



mitsui kinzoku Integrated Report 2019

For the year ended March 31, 2019



MSCI Japan Empowering Women Index (WIN)

THE INCLUSION OF Mitsui Mining & Smelting Co., Ltd. IN ANY MSCI INDEX, AND THE USE OF MSCI LOGOS, TRADEMARKS, SERVICE MARKS OR INDEX NAMES HEREIN, DO NOT CONSTITUTE A SPONSORSHIP, ENDORSEMENT OR PROMOTION OF Mitsui Mining & Smelting Co., Ltd. BY MSCI OR ANY OF ITS AFFILIATES. THE MSCI INDEXES ARE THE EXCLUSIVE PROPERTY OF MSCI. MSCI AND THE MSCI INDEX NAMES AND LOGOS ARE TRADEMARKS OR SERVICE MARKS OF MSCI OR ITS AFFILIATES.



Member of SNAM Sustainability Index 2019



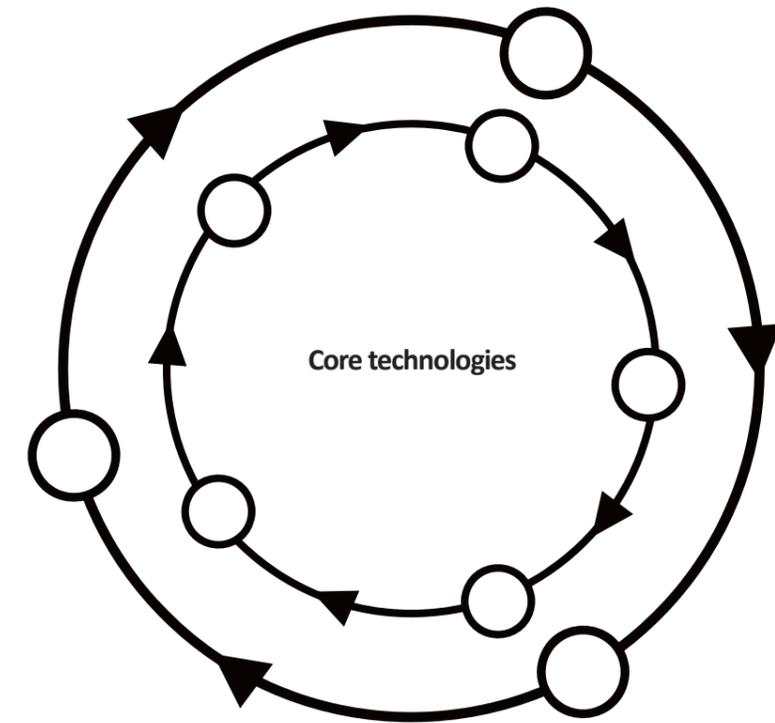
健康経営優良法人
Health and productivity
ホワイト500



MITSUI KINZOKU

MITSUI MINING & SMELTING CO.,LTD.
CSR Office

1-11-1 Osaki, Shinagawa-ku, Tokyo
141-8584, Japan
Telephone 81-3-5437-8028
Facsimile 81-3-5437-8029
e-mail csr@mitsui-kinzoku.com
URL <https://www.mitsui-kinzoku.co.jp/>



“Transformation for Sustainable Growth”

About Mitsui Kinzoku Integrated Report 2019

Mitsui Kinzoku Group has been disclosing information on our business overview, management strategy, business performance and other financial information through our Annual Report. Additionally, CSR Reports have been issued from FY2016 in order to inform our stakeholders of our approach and initiatives, with regards to fulfilling our corporate social responsibility.

Today, companies are getting required to present how they will achieve sustainability by explaining their efforts to fulfill their social responsibility, or how they are contributing to solving the environmental and social issues through business management and activities.

Mitsui Kinzoku Group recognizes our corporate value from two sides—the economic value, and the social value for the stakeholders and society. In order to demonstrate our corporate value more accurately, we report on our value from the two sides as well as on our value creation process. Thus, starting from this issue of the Integrated Report, we disclose both our financial information and ESG information in an integrated manner to our shareholders, investors, and other stakeholders, so that they will understand better about the sustainability of Mitsui Kinzoku Group.

This report describes the “value creation process” of Mitsui Kinzoku Group starting from recognizing social and environmental issues, and how the Group will enhance its corporate value and generate social value through the management while introducing the newly started medium-term management plan, “the 19 Medium Plan”. We believe that through this report, our stakeholders, including our shareholders and investors, will be able to ascertain that Mitsui Kinzoku Group is working to transform itself into a sustainable company and striving toward a sustainable society through our business management.

This report has been edited by referring to the International Integrated Reporting Framework advocated by the International Integrated Reporting Council (IIRC), the “Guidance for Integrated Corporate Disclosure and Company-Investor Dialogues for Collaborative Value Creation” developed by the Ministry of Economy, Trade and Industry, and the GRI’s Sustainability Reporting Guideline (GRI Standards).

Details on our financial information can be found in our securities report. Details on our governance information are provided in our Corporate Governance Report.

[Securities Report] only available in Japanese

<https://www.mitsui-kinzoku.co.jp/wp-content/uploads/yuho2019.pdf>

[Corporate Governance Report] only available in Japanese

<https://www.mitsui-kinzoku.co.jp/wp-content/uploads/CorporateGovernance190628.pdf>

[Coverage]

This report focuses on figures for fiscal 2018 (April 2018 – March 2019). It also contains details of initiatives prior to that period, and initiatives that are underway for fiscal 2019 and beyond.

[Scope]

This report covers Mitsui Kinzoku (non-consolidated), as well as consolidated domestic/overseas subsidiaries. If a non-consolidated group company is included, details on its scope of application are listed in the explanatory note for each item.

[Caution concerning forward-looking statements]

In addition to facts about Mitsui Kinzoku Group past and present, this report contains decisions, plans and other forward-looking statements based on information available at the time of writing. Please bear in mind that social situations in the future, and the actual results of our business activities, may vary from the forward-looking statements contained herein.

CONTENTS

Integrated Report 2019

MITSUI KINZOKU

04	Philosophy of Mitsui Kinzoku	28	Capital as the source of value creation
06	Our History	30	Corporate governance
08	My commitment President and Representative Director Keiji Nishida Our value creation story — fulfilling responsibilities & cultivating business opportunities in response to the world’s environmental and social issues.	34	Occupational health and safety
12	Our value creation process As a nonferrous metal manufacturer, we have cultivated our technologies and know-how and developed our value chain in our history. “Material Intelligence” — this is the source of our value creation.	36	Initiatives for environmental issues
14	Stakeholders and materiality	40	Compliance
16	Financial strategy	41	Respect for human rights
18	Financial highlights	44	Supply chain management
20	Business strategy [Engineered Materials Sector] Co-creation in the market for new engineered material	46	Mining business
24	Business strategy [Metals Sector] Recycle-smelting ~ Implementing materials stewardship ~	48	Progress of material issues
26	Business strategy [Automotive Parts & Components = MITSUI KINZOKU ACT CORPORATION] Continuous supply contributing to sustainable mobility	54	11-Year Summary of Selected Financial Data
		56	Financial Section
		88	ESG data
		96	Corporate profile and Stock information
		97	Independent Practitioner’s Assurances Report

Philosophy of Mitsui Kinzoku

Throughout our history, which is approaching 150 years since our company was first founded, Mitsui Kinzoku has experienced many changes and faced many difficulties. The reason why we were able to overcome these obstacles and continue to this day is because we continuously supplied products that are helpful to the world by utilizing our “intelligence” that we have fostered over years as a manufacturer. The central pillar of the business is our corporate philosophy.

We have to enhance our own sustainability in order to fulfill our social responsibilities. We advance our business to respond to the expectations of our stakeholders, while keeping our corporate philosophy at the center of our business activities to further strengthen our business base. We will contribute to the realization of a sustainable society through new value creation by enhancing our recognition of environmental and social issues, and driving our unique innovations.

経営理念

創造と前進を旨とし
価値ある商品によって社会に貢献し
社業の永続的発展成長を期す

三井金属鉱業株式会社

Management Philosophy

“With creativity and productivity,
We, Mitsui Kinzoku Group, will explore products of value to society,
and seek an eternal growth of our group.”

Mitsui Kinzoku’s mission statement included in its Management Philosophy

The Management Philosophy was developed and documented in 1984, more than 30 years ago. It declares that the major goals of the company’s business are contribution to society and sustainable growth. Grateful to our predecessors for having had the foresight to appreciate the perspective of sustainability, we will pass on the values they sought to uphold.

【Corporate Slogan】

Taking full advantage of Material Intelligence

Mitsui Kinzoku in a nutshell

We are a manufacturing company mainly dealing with non-ferrous metal materials and always thinking about what our strengths are, how we can utilize them effectively, and what value we can create. With thinking them thoroughly, we are in pursuit of our originality and value.

Code of Conduct

This Code of Conduct applies to all the directors, officers and employees of Mitsui Mining & Smelting Co., Ltd. (Mitsui Kinzoku) and its Group companies.

1. Our Social Mission

We shall contribute to society by providing valuable products.

2. Self-Awareness and Social Responsibility as a Member of our Corporate Group

We shall always be mindful of our role as a member of the Mitsui Kinzoku Group and act with dignity and responsibility, while positively conducting social action programs by facilitating communication with all stakeholders.

3. Compliance

We shall comply with domestic and international laws and regulations as well as our company’s regulations, and shall act in accordance with the conscience of our society.

4. Fair Business Activities

We shall conduct appropriate business activities based on free and fair competition. We shall also maintain healthy and transparent relationships with political parties and factions, the government, and business partners, while making sure not to get involved in corruption.

5. Rejection of Antisocial Forces

We shall resolutely confront antisocial forces and organizations and thoroughly prohibit all relationships with them.

6. Proactive Information Disclosure and Comprehensive Information Management

We shall proactively and fairly disclose corporate information and comprehensively protect and manage confidential information, including personal and customer information.

7. Contribution to the Natural Environment

We shall address environmental issues to help realize a sustainable society.

8. Provision of Comfortable Work Environment

We shall provide a safe and comfortable work environment that respects the human rights, personalities, and uniqueness of our employees, while providing a place where a diverse range of human resources can play an active role.

9. Demonstration of Leadership by Senior Management

Top management shall recognize that it is their responsibility to realize the spirit of this code, and act on their own responsibility while demonstrating leadership.

[Revision 3rd edition as of July 2016]

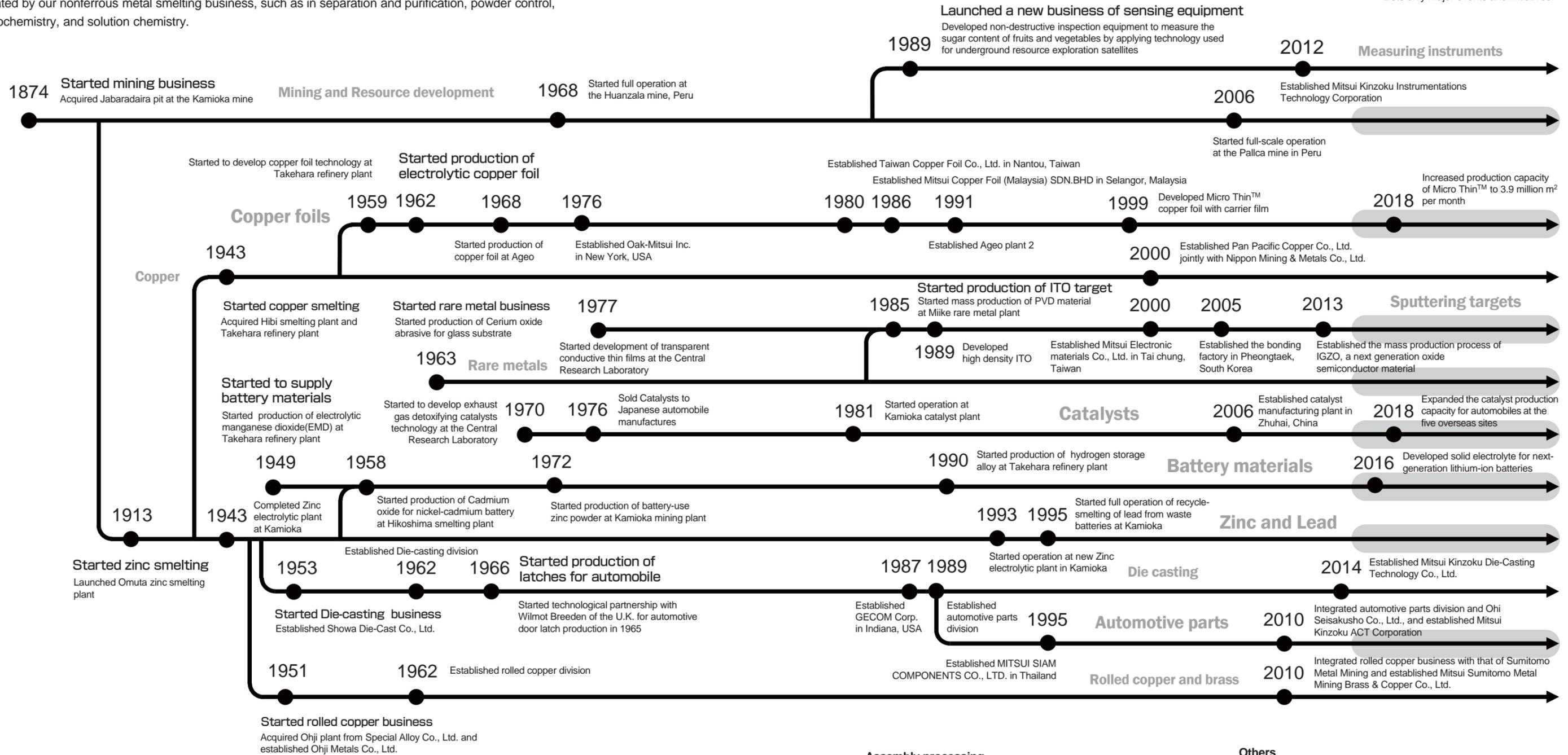
Specific commitment to implementing the Management Philosophy

The Code of Conduct defines basic requirements that employees must comply with in their daily business activities to make them aware of their social responsibilities so that we can grow together with our stakeholders.

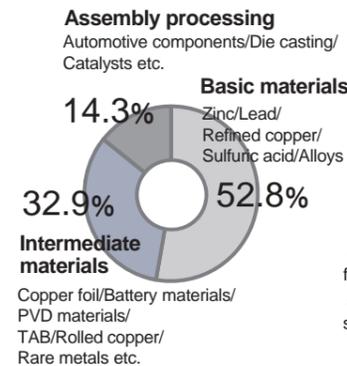
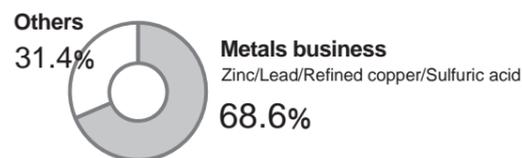
Our History

Our origin is to develop the resources that are blessings from the Earth, and perform smelting of nonferrous metal. We have continued to provide materials and products that are essential to many industries by giving added value to nonferrous materials through processing and assembly. We will strive to create new value utilizing our core technologies cultivated by our nonferrous metal smelting business, such as in separation and purification, powder control, electrochemistry, and solution chemistry.

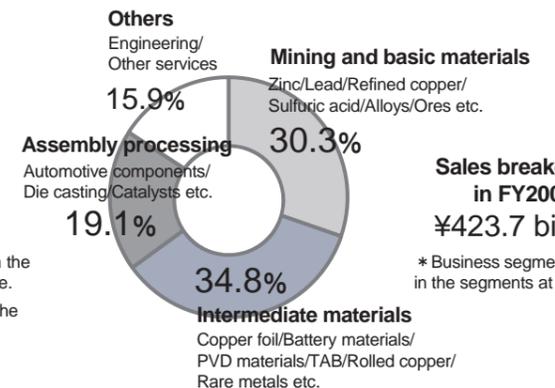
Areas that our current core business domains
* Lists only major events and initiatives.



Sales breakdown in FY1960
¥29.5 billion
* Non-consolidated sales



Sales breakdown in FY1990
¥269.6 billion
* Excludes sales of gold bullion from the financial statement values of that time.
* Business segments are shown in the segments at that time.



Sales breakdown in FY2000
¥423.7 billion
* Business segments are shown in the segments at that time.



My commitment

Our value creation story - fulfilling responsibilities and cultivating business opportunities in response to the world's environmental and social issues

Mitsui Kinzoku Group will fulfill our responsibilities to the issues regarding our business and value chains with strong determination. We will create and expand businesses and products that may help resolve environmental and social issues on a global and regional level seeing them as our growth opportunities.

Through these approaches, we will transform into a corporate group that expands with our own value creation capacity, in other words a sustainable corporate group.

President and Representative Director

Keiji Nishida

Keiji Nishida <Profile >

1980 Joined Mitsui Kinzoku
2008 Head of Finance Department
2011 Director and Chief Financial Officer
2014 Representative Director and Senior Managing Director
2016 President and Representative Director

Will Mitsui Kinzoku Group be able to survive?

In FY2018, there were many phenomena that are attributed to the effects of climate change, even just within Japan. While Japan and other advanced nations are facing an increasingly aging society, urbanization is accelerating in the developing countries. Increased income gaps and poverty exist, both in developed and developing countries, and the divide in societies is deepening throughout the world, such as with regards to human rights issues.

Those various changes are having serious impacts on the economy and the markets and uncertainty is increasing even for our immediate future. Facing changes on a global scale, I am constantly asking myself, “Is Mitsui Kinzoku Group sustainable?”

Companies operating globally are said should have a certain responsibility toward the increasingly serious environmental degradation and social problems. Companies are facing stringent requirements from society including stakeholders to fulfill responsibilities on the negative effects of their business activities. Meanwhile, there are rising expectations toward the social value created by companies’ business which may help solve the environmental and social issues.

Mitsui Kinzoku Group will fulfill our responsibilities to the issues regarding our business and value chains with strong determination. We will create and expand businesses and products that may help resolve environmental and social issues on a global and regional level seeing them as our growth opportunities. Through these approaches, we will transform into a corporate group that expands with our own value creation capacity, in other words, a sustainable corporate group.

Management through the integrated thinking and the story of value creation

How should we transform ourselves into a sustainable company?

I believe that Mitsui Kinzoku Group can achieve long-term growth by creating economic value like raising revenue, while at the same time, generating social value in response to

environmental and social issues. Recognizing the importance of incorporating integrated thinking into our management, we formulated a new medium-term management plan and developed the “Mitsui Kinzoku Group’s Value Creation Process” as our management vision.

We obtain insights from the SDGs, which declare the global goals about issues and needs the world is facing. By using SDGs and stakeholder engagement, we extract the environmental and social issues that relate to our group (outside-in approach). Based on this awareness, we identify our material issues. Focusing on material issues, we manage the business model cycle that leverages our competitive advantage utilizing our owned capital. The output will create economic value for our Group, while also providing our stakeholders with solutions, social value (outcome).

The first step in formulating this value creation process is the new medium-term management plan, the “19 Medium Plan” that has started since FY2019. We advocate “transform growth foundation to achieve the vision,” arising from a strong desire to evolve into a sustainable corporate group.

Our competitive advantage and the new medium-term management plan

The source of Mitsui Kinzoku Group’s value creation lies in our business model and strategy based on a portfolio aiming at optimization. Our business is rolled out for multi processes in value chain from arterial industries to venous industries, and also leads venous industries to arterial industries. That means Mitsui Kinzoku Group is one of the global companies which have potential to achieve a resource recycling (closed loop) society.

Over around 150 years since our company founding, we have developed core technologies in nonferrous metal business, such as: separation and purification, powder control, electrochemistry, and complex compound. Our business domains in each of the processes on value chain possess core technologies of our unique “Material Intelligence” and will continuously generate growth products and businesses to help raise profits.

The “19 Medium Plan” states that our research and development expenses will be increased from the previous plan by 40% and focused on the engineered materials business. We will aim toward expanding sales and achieving early market launch of next-generational products in the 5G market. In the metal business, we will promote recycle-smelting, and in the automotive parts and components business, we will address the electrification and automation of mobility.

We will deploy our businesses in an aggressive manner, while at the same time, strive to strengthen our business foundation by improving the financial indexes such as the equity ratio and ROE in a well-balanced manner.

Responsibility toward the impact on the environment and on society

Companies are required to sufficiently fulfill their responsibilities toward environmental and social issues that can no longer be ignored. Furthermore, companies are required to adopt a new business approach: not only utilizing social & relationship and natural capital but also managing and conserving them appropriately. Since established, our business has used the blessings of nature and built a relationship of mutual trust with the people related to our business operation. We consider the natural environment and the relationship of trust with society as being part of the key capital of our company. We recognize the importance of accurately verifying the effect that our company has on the environment and society and of reducing potential risks.

In FY2018, we conducted a materiality assessment; we selected “materiality issues in the areas of responsibility that relate to the social & relationship and the natural capital” from the 28 items, which could be particular risk on our economic value and our financial aspect. Accordingly, our initiatives also should focus on these material issues associated with environmental, safety and health and human rights related to our business activities.

Human resources that execute the value creation process

In order for us to be able to generate both economic and social value through our business activities, human resources are essential, who possess an acute awareness of the environmental and social issues and who are able to incorporate those issues into the business model. We must therefore accept employees who have different values and diverse abilities, and create a workplace where different types of people are able to work actively and vitally. Since FY2016, Mitsui Kinzoku Group has been continuously addressing the “work style reform”. We have developed various systems and frameworks that enable diverse talents to work actively in a fair manner.

Also, the ICT reform (digital transformation project) started in FY2019, which aims to improve the work process in order to enhance productivity, is backing up the active participation of employees with diverse capabilities. Securing talents and improving productivity will enable us to achieve value creation.

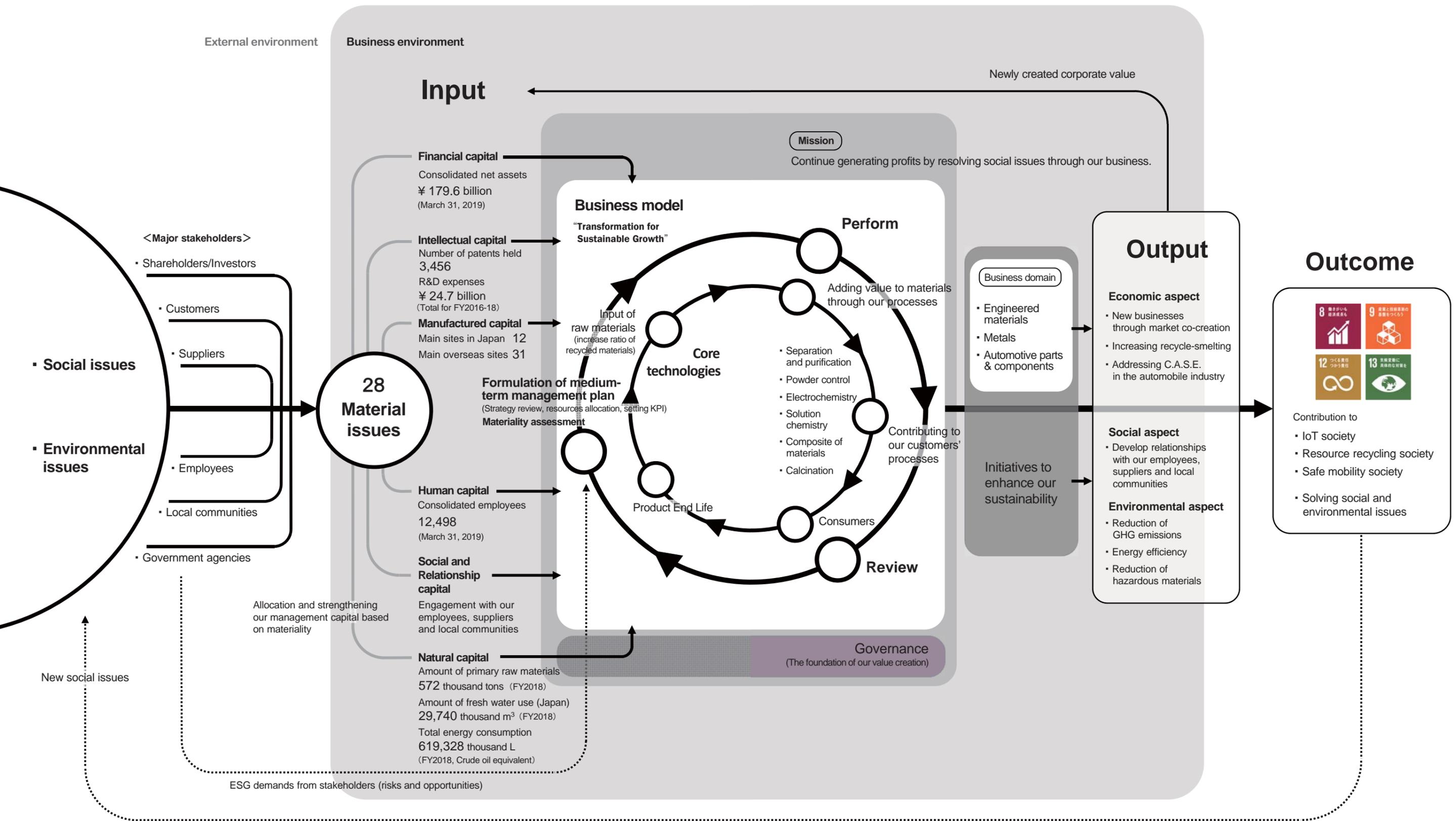
Mitsui Kinzoku Group works together with our stakeholders toward a future where the environmental and social issues are resolved. We contribute to society in the areas in which we have strength. I firmly believe that by taking these processes, we will be able to become a corporate group that receives the trust of our stakeholders and from the world.



(July, 2019)

Our value creation process

As a nonferrous metal manufacturer, we have cultivated our technologies and know-how and developed our value chain in our history. "Material Intelligence" — this is the source of our value creation.



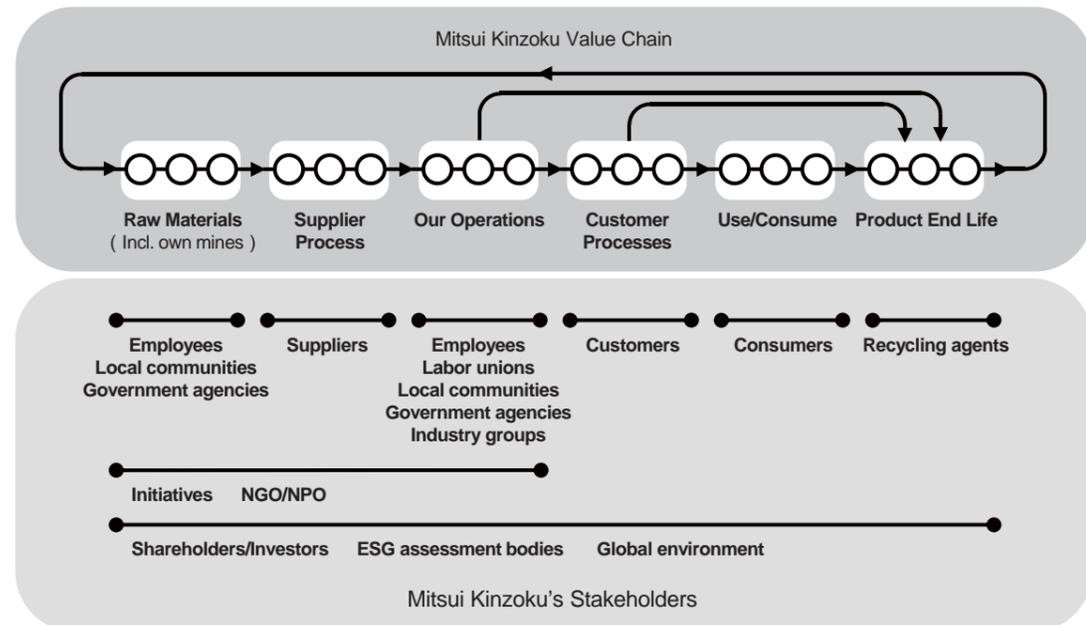
Stakeholders and materiality

Stakeholder identification

Mitsui Kinzoku Group recognizes that the business activities have influence over the economy, environment, and society that reach beyond national borders. We identify our major stakeholders with a high possibility of being subject to impact by utilizing the eight standards of ISO26000. The Earth environment is considered as being one of our major stakeholders. The SDGs indicate the common social and environmental issues and goals that should be shared among multiple stakeholders. In recognition of such global-scale issues, we identify our materiality based on the expectations and requests from our major stakeholders.

Furthermore, in considering our company's social responsibility, we identified our employees (workers), suppliers, and local community as the prioritized stakeholders with a more direct relationship with us and related to our Group's "social and relationship capital".

Stakeholder mapping along the value chain



Step of materiality identification and assessment

Identification FY2016

We identified issues based on the seven core subjects of ISO 26000 and in reference to the Global Reporting Initiative (GRI) guidelines (G4), the Sustainable Development Goals (SDGs) and the questionnaires of CSR assessment organizations.

Narrowing down the categories by crosschecking with our disclosure and the situation in our initiatives.

Based on identified stakeholders, we sorted out and analyzed their major expectations and requests.

By taking into account both the materiality for stakeholders and that for Mitsui Kinzoku, we mapped the candidate issues and identified the 28 material issues which were approved by the top management.

Assessment FY2017

For a future intention to integrate solutions for social and environmental issues into management strategies, we assessed the materiality, whether it is a risk or an opportunity, from the ESG perspective of the GRI standards, and linked the materiality to the SDGs.

Assessment FY2018 [Overview of materiality assessment in FY2018]

In FY2018, we conducted the materiality assessment again in connection to the new medium-term management plan (19 Medium Plan). This assessment was conducted in terms of what will have influence on our long-term value creation ability. This assessment used the SASB*1 standard and the ESG general standards*2 offered by Amundi, the largest asset management company in Europe. The SASB standard lists the disclosure items and indexes that have particular impact on a company's finances by each industry type and ESG issue. The ESG general standards comprised of 15 factors helps to evaluate the level of influence and probability of impact on the company's value.

Utilizing these standards, we extracted from the items required by ESG investment those that may have particular impact on our business model and finances, and grouped them as "materiality issues in the areas of responsibility that relate to the social & relationship and the natural capital".

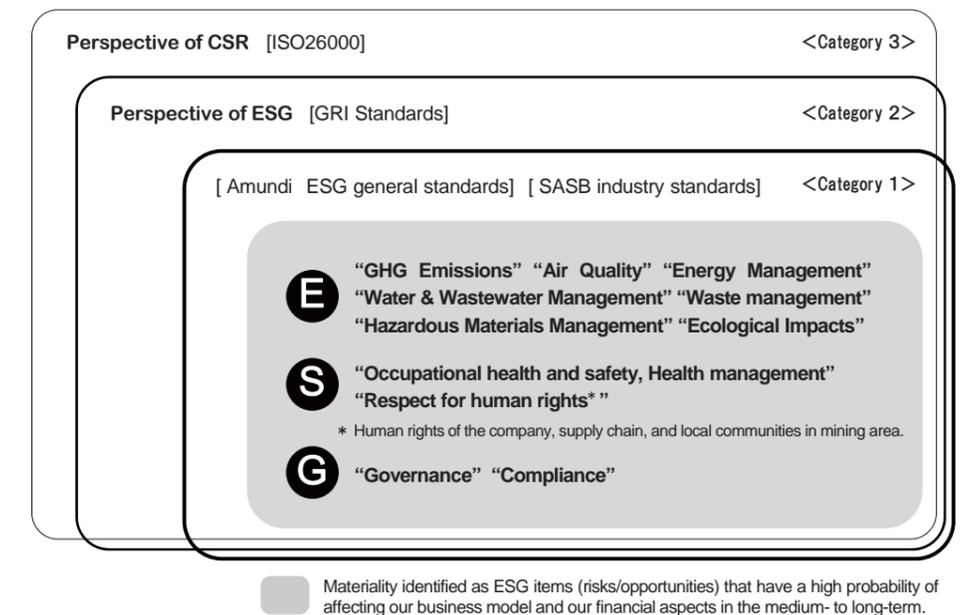
For the SASB standards by industrial sectors, we referred to the Metals & Mining category in the Extractives & Minerals Processing Sector in order to incorporate the risks that are unique to mining.

* 1 SASB Sustainability Accounting Standards Board

* 2 Amundi ESG general standard

<Reference> Amundi Japan (2018) "Introduction to ESG investment that will change society", Nikkei Publishing Inc.

Extraction from the 28 material issues



Material issues in each category

<Category 1>

- 12 Reduce GHG emissions (P.36)
- 13 Creation of renewable energy (P.37)
- 14 Sustainable water use (P.37)
- 15 Wastewater management (P.38)
- 16 Sustainable use of raw materials/resources (P.39)
- 17 Recycling and management of waste (P.39)
- 18 Biodiversity conservation (P.46)
- 19 Manage closed mines (P.47)
- 05 Human rights due diligence (P.41)
- 06 Prohibition of child labor/forced labor (P.41)
- 09 Occupational health and safety (P.34-35)
- 23 CSR procurement (P.44-45)
- 01 Strengthen of corporate governance (P.30-33)
- 02 Full enforcement of compliance (P.40)
- 21 Anti-corruption and anti-bribery (P.40)
- 22 Prohibit of anti-competitive practices (P.40)

<Category 2>

- [Material issues related to business models]
- 25 Co-creation in markets for new engineered materials (P.20-23)
- 26 Recycle-smelting (Implementing materials stewardship) (P.24-25)
- 27 Continuous supply contributing to sustainable mobility (P.26-27)
- [Human capital]
- 07 Diversity (P.28)
- 10 Health management (P.69)
- 11 Develop human resources (P.28)
- 08 Employee engagement [Intellectual capital]
- 03 Information management

<Category 3>

- 04 Spread CSR throughout the Group
- 28 Contribution to local communities (P.69)
- 20 Products contributing to the environment [Intellectual capital]
- 24 Intellectual property (P.70)

Items that do not have their relevant page numbers are listed in the chart "Progress of material issues" (P. 48-53).

