Introduction

The Mitsubishi Materials Group publishes its Corporate Social Responsibility (CSR) report 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. 7), 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 appropriately disclose and promote 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 the Mitsubishi Materials “CSR Report 2015.”

Please also refer to the Mitsubishi Materials “CSR Report 2015,” as information regarding the Metals Company is also included in the Report.

†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.
Period Covered by This Report
Fiscal year 2015 (Mitsubishi Materials Corporation Fiscal Year: April 2014 to March 2015)

Reporting Boundary
Mitsubishi Materials’ the 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
January 2016

Referred Guideline
GRI (Global Reporting Initiative) Sustainability Reporting Guideline (the 2006 edition) (version 3.0)

Operations of the Metals Company and affiliated smelting companies

Message from Company President P.3
Business Outline of the Metals Company P.4
The Metals Company and CSR P.6

Environmental Report
Environmental Preservation and P.9
Environmental Technologies

Social Report
Training and Harnessing a Diverse Range of P.15
Human Resources
Occupational Health and Safety P.16
Responsibility in the Value Chain P.18

This Data Book, along with the information covered in the Mitsubishi Materials “CSR Report 2015,” 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. 73 in the Mitsubishi Materials “CSR Report 2015.”
Achieving the Target with the Vertical Value Chain while Giving Top Priority to Safety and Health!
The Mitsubishi Materials Group formulated "Materials Premium 2016 -- Challenge to become the world’s leading business group" a new medium-term management plan (for fiscal 2015 - 2017) (hereafter, the "New Medium-Term Plan") in April 2014, aiming to take the next leap forward in the new era.

The Metals Company positions the period of this New Medium-term Plan as one for taking an important step toward the vision under the long-term management policy and has set an operating income of 40 billion yen as management targets for fiscal 2017, the final year of the plan.

In fiscal 2015, which is the first year of the New Medium-Term Plan, our consolidated operating income stood at 32.8 billion yen, and unfortunately failed to reach the initial forecast of 36.9 billion yen. This is attributed in part to the decline in the copper price and the subsequent reduction in dividends from mining companies. In the fiscal 2016 budget, however, consolidated ordinary income is set at 43.7 billion yen, and we would like to mobilize all the forces throughout the Metals Company to achieve this.

To ensure that the aims of the New Medium-Term Plan are met, we will take full advantage of the vertical value chain of mine investment, smelting & refining, and rolling & processing, which are the strengths of the Metals Company. At the same time, we will accelerate measures such as the development of overseas mines, the recycling business, and the advantageous sales of slag by taking advantage of the Materials Premium through close cooperation with other business departments. In the recycling business, we have entered a stage for formulating a plan to become the best in the world in the long run, in addition to being the world’s leading company in E-Scrap processing. We will also strive to improve the TC/RC (treatment/refining charge). For copper processing, we will adopt a strategy that calls for the proactive development of excellent new alloys and products that meet customer needs by cooperating with research institutes and our group companies, and aggressively promote the sales of products in the global market.

With respect to mine investment in the upstream, we are planning to promote research so that we can sow the seeds for the current medium-term plan, and then cultivate these crops in the next medium-term plan. The achievement of these objectives only pays off when it is accomplished in a safe, healthy environment. In the New Medium-Term Plan, we will take safety measures and countermeasures to address overtime work and respond to other issues more intently than ever.

The Management of Chemicals and Actions for Addressing Conflict Minerals Issues
'Hazardous substances', which pose potential risks to the environment and the health of the people, are facing global strengthening of regulations, with the number of targeted substances on the rise. These regulations focus on the containment of hazardous substances in the upstream base materials. The Metals Company supplies those base materials to our downstream clients and we take all possible measures to meet all social requirements and to ensure the safe management of chemical substances at operation sites and the surrounding environments.

In recent years, there has been an increasing international focus on the Conflict Minerals Issue, requiring action from all entities involved in the supply chain, in particular, the upstream refining industries. Of the four Conflict Minerals, the Company manufactures gold bullion and tin metal. In 2012, we developed and implemented a management system which aims for the use of conflict-free minerals. With regards to gold, following a third-party audit, we were certified by the London Bullion Market Association (LBMA), showing we comply with the LBMA Responsible Gold Guidance on August 2013. Following this, in February 2014, we obtained CFS certification for tin from the Electronic Industry Citizenship Coalition (EICC), an international organization of electronic equipment manufacturers. The focus of the Conflict Minerals Issue lies in the management of raw materials, and since the root of this problem is the widespread abuse of human rights, we are required to establish a new management strategy. We commit to accomplishing our duty as a trusted material manufacturer to provide the best products to our customers. The two keywords of pervasive significance in many of the industries today are transparency and accountability; through this Data Book, we hope our stakeholders deepen their understanding of the CSR activities of the Metals Company.

Osamu Iida
Managing director/ President of the Metals Company, Mitsubishi Materials Corporation

(Profil)
2004.1 General Manager of Copper Smelting Division of the Metals Company
2010.6 General Manager of Naoshima Smelter & Refinery
2011.6 Executive Officer / Vice President of the Metals Company / General Manager of Naoshima Smelter & Refinery
2013.4 Senior Executive Officer / President of the Metals Company
2013.6 Managing director/ President of the Metals Company, Mitsubishi Materials Corporation

3
Comprehensive Capabilities for Copper Mines, Smelting, and Copper Processing

It is said that the history of people and copper stretches back more than 10,000 years. Due to its excellent properties, such as its high electrical and thermal conductivity and excellent workability, there is practically no limit to the expanding applications of copper. It is now used in electric cabling, copper tubing for air conditioners, semiconductor lead frames, and terminal connectors for automotive use. In addition, the demand for copper is expected to continue growing stably in emerging countries and other parts of the expanding global market.

