


Metals Company
Supplementary Data Book
2018



Introduction

The Mitsubishi Materials Group publishes its Corporate Social Responsibility (CSR) data book to provide stakeholders with information regarding its perspective on and activities in the area of CSR. The Metals Company, one of the in-house operating companies of Mitsubishi Materials, is a member of the ICMM†1 (related article: p. 4), which has as one of its objectives promoting sustainable development in the mining and metals industry. To ensure accountability for our mining and metal sector operations, we aim to make appropriate disclosure and strive for transparency in the information we provide. As part of our effort to meet this objective, we publish this Supplementary Data Book to provide detailed information on the Metals Company's CSR activities to supplement Mitsubishi Materials' "CSR Data Book 2018."

Please also refer to the Mitsubishi Materials' "CSR Data Book 2018," which also includes information regarding the Metals Company's CSR activities.

†1 ICMM: The International Council on Mining and Metals is an organization formed by the world's leading mining and metals companies and has a clear commitment to leading sustainable development in the mining and metals sector.

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Period Covered by This Report

Fiscal year 2018 (Mitsubishi Materials Corporation Fiscal Year: April 2017 to March 2018)

Reporting Boundary

Mitsubishi Materials' Metals Company and its four affiliated smelting companies (Hosokura Metal Mining Co., Ltd., Onahama Smelting and Refining Co., Ltd., Materials Eco-Refining Co., Ltd. (MERC), Indonesia P.T. Smelting (P.T. Smelting))

Release Date

September 2018

Referred Guideline

GRI (Global Reporting Initiative) Sustainability Reporting Guideline

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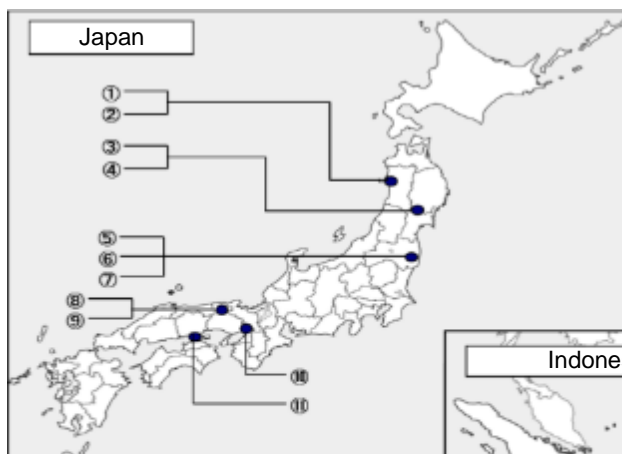
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This Data Book, along with the information covered in the Mitsubishi Materials "CSR Data Book 2018," has been independently assured by KPMG AZSA Sustainability Co., Ltd., with all figures subject to external independent assurance marked with a star "★." For more details regarding external independent assurance, please refer to p. 86 in Mitsubishi Materials' "CSR Data Book 2018."

Operations of the Metals Company and affiliated smelting companies

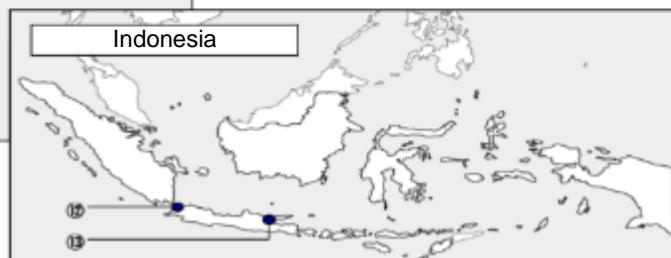


Domestic Offices

- ① Akita Refinery (Akita Pref.)
- ② Materials Eco-Refining Co., Ltd. (Akita Pref.)*
- ③ Hosokura Metal Mining Co., Ltd. (Miyagi Pref.)*
- ④ Materials Eco-Refining Co., Ltd. (Miyagi Pref.)*
- ⑤ Onahama Smelting and Refining Co., Ltd. (Fukushima Pref.)*
- ⑥ Onahama Plant (Fukushima Pref.)
- ⑦ Materials Eco-Refining Co., Ltd. (Fukushima Pref.)*
- ⑧ Ikuno Plant (Hyogo Pref.)
- ⑨ Materials Eco-Refining Co., Ltd. (Hyogo Pref.)*
- ⑩ Sakai Plant (Osaka Pref.)
- ⑪ Naoshima Smelting and Refining (Kagawa Pref.)

Indonesia Offices

- ⑫ P.T. Smelting Jakarta*
- ⑬ P.T. Smelting Gresik Smelter and Refinery*



* Group companies

The Metals Company and CSR

Material Issues

Mitsubishi Materials recognizes that the sustainability of society as a whole has a profound impact on the future of corporate activities, and has identified issues in its management that carry a high level of importance. For the details and action associated with these issues, please refer to the “CSR Data Book 2018.”