Financial Strategy

Place importance on investment efficiency, coordinating with the business strategies to improve our corporate value



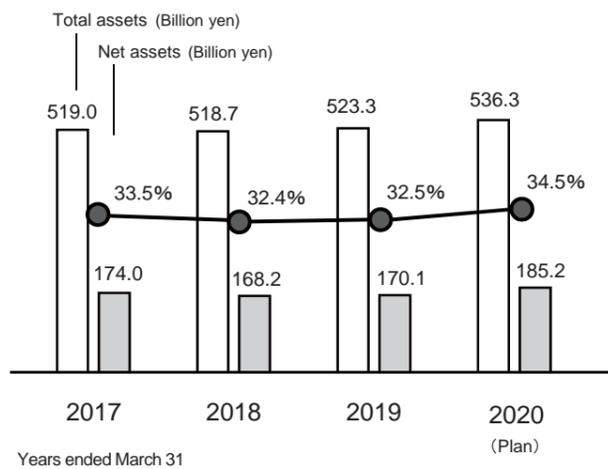
Takashi Oshima
Director and Senior Executive Officer,
Senior General Manager of Corporate Planning & Control Sector

Mitsui Kinzoku Group upholds the vision of becoming by 2024 a “company that continually creates and develops growth products and businesses in our three core business segments (Engineered Materials, Metals, and Automotive parts).” As a step toward realizing this vision, during the period of the “16 Medium-Term Plan,” we actively made investments with a focus on the Engineered Materials business where there is a strong need for new product development. Furthermore, in order to underpin the metals business that is affected by changes in currency exchange rates and the global market price for nonferrous metals, we conducted and completed a large-scale renovation, in advance, of the Kamioka hydropower generator equipment that is expected to contribute toward improving our earnings from FY2019.

The consolidated equity ratio for the end of FY2018, which was the final fiscal year of the “16 Medium-Term Plan,” was 32.5%, which fell short of the 37.0% that was initially planned. We feel an ever stronger need to strengthen our financial structure, since we are a company that receives significant impact from changes such as in the currency exchange rate and the nonferrous metals market rate, as well as in the trends of the electrical materials market for smartphones, which sees a high turnover in product cycles and dynamic fluctuations in market conditions.

We will strive to achieve a consolidated equity ratio of 40%, which is one of our management goals for FY2021, by maintaining our financial discipline as we strengthen our management foundation achieved by drawing in the benefits from the initiatives that we have implemented thus far through the “19 Medium-Term Plan” and by executing our growth strategy.

Trends in consolidated equity ratio



Asset procurement policy

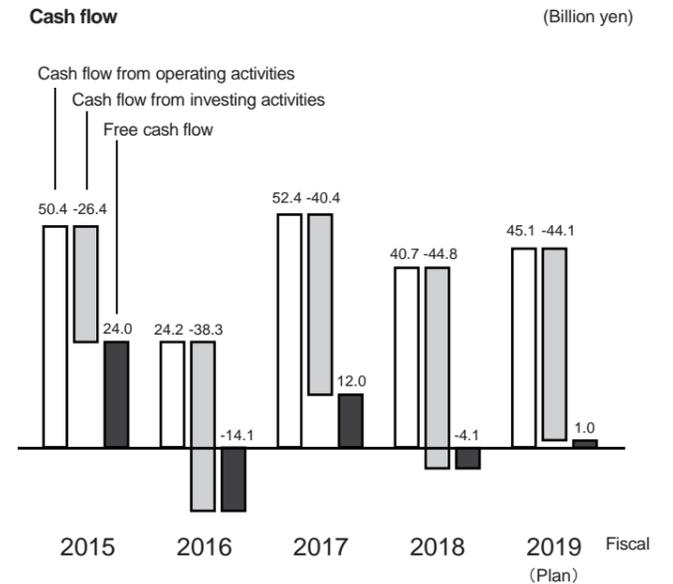
In order to prepare for dramatic changes, such as in the market situation as well as the exchange rate and prices for nonferrous metals, we will secure a certain level of liquidity on hand so that we will be able to conduct stable business operations. Meanwhile, as our “19 Medium-Term Plan” includes plans for making active equipment investments with a focus on the engineered materials business, we will strive toward the advantageous procurement of capital in a timely manner in accordance to funding needs, while taking consideration of various factors including the financial situation and the interest rate levels.

Management that places awareness on capital efficiency

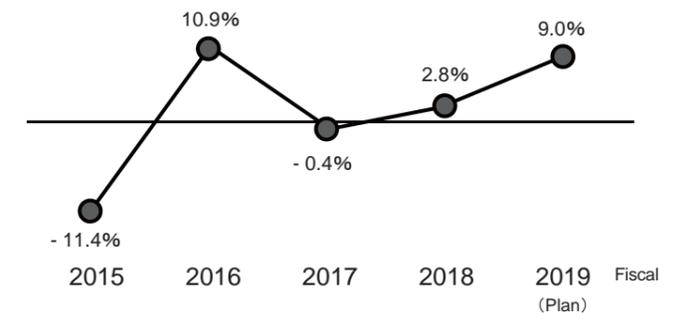
As we strive toward “Transform the growth foundation to achieve vision for 2024” which is the slogan in the “19 Medium-Term Plan,” we will strengthen business monitoring by not only using the traditional management index, but also evaluating each segment using ROIC (consolidated return on invested capital), and seek to achieve our goal of 10% for the FY2021 ROE (consolidated return on equity).

Dividend policy

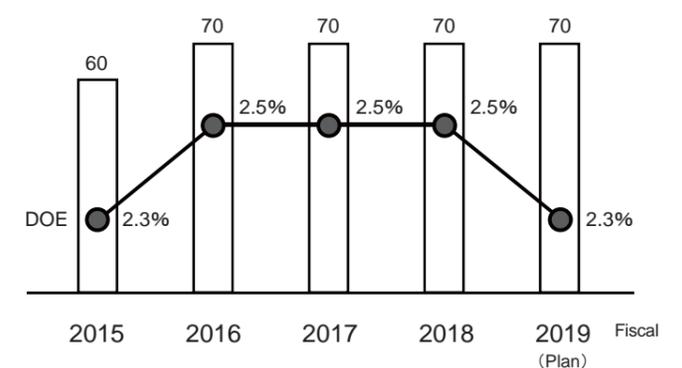
Our dividend policy is based on the appropriate distribution of profits according to our business performance, while also ensuring that we hold back what is needed for the future of our business foundation. Specifically, while we will return profits with the aim of realizing a consolidated payout ratio of 20% in accordance with the company’s dividend policy that was announced on May 9, 2018, we will also place importance on providing continuous and stable dividends. As such, we aim to provide dividends at a rate of 2.5% DOE (consolidated dividend on equity). In the future, we will review our shareholder return policy in accordance with the level of progress that we achieve in strengthening our management foundation and in improving our financial condition.



Trends in ROE



Trends in consolidated dividend on equity



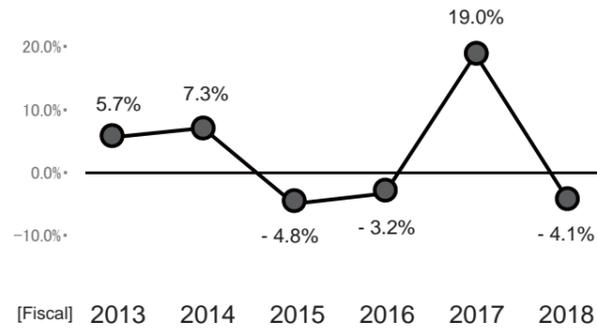
※ We executed a 1-for-10 consolidation of shares, which came into force on October 1, 2017. Shares from before FY2017 are being provided the dividend amount per share in accordance with the standard after the share consolidation.

Financial Highlights

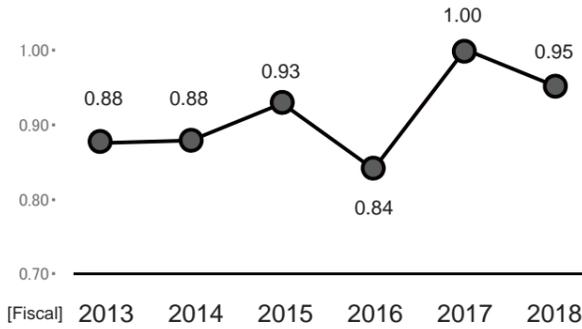
Trends in major financial indexes in the “13 Medium-Term Plan” and the “16 Medium-Term Plan,” and the planned values in the “19 Medium-Term Plan”

13 Medium-Term Plan: from FY2013 to FY2015, 16 Medium-Term Plan: from FY2016 to FY2018, 19 Medium-Term Plan: from FY2019 to FY2021

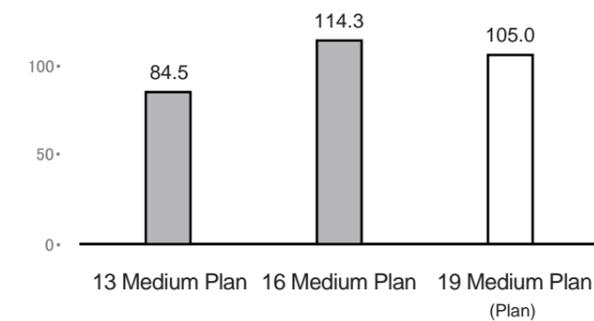
Sales growth rate



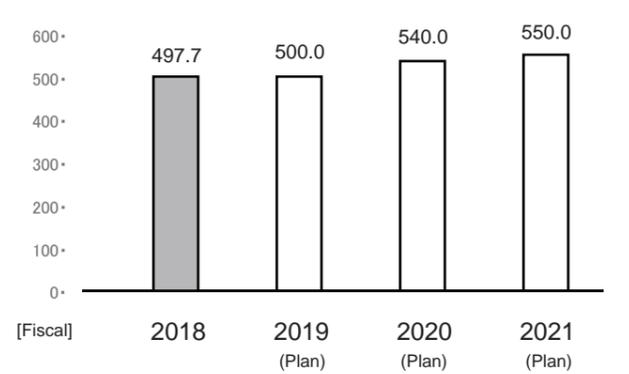
Total asset turnover ratio



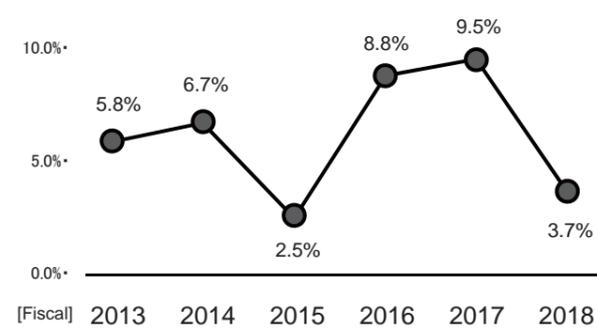
Capex (Total for 3 fiscal years)



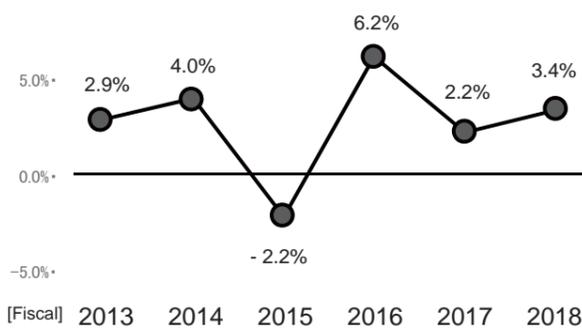
Net Sales



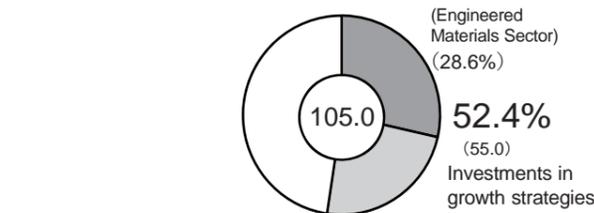
Rate of operating profit on sales



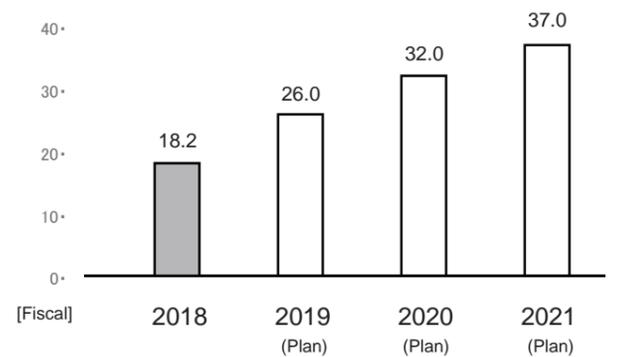
ROA (Return on assets)



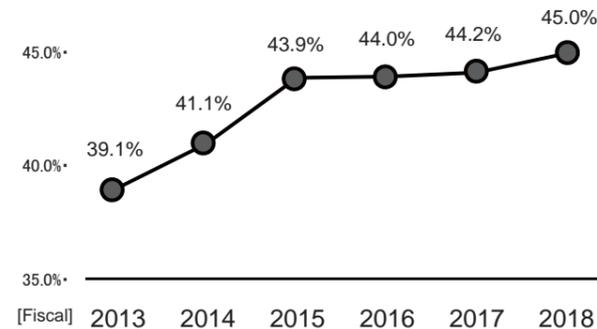
Capex in 19 Medium Plan



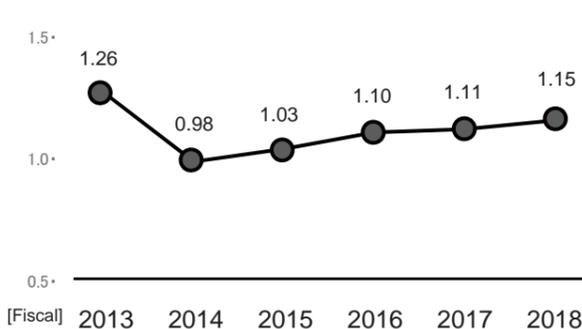
Operating profit



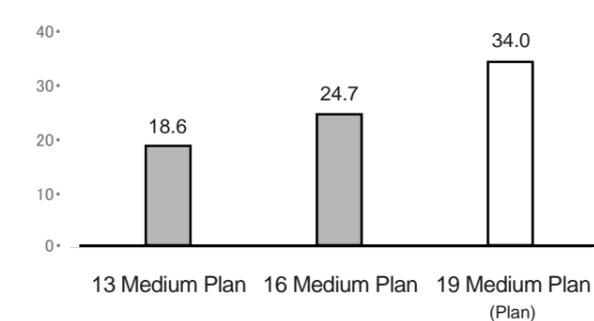
Overseas sales ratio



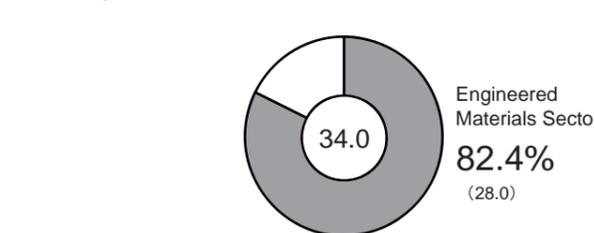
Net D/E ratio



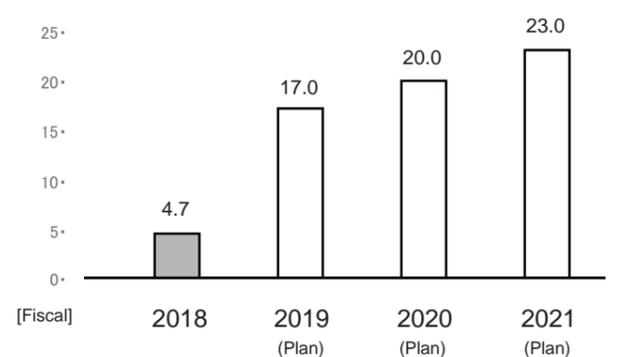
R&D expenditures (Total for 3 fiscal years)



R&D expenditures in 19 Medium Plan



Profit attributable to owners of parent



Highlights of major financial indexes for the past 11 fiscal years are listed on pages 54-55. Please refer to those pages as well.

Other figures of each business segment in the 19 medium-term business plan are listed on pages 20-27.

Co-creation in the market for new engineered material

[Engineered Materials Sector]

Utilizing our core technologies, know-how and sales channels, we transform into a Market Co-creation business entity which works with market participants to create a succession of new products using our "Material Intelligence."

Besides maintaining a stable supply, it is essential for Engineered Materials Business to continuously create growing products and businesses.

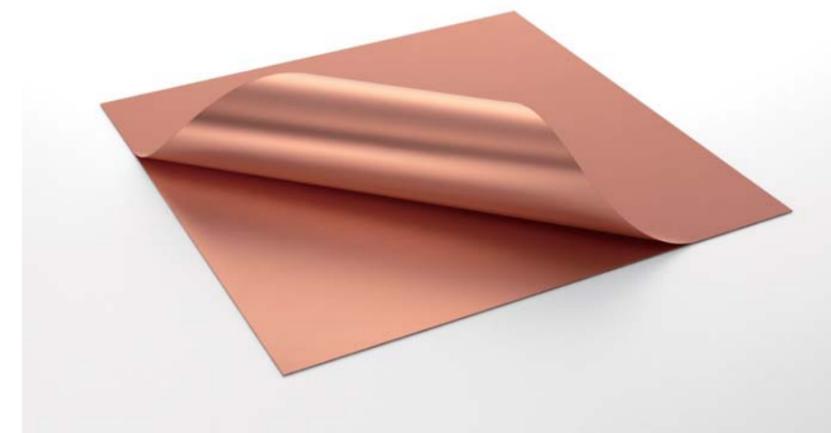
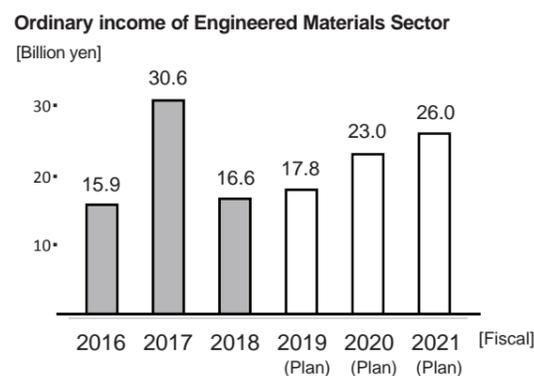
Many of the products handled by the Engineered Materials Sector are bound to lose their product value at some point. We have experienced it so far through the diversification of needs, fast-moving demand patterns, and the intensification of global competition. What is more, the product cycle today is much shorter than ever before. We need to establish a cycle in which we create growth businesses and products, enter the market early and make a profit while our products are still strong, and then link this to the next products and the next businesses to survive.

Our new three-year medium-term management plan has started. In this plan, the Engineered Materials Sector is undertaking many diverse initiatives to strengthen the functions of our Sector, such as marketing abilities and production technology capabilities. These efforts are being made not only to achieve the profit committed in this medium-term plan, but also to strengthen the foundation for promoting the development of new businesses, and to achieve transforming ourselves into a business organization that is able to co-create with the market.

We are steering the various operations within the engineered materials business to enable us to continuously create new businesses and products, which will not only serve to enhance our corporate value and the sustainability of our company, but also contribute toward enabling technological innovations in diverse industries including in the electronics field, and further help toward resolving the problems that the world is faced with. We are also continuously acquiring new partners for co-creation, and will accelerate our efforts within this medium-term plan toward achieving our vision. Please look forward to the growth and transformation of our engineered materials business.



Takeshi Nou
Representative Director, Managing Director,
Senior Executive Officer, Engineered Materials Sector



Copper foil with carrier film



Catalysts for detoxifying exhaust gases



Functional powders



Sputtering targets IGZO and ITO

Products with leading share in the global market

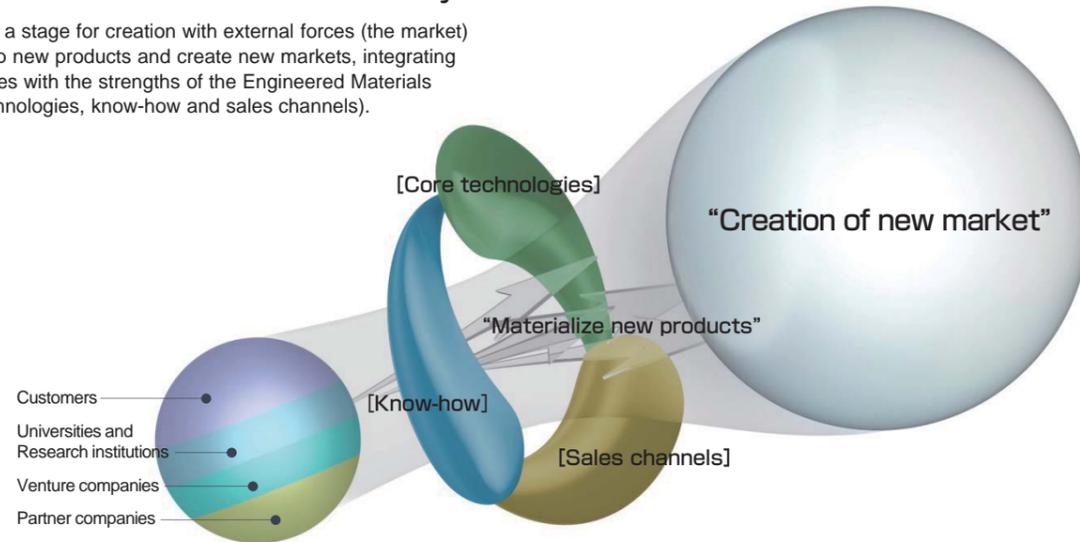
<p>For Semiconductor Package Substrate MicroThin™ copper foil with carrier foil Electro-deposited copper foil is used for wiring material in high-precision circuits. In particular, Mitsui Kinzoku has a high market share in carrier foil. These products contribute toward minimizing the sizes of smartphones and enhancing the advanced functions of electronic products.</p> <p>Global share: 90%</p>	<p>For motorcycle Catalyst for detoxifying exhaust gas We are contributing toward the maintenance of a clean environment by detoxifying toxic substances such as CO and NOx that could cause air pollution. We are also increasing the supply of catalysts for four-wheel vehicles that we offer in the world market.</p> <p>Global share: 60%</p>
<p>For hybrid car Buttery material (Hydrogen storage alloy) Mitsui Kinzoku started providing materials for batteries in the 1940s. Since then, the company started developing materials for rechargeable batteries at an early opportunity, and has been supplying hydrogen storage alloy for batteries used in hybrid vehicles since the 1990s.</p> <p>Global share: 50%</p>	<p>For LCD display Indium tin oxide (ITO) target ITO, which is oxidized indium and tin, is an essential material for creating the transparent conductive film on liquid crystal displays. We make use of the capabilities held by Mitsui Kinzoku in creating products that offer a high level of purity, sintering technologies, and film formation. We also supply sputtering targets for IGZO.</p> <p>Global share: 40%</p>
<p>For MLCC Copper powder Demand for MLCC (multi-layered ceramic capacitors) is increasing rapidly with the electrification of automobiles, the increased sophistication of smartphone functions, and the widespread application of IoT. We are contributing to this by providing materials toward the advancement of MLCC, such as in downsizing and increasing their capacity.</p> <p>Global share: 35%</p>	<p>For glass substrate Cerium oxide abrasive This is a polishing material that is essential for polishing high-performance glass, such as optical lens, hard disk glass substrate, and liquid crystal glass panels. Mitsui Kinzoku's strength is not only in nonferrous metal materials, but also in rare-earth metals.</p> <p>Global share: 40%</p>

<other products>

- | | | |
|--|---|---|
| <ul style="list-style-type: none"> Battery-use mercury-free zinc powder Active materials for lithium-ion batteries Conductive oxide Magnetite Tantalum oxide Niobium oxide Atomized powder Solder powder | <ul style="list-style-type: none"> Fine powder Embedded Capacitance Materials for PCB Various refractories for super-high-temperature furnace Filtering equipment for molten aluminum Carriers for electrophotography Ferrite powder Iron powders Oxygen absorber | <ul style="list-style-type: none"> Calcium Fluoride (CaF₂) crystals for steppers Single crystals for optics Cadmium Tungstate (CdWO₄) crystals Single crystals for scintillation materials Detectors for X-ray computed tomography Photodiodes Rare earth oxides |
|--|---|---|

Change to a “Market Co-creation business entity”

We first cultivate a stage for creation with external forces (the market) and then develop new products and create new markets, integrating the external forces with the strengths of the Engineered Materials Sector (core technologies, know-how and sales channels).



Plan of Execution

FY2017

Strengthen research and development system, increase activities to explore market opportunities, and collaborate with entities outside the company.

FY2018

Strengthen joint development and collaboration and cooperation in research and development with entities outside the company, while continuing to explore market opportunities.

From FY2019 onwards

Build Market Co-creation research and development system and reflect these activities to our business performance.

Initiatives for Market Co-creation activities in FY2018

Place for meeting partners for market co-creation

During this fiscal year, we exhibited at three trade shows held both in Japan and overseas to send out information on our company's products as well as on our R&D products. At the Neo Functional Material Exhibit (held at Tokyo Big Sight) in January 2019, we exhibited our products (6 products) and R&D items (5 products), which attracted the interest of people from diverse industries.

Exploring business opportunities in the life sciences field

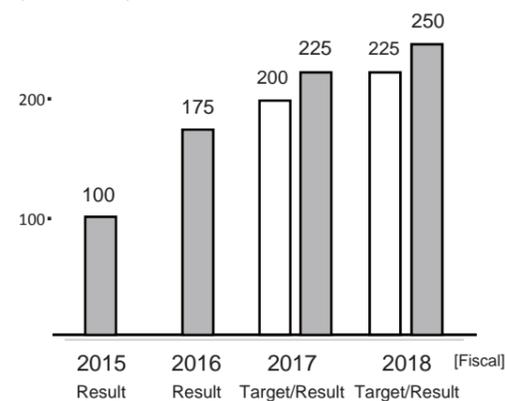
Goryo Chemical, Inc. (head office in Sapporo City, Hokkaido Prefecture) is a venture company that came out of Hokkaido University. This company seeks to develop, manufacture and sell its unique and “Japan made” series of fluorescent reagents which are not produced at any other company, and also seeks to achieve the commercialization of diagnostics that use fluorescent probes for cancer.

Our company invested in this company through CVC. We are actively deploying our unique materials so that they can be applied toward Goryo Chemical's product development in the biochemical field.

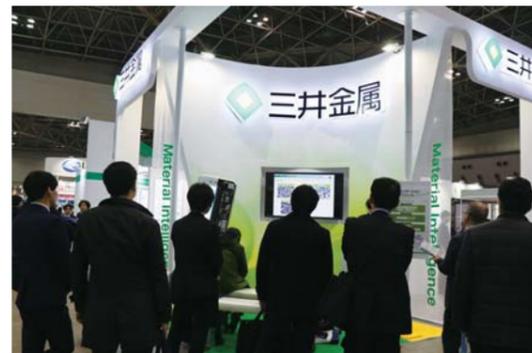
Furthermore, the above activity will be used as a foothold toward entering into a new market area for us. As such, from now on, we will pursue business opportunities in the life sciences field based on our concept of “Material Intelligence” as upheld in our company's slogan.

Market Co-Creation Activity Index *

(FY2015 = 100)



* Market Co-Creation Activity Index
Index reflects the combined total of joint R&D projects and business collaborations.



Exhibition booths at the Neo Functional Material Exhibit (held at Tokyo Big Sight)

SWOT analysis

Strengths

- High quality and high performance product lineup that makes use of our core technologies and know-how
- Manufacturing and sales structure of being “located at the consumption site” with a focus on Asia
- Structure for creating new businesses through collaborations with external institutions

Weaknesses

- Product composition that is susceptible to changes in the economy
- Short life cycle of products
- High-cost structure resulting from multiproduct production

Opportunities

- Pursue new levels of quality and create demand through technological innovations
- Expand demand for high-functional products arising from increased sophistication of market needs
- Increased demand in final market from the emergence of developing countries

Threats

- Increased price competition with manufacturers in developing countries
- Reduced demand from the protracted trade friction between the United States and China
- Increased geopolitical risks regarding overseas materials procurement

Solutions and initiatives for major business segments in FY2019

Engineered powders

We will increase our efforts to expand sales of 5G-related products, as full-scale implementation of 5G is expected to start in 2020, and also of abrasives for which we enhanced our equipment in 2018. In particular, 5G is a field that is expected to create growth in such products as copper powder for MLCC, as electronic components become increasingly adapted for high frequency and high performance usage. Our business unit that deals with powders, which constitute our core technology, will strive to expand our business by operating a cycle of grasping market needs at an early opportunity and launching new products effectively.

Catalysts

We will maintain top share in catalysts for two-wheel vehicles, as well as for the stable supply of catalysts for four-wheel vehicles. Furthermore, in order to answer to the increasingly stringent global restrictions against emissions, we will proceed to enhance our research and development structure, while also implementing initiatives toward maximizing capacity utilization of the facilities, and will also proceed with making considerations for further increasing and strengthening our facilities.

Copper foil

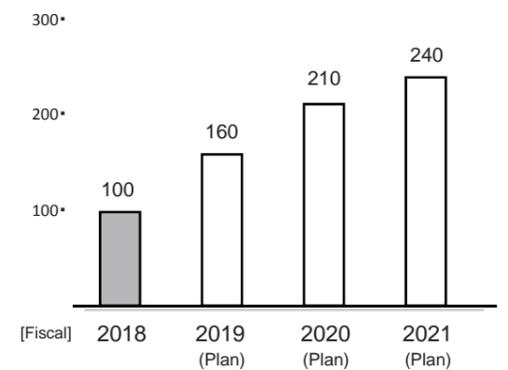
We will strive to expand sales of MicroThin™ for PKG other than smartphones, such as for external memories and GPUs, and also for 5G related products such as electro-deposited copper foils for high-frequency devices. We will also accelerate new product development by strengthening our marketing abilities and by enhancing partnership with engineers at our partner companies.

PVD materials

We will strengthen the competitiveness and increase the market share of ITO and IGZO. We will improve the framework for achieving continuous cost reduction, while also enhancing our business structure of being in close partnership with our customers.

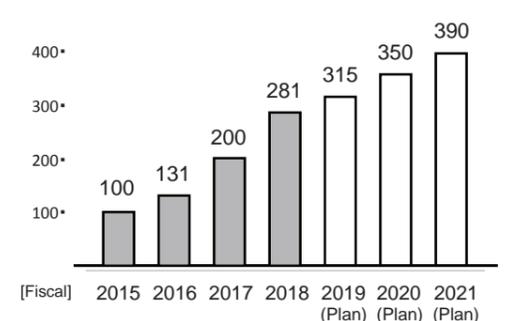
Sales projection for 5G affiliates

(FY2018 = 100)



Sales projection for Automotive catalysts

(FY2015 = 100)



Recycle-smelting ~ Implementing materials stewardship ~

[Metals Sector]

The strength of the Metals Sector is that it has accumulated smelting technologies and has multiple smelters. Through a shift in approach from the optimization of individual sites to total optimization through the enhancement of cross-site functions, we have further increased our business value.

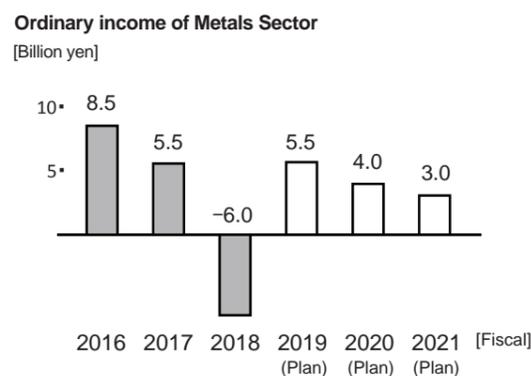
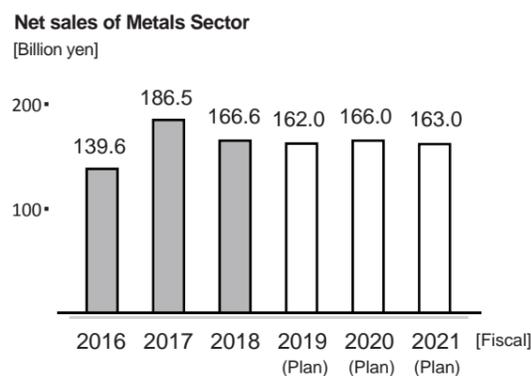
Since the early 1900s, we Mitsui Kinzoku have owned multiple non-ferrous metal smelters in Japan. We have possessed the consistent process from the mine to the smelter. Similarly in our overseas operations, we have not only invested in mines, but also undertaken mine exploration, development and operation ourselves. We are one of the few non-ferrous metal smelters to have done this in Japan.

Extracting lead from scrap batteries and valuable metals from industrial waste has begun early in the 1990s. We have implemented the process to the downstream activities, leading to “venous industries.” Material Stewardship is included in the 10 Principles for Sustainable Development advocated by the International Council on Mining & Minerals (ICMM), an international organization made up of mining and smelting companies. The aim is to promote the establishment of a material-cycle society through management of the entire industrial supply chain from mining, smelting, and processing to consumption, disposal, recovery and recycling of metal products. Mitsui Kinzoku is not a member of ICMM but we greatly approve of this principle. It is also in sync with our activities to date aimed at creating a sustainable supply chain.

Under our Medium-Term Management Plan, we are speeding up further the transformation of our business structure from a non-ferrous metals smelter, which uses concentrate as raw materials, to a recycling smelter. We are actively expanding our processing capacity of complex and refractory zinc ores, increasing lead blast furnace processing, and strengthening our capacity for collecting precious metals. We are also seeking to strengthen the system of collecting recycled materials for recycling, and developing new smelting processes to expand the scope of metals that can be recycled. We aim to expand the capacity of recycle-smelting, to increase benefits for a sustainable business entity, and to contribute to the creation of a resource recycling society.



Satoshi Tsunoda
Senior Executive Officer, Metals Sector



SWOT analysis

Strengths

- Mining**
- Operation of our own zinc mine in Peru over a long period of time
 - Production of high quality and clean zinc concentrates
- Smelting**
- Presence as a top manufacturer of zinc in Japan
 - Ability to process a wide variety of materials through a network of eight smelters in Japan and overseas
 - Operates ISP technology, of which there are only a few in the world, at Hachinohe Smelting Co., Ltd. Deepening the smelting network by combining hydrometallurgy and pyrometallurgy, and improving competitiveness.
 - Production of mixed zinc (high value-added product) for anti-corrosive zinc plating for steel sheets

Weaknesses

- Mining**
- Increased costs from deepening of mining locations
 - Locations that are distant from ports and consumption locations
- Smelting**
- Aging of equipment

Opportunities

- Mining**
- Increased market price for zinc
 - Possibility of technological development, such as improved recovery rate from the use of IoT
- Smelting**
- Global expansion of the recycled materials market due to enhanced eco-awareness
 - Stable growth of zinc demand, both globally and in the long term

Threats

- Mining**
- Decline of market price for zinc
 - Strengthened restrictions due to enhanced eco-awareness
- Smelting**
- Increased presence of Chinese zinc smelting
 - Gradual decline in domestic demand for zinc
 - Increased competition in collecting recycled material

Results and plans of Metals Sector

FY2018

We made solid strides in increased processing of recycled materials and recovery of by-products, but there is still much room for improvement, with issues still remaining to be solved.