The history of the Metals Company goes back to 1873 when Mitsubishi Shokai, the precursor to Mitsubishi Materials Corporation, acquired and started operating the Yoshioka Mine in Okayama Prefecture. In recent years, we import copper concentrate from mines in other countries to produce high-quality electrolytic copper. This copper is produced through highly efficient, stable operations with extremely low environmental impact by using advanced technologies, such as the Mitsubishi Continuous Copper Smelting and Converting Process that was put into practical use at the Naoshima Smelter & Refinery in 1974. To increase the added value of the electrolytic copper produced at the Naoshima Smelter & Refinery and Onahama Smelting and Refining Co., Ltd., we post-process the copper at the Sakai Plant and the Mitsubishi Materials Group companies, such as Mitsubishi Shindo Co., Ltd. and Mitsubishi Cable Industries, Ltd., thereby producing various electric cables and rolled copper products. In addition, we also run a precious metals business, in which we produce gold and silver bullion and other products from the gold or silver slime generated in the copper smelting process. At the same time, we run a recycling business, which has been growing remarkably, thereby exerting the strength of the vertical value chain.

Naoshima Smelter & Refinery Becomes the World’s Top-ranked E-Scrap Receiving and Processing Capacity

The Metals Company has expanded the Naoshima Smelter & Refinery to create the world’s top-ranked E-Scrap receiving and processing capacity amounting to approximately 110,000 tons per year (an annual increase of 30,000 tons over current capacity). The Company has invested nearly 5 billion yen in receiving sampling, analyzing, and processing equipment enhancements. The receiving and processing equipment upgrades are slated for completion in April 2016.

Discarded circuit boards from home appliances, personal computers, cellular and smartphones, communications servers and other digital devices are commonly referred to as E-Scrap, and contain a high concentration of gold, silver, copper, palladium, and other valuable metals. This is the source for a new supply of valuable smelting materials, which in recent years has been gaining attention as an urban mine. Furthermore, amid growing environmental concerns, the amount of E-Scrap recovered is expected to increase in line with the higher recycling rates of home appliances and other items in various countries.

Regarding the expanding E-Scrap market, the Naoshima Smelter & Refinery, taking advantage of the Mitsubishi Continuous Copper Smelting and Converting Process, a unique technology for smelting valuable metals with the lowest environmental impact in the industry, has been promoting the expansion of E-Scrap receiving and processing for some time. These recent upgrades expanded E-Scrap processing to nearly 80,000 tons per year in fiscal 2011. Additionally, we began operation of an online reservation system in May 2014 to process E-Scrap receiving more rapidly, aiming for the further increase of processing volumes. In June 2014, we established a new department for E-Scrap recycling at Mitsubishi Materials U.S.A. Corporation among other efforts to build and enhance a solid receiving structure in the United States.

The Metals Company intends to cultivate E-Scrap processing as one of the pillars of profitability, and aims to attain the top global share in E-Scrap processing together with the group Onahama Smelting and Refining Co., Ltd. The Metals Company will continue to contribute to the development of a sustainable society through the collection and recycling of valuable metals in accordance with company-wide growth strategies based on the long-term management policies of the Mitsubishi Materials Group.

Processing Volume of E-Scrap

Recycling of Rare Metals

Copper concentrate contains Platinum Group Metals (PGM), which are rare metals. Materials Eco-Refining Co., Ltd. (MERC), an affiliated smelting company of the Metals
Company, refines products including intermediate products of PGM from the Naoshima Smelter & Refinery into products in the form of metals or compounds. Among them, we applied to become a registered brand on the London Platinum and Palladium Market (LPPM), reflecting the reliable quality of our platinum and palladium products, which are important materials in automobile, electrical and electronics industries. Our application was approved and we received certification in September 2012.

Ceremonies to Celebrate the Completion of the New PGM Process Facility and Tellurium Refining Facility
At the Onahama Plant of Materials Eco-Refining Co., Ltd., ceremonies to celebrate the completion of the new Platinum Group Metals (PGM) process facility and tellurium refining facility were held on March 13, 2015.

The new PGM process was granted a subsidy for earthquake reconstruction under the Ganbarou Fukushima Sangyou Fukkou Kigyou Ricchi Shien Jigyou (project to support the establishment of business facilities for the reconstruction of industry in Fukushima Prefecture), with two-thirds of the construction costs covered by this subsidy. The new process implements the solvent extraction method, which shortens the smelting period from approximately 70 days to around 30 days. Test operation was started in February and full conversion to the new refinery process was made in April.

In the tellurium business, the company produces 3N tellurium powder by refining the copper telluride that is generated at the electrolysis plant of a copper smelter. The Mitsubishi Materials Group owns three copper smelters—the Naoshima Smelter & Refinery, the Onahama Smelter & Refinery, and PTS (Indonesia)—which combine to produce slightly more than 100 tons of copper telluride every year. The process of refining copper telluride into tellurium powder was originally outsourced to a company outside the group. However, now all of the copper telluride is processed at the Onahama Smelter & Refinery, enabling the group to produce tellurium powder on its own.