Mitsubishi Materials Group’s Seven Material Issues

- ① Resources and Recycling
- ② Environmental Preservation and Environmental Technologies
- ③ Training and Harnessing a Diverse Range of Human Resources
- ④ Occupational Safety and Health
- ⑤ Responsibility in the Value Chain
- ⑥ Communication with stakeholders
- ⑦ Governance

The Metals Company’s Business Characteristics and Material Issues

Securing a stable supply of raw materials is critical for our business operations. At the same time, we recognize a need to make procurement and investment decisions in an environmentally and socially responsible manner. We also consider it essential to obtain materials not only through purchases of ore from mines but also to obtain copper and other precious and rare metals from recycled materials, in order to preserve natural resources. The Metals Company undertook action plans in FY 2018 in the following areas.

Metals Company: FY 2018 Results and Future Tasks

① Resources and Recycling

[Target] Initiatives ensuring the stable procurement of raw materials

[FY 2018 Results]

- Assessing and making improvements to existing projects, and developing new projects

[Future Tasks]

- Improvement of existing projects, improvement of the system and development of new projects

[Target] Expansion of the recycling business (Metals business)

[FY 2018 Results]

- Start of operation of the sampling site in the Netherlands to expand E-Scrap processing

[Future Tasks]

- Expansion of collection and processing of high-grade E-Scrap

⑤ Responsibility in the Value Chain

[Target] Implementation of measures concerning CSR procurement (addressing conflict minerals issues)

[FY 2018 Results]

- Continue to operate our conflict mineral management system
- Undergo third-party audits and renew annual certification for gold (LBMA *1) and tin (RMI *2)

[Future Tasks]

- Start of management of silver under the conflict mineral management system (LBMA)
- Undergo third-party audits and renew annual certification

*1 LBMA stands for the London Bullion Market Association, an association engaged in managing the quality of gold bullion circulated in the gold market.

*2 Responsible Minerals Initiative

In this Data Book, we will provide information related to the following four of the seven material issues, which we consider especially important to the Metals Company.

Material Issues	Page
② Environmental Preservation and Environmental Technologies The environmental impact of our operations and steps to reduce our impact.	6
③ Training and Harnessing a Diverse Range of Human Resources Global human resources management in the Metals Company.	10
④ Occupational Safety and Health Actions to create a safe and healthy working environment taking into account the nature of our operations.	11
⑤ Responsibility in the Value Chain Environmental and social actions in copper ore procurement.	12

As an ICMM Member

Supporting the Basic Principles of the ICMM

The International Council on Mining and Metals (ICMM), of which Mitsubishi Materials Corporation (MMC) is a member, was established in 2001 to play a central role among major worldwide resource producers and bring about sustainable development in the mining and metals industry. Working in coordination with a range of international organizations including the United Nations, World Bank, OECD, ILO and various NGOs, ICMM is a group at the forefront of industry-wide CSR activities, tackling issues including local communities, economics and the environment in relation to the global mining and metals industry, holding discussions and developing guidelines to resolve issues including safety and human rights, and lobbying government organizations. The ICMM is comprised of 23 corporate members, primarily major resource producers. The Japan-based members are Mitsubishi Materials, JX Nippon Mining & Metals and Sumitomo Metal Mining, as well as the Japan Mining Industry Association. We joined the ICMM in 2002 and promote CSR initiatives within our operations. The ICMM advocates 10 Principles for Sustainable Development, to which member companies are required to commit. The spirit of the ICMM's 10 Principles are reflected in the Mitsubishi Materials Code of Conduct.

The ICMM 10 Principles for Sustainable Development

- Principle 1:** Apply ethical business practices and sound systems of corporate governance and transparency to support sustainable development
- Principle 2:** Integrate sustainable development in corporate strategy and decision-making processes
- Principle 3:** Respect human rights and the interests, cultures, customs and values of employees and communities affected by our activities
- Principle 4:** Implement effective risk-management strategies and systems based on sound science and which account for stakeholder perceptions of risks
- Principle 5:** Pursue continual improvement in health and safety performance with the ultimate goal of zero harm
- Principle 6:** Pursue continual improvement in environmental performance issues, such as water stewardship, energy use and climate change
- Principle 7:** Contribute to the conservation of biodiversity and integrated approaches

- Principle 8:** Facilitate and support the knowledge-base and systems for responsible design, use, re-use, recycling and disposal of products containing metals and minerals
- Principle 9:** Pursue continual improvement in social performance and contribute to the social, economic and institutional development of host countries and communities
- Principle 10:** Proactively engage key stakeholders on sustainable development challenges and opportunities in an open and transparent manner. Effectively report and independently verify progress and performance

Moreover, the ICMM defines the position statements for supplementing and embodying some of the ten essential principles.