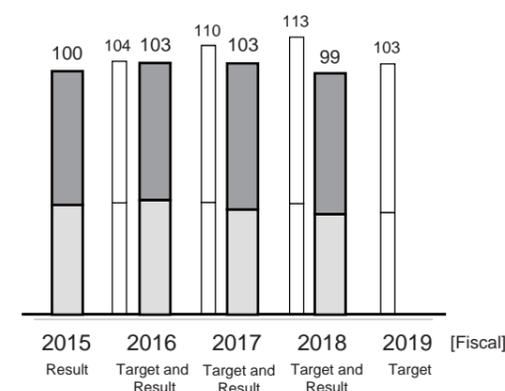
From FY2019 onwards

Organically link new processes to smelting network to obtain more diverse raw materials for recycle and increase processing capacity.

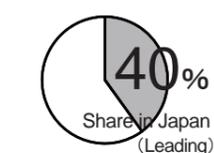
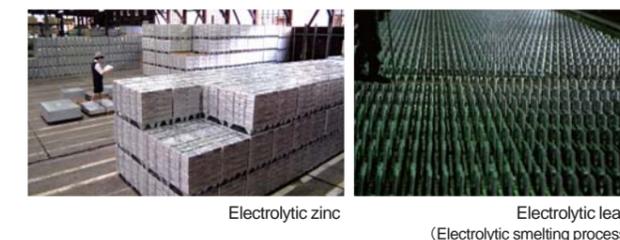
Expansion of recycle-smelting

(Total amount of raw materials in FY2015 = 100)

- Recycled material (zinc, lead, precious metals)
- Zinc concentrate, lead concentrate, etc.

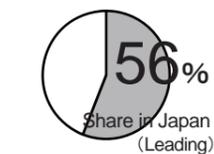


High share products



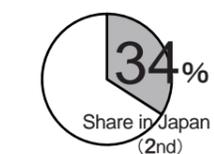
Zn (Zinc)

Iron is essential as a basic material for use by industries and in our livelihood. In addition, zinc is what protects iron from corrosion. Zinc powder is widely used not only as a coating material for steel, but also for die-casting and other processes of copper.



Bi (Bismuth)

Recovered as by-products of copper and lead ore, they are used not only as alloy material but also as material for pharmaceutical products, pigments, and also for compound semiconductors.



Pb (Lead)

Lead is acquired from battery scraps and ores, and because it is easy to process, it is used mainly for lead storage batteries, as well as for solder, lead pipes and sheets, X-ray shielding material, soundproofing material, and more.

<Other main products>

Zinc base alloys/Cadmium/Antimony trioxide/Refined copper/Gold/Silver/Sulfuric acid/ Selenium /Tellurium/Zinc ore/Lead ore

Continuous supply contributing to sustainable mobility

[Automotive Parts & Components = MITSUI KINZOKU ACT CORPORATION]

Leverage our “Manufacturing Intelligence” and provide continuously “Safety,” “Comfort” and “Amazing Performance.”

Continually enhancing quality and cost competitiveness as well as developing and sales expanding

of automotive mobility products are one of the processes for that purpose.

Contributing to the sustainability of the automotive industry has led to the building of a resilient society.

While MITSUI KINZOKU ACT CORPORATION (hereinafter “ACT”) was established in 2010, Mitsui Kinzoku’s automotive parts & components business dates back more than half a century.

The company first launched into the United States in 1987. Now, it has 11 production and supply sites through the world including a site in Morocco that will start operations next year.

Our system of regional business units which conduct business operations in each region is also established. We have cultivated local human resources at both operational and management level. Currently the percentage of employees holding local nationality in executive officer positions is around 30% and the percentage of women in management positions is around 20%.

As the new medium-term management plan just has started this fiscal year, and since this is an important period for us as we head along our path toward realizing our vision for 2024, both the head office and each business unit will work together as one toward “continually enhancing quality and cost competitiveness” and “focusing on winning major business deals.”

Our vision for 2024 is to be a company that provides products and services focused on safety, comfort, and amazing performance through the utilization of our strength in manufacturing capabilities. We will strengthen our quality and cost competitiveness by implementing ICT and other technologies in our production sites to develop smart factories, in order to improve productivity and enhance the quality of mass-produced items, as well as to reduce costs. We will also develop high quality products for door-related components in accordance with the electrification and automation of mobility, and propose such products on a global scale to our customers, in order to acquire large-scale orders and to expand our sales routes into the future.

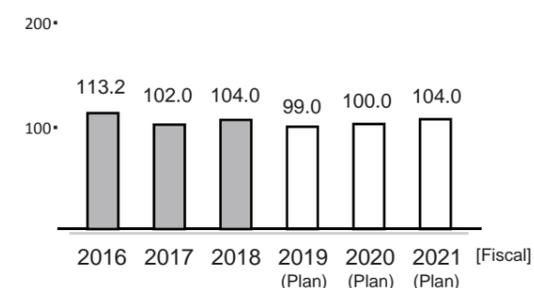
By establishing the ACT brand and strengthening customer trust, we believe we can contribute to the sustainability of the automotive industry.



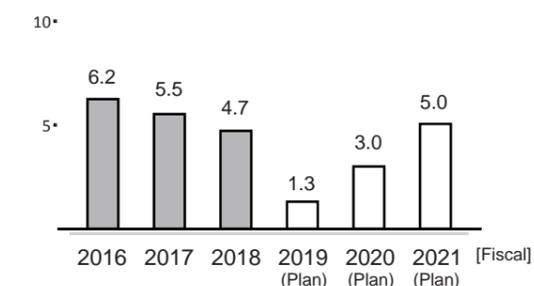
Hiroshi Igata

Senior Executive Officer of Mitsui Kinzoku, President and Representative Director of MITSUI KINZOKU ACT CORPORATION.

Net sales of MITSUI KINZOKU ACT group
[Billion yen]



Ordinary income of MITSUI KINZOKU ACT group
[Billion yen]



SWOT analysis

Strengths

- Technological abilities as a manufacturer specializing in components for the door area
- Long-term business partnership with outstanding Japanese OEMs
- Supply chain that enables stable supply on a global scale
- Integrated production at the major production sites that covers everything from pressing, resin formation, and assembly

Weaknesses

- In-store share among European and American OEMs
- Lineup of products for electric sliding doors and backdoor systems
- Alliance with other companies that complement our own technologies

Opportunities

- Alliance with European OEMs that do not have much business with the Japanese OEMs who are our customers, and increase sales opportunities toward European OEMs through joint purchases
- Increased sales opportunities for our company’s lightweight products and system products due to the electrification and automation of automobiles
- High barriers to market entry because of strict demands in terms of performance and required quality

Threats

- Emergence of giving priority to one’s own country, deceleration of the automobile market due to trade frictions, increased burden of customs expenses, changes in the currency exchange rate
- Market oligopoly by global mega-suppliers
- Emergence of new customers and competitors from the major transformation in the automobile industry

Key challenges

Achievements in FY2018

In order to meet the demand from our customers for enhanced safety and comfort, we developed and began offering the new two-stage seat back latch with added mechanism.

The proposals and development activities made by our company have earned high appraisals from our customers, which resulted in acquiring the Project Award in the technology category*.



* Toyota Motor Corporation
New model SUV Project Award

Seat Back Latch
(Two Stage Type)

Customer awards for our manufacturing sites

(Excerpts from the results in FY2018)

<Japan>

Toyota Motor East Japan, Inc. “Quality Control Award”
Tachi-S Co., Ltd. “2018 Quality Excellence Award”

<Other countries>

Dongfeng Nissan Passenger Vehicle Company “Excellent Supplier”
Honda Automobile (Thailand) Co., Ltd. “Quality Award”
Isuzu Motors Co., (Thailand) Ltd. “QD Certificate of Achievement”
Honda De Mexico, S.A.De C.V. “2018 calendar Supplier Performance Award”
Honda Cars India Ltd. “Cost Award”

From FY2019 onwards

Solid progress toward achieving our vision for 2024

We will develop high-quality products for use around doors in accordance to the electrification and automation of mobility, and to meet the needs of our customers. We will make proposals on a global level to our customers in order to acquire large-scale orders, and thereby realize expanded sales in the future.

Product lineup

Side Door Latch and Related Products

- Side Door Latch (Fully Enclosed Type)
- Side Door Latch (Integrated actuators)
- Side Door Latch (For Compact Cars)
- Check Link/Side Door Hinge



Back Door Latch

- Back Door Latch (Closer)
- Back Door Latch (Electric Release Type)
- Back Door Latch (For Compact Cars)



Power Sliding Door System

- Power Sliding Door Drive Unit
- Remote Control Unit
- Rear Latch/Auto Step



Power Back Door System

- Power Back Door Drive Unit
- Back Door Latch/ECU



Door Latch for automobile

Major products offered by Mitsui Kinzoku Act Corporation that have top-level shares in the world market are mechanical components that keep the doors firmly in place on the vehicle body. These parts are constantly required to be made smaller, more lightweight, and with improved performance, while also being required to have the strength to ensure the safety of the people in the vehicles.

Capital as the source of value creation

Mitsui Kinzoku Group maintains and strengthens not only our financial capital but also our non-financial capital for achieving our business model and enhancing our corporate value.

We will continue to make investments in non-financial capital in order to develop growth products and businesses so that social value generates continuously.

Workstyle reform project (human capital)

There are major changes of external environment underway, such as the decline of the working-age population in Japan and the advancement of technologies including AI. In this situation, Mitsui Kinzoku Group has been reforming our workstyle since FY2016 as a means for securing the human resources that will realize value creation of our Group. This workstyle reform aims to create a work environment where diverse talents are able to participate actively, regardless of age, gender, nationality or other attributes.

We are implementing teleworking, as well as reviewing our leave of absence system and transfer system, in order to create an environment that enables the active participation of employees with place restrictions and time restrictions due to various reasons—such as for child-raising, providing nursing care, or receiving medical treatment. Workstyle reform will help enhance the engagement of our employees, who are one of the major stakeholders of our Group.



Development of human resources who will achieve value creation (human capital)

First of all, Mitsui Kinzoku places importance on OJT training. We appoint OJT instructors, and give regular trainings to them. Secondly, we offer Off-JT training programs to supplement the OJT. The Off-JT training programs include the following: required rank-based training in order to acquire the necessary knowledge and skills for each career stage, training to strengthen the employees' expertise, and a support system for self-sustaining career development.

Rank-based training has expanded the scope of the objective person. National staff* now participate in the training. We have introduced CSR training including ESG theme, as well as a program on the SDGs for upper-level management employees (general managers) from FY2018, for the purpose of nurturing employees who create business opportunities that are inspired by environmental and social issues.

Training programs for strengthening expertise are held on different themes, such as on equipment maintenance skills, calculating statistics, intellectual property, and on sales skill-up. The program lineup is reviewed every year in accordance with the changes in external environment and in-house needs.

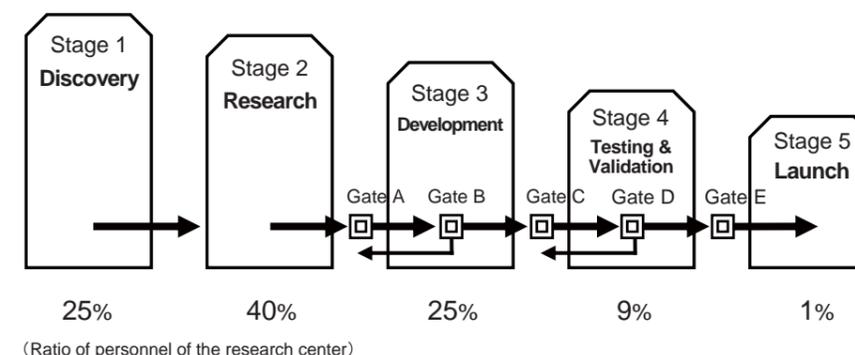
We also offer correspondence courses, e-learning, and selective external seminars, as well as systems for enhancing language abilities and for providing assistance in acquiring certifications, for the self-sustaining career development of employees. Furthermore, we encourage staff of the Human Resources department to obtain the certification for career consultant, and they take initiatives in career support for each of our employees.

* National staff: Local staff in overseas sites.

Effective R&D management (intellectual & human capital)

The source of continuous growth and competitive advantage for Mitsui Kinzoku Group is in conducting research and development toward the creation of new businesses. We make strategic investments in research and development, while also implementing stage-gate management. Research themes that have been narrowed down by considering market needs (including social issues) and commercialization potential are moved forward into the research stage. Research resources such as human resources are allocated to the selected research in the research stage intensively. We will enhance our opportunity to create new businesses by focusing on the areas that have high potential to proceed steadily from research to development, commercialization, and market launch.

- Trends in R&D expenses are listed on page 19.

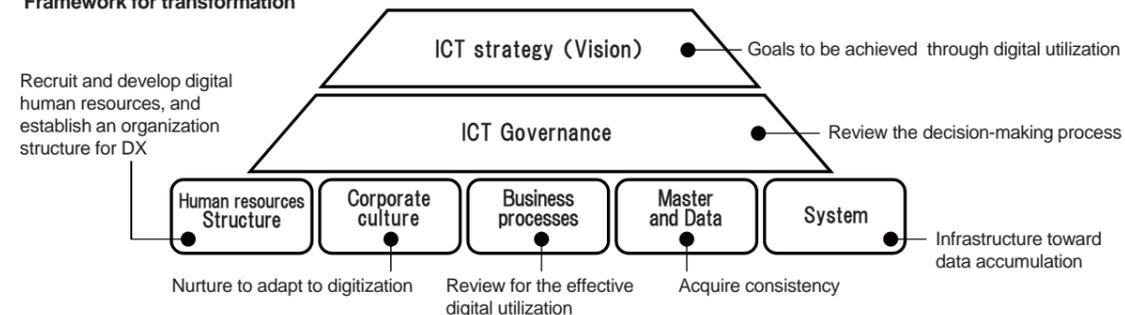


Digital transformation (intellectual capital)

Mitsui Kinzoku Group will transform our business operations into one that leverages data and digital technologies. The digital transformation aims to correspond to changes in our external environment such as the rapid expansion and dissemination of digitalization. It will be expected to enable us to provide products and services according to social and customer needs.

In FY2019, we launched a company-wide project for digital transformation (DX). We are proceeding with this project, with a focus on innovating our business operations, developing ICT governance, and strengthening security. Considering our vision of innovation in our business, we aim to “make the management index visible” and “achieve advanced data utilization” by implementing a unified main system for the Group, which is scheduled to start operations in FY2022.

Framework for transformation



In order for Mitsui Kinzoku Group to be able to continuously utilize social & relationship capital and natural capital, it is essential that we build an appropriate relationship with such capitals and conserve them. These capital must be managed throughout our entire business. This is explained under “materiality issues in the areas of responsibility that relate to social & relationship capital and natural capital” on page 15.

The foundation of our value creation

Mitsui Kinzoku recognizes that “corporate governance is a mechanism for ensuring transparent and fair decision-making that proceeds in a prompt and decisive manner, taking into account the standpoints of all stakeholders, including shareholders, customers, employees, and local communities.”

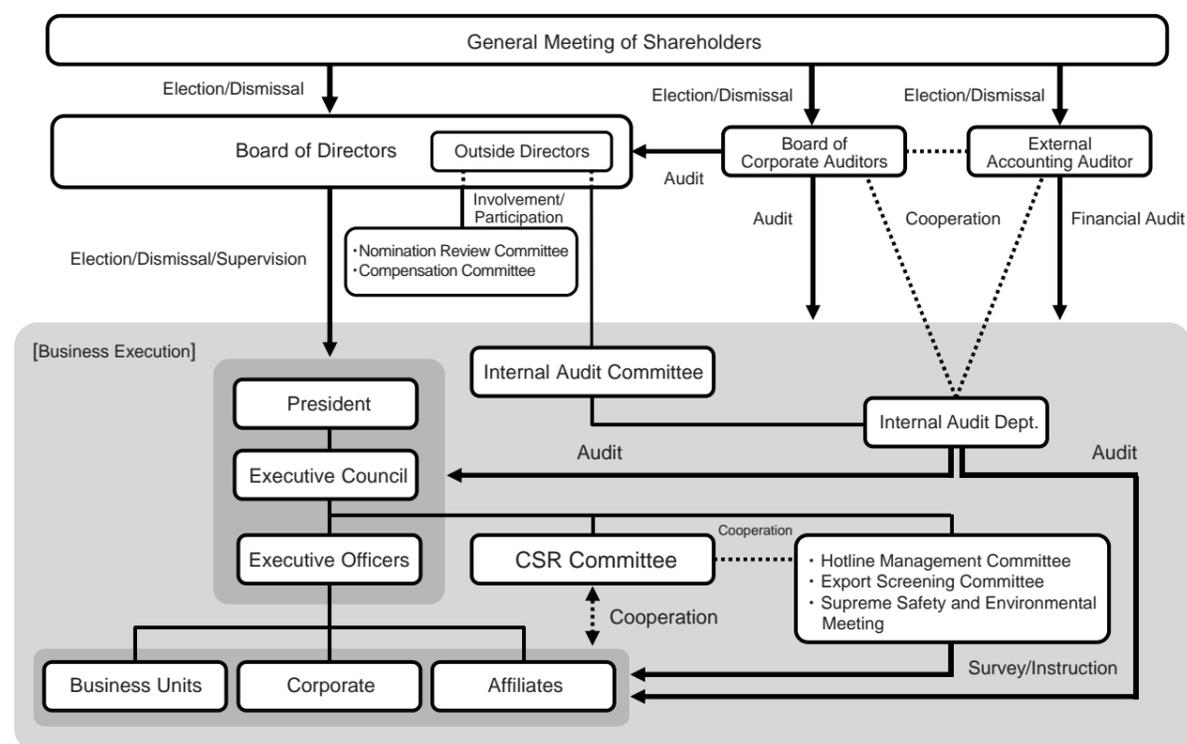
Corporate governance, which is considered one of the most important issues in business management, is about establishing a management organization and mechanism and taking necessary measures to achieve the management philosophy.

Corporate governance is the foundation for sustaining the long-term value creation of Mitsui Kinzoku Group.

Corporate Governance System

Mitsui Kinzoku's Board of Directors is comprised of Executive Directors and Outside Directors. This board conducts appropriate and accurate supervision of the business execution performed by the individual Executive Directors. In addition, Corporate Auditors attend the Board of Directors and audit the decision-making process of the board and the performance of duties by the Directors.

Corporate Governance System of Mitsui Kinzoku



Directors and Board of Directors

The Directors supervise the execution of business operations. Important issues are shared in advance among the Directors and discussed deliberately at the meetings of the Board of Directors. In order to make swift decisions and to strengthen the supervision function of the board, the decision-making processes on certain items are entrusted to Executive Officers and their performances are monitored by the board. The term for the board as stated in our articles of incorporation was changed from two years to one year at the general meeting of shareholders held on June 27, 2019. This

change was made in order to clarify the management responsibility and to strengthen corporate governance by increasing the opportunities to ascertain shareholders' confidence in directors.

Executive Officers

The President and Representative Director not only assumes executive management responsibilities, but also executive responsibilities for business operations of Mitsui Kinzoku Group. The Representative Directors and Directors concurrently serve as Senior Executive Officers for Mitsui Kinzoku.

Board of Corporate Auditors and External Accounting Auditor

Corporate Auditors perform audits on the execution performed by the Directors in accordance with the auditing plan determined by the Board of Corporate Auditors. Corporate Auditors strengthen its cooperation with Accounting Auditors by receiving accounting audit plans and audit results, as well as exchanging opinions regularly.

The Corporate Governance Guidelines defining our fundamental principles regarding corporate governance is available on our website.

https://www.mitsui-kinzoku.co.jp/wp-content/uploads/cgguideline_e.pdf

Internal Audit Committee and Internal Audit Dept.

In order to strengthen our internal control function, Mitsui Kinzoku has an Internal Audit Committee chaired by an Outside Director, which reports directly to the board. Internal auditing is also performed by our Internal Audit Department. The Department is equipped with personnel with specialized knowledge to perform audits regarding Mitsui Kinzoku Group's compliance with laws and regulations, as well as the operating situation of the internal control system.

The Internal Audit Committee evaluates the results of the internal audits and confirms the situation on corrective measures of issues pointed out as concern.

Organization Structure

The structure of each organization is as follows;

(As of the end of June 2019 - Number of female directors: 0; Number of female auditors: 1)

Name	Position	Board of Directors	Board of Corporate Auditors	Nomination Review Committee	Compensation Committee	Executive Council	Internal Audit Committee
Keiji Nishida	President and Representative Director	◎ (94%)		○	○	◎	
Takeshi Nou	Representative Director, Managing Director	○ (100%)				○	○
Isshi Hisaoka	Director	○ (100%)				○	
Takashi Oshima	Director	○ (100%)		○	○	○	
Morio Matsunaga	Outside Director	○ (100%)		○	◎		○
Masaharu Miura	Outside Director	○ (100%)*1		◎	○		◎
Akira Yoshida	Corporate Auditor		○ (100%)				
Takashi Kadowaki	Corporate Auditor		◎ (100%)				
Toru Ishida	Outside Corporate Auditor		○ (80%)				
Keiko Takegawa	Outside Corporate Auditor		○ (-%)*2				

◎ = Chairperson ○ = Member of Committee

() = Attendance rate in FY2018 *1 Attendance rate as Auditor *2 Not listed since being newly appointed

※ Auditors attend at the board meetings.

※ Outside Auditors attend at the Nomination Review Committee and Compensation Committee in the role of advisers.

※ The Internal Audit Committee includes the general manager of Internal Audit Dept. as a member and Corporate and Outside Corporate Auditors as observers.

Election of Outside Directors

We take note of ensuring the independence of the supervision and auditing functions from our company and incorporating the perspectives of diverse stakeholders.

Name	Position	Reasons for the Nomination
Morio Matsunaga	Outside Director	Mr. Matsunaga has specialized knowledge of engineering and experience of organizational management as a university professor and the president of a national university corporation. the Company judges that by utilizing his wealth of experience he can further contribute to the strengthening of the Group's management oversight and supervisory functions.
Masaharu Miura	Outside Director	Mr. Miura has a wealth of knowledge and experience in legal circles as a public prosecutor and a lawyer. the Company judges that by utilizing his wealth of experience he can further contribute to the strengthening of the Group's management oversight and supervisory functions
Toru Ishida	Outside Corporate Auditor	Mr. Ishida has held key positions in which he has contributed to development of commerce and industry over the years. He served as Director-General, the Industrial Science and Technology Policy and Environment Bureau, METI and Commissioner, Agency for Natural Resources and Energy, METI and currently serves as President, The Japan Chamber of Commerce and Industry and President, The Tokyo Chamber of Commerce and Industry. The Company judges he can reflect his experience and specialized knowledge in auditing of the Company and believes he is a suitable person for the position of Corporate Auditor.
Keiko Takegawa	Outside Corporate Auditor	Ms. Takegawa served as Director, Public Relations Office and Director General, Gender Equality Bureau at the Cabinet Office and has a wealth of knowledge and experience through her engagement in formulation and implementation of policies such as promotion of women's participation and advancement. Although she has never been directly involved in management of a company, the Company judges that she can utilize her wealth of experience in auditing of the Company and believes she is a suitable person for the position of Corporate Auditor.

(as of June 30, 2019)



Masaharu Miura Outside Director
Isshi Hisaoka Director
Keiji Nishida President and Representative Director
Takeshi Nou Representative Director and Managing Director
Takashi Oshima Director
Morio Matsunaga Outside Director



Akira Yoshida
Corporate Auditor



Takashi Kadowaki
Corporate Auditor



Toru Ishida
Outside Corporate Auditor



Keiko Takegawa
Outside Corporate Auditor

* The profile of Directors and Auditors is listed on pages 88-89.

Election Policy of Directors and Auditors

Mitsui Kinzoku establishes a Nomination Review Committee as an optional organization. The Nomination Review Committee reviews candidates to serve as directors or auditors by their capabilities, knowledge and personalities. Based on the result of the review, those who are deemed capable of satisfactorily fulfilling the responsibilities are named as candidates for nomination by the board.

Compensation Policy of Directors and Auditors

(1) Criteria for determining the amounts of compensation
 The Compensation Committee establish and abolish the standards for determining the amount of compensation for the Directors as well as discusses and decides on the amount of basic compensation and performance-based compensation provided to each Director, which is entrusted by the resolution of the board within the scope decided at the Annual General Meeting of Shareholders. Auditors' compensation will be determined by the conference of Auditors, and the total volume of Auditors' compensation would be within the limit approved at the Annual General Meeting of Shareholders.

(2) Composition of Compensation

Compensation for Directors consists of base compensation and performance-linked compensation. Base compensation is calculated based on the base compensation for the President and by applying the ratio according to the title, taking into consideration the Company's performance, the general level in Japan, and other factors comprehensively. Performance-linked compensation is calculated by using consolidated ordinary income as the performance indicator and is determined (calculated by addition and subtraction) by the evaluation corresponding to the performance of the business for which the Director is responsible. Outside Directors and Auditors who are uninvolved in business execution do not receive performance-linked compensation. The payment ratio of the compensation provided to the

Directors (excluding Outside Directors) has been determined, by way of how the system is designed, as being 60% in basic compensation and 40% in performance-based compensation. However, this is variable in accordance with the performance of the company.

Internal control system

A summary of the decisions made at the meetings of the Board of Directors, regarding the business structure for the appropriate business operation of Mitsui Kinzoku Group in compliance with laws and regulations and the corporate ethics, is available on our website.

<https://www.mitsui-kinzoku.co.jp/en/toushi/management/governance/>

Effectiveness Assessment of the Board of Directors

We assess the effectiveness of the Board of Directors by having a third party conduct hearing with the Directors/Auditors and analyzing the results of the hearings. In FY2018, in addition to addressing the issues pointed out previously, our response was evaluated with respect to the Corporate Governance Code revised in June 2018.

Our initiatives were evaluated to contribute toward enabling vigorous discussions at the meetings of the Board of Directors, such as in increasing the transparency of discussions in the Compensation Committee and in improving the operating procedure of the Board of Directors. Meanwhile, it was identified to improve the ongoing issues regarding the appropriate formulation and supervision of a chief executive officer succession plan and the lack of female executives. We were also notified of new problem in specifying the standards for exercising voting rights in cross-shareholdings. Details of the evaluation results were shared the meeting of the Board of Directors. The Board of Directors will discuss issues that were identified in the effectiveness assessment in order to further improve the functions of the Board.

Total Compensation Paid to Directors and Auditors

Classification	Total Compensation (Million Yen)	Total amount of Compensation by type (Million Yen)		Number
		Base compensation	Performance-linked compensation	
Director (excluding Outside Director)	174	153	21	4
Corporate Auditor (excluding Outside Corporate Auditor)	51	51	-	3
Outside Director/Outside Corporate Auditor	57	57	-	5

Note 1. The 80th regular general meeting of shareholders held on June 29, 2005 decided on the maximum compensation for the Board of Directors as being 60 million yen per month (however, this does not include the salaries of non-director staff on the board).

Note 2. The 80th regular general meeting of shareholders held on June 29, 2005 decided on the maximum compensation for Auditors as being 15 million yen per month.

Note 3. At the meeting of the Board of Directors held on April 22, 2014, it was decided that the Director bonus system will be abolished, and that the Directors' compensation will be calculated by adding to the basic compensation a performance-based compensation that is linked to the business performance, but within the scope of the maximum compensation amount that has already been approved at the 80th regular general shareholders meeting held on June 29, 2005 (however, Outside Directors will only be provided with basic compensation, with no performance-based compensations added). The amount of compensation received by the directors is determined by the Compensation Committee that is chaired by an Outside Director, with committee members including the President, the Director in charge of human resources, and an Outside Auditor in attendance as an adviser.

Occupational health and safety

Mitsui Kinzoku Group holds that occupational health and safety is essential for business continuity.

We provide a safe worksite environment not only for our employees but also for cooperative companies, contractors, and visitors to plants.



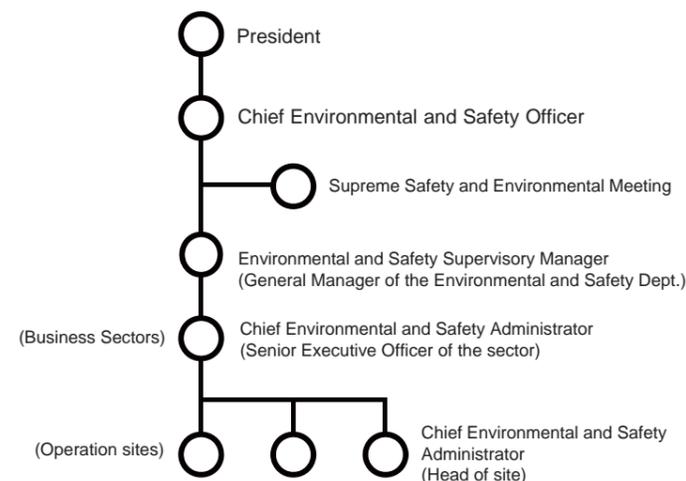
Policies related to health and safety

Being a manufacturing company, we are aware of the importance of managing the health and safety of the workplace. Mitsui Kinzoku Group is committed to creating a safe and comfortable work environment. This is based on our Basic Policy on Health and Safety, in which it states that “ensuring the health and safety of all people working for Mitsui Kinzoku Group is the most important element for conducting business activities.” We also believe that by cultivating a corporate culture that places safety first, we will be able to prevent occupational hazards, improve productivity, and reduce operational and business risks.

Health and safety management system

Mitsui Kinzoku Group adopted the occupational health and safety management system, OHSAS 18001, for major sites. Currently, we are working to sequentially change this to ISO 45001 certification.

Environmental and Safety Management System



For small-sized sites, we developed an internal certification system. At each site we work to realize an upward spiral motion by going through the PDCA cycle in accordance with the management system, which is implemented in effective activities, such as risk assessments as well as training programs for health and safety.

We implement internal safety audits both in Japan and overseas in order to confirm the operational situation of the management system at the manufacturing site. The internal safety auditing body checks for compliance with laws and regulations, such as regarding the notifications, inspections, and measurements, in addition to pointing out hazardous places and following up on improvements made.

Health and safety training

Each production site improves the safety awareness of their employees by conducting KY (“Kiken Yochi” meaning “hazard prediction”) activities before starting operations, and giving experiential risk training by experienced employees. Furthermore, each workplace conducts “close-call activities,” and has the workers and supervisors communicate with one another on safety issues. We train employees on the protective equipment that needs to be used for each work activity, and also conduct training in preparation for emergency situations, such as earthquakes. In addition, each site trains those in managerial and supervisory roles about related laws such as on occupational health and safety, thereby ensuring that safety compliance activities are implemented in a thorough manner.



Experiential education (dangers of operating a forklift)

Topics on health and safety: Establishment of the lockout standard

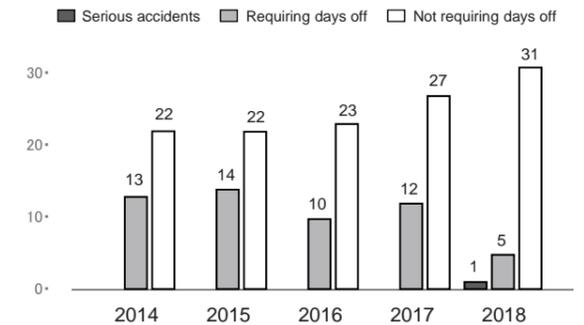
Every year, Mitsui Kinzoku Group defines the “President’s policy on important health and safety issues” that raise key initiatives for the following year based on the year’s safety performance results. The President’s policy for 2019 gives priority to preventative management. Also, a new lockout standard was established as one of the actions to achieve this.

A lockout system is a safety system that keeps the equipment in a state of shutdown (shutting off power) by applying the locks. This system is used to prevent labor hazards that could occur when work is being performed while the equipment is stopped, by preventing a third person from accidentally restarting the equipment and causing such occupational hazards as being caught in between, being drawn into, being electrocuted by the machine, or getting in contact with toxic substances. This standard requires all workers to manage and apply the locks. Furthermore, in order to achieve the reliable use of this system, the standard requires all persons who work on equipment that uses the lockout system (responsible person, workers, consigned workers, etc.) to attend a lecture about the details of the system.

Safety performance in 2018

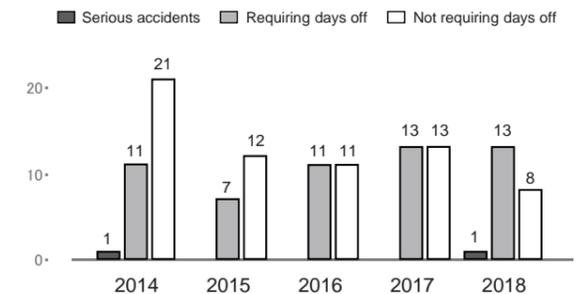
Trends in the number of accidents in sites in Japan

※ Including accidents that occurred in cooperative companies and contractors



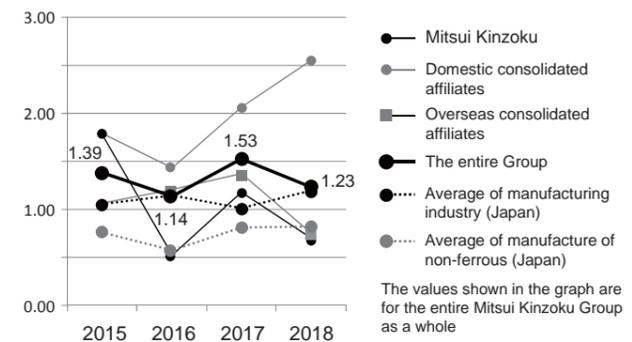
Trends in the number of accidents in overseas sites

※ Including accidents that occurred in cooperative companies and contractors



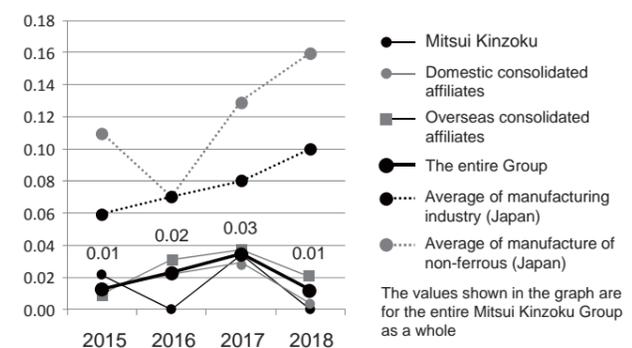
Frequency rate of accidents

※ Not including accidents that occurred in cooperative companies and contractors



Severity rate of accidents

※ Not including accidents that occurred in cooperative companies and contractors



Initiatives for environmental issues

The sustainability of the Earth environment is essential to the continuation of our business. We strive to reduce the negative impact on the environment brought about by our business activities because we recognize that it constitutes a great risk to our business.