Procurement of Raw Materials and Investment in Overseas Copper Mines
Currently, the Metals Company participates in five mine operation and development projects: Los Pelambres Mine (Chile), La Escondida Mine (Chile), Huckleberry Mine (Canada), Copper Mountain Mine (Canada), and Batu Hijau Mine (Indonesia). Mine development processes generally incorporate 1) site selection, 2) exploration, 3) feasibility study, 4) facility construction, and 5) operation stages. Historically we joined new projects from the feasibility study stage, but under our current strategy we are proactively promoting participation from the exploration stage.

To ensure stable operation of the mines, we will cooperate closely with co-parent companies and the Mineral Resources & Recycling Business Unit. We will also work with the Corporate Production Engineering Dept. to provide support for the maintenance of mine equipment and others in terms of engineering and human resources. The group has human resources who have high levels of technological capabilities and a wealth of experience in installation, operation, and maintenance of large equipment at smelters, cement plants, and the like. They will provide support on technologies and know-how for the efficient operation of mines.

Sakai Plant – Top Priority Given to the Safety and Health of Employees to Create the Most Comfortable Workplace in the Industry
The Sakai Plant produces billets and cakes using the electrolytic copper produced at smelters and on the continuous casting line. It also produces copper wire rods by applying the Southwire Continuous Rod (SCR) casting system, and oxygen-free copper and copper alloy from oxygen-free copper. The production capacity of the SCR plant is 14,000 tons per month, while the billet and cake plant is capable of producing 12,000 tons per month. The production capacity of oxygen-free copper and copper alloy made from oxygen-free copper reaches approximately 5,000 tons per month, which is among the largest in the world. Sakai Plant strives to ensure stable operation with its own safety activities, and received a safety excellence award (for 590,000 hours with no lost worktime) in September 2014. In regards to its safety and health target for fiscal 2016, the Sakai Plant is working to “ensure risk prediction before work and share safety awareness in an effort to completely eradicate occupational accidents,” with the aim of creating the most comfortable workplace in the industry. All the people working at Sakai Plant make concerted efforts to prevent accidents and promote good health under the basic policies of 1) giving top priority to ensuring safety and good health, 2) making sure to finish what they are supposed to do, 3) creating a comfortable, pleasant workplace where workers are both physically and mentally healthy, and 4) promoting safety activities that will become the norm for society.
Material Issues

Mitsubishi Materials has reappraised the key material issues that we consider necessary to address in the future ("material issues"; factors that have the potential to have a significant impact on our corporate value) on a companywide basis. Seven material issues, as shown below, were identified. In this process, we took into consideration issues impacting the sustainability of society as a whole and the perspectives of our stakeholders. For the details and actions associated with these issues, please refer to “the 2015 CSR Report.”

Mitsubishi Materials' Seven Material Issues

① Governance
② Resources and recycling
③ Environmental preservation and environmental technologies
④ Training and harnessing a diverse range of human resources
⑤ Occupational health and safety
⑥ Responsibility in the value chain
⑦ Communication with stakeholders

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 from recycled materials, in order to preserve natural resources. The Metals Company undertook action plans in FY 2015 in the following areas.

Metals Company: FY 2015 Results and Future Tasks

② Resources and recycling

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

[FY2015 Results]
- Establishing overseas locations to strengthen the structure for collection from overseas

[Future Tasks]
- E-Scrap, which contains high concentration of valuable metals such as gold, silver, and PGM, has been gaining attention as an urban mine. Amid growing environmental concerns, the amount of E-Scrap recovered is expected to increase in line with the higher recycling rates of home appliances and other items in various countries.

⑥ Responsibility in the value chain

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

[FY2015 Results]
- Continuous operation of the conflict minerals management system, receiving third-party audits, and renewing certifications for gold (from LBMA) and tin (from EICC) every year

[Future Tasks]
- Initiatives on smelting business, which is positioned in the upstream of the supply chain, is important.
  - Continuing to fulfill social responsibility by supplying reliable materials to society
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.

<table>
<thead>
<tr>
<th>Material Issues</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>③ Environmental preservation and environmental technologies</td>
<td>9</td>
</tr>
<tr>
<td>The environmental impact of our operations and steps to reduce our impact.</td>
<td></td>
</tr>
<tr>
<td>④ Training and harnessing a diverse range of human resources</td>
<td>15</td>
</tr>
<tr>
<td>Global human resources management in the Metals Company.</td>
<td></td>
</tr>
<tr>
<td>⑤ Occupational health and safety</td>
<td>16</td>
</tr>
<tr>
<td>Actions to create a safe and healthy working environment taking into account the nature of our operations.</td>
<td></td>
</tr>
<tr>
<td>⑥ Responsibility in the value chain</td>
<td>18</td>
</tr>
<tr>
<td>Environmental and social actions in copper ore procurement.</td>
<td></td>
</tr>
</tbody>
</table>

### As an ICMM Member

As a member of the ICMM (International Council on Mining and Metals), we promote CSR initiatives within our operations. The ICMM is a global consultative body comprising major global mining/smelting companies with the key objective of working to improve the environment, health and safety, and human rights performance in the mining and metals industry. The ICMM advocates 10 Principles for Sustainable Development, to which member companies are required to commit.

**The ICMM 10 Principles for Sustainable Development**

01. Implement and maintain ethical business practices and sound systems of corporate governance.
02. Integrate sustainable development considerations within the corporate decision-making process.
03. Uphold fundamental human rights and respect cultures, customs and values in dealings with employees and others who are affected by our activities.
04. Implement risk management strategies based on valid data and sound science.
05. Seek continual improvement of our health and safety performance.
06. Seek continual improvement of our environmental performance.

