

Building and Enhancing Relations throughout the Value Chain

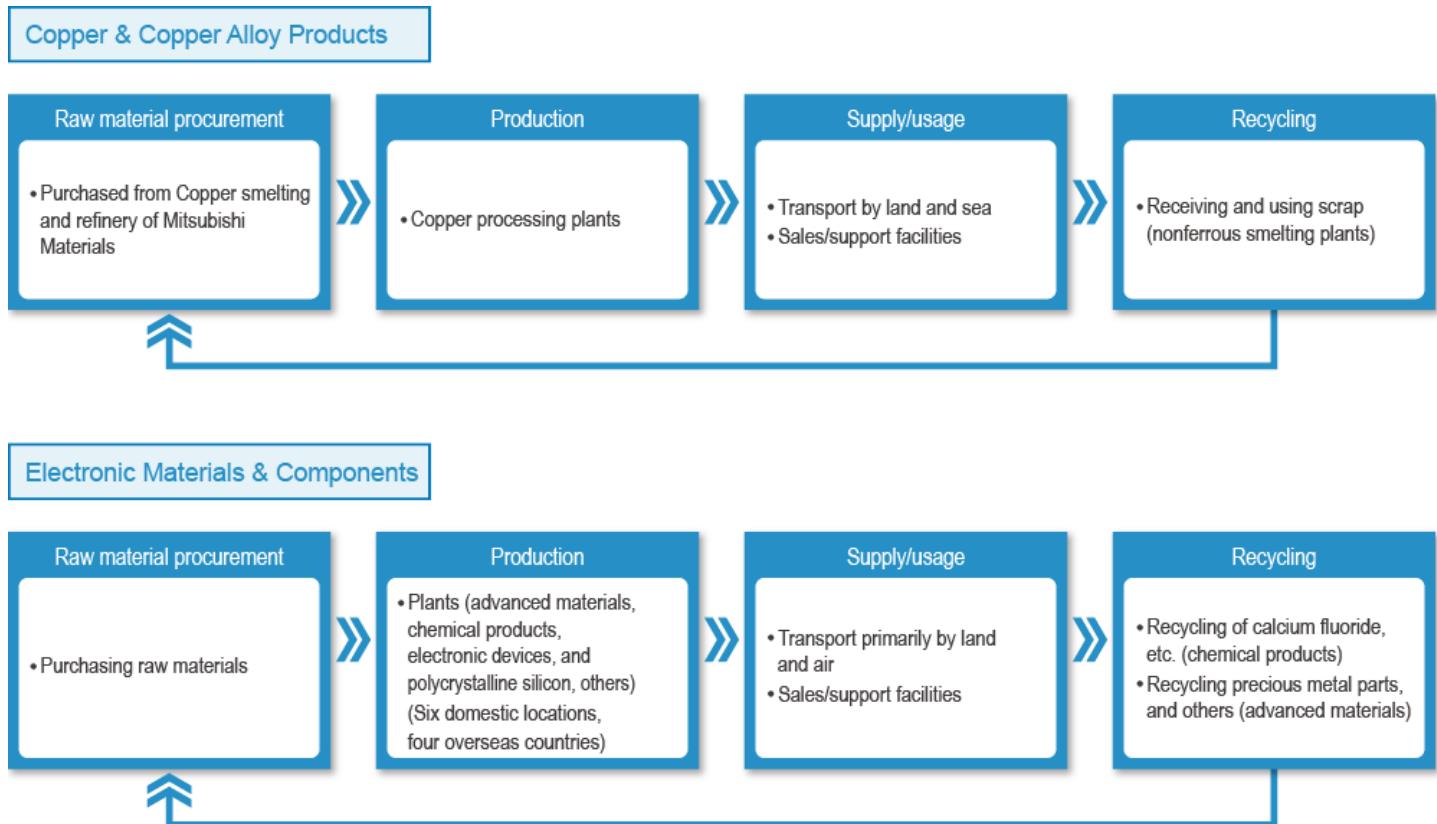
Advanced Products Business

Advanced Products Company (APC) operates two businesses in an integrated manner—the copper & copper alloy business and the electronic materials & components business—since they are very similar in terms of market needs and technology development. Taking advantage of our unique technologies, we offer various products in the markets of next-generation vehicles, semiconductor manufacturing, electronics, industrial equipment, robots, and infrastructure, which are our focus market domain.

For the next-generation vehicle market, we supply oxygen-free copper and advanced copper alloys which are essential for high current, high voltage and large amounts of data communication; lead frames and other copper & copper alloy products; solar heat-ray shielding paints that are used mainly for automotive windows to save energy; and automotive electronic components such as sensors.

For the semiconductor manufacturing and electronics market, we offer processed silicon products and seals for semiconductor manufacturing equipment. For industrial equipment, robotics, and infrastructure, we supply superconducting wires and high-performance alloy wires used for magnetic resonance imaging (MRI) scanners and scientific research, ECO BRASS and Glo Brass (an environmentally friendly, lead-free free machining brass), and others. In this way, APC contributes widely to the development of society, for instance in the popularization of new mobility services through providing high value-added products in response to mega trends.