Environmental management

Mitsui Kinzoku Group has established the Supreme Safety & Environmental Meeting as a place to deliberate and determine the most important matters related to safety and the environment.

Guidelines and action plans determined at the Meeting are spread to each site by the Environmental and Safety Supervisory Manager (General manager of the Environmental and Safety Dept.) under the direction of the Chief Environmental and Safety Officer. Each site that operates under ISO14001 has a chief person that serves as the person responsible for managing environmental safety, and who makes sure that the required actions are being reliably executed.

In 2001, we established the Basic Policy on Environmental Conservation and formulated the Environmental Action Plan aiming to improve our environmental management system and minimize the environmental impact.

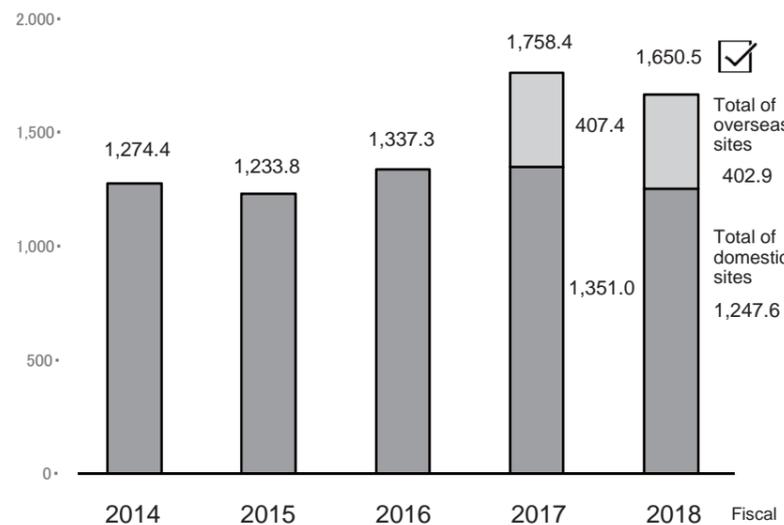
In 2018, we revised the Environmental Action Plan to meet the current needs of society. We have established targets to reduce greenhouse gas emissions and waste and create products that will contribute to the environment. We have also partially revised the Basic Policy on Environmental Conservation.

Response to climate change

We advance initiatives to reduce the emission of greenhouse gases, not only to contribute toward the prevention of global warming, but because we also recognize the risks that climate change poses to our business. Our Environmental Action Plan states the goal of reducing CO2 emissions for the Group by 7% up to FY2030 (compared to FY2013). We conduct activities to reduce energy use, reduce CO2 emissions, and create renewable energy.

In FY2018, CO2 emissions originating from energy consumption by our Group both domestic and overseas amounted to 1,650.5 thousand tons of CO2, down by 6.1% compared to FY2017.

CO2 emissions from energy consumption (thousand t-CO2)



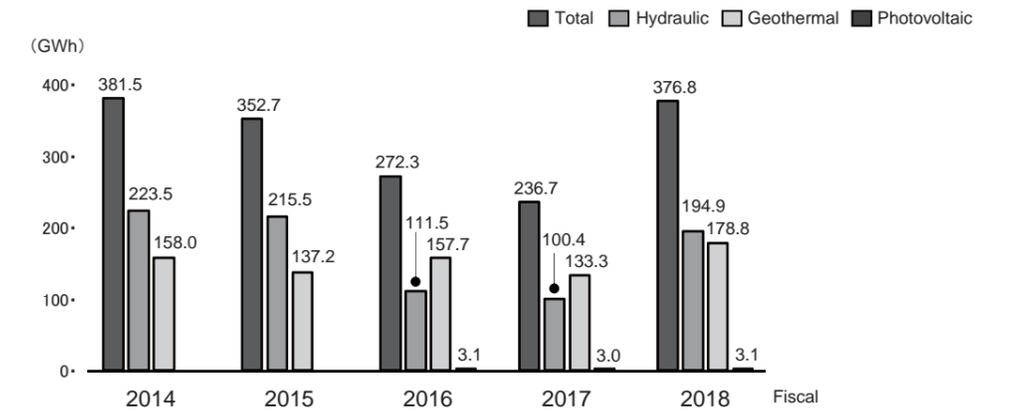
※ Emission amounts from overseas sites have been added to the total amount starting FY2017.

※ The emission amount in FY2017 from overseas sites that was disclosed in our CSR Report 2017, which stated that it was 449.8 thousand tons of CO2, was recalculated and revised.

※ Figures for CO2 emissions from energy consumption were calculated using emission factors derived in a manner conforming to the "Act on Promotion of Global Warming Countermeasures." CO2 emissions derived from purchased electricity in Japan were calculated using the latest basic emission factors of electric power suppliers. For emission factors overseas, the per-country emission factors "CO2 emission factors from electricity" reported by the International Energy Agency (IEA) were used.

※ We have received an independent practitioner's assurance for the figures for FY2018 in this information to which is attached.

Total power generation using renewable energy



Creation of renewable energy

Mitsui Kinzoku Group will further expand the use of renewable energy as clean energy in place of fossil fuels. Kamioka Mining and Smelting Co., Ltd. has 10 hydroelectric power plants. The earliest one has started operating in 1917. The renewal construction work, which started in FY2015 with a total investment of 20.8 billion yen, was fully completed in FY2018, and the output totaled approximately 40,000 kW.

Hikoshima Smelting Co., Ltd. has started the solar PV which outputs around 2 MW (megawatts) since March 2016. Okuaizu Geothermal Co., Ltd., which provides the steam for geothermal power generators, has been making efforts to achieve stable provision ever since the company began its operations in 1995.



Kanakido power plant, Kamioka Mining and Smelting Co., Ltd.



Okuaizu Geothermal Co., Ltd.



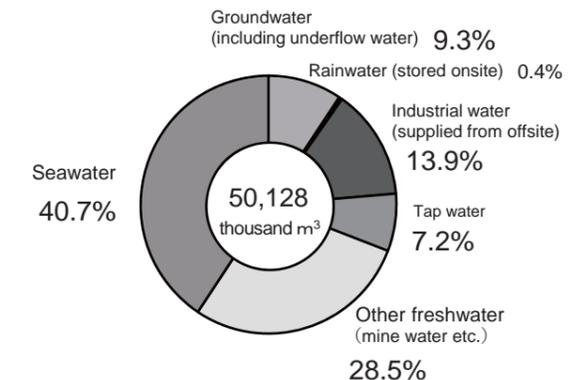
Solar power plant, Hikoshima Smelting Co., Ltd.

Water resource conservation

Mitsui Kinzoku Group strives to reduce and recycle water used in the business operations. The total water usage amount in FY2018 was 50,128 thousand m³, a reduction of 3.2% compared to FY2017. Furthermore, the circulated water usage through reusing and recycling was 8,815 thousand m³, an increase of 7.0% from FY2017.

Water-related risks that could have an impact on our business have not become apparent as of today, but we will advance efforts to evaluate water-related risks from multiple perspectives that include physical risks, such as the drying up of water resources and the lack of sufficient amounts of water, as well as regulatory risks related to the use of water. These efforts will also help us reduce the risks in our business.

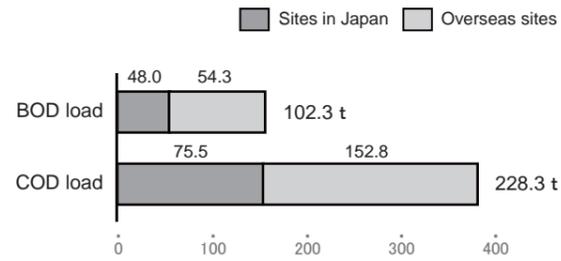
Breakdown of water use (FY2018)



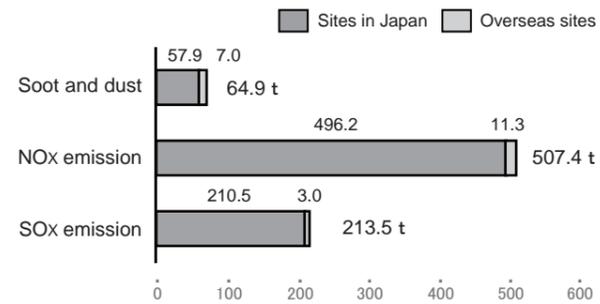
Prevent air and water pollution

Each manufacturing site of Mitsui Kinzoku Group monitors the following in accordance with laws, regulations and ordinances and voluntary standards: Sulfur oxide (SOx) emissions produced on the combustion of fossil fuels containing sulfur, nitrogen oxide (NOx) emissions from boilers, incinerators and other combustion equipment, and particulate matter, as well as water quality including BOD and COD which indicate the level of organic material in wastewater. We work on gathering and managing the monitoring results from each site, and sharing the initiatives and the technologies within the Group.

Emissions to the water (FY2018)



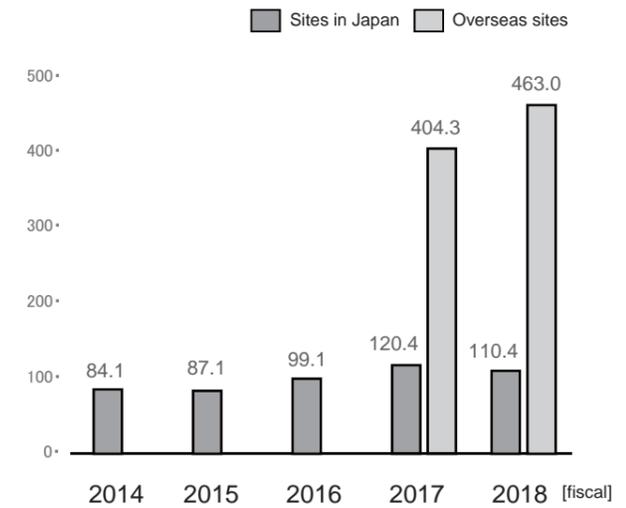
Emissions to the atmosphere (FY2018)



Initiatives to reduce waste

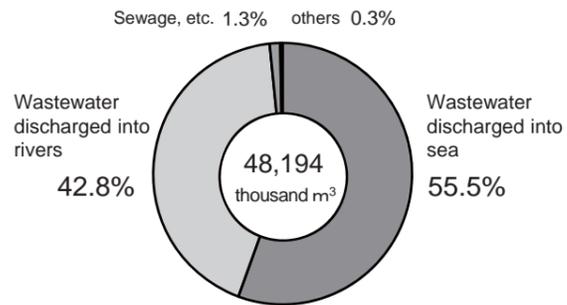
We strive to reduce the amount of waste generated in our business activities, and also conduct efforts to develop technology toward reusing and recycling. In the Environmental Action Plan revised in 2018, we set a target basic unit (calculated by dividing the amount of waste generation excluding waste to be reused and recycled by net sales) at each business site. In FY2018, as a result of the implementation of new initiatives as well as the increase and decrease in our production amounts, the amount of waste from our domestic sites was reduced by 8.3% from the previous year to 110.4 thousand tons, and increased by 14.5% at our overseas sites to 463.0 thousand tons. Of the amount of waste in FY2018, 69% within Japan and 11% overseas were recycled and used either within or outside of our company.

Amount of waste generation (thousand tons)



※ The amounts from overseas sites have been added starting FY2017.
 ※ The value for the amount within Japan in FY2017 disclosed last year has been revised.

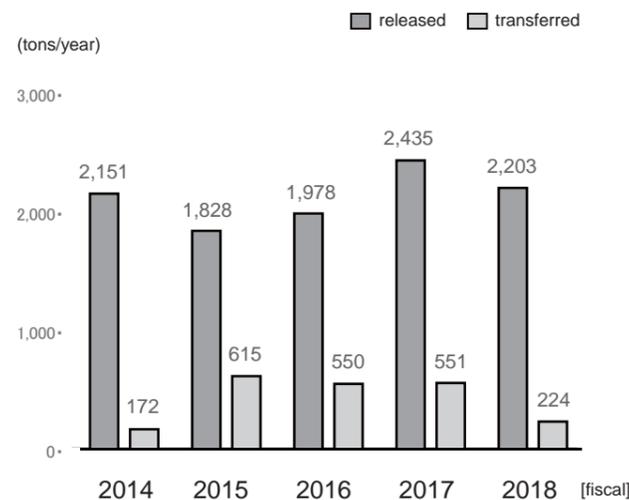
Breakdown of wastewater (FY 2018)



Reduction of chemical substance emissions

Each manufacturing site of the Group files the release and the transfer amount of chemical substances to the government under the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (Law concerning Pollutant Release and Transfer Register [PRTR]). The management of hazardous chemical substances contained in products has become an essential requirement. We also respond to the guidelines for chemical substances contained in products, such as the RoHS Directive and the REACH regulations required by customers. We aim to reduce the emission amount of environmental pollutants in accordance with our Environmental Action Plan, including our overseas sites. We continuously strive to collect and replace chemical substances that may cause environmental pollution. Thus we focus to reduce or remove use of such chemical substances from our products.

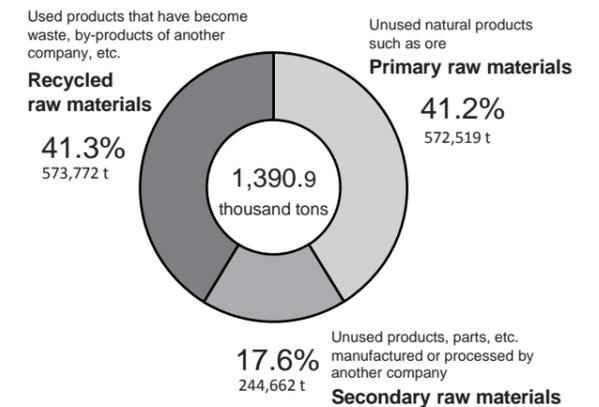
Volume of chemical substances released and transferred



Use of recycled raw materials

Mitsui Kinzoku Group works on the recycling of waste by using resources as effectively as possible. During this process, it is essential that we establish separation and purification technologies in accordance with the materials, as well as make technological improvements and renew existing manufacturing equipment for each production process, and develop a network for collecting recycled raw materials. In FY2018, the use of recycled raw materials exceeded its use of natural resources such as ore. Recycled materials account for 41.7% and 36.9% of the total raw materials used in domestic and overseas sites respectively. We achieved 41.3% in the percentage of recycled materials for the Group.

Breakdown of usage by type of raw material (FY2018)



Compliance

Compliance management system

Mitsui Kinzoku Group ensures that all the employees are made fully aware of its compliance issues. This effort is led by the Legal Department, with the General Manager of the Corporate Planning Department serving as the chief person responsible. We are also strengthening our efforts, such as by operating the grievance mechanism and through efforts conducted by various committees including those on safety and export management. The situation on compliance is also monitored by the Internal Audit Department under the Internal Audit Committee.

Code of Conduct

Mitsui Kinzoku Group considers compliance as referring not only to being compliant with the rules and regulations, but also to being compliant with issues that are expected by society that may not necessarily have strictly defined codes, such as social norms, corporate ethics, common sense, and morals.

The Code of Conduct defines the values that should be shared by all those involved in the Group's operations, with the aim of promoting behavior in accordance with the laws and socially accepted common sense. The Code of Conduct is available in different language versions, which are distributed to the overseas sites.

The Compliance Guidebook, which explains the main points in practicing compliance, has been distributed to all executives and employees of Mitsui Kinzoku Group to ensure compliance.

Compliance training

Mitsui Kinzoku Group provides its employees with compliance training to ensure all of its employees are aware of the Code of Conduct. The training for new employees includes a session explaining the Code of Conduct using the Compliance Guidebook. Compliance programs are also included in regular rank-based training as well as training at overseas sites to continuously raise compliance awareness.

Specifically, we conduct, as appropriate, various seminars that focus on such topics as antitrust issues, management training targeted toward newly appointed directors and auditors for affiliate companies, information management, and security trade control.

Grievance mechanism

For external stakeholders, we set up the CSR Inquiry Line where we receive reports of concern from websites outside of our company. This enables people to send information with anonymity, thereby establishing a framework where reporters will not be put into a disadvantageous position.

The Mitsui Kinzoku Hotline is available to any employee (including executives) seeking to consult or report a concern. Contact can be made at a contact point within the company or with one at an external law firm. Under the internal regulations, reporters are granted anonymity and are protected to ensure they do not suffer any disadvantage as a result of making a report. This whistleblowing system is widely disseminated among employees through compliance training and on other occasions. For our affiliates in China, we created and started operating a whistleblowing system that is being consigned to a third party, and that enables communicating in Chinese.

Issues reported via the grievance mechanism are regularly passed on to auditors, with the anonymity of the reporter ensured, and also comprehensively reported to the Board of Directors.

Efforts to prevent anti-competitive practices and corruption/bribery

Article 4 of the Code of Conduct stipulates "Fair Business Activities" and requires all executives and employees to ensure proper activities based on the value chain. The Compliance Guidebook requires the establishment and implementation of a system that ensures compliance with the Antimonopoly Act and prohibits bribery and corruption. In addition, it provides instructions on how to respond in the event of detecting any wrongdoing or being involved in wrongdoing, or if asked for a bribe. In FY2018, there were no reports of punitive legal action taken against Mitsui Kinzoku with respect to anti-competitive practices and bribery.

Respect for Human Rights

The human rights policy and the human rights standards

Mitsui Kinzoku Group approaches human rights issues based on our Human Rights Policy. In FY2018, we identified prioritized stakeholders who could potentially be affected in our businesses and major risks through the risk assessment. We define our approach to the major risks as our "Human Rights Standards" in July 2019. This Human Rights Standard serves as a code for our human rights due diligence.

Addressing human rights

Mitsui Kinzoku Group is implementing due diligence based on the Human Rights Standard by giving priority to human rights risks in our businesses and supply chain, as well as to the mining-specific human rights risks. Please see the following pages for more details.

[Supply chain management] Page 44-45

[Mining business] Page 46

Human rights due diligence to the sites of the Group

In FY2018, we conducted the human rights due diligence using a self-check sheet (SAQ) at ten sites among the major sites in Japan and at two model sites overseas. We assessed SAQ results and conducted on-site surveys and hearings.

As a result, we did not find any major risks, including any forced labor or child labor risks. For areas that were found to require improvements, we provided feedback and implemented corrective measures. The due diligence will be newly performed in major sites within Asia during FY2019.

<Main areas that were improved>

- Introducing compliance training for newly-hired employees
- Introducing measures to prevent missed procedures related to overtime work

Human rights training

We are conducting human rights training to increase awareness of our Group's Human Rights Policy and promote the correct understanding of human rights issues. In FY2018, we conducted training within Japan in the rank-based training. With regards to overseas areas, we gave explanations on the human rights due diligence toward the persons responsible for human resources at each site in China. We also conducted human rights training at two sites in Taiwan. In FY2019, we will conduct further educational training at major sites within Asia.

Labor relations

Mitsui Kinzoku Group respects freedom of association and collective bargaining. Mitsui Kinzoku and major affiliates in Japan have a respective labor unions under the Mitsui Mining & Smelting Workers Union. Based on the union shop agreement, all general employees become members of the labor unions. About half of the other consolidated affiliates in Japan have labor unions. Among global consolidated affiliates, 13 affiliates have labor union. A labor-management council and a labor-management round-table conference are regularly held to communicate with workers. In FY2018, no strikes or lockouts lasting more than a week occurred in Mitsui Kinzoku Group.

	Sites in Japan	Overseas	Total
Employees covered by collective bargaining agreements	3,863	4,085	7,948
Total employees	6,143	7,482	13,625
Coverage rate	63%	55%	58%

※ Information on labor unions at several sites is unavailable due to legal requirements.

Mitsui Kinzoku Group Human Rights Standards

Mitsui Kinzoku Group conducts human rights due diligence and approaches human rights issues following internationally recognized guidelines and the ICMM Principles, with particular reference to the Responsible Business Alliance (RBA) Code of Conduct.

Mitsui Kinzoku Group recognizes that there are human rights risks in our businesses and supply chain, particularly mining-specific human rights risks and human rights risks in the mineral supply chain. We identify workers ⁱ of our own sites ⁱⁱ, workers of our business partners including suppliers, and residents of local communities as the prioritized stakeholders who could potentially be affected in our businesses and supply chain. We also identify major risks through risk assessment conducted in relation to labor, health and safety, the environment, and ethics, and define our approach to the major risks as our “Human Rights Standards.”

1) Management System

We establish and maintain a human rights management system.

- The management system includes regular trainings for promoting understanding and raising awareness of the human rights policy and human rights across the entire group, and keeping appropriate records of human rights matters.

2) Freely Chosen Employment

We do not use forced labor.

- Workers retain and manage their own legal documents including passports, other government-issued identification documents, and travel documents, and are not required to hand over the original documents.
- Workers are not required to pay any type of fees or bonds in relation to employment.
- Employment agreements are executed in the native language of workers or in a language that workers can understand, and no unfair changes are made.

3) Prohibition against Child Labor and Protection of Young Workers

We do not use child labor.

We protect the rights of young workers and student workers, and manage them appropriately in accordance with applicable laws and regulations.

- We strictly check the age of workers using documents issued by official organizations. We do not employ workers who have not reached the highest age of either 15 years, the legal minimum age for employment, or the age for completing compulsory education in that country.
- We do not require young workers under the age of 18 to perform work that is likely to jeopardize their health or safety, including night shifts and overtime.

4) Working Hours

With regard to working hours and day off, we comply with applicable local laws and support international guidelines.

5) Wages and Benefits

With regard to wages and benefits, we comply with applicable local laws and support international guidelines.

- We manage the wages paid to workers so that they never fall below the minimum wages.
- With regard to overtime work, we pay workers at legal pay rates greater than regular hourly rates.
- We do not reduce wages illegally or unjustly as a disciplinary measure.

6) Humane Treatment

We prohibit the inhumane treatment, including any type of abuse or harassment.

- We prohibit any type of harassment such as sexual harassment ⁱⁱⁱ, sexual abuse, corporal punishment, mental or physical coercion, and verbal abuse.
- We take appropriate measures against harassers/abusers and against those who make false accusations.

7) Non-Discrimination

We prohibit unlawful discrimination.

- We do not engage in discrimination based on race, color, age, gender, sexual orientation, gender identity and expression, ethnicity or national origin, disability, pregnancy, religion, political affiliation, union membership, covered veteran status, protected genetic information, or marital status in hiring and employment practices such as application for employment, wages, benefits, promotions, rewards, job assignments, discipline, termination and access to training.
- We provide workers with reasonable accommodation for religious practices.
- Except when specified by laws and regulations or to ensure individual safety or workplace safety, workers do not be subjected to pregnancy testing or other medical testing (such as for type B hepatitis or HIV), and the test results do not be used in a discriminatory way.

8) Freedom of Association

With regard to freedom of association and collective bargaining, we comply with applicable local laws and regulations and support global standards.

- We respect the right to form or participate in organizations such as labor unions and worker committees.
- Workers and/or their representatives shall be able to openly communicate and share ideas and concerns with management regarding working conditions and management practices without fear of interference, discrimination, reprisal, intimidation or harassment.

9) Protection of Identity and Non-Retaliation

We maintain a grievance mechanism enabling internal and external stakeholders to raise any concerns they may have.

- We ensure the confidentiality and anonymity of whistleblowers.
- We maintain a process that ensures whistleblowers are able to raise any concerns they may have without fear of retaliation.

10) Suppliers ^{iv}

At each of our sites, we select suppliers in accordance with the Mitsui Kinzoku Group Procurement Policy and conduct supplier due diligence on a continual basis.

11) Local Communities

We respect the human rights, interests, cultures, customs, and values of local communities including indigenous people, affected by our businesses.

ⁱ All personnel working in our facilities or offices, regardless of their employment type

ⁱⁱ All sites including our own mine

ⁱⁱⁱ Giving disadvantage in the working condition of a worker by reason of the worker's responses to verbal or physical conduct of a sexual nature or harming the working environment of the worker by such conducts

^{iv} Including third-party employment agencies

Supply chain management

Responsibility for our supply chain

Mitsui Kinzoku Group operates our business activities together with suppliers and customers globally. Therefore, we have to understand the impact of our Group's business in the whole value chain beyond national borders.

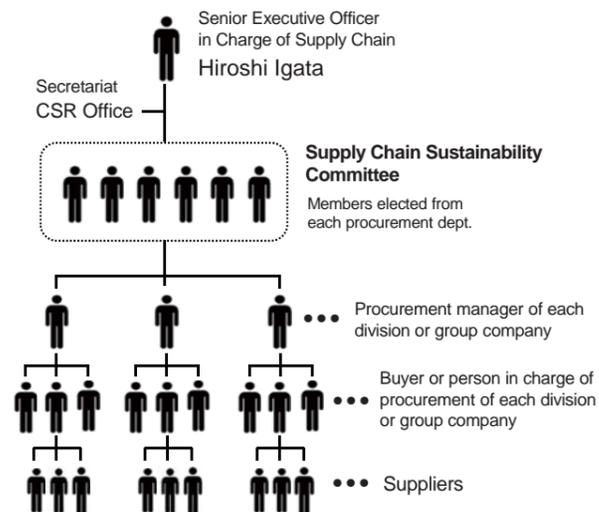
In particular, negative social and environmental impact by our Group's supply chain may pose a risk for the business of Mitsui Kinzoku Group. We will fulfill our responsibilities by implementing initiatives for sustainability in the supply chain according to the requests from our stakeholders including our customers.

The Mitsui Kinzoku Group Procurement Policy

Mitsui Kinzoku Group respects the globally recognized codes and guidance, such as the United Nations Global Compact. We will fulfill our social responsibilities in human rights and labor, health & safety, ethics, and on the environment, based on ensuring legal compliance throughout our procurement activities. Mitsui Kinzoku group's procurement policy has been established as our basic commitment. The policy consists of the basic procurement policy and the Mitsui Kinzoku procurement guidelines that gives specific instructions for executing the basic procurement policy. Detailed items in the guidelines follow the objectives of the RBA* Code of Conduct.

Supply chain management system

The supply chain management system is formulated as follows: The senior executive officer in charge of supply chain is appointed as chief person responsible for our procurement. The Supply Chain Committee of the Group has organized under the chief person, which consists of the representatives of each department.



Supply chain structure

The structure of supply chain can be specified as follows:

- Mineral extraction from mines
- Procurement and smelting of mine-derived materials
- Procurement of waste-derived recycle materials from recycling agents and smelting of procured materials
- Procurement and processing of materials and parts

* In FY2018, no major change was made in the structure.

Supplier due diligence

In order to respond to risks in our supply chain, Mitsui Kinzoku Group promotes supplier due diligence by requesting suppliers to implement our procurement policy and assessing their implementation status.

Medium-and long-term target (by FY2020)

Rate of implementation of a Self-Assessment Questionnaire (SAQ) to the critical suppliers 100%

[Performance in FY2018]

- Formulated the procurement policy (The basic procurement policy and the procurement guidelines)
- Established the supply chain management system
- Informed the persons affiliated with procurement within our Group about the procurement policy: more than 300 participants
- Selected critical suppliers at each site
- Explained/informed about the procurement policy: 4,570 suppliers
- Received the signed agreement form to the procurement policy from the critical suppliers at each site: 588 suppliers
- Held briefing sessions for the critical suppliers and obtained their agreement with the procurement policy: 134 suppliers
- Conducted the trial SAQ to critical suppliers: 76 suppliers
- Conducted interviews with the selected C-ranked suppliers (evaluated high risk): 2 suppliers

[Plan for FY2019]

- Conduct SAQ to all of the critical suppliers
- Assess SAQ and feedback
- Conduct interviews with C-ranked suppliers and take necessary corrective actions

※ RBA=The Responsible Business Alliance

In order to execute our procurement policy, Mitsui Kinzoku Group informs the persons affiliated with procurement operations within our Group as well as our suppliers about the procurement policy and requests to perform it in their business.

We also identified suppliers at each site who would have a particular major impact on our Group's business. These suppliers were identified from the following perspectives: those who have the top 80% of our procurement amount, those who supply irreplaceable products or strategic parts, and those who manufacture their products at areas with high CSR risks. Toward these critical suppliers identified at each site, we ask to agree with our procurement policy, either through submission of a signed agreement form or at a briefing session.

We will conduct SAQs on due diligence regarding human rights (see page 41) to our Group and SAQs for suppliers in order to check and evaluate the status of executing our procurement policy. In FY2018, we created a supplier SAQ in accordance with the objectives of the RBA Code of Conduct (human rights and labor,

health & safety, environment, and ethics), and conducted a trial by asking 76 suppliers to participate in this questionnaire.

In particular, among the suppliers with a C-rank (high risk), we selected two companies which could have a major impact on our business. We visited and conducted interviews with these suppliers on the actual situation. We explained the objectives of the SAQ in detail and requested improvements of deducted items. After re-evaluation, the two suppliers are B-ranked (medium risk) or better, no critical risks were discovered.



Suppliers meeting in China (Mitsui Kinzoku ACT Corporation)

Responsible minerals sourcing

Mitsui Kinzoku Group promotes responsible minerals sourcing. As a company in the minerals supply chain, we are aware of the possibility that risks in the supply chain related to minerals sourcing could affect the business of our Group.

With regards to addressing the issue of conflict minerals, we support the initiatives of the industry's standards and have defined the "Mitsui Kinzoku Group Conflict Minerals Policy". The policy prohibits the use of conflict minerals (gold, tin, tantalum, and tungsten) that are sourced from the Democratic Republic of the Congo (DRC) and the adjoining 9 countries and that benefit armed groups who violate human rights and use violence. We conduct due diligence and respond to requirements from customers in accordance with the Dodd-Frank Act of the United States. Furthermore, along with the heightened global interest in responsible minerals procurement, relevant risks are expanding. The scope of target risks is expanding to environment and human rights issue, target areas are widening to CAHRAs* and other minerals such as cobalt and silver are included as target minerals. Mitsui Kinzoku Group is addressing such emerging demands by working in close partnership with industry groups and other organizations.

Especially, our smelting businesses of tantalum, gold, and silver have been certificated by third party as a conformant smelter every year.

With regards to the tantalum smelting business, based on the RMAP* by the RMI*, we have been receiving third party audits every year since 2011 and have been acquiring RMAP Conformant status. We are also a member of ITSCI*, a program for achieving due diligence in the tantalum mineral supply chain and engaging with our suppliers.

In the smelting business of gold or silver, we defined the "Gold and Silver Supply Chain Policy" and are performing initiatives in accordance with the LBMA*'s guidance that is based on the OECD Guidance. The risk investigation and assessment are conducted to the target suppliers selected according to the LBMA's guidance. We check the origin of mineral sourcing and the transportation route every year. An independent third party certifies that all of the processed gold and silver in our plants have been sourced from areas that are not associated in any way with the conflict zones. The results of this audit are reported to the LBMA. The report of guarantee issued by the auditing company, and the report submitted to LBMA, are disclosed on our website. For business activities other than smelting, we participate in the Responsible minerals Trade Working Group by JEITA (Japan Electronics and Information Technology Industries Association), and cooperate and engage with downstream companies in the supply chain, as well as global initiatives such as RMI through JEITA.

* CAHRAs: Conflict Affected and High-Risk Areas
 * RMI: Responsible Minerals Initiative
 * RMAP: Responsible Minerals Assurance Process
 * ITSCI: International Tin Supply Chain Initiative
 * LBMA: The London Bullion Market Association

Mining business

Mitsui Group first started mining operations in the Kamioka area in 1874, and ever since, Mitsui Kinzoku has been in the mining business for more than 140 years. We currently have our own developed mines in operation in Peru: the Huanzala Mine and the Pallca Mine. In Japan, many of the mines have already suspended or terminated operations, and we are continuing to manage these suspended or closed mines.

Relationships with the local communities around the mines

We recognize that the mining business has a particularly large impact on the surrounding environment and the local communities. As such, based on the mining-specific risks as recognized by such institutions as the ICMM Principles and SASB, we strive in our efforts to establish a relationship of co-existence and mutual prosperity with the local communities, and to be respectful of human rights. Since FY2017, we have been conducting annual surveys on human rights and environment at the mines for which we hold an investment ratio of more than 50%, using a self-assessment check sheet for sites engaged in mining activities.

We also place importance on our engagement with the local communities around the mines, and are continuing to address the needs of the communities, such as by developing infrastructure, providing educational aid, and offering support for agriculture and livestock. In FY2018, the town of Huallanca near the Huanzala Mine was affected by disaster from torrential rain, and to help in this situation, we dispatched construction workers and heavy equipment to the local government, and helped build a temporary road in order to recover the transportation network for this town.

Migration and resettlement

We manage human rights risks, such as the relocation of indigenous people and local residents, for the mines in which our investment ratio exceeds 50%. None of these mines are located and operated on land owned by indigenous people or in neighboring areas. No local residents were forced to relocate to another area due to the development of these mines.

Artisanal and Small-scale Mining (ASM)

There are no ASM activities in the operation areas of the Huanzala Mine, Pallca Mine, and the Akeshi Mine. Although we found ASM activities in a neighborhood located outside of the Huanzala Mine operating area, we confirmed that the discovered ASM activities do not pose a risk to our business.

Grievance mechanism

Compania Minera Santa Luisa that operates the Huanzala Mine and the Pallca Mine holds meetings with the local government and the community organizations on an as-needed basis. These meetings are held to listen to complaints and opinions from the local community and to resolve the raised issues. There is also a grievance mechanism system to address conflicts between the company and local residents that could affect the operation of the mines. In the event of such a conflict, a discussion with local residents is held with the attendance of a third party, such as the Ministry of Energy and Mines of Peru. No such conflicts occurred in FY2018. Details of the group-wide grievance mechanism are described on page 40.

Appropriate management of water

The Huanzala Mine and Pallca Mine manage the drainage of water in keeping with related regulations. The Huanzala Mine, in particular, conducts thorough management of acidic water, and in 1997, it became the first in Peru to acquire the environmental optimization plan known as PAMA (Programas de Adecuación y Manejo Ambiental), in addition to acquiring ISO 14001 certification in 2008. Acidic water generated in the mine is processed with a neutralization treatment, and a 24-hour monitoring system is put into place, thus consistently making sure that the water being released into the river has a pH level below the required environmental standard value. Furthermore, the mine voluntarily conducts analysis of obtained water samples at a frequency of every three days, in order to check the concentration of heavy metals within the drained water. And once every month, in accordance with related laws, water samples are collected from 14 locations around the Huanzala Mine to check the water quality. The flotation plant at the Huanzala Mine is also advancing efforts to recycle the use of water and striving to reduce the amount of water being used.