07. Contribute to the conservation of biodiversity and integrated approaches to land use planning.
08. Facilitate and encourage responsible product design, use, re-use, recycling and disposal of our products.
09. Contribute to the social, economic and institutional development of the communities in which we operate.
10. Implement effective transparent engagement, communication and independently verified reporting arrangements with our stakeholders.

In April 2010, reflecting changes in social awareness associated with our operations and to reflect the ICMM 10 Principles, we revised our Code of Conduct for Mitsubishi Materials as a whole, and added the following items:

**Additions to Specific Details under the 10 Articles of Our Code of Conduct**

- Taking into consideration the sustainable development of society
- Working to create a low-carbon society
- Taking into consideration biodiversity
- Implementing and maintaining sound corporate governance
- Prohibiting child labor and forced labor
- Striving to achieve a work-life balance
- Continually improving occupational health and safety performance
- Ensuring that products are designed, used, reused, recycled and disposed of responsibly

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
The Metals Company has for several years implemented measures supporting the ICMM position statements. Examples of our proactive approach include establishing a company wide initiative in November 2008 regarding our greenhouse gas emissions (Statement 2).

Regarding Statement 3, mercury is contained as an impurity in copper concentrate, a raw material in one of our core businesses, copper smelting. As an ICMM member, we will continue our initiatives regarding the appropriate management of mercury. As part of our normal operating procedures, in accordance with the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc., we notify the Ministry of Economy, Trade and Industry regarding the generation of mercury-containing substances resulting from mercury removal from copper concentrate. 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. 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 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. As a member company of the ICMM and a shareholder in Indonesia-based P.T. Smelting, the Metals Company, as an extractive company, supports the objectives of EITI in responsible resources development and promoting growth and poverty reduction.

Communication with the ICMM
The International Council on Mining and Metals (ICMM), of which the Company has been a member since 2002, is an international consultation body that promotes the CSR of major mines around the world and the entire metals industry. It places emphasis on the initiatives and participation of the chief executive officers (CEOs) of member companies. For this reason, communication between the ICMM and member companies is extremely important, and the results of the communication are reflected in the global measures of the ICMM.

Dr. John Atherton of the ICMM visited Japan in June 2014, with Mr. Hannes Struyweg visiting the following year in May 2015. They shared information about the latest activities and plans of the ICMM with Mitsubishi Materials. These visits were valuable opportunities for us to exchange opinions with them about changes in the environment surrounding the mining and metals industries.
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

<table>
<thead>
<tr>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw materials</td>
<td>Products</td>
</tr>
<tr>
<td>Energy</td>
<td>Air emissions</td>
</tr>
<tr>
<td>Water</td>
<td>Wastewater</td>
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Environment Regulatory Compliance
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 2015. Consideration towards the environment and safety is considered to be a key component in our Medium-Term Management Plan and forms the basis of our operations.

Emission into the Air
The generation of SO\textsubscript{x} and NO\textsubscript{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\textsubscript{x}, dust and other pollutants from exhaust systems, regular equipment inspections and dust control at roads and storage facilities.

■ SO\textsubscript{x} Emissions\(^*\)  ■ NO\textsubscript{x} Emissions\(^*\)  ■ Dust Emissions\(^*\)

Effective Utilization of Water Resources
At sites performing smelting and copper processing operations, water is used for many purposes including cooling, production, and drinking. Total water consumption in FY 2015 was 284 million m\textsuperscript{3}, of which more than 90% (264 million m\textsuperscript{3}) was sourced from seawater. We promote the installation of closed-loop water treatment system and water re-use.

Environmental protection activities by Sakai Plant (Recycling of wood waste)
More than 99% of the industrial waste generated by the Sakai Plant is recycled in some form. Among this waste, the wood waste generated in the plant are mainly pallets for distribution that were disposed of. Wood waste is shredded into tiny pieces professionally. Foreign substances, such as nails, are detected and removed during the shredding process. About 50% of the shredded wood waste is sold to paper-manufacturing companies and reused as materials for manufacturing paper and boards. The rest is sold and reused as fuel.
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.

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 Metals Company's released/transferred amount for FY 2015 was 540 tons. This is practically the same amount as in FY 2014. In addition, reductions in the volume of wastewater generated and discharged were achieved by introducing a closed-loop water treatment system in the copper slag granulation process performed at the Onahama Smelter & Refinery.

Mitigation of Arsenic Emissions by a Mist Cottrell Precipitator at the Onahama Smelter & Refinery

The Onahama Smelter & Refinery has been advancing various environmental measures. In November 2012, two mist Cottrell precipitators were installed to reduce environmental damage by chemical substances as stipulated in the PRTR Act. This is a measure to achieve a higher removal rate of impurities contained in copper concentrates (arsenic in particular), the concentration of which has increased in recent years.

A mist Cottrell precipitator is a wet electrostatic precipitator which collects particles using the force of an induced electrostatic charge. By running a high voltage between collecting electrodes, particles surrounding discharge electrodes are charged and thus collected.

In June 2013, another precipitator was installed as planned. As a result, the overall arsenic emission for FY 2014 was 60% less than that for FY 2013.
Promotion of a Recycling-Oriented Society

Use of Recycled Material

The raw material input in FY 2015 was 3.66 million tons, of which 0.46 million tons (12.4%) came from recycled materials, such as shredder residue and waste substrates, etc., and 0.20 million tons of the recycled materials came from industrial waste that would otherwise have gone to landfill.

