. is established in China.</li> <li>Nippon PGM Europe s.r.o. is established in the Czech Republic.</li> </ul>
2011	<ul style="list-style-type: none"> <li>Jiangxi Dowa Environmental Management Co., Ltd. is established in China.</li> <li>Dowa Holdings (Shanghai) Co., Ltd. is established in China.</li> <li>Dowa acquires controlling interest in HIGHTEMP FURNACES Ltd. (India)</li> </ul>
2012	<ul style="list-style-type: none"> <li>Metal recycling plant begins operations at DOWA ECO-SYSTEM SINGAPORE PTE. LTD. (Singapore)</li> <li>PT. DOWA Thermotech Indonesia is established in Indonesia.</li> <li>DOWA Metals &amp; Mining (Thailand) Co., Ltd. is established in Thailand.</li> </ul>
2014	<ul style="list-style-type: none"> <li>DOWA HOLDINGS (THAILAND) CO., LTD. is established in Thailand.</li> <li>GOLDEN DOWA ECO-SYSTEM MYANMAR COMPANY LIMITED is established in Republic of the Union of Myanmar.</li> </ul>
2015	<ul style="list-style-type: none"> <li>DOWA THERMOTECH MEXICO, S.A. DE C.V. is established in Mexico.</li> <li>DOWALI PRECISION CO., LTD. is established in Taiwan.</li> </ul>
2016	<ul style="list-style-type: none"> <li>MELTECH IWAKI CO., LTD. is established.</li> <li>DOWA METALTECH MEXICO, S.A. DE C.V. is established in Mexico.</li> </ul>



# Corporate Data

As of March 31, 2016

## Company Name

DOWA HOLDINGS CO., LTD.

## Head office

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

## Founded

September 18, 1884

## Incorporated

March 11, 1937

## Main Businesses

Environmental Management & Recycling, Nonferrous Metals, Electronic Materials, Metal Processing and Heat Treatment

## 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.

## Authorized Shares

1,000,000,000 shares

## Shares Issued

309,946,031 shares

## Common Stock

¥36,437 million

## Stock Listing

Common stock is listed on the Tokyo, Nagoya, and Sapporo stock exchanges and the Fukuoka Securities Exchange.

## Number of Shareholders

11,348

## Principal Shareholders

	Percentage of Outstanding Shares (%)
The Master Trust Bank of Japan, Ltd. (Trust Account)	8.79
Japan Trustee Services Bank, Ltd. (Trust Account)	8.44
Fujita Kanko Inc.	4.79
JFE Steel Corporation	3.74
J.P. MORGAN BANK LUXEMBOURG S.A 380578	3.35
National Mutual Insurance Federation of Agricultural Cooperatives	3.06
Mizuho Bank, Ltd.	2.46
Resona Bank, Ltd.	2.43
Japan Trustee Services Bank, Ltd. (Trust Account 9)	2.42
JP MORGAN CHASE BANK 385174	1.73

\*1. The Company holds 9,430,000 shares of treasury stock.

2. Shareholding ratios are calculated after deducting treasury stock from outstanding shares.

## Fiscal Year-End

March 31

## Annual Shareholders' Meeting

June

## Inquiries

DOWA HOLDINGS CO., LTD.  
Strategic Planning & Public Relations

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**DOWA HOLDINGS CO., LTD. Website**

[http://www.dowa.co.jp/index\\_e.html](http://www.dowa.co.jp/index_e.html)

# DOWA HOLDINGS CO., LTD.

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

URL: <http://www.dowa.co.jp/>

Cover photo (from the top):

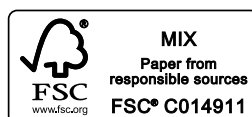
Processed zinc

Zinc ingot

Zinc smelter

Ore sample

Mine development project exploratory drilling site (Mexico)



Printed in Japan