The water quality monitoring around the Huanzala Mine

Initiatives to conserve biodiversity

The areas surrounding the Huanzala Mine and Pallca Mine, which are situated at an elevation of over 3,000 meters, are home to flora and fauna that are unique to that particular environment. Both mines practice underground mining, so they have limited impact on the surface above the grounds. However, in order to minimize the effects of mine development and operations, we make sure to process the acidic water properly, and also conduct environmental baseline surveys and bio habitat surveys. From 2019, due to the construction work to expand the tailings dam, we conduct the transplant of the wetland vegetation group (bofedal) at the Huanzala



The transplantation work of plants (the Huanzala Mine)

Mine, which is being performed in partnership with experts and affiliated government agencies. In addition, since 2018, we have been distributing pamphlets to the local residents on animal and plant protection, thereby providing information on initiatives being implemented toward the preservation of biodiversity.

Appropriate management of the tailings dam

The Huanzala Mine positioned the management of the tailings dam as being one of the major risks in the mining business. As such, the tailings dam was designed, and is being managed and is undergoing stability evaluations, based on the technological guidelines and manual defined by the Ministry of Energy and Mines in Peru. As a result of the stability evaluation, it has been confirmed that the site has no problems and will remain stable, even if the area is hit by a major earthquake of a level that only happens once every 500 years. The situation is constantly being monitored, such as by monitoring the seepage level in the levees and water quality every month, in addition to having external specialists check the seepage level in the levees and perform tilt measurement every three months, in order to address the risks of leaking waste. The amount of tailings for FY2018 was 454,588 tons*.

In Japan, after there were leakage incidents at a number of tailings dams caused by the Great East Japan Earthquake in 2011, the Ministry of Economy, Trade and Industry revised in 2012 the "Technical Policies of the ministerial decree defining technical standards of mining facilities". And from FY2017 to FY2018, we conducted a stability evaluation of the tailings dams owned by our Group, regardless of whether or not this applies to the new guidelines. Of the 12 disposal sites for which the evaluations were completed, it was concluded that the risks of major collapses or downstream damages are extremely low, even in the event of a massive-scale earthquake. We have another tailings dam currently under evaluation, which is scheduled to complete by the end of FY2019.

* Ores mined at the Pallca Mine are being processed at flotation plant at the Huanzala Mine, and therefore, the amount of tailings at the Huanzala Mine includes the amount originating from the Pallca Mine.

Closure plan

In the mining business, we have drawn up closure plans of mines subject to applicable laws, and accumulate expenses for closure from the development stage to minimize the impact and risk after closure.

Mine	Closure plan	Amount of accumulated expenses (FY2018)
Huanzala Mine (Peru)	Planned	7.72 million US dollars
Pallca Mine (Peru)	Planned	2.1 million US dollars
Akeshi (Kagoshima, Japan)	Not planned	243.4 million yen

* Pan Pacific Copper Co., Ltd., which is an affiliate company based on the equity method (capital ratio of 32.2%), is operating the Caserones Copper Mine in Chile through SCM Minera Lumina Copper. The scope of disclosure for this report is for mines of which our capital ratio is 50% or more.

Management of suspended and closed mines

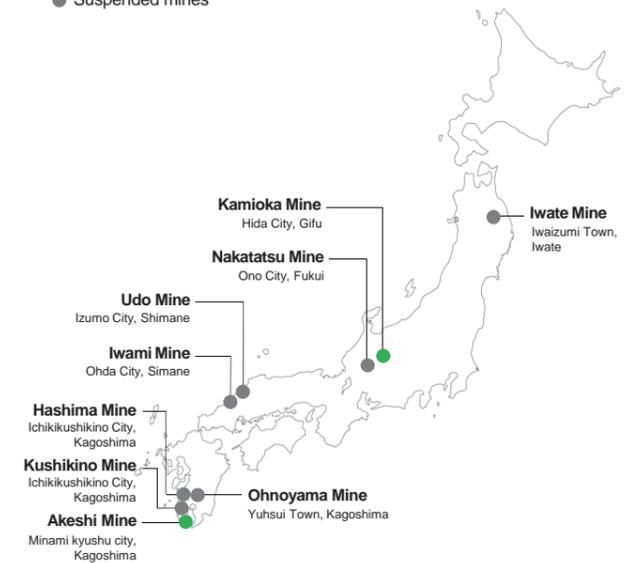
Even for mines that have been suspended or closed, wastewater processing and disposal management continue to be performed in compliance with the Mine Safety Act and related environmental laws. We are managing the maintenance of the tailings dam and the former mine mouth, conducting detoxifying treatment of acidic mine wastewater that includes heavy metals, and performing the monitoring of water quality. We also visit and check the area, as well as perform environmental audits, on a regular basis in order to make sure that the mines are being properly managed.



New acidic water treatment equipment has started operations. (Udo Mine)

Mines that are in operation and suspended in Japan

- Mines in operation (including those partially operating)
- Suspended mines



Progress of Material Issues

List of material issues with the commitments, the performance in fiscal 2018 and the future plan.

[Assessment standards]

△: Not achieved as planned

○: Achieved as planned

◎: Achieved more than planned

Materiality	Policies	Related SDGs	Ideal Goals [Commitment]	Plan for FY2018	Performance in FY2018 and self assessment	Implementation plan for FY2019
[Organizational Governance] 01 Strengthen of corporate governance	Corporate Governance Guidelines		Implementation of the Corporate Governance Code and enhancement of deliberations by the Board of Directors	<ul style="list-style-type: none"> Discuss and implement the revised Corporate Governance Code. Disclose the implementation status to public. 	<ul style="list-style-type: none"> Effectiveness assessment of the Board of Directors by a 3rd-party organization. Addressed changes from the revised Corporate Governance Code. Explained the lack of female directors in the Corporate Governance Report. 	○ <ul style="list-style-type: none"> Review the implementation of the revised Corporate Governance Code. Conduct follow-up on the results of the evaluation on the effectiveness of the Board of Directors. Implement the evaluation on the effectiveness of the Board of Directors.
02 Full enforcement of compliance	Code of Conduct		Spreading of compliance awareness group-wide	<ul style="list-style-type: none"> Take measures to inform all employees of the Compliance Guidebook through legal audits and by providing relevant training at major sites in Japan and abroad. Provide compliance training individually for executives (directors and auditors). 	<ul style="list-style-type: none"> (Overseas) Conducted training for local employees in India and Taiwan. (Japan) Conducted compliance seminars at the regular rank-based training programs, etc. Conducted according to plan. 	○ <ul style="list-style-type: none"> Conduct compliance seminars at overseas sites. Disseminate information about the Compliance Guidebook through legal audits and training, etc. Conduct compliance training for the management executives, individually to Directors and Auditors. Conduct compliance awareness survey.
03 Information management	Code of Conduct		Establishment of a management system for confidential information at sites beside priority sites	<ul style="list-style-type: none"> Make a review of confidential information at affiliated sites. Discuss what method and system would be most suitable for each site. Inform all employees of the information management regulations and their compliance ensured. Hold seminars on information management. 	<ul style="list-style-type: none"> Conducted according to plan. Conducted information management seminars at affiliated sites. 	○ <ul style="list-style-type: none"> Make a review of confidential information at affiliated sites. Discuss what method and system would be most suitable for each site. Inform all employees of the information management regulations and their compliance ensured. Organize and implement rules related to ICT governance
04 Spread CSR throughout the Group	Basic CSR Policy		Establishment of the CSR promotion system and each site's taking the initiative	<ul style="list-style-type: none"> The second caravan in Japan The CSR caravan at major sites in Asia Review materiality issues in line with the 2019 Medium-term Plan. 	<ul style="list-style-type: none"> Conducted the CSR Caravan at 3 sites in Japan and 2 sites in Taiwan. Provided CSR training and SDGs training to the Group's executives. Conducted the materiality assessment again. 	○ <ul style="list-style-type: none"> Conduct the CSR Caravan at major sites in Asia
[Human rights] 05 Human rights due diligence 06 Prohibition of child labor /forced labor	Human Rights Policy Human Rights Policy		Understanding of the actual situation of the Group's sites and addressing human rights risks, through human rights due diligence	<ul style="list-style-type: none"> Continue training on human rights (including prohibition of child labor/forced labor) and also conduct it at sites in Asia. Conduct human rights DD at major sites in Japan and overseas model sites. Review the results from the survey conducted in 2017 at mining sites in which the company has a majority interest, discuss corrective measures, and continue the survey. 	<ul style="list-style-type: none"> Continued human rights training at the regular rank-based training programs (approximately 250 participants) and conducted human rights training at the sites in Taiwan (approximately 60 participants). Conducted human rights due diligence at 10 major sites in Japan and 2 model overseas sites. (Details are listed on P.46) 	○ <ul style="list-style-type: none"> Continue training on human rights (including prohibition of child labor/forced labor) and also conduct it at sites in Asia. Conduct human rights DD at major sites in Japan and overseas model sites. Review the results from the survey conducted in 2018 at mining sites in which the company has a majority interest, discuss corrective measures and continue the survey.
[Labor Practices] 07 Diversity	Code of Conduct		Improvement of the work environment so that all employees can play an active role	<ul style="list-style-type: none"> Conduct PR activities to employ women. Continue to hold diversity training and promote diversity-related information. Make the general officer employees eligible for the career management training. Discuss introduction of affiliated systems or making more employees eligible for them(work-at-home system, retirement reinstatement system, leave system and job transfer suspension system associated with the job transfer of a spouse, etc.) Continue to develop internal career consultants Implement measures to reduce overtime work. 	<ul style="list-style-type: none"> Provided the facilities tours for female students. Provided training at the regular rank-based training programs at the head office and at 2 sites in Japan. Continued promoting information through the company newsletters, intranet, etc. Conducted according to plan(Held training in May 2019). For the work style reform project, submitted a report to the management on the introduction of affiliated systems. 2 employees were certified as career consultants. Implemented work hour CA in the committee, performed by the labor and management at each site. 	○ <ul style="list-style-type: none"> Continue providing training and promoting information related to diversity issues. Continue career management training. Give shape to details in the report on the work style reform project. Conduct attitude survey toward management-level employees and female employees, and consider countermeasures. Enhance measures to give support toward career development, with a focus on the development of career consultants. Continuously implement work hour CA in the committee, performed by the labor and management at each site.
08 Employee engagement	Basic Policy for Human Resources Development	(Same as 07)	Creation of workplaces where employees feel fulfilled in their work	<ul style="list-style-type: none"> Discuss relevant measures and systems, along with efforts in promoting diversity. 	<ul style="list-style-type: none"> For the work style reform project, deliberated on measures to improve employee engagement and submitted a report to the management. 	○ <ul style="list-style-type: none"> Conduct the 2nd employee satisfaction survey.
09 Occupational health and safety	Basic Policy on Health and Safety		Ensuring fundamental safety at all sites and training employee to improve compliance with rules and increase their risk sensitivity	<ul style="list-style-type: none"> Continuously implement a plan that takes into account the occurrences of occupational accidents in the previous fiscal year. (Start training programs on electric tools, specified chemical substances, and other sources of accidents.) 	<ul style="list-style-type: none"> Number of occupational accidents: 37 in Japan, 22 overseas. Conducted training (rank-based education, legal seminars, simulation-based safety training, RA training, human error training, training program on how to identify useful "work points"). Conducted measures to prevent the reoccurrence of disasters by training on the safe use of disk grinders, high-pressure washing equipment, etc. Horizontal deployment of lessons learned from disasters at other companies: Inspection and repair of block fences, in response to the accident involving the collapsed block fence from the earthquake in the northern area of Osaka. 	△ <ul style="list-style-type: none"> Deploy the implementation of the lockout system. Promote the horizontal deployment of lessons learned from disasters at other companies. Provide trainings and thoroughly implement measures to prevent the reoccurrence of high-risk disasters.

Materiality	Policies	Related SDGs	Ideal Goals [Commitment]	Plan for FY2018	Performance in FY2018 and self assessment	Implementation plan for FY2019
10 Health management	Basic Policy on Health and Safety	 	Improvement of the work environment based on the stress check survey	<ul style="list-style-type: none"> Centrally control information on employees' health. Implement measures to improve the work environment based on results of group analysis of stress check survey results. 	<ul style="list-style-type: none"> Selected in the category of White 500 by the 2019 Certified Health and Productivity Management Organization Recognition Program (Mitsui Kinzoku non-consolidated). Deployed and implemented a unified information management structure at major sites in Japan. Shared the group-wide analysis with the Occupational Health and Safety Committee and the board. 	<ul style="list-style-type: none"> Centrally Control and utilize information on employees' health. Prevent poor mental health by the utilization of stress checks.
11 Develop human resources	Basic Policy for Human Resources Development	 	Making full use of the abilities of each employee	<ul style="list-style-type: none"> Include the mindfulness training in training for new employees. Improve training programs regarding advanced technology, work style reform-related issues, business skills, etc.. Provide training for selecting candidates for executive positions to section and department managers. Include national staff over general officers in the target of rank-based training. 	<ul style="list-style-type: none"> Conducted according to plan (April, 2018). Hosted seminars related to advanced technologies such as machine learning and deep learning. Newly implemented training on efficient ways of work. Increased the number of trainings related to improving business skills, etc. Conducted according to plan (14 days) Conducted according to plan 	<ul style="list-style-type: none"> Continue strengthening efforts in the training of new employees (volunteer training, overseas training) Further improve training programs regarding advanced technology, work style reform-related issues, business skills, etc. Continue and improve education toward management candidates. Strengthen development of global human resources (promote participation of locally hired staff in the rank-based training).
[Environment]						
12 Reduce GHG emissions	Basic Environmental Policy	 	Setting Group-level targets and focusing strategic efforts	<ul style="list-style-type: none"> Establish a management system for reducing GHG emissions of the entire Group. Identify the Scope 3 GHG emissions. 	<ul style="list-style-type: none"> Developed the Environmental Action Plan and disclosed the amount of GHG emissions. Responded to the CDP questionnaire (Score D). 	<ul style="list-style-type: none"> Establish a management system for reducing GHG emissions of the entire Group. Identify the Scope 3 GHG emissions.
13 Creation of renewable energy	Basic Environmental Policy	  	Stable generation of renewable energy at the existing facilities and completion of Kamioka hydroelectric power facilities	<ul style="list-style-type: none"> Determine the status of operations using renewable energy. Determine the progress of the refurbishment of Kamioka Hydroelectric Power Station's facilities. 	<ul style="list-style-type: none"> Operations using renewable energy projects progressed steadily. Completed renovation of the Kamioka hydropower generation equipment and began generating power. Conducted survey on CO2 credit issuance. 	<ul style="list-style-type: none"> Determine the status of operations using renewable energy. Determine the progress of the refurbishment of Kamioka Hydroelectric Power Station's facilities. Study the issuance of CO2 credits.
14 Sustainable water use	Basic Environmental Policy		Setting and achieving a target amount of water intake	<ul style="list-style-type: none"> Monitor the total amount of water intake, the amount of recycled water, and the amount of reused water by water source. Set intensity targets for water. 	<ul style="list-style-type: none"> Determined the amount of recycled and reused water at domestic and overseas sites. 	<ul style="list-style-type: none"> Monitor the total amount of water intake, the amount of recycled water, and the amount of reused water by water source. Set intensity targets for water.
15 Wastewater management	Basic Environmental Policy	 	Setting and achieving a target water quality	<ul style="list-style-type: none"> Monitor the amount of wastewater and water quality by destination of discharged wastewater and manage the targets. Encourage acquisition of Pollution Control Manager Certification and provide education for qualified Pollution Control Managers to maintain and improve their capabilities. Place emphasis on wastewater management in environmental audits. 	<ul style="list-style-type: none"> Assessed the amount of wastewater and water quality by destination of discharged wastewater. Encouraged acquisition of the Pollution Control Manager Certification and provided education for qualified Pollution Control Managers to maintain and improve their capabilities. Conducted checks on the situation of compliance with laws and regulations. 	<ul style="list-style-type: none"> Monitor the amount of wastewater and water quality by destination of discharged wastewater and manage targets. Encourage acquisition of Pollution Control Manager Certification and improvement of skills of qualified employees. Conduct key environmental audits for wastewater management
16 Sustainable use of raw materials/resources	Basic Environmental Policy		Striving for zero emissions and development of products with reduced use of resources	<ul style="list-style-type: none"> Set a target ratio of recycled raw materials used. 	<ul style="list-style-type: none"> Determined the ratio of recycled raw materials used. 	<ul style="list-style-type: none"> Set a target ratio of recycled raw materials used.
17 Recycling and management of waste	Basic Environmental Policy		Striving for resource circulation in the business activities including recycle-smelting	<ul style="list-style-type: none"> Set a target for reduction in generated waste. 	<ul style="list-style-type: none"> Determined the amount of generated waste, established targeted values in the Environmental Action Plan. 	<ul style="list-style-type: none"> Set an individual target for reduction in generated waste.
18 Biodiversity conservation	Basic Environmental Policy	 	Implementation of an action plan for biodiversity	<ul style="list-style-type: none"> Develop a specific action plan for efforts. 	<ul style="list-style-type: none"> Started training for employees in charge of biodiversity conservation. Conducted studies and protection of rare species in the development areas (Huanzala Mine, Peru). 	<ul style="list-style-type: none"> Develop a specific action plan for efforts. Continue studies and protection of rare species in the development areas.
19 Manage closed mines	Basic Environmental Policy	   	(Japan) Development and implementation of a management plan for suspended or closed mines (overseas) Works before mines closure	<ul style="list-style-type: none"> (Japan) Develop and implement a plan for maintenance and management of suspended mines. Update aging pit wastewater treatment facilities and resume operations. Assess the earthquake resistance of tailings dams (two-year plan). Conduct testing before introducing new pit wastewater treatment technology. (overseas) Conduct construction works before closing a mine along the mine closing plan. 	<ul style="list-style-type: none"> (Japan) Conducted according to plan. Conducted according to plan. Conducted anti-earthquake evaluation of the tailings dams managed within the Group. (overseas) Conducted according to plan. 	<ul style="list-style-type: none"> (Japan) Develop and implement a plan for maintenance and management of suspended mines. Develop and implement plans for construction work at each site to strengthen facilities against torrential rain. Conduct follow-up studies on closed mines (sites for where the studies were not performed in 2018). Conduct voluntary studies at 1 site on the stability analysis of the tailings dam. (overseas) Implement works before closing a mine along the mine closing plan.

Materiality	Policies	Related SDGs	Ideal Goals [Commitment]	Plan for FY2018	Performance in FY2018 and self assessment	Implementation plan for FY2019
20 Products contributing to the environment	Basic Environmental Policy	 (And other goals)	Development of standards for products contributing to the environment and setting of targets	<ul style="list-style-type: none"> Establish an organization to implement programs for products contributing to the environment. Design internal certification criteria. Identify candidate products contributing to environmental protection among existing products. 	<ul style="list-style-type: none"> Selected person responsible for execution. Not conducted. Conducted according to plan. 	<ul style="list-style-type: none"> Establish an organization to implement programs for products contributing to the environment. Design internal certification.
[Fair Operating Practices]						
21 Anti-corruption and anti-bribery	Code of Conduct		Anti-corruption and anti-bribery awareness	<ul style="list-style-type: none"> Prepare and use a written agreement on prohibition of corruption and bribery for sites in China and Asia. Assess a sample of a basic transaction agreement from CSR perspectives. 	<ul style="list-style-type: none"> Deployed and followed-up on the anti-bribery agreement at each site in China and Thailand. Conducted according to plan. 	<ul style="list-style-type: none"> Prepare and use a written agreement on prohibition of corruption and bribery for sites in Taiwan and other Asian countries. Assess a sample of a basic transaction from CSR perspectives. Develop a manual on anti-bribery
22 Prohibit of anti-competitive practices	Code of Conduct		Compliance with the Antimonopoly Act, the Subcontract Act, and laws related to anti-competitive practices	<ul style="list-style-type: none"> Conduct legal audit and feedback at all sites of the Group. Provide training related to fair operating practices. 	<ul style="list-style-type: none"> Conducted approving authority audit at 7 affiliates in Japan. Conducted legal affairs audit at 2 overseas sites. (Including legal auditing follow-ups at the implemented sites) Conducted anti-trust law seminars for the Group. Conducted training related to the Subcontract Act at 1 site in Japan. 	<ul style="list-style-type: none"> Continue legal audit and feedback at all sites of the Group. Continue training related to fair operating practices
23 CSR procurement	Procurement Policy Conflict Minerals Policy		Fulfill responsibility to reduce risks in supply chains	<ul style="list-style-type: none"> Share the Procurement Policy throughout the Group and with suppliers. Establish Medium- and long-term goals for supply chain management. 	(Details are listed on P.44-45)	(Details are listed on P.44-45)
24 Intellectual property	President's policy regarding intellectual property		Spreading awareness and maximum utilization of intellectual property group-wide	<ul style="list-style-type: none"> Support surveys on new projects. Secure intellectual property rights and use intellectual property. Provide education on intellectual property Establish an intellectual property infrastructure (improvement of the specifications). 	<ul style="list-style-type: none"> Supported surveys at laboratories. Educational activities related to intellectual property. Conducted training regarding intellectual property as part of BS training. Education on how to use the new system and correction of defects. 	<ul style="list-style-type: none"> Support surveys on new projects. Secure intellectual property rights and use intellectual property. Provide education on intellectual property and establish an intellectual property infrastructure (improvement of the specifications).
[Consumer Issues]						
25 Co-creation in markets for new engineered materials	Basic CSR Policy		Change to a company that, in cooperation with stakeholders, creates a succession of new products utilizing our "material intelligence"	Strengthen research and development system, increase activities to explore market opportunities, and collaborate with entities outside the company.	(Details are listed on P.20-23)	(Details are listed on P.20-23)
26 Materials stewardship (recycle-smelting)	Basic CSR Policy		Utilization of the Mitsui Kinzoku's smelters network and increase of the collection of recycle-materials, processing capacity, and the number of processing metals	Increase processing and extracting of valuable metals (base metals, precious metals and rare metals) by strengthening smelter network.	(Details are listed on P.24-25)	(Details are listed on P.24-25)
27 Supply products for sustainable mobility	Basic CSR Policy		Establishment of the ACT brand by ensuring "Safety," "Comfort" and "Amazing Performance" using our manufacturing intelligence	Quality improvement for our customers	(Details are listed on P.26-27)	(Details are listed on P.26-27)
[Community involvement]						
28 Contribution to local communities	Code of Conduct		Local communities understand and trust our business activities through social contribution activities	Implement the three-year action plan.	<ul style="list-style-type: none"> Identified efforts in social contribution made by each site and each affiliate and encouraged sites that are not engaged in social contribution to promote efforts. Shared information through the company newsletter on examples of social contribution activities conducted at overseas sites. 	<ul style="list-style-type: none"> Social contribution activities take root in the Group. Promoting activities according to plan at each site.

11-Year Summary of Selected Financial Data

Mitsui Mining and Smelting Company, Limited and Consolidated Subsidiaries
Years ended March 31

Millions of yen

		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Consolidated Financial Highlights												
Net sales		427,191	392,364	446,487	431,058	417,219	441,046	473,274	450,553	436,330	519,215	497,701
Operating income		(27,031)	27,881	30,208	20,903	16,557	25,743	31,835	11,137	38,461	49,529	18,222
Ordinary income		(30,310)	25,639	34,010	19,168	16,194	13,656	21,096	(11,284)	31,047	11,239	17,755
Profit attributable to owners of parent		(67,256)	13,899	21,160	11,531	9,910	3,662	17,237	(20,926)	18,674	(708)	4,691
Capital expenditures		32,424	15,186	21,829	29,226	22,601	27,160	28,906	28,446	37,718	40,509	36,119
Depreciation		32,390	26,119	22,707	22,781	23,952	24,178	25,146	25,066	24,414	26,634	27,964
Research and Development expenditures		8,011	4,941	4,623	4,967	5,867	5,795	6,265	6,575	7,163	8,015	9,523
Cash flows from operating activities		30,038	19,610	22,545	30,992	38,058	38,003	37,245	50,397	24,218	52,436	40,696
Cash flows from investing activities		(36,922)	(17,823)	(26,286)	(31,039)	(47,208)	(72,128)	(26,418)	(26,395)	(38,300)	(40,376)	(44,843)
Free cash flows		(6,884)	1,787	(3,741)	(47)	(9,150)	(34,125)	10,827	24,002	(14,082)	12,060	(4,147)
Total assets		410,258	416,541	411,027	413,106	438,072	503,825	538,646	484,800	518,981	518,705	523,315
Net assets		104,631	121,300	134,452	140,175	155,049	169,867	207,106	179,566	184,421	178,652	179,673
Shareholders' equity		107,843	121,375	140,817	148,840	154,397	156,280	170,994	146,469	161,713	157,271	159,207
Interest-bearing debt		202,467	191,514	171,459	169,263	180,372	218,500	210,390	191,733	207,421	208,418	216,878
Per share of common stock												
EPS (Earnings per share) ※	Yen	(1,176.60)	243.20	370.25	201.78	173.51	64.12	301.81	(366.41)	326.98	(12.40)	82.15
BPS (Net assets per share) ※	Yen	1,647.26	1,948.20	2,203.82	2,306.12	2,565.60	2,816.71	3,449.10	2,968.55	3,046.41	2,945.20	2,977.84
Cash dividends per share ※	Yen	0	30	60	30	30	40	60	60	70	70	70
Dividend payout ratio	%	-	12.3	16.2	14.9	17.3	62.4	19.9	-	21.4	-	85.2
DOE (Dividend on equity ratio)	%	-	1.5	2.6	1.2	1.1	1.5	2.1	2.2	2.6	2.5	2.5
Financial Ratios												
ROE (Return on equity)	%	(48.2)	13.5	17.8	9.0	7.1	2.4	9.6	(11.4)	10.9	(0.4)	2.8
ROA (Return on assets)	%	(6.8)	6.2	8.2	4.7	3.8	2.9	4.0	(2.2)	6.2	2.2	3.4
Net D/E ratio		1.59	1.34	1.17	1.15	1.13	1.26	0.98	1.03	1.10	1.11	1.15
Equity ratio	%	22.9	26.7	30.6	31.9	33.5	31.9	36.6	35.0	33.5	32.4	32.5

※ The company conducted a share consolidation to change its share unit from 10 shares to 1 share on October 1, 2017.
Past figures have been calculated assuming the share consolidation took place in 2009.

Financial Review

The forward-looking statements contained in this section represent the Company's judgment as of March 31, 2019.

Overview of fiscal 2018

On a consolidated basis, the Company's net sales during fiscal 2018, ended March 31, 2019, decreased ¥21.5 billion (4.1%) from the previous fiscal year, to ¥497.7 billion. Operating income decreased ¥31.3 billion (63.2%) from the previous fiscal year, to ¥18.2 billion. This was mainly attributable to recording of a loss on valuation of inventories in line with fluctuations of nonferrous metal prices and the foreign exchange market (hereinafter "inventory factors") in addition to lower sales volumes of the principal products of the Engineered Materials segment, among other factors.

Ordinary income increased by ¥6.5 billion (58.0%) year on year to ¥17.7 billion despite the recording of investment losses on equity method amounting to ¥2.1 billion, primarily because there is no longer an impact from the impairment loss for the Caserones copper mine recorded for the previous fiscal year.

In extraordinary items, the Group recorded extraordinary losses such as a loss on disposal of property, plant and equipment of ¥1.7 billion. After accounting for taxation expenses and profit attributable to non-controlling interests, the profit attributable to owners of parent improved by ¥5.3 billion to ¥4.6 billion.

Financial position

Total assets increased ¥4.6 billion from the previous fiscal year-end to ¥523.3 billion. The change was mainly attributable to increases of ¥12.6 billion in other current assets and ¥6.4 billion in property, plant and equipment, partially offset by decreases of ¥9.2 billion in notes and accounts receivable and ¥1.8 billion in inventories.

Total liabilities increased ¥3.5 billion from the previous fiscal year-end to ¥343.6 billion. This change was mainly attributable to increases of ¥8.4 billion in short- and long-term borrowings, straight bonds and commercial paper, and ¥2.6 billion in debt related to capital investment and procurement debt, despite decreases of ¥5.2 billion in derivative liabilities and ¥3.8 billion in notes and accounts payable, among others.

Total net assets increased ¥1.0 billion from the previous fiscal year-end, to ¥179.6 billion. This increase mainly reflected the recording of ¥4.6 billion in profit attributable to owners of parent, ¥1.3 billion in retained earnings associated with the change in fiscal year-end of a consolidated subsidiary, ¥2.7 billion in deferred gains on hedges, net of tax, ¥3.9 billion in dividends of surplus, ¥2.0 billion in foreign currency translation adjustments, and ¥0.9 billion in net unrealized losses on securities, net of tax.

As a result, the shareholders' equity ratio increased 0.1 of a percentage point from the previous fiscal year-end, to 32.5%.

Cash flows

Net cash provided by operating activities was ¥40.6 billion, a decrease of ¥11.7 billion from the previous fiscal year. This was primarily attributable to cash provided of ¥15.1 billion in profit before income taxes, ¥27.9 billion in depreciation and amortization, and ¥7.7 billion in decrease in notes and accounts receivable. This was partially offset by ¥15.2 billion in income taxes paid.

Net cash used in investing activities amounted to ¥44.8 billion, an increase of ¥4.4 billion from the previous fiscal year. Expenditures mainly consisted of ¥35.2 billion for the acquisition of property, plant and equipment, and other assets and ¥6.6 billion for increase in short-term loans receivable.

Net cash provided by financing activities totaled ¥2.8 billion, a change of ¥6.9 billion from net cash used in the previous fiscal year. This change was mainly attributable to a ¥8.6 billion increase in short- and long-term borrowings, straight bonds and commercial paper, and a ¥3.9 billion payment for cash dividends.

As a result of the above, cash and cash equivalents, including foreign currency translation adjustments, decreased ¥0.8 billion from the end of the previous fiscal year to ¥21.5 billion.

- Cash flow trends are explained in detail on page 17.
- The changes in major financial indicators are explained in detail on page 17-18.
- See page 20-27 for details on the main business segments.
- Please see page 19 for the forecasts for FY2019 and beyond.

Consolidated Balance Sheets

Mitsui Mining and Smelting Company, Limited and Consolidated Subsidiaries
Years ended March 31, 2018 and 2019

Millions of yen

	2018	2019
Assets		
Current assets:		
Cash and deposits (Notes 5 and 15)	¥ 22,379	¥ 21,536
Notes and accounts receivable (Note 15):		
Trade	94,452	85,387
Unconsolidated subsidiaries and affiliates	6,087	5,885
Inventories (Note 3)	113,645	111,753
Derivatives (Notes 15 and 16)	1,693	841
Other current assets	11,431	24,110
Less: Allowance for doubtful accounts	(154)	(179)
Total current assets	249,536	249,336
Property, plant and equipment (Note 7):		
Land	33,693	33,711
Buildings and structures	175,761	184,982
Machinery and equipment	368,082	385,567
Leased assets	4,263	3,768
Construction in progress	16,436	11,492
Others	56,191	57,249
	654,428	676,772
Less: Accumulated depreciation	(471,059)	(486,914)
Total property, plant and equipment	183,369	189,857
Investments and other assets:		
Investment securities (Notes 4 and 15):		
Unconsolidated subsidiaries and affiliates	52,684	53,529
Others	12,315	10,833
Loans receivable:		
Unconsolidated subsidiaries and affiliates	24	8
Others	458	446
Deferred tax assets (Note 14)	7,268	5,765
Asset for retirement benefits (Note 17)	4,624	4,625
Others	8,578	9,050
Less: Allowance for doubtful accounts	(155)	(137)
Total investments and other assets	85,799	84,121
Total assets	¥ 518,705	¥ 523,315
Liabilities and Net Assets		
Current liabilities:		
Notes and accounts payable (Note 15):		
Trade	38,787	36,334
Unconsolidated subsidiaries and affiliates	4,643	3,258
Others	15,193	16,333
Short-term borrowings and commercial papers (Notes 6 and 15)	45,341	58,098

Millions of yen

	2018	2019
Current portion of long-term debt (Notes 6 and 15)	¥ 32,708	¥ 36,412
Current portion of lease liabilities	337	324
Accrued income taxes	4,050	2,600
Accrued expenses	9,547	9,022
Provision for product warranties	1,316	1,232
Provision for loss on construction contracts	220	23
Provision for improvement of business structure	36	—
Provision for loss on disposal of inventories	312	327
Derivative liabilities (Notes 15 and 16)	7,442	2,239
Other current liabilities	12,514	14,761
Total current liabilities	172,454	180,969
Long-term liabilities:		
Long-term debt (Notes 6 and 15)	130,369	122,368
Lease liabilities	1,124	1,025
Directors' and corporate auditors' retirement benefits	554	502
Deferred tax liabilities (Note 14)	2,906	2,775
Provision for environmental countermeasures	1,120	878
Provision for preventing environmental pollution in mineral, mining, and other operations	1,053	927
Asset retirement obligations (Note 21)	3,065	3,341
Liability for retirement benefits (Note 17)	26,542	26,404
Other long-term liabilities	862	4,447
Total long-term liabilities	167,598	162,672
Total liabilities	340,053	343,641
Commitments and contingent liabilities (Note 8)		
Net Assets (Note 9):		
Shareholders' equity:		
Common stock:		
Authorized - 190,000 thousand shares in 2019 and in 2018		
Issued - 57,296 thousand shares in 2019 and in 2018	42,129	42,129
Capital surplus	22,648	22,631
Retained earnings	93,113	95,069
Less: Treasury stock		
189 thousand shares in 2019 and 188 thousand shares in 2018	(619)	(622)
Total shareholders' equity	157,271	159,207
Accumulated other comprehensive income:		
Net unrealized gains on securities, net of tax	2,606	1,607
Deferred gains (losses) on hedges, net of tax	(4,696)	(1,976)
Foreign currency translation adjustments	13,532	11,524
Accumulated adjustments for retirement benefit (Note 17)	(519)	(308)
Total accumulated other comprehensive income	10,922	10,847
Non-controlling interests in consolidated subsidiaries	10,459	9,618
Total net assets	178,652	179,673
Total liabilities and net assets	¥ 518,705	¥ 523,315

See accompanying notes to consolidated financial statements.