ICMM Position Statements

1. Transparency of Mineral Revenues
Declare support for the Extractive Industries Transparency Initiative (EITI)
2. ICMM Principles for climate change policy design
Work on the reduction of greenhouse gas emissions
3. Mercury Risk Management
Implement appropriate management of mercury
4. Mining and Protected Areas
Do not undertake exploration or mining on World Heritage properties
5. Indigenous Peoples and Mining
Respect indigenous peoples and their rights
6. Mining: Partnerships for Development
Enhance mining's social and economic contribution
7. Tailings Governance
8. Water Stewardship

The Metals Company has for several years implemented measures supporting the ICMM position statements. For instance, we established a company-wide initiative in November 2008 regarding our greenhouse gas emissions (Statement 2) and have stepped up efforts to tackle global warming. Regarding Statement 3, copper concentrate, which is a raw material used in core copper smelting and refining business, contains mercury as an impurity. We implement proper mercury management in accordance with the Waste Management and Public Cleansing Act amended (and put into force on October 1, 2017) after the Minamata Convention on Mercury came into force in August 2017.

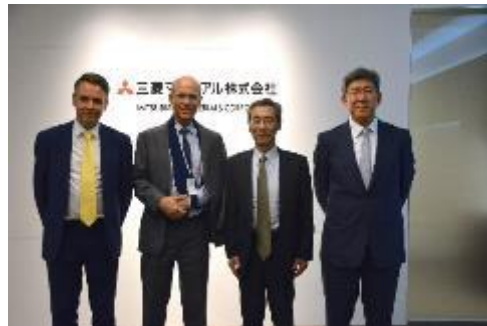
Although we are not directly involved in the day-to-day operations of mines, we monitor the environmental and social compliance of mines in which we invest (Statements 4 to 6) by implementing our CSR Investment Standards, which we established in July 2009. Regarding Statement 7, information on the management of abandoned mines is listed on p. 33 and 34 in Mitsubishi Materials' "CSR Data Book 2018." With respect to Statement 8, we have reported on water usage and emissions into bodies of water in the CSR reports we have published to date. In addition, as a member of the ICMM we actively support the Extractive Industries Transparency Initiative (EITI) as described below (Statement 1).

Support for the Extractive Industries Transparency Initiative (EITI)

The Extractive Industries Transparency Initiative (EITI) increases transparency of payments by companies in extractive industries such as oil, gas, metal and mining to host country governments. EITI also supports poverty reduction and promotes the creation of a sustainable society. Governance of EITI is shared equally between representatives of government, extractive industries and civil society. The ICMM has supported the goals of EITI since its establishment in 2005. The Metals Company supports the objectives of the EITI in promoting growth and poverty reduction through responsible resources development, as both a member company of the ICMM and a shareholder of P.T. Smelting based in Indonesia, an EITI member country.

Communication with the ICMM

The ICMM makes use of dialog with member companies to formulate policy, and in June 2017 ICMM CEO Tom Butler came to Japan and visited Japanese member companies as part of his itinerary. He talked with Osamu Iida and Yasunobu Suzuki, our Executive Vice President and Senior Managing Executive Officer, respectively. In May 2018, Iida attended the Council meeting, a meeting of representatives from corporate members held in the United States, to have a constructive exchange of opinions mainly on the ICMM's activities planned for 2019 to 2021.



Meeting with MMC top management (From left) ICMM Director John Atherton and CEO Tom Butler, MMC Vice President Iida and Senior Managing Executive Officer Suzuki)

Environmental Preservation and Environmental Technologies

Environment Management

The Metals Company and the Environment

The Metals Company's operations include nonferrous smelting and copper processing which generate emissions that have a negative impact on the environment. To reduce our impact, we are taking measures including continuing to operate in compliance with environmental regulations, promotion of a more socially and environmentally responsible procurement process for raw materials, implementation of energy saving programs, recycling activities and measures for biodiversity preservation.

Energy and Material Balance

Input	Output
Raw materials	Products
Energy	Air emissions
Water	Wastewater
	Waste

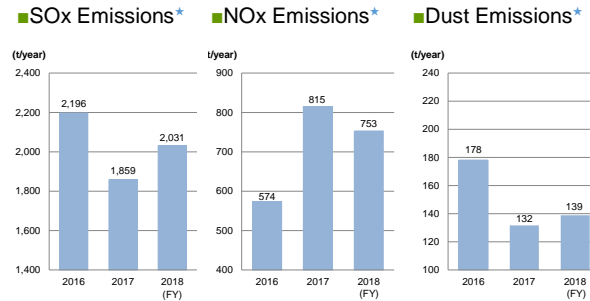
Compliance with Environmental Legislation and Initiatives in Support of a Recycling-Oriented Society

The Metals Company's sites in Japan have obtained ISO 14001 certification to support environmental management and compliance. P.T. Smelting has established an environmental management department working to ensure environmental compliance with local regulations, with actions including holding monthly environmental committee meetings and performing environmental monitoring in three shifts. As a result, the Metals Company received no administrative measures, for example fines for environmental violations, operational stop orders or revocation of environmental permits, in FY 2018.

The Metals Company has declared a business policy of "contributing to a recycling-oriented society through metals from manufacturing to recycling," and this forms the basis of our operations.