The Metals Company operations consume a large amount of natural resources including ore. 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

Reduction of Waste Generation

The total amount of waste discharged was 3,180 tons in FY 2015. Approximately 8% of this was specially controlled industrial waste, followed by wood waste, waste plastic, and waste acid accounting for approximately 24%, 22%, and 18% respectively.

<table>
<thead>
<tr>
<th>FY2015</th>
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</thead>
<tbody>
<tr>
<td>Sludge</td>
<td>31</td>
</tr>
<tr>
<td>Waste Oil</td>
<td>518</td>
</tr>
<tr>
<td>Waste Acid</td>
<td>576</td>
</tr>
<tr>
<td>Waste Alkali</td>
<td>78</td>
</tr>
<tr>
<td>Waste Plastic</td>
<td>712</td>
</tr>
<tr>
<td>Wood Waste</td>
<td>775</td>
</tr>
<tr>
<td>Glass/Concrete/Pottery Waste</td>
<td>190</td>
</tr>
<tr>
<td>Demolition Waste</td>
<td>45</td>
</tr>
<tr>
<td>Waste Electric Machinery and Apparatus</td>
<td>0</td>
</tr>
<tr>
<td>Mixed Waste</td>
<td>1</td>
</tr>
<tr>
<td>Specially controlled Industrial Waste</td>
<td>254</td>
</tr>
<tr>
<td>Total</td>
<td>3180</td>
</tr>
</tbody>
</table>

* Excluding P.T. Smelting.

We confirmed from reviews of industrial waste manifests that approximately 88% of the total waste discharged in FY 2015 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 2015)*

*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 of waste discharge and management for these operations. For FY 2015, the amount of waste discharge at P.T. Smelting was 1,822 tons.

Promoting Recycling of Rare Metals
Copper concentrate, the main raw material used in copper smelting, also contains rare and valuable resources in the form of platinum group metals (PGM). The refining process for rare metals at the Naoshima Smelter & Refinery allows these to be concentrated to produce intermediate products. We also collect PGM containing scrap from electronic material manufacturers and other items such as scrap jewelry for resource recovery. These are sent to the Materials Eco-Refining’s Onahama Plant where they are refined and recycled into finished products. At the Onahama Plant, we collect palladium and ruthenium in the form of metal and rhodium in the form of compounds.

We applied to become a registered brand on the London Platinum and Palladium Market (LPPM), reflecting the reliable quality of our platinum and palladium products. Our application was approved and we received certification in September 2012. We will continue to improve the quality of our products, and endeavor to achieve a stable supply of rare metals for our society and the lives of its citizens.

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 consumption in FY 2015 was 12,358 terajoules, a decrease of 1,063 terajoules from 13,421 terajoules in the previous year.

![Energy Saving Results of FY 2015](image)

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 2015, we reduced energy use by approximately 518 kiloliters of crude oil equivalent, which amounts to JPY 29 million. The breakdown of the reduction is summarized below.

<table>
<thead>
<tr>
<th>Effect</th>
<th>Amount of Money (Million Yen)</th>
<th>Crude oil Equivalent (kl)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akita Refinery Fuel conversion</td>
<td>11.5</td>
<td>139.8</td>
</tr>
<tr>
<td>Naoshima Smelter &amp; Refinery</td>
<td>Installation of efficient facilities/equipment</td>
<td>11.1</td>
</tr>
<tr>
<td>Sakai Plant Improvement of existing facilities/equipment</td>
<td>5.8</td>
<td>94.7</td>
</tr>
<tr>
<td>Metals Company Total</td>
<td>28.9</td>
<td>518.5</td>
</tr>
</tbody>
</table>

* Excluding MERC and P.T. Smelting.

Key examples of energy saving measures are:
1. Fuel conversion from A heavy oil to utility gas that resulted from boiler renewal (Akita Refinery)
2. Reduction of electricity consumption which resulted from the introduction of a mixer burner fan (Naoshima Smelter & Refinery)
Energy Saving from Logistics Operations

In FY 2015 total energy use in logistics was 180 terajoules*. Modes of transportation include ships and trucks, with ships accounting for 144 terajoules or 80% of total logistics energy use. The greenhouse gas (GHG) emission from our logistics was 12,566 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 in transport from truck to ship. Transport energy consumption statistics show that the unit energy consumption of ships is approximately a quarter of that of trucks. As we reach the maximum level of energy saving that can be achieved from this modal shift, we will continue our efforts in other areas to increase energy efficiency in our logistics operations. An example of other measures we are adopting includes the increased usage of larger vehicles.

Reducing GHG Emission

The FY 2015 GHG emissions of the Metals Company were 1.166 million tons-CO₂ equivalent, a decrease of approximately 69 thousand tons compared to the previous fiscal year. Approximately 75% of the emissions were emitted through energy use with the remainder coming from waste processing and industrial processes.

<table>
<thead>
<tr>
<th>GHG</th>
<th>FY 2015 Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO₂</td>
<td>Energy Use: 870,363</td>
</tr>
<tr>
<td></td>
<td>Non Energy Use: 112</td>
</tr>
<tr>
<td></td>
<td>Waste: 291,955</td>
</tr>
<tr>
<td>Other GHG**</td>
<td>3,624</td>
</tr>
</tbody>
</table>

*1 Including emissions from logistics
*2 Emissions from P.T. Smelting include emissions from Energy Use only.

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 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 Hosokura Metal Mining

As part of efforts to restore the natural environment impacted as a result of past mining and smelting operations, Hosokura Metal Mining has continued tree-planting activities since 2002.