Consolidated Statements of Operations

Mitsui Mining and Smelting Company, Limited and Consolidated Subsidiaries
Years ended March 31, 2018 and 2019

Millions of yen

	2018	2019
Net sales (Note 13)	¥ 519,215	¥ 497,701
Cost of sales (Notes 3 and 11)	417,796	424,325
Gross profit	101,419	73,376
Selling, general and administrative expenses (Notes 10 and 11)	51,889	55,153
Operating income	49,529	18,222
Non-operating income (expenses):		
Interest and dividend income	1,824	1,998
Interest expense	(1,392)	(1,605)
Foreign exchange gains (losses)	(853)	875
Investment losses on equity method	(38,044)	(2,194)
Real estate rent	725	718
Other, net	(550)	(259)
	(38,290)	(467)
Ordinary income (Note 13)	11,239	17,755
Extraordinary income (losses):		
Gain on sale of investment securities	128	—
Gain on sale of property, plant and equipment (Note 12)	87	64
Loss on sale and disposal of property, plant and equipment (Note 12)	(1,497)	(1,769)
Loss on impairment of fixed assets (Note 19)	(287)	—
Insurance claim income	30	20
Reversal of provision for environmental countermeasures	6	21
Loss on disaster	(93)	(336)
Environmental expenses	(716)	(156)
Gain on transfer of business	115	—
Custom duties for prior year	(1,098)	—
Other, net (Note 12)	(172)	(438)
	(3,497)	(2,592)
Profit before income taxes	7,741	15,162
Income taxes (Note 14):		
Current	9,562	8,792
Deferred	(2,096)	1,191
	7,466	9,984
Profit	275	5,177
Profit attributable to non-controlling interests	983	486
Profit (loss) attributable to owners of parent	¥ (708)	¥ 4,691

See accompanying notes to consolidated financial statements.

Consolidated Statements of Comprehensive Income

Mitsui Mining and Smelting Company, Limited and Consolidated Subsidiaries
Years ended March 31, 2018 and 2019

Millions of yen

	2018	2019
Net income	¥ 275	¥ 5,177
Other comprehensive income:		
Net unrealized losses on securities, net of tax	(80)	(1,056)
Deferred gains (losses) on hedges, net of tax	(1,718)	3,917
Foreign currency translation adjustments	1,108	(2,228)
Remeasurements of defined benefit plans, net of tax	176	243
Share of other comprehensive income		
of associates accounted for using equity method	(826)	(987)
Total other comprehensive income (Note 22)	¥ (1,340)	¥ (111)
Comprehensive income	¥ (1,065)	¥ 5,066
(Breakdown)		
Comprehensive income attributable to owners of parent	(2,054)	4,616
Comprehensive income attributable to non-controlling interests	988	449

See accompanying notes to consolidated financial statements.

Consolidated Statements of Changes in Net Assets

Mitsui Mining and Smelting Company, Limited and Consolidated Subsidiaries
Years ended March 31, 2018 and 2019

2018	Millions of yen				
	Common stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity
Balance at April 1, 2017	¥42,129	¥22,557	¥97,633	¥(605)	¥161,713
Cash dividends paid			(3,997)		(3,997)
Loss attributable to owners of parent			(708)		(708)
Acquisition of treasury stock				(13)	(13)
Disposition of treasury stock		0		0	0
Change of scope of consolidation			185		185
Change in ownership interest of parent due to transactions with non-controlling shareholders		91			91
Net changes of items other than shareholders' equity					
Total changes		91	(4,519)	(13)	(4,442)
Balance at March 31, 2018	¥42,129	¥22,648	¥93,113	¥(619)	¥157,271

2018	Millions of yen						
	Net unrealized gains on securities, net of tax	Deferred gains(losses) on hedges, net of tax	Foreign currency translation adjustments	Accumulated adjustments for retirement benefit	Total accumulated other comprehensive income	Non-controlling interests in consolidated subsidiaries	Total net assets (Note 9)
Balance at April 1, 2017	¥2,666	¥(3,698)	¥13,982	¥(682)	¥12,268	¥10,439	¥184,421
Cash dividends paid							(3,997)
Loss attributable to owners of parent							(708)
Acquisition of treasury stock							(13)
Disposition of treasury stock							0
Change of scope of consolidation							185
Change in ownership interest of parent due to transactions with non-controlling shareholders							91
Net changes of items other than shareholders' equity	(60)	(998)	(450)	163	(1,346)	19	(1,326)
Total changes	(60)	(998)	(450)	163	(1,346)	19	(1,326)
Balance at March 31, 2018	¥2,606	¥(4,696)	¥13,532	¥(519)	¥10,922	¥10,459	¥178,652

Note: The company conducted a share consolidation to change its share unit from 10 shares to 1 share on October 1, 2017.

2019	Millions of yen				
	Common stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity
Balance at April 1, 2018	¥42,129	¥22,648	¥93,113	¥(619)	¥157,271
Cash dividends paid			(3,997)		(3,997)
Profit attributable to owners of parent			4,691		4,691
Effect of changes in accounting period of consolidated subsidiaries			1,324		1,324
Acquisition of treasury stock				(2)	(2)
Change of scope of consolidation			(61)		(61)
Change in ownership interest of parent due to transactions with non-controlling shareholders		(16)			(16)
Net changes of items other than shareholders' equity					
Total changes		(16)	1,956	(2)	(1,936)
Balance at March 31, 2019	¥42,129	¥22,631	¥95,069	¥(622)	¥159,207

2019	Millions of yen						
	Net unrealized gains on securities, net of tax	Deferred gains(losses) on hedges, net of tax	Foreign currency translation adjustments	Accumulated adjustments for retirement benefit	Total accumulated other comprehensive income	Non-controlling interests in consolidated subsidiaries	Total net assets (Note 9)
Balance at April 1, 2018	¥2,606	¥(4,696)	¥13,532	¥(519)	¥10,922	¥10,459	¥178,652
Cash dividends paid							(3,997)
Profit attributable to owners of parent							4,691
Effect of changes in accounting period of consolidated subsidiaries							1,324
Acquisition of treasury stock							(2)
Change of scope of consolidation							(61)
Change in ownership interest of parent due to transactions with non-controlling shareholders							(16)
Net changes of items other than shareholders' equity	(998)	2,720	(2,007)	210	(74)	(840)	(915)
Total changes	(998)	2,720	(2,007)	210	(74)	(840)	1,021
Balance at March 31, 2019	¥1,607	¥(1,976)	¥11,524	¥(308)	¥10,847	¥9,618	¥179,673

Consolidated Statements of Cash Flows

Mitsui Mining and Smelting Company, Limited and Consolidated Subsidiaries
Years ended March 31, 2018 and 2019

Millions of yen

	2018	2019
Cash flows from operating activities:		
Profit before income taxes	¥ 7,741	¥ 15,162
Depreciation and amortization	26,634	27,964
Loss on impairment of fixed assets (Note 19)	287	—
Loss (gain) on sale of property, plant and equipment, net (Note 12)	(13)	(2)
Loss on disposal of property, plant and equipment (Note 12)	1,423	1,706
Custom duties for prior year	1,098	—
Foreign exchange losses (gains)	(538)	271
Investment losses on equity method	38,044	2,194
Increase (decrease) in allowance for doubtful accounts	(65)	18
Increase in liability for retirement benefits	797	58
Interest and dividend income	(1,824)	(1,998)
Interest expense	1,392	1,605
Decrease (increase) in notes and accounts receivable	(4,120)	7,764
Decrease (increase) in inventories	(12,977)	2,366
Increase(decrease) in notes and accounts payable	1,000	(2,764)
Other, net	1,713	(644)
Subtotal	60,593	53,705
Interest and dividend received	2,394	2,875
Interest paid	(1,388)	(1,623)
Income taxes paid	(9,726)	(15,268)
Income taxes refund	120	582
Other, net	443	425
Net cash provided by operating activities	52,436	40,696
Cash flows from investing activities:		
Purchases of investment securities	(469)	(1,339)
Proceeds from sale of investment securities	302	—
Acquisition of property, plant and equipment and other assets	(40,450)	(35,280)
Proceeds from sale of property, plant and equipment	162	260
Payments for retirement of property, plant and equipment and other assets	(1,047)	(1,313)
Decrease (increase) in short-term loans receivable, net	39	(6,645)
Other, net	1,085	(525)
Net cash used in investing activities	(40,376)	(44,843)

Millions of yen

	2018	2019
Cash flows from financing activities:		
Net change in short-term borrowings and commercial papers	(4,231)	12,805
Proceeds from long-term debt	30,600	18,504
Repayment of long-term debt	(25,006)	(22,699)
Repayment of lease liabilities	(426)	(403)
Issuance of bonds	10,000	10,000
Redemption of straight bonds	(10,000)	(10,000)
Cash dividends paid	(3,997)	(3,997)
Dividends paid to non-controlling interests	(987)	(1,147)
Other, net	(64)	(188)
Net cash provided by (used in) financing activities	(4,114)	2,873
Effect of exchange rate changes on cash and cash equivalents	126	(567)
Net increase (decrease) in cash and cash equivalents	8,072	(1,840)
Cash and cash equivalents at beginning of year	13,952	22,377
Effect of addition of consolidated subsidiaries	353	—
Effect of exclusion of consolidated subsidiaries	—	(2)
Effect of changes in accounting period of consolidated subsidiaries	—	990
Cash and cash equivalents at end of year (Note 5)	¥ 22,377	¥ 21,524

See accompanying notes to consolidated financial statements.

Notes to Consolidated Financial Statements

Mitsui Mining and Smelting Company, Limited and Consolidated Subsidiaries
Years ended March 31, 2018 and 2019

1. Basis of Presenting 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 Law and its related accounting regulations, and in conformity with accounting principles generally accepted in Japan ("Japanese GAAP"), which are different in certain respects as to application and disclosure requirements of International Financial Reporting Standards. The accounts of consolidated overseas subsidiaries are prepared in accordance with either International Financial Reporting Standards or U.S. generally accepted accounting principles, with adjustments for the specified four items as applicable.

The accompanying consolidated financial statements have been restructured and translated into English (with some expanded descriptions) from the consolidated financial statements of Mitsui Mining and Smelting Company, Limited ("the Company") prepared in accordance with Japanese GAAP and filed with the appropriate Local Finance Bureau of the Ministry of Finance as required by the Financial Instruments and Exchange Law. Some supplementary information included in the statutory Japanese language consolidated financial statements, but not required for fair presentation, is not presented in the accompanying consolidated financial statements.

Amounts less than one million yen have been rounded down in the presentation of the accompanying consolidated financial statements. As a result, the totals in yen shown herein do not necessarily agree with the sums of the individual amounts.

The translation of the Japanese yen amounts into U.S. dollars is included solely for the convenience of readers outside Japan, using the prevailing exchange rate at March 31, 2019, which was ¥111.00 to U.S. \$1. The convenience translations should not be construed as representations that the Japanese yen amounts have been, could have been, or could in the future be, converted into U.S. dollars at this or any other rate of exchange.

2. Summary of Significant Accounting Policies

(a) Consolidation

The consolidated financial statements include the accounts of the Company and its 52 significant subsidiaries (the "Companies"). One subsidiary was excluded from the scope of consolidation from the fiscal year ended March 31, 2019 due to a decrease of its materiality to the consolidated financial statements. All significant intercompany transactions, accounts and unrealized profits among the Companies have been eliminated in consolidation. Investments in the 10 significant affiliates which the Company and its subsidiaries are able to influence, in a material degree, their financial and operating decision-making, are accounted for by the equity method after the elimination of unrealized intercompany profits. Investments in the remaining unconsolidated subsidiaries and affiliates are not accounted for by the equity method because of their immaterial effect on the consolidated financial statements. Such investments, therefore, are carried at cost, adjusted for any substantial and non-recoverable decline in value, and income from such unconsolidated subsidiaries and affiliates is recognized only when the Companies receive dividends.

In the elimination of investments in subsidiaries, the assets and liabilities of the subsidiaries, including the portion attributable to minority shareholders, are recorded based on the fair value at the time when the Company acquired control of the respective subsidiaries.

The consolidation difference between acquisition cost and net assets at the date of acquisition is shown as goodwill and amortized mainly over five years. Negative goodwill is recognized as profit on the acquisition date.

The balance sheet date of the 14 significant subsidiaries is December 31. As the difference between their balance sheet date and the consolidated balance sheet date does not exceed three months, they are consolidated on the basis of their financial statements for the fiscal year ended December 31. We have made necessary adjustments for significant transactions that have occurred in the period between their balance sheet date and the consolidated balance sheet date.

In addition previously, other 5 subsidiaries were consolidated on the basis of their financial statements for the fiscal year ended December 31. From the fiscal year ended March 31, 2019, these subsidiaries provided financial statements based on provisional settlement of accounts as of March 31, for the purpose of a more appropriate disclosure.

The impact of the above changes on profit and loss for 3 months from January 1, 2018 to March 31, 2018 was reflected directly to retained earnings in the fiscal year ended March 31, 2019. As a result, retained earnings increased by ¥1,324 million (\$11,927 thousand).

(b) Foreign currency translation

Revenues and expenses are translated at the rates of exchange prevailing when transactions are made. Monetary claims and liabilities denominated in foreign currencies are generally translated into each reporting currency at the rates of foreign exchange prevailing at the balance sheet dates and the resulting translation gains or losses are included in earnings.

All assets and liabilities of consolidated foreign subsidiaries are translated into Japanese yen at the rates prevailing at their balance sheet dates and revenues and expenses of consolidated foreign subsidiaries are translated into Japanese yen at the average exchange rates prevailing during the year. The resulting translation adjustments are shown as "Foreign currency translation adjustments," a component of net assets.

(c) Cash and cash equivalents

In the accompanying consolidated statements of cash flows, cash and cash equivalents include cash on hand, demand deposits and short-term investments with maturities of three months or less from the date of acquisition which have high liquidity and negligible risk of price fluctuation.

(d) Marketable securities, investment securities and investments in unconsolidated subsidiaries and affiliates other than those accounted for by the equity method

Securities owned by the Companies are classified into:(1) securities intended to be held to maturity (hereafter, "held-to-maturity securities"), (2) equity securities issued by subsidiaries and affiliated companies, or (3) all other securities that are not classified as trading securities or in any of the above categories (hereafter, "available-for-sale securities").

Held-to-maturity securities are stated at amortized cost. Equity securities issued by subsidiaries and affiliated companies which are not consolidated or accounted for using the equity method are mainly stated at average cost. Available-for-sale securities with fair market values are stated at fair market values, and the corresponding unrealized holding gains or losses, net of applicable income taxes, are reported as a component of net assets. Realized gains and losses on sale of such securities are computed using average cost or moving-average cost. Other available-for-sale securities with no available fair market value are mainly stated at average cost.

(e) Derivative transactions and hedge accounting

The Companies generally state derivative financial instruments at fair value and recognize changes in the fair value as gains or losses unless they are used for hedging purposes and qualified for hedge accounting.

If derivative financial instruments are used as hedges and meet certain hedging criteria, gains or losses resulting from changes in their fair value are generally deferred as a component of accumulated other comprehensive income in the consolidated balance sheet, and charged to income when the related gains or losses on the hedged items are recognized.

All derivative contracts are based on actual demand and not for trading in the short term or for speculation.

For currency swap contracts, interest rate swap contracts, metal forward contracts and fuel forward contracts, the Companies evaluate hedge effectiveness by comparing the cumulative changes in cash flows or the changes in fair value of the hedged items with the corresponding changes in the hedging derivative instruments.

The evaluation of effectiveness is skipped for currency forward contracts that are believed to have high hedge effectiveness, such as in cases where hedging instruments and hedged items share the same important characteristics.

(f) Inventories

Inventories are stated primarily at lower of cost or net selling value based on the following methods:

The Company:

Metals Sector, Catalysts Division

Subsidiaries:

Mitsui Kinzoku ACT Corporation, Kamioka Mining & Smelting Co., Ltd. (except for the metal powders factory), Hachinohe Smelting Co., Ltd. and others

: First-in, first-out method

The Company:

Copper Foil Division

: Moving average method

The Company:

Engineered Materials Sector (except for Catalysts Division and Copper Foil Division), Affiliates Coordination Strategic Sector

Subsidiaries:

The metal powders factory of Kamioka Mining & Smelting Co., Ltd., Nippon Yttrium Co., Ltd., Mitani Shindo Co., Ltd. and others

: Average method

Overseas subsidiaries

: Average method or first-in, first-out method

(g) Property, plant and equipment

Property, plant and equipment are stated at cost. Depreciation of property, plant and equipment is generally computed by the declining-balance method based on the estimated durable years of these depreciable assets, except the straight-line method is applied to:(1) buildings, excluding building fixtures, acquired since April 1, 1998, and building fixtures and structures, which were acquired since April 1, 2016. (2) certain plant facilities of the Company and (3) property, plant and equipment of certain consolidated subsidiaries. The durable years of these assets generally range from 7 to 50 years for buildings, 3 to 60 years for structures and 2 to 20 years for machinery and equipment.

Leased assets used under finance leases and capitalized, are depreciated over the lease terms of respective assets by the straight-line method.

(h) Allowance for doubtful accounts

The Company and consolidated subsidiaries provide an allowance for doubtful accounts in an amount sufficient to cover probable losses on collection by estimating individually uncollectible amounts and applying a percentage based on historical data to the remaining accounts.

(i) Provision for product warranties

Reserve for product warranties is provided to accrue estimated costs of repairing products free of charge, based on individually estimated amounts which are reliably measurable or the amounts computed by the ratio of actual repair costs which correspond to net sales.

(j) Provision for improvement of business structure

Provision for improvement of business structure is provided to accrue estimated costs of improvement of business structure by consolidating production facilities and other measures.

(k) Provision for loss on disposal of inventories

Provision for loss on disposal inventories is provided to accrue estimated costs of disposal of inventories, such as by-products and other materials.

(l) Employees' retirement benefits

The Companies provided employees' retirement benefits based on the estimated amounts of projected benefit obligation and the fair value of the plan assets at the balance sheet date. The liabilities and expenses for employees' retirement benefits are determined based on the amounts actuarially calculated using certain assumptions.

Prior service costs are amortized by the straight-line method over periods of 1 to 5 years which are within the average remaining years of service of the employees.

Actuarial differences are amortized primarily from the year in which the actuarial differences are incurred by the straight-line method over periods of 1 to 12 years which are within the average remaining years of service of the employees.

(m) Directors' and corporate auditors' retirement benefits

Directors and corporate auditors are generally entitled to receive retirement benefits based on the Companies' internal rules. Their retirement benefits are accrued at the amount required to be paid in accordance with the internal rules if the directors and corporate auditors retired at the balance sheet date.

(n) Provision for environmental countermeasures

With enactment of the legislation about special measures concerning the proper treatment of PCB (polychlorinated biphenyl) waste, the Company and its domestic subsidiaries provide for environmental countermeasures to accrue estimated cost of disposal of PCB waste.

Furthermore, estimated cost of soil improvement and preventing environmental pollution is charged to this account.

(o) Provision for preventing environmental pollution in mineral, mining, and other operations

Provision for preventing environmental pollution in mineral, mining, and other operations is provided to accrue estimated cost of preventing the environmental pollution following the termination of use of mineral, mining, and other facilities.

(p) Research and development expenses

Research and development expenses are charged to expenses when incurred.

(q) Accounting for revenues on construction contracts

Recognition of net sales and cost of sales of completed construction contracts

Construction contracts whose outcome can be estimated reliably: Percentage-of-completion method

Other construction contracts: Completion-of-contract method

(r) Income taxes

The Companies recognize tax effects of temporary differences between the financial statement basis and the tax basis of assets and liabilities. The provision for income taxes is computed based on the pretax income of each of the Companies, with certain adjustments required for consolidation and tax purposes.

The asset and liability approach is used to recognize deferred tax assets and liabilities for the expected future tax consequences of temporary differences.

The Company has adopted the consolidated tax return system for the calculation of income taxes. Under the consolidated tax return system, the Company consolidates all wholly owned domestic subsidiaries based on the Japanese tax regulations.

(s) Earnings per share, diluted earnings per share and cash dividends per share

Earnings per share is computed based on the weighted-average number of shares of common stock outstanding during the respective fiscal year.

Diluted earnings per share is not presented as there were no shares with dilutive effects in 2019 and 2018.

Cash dividends per share represent the historical amount applicable to the respective year.

(t) Reclassification

Certain prior year amounts have been reclassified to conform to the 2019 presentation. These changes had no impact on previously reported results of operations or shareholders' equity.

(u) Accounting of consumption tax

Consumption tax generally withheld upon sale, as well as that paid for purchases of goods or services, is recorded as a liability or an asset, and is excluded from the relevant revenue, costs or expenses.

(Standards and guidance not yet adopted)

The following standard and guidance were issued but not yet adopted.

- "Accounting Standard for Revenue Recognition" (ASBJ Statement No.29, March 30, 2018)
- "Implementation Guidance on Accounting Standard for Revenue Recognition" (ASBJ Guidance No.30, March 30, 2018)

(1) Overview

The above standard and guidance provide comprehensive principles for revenue recognition. Under the standard and guidance, revenue is recognized by applying following 5 steps:

Step1: Identify contract(s) with customers.

Step2: Identify the performance obligations in the contract.

Step3: Determine the transaction price.

Step4: Allocate the transaction price to the performance obligation in the contract.

Step5: Recognize revenue when (or as) the entity satisfies a performance obligation.

(2) Adoption date

The Company will adopt the above standard and guidance from the beginning of the fiscal year ending March 31, 2022.

(3) Effects of the application of the standards

The Company and its consolidated domestic subsidiaries are currently in the process of determining the effects of these new standards on the consolidated financial statements.

(Changes in presentation)**(1) Consolidated statements of operations**

"Insurance claim income", "Reversal of provision for environmental countermeasures" and "Loss on disaster" that had been included in "Other, net" under "Extraordinary income (losses)" in the previous fiscal year increased in importance, and have therefore been presented separately in the current fiscal year. The presentation for the year ended March 31, 2018 was reclassified to reflect this change to the comparative information.

As a result, ¥(229) million that was presented as "Other, net" under "Extraordinary income (losses)" in the consolidated statements of operations for the previous fiscal year has been restated as "Insurance claim income" of ¥30 million, "Reversal of provision for environmental countermeasures" of ¥6 million, "Loss on disaster" of ¥(93) million and "Other, net" of ¥(172) million.

(2) Consolidated statements of cash flows

"Decrease (increase) in short-term loans receivable, net" that had been included in "Other, net" under "Cash flows from investing activities" in the previous fiscal year increased in importance, and has therefore been presented separately in the current fiscal year. The presentation for the year ended March 31, 2018 was reclassified to reflect this change to the comparative information.

As a result, ¥1,124 million that was presented as "Other, net" under "Cash flows from investing activities" in the consolidated statements of cash flows for the previous fiscal year has been restated as "Decrease (increase) in short-term loans receivable, net" of ¥39 million and "Other, net" of ¥1,085 million.

(3) Changes associated with adoption of "Partial Amendments to Accounting Standard for Tax Effect Accounting"

Upon application of "Partial Amendments to Accounting Standard for Tax Effect Accounting" (ASBJ Statement No. 28, February 16, 2018 (hereinafter, "Statement No. 28")) from the beginning of the current fiscal year, the Company and its domestic subsidiaries changed the presentation and related notes of deferred tax assets and deferred tax liabilities, such that deferred tax assets and deferred tax liabilities are classified as part of investments and other assets and long-term liabilities, respectively.

As a result, ¥4,965 million that was presented as "Deferred tax assets" under "Current assets" in the consolidated balance sheets for the previous fiscal year has been included under "Deferred tax assets" of ¥7,268 under "Investments and other assets". Meanwhile, ¥2 million that was presented as "Deferred tax liabilities" under "Current liabilities" has been included under "Deferred tax liabilities" of ¥2,906 million under "Long-term liabilities".

Furthermore, deferred tax assets and deferred tax liabilities of the same tax filing entity have been offset in presentation, so that total assets for the previous fiscal year have decreased by ¥3,712 million compared with before the change.

The notes related to tax effect accounting additionally included those described in notes 8 (excluding total amount of valuation allowance) and 9 of "Accounting Standard for Tax Effect Accounting", which are required in paragraphs 3 to 5 of Statement No. 28. However, this additional information corresponding to the previous fiscal year is not disclosed, in accordance with the transitional treatments prescribed in paragraph 7 of Statement No. 28.

3. Inventories

Inventories at March 31, 2018 and 2019 consisted of the following:

	Millions of yen	
	2018	2019
Merchandise and finished goods	¥36,175	¥36,061
Work in process	31,155	30,392
Raw materials and supplies	46,314	45,299
Total	¥113,645	¥111,753

Write-downs, net of reversal of write-downs recognized during the prior fiscal year, are included in the cost of sales for the fiscal years ended March 31, 2018 and 2019 respectively as follows:

	Millions of yen	
	2018	2019
Cost of sales	¥404	¥1,648
Total	¥404	¥1,648

4. Securities

(a) Acquisition costs and book values of available-for-sale securities with fair value as of March 31, 2018 and 2019 were as follows:

Year ended March 31, 2018	Millions of yen		
	Book value	Acquisition cost	Difference
Securities whose book value exceeds acquisition cost:			
Stocks	¥5,717	¥1,979	¥3,737
Subtotal	5,717	1,979	3,737
Securities whose book value does not exceed acquisition cost:			
Stocks	1,162	1,201	(39)
Subtotal	1,162	1,201	(39)
Total	¥6,879	¥3,181	¥3,698

Year ended March 31, 2019	Millions of yen		
	Book value	Acquisition cost	Difference
Securities whose book value exceeds acquisition cost:			
Stocks	¥4,348	¥2,007	¥2,341
Subtotal	4,348	2,007	2,341
Securities whose book value does not exceed acquisition cost:			
Stocks	1,030	1,238	(208)
Subtotal	1,030	1,238	(208)
Total	¥5,379	¥3,246	¥2,133

(b) Available-for-sale securities sold for the years ended March 31, 2018 and 2019 were as follows:

		Millions of yen	
		2018	2019
Total sale amount	Stocks	¥307	¥-
Gains	Stocks	128	-
Losses	Stocks	105	-

5. Amounts of Cash and Cash Equivalents

Amounts of cash and cash equivalents at March 31, 2018 and 2019 were reconciled with cash and deposits as follows:

	Millions of yen	
	2018	2019
Cash and deposits	¥22,379	¥21,536
Time deposits with maturities exceeding three months from the date of deposit	(1)	(11)
Total : Cash and cash equivalents	¥22,377	¥21,524

6. Short-Term Borrowings and Long-Term Debt

Inventories at March 31, 2018 and 2019 consisted of the following:

	Millions of yen	
	2018	2019
Short-term bank loans, generally represented by short-term notes and bank overdrafts, bore interest at annual rates ranging from 0.300% to 8.350% and from 0.310% to 9.432% at March 31, 2018 and 2019, respectively.	¥37,841	¥51,598
Commercial paper with interest at annual rate of (0.01)% and (0.01)% at March 31, 2018 and 2019, respectively.	7,500	6,500
	¥45,341	¥58,098

Long-term debt at March 31, 2018 and 2019 consisted of the following:

	Millions of yen	
	2018	2019
0.20 % yen unsecured straight bonds due in 2023	¥ -	¥10,000
0.20 % yen unsecured straight bonds due in 2022	10,000	10,000
0.20 % yen unsecured straight bonds due in 2021	10,000	10,000
0.39 % yen unsecured straight bonds due in 2020	10,000	10,000
0.27 % yen unsecured straight bonds due in 2019	10,000	10,000
0.76 % yen unsecured straight bonds due in 2020	10,000	10,000
0.79 % yen unsecured straight bonds due in 2018	10,000	-
Banks, insurance companies and other financial institutions, maturing through 2026 at interest rates ranging from 0.200% to 10.850% at March 31, 2019:		
Secured	900	900
Unsecured	100,381	96,714
Government-owned banks and government agencies, maturing through 2027 at interest rates ranging from 0.900% to 2.200% at March 31, 2019:		
Secured	1,797	1,166
Unsecured	-	-
	163,078	158,780
Less: Current portion	32,708	36,412
	¥130,369	¥122,368

The aggregate annual maturities of long-term debt at March 31, 2019 were as follows:

Year ending March 31,	Millions of yen
2020	¥36,412
2021	28,522
2022	25,366
2023	38,445
2024	26,244
Thereafter	3,790
Total	¥158,780

The 0.76% yen unsecured straight bonds due in 2020 were issued on November 28, 2013 by the Company.
The 0.27% yen unsecured straight bonds due in 2019 were issued on December 16, 2014 by the Company.
The 0.39% yen unsecured straight bonds due in 2020 were issued on December 15, 2015 by the Company.
The 0.20% yen unsecured straight bonds due in 2021 were issued on November 28, 2016 by the Company.
The 0.20% yen unsecured straight bonds due in 2022 were issued on November 28, 2017 by the Company.
The 0.20% yen unsecured straight bonds due in 2023 were issued on November 29, 2018 by the Company.

7. Pledged Assets

Assets pledged as collateral for long-term debt at March 31, 2018 and 2019 were as follows:

	Millions of yen	
	2018	2019
Property, plant and equipment, net book value	¥8,406	¥7,846
	¥8,406	¥7,846

8. Contingent Liabilities

Contingent liabilities at March 31, 2018 and 2019 were as follows:

	Millions of yen	
	2018	2019
Notes receivable discounted	¥251	¥270
Notes and accounts receivable securitized with recourse	499	584
Loans guaranteed		
Unconsolidated subsidiaries and affiliates	127,089	116,820
Others	398	343
	¥128,237	¥118,019

9. Net Assets

Under the Japanese Company Law, the entire amount paid for new shares is required to be designated as common stock. However, a company may, by a resolution of the board of directors, designate an amount not exceeding one-half of the price of the new shares as additional paid-in-capital, which is included in capital surplus.

The Japanese Company Law provides that an amount equal to 10 % of cash dividends and other cash appropriations of retained earnings must be set aside as a legal earnings reserve included in retained earnings until the total amount of capital surplus and the legal earnings reserve equals 25% of common stock.

The excess of the total amount of capital surplus and the legal earnings reserve over 25% of common stock can be transferred to retained earnings by a resolution of the shareholders, which may be available for dividends.

The maximum amount that the Company can distribute as dividends is calculated based on the unconsolidated financial statements of the Company in accordance with the Japanese Company Law.

(a) Shares issued and outstanding

Changes in number of shares issued and outstanding during the year ended March 31, 2018 and 2019 were as follows:

	Shares of common stock (Thousands)	Shares of treasury stock (Thousands)
Balance at April 1, 2017	572,966	1,865
Increase during the year	–	11
Decrease during the year	515,669	1,687
Balance at March 31 and April 1, 2018	57,296	188
Increase during the year	–	0
Decrease during the year	–	–
Balance at March 31, 2019	57,296	189

Note: The company conducted a share consolidation to change its share unit from 10 shares to 1 share on October 1, 2017.

(b) Dividends

Dividends paid for the year ended March 31, 2019 were as follows:

	Millions of yen
Approved at the shareholders' meeting held on June 28, 2018	¥3,997
Total	¥3,997

Dividends included in the retained earnings at March 31, 2019 and to be paid in subsequent periods were as follows:

	Millions of yen
Approved at the shareholders' meeting held on June 27, 2019	¥3,997
Total	¥3,997

10. Selling, General and Administrative Expenses

Principal items of selling, general and administrative expenses for the years ended March 31, 2018 and 2019 were as follows:

	2018	2019
Freightage related expenses	¥9,856	¥9,758
Salaries	9,442	10,046
Bonus and retirement pay	2,108	2,401
Provision for bonuses	1,759	1,610
Provision for directors' and corporate auditors' bonuses	38	31
Retirement benefit expenses	1,320	1,307
Provision for directors' and corporate auditors' retirement benefits	137	120
Provision for product warranties	104	72
Depreciation expense	2,054	2,028
Research and development/Exploration expenses	6,942	8,232

11. Research and Development Expenses

Research and development expenses included in production cost and selling, general and administrative expenses amounted to ¥8,015million and ¥9,523million for the years ended March 31, 2018 and 2019, respectively.

12. Explanatory notes on extraordinary profit and loss

(a) Gain on sale of property, plant and equipment

	Millions of yen	
	2018	2019
Buildings and structures	¥20	¥4
Machinery and equipment	26	20
Land	29	–
Others	10	39
Total	¥87	¥64

(b) Loss on sale of property, plant and equipment

	Millions of yen	
	2018	2019
Buildings and structures	¥0	¥3
Machinery and equipment	62	46
Others	11	12
Total	¥74	¥62

(c) Loss on disposal of property, plant and equipment

	Millions of yen	
	2018	2019
Buildings and structures	¥290	¥655
Machinery and equipment	968	963
Others	163	87
Total	¥1,423	¥1,706

(d) Provisions included in other, net of extraordinary losses

	Millions of yen	
	2018	2019
Provision for allowance for doubtful accounts	¥–	¥21

13. Segment Information

The operations of the Companies for the years ended March 31, 2018 and 2019 were summarized as follows:

(a) Overview of reportable segments

The reportable segments of the Company are those units for which separate financial statements can be obtained among the constituent units of the Company and which are regularly examined by the Board of Directors for decisions on the allocation of management resources and for assessing business performance.

The Company has business sectors categorized by products and services in head office, and each business sector plans business strategies comprehensively and operates business activities domestically and internationally.

As a result, the Company reports four segments: Engineered Materials, Metals, Automotive Parts & Components, and Affiliates Coordination, based on business sectors categorized by products and services.

(b) Basis for Calculating amounts of net sales, profit or loss, assets, and other items by reported segments

Accounting procedure for reported segments, excluding the handling treatment for converting the income, expenses and assets of overseas subsidiaries into Japanese currency, is mostly the same as procedures indicated in 2. Summary of Significant Accounting Policies. The handling treatment for converting the income, expenses and assets of overseas subsidiaries into Japanese currency is mainly based on anticipated exchange rates at the time budgets were formulated. Profit for reported segments is based on ordinary income. Sales for inter-segment are based on actual market prices.

(c) Information on amounts of net sales, profit or loss, assets, and other items by reported segments

Segment information as of and for the fiscal year ended March 31, 2018, which was restated in conformity with reorganization, was as follows:

Year ended March 31, 2018	Reported segments				Total	Adjustment	Millions of yen Consolidated
	Engineered Materials	Metals	Automotive Parts & Components	Affiliates Coordination			
Sales:							
Outside customers	¥160,293	¥158,165	¥102,039	¥90,880	¥511,380	¥7,834	¥519,215
Inter-segment	6,922	28,352	—	41,866	77,141	(77,141)	—
Total	167,216	186,518	102,039	132,747	588,522	(69,307)	519,215
Segment profit	30,611	5,530	5,513	6,833	48,489	(37,250)	11,239
Segment assets	149,940	210,397	56,763	95,446	512,549	6,156	518,705
Depreciation expense	10,083	8,712	3,824	2,520	25,140	1,493	26,634
Amortization of goodwill and negative goodwill	—	3	—	—	3	1	4
Interest income	138	158	75	119	491	(297)	194
Interest expense	424	1,105	117	216	1,864	(472)	1,392
Investment gains (losses) on equity method	436	(5,434)	—	1,556	(3,441)	(34,602)	(38,044)
Investment for companies accounted for using the equity method	3,590	33,472	—	14,466	51,529	62	51,592
Increase in property, plant and equipment, and intangible assets	13,163	18,074	4,821	2,474	38,534	1,974	40,509

Notes :

(a) Amounts of adjustment are as follows::

(1) Adjustments of sales to outside customers is the difference mainly in the conversion process to the Japanese currency of sales of overseas subsidiaries.(The difference between the anticipated exchange rates at the time budgets were formulated and the average exchange rates during the year)

Adjustment to segment profit, which amounted to ¥(37,250) million, consists mainly of ¥(2,131) million for Company-wide costs that do not belong to any reportable segments, ¥(34,603) million for impairment loss on asset relating to a copper mine at a subsidiary of an affiliate and ¥1,278 million for difference from converting the income and expenses of overseas subsidiaries into Japanese currency.