Emission into the Air

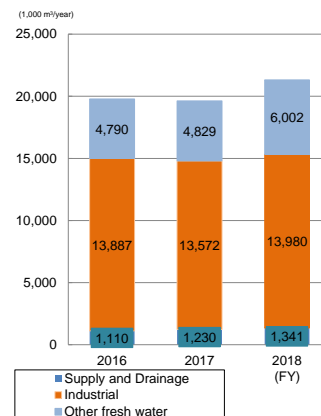
The generation of SO_x and NO_x atmospheric emissions is an unavoidable result of fossil fuel combustion. To minimize atmospheric emissions, each site implements programs such as controlling emissions of SO_x, dust and other pollutants from exhaust systems, regular equipment inspections and dust control at roads and storage facilities.



Effective Utilization of Water Resources

At sites performing smelting and copper processing operations, water is used for many purposes including cooling, production, and drinking. For FY 2018, our water consumption reached 294,992 thousand m³. Nearly 90% of the water consumed, amounting to 283,659 thousand m³, was seawater and the remainder was fresh water. We promote the installation of closed-loop water treatment system and water re-use.

Freshwater Consumption by Source*



Amount of Wastewater (1000 m³)*

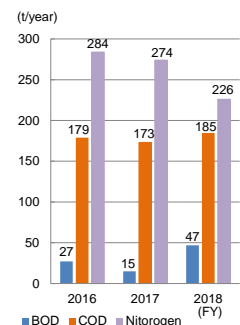
	FY 2018
River/Lake	13,167
Sewage	16
Marine	283,659
Total	296,842

* The reason why the wastewater amount is greater than the water consumption amount is due to the treatment of wastewater from the springs (ground water) of closed mines.

Discharged Water Quality Control

Process wastewater from each site is discharged following on-site treatment. Each site has established its own internal emission standards that are more stringent than legal requirements and strictly control the concentrations of pollutants in discharged water. Sites are also working to protect the water environment through measures to reduce the usage of substances that cause pollution as well as strict management and inspection of wastewater treatment plants.

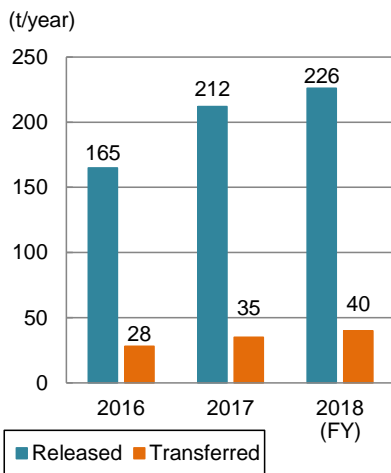
Pollutant Load Discharged to Bodies of Water*



Amount of Chemical Substances Released/Transferred Subject to the PRTR Act

The amount of chemical substances released and transferred by each facility is aggregated and reported annually based on the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (PRTR Act). The amount of chemical substances that we released and transferred in FY 2018 totaled 265 tons, showing an increase from the previous fiscal year.

■ Amount of Chemical Substances Released/Transferred Subject to the PRTR Act*



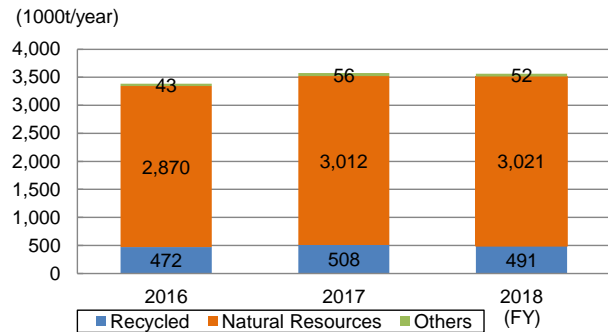
Promotion of a Recycling-Oriented Society

Use of Recycled Material

Our raw material input for FY 2018 amounted to approximately 3,564 thousand tons. It includes approximately 491 thousand tons of recycled materials, such as shredder residue and waste substrates. They constitute nearly 13.8% of the total raw material input. Of all the recycled materials, approximately 204 thousand tons were derived from industrial waste, which would have been put in a landfill if it had not been recycled.

The Metals Company operations consume a large amount of natural resources including copper concentrate. As part of our resource conservation activities, we are reducing the use of virgin raw materials, and promoting the use of secondary raw materials including scrap of various kinds. Because there are various sources of scraps, we are promoting measures for scrap collection as well as processing.

■ Raw Material Input*



Shredder Residue



Waste

Reduction of Waste Generation

Industrial waste emissions from domestic offices in FY 2018 amounted to 2,999 tons. Nearly 4% of it was specially controlled industrial waste. Approximate shares of waste plastic, wood waste and waste acid were 27%, 27% and 18%, respectively.