In May 2015, we planted approximately 180 azalea trees on the embankment of a prefectural road in cooperation with local residents and affiliated companies. We will continue these activities as a part of our efforts to contribute to the local community.
Efforts at the Naoshima Smelter & Refinery

In December 2014, the Naoshima Smelter & Refinery was awarded the Minister of the Environment's 2014 Commendation for Global Warming Prevention Activity in recognition of its many years of efforts to help improve the environment.

As part of its measures to promote anti-global warming activities, since FY 1999 the Ministry of the Environment has commended groups and individuals who have made outstanding achievements in activities to help prevent global warming. The Naoshima Smelter & Refinery was awarded a commendation in the category for implementing and spreading countermeasures, receiving high praise for the series of environmental activities it promoted together with the local community, including the Wa-no-Sato Creation Project, the creation of green curtains, and mountain greening activities. It also received recognition for its efforts in process improvements, such as saving energy by introducing highly efficient equipment and reducing coal consumption with E-Scrap processing.

The introduction of inverter controls in existing equipment and replacement with highly efficient equipment, which began in 2009, has resulted in a cumulative reduction of 41,552 tons-CO$_2$. In addition, coal consumption has been reduced by 6,030 tons/year through the use of E-Scrap, which is a combustible alternative to coal. Other activities include the provision of opportunities for environmental learning to raise environmental awareness, and continuous greening activities aimed at helping trees grow back after mountain fires.

Opening of Wa-no-Sato Biotope

In May 2014, an event was held to commemorate the opening of the Wa-no-Sato Biotope, which the Naoshima Smelter & Refinery created in Gotanji. The event was held in the presence of people involved with the biotope from Naoshima Town, Kagawa Prefecture, and the local community.

The creation of this biotope began full scale in November 2013 to help maintain the landscape and provide for environmental education. The work was moved forward by volunteers, who aimed to make it a place where people can enjoy watching fireflies.

On May 21, the cultivation of sweet potatoes and soybeans was started separately from the Wa-no-Sato Project at the farm on the other side of the road. Volunteers who worked at the farm said that the work was unlike anything they had ever done. As a part of its CSR activities, the Naoshima Smelter & Refinery has been entrusted by the government of Naoshima Town, Kagawa Prefecture, to implement the Naoshima Wa-no-Sato Creation Project, under which it grows sunflowers and maintains and manages the biotope.

We were involved in work to create the biotope in Gotanji, hoping to make it a place where employees and local residents in Naoshima can relax. The work was completed by our employee volunteers in November 2013.

We will work to maintain the biotope, with our volunteer team playing a leading role.
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, 2015)

<table>
<thead>
<tr>
<th>Classification</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>129</td>
<td>3</td>
<td>132</td>
</tr>
<tr>
<td>Full-Time Employees</td>
<td>476</td>
<td>42</td>
<td>518</td>
</tr>
<tr>
<td>Temporary Staff</td>
<td>68</td>
<td>54</td>
<td>122</td>
</tr>
<tr>
<td>Total</td>
<td>673</td>
<td>99</td>
<td>772</td>
</tr>
</tbody>
</table>

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

Employee Turnover* (number of people)

<table>
<thead>
<tr>
<th>Number of Turnovers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>18</td>
</tr>
</tbody>
</table>

* 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 2015, 516* out of the 535 total employees (96%*) 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, 2015, 38* out of 57 managers above the assistant manager level (66.7%*) 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, etc. 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.

In Indonesia, worker demonstrations have occurred in various locations in recent years in protests over labor rights. Foreign companies, usually seen as having good working conditions, have not been an exception to this dispute. At P.T. Smelting, a new labor union has been established, and currently there are two unions. Under such circumstances, P.T. Smelting values smooth communication between the company and its employees for a healthy industrial relationship. As such they have increased the frequency of meetings to exchange views between the union and management representatives, and hold frequent discussions between managers and members in each section weekly or bi-weekly.

In FY 2015, there were no strikes or shut downs lasting over a week.

Resource Engineer Training Program

As part of our human resource development program, we have launched a trial scheme assigning resource engineers to overseas mines for extended periods. In this program, selected employees are dispatched to overseas copper mines where the Company has an interest after completing a one-year training program at the Company’s limestone mine in Japan. The purpose is to develop technical capabilities in mining, mineral processing and the geology of copper mines as well as to gain an understanding of the CSR performance of mines. Currently under this program, two people have been dispatched to Huckleberry Mine and one to Copper Mountain Mine.
Occupational Health and Safety

Enhancing and Strengthening Safe 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.

In response to situations such as the explosion and fire at Yokkaichi Plant that occurred in 2014, we established Occupational Safety & Health Department at the head office as an independent department in March 2014 in order to rebuild and enhance our safety management system. The following month in April, we launched the “Zero Accident Project,” under which the entire Mitsubishi Materials Group has been working to enhance its safety management system.

However, a ghastly accident occurred at the Metals Company later that year in May in which an employee at a group company engaged in copper processing was caught in a machine and died. In response, an Occupational Safety & CSR Department was established in the Metals Company in January 2015.

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 health and safety 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

Each of our production sites is implementing risk assessment to prevent accidents. The safety performance in 2014 of the Metals Company is summarized below. No incidents of occupational disease or explosions/fire occurred in 2014.