Company-wide costs are mainly general and administrative expenses and research expenses that do not belong to any reportable segments.

(2) Adjustment to segment assets, which amounted to ¥6,156 million, consists of ¥(14,737) million for offset of receivables to the corporate administrative department, ¥(20,570) million for offset of inter-segment receivables and ¥42,143 million for Company-wide assets that do not belong to any reportable segments.

Company-wide assets are mainly assets in head office that do not belong to any reportable segments.

(3) Adjustment to investment gains (losses) on equity method, which amounted to ¥(34,602) million, consists mainly of ¥(34,603) million for impairment loss on asset relating to a copper mine at a subsidiary of an affiliate.

(b) Segment profit (loss) is adjusted to be consistent with ordinary income (loss) shown on the consolidated statements of operations.

Segment information as of and for the fiscal year ended March 31, 2019 was as follows:

Year ended March 31, 2019	Reported segments				Total	Adjustment	Millions of yen Consolidated
	Engineered Materials	Metals	Automotive Parts & Components	Affiliates Coordination			
Sales:							
Outside customers	¥158,950	¥142,796	¥104,026	¥89,825	¥495,599	¥2,102	¥497,701
Inter-segment	6,524	23,843	—	37,079	67,447	(67,447)	—
Total	165,474	166,640	104,026	126,904	563,047	(65,345)	497,701
Segment profit	16,608	(6,039)	4,689	4,881	20,140	(2,385)	17,755
Segment assets	158,160	205,482	59,321	94,536	517,500	5,815	523,315
Depreciation expense	10,991	9,191	4,183	2,508	26,876	1,088	27,964
Amortization of goodwill and negative goodwill	—	—	—	—	—	—	—
Interest income	201	279	101	136	719	(419)	299
Interest expense	769	1,122	184	215	2,292	(686)	1,605
Investment gains (losses) on equity method	369	(3,349)	—	753	(2,225)	31	(2,194)
Investment for companies accounted for using the equity method	3,862	29,139	—	14,446	47,447	(40)	47,407
Increase in property, plant and equipment, and intangible assets	14,395	12,054	5,013	2,841	34,305	1,814	36,119

Notes :

(a) Amounts of adjustment are as follows::

(1) Adjustments of sales to outside customers is the difference mainly in the conversion process to the Japanese currency of sales of overseas subsidiaries.(The difference between the anticipated exchange rates at the time budgets were formulated and the average exchange rates during the year)

Adjustment to segment profit, which amounted to ¥(2,385) million, consists mainly of ¥(2,084) million for Company-wide costs that do not belong to any reportable segments, ¥895 million for adjustment of inventories and ¥(1,802) million for adjustment of fixed assets.

Company-wide costs are mainly general and administrative expenses and research expenses that do not belong to any reportable segments.

(2) Adjustment to segment assets, which amounted to ¥5,815 million, consists of ¥(14,642) million for offset of receivables to the corporate administrative department, ¥(18,432) million for offset of inter-segment receivables, ¥47,822 million for Company-wide assets that do not belong to any reportable segments and ¥(8,932) million for other adjustment.

Company-wide assets are mainly assets in head office that do not belong to any reportable segments.

(b) Segment profit (loss) is adjusted to be consistent with ordinary income (loss) shown on the consolidated statements of operations.

【Related information】

Information by area:

Year ended March 31, 2018	Japan	China	Asia (Except China)	North America	Other Areas	Millions of yen
						Consolidated
Sales	¥289,742	¥67,747	¥103,450	¥41,556	¥16,719	¥519,215
Year ended March 31, 2019	Japan	China	Asia (Except China)	North America	Other Areas	Consolidated
Sales	¥273,724	¥69,893	¥94,734	¥41,790	¥17,559	¥497,701
Year ended March 31, 2018	Japan	Asia	North America	Other Areas	Consolidated	
Property, plant and equipment	¥133,135	¥38,259	¥6,219	¥5,754	¥183,369	
Year ended March 31, 2019	Japan	Asia	North America	Other Areas	Consolidated	
Property, plant and equipment	¥137,488	¥38,598	¥6,577	¥7,192	¥189,857	

【Information on loss on impairment of fixed assets by reported segments】

Year ended March 31, 2018	Engineered Materials	Metals	Automotive Parts & Components	Affiliates Coordination	Elimination · Corporate	Millions of yen
						Consolidated
Loss on impairment of fixed assets	¥—	¥—	¥287	¥—	¥—	¥287

Year ended March 31, 2019

Not applicable.

【Information on loss on impairment of fixed assets by reported segments】

Year ended March 31, 2018	Engineered Materials	Metals	Automotive Parts & Components	Affiliates Coordination	Elimination · Corporate	Millions of yen
						Consolidated
Amortization of goodwill	¥—	¥4	¥—	¥—	¥—	¥4
Balance at end of fiscal year	—	—	—	—	—	—

Year ended March 31, 2019

Not applicable.

【Information on gain on negative goodwill by reported segment】

Year ended March 31, 2018

Not applicable.

Year ended March 31, 2019

Not applicable.

14. Income Taxes

The Company and its domestic subsidiaries are subject to a number of taxes based on income, which, in the aggregate, indicate statutory rates in Japan of approximately 30.7% and 30.5% for the fiscal years ended March 31, 2018 and 2019, respectively.

1. Significant components of the Companies' deferred tax assets and liabilities as of March 31, 2018 and 2019 were as follows:

	2018	2019	Millions of yen
Deferred tax assets:			
Excess bad debt expenses	¥ 102	¥ 84	
Excess accrued bonuses to employees	1,545	1,451	
Excess product warranties	249	253	
Liability for retirement benefits	8,019	8,058	
Provision for environmental countermeasures	333	258	
Loss on impairment of fixed assets	2,773	2,449	
Depreciation in excess of limit	2,046	1,802	
Enterprise taxes accrued	333	129	
Unrealized profits and losses	3,082	3,299	
Operating loss carryforward for tax purposes (b)	6,321	9,695	
Net unrealized losses on securities	23	70	
Deferred losses on hedges	2,273	684	
Other	6,767	6,425	
Subtotal	33,871	34,662	
Valuation allowance for operating loss carryforward for tax purposes (b)	—	(8,452)	
Valuation allowance for deductible temporary differences	—	(14,770)	
Valuation allowance-total (a)	(19,234)	(23,222)	
Total deferred tax assets	¥ 14,637	¥ 11,439	
Deferred tax liabilities:			
Net unrealized gains on securities	¥ (1,119)	¥ (679)	
Deferred gains on hedges	(498)	(252)	
Retained earnings of foreign subsidiaries	(5,198)	(4,016)	
Asset for retirement benefits	(1,441)	(1,460)	
Other	(2,017)	(2,040)	
Total deferred tax liabilities	(10,274)	(8,449)	
Net deferred tax assets (liabilities)	¥ 4,362	¥ 2,989	

(a) Valuation allowance increased by ¥3,988 million, because the Company recognized valuation allowance of ¥3,763 million for operating loss carryforward for tax purposes in the fiscal year.

(b) Operating loss carryforward for tax purposes and its deferred tax assets by expiration periods.

	Millions of yen						
	2020	2021	2022	2023	2024	2025 and beyond	Total
Operating loss carryforward for tax purposes (1)	¥1,173	¥317	¥1,184	¥153	¥678	¥6,187	¥9,695
Valuation allowance	1,132	310	821	153	676	5,357	8,452
Net deferred tax assets	40	7	362	—	2	829	1,243

(1) Carryforward tax loss shown in the above table is after multiplying the statutory tax rate.

2. The following table summarizes the significant differences between the statutory effective tax rate and the tax rate calculated based on the Company's consolidated financial statements for the fiscal years ended March 31, 2018 and 2019.

	2018	2019
Statutory effective tax rate	30.7 %	30.5 %
Permanent difference due to non-deductible expense	4.4	1.7
Permanent difference due to non-taxable income	(73.6)	(109.7)
Effect of elimination of intercompany dividends received	70.3	111.8
Investment losses on equity method	150.9	4.4
Valuation allowance	(87.8)	29.1
Adjustment of deferred tax assets at end of year due to tax rate change	2.0	—
Others	(0.4)	(2.1)
Tax rate calculated based on the Companies' consolidated financial statements	96.4 %	65.8 %

15. Financial Instruments

(a) Qualitative information on financial instruments

1. Policy of financial instruments management

The Companies raise funds primarily through bank loans and the issuance of commercial paper and bonds. The Companies manage surplus funds utilizing financial assets with high degrees of safety. The Companies use derivatives to reduce risk as described below and do not enter into speculative trading.

2. Description of financial instruments and risk

Trade receivables-notes and accounts receivable are exposed to the credit risks of customers. As the Companies are expanding their business globally, certain foreign currency denominated trade receivables are exposed to foreign currency exchange rate fluctuation risk. For this risk, currency forward contracts are used on a certain portion of the amount of foreign currency denominated trade receivables less the amount of respective foreign currency denominated trade payable. Investment securities are mainly stocks issued by companies that have business relationships, and are exposed to stock market fluctuation risk.

The majority of trade payables-notes and accounts payable have payment due dates of less than one year. A portion of foreign currency denominated trade payables-notes and accounts are denominated in foreign currencies in association with the import of raw materials and others and are thus exposed to foreign currency exchange rate fluctuation risk. For this risk, currency forward contracts are used on a certain portion of the positions that are, as a general rule, the net amount of trade payables denominated in the respective foreign currencies. Short-term borrowings and commercial papers are raised mainly for operating activities while long-term debt (in principle within 5 years) is raised mainly for capital investments. Loans with floating interest are exposed to interest rate fluctuation risk, for long-term debt with floating interest, derivative transactions (interest rate swap contracts) are used for certain long-term loans in each loan agreement in order to hedge the risk of fluctuating interest rates and to make interest expenses fixed.

Regarding derivative transactions, the Companies used currency forward contracts and swaps to hedge transactions, such as future sales of commodities (mainly basic metals) and future purchases of inventories (mainly imported materials) in foreign currencies, and to hedge their foreign currency denominated assets and liabilities against foreign currency exchange risk. For those transactions, the Companies apply the deferred hedge method or the matching treatment method as hedge accounting methods except for transactions held by certain foreign subsidiaries, and for certain transactions to hedge assets and liabilities denominated in foreign currencies against foreign currency exchange risk.

The Companies also entered into interest rate swap contracts to hedge their loans payable against interest rate fluctuation risk. For those transactions, the Companies apply the deferred hedge method or the exceptional accrual method for interest rate swaps as hedge accounting methods except for transactions held by certain foreign subsidiaries.

Further, the Companies utilized metal forward contracts and fuel forward contracts to reduce the Companies' exposure to fluctuations in material prices. For those transactions, the Companies apply the deferred hedge method as hedge accounting methods except for transactions held by certain foreign subsidiaries. With regard to hedging instruments, hedged items, hedging policies and evaluation of hedge effectiveness, please refer to "Notes to Consolidated Financial Statements - 2.Summary of Significant Accounting Policies - (e) Derivative transactions and hedge accounting."

Derivative transactions are exposed to market risks from fluctuations in fair value and to credit risks from breach of contract due to counter parties' insolvency or other reasons. Market risks of the Companies' currency forward and swap contracts, interest rate swap contracts and metal forward contracts refer to the risks from fluctuations in exchange rates, interest rates and metal prices.

3. Description of risk management system for financial instruments

Management system for credit risk

With regard to the credit risk for trade receivables-notes and accounts receivable, due dates and balances are managed for each customer and the credit status of major customers is kept track of on a semiannual basis.

In order to mitigate credit risk for derivative transactions, the Companies conduct business only with highly rated financial institutions and trading companies.

Management system for market risk

For foreign currency exchange rate risk from foreign currency denominated trade receivables, currency forward contracts are used on a certain portion of the positions that are, as a general rule, the net amount of foreign currency denominated trade receivables. For foreign currency exchange rate risk from foreign currency denominated trade payables, currency forward contracts are used on a certain portion of the positions that are, as a general rule, the net amount of foreign currency denominated trade payables. Moreover, the Companies also entered into interest rate swaps to hedge their loans payable against interest rate risk.

For stock market fluctuation risk of investment securities, the Companies keep track of the market prices and investees' (business partners) financial condition and review continuously the possession situation of stocks in view of the relationship with business partners.

Derivative transactions entered into by the Companies are implemented and controlled based on the Company's internal policies.

Management system for liquidity risk of financing

The Company's Finance & Accounting Department manages the risk through the preparation of the Companies' financial plans with group financing.

4. Supplementary explanation regarding fair value of financial instruments

The fair value of financial instruments is measured based on the market price, if available, or reasonably estimated value if a market price is not available. As reasonably estimated value is estimated based on certain assumptions, it might differ if different assumptions are used.

In addition, the contract amount of the derivative transactions described below in "Notes to Consolidated Financial Statements - 16. Derivative Transactions" does not represent the market risk of the derivative transactions.

(b) Fair value of financial instruments

The carrying amounts of book value, fair value, and differences as of March 31, 2018 and 2019 were as follows. In addition, financial instruments, of which it is extremely difficult to measure the fair value, are not included (Please refer to "Notes 2. Financial instruments whose fair value is extremely difficult to measure").

Millions of yen

Year ended March 31, 2018	Book value	Fair value	Difference
Assets:			
(a) Cash and deposits	¥ 22,379	¥ 22,379	¥ -
(b) Notes and accounts receivable	100,540	100,540	-
(c) Investment securities	12,648	14,054	1,405
Total	¥ 135,569	¥ 136,975	¥ 1,405
Liabilities:			
(a) Notes and accounts payable	58,623	58,623	-
(b) Short-term borrowings and commercial papers	45,341	45,341	-
(c) Current portion of long-term debt	32,708	32,779	70
(d) Long-term debt	130,369	130,830	460
Total	¥ 267,043	¥ 267,574	¥ 530
Derivative transactions	¥ (5,749)	¥ (5,749)	¥ -

Notes: Derivative assets and liabilities are on net basis. Items that are net liabilities are shown in parenthesis.

Year ended March 31, 2019	Book value	Fair value	Difference
Assets:			
(a) Cash and deposits	¥ 21,536	¥ 21,536	¥ -
(b) Notes and accounts receivable	91,273	91,273	-
(c) Investment securities	11,441	10,912	(529)
Total	¥ 124,251	¥ 123,721	¥ (529)
Liabilities:			
(a) Notes and accounts payable	55,926	55,926	-
(b) Short-term borrowings and commercial papers	58,098	58,098	-
(c) Current portion of long-term debt	36,412	36,550	138
(d) Long-term debt	122,368	122,762	393
Total	¥ 272,805	¥ 273,337	¥ 532
Derivative transactions	¥ (1,398)	¥ (1,398)	¥ -

Notes: Derivative assets and liabilities are on net basis. Items that are net liabilities are shown in parenthesis.

Notes:

1. Method of estimating fair value of financial instruments

Assets:

(a) Cash and deposits and (b) Notes and accounts receivable:

Regarding Cash and deposits and Notes and accounts receivable, book value is used as fair value, because these instruments have short maturity so that fair value approximates book value.

(c) Investment securities:

Fair value of investment securities equals quoted market price. Fair value of debt securities equals quoted market price or provided price by financial institutions. For the situation from the point of view of holding purposes, please refer to "Notes to Consolidated Financial Statements - 4. Securities."

Liabilities:

(a) Notes and accounts payable and (b) Short-term borrowings and commercial papers:

Regarding Notes and accounts payable and Short-term borrowings and commercial papers, book value is used as fair value, because these instruments have short maturity so that fair value approximates book value.

(c) Current portion of long-term debt and (d) Long-term debt:

Fair value of long-term bank loans is based on the present value of future cash flows discounted using the current borrowing rate for similar debt of a comparable maturity.

Fair value of corporate bonds is based on the present value of future cash flows discounted using the indicated rate in secondary markets.

Derivative transactions:

(a) Contract amount, fair value, unrealized gain or loss, and others are described in "Notes to Consolidated Financial Statements - 16. Derivative Transactions."

2. Financial instruments whose fair value is extremely difficult to measure

Consolidated balance sheet amount Millions of yen

Classification	2018	2019
Unlisted equity securities	¥ 52,111	¥ 52,681
Nonpublic domestic bonds	240	240

Above are not included in "(c) Investment securities" because there is no market value and it is extremely difficult to measure the fair value.

3. The redemption schedule for money claim and held-to-maturity debt securities with maturity dates subsequent to the consolidated balance sheets date

Millions of yen

Year ended March 31, 2018	April 1, 2018 to March 31, 2019	April 1, 2019 to March 31, 2023	April 1, 2023 to March 31, 2028	April 1, 2028 and thereafter
(a) Cash and deposits	¥ 22,379	¥ -	¥ -	¥ -
(b) Notes and accounts receivable	100,540	-	-	-
(c) Investment securities:				
Available-for-sale securities with maturity date				
Bonds(domestic government and municipal bonds)	-	-	-	240
Total	¥ 122,920	¥ -	¥ -	¥ 240

Year ended March 31, 2019	April 1, 2019 to March 31, 2020	April 1, 2020 to March 31, 2024	April 1, 2024 to March 31, 2029	April 1, 2029 and thereafter
(a) Cash and deposits	¥ 21,536	¥ -	¥ -	¥ -
(b) Notes and accounts receivable	91,273	-	-	-
(c) Investment securities:				
Available-for-sale securities with maturity date				
Bonds(domestic government and municipal bonds)	-	-	-	240
Total	¥ 112,809	¥ -	¥ -	¥ 240

4. The redemption schedule for corporate bonds, long-term debt, and other interest-bearing debt with maturity dates subsequent to the consolidated balance sheets date

Please refer to "Notes to Consolidated Financial Statements - 6. Short-Term Borrowings and Long-Term Debt."

16. Derivative Transactions

(a) Derivative transactions for which hedge accounting had not been applied as of March 31, 2018 and 2019 were as follows:

Currency-related derivatives

Millions of yen

Type	2018	2019
Forward contracts:		
Selling:		
U.S. dollars:		
Contract amounts	¥2,525	¥1,498
Due over one year	-	-
Fair value	39	(10)
Net unrealized gains (losses)	39	(10)

Notes: Fair values of currency forward contracts are based on future exchange rates or prices provided by financial institutions.

(b) Derivative transactions for which hedge accounting had been applied as of March 31, 2018 and 2019 were as follows:

Currency-related derivatives

Currency-related derivatives for which hedge accounting had been applied

		Millions of yen	
Type	Hedged items	2018	2019
Forward contracts:			
Selling:			
	Accounts receivable		
U.S. dollars:	Contract amounts	¥37,566	¥15,007
	Due over one year	4,574	2,568
	Fair value	759	(137)
Buying:			
	Accounts payable		
U.S. dollars:	Contract amounts	¥2,580	¥1,610
	Due over one year	-	-
	Fair value	17	17
Euros:	Contract amounts	¥254	¥33
	Due over one year	13	-
	Fair value	6	(0)
Malaysia ringgit:	Contract amounts	¥30	¥ -
	Due over one year	-	-
	Fair value	0	-

Notes:

- (a) The deferred hedge method is applied as a hedge accounting method.
(b) Fair values of currency forward contracts and currency swap contracts are based on future exchange rates or prices provided by financial institutions.

Currency-related derivatives for which exceptional accrual method had been applied

Type	Hedged items	2018	2019
Forward contracts:			
Selling:			
	Accounts receivable		
U.S. dollars:	Contract amounts	¥236	¥230
	Due over one year	-	-
	Fair value	(Note b)	(Note b)
Buying:			
	Accounts payable		
U.S. dollars:	Contract amounts	¥2	¥2
	Due over one year	-	-
	Fair value	(Note b)	(Note b)

Notes:

- (a) The exceptional accrual method for currency-related derivatives is applied as a hedge accounting method.
(b) For certain accounts receivable for which currency forward contracts are used to hedge the foreign currency exchange rate fluctuation risk, fair value of derivative financial instruments is included in fair value of the accounts receivable as hedged items, because those currency forwards contracts are treated in combination with the respective accounts receivable with the exceptional accrual method for currency forward contracts.

Commodities-related derivatives

		Millions of yen	
Type	Hedged items	2018	2019
Forward contracts:			
Raw materials and finished goods			
Selling:			
Zinc:	Contract amounts	¥45,699	¥23,222
	Due over one year	16,473	7,494
	Fair value	(6,538)	(1,648)
Lead:	Contract amounts	¥1,495	¥1,576
	Due over one year	-	-
	Fair value	52	31
Silver:	Contract amounts	¥1,498	¥635
	Due over one year	-	-
	Fair value	54	19
Copper:	Contract amounts	¥177	¥17
	Due over one year	-	-
	Fair value	(2)	0
Buying:			
Zinc:	Contract amounts	¥1,718	¥2,354
	Due over one year	-	-
	Fair value	1	185
Lead:	Contract amounts	¥2,404	¥2,225
	Due over one year	-	-
	Fair value	(142)	(19)
Copper:	Contract amounts	¥1,523	¥5,813
	Due over one year	-	3,296
	Fair value	(2)	163
Coal:	Contract amounts	¥38	¥ -
	Due over one year	-	-
	Fair value	3	-

Notes:

- (a) The deferred hedge method is applied as a hedge accounting method.
(b) Fair value of metal forward contracts is based on forward prices provided by trading companies.

17. Employees' Retirement Benefits

The Company and its consolidated domestic subsidiaries provide two retirement benefit plans for employees, an unfunded retirement plan and a funded retirement plan, under which all eligible employees are entitled to benefits based on their length of service and basic rate of pay at the time of termination.

Defined benefit plans

(a) Changes in retirement benefit obligations

Millions of yen

	2018	2019
Balance at the beginning of the fiscal year	¥45,125	¥46,264
Service cost	2,573	2,606
Interest cost	149	148
Actuarial loss (gain)	849	(152)
Benefits paid	(2,467)	(2,081)
Past service costs (benefits)	11	(0)
Increase by newly consolidated subsidiaries	42	—
Decrease by exclusion of consolidated subsidiaries	—	(58)
Other	(19)	(93)
Balance at the end of the fiscal year	¥46,264	¥46,633

(b) Changes in plan assets

	2018	2019
Balance at the beginning of the fiscal year	¥23,140	¥24,346
Expected return on plan assets	431	637
Actuarial gain (loss)	504	(505)
Contributions paid by the employer	1,008	999
Benefits paid	(742)	(648)
Increase by newly consolidated subsidiaries	33	—
Other	(29)	26
Balance at the end of the fiscal year	¥24,346	¥24,854

(c) Reconciliation from retirement benefit obligations and plan assets to liability (asset) for retirement benefits

	2018	2019
Funded retirement benefit obligations	¥20,437	¥20,941
Plan assets	(24,346)	(24,854)
Unfunded retirement benefit obligations	(3,908)	(3,913)
Net liability for retirement benefits at the end of the fiscal year	21,918	21,779
Liability for retirement benefits	26,542	26,404
Asset for retirement benefits	(4,624)	(4,625)
Net liability for retirement benefits at the end of the fiscal year	¥21,918	¥21,779

(d) Retirement benefit costs

	2018	2019
Service cost	¥2,619	¥2,606
Interest cost	149	148
Expected return on plan assets	(431)	(637)
Net actuarial loss (gain) amortization	454	568
Past service costs amortization	101	63
Total retirement benefit costs for the fiscal year	¥2,892	¥2,748

(e) Remeasurements of defined benefit plans

Millions of yen

	2018	2019
Past service costs	¥89	¥63
Actuarial gain (loss)	109	215
Total remeasurements of defined benefit plans for the fiscal year	¥199	¥278

(f) Accumulated adjustments for retirement benefit

	2018	2019
Prior service costs that are yet to be recognized	¥65	¥2
Net actuarial losses that are yet to be recognized	564	348
Total balance at the end of the fiscal year	¥629	¥351

(g) Plan assets

1. Plan assets comprise:

	2018	2019
Bonds	35%	34%
Equity securities	30%	31%
General insurance funds	31%	31%
Other	4%	4%
Total	100%	100%

2. Long-term expected rate of return

Current and target asset allocations, historical and expected returns on various categories of plan assets have been considered in determining the long-term expected rate of return.

(h) Actuarial assumptions

The principal actuarial assumptions at March 31, 2018 and 2019 are as follows:

	2018	2019
Discount rate	0.0%-0.9%	0.0%-0.9%
Long-term expected rate of return	Mainly 1.7 %	Mainly 3.0 %

Defined contribution plans

Contributions to defined contribution plans amounted to ¥419 million and ¥792 million for the years ended March 31, 2018 and 2019, respectively.

18. Earnings per Share of Common Stock

Earnings per share of common stock at March 31, 2018 and 2019 were as follows:

Year ended March 31, 2018	Profit (loss) (Millions of yen)	Weighted-average shares (Thousands)	Profit (loss) per share (Yen)
Profit (loss) attributable to owners of parent	¥(708)	57,108	¥(12.40)

Year ended March 31, 2019	Profit (Millions of yen)	Weighted-average shares (Thousands)	Profit per share (Yen)
Profit attributable to owners of parent	¥4,691	57,107	¥82.15

Regarding diluted earnings per share, no figures for diluted earnings per share have been disclosed because no latent shares existed.

Note: Due to a share consolidation from 10 shares to 1 share on October 1, 2017, profit (loss) per share was calculated based on assumption that the share consolidation had taken place at the beginning of the year ended March 31, 2018.

19. Loss on impairment of fixed assets

Loss on impairment of fixed assets for the fiscal years ended March 31, 2018 and 2019 consisted of the following:

Year ended March 31, 2018			
Location	Major use	Asset category	Millions of yen
Yokohama City, Kanagawa Prefecture	Idle assets	Land	¥219
		Intangible fixed Assets	67
		Subtotal	287
Total (1 item)			¥287

Year ended March 31, 2019

Not applicable.

Grouping of assets used for business purposes is based on plant- and product-specific units based on management accounting classifications.

The book value for idle assets was written down to the recoverable value as the investment amount was deemed not to be recoverable due to a decline in profitability. The collectible value was measured by the net saleable price, and the difference against the book value was recorded as an impairment loss under extraordinary losses. The net saleable price was calculated based on the value assessed by real estate appraisal, among other factors.

20. Related Party Transactions

(a) Related party transactions

1. The Company owns 32.2% of outstanding shares of Pan Pacific Copper Co., Ltd., which produces and sells products related to copper refining and smelting business.

The transaction amount for the fiscal years ended March 31, 2018 and 2019 and account balance as of March 31, 2019 with Pan Pacific Copper Co., Ltd. was as follows:

	2018	2019	Millions of yen
Guarantees of bank loans	¥90,902	¥90,302	
Increase in short -term loans receivable, net	¥ -	¥6,575	
Short term loans receivable	¥ -	¥6,575	

2. SCM Minera Lumina Copper Chile is an affiliate of MFN Investment LLC.

MFN Investment LLC is an affiliate of the Company.

The transaction amount for the fiscal years ended March 31, 2018 and 2019 with SCM Minera Lumina Copper Chile was as follows:

	2018	2019	Millions of yen
Guarantees of bank loans	¥27,442	¥25,135	

3. Caserones Finance Netherlands B.V. is an affiliate of Pan Pacific Copper Co., Ltd.

The transaction amount for the fiscal years ended March 31, 2018 and 2019 with Caserones Finance Netherlands B.V. was as follows:

	2018	2019	Millions of yen
Guarantees of bank loans	¥6,625	¥ -	

(b) Note about significant related parties

In the fiscal year ended March 31, 2019, Pan Pacific Copper Co., Ltd. was recognized as significant related party and the summary of its financial statements was as follows:

Pan Pacific Copper Co., Ltd.			
	2018	2019	Millions of yen
Total current assets	¥327,000	¥308,844	
Total non-current assets	149,359	194,686	
Total current liabilities	315,194	330,690	
Total long-term liabilities	50,322	58,280	
Total net assets	110,842	114,560	
Net sales	690,313	733,965	
Profit before income taxes	225	10,003	
Profit (loss)	(961)	6,782	

21. Asset Retirement Obligations

Years ended March 31, 2018 and 2019

Asset retirement obligations that are recorded in the consolidated balance sheet

(a) Overview of asset retirement obligations

- Obligation to restore a closed mine to its original state required by the Mine Closure Law overseas
- Obligation to eliminate asbestos caused by dismantling a building (business asset) under the Act on Asbestos Health Damage Relief
- Obligation to restore a vacated office or other facility to its original state based on a real estate lease agreement

(b) Basis for calculating amounts of the asset retirement obligations

(Mines)

Compania Minera Santa Luisa S.A. has recognized asset retirement obligations in accordance with International Financial Reporting Standards, by estimating closure costs based on mine closure plans under mine closure legislation and regulations in Peru. With regard to estimate of asset retirement obligations, a discount rate of 2.69% is used, and the estimated period up to payment is based on number of recoverable years from launch of operations (average of 41 years). In addition, during the fiscal year ended March 31, 2019, the company revised its estimate of mine closure costs, no longer using the 2.40% discount rate used in the previous fiscal year. As a result, there was a increase of ¥538million (\$4,846 thousand) in the balance of asset retirement obligations compared with before the change.

(Asbestos)

The expected periods of time before removal expenses at the time of dismantling is estimated between 2 and 31 years depending on each asset. The companies use rates between 0.64% and 2.30% as a discount rate to estimate the amount of asset retirement obligations.

(Real estate lease agreements)

The companies reasonably estimate the amount of lease deposits from real estate lease agreements that they cannot expect to finally recover, and record the portion of this amount allocated to the fiscal year ended March 31, 2019 as expenses, instead of recording them as asset retirement obligations under liabilities. The companies use periods of time between 4 and 21 years from the date of occupancy to estimate the amount of the expenses. The companies estimate the uncollectible amount of lease deposits as ¥83 million in the fiscal year ended March 31, 2019.

(c) Changes in the total amount of these asset retirement obligations in the fiscal years ended March 31, 2018 and March 31, 2019

	Millions of yen	
	2018	2019
Balance at the beginning of the fiscal year	¥ 3,224	¥ 3,065
Adjustments due to the passage of time	73	66
Decrease from execution of asset retirement obligations	(139)	(156)
Increase from changes of estimates	(101)	538
Impact of foreign currency translation	8	(171)
Balance at the end of the fiscal year	¥ 3,065	¥ 3,341

22. Consolidated Statements of Comprehensive Income

Years ended March 31, 2018 and 2019

Amounts reclassified to net income in the current period that were recognized in other comprehensive income in the current or previous periods and tax effects for each component of other comprehensive income were as follows:

	Millions of yen	
	2018	2019
Net unrealized gains (losses) on securities:		
Increase (decrease) during the year	¥(14)	¥(1,542)
Reclassification adjustments	(128)	-
Subtotal, before tax	(143)	(1,542)
Tax (expense) or benefit	62	485
Subtotal, net of tax	(80)	(1,056)
Deferred gains (losses) on hedges:		
Increase (decrease) during the year	(7,745)	3,626
Reclassification adjustments	5,716	772
Subtotal, before tax	(2,029)	4,398
Tax (expense) or benefit	310	(481)
Subtotal, net of tax	(1,718)	3,917
Foreign currency translation adjustments:		
Increase(decrease) during the year	1,108	(2,228)
Reclassification adjustments	-	-
Subtotal, net of tax	1,108	(2,228)
Remeasurements of defined benefit plans:		
Increase(decrease) during the year	(13)	76
Reclassification adjustments	212	202
Subtotal, before tax	199	278
Tax (expense) or benefit	(22)	(35)
Subtotal, net of tax	176	243
Share of other comprehensive income of associates accounted for using equity method:		
Increase(decrease) during the year	(2,797)	(2,035)
Reclassification adjustments	1,971	1,048
Subtotal, net of tax	(826)	(987)
Total other comprehensive income	¥(1,340)	¥(111)



Independent Auditor's Report

To the Board of Directors of Mitsui Mining and Smelting Company, Limited:

We have audited the accompanying consolidated financial statements of Mitsui Mining and Smelting Company, Limited and its consolidated subsidiaries, which comprise the consolidated balance sheets as at March 31, 2019 and 2018, and the consolidated statements of operations, statements of comprehensive income, statements of changes in net assets and statements of cash flows for the years then ended, and a summary of significant accounting policies and other explanatory information.

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 audits. We conducted our audits in accordance with auditing standards generally accepted in Japan. Those standards require that we comply with ethical requirements and 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 our 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, we consider 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, while the objective of the financial statement audit is 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 present fairly, in all material respects, the financial position of Mitsui Mining and Smelting Company, Limited and its consolidated subsidiaries as at March 31, 2019 and 2018, and their financial performance and cash flows for the years then ended in accordance with accounting principles generally accepted in Japan.

Convenience Translation

The U.S. dollar amounts in the accompanying consolidated financial statements with respect to the year ended March 31, 2019 are presented solely for convenience. Our audit also included the translation of yen amounts into U.S. dollar amounts and, in our opinion, such translation has been made on the basis described in Note 1 to the consolidated financial statements.

KPMG AZSA LLC

June 27, 2019
Tokyo, Japan

KPMG AZSA LLC, a limited liability audit corporation incorporated under the Japanese Certified Public Accountants Law and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity.