■ Industrial Waste Generated by Types (t)*

	FY 2018
Sludge	37
Waste Oil	422
Waste Acid	546
Waste Alkali	10
Waste Plastic, Scrap Rubber	819
Wood Waste	824
Glass/Concrete/Pottery Waste	216
Demolition Waste	10
Waste Metals, Electric Machinery and Apparatuses	1
Mixed Waste	2
Specially controlled Industrial Waste	114
Total	2,999

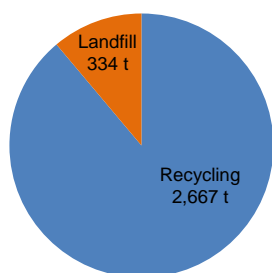
* Excluding P.T. Smelting

* Figures after the decimal point are rounded off.

We confirmed from reviews of industrial waste manifests that approximately 89% of the total domestic industrial waste generated in FY 2018 was recycled by external waste treatment contractors. Scrap materials generated from our own production processes are reused on-site whenever possible. Scrap materials which cannot be reused are treated at the Mitsubishi Materials Group companies where possible or transported to other smelting companies for recycling as necessary. In this way, we try to

maximize the collection of scrap materials by utilizing the network of companies that possess processes to recover substances from scrap. In cases where it is not possible to recycle scrap materials, they are disposed of by external contractors. Through this approach, we reduce the amount of industrial waste going into landfill.

■ Breakdown of Industrial Waste by Disposal Method (FY 2018)*



* Excluding P.T. Smelting

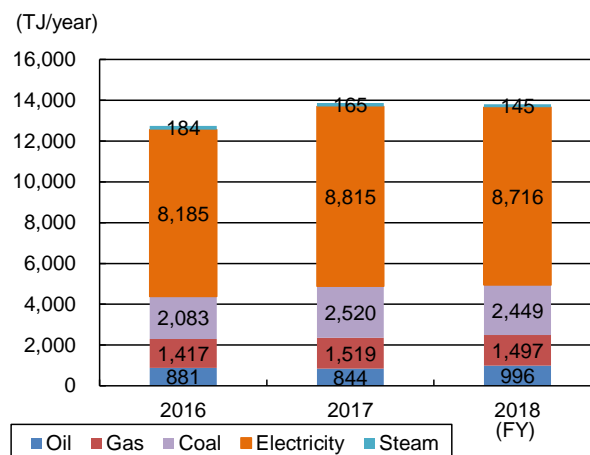
P.T. Smelting is a subsidiary company based in Indonesia. The data on waste generated by this subsidiary are excluded from the data presented on Industrial Waste Discharge by Type and Breakdown of Industrial Waste by Disposal Method since the waste classification system is different from that of Japan. We conduct separate monitoring on waste generated by this subsidiary. P.T. Smelting generated 1,121 tons of waste in FY 2018. Around 98% of it was recycled into resources.

Preventing Global Warming

Promoting Energy Saving

In our smelting and copper processing operations, oil, gas and coal are used as primary energy sources, with electricity and steam used as secondary energy sources. Total energy input in FY 2018 amounted to 13,804 terajoules. It decreased by 59 terajoules from the previous fiscal year's level, at 13,863 terajoules.

■ Total Energy Use*



The Metals Company has set for itself the target of achieving an “annual reduction of 1% in energy per unit” through the implementation of energy saving programs. In FY 2018, we reduced energy use by approximately 1,391 kiloliters of crude oil equivalent, which amounts to JPY 60 million in cost reduction. The breakdown of the reduction is summarized below.

■ Energy Saving Results of FY 2018

		Effect	
		Reduction of Cost (Million Yen)	Reduction of Energy Use in Crude Oil Equivalent (kL)
Akita Refinery	Installation of efficient facilities/equipment	0.1	1.0
Naoshima Smelter & Refinery	Installation of efficient facilities/equipment, etc.	22.9	523.5
Sakai Plant	Installation of efficient facilities/equipment, etc.	4.2	80.2
Hosokura Material Mining	Reconsideration of the style of operation	1.6	57.0
Onahama Smelting & Refining	Installation of efficient facilities/equipment, etc.	31.1	729.4
Total		59.9	1,391.1

* Excluding MERC and P.T. Smelting.

Key examples of energy saving measures are:

- ① Introduction of inverters to blowers (Naoshima Smelter & Refinery)
- ② Replacement of hydraulic motors (Sakai Plant)
- ③ Modification of the heating source for the boilers of the converter furnace from superheated steam to saturated steam (Onahama Smelting & Refining)

Energy Saving from Logistics Operations

In FY 2018 total energy use in logistics was 189 terajoules*. Modes of transportation include ships and trucks, with ships accounting for 132 terajoules or 70% of

total logistics energy use. Greenhouse gas emissions from logistics reached 13,186 tons-CO₂.[★]

One of the major steps that can be taken to improve unit energy consumption (energy consumption per t-km) is a modal shift from truck-based transportation to more efficient ship-based transportation. On a ton-kilometer basis, the percentage of ship usage for the Metals Company has reached 80%.