<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>People injured with lost workdays</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

* 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 2014, there were three cases of accidents with lost workdays, five cases of accidents without lost workdays at the Naoshima Smelter & Refinery, and one case of an accident without lost workdays at the Sakai Plant. Following the fatal accident that occurred at the selenium plant of the Precious Metals Section in November 2013, the Naoshima Smelter & Refinery took measures to ensure that such a sad accident will never happen again, such as reviewing work standards and risk assessments and performing a full check of facilities, including tanks, that may cause falls.

In two of the three accidents with lost workdays, the workers put their hands on the machines without stopping operation, causing them to get their fingers sandwiched and hit. Article 107 of the Ordinance on Industrial Safety and Health says “The employer shall, in the case where works of cleaning, lubrication, inspection or repairing of a machine (excluding blade parts) are carried out, and when it is liable to cause dangers to workers, stop the operation of the machine.”

It is necessary to go back to the basics of safety once more, and ensure that workers rigorously observe the established rules and procedures, and ensure that others do the same.

On July 1, 2014, a Safety & Environmental Management Department was established at the Naoshima Smelter & Refinery.

Consideration for the Local Community

Responding to New Business Environment by Combining Wisdom and Enthusiasm

The Gresik copper smelter of PT. Smelting (PTS) has promoted the 5Ss since it was founded. Supported by all of its employees, including the General Manager, the 5Ss help PTS take full advantage of the true value of its superior equipment. All of the employees apply the 5Ss of “Seiri (keeping things organized),” “Seiton (tidying things up),” “Seiso (cleaning),” “Seiketsu (keeping things hygienic),” and “Sitsuke (discipline)” in the same way the 5S activities are conducted in Japan. Based on the 5Ss, all of the employees are working to strengthen the foundation for the smelter’s development by following rules and striving to improve the product quality and productivity at comfortable workplaces where the top priority is given to safety.

The Gresik copper smelter has been in operation for fifteen years, and is moving forward with activities to respond to
the needs of the new times. CSR activities are made mandatory by the laws of Indonesia.
As a part of its CSR activities, the Gresik copper smelter has been proactively supporting the development of the local community. This diverse range of activities includes workshops for the repair of motorcycles, support for the construction of an elementary school building, the donation of books to the local community center, and road pavement.

The assemblies of people from 66 companies in the Gresik district involved in CSR activities are held at the Gresik copper smelter. In this way, the copper smelter is fulfilling its role and responsibility as the core company in the district. These patient and dedicated efforts are highly regarded by people in the local community, and have helped enhance the reliability of PTS and facilitate its business activities.

In the last few years, wages have continued to rise in Indonesia just as they did in Japan during the period of post-war economic growth. To keep the workers motivated, there is a need to hold thorough discussions with the labor union about establishing and operating an appropriate treatment system. There is also an issue specific to PTS in which a large number of staff members, who were hired when the company began operation, will retire in the next 10 to 15 years. Thus, the company also needs to establish a system for passing skills on to future generations. In this regard, the Gresik copper smelter stands on the firm business base developed through cooperation between Japan and Indonesia. All of the staff members are moving forward strongly to further help build up the smelter by combining their wisdom and enthusiasm, rooted in a feeling of trust in midst of the rapidly-changing business environment of this new era.

**Establishment of a Safety & Environmental Management Department at the Naoshima Smelter & Refinery in July 2014**

On July 1, 2014, a Safety & Environmental Management Department was established at the Naoshima Smelter & Refinery. This department manages all matters related to safety, health, and the environment.

The new department, which has a total of 18 staff members, is entrusted with the extremely heavy responsibility of managing the safety and environment as fundamental elements of business. It was established by integrating three existing organizations and adding more personnel. The three original organizations were the Safety Unit of the General Affairs Section, which served as the safety and health secretariat, the Environmental and Recycling Section, which was in charge of managing general environmental matters, and the TPM Promotion Department, which was in a position that allowed it to see the entire smelter and refinery from the viewpoint of TPM.

The Safety & Environmental Management Department is a new organization that was established following repeated discussions by all the workers and managers of the Naoshima Smelter & Refinery. During these discussions, they examined ways for further improving the safety and environmental management system in response to the serious accident that happened in 2013. Under the direct instructions of the General Manager of the smelter and refinery, the department aims to make quick and careful responses based on the clear policies.

The establishment of the new department has enabled managers to stay directly informed and readily aware of potential risks known to workers out in the field, accurately check on-site risks, immediately take emergency measures, develop permanent measures by clarifying the periods and persons responsible, and follow up and promote measures. The General Manager of the smelter and refinery serves as the General Safety and Health Manager of the department.

The Naoshima Smelter & Refinery is currently designated as an enterprise under the government’s special guidance on general safety and health management. To create the safest and most secure smelter in the world, which sincerely implements measures, all of the employees at the smelter stand united, with each one of them serving as a safety leader and working with the employees of the partner companies.
Investment and Procurement Standards
The Metals Company purchases about 1.9 million tons of copper ore annually from overseas mines for supply to our smelters. To secure a long term, stable supply, we have invested in five mines outside of Japan (Los Pelambres Mine and La Escondida Mine in Chile, Huckleberry Mine and Copper Mountain Mine in Canada, and Batu Hijau Mine in Indonesia). With the start of operations at Copper Mountain Mine in Canada in 2011, the ratio of ore procured for domestic smelters from invested mines reached 70%. 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 as well as supporting the mine operations regarding the environment and local community issues as a shareholder. As part of our CSR supply chain management activities, in July 2009 we developed “CSR Investment Standards” to evaluate mines for investment and “CSR Procurement Standards” to evaluate external mines, i.e. mines in which we don’t invest but from which we purchase ore. The ICMM 10 Principles for Sustainable Development, especially mine-related principles (Principles 3, 7 and 9) and various social & environmental guidelines for mine development were used in drafting the standards. In October 2011, we revised the basic human rights sections of our CSR Investment and CSR Procurement Standards, adding the requirement forbidding any involvement, either direct or indirect, with militia or other armed groups in areas of conflict where there are concerns regarding human rights violations. The outlines of both standards are summarized in the column below.
A questionnaire based on the standards is sent to both mines in which we invest, and non-affiliated mines who are ore suppliers. The CSR aspects of their operations are evaluated based on their responses with further communications regarding CSR aspects of operations taken as required.