ESG data

Governance

Profile of Directors and Corporate Auditors (As of June 2019)

President and Representative Director

Keiji Nishida

April 1980	Entered the Company
October 2008	General Manager of Finance & Accounting Department
June 2010	Executive Officer, General Manager of Finance & Accounting Department
June 2011	Director, Senior Executive Officer, CFO, General Manager of Corporate Management Department and Finance & Accounting Department
February 2012	Director, Senior Executive Officer, CFO, General Manager of Corporate Management Department
April 2014	Representative Director, Senior Managing Director, Senior Managing Executive Officer, CFO, General Manager of Corporate Management Department, Senior General Manager of Copper Business Strategic Division
January 2016	Representative Director, Senior Managing Director, Senior Managing Executive Officer, CFO
April 2016	President and Representative Director (current positions)

Representative Director, Managing Director, Senior Executive Officer

Takeshi Nou

April 1986	Entered the Company
June 2010	President and Representative Director of Mitsui Copper Foil (Malaysia) Sdn. Bhd.
October 2013	General Manager of Recycling Business Promotion Group, Metals, Minerals & Engineering Sector
April 2014	Executive Officer, Senior General Manager of Technology Management Division, Metals & Recycling Division, Metals Sector
April 2015	Executive Officer, Deputy Senior General Manager of Engineered Materials Sector, General Manager of Business Planning Group, Engineered Materials Sector
June 2015	Director, Senior Executive Officer, Deputy Senior General Manager of Engineered Materials Sector, General Manager of Business Planning Group, Engineered Materials Sector
October 2015	Director, Senior Executive Officer, Senior General Manager of Engineered Materials Sector, General Manager of Business Planning Group, Engineered Materials Sector
April 2016	Representative Director, Managing Director, Senior Executive Officer, Senior General Manager of Engineered Materials Sector (current positions)

Director and Senior Executive Officer

Isshi Hisaoka

April 1980	Entered the Company
January 2010	General Manager of Specialty Foil Division
June 2010	Executive Officer, Deputy Senior General Manager of Copper Foil Sector, General Manager of Specialty Foil Division
November 2010	Executive Officer, Senior General Manager of Copper Foil Sector, General Manager of Specialty Foil Division
June 2011	Senior Executive Officer, Senior General Manager of Electronic Materials Sector, General Manager of Specialty Foil Division
June 2013	Director, Senior Executive Officer, Senior General Manager of Electronic Materials Sector
April 2014	Director, Senior Executive Officer, Deputy Senior General Manager of Engineered Materials Sector
June 2014	Director, Senior Executive Officer, Deputy Senior General Manager of Engineered Materials Sector, General Manager of Business Planning Group, Engineered Materials Sector
April 2015	Director, Senior Executive Officer, Senior General Manager of Engineered Materials Sector
October 2015	Director, Senior Executive Officer, Senior General Manager of Engineered Materials Sector Director, Senior Executive Officer, Deputy Senior General Manager of Metals Sector
April 2016	Director, Senior Executive Officer, Senior General Manager of Metals Sector
April 2018	Director, Senior Executive Officer, Senior General Manager of Metals Sector, Chief Environmental Safety Officer
April 2019	Director, Senior Executive Officer, Chief Environmental Safety Officer (current positions)

Director and Senior Executive Officer

Takashi Oshima

April 1981	Entered the Company
October 2009	President and Representative Director of MCS, Inc.
April 2013	Deputy Senior General Manager of Materials & Applications Sector, General Manager of Affiliates Coordination Division
June 2013	Executive Officer, Deputy Senior General Manager of Materials & Applications Sector, General Manager of Affiliates Coordination Division
April 2014	Executive Officer, Senior General Manager of Affiliates Coordination Strategic Sector
June 2014	Director, Senior Executive Officer, Senior General Manager of Affiliates Coordination Strategic Sector
January 2016	Director, Senior Executive Officer, CRO, Senior General Manager of Corporate Planning & Control Sector, General Manager of Corporate Planning Department
April 2016	Director, Senior Executive Officer, Senior General Manager of Corporate Planning & Control Sector, General Manager of Corporate Planning Department (current positions)

Outside Director

Morio Matsunaga

August 1977	Postdoctoral fellow, The University of Tennessee
October 1978	Lecturing Professor, Faculty of Engineering, Kyushu Institute of Technology
October 1980	Associate Professor, Faculty of Engineering, Kyushu Institute of Technology
September 1996	Professor, Faculty of Engineering, Kyushu Institute of Technology
April 2003	Professor, Department of applied science for integrated system engineering, Kyushu Institute of Technology
April 2004	Administration officer, Kyushu Institute of Technology
April 2007	Vice president, Kyushu Institute of Technology
April 2010	President, Kyushu Institute of Technology
June 2016	Chairperson of the Board of Director, Kitakyushu Foundation for the Advancement of Industry, Science and Technology (current position)
June 2016	Chairperson of the Board of Director, Human Media Creation Center/KYUSHU
June 2016	Outside Director of the Company (current position)
April 2017	Member of Administrative Council, The University of Kitakyushu (current position)
June 2018	Outside Auditor of KROSAKI HARIMA CORPORATION (current position)

Outside Director

Masaharu Miura

April 1975	Adopted as Prosecutor
August 2002	Chief Prosecutor of Naha District Public Prosecutors Office
September 2004	Director-General of the Immigration Bureau, the Ministry of Justice
June 2007	Chief Prosecutor of Osaka District Public Prosecutors Office
January 2010	Superintending Prosecutor of Fukuoka High Public Prosecutors Office
May 2011	Professional registration in Japan as lawyer
May 2011	With KAWAKAMI Law Office
June 2013	Outside Auditor of Miyasaka Construction Corporation (current position)
June 2013	Outside Corporate Auditor of the Company
April 2014	Professor, Division of Law, Multimedia Master's Course, Graduate School of Integrated Science and Art, University of East Asia (current position)
April 2014	Special Councillor, Asia Crime Prevention Foundation (current position)
June 2014	Outside Director of OUG Holdings Inc. (current position)
May 2015	Launched GINZA-CHUO Law Office
June 2017	Councilor of Association of Safety and Health Technical Skills Examination (current position)
August 2018	Outside Auditor of Toju Holdings, Ltd (current position)
June 2019	Outside Director of the Company (current position)

Corporate Auditor

Akira Yoshida

April 1980	Entered the Company
June 2008	General Manager of Legal & Administrative Department
June 2010	Executive Officer, General Manager of Legal & Administrative Department
June 2011	Executive Officer, General Manager of Personnel Department and Legal & Administrative Department
June 2012	Executive Officer, President and Representative Director of Kamioka Mining & Smelting Co., Ltd.
October 2015	Executive Officer, Senior General Manager of Metals & Recycling Division, Metals Sector
June 2018	Corporate Auditor of the Company (current position)

Corporate Auditor

Takashi Kadowaki

April 1981	Entered the Company
June 2009	General Manager of Strategy Planning, Corporate Management Division
July 2010	Managing Director of Mitsui Sumitomo Metal Mining Brass & Copper Co., Ltd.
June 2015	Corporate Auditor of the Company (current position)

Outside Corporate Auditor

Toru Ishida

April 1975	Entered Ministry of International Trade and Industry (Presently Ministry of Economy, Trade and Industry)
April 2000	Executive Secretary to the Prime Minister
July 2002	Deputy Director-General for Policy Coordination, Minister's Secretariat, METI
July 2003	Director-General for Policy Planning and Coordination, Minister's Secretariat, METI
September 2005	Director-General, Trade and Economic Cooperation Bureau, METI
July 2007	Director-General, Industrial Science and Technology Policy and Environment Bureau, METI
July 2008	Commissioner, Agency for Natural Resources and Energy, METI
January 2011	Advisor, Tokyo Electric Power Company, Incorporated
June 2013	Director, Japan Alcohol Trading Co., LTD
June 2014	Vice President, Japan Alcohol Trading CO., LTD
December 2015	President, The Japan Chamber of Commerce and Industry (current position)
June 2016	Outside Auditor, Tokyo Small and Medium Business Investment & Consultation CO., LTD. (current position)
June 2016	Outside Director, Tokyo Ryutsu Center Inc. (current position)
June 2018	Outside Corporate Auditor of the Company (current position)

Outside Corporate Auditor

Keiko Takegawa

April 1981	Entered Prime Minister's Office (Presently Cabinet Office) Deputy Director General for Policies on Cohesive Society, Cabinet Office
July 2008	Deputy Director General for Gender Equality Bureau, Cabinet Office
July 2009	Director, Public Relations Office, Cabinet Office
December 2012	Director General, Gender Equality Bureau
July 2014	Counsellor for Scientific Research Organizations, Policy Planning Division, Secretariat of the Science Council of Japan
July 2018	Professor, Showa Women's University (current position)
April 2019	Outside Corporate Auditor of the Company (current position)
June 2019	Outside Corporate Auditor of the Company (current position)

Employees

Breakdown of consolidated employees by employment status and employment contract type (as of the end of FY2018)

		Male	Female	Total
Open-ended workforce contract	Full-time	8,675	3,987	12,662
	Part-time	197	10	207
	Total	8,872	3,997	12,869
Fixed-term contract	Full-time	524	136	660
	Part-time	82	35	117
	Total	606	171	777
Total		9,478	4,168	13,646
Supervised workers		1,023	813	1,836
Total workforce		10,501	4,981	15,482

※ Since the calculation method is different from the one for temporary employees stated in the annual securities report, the total number of employees is not in accord.

Breakdown of consolidated employees by employment contract (as of the end of FY2018)

	Open-ended workforce contract		Fixed-term contract		Total
	Male	Female	Male	Female	
Japan	4,617	751	560	150	6,078
North America	462	310	0	0	772
South and Central America	623	414	6	6	1,049
Asia	3,130	2,473	40	15	5,658
Europe	40	49	0	0	89
Total	8,872	3,997	606	171	13,646

Breakdown of consolidated employees by position (as of the end of FY2018)

	Under 30 years of age		30-49years old		50 years of age or over		Total
	Male	Female	Male	Female	Male	Female	
Managerial	2	2	740	89	519	21	1,373
Non-managerial	2,098	1,006	4,468	2,495	1,651	555	12,273
Total	2,100	1,008	5,208	2,584	2,170	576	13,646

Percentage of managers holding local nationality in overseas sites (as of the end of FY2018)

North America	54.7%
South and Central America	73.9%
Asia	81.8%
Europe	100.0%
Total	77.7%

New employee hires by region (as of the end of FY2018)

		Under 30 years of age		30-49years old		50 years of age or over		Total
		Male	Female	Male	Female	Male	Female	
Japan	New hires	206	35	175	70	55	29	570
	Total employees	732	131	2,957	420	1,689	214	6,143
	Rate of hiring	28.1%	26.7%	5.9%	16.7%	3.3%	13.6%	9.3%
North America	New hires	34	6	31	11	3	2	87
	Total employees	59	14	205	127	186	168	759
	Rate of hiring	57.6%	42.9%	15.1%	8.7%	1.6%	1.2%	11.5%
South and Central America	New hires	213	216	98	113	4	11	655
	Total employees	228	233	295	167	93	19	1,035
	Rate of hiring	93.4%	92.7%	33.2%	67.7%	4.3%	57.9%	63.3%
Asia	New hires	410	281	236	102	3	4	1,036
	Total employees	1,123	622	1,834	1,777	156	87	5,599
	Rate of hiring	36.5%	45.2%	12.9%	5.7%	1.9%	4.6%	18.5%
Europe	New hires	10	3	9	6	2	2	32
	Total employees	10	5	20	17	10	27	89
	Rate of hiring	100.0%	60.0%	45.0%	35.3%	20.0%	7.4%	36.0%
Total	New hires	873	541	549	302	67	48	2,380
	Total employees	2,152	1,005	5,311	2,508	2,134	515	13,625
	Rate of hiring	40.6%	53.8%	10.3%	12.0%	3.1%	9.3%	17.5%

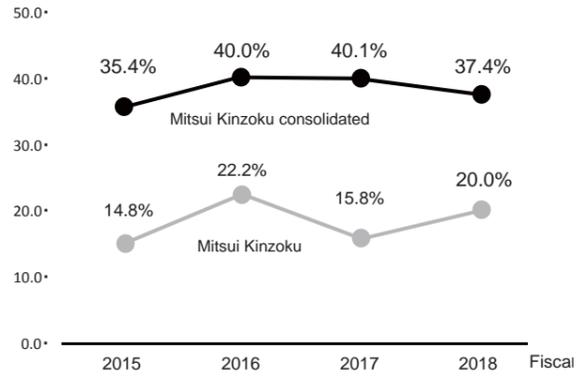
※ Since the calculation method is different from the one for consolidated employees, the total number of employees is not in accord.

Employee turnover by region (as of the end of FY2018)

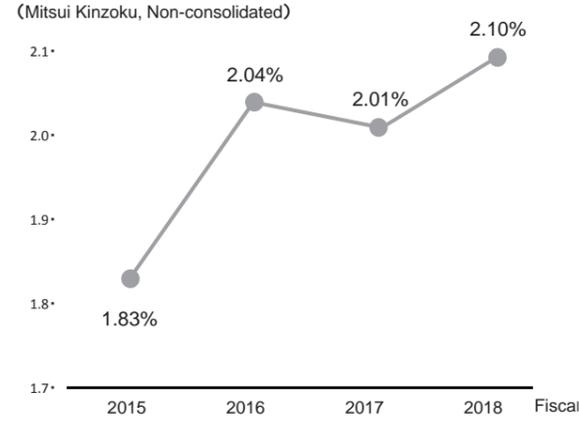
		Under 30 years of age		30-49years old		50 years of age or over		Total
		Male	Female	Male	Female	Male	Female	
Japan	Departures	35	6	52	19	162	9	283
	Total employees	732	131	2,957	420	1,689	214	6,143
	Turnover rate	4.8%	4.6%	1.8%	4.5%	9.6%	4.2%	4.6%
North America	Departures	35	5	33	17	12	12	114
	Total employees	59	14	205	127	186	168	759
	Turnover rate	59.3%	35.7%	16.1%	13.4%	6.5%	7.1%	15.0%
South and Central America	Departures	150	170	67	109	8	8	512
	Total employees	228	233	295	167	93	19	1,035
	Turnover rate	65.8%	73.0%	22.7%	65.3%	8.6%	42.1%	49.5%
Asia	Departures	354	247	240	193	9	12	1,055
	Total employees	1,123	622	1,834	1,777	156	87	5,599
	Turnover rate	31.5%	39.7%	13.1%	10.9%	5.8%	13.8%	18.8%
Europe	Departures	4	0	14	3	3	5	29
	Total employees	10	5	20	17	10	27	89
	Turnover rate	40.0%	0.0%	70.0%	17.6%	30.0%	18.5%	32.6%
Total	Departures	578	428	406	341	194	46	1,993
	Total employees	2,152	1,005	5,311	2,508	2,134	515	13,625
	Turnover rate	26.9%	42.6%	7.6%	13.6%	9.1%	8.9%	14.6%

※ Since the calculation method is different from the one for consolidated employees, the total number of employees is not in accord. Departures includes "retirement at the age limit" and "expiration of contract period".

Proportion of women as a percentage of new hires



Percentage of employees with disabilities

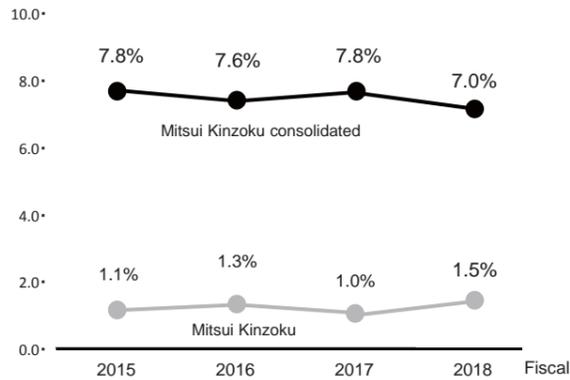


Parental leave

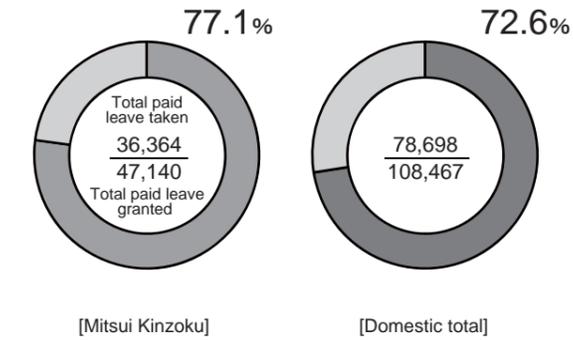
		FY2016		FY2017		FY2018	
		Employees that entitled to leave	Employees that took advantage	Employees that entitled to leave	Employees that took advantage	Employees that entitled to leave	Employees that took advantage
Mitsui Kinzoku	Male	69	1	87	1	69	2
	Female	1	1	10	10	7	7
	Total	70	2	97	11	76	9
Domestic total	Male	160	3	127	1	130	3
	Female	9	8	20	20	17	17
	Total	169	11	147	21	147	20

※ Employees that took advantage: Employees that took parental leave in the relevant fiscal year of those entitled.

Proportion of women in management positions



Rate of taking paid leave

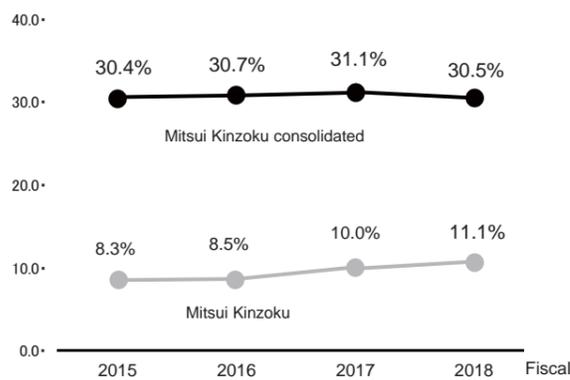


Return to work and retention rates after parental leave

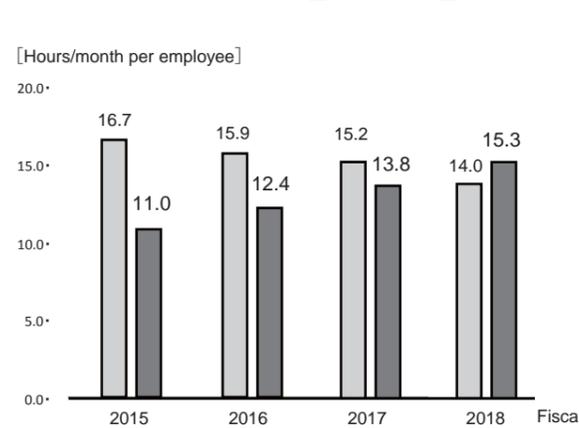
		FY2016			FY2017			FY2018		
		Ended	Returned	Retired	Ended	Returned	Retired	Ended	Returned	Retired
Mitsui Kinzoku	Male	1	1	0	2	2	0	2	2	0
	Female	7	6	0	0	0	0	7	7	0
	Total	8	7	0	2	2	0	9	9	0
Domestic total	Male	2	2	0	2	2	0	4	4	0
	Female	11	10	0	6	6	0	15	15	0
	Total	13	12	0	8	8	0	19	19	0

※ Ended: Employees whose parental leave ended.
Returned: Employees that returned to work after ended.
Retired: Employees that separated from employment in twelve months after returning.

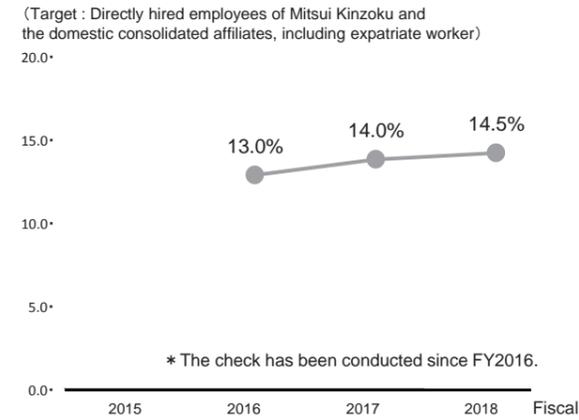
Proportion of women as a percentage of total employees



Overtime hours

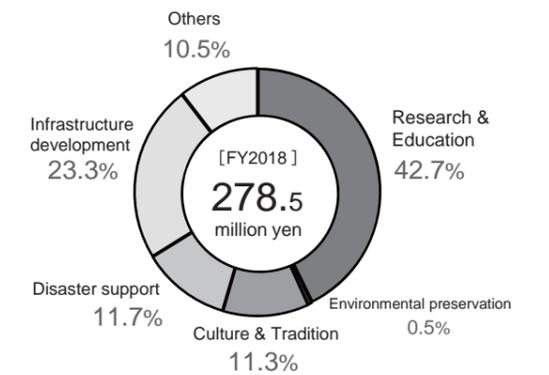


Results of stress check (Percentage of high stress)



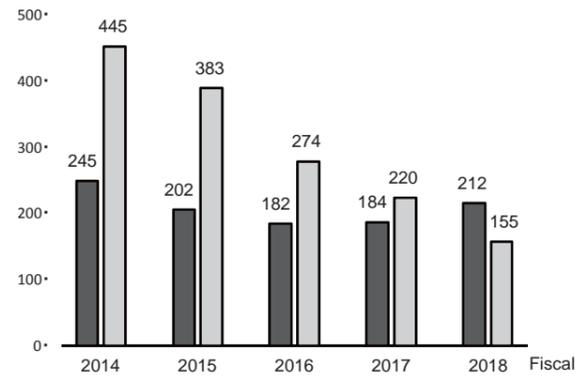
Contributing to communities

Mitsui Kinzoku Group breakdown of the amount

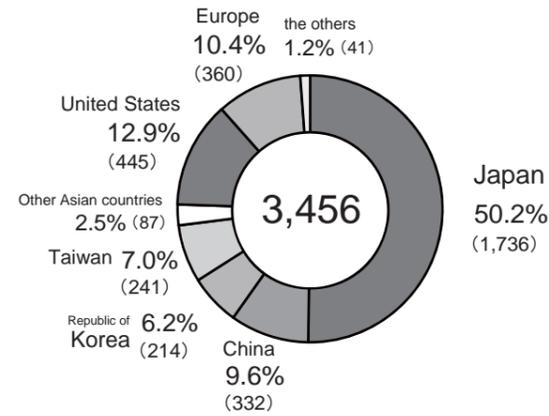


Intellectual property

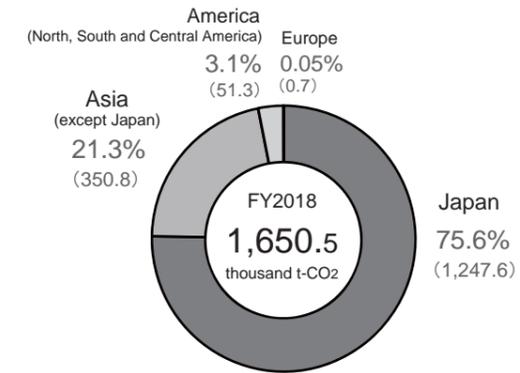
Number of patent applications Japan Overseas



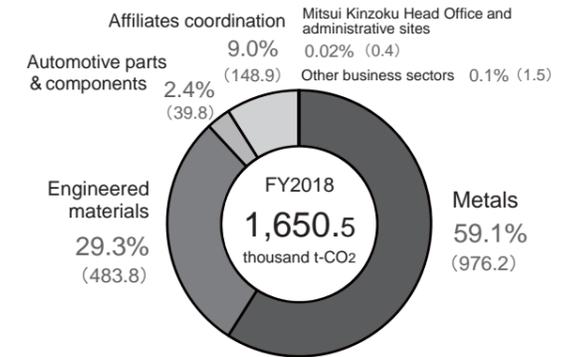
Number of patents registered globally



Breakdown of CO2 emissions by region

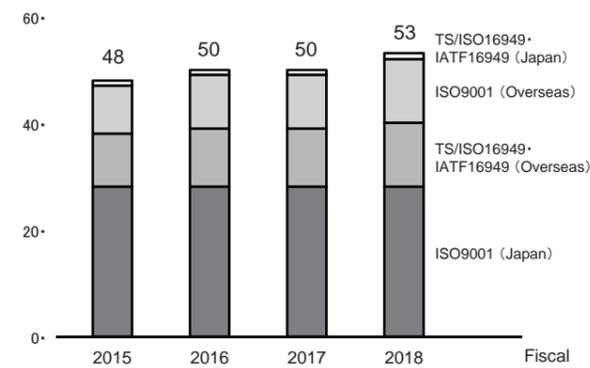


Breakdown of CO2 emissions by business unit



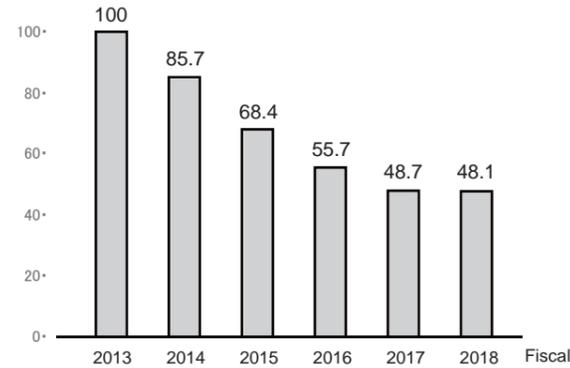
Quality assurance

Number of operating sites with certifications

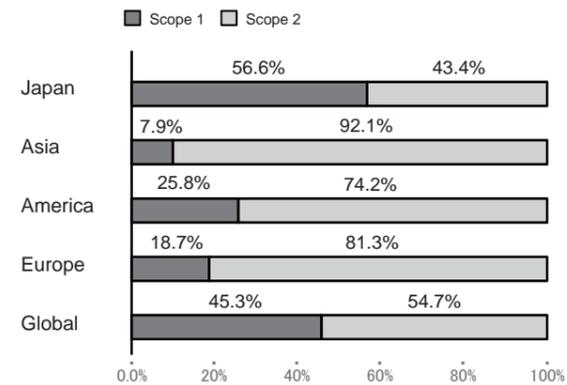


Number of claims at sites that hold QA meetings

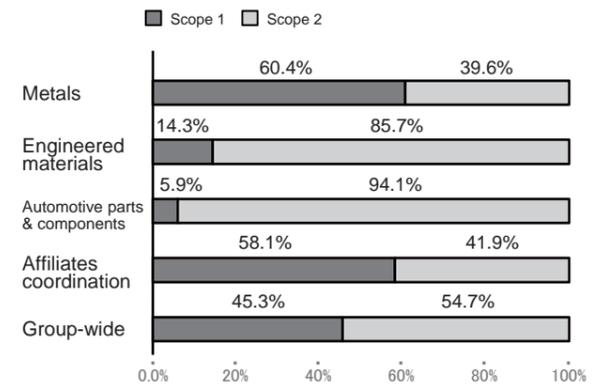
* The data are expressed as relative values, with the data of FY2013 being 100.



Breakdown by scope of CO2 emissions by region

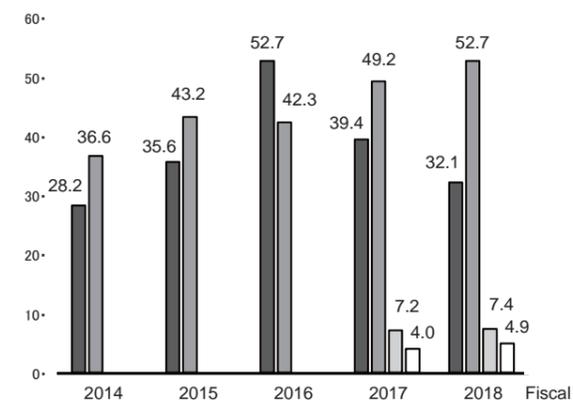


Breakdown by scope of CO2 emissions by business unit

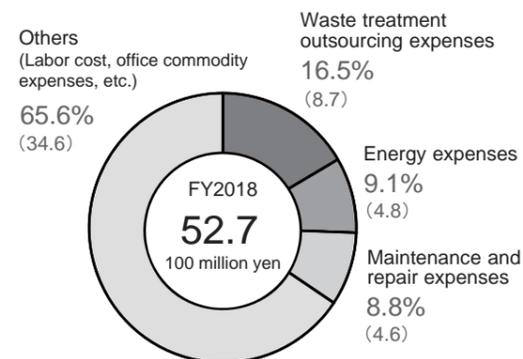


Environment

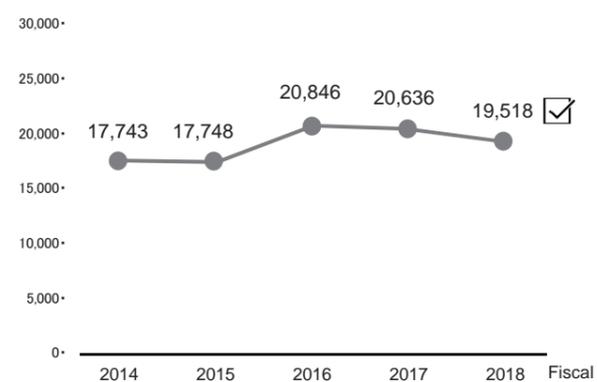
Environment-related capital expenditures and environmental management expenses (Hundred million yen)



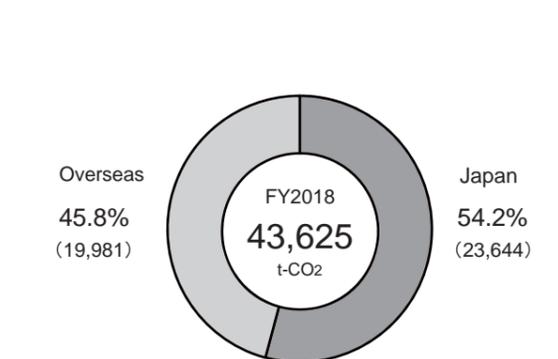
Break down of environmental management expenses in Japan



CO2 emissions in logistics (Non-consolidated, t-CO2/year)



CO2 emissions by waste treatment (t-CO2/year)



■ Environment-related capital expenditures (Japan)
 ■ Environmental management expenses (Japan)
 ■ Environment-related capital expenditures (overseas)
 □ Environmental management expenses (overseas)

* The data of overseas sites have been added since FY2017.

* The scope of data calculation covers only the transportation which are designated as Specified Consigner by the Act on the Rational Use of Energy.

* We have received an independent practitioner's assurance for the figures for FY2018 in this information to which is attached.

* For the emission factors, the emission intensity database for calculating GHG emissions of organizations throughout the supply chain, Japan's Ministry of the Environment and Ministry of Economy, Trade and Industry (Ver. 2.6) was referenced.

Corporate profile and Stock information

(as of March 31, 2019)

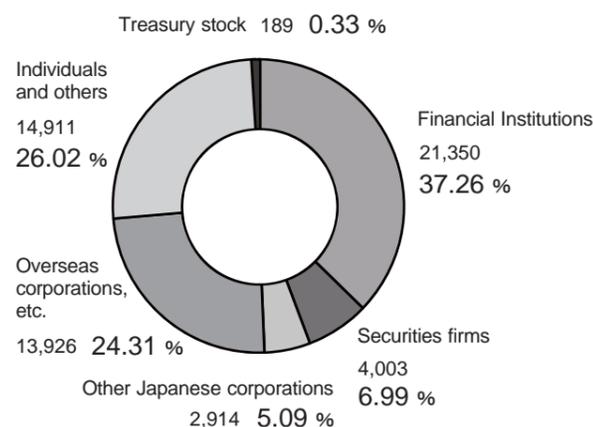
Corporate profile

Company name	MITSUI MINING & SMELTING CO., LTD.
Established	May 1, 1950
Paid-in capital	42,129 million yen
Employees	Consolidated 12,498 Non-consolidated 1,943
Subsidiaries and affiliates	Subsidiaries 52 Affiliates 10
Head office	1-11-1 Osaki, Shinagawa-ku, Tokyo 141-8584 Japan Telephone +81-3-5437-8000 Facsimile +81-3-5437-8029

Stock information

Total number of authorized shares	190,000,000 shares
Total number of outstanding shares	57,296,616 shares
Number of shareholders	36,706

Share breakdown (Thousands of shares)



Major shareholders (Top 10)

Shareholder	Number of shares held (Thousands)	Percentage of total sales issued (%)
Japan Trustee Services Bank, Ltd. (Held in trust account)	5,747	10.06
The Master Trust Bank of Japan, Ltd. (Held in trust account)	5,678	9.94
Japan Trustee Services Bank, Ltd. (Held in trust account 9)	2,138	3.74
JP MORGAN CHASE BANK 385632	1,390	2.43
JP MORGAN CHASE BANK 385635	1,067	1.86
Japan Trustee Services Bank, Ltd. (Held in trust account 5)	1,046	1.83
The Employees' Shareholding Association	1,005	1.76
Japan Trustee Services Bank, Ltd. (Held in trust account 4)	926	1.62
JP MORGAN CHASE BANK 385151	848	1.48
DFA INTL SMALL CAP VALUE PORTFOLIO	732	1.28

* Percentages of shares held are calculated based on the total number of shares issued and outstanding (excluding 189,741 shares in treasury).

Deloitte.

デロイトトーマツ

(TRANSLATION)

Independent Practitioner's Assurance Report

August 8, 2019

Mr. Keiji Nishida,
President, Representative Director,
MITSUI MINING & SMELTING CO., LTD.

Masahiko Sugiyama
Representative Director
Deloitte Tohmatu Sustainability Co., Ltd.
3-2-3, Marunouchi, Chiyoda-ku, Tokyo

We have undertaken a limited assurance engagement of the CO₂ information indicated with for the year ended March 31, 2019 (the "CO₂ Information") included in the "MITSUI KINZOKU Integrated Report 2019" (the "Report") of MITSUI MINING & SMELTING CO., LTD. (the "Company").

The Company's Responsibility

The Company is responsible for the preparation of the CO₂ Information in accordance with the calculation and reporting standard adopted by the Company (indicated with the CO₂ Information included in the Report). CO₂ quantification is subject to inherent uncertainty for reasons such as incomplete scientific knowledge used to determine emissions factors and numerical data.

Our Independence and Quality Control

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. We apply International Standard on Quality Control 1, *Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance and Related Services Engagements*, and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our Responsibility

Our responsibility is to express a limited assurance conclusion on the CO₂ Information based on the procedures we have performed and the evidence we have obtained. We conducted our limited assurance engagement in accordance with the International Standard on Assurance Engagements ("ISAE") 3000, *Assurance Engagements Other than Audits or Reviews of Historical Financial Information*, issued by the International Auditing and Assurance Standards Board ("IAASB"), ISAE 3410, *Assurance Engagements on Greenhouse Gas Statements*, issued by the IAASB and the *Practical Guideline for the Assurance of Sustainability Information*, issued by the Japanese Association of Assurance Organizations for Sustainability Information.

The procedures we performed were based on our professional judgment and included inquiries, observation of processes performed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records. These procedures also included the following:

- Evaluating whether the Company's methods for estimates are appropriate and had been consistently applied. However, our procedures did not include testing the data on which the estimates are based or reperforming the estimates.
- Undertaking site visits to assess the completeness of the data, data collection methods, source data and relevant assumptions applicable to the sites.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement.

Limited Assurance Conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the CO₂ Information is not prepared, in all material respects, in accordance with the calculation and reporting standard adopted by the Company.

The above represents a translation, for convenience only, of the original Independent Practitioner's Assurance report issued in the Japanese language.

Member of
Deloitte Touche Tohmatsu Limited