We are also working to improve unit energy consumption for truck-based transportation through improved capacity fulfillment rates and a shift to larger trucks (transportation involving larger lots).

Reducing GHG Emission

Our greenhouse gas emissions in FY 2018 were approximately 1,211 thousand tons in CO₂ equivalents, almost unchanged from the FY 2017 level. Approximately 75% of the emissions were emitted through energy use with the remainder coming from waste processing and industrial processes.

■ Breakdown of GHG emissions (t-CO₂ eq)^{★1, 2}

GHG		FY 2018 Emissions
CO ₂	Energy Use	905,483
	Non Energy Use	142
	Waste	301,083
Other GHG ^{*3}		4,486
Total		1,211,194

* 1 Excluding emissions from logistics

* 2 The emissions were calculated in accordance with the "Manual for Calculating and Reporting Greenhouse Gas Emissions" (version 4.3.2).

* 3 HFCs, PFCs, SF₆, CH₄, NF₃, N₂O

As the main source of GHG emission is energy use, the Metals Company is working on energy saving activities to reduce GHG emissions. For example, the Onahama Smelter & Refinery recycles shredder residue (SR) generated from end-of-life vehicles and used home appliances. The smelter initially treated SR by mixing it with ore in the existing reverberatory furnaces. In December 2008, as part of implementing the Mitsubishi Process, an S-Furnace was installed upstream of the reverberatory furnaces. This is used primarily for processing ore with the reverberatory furnaces treating SR.

The pulverized coal burner used at the reverberatory furnace was inefficient for SR treatment, requiring the use of large amounts of coal and heavy oil in combustion. To overcome this, the coal burner was converted from direct combustion to indirect combustion in October 2009, a move that helped to significantly reduce coal consumption. As a result of this reduction, the air-heating furnaces used for drying coals became excess equipment. The furnaces were renewed in February 2011, and the amount of LNG used for drying coals was reduced significantly

E-Scrap receiving equipment was brought into operation in October 2013. The use of heat from combustion has made it possible to further reduce the amount of GHG emissions from energy use.

Conservation of Biodiversity

Preservation and Recovery of Biodiversity Efforts at P.T. Smelting

P.T. Smelting is engaged in ongoing mangrove planting efforts in the local Gresik Regency. These efforts have been made annually since 2014. A total of 40,000 young trees have been planted as of 2018. They earn high marks from the local government. The mangroves planted in the first year have now grown to more than three meters in height, and across the plantation, more than 97% of the planted seedlings have grown well. The effort represents a considerable contribution to preserving the biodiversity of the area, as suggested by sightings of wildlife in recent years.



Planting mangrove trees

Human Resources of the Metals Company

We are engaged in measures to improve the value of our people, as we recognize that people are important management resources. This policy is declared in the Mitsubishi Materials Group Policy. We are also promoting diversity in the workplace in response to the low birth rate and aging society in Japan.

- Breakdown of numbers of employees at HQs and production sites of the Metals Company★ (number of people)

(As of March 31, 2018)

Classification	Male	Female	Total
Management	131	3	134
Full-Time Employees	530	54	584
Temporary Staff	72	52	124
Total	733	109	842

* Only the Metals Company's HQs and production sites directly managed by the Metals Company

- Employee Turnover★ (number of people)

Number of Turnovers		
Male	Female	Total
31	3	34

* Only the Metals Company's HQs and production sites directly managed by the Metals Company

Respecting Human Rights

We respect the basic human rights of all people, work to eliminate discrimination and contribute to the creation of a free, equal, and fair society.

P.T. Smelting in Indonesia is working to prevent child and forced labor, which are sometimes encountered in the developing countries. The company hires employees from candidates who directly apply to the company and confirms the age of applicants with formal IDs or diplomas to ensure that the applicants are above the minimum legal working age in Indonesia.

Overseas Human Resource Development

P.T. Smelting understands that localization is a key component for sustainable development and proactively recruits local people. As of the end of June 2018, 361★ out of the 379 total employees (95.3%★) of the workforce, were local employees. In addition, the company appoints local people to management positions to motivate employees and promote clear communication of management policies among employees. As of the end of June 2018, 38★ out of 56 managers above the assistant manager level (67.9%★) were locally hired.

P.T. Smelting is also implementing skills development activities; developing annual training plans and providing training in accordance with the plans. Key development areas for employees include corporate-wide programs such as management strategy, finance and safety, as well as operation-related training such as environment/quality management and equipment maintenance. Training programs are established so that employees can take training that corresponds to their job functions. In welfare packages, we have also expanded the housing loan system and the subsidization for company trips.

Occupational Safety and Health

Enhancing and Strengthening Safety Management Organizations

“Giving top priority to ensuring safety and good health” has been the basic policy of Mitsubishi Materials. This policy is based on the idea that safety is essential for the stable life and welfare of employees and their families, for stable operation, and for the development of the Company. In short, ensuring safety is one of the obligations of every company, one of the duties of their employees, and an essential condition for the continuation and development of each business.