<table>
<thead>
<tr>
<th>The Metals Company Outline of CSR Investment Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protection of basic human rights</td>
</tr>
<tr>
<td>Mining and protected areas</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>The Metals Company Outline of CSR Procurement Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continual improvement of environmental performance</td>
</tr>
<tr>
<td>Continual improvement of occupational health and safety</td>
</tr>
<tr>
<td>Protection of basic human rights</td>
</tr>
</tbody>
</table>
Addressing the Issue of Conflict Minerals

Of the four Conflict Minerals, the Metals Company manufactures gold bullion and tin, and is required to respond appropriately as a smelter. In the second half of 2012, we set up and started implementing a conflict minerals management system. With regard to gold bullion, we were audited and assured by a third-party organization (KPMG AZSA Sustainability Co., Ltd.) for the period of fiscal 2013 (one year), and our compliance with the LBMA Responsible Gold Guidance was certified for the first time by the London Bullion Market Association (LBMA) on June 28, 2013. Following this, we were audited in the same way again for the period of fiscal 2014 (one year) and obtained a second certification from LBMA on June 27, 2014.

Regarding tin, we are following the CFS program advocated by the Electronic Industry Citizenship Coalition (EICC). In February 2014, we were audited by a third-party organization specified by EICC and obtained the CFS certification. In this way, 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:

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.

Examples of Environmental Protection Activities

- **Huckleberry Mine (operation stage)**
  - Water quality monitoring in the wastewater pit
  - Acid drainage prevention measures
  - Countermeasures for mine closure (maintenance of water quality, structural monitoring of a tailing dam)
  - Monitoring of aquatic species living in nearby rivers and lakes
  - Measures for sealing water into the tailing dam
  - Tree planting around mine facilities

- **Namosi mining area (exploration stage)**
  - Water quality monitoring studies of rivers in the area
  - Biodiversity offset survey
  - Survey on the impact on the landscape

Examples of Activities in Social Issues

- **Los Pelambres Mine (operation stage)**
  - Prioritizing the hiring of local people for on-site operations
  - Enhancing education and medical care, contributing to the creation of new employment (e.g. construction of vocational training schools, expansion of existing hospital facilities)
  - Enhancing infrastructure by direct funding (e.g. construction of university auditoriums, maintenance of roads, construction of irrigation facilities, conservation of archaeological resources and tree planting)
  - Donations to national poverty eradication programs

- **Namosi mining area (exploration stage)**
  - Prioritizing the hiring of local people
  - Donations to a local Catholic church
  - Maintenance and urgent repair of local roads
  - Supporting emergency personnel from local NPO and donation of AEDs to the community
  - Supporting agriculture (ginger and taro)
  - Provision of computers to a local elementary school
  - Supporting a group of local women managing stores
  - Partially funding a project for laying electric cables to a local village
Environmental and Social Action in Overseas Mines
We evaluate overseas mines in which we invest to secure a stable supply of raw materials from the shareholder’s perspective to check whether consideration is given to biodiversity in their management. At the Huckleberry Mine and Copper Mountain Mine, which are located in British Colombia, Canada, we continuously monitor the river water quality in accordance with the water quality guidelines of the state.

Local Procurement
The Metals Company strategically locates production sites close to areas from where raw materials are sourced reducing the environmental impacts associated with the transport of ore. P.T. Smelting in Indonesia purchases 100% of its copper ore from mines in Indonesia and 50% of its auxiliary material and goods within Indonesia, thereby contributing to the local economy. In Japan, the Onahama Smelter & Refinery purchases auxiliary material from suppliers located in the same city. About 13 thousand tons per month of calcium carbonate is used as a raw material in the production of gypsum, a smelting by-product, all of which is purchased from a neighboring factory. About 9 thousand tons per month of silica is used as an auxiliary material in the copper smelting process, of which 50% is purchased locally.

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 (refer to page 19 for details). 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 (refer to page 18 for details).

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 trend towards stricter regulatory control over chemicals management, particularly in Europe with the introduction of the Regulation concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). As an exporter of copper alloy to European markets, the Metals Company is required to comply with requirements of REACH. We successfully completed our registration for copper, ahead of the required deadline, in November 2010. Later, we also completed registration for silver in July 2014. We also plan to complete registration for elements such as nickel, gold, selenium, and chromium in FY 2016. In addition, we are also in compliance with the requirements of REACH regarding the preparation of SDSs prepared 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 also closely monitor changes in chemical regulations as different countries are at different stages in reforming their chemicals management regimes.

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 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.

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\(^{1}\) CLP: Abbreviation for Classification, Labeling and Packaging of substances and mixtures. CLP is a regulation issued by EU in 2008 regarding classification, labelling 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.

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**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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TEL: 03-5252-5357 FAX: 03-5252-5426