Health and Safety (HS) Promotion Activities

Each production site of the Metals Company implements safety management applicable to the site-specific safety risks and in line with the Corporate Safety and Health Management Policy. We believe that HS activities should be promoted in cooperation with the labor union and therefore hold a labor union and company management meeting once a year. Additionally, we participate in the Safety Committee of the Japan Mining Industry Association and share information on our occupational safety and health performance with our peers in the sector. The safety statistics report of the non-ferrous metal industry is compiled by the association once a year in cooperation with the member companies. The report is helpful to understanding the safety level of our company in the industry.

HS Performance Results

The safety performance in 2017 of the Metals Company is summarized below.

■ Safety performance of the Metals Company in 2017* (January-December, 2017)

People injured with lost workdays	People injured without lost workdays
1	7

* Only the Metals Company's HQs and production sites directly managed by the Metals Company

Looking at the safety performance of the Metals Company in 2017, there was one case of an accident with lost workdays and five cases of accidents without lost workdays at the Naoshima Smelter & Refinery, and two cases of accidents without lost workdays at the Sakai Plant. While the single accident with a lost workday matched the results of the previous year, the number of accidents without lost workdays increased by two cases compared with the previous year.

Holding an Exchange Session for Metals Company On-site Leaders

In November 2017, an On-Site Leader Exchange Session made up of the people supporting each Metals Company manufacturing site on the ground was held at the Onahama Smelter and Refinery, Onahama Smelting and Refining Co.,Ltd.

This was the fifth exchange session of its kind, and was attended by a total of 30 people from sites and affiliate companies including Naoshima Smelter & Refinery and Onahama Smelting and Refining Co., Ltd. On the first day, the invited consultant delivered a lecture to help participants acquire knowledge about safety and raise their awareness.

On the second day, there was a plant tour and an opinion exchange session. The event provided an opportunity that greatly helped on-site leaders share their day-to-day problems.

Investment and Procurement Standards

The Metals Company purchases copper ore annually from overseas mines for supply to our smelters. To secure a long-term, stable supply, we have invested in three mines outside of Japan (Los Pelambres Mine and La Escondida Mine in Chile, and Copper Mountain Mine in Canada). Though we do not have operational control and management of these mines as our investment is below 50%, from the perspective of CSR supply chain management, we are monitoring the compliance status with environment-related standards regulations, permits/licenses, and the working conditions at these mines. We also support the mine operations regarding the environment and local community issues as a shareholder. To develop guidelines based on these CSR procurement activities, in July 2009 we developed "CSR Investment Standards" to evaluate mines for investment and "CSR Procurement Standards" to evaluate external mines. The outlines of both standards are summarized in the column below.

The Metals Company Outline of CSR Investment Standards

Protection of basic human rights

Protect the basic human rights of people impacted by business operations. Consult with stakeholders regarding local community issues.

Eliminate any involvement, either direct or indirect, with militia or other armed groups in areas of conflict where there are concerns regarding human rights violations.

Mining and protected areas

Identify and evaluate impacts on cultural heritage and protected areas, and risks to biodiversity at different stages of our business. Develop and implement mitigation measures.

Mining and indigenous people

Understand and respect the society, economy, environment, culture and rights of indigenous people. Conduct evaluations of the social impact on indigenous people for new mine investments and provide appropriate compensation.

Relationship with local community

Verify if there are any conflicts or lawsuits with local communities. Hold consultations or dialogues to explain business plans.

Environmental Preservation

Conduct Environmental Impact Assessments and obtain appropriate permits. Develop specific plans for reducing the negative environmental impacts of mine development and operation.

Mineral resources and economic development

Engage in sustainable economic development at regional or national level.

The Metals Company Outline of CSR Procurement Standards

Continual improvement of environmental performance

- Implement environmental management systems focusing on continual improvement
- Reduce negative environmental impacts in mine development and operation
- Consider protection of natural areas and biodiversity
- Consult with stakeholders on environmental issues

[Continual improvement of occupational safety and health]

- Implement HS management systems focusing on continual improvement
- Protect employees and contractors from occupational disasters. Take disease prevention measures, including in local communities.

Protection of basic human rights

- Prevention of forced and child labor
- Elimination of harassment and discrimination

- Avoidance of and compensation for forced resettlement
 - Protection of indigenous people
 - Management and recording of complaints and conflicts from stakeholders
- Elimination of any involvement, either direct or indirect, with militia or other armed groups in areas of conflict where there are concerns regarding human rights violations.

Addressing the Issue of Conflict Minerals

Of the four conflict minerals, the Metals Company manufactures gold bullion and tin ingots, and is required to respond appropriately as a smelter. In 2012, we set up and began implementing a conflict minerals management system. With regard to gold bullion, our compliance with the LBMA Responsible Gold Guidance was certified for the first time by the London Bullion Market Association (LBMA) in June 2013. Regarding tin, we are following the Conflict-Free Smelter (CFS) program advocated by the Electronic Industry Citizenship Coalition (EICC), and obtained CFS certification in February 2014. Certification needs to be renewed every year for both gold and tin, but we will continue to fulfill our social responsibility to be able to promise our customers a supply of gold bullion and tin ingot that is reliable and not involved in conflicts. "The Metals Company Conflict Minerals Control Policy" is available at the URL of Mitsubishi Materials below: This policy applies to both gold and tin.

<http://www.mmc.co.jp/corporate/ja/csr/social/procurement/eti.html>

Social and Environmental Considerations in Overseas Mines

The mines with which the Metals Company is involved include ones in the operation and exploration stages. In both cases, aside from verifying compliance with regulatory requirements, various voluntary activities relating to environmental and social issues are also conducted.

Zafranal Mine Project (Peru) Environmental Impact Assessment as part of Copper and Gold Deposit Development Project

We are carrying out a basic environmental study geared towards conducting EIA* as part of a development project in Zafranal, in southern Peru. At the same time, we are studying and analyzing the potential impact on the environment from the development, and are looking into ways to secure new habitats for species of flora and fauna if there is a risk of any impact on the ecosystem.

* Environmental Impact Assessment



Striving for Materials Stewardship

Materials stewardship is a concept which aims to maximize the value of resources in our society and minimize impacts on people and the environment through the complete life cycle of the resource, such as mining, processing, designing, using and disposing, which is beyond the bounds of an individual business. Put forward by the ICMM, of which we are a member, materials stewardship is attracting a great deal of attention as an essential new approach to CSR, particularly for global mining and metals companies.

■ Conceptual Framework of Material Flow



Mitsubishi Materials incorporates the concept of materials stewardship and undertakes various activities in each stage in the material flow.

Mine Site Development and Procurement: We strive to implement environmental conservation and contribute to regional development activities in our joint exploration areas. As part of the procurement process, we use our CSR Investment Standards to assess social and environmental impacts of our invested mines and our CSR Procurement Standards for ore procured from mines with which we have

no capital ties.

Smelting: Our proprietary smelting process, the Mitsubishi Process, enables energy savings and cost reductions in operations whilst minimizing emissions of pollutants, forming part of our goal to manufacture and supply our products with an extremely low environmental impact and high efficiency. In addition, through strict operational controls from smelting to processing within our groups, we can reuse scrap copper as part of our resources conservation approach.

Product Design and Safety: We develop products containing no heavy metals, such as lead, and jointly research with our customers how to maximize the efficient use of copper. We have established the “hazardous chemical substance control rules” to control the heavy metal or hazardous substance content of our products and check the compliance status through quality audits and compliance with the rules in daily operations. We will strive to deliver information on safe use to our customers, for example, by attaching a Safety Data Sheet (SDS) to our products at the time of supply.

Disposal: Our recycling operations, one of our core operations driving our commitment toward materials stewardship, aim to create closed loop material flow cycles by extracting valuable metals from shredder residue from end-of-life vehicles and used home appliances, bringing them back to the economy. We are aiming to reduce society's environmental impact and promote the effective use of resources throughout the material cycle.

Compliance with Chemical Substance Regulation

In recent years there has been a marked global trend towards stricter regulatory control over chemicals management.

As an exporter of copper alloy to European markets, the Metals Company must comply with the requirements of REACH, the European regulation on chemicals. We successfully completed our registration of copper ahead of the deadline in November 2010. We also completed registration of silver in July 2014, nickel in June 2015, chromium in May 2016, gold in December 2016, and selenium in September 2017. In addition, we are also compliant with the requirements of REACH regarding the preparation of safety data sheets (SDSs) in accordance with the CLP*¹ regulation, which provides the legal framework for the introduction of GHS*² in Europe. Outside of Europe, to support our product compliance, we are closely monitoring changes in chemical regulations as

different countries are at different stages in reforming their chemical management systems.

In Japan, amendments to the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. regarding notification came into effect in April 1, 2011. The Metals Company completes appropriate notification for products and intermediates in June every year. The Metals Company works closely with group companies in identifying applicable substances and data collection for notification purposes, taking a leadership role in successfully completing notification for the whole group.

Given the upstream position of the smelting industry in the metals supply chain, we will continue to implement appropriate chemical management practices to support compliance with changing regulatory requirements to minimize the potential for disruption to the supply chain.

*1 CLP: Abbreviation for Classification, Labeling and Packaging of substances and mixtures. CLP is a regulation issued by EU in 2008 regarding classification, labeling and packaging of chemical substances introduced to GHS.

*2 GHS: Abbreviation for Global Harmonized System. GHS is a system to classify and label etc., chemical substances in accordance with the worldwide unitary regulation. It is published by the United Nations.

Editorial Note

We have produced this Supplementary Data Book since FY 2010 to communicate the detailed CSR activities of the Metals Company.

We will continuously and proactively develop our CSR activities with contribution to society and the environment including ICMM related initiatives.



[Contact for more information](#)

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