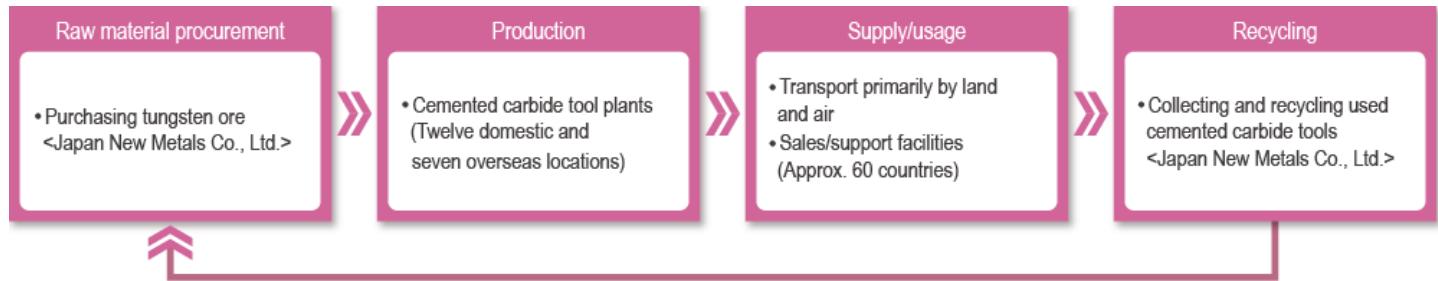
■ Value Chain for the Advanced Products Business



Metalworking Solutions Business

In addition to the cutting tools that are essential for processing metal parts, we also supply rock tools, wear resistant tools, and other cemented carbide products, as well as sintered parts used in the engines and drive parts of vehicles and aircraft. We operate manufacturing and sales facilities worldwide, in China and other parts of Asia, the Americas and Europe. We support manufacturing across a range of different fields by providing high value-added products and services which cater to customer needs. Those products and services are underpinned by high levels of technical expertise and reliability. Our cemented carbide products boast the largest market share domestically. In addition, we proactively recycle tungsten, a rare metal that is the main raw material for cemented carbide. We are also focusing a great deal of effort on collecting used cemented carbide tools.

■ Value Chain in the Metalworking Solutions Business



Metals Business

Our metals business consists of three areas of business; mining, smelting and refining, and precious metals. In the mining sector, we invest in overseas copper mines in order to procure a steady supply of copper concentrate. In the smelting and refining sector, we manufacture and sell high quality products, both domestically and overseas, thanks to the Mitsubishi Process, which combines high efficiency with exceptionally low environmental impact. Making the most of the smelting process, we have also established a recycling system for recovering valuable metals from E-Scrap, as part of our active commitment to recycling resources. In the precious metals sector, we provide precious metal bullion products and services under the brand "Mitsubishi Gold," including our accumulation plan service called "MY GOLD PARTNER" for gold, silver and platinum for individual customers.

■ Value Chain for the Metals Business

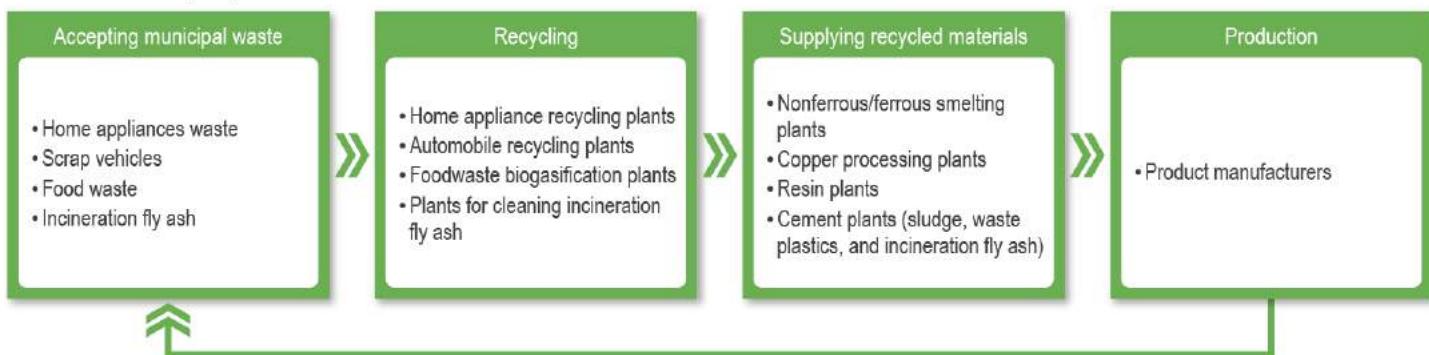


Environment & Energy Business

In the energy business, we contribute to the building of a decarbonized society by providing a stable supply of renewable energy, including geothermal, hydroelectric and solar power. In the nuclear sector, our operations include treatment and disposal of radioactive waste and safety assessments. In the eco-recycling sector, we operate recycling plants that we have established together with home appliance manufacturers, while working collaboratively within the Group to expand resource recycling, not least through our smelting and cement recycling system.

■ Value Chain for the Environment & Energy Business

Environmental Recycling Business



Affiliated Businesses (Cement)

We operate a wide range of affiliated businesses via our highly distinctive group companies. Our affiliated engineering and trading companies support all manner of industrial infrastructure, not only the semiconductor industry. Salt producing companies provide a stable supply of salt, which is essential to our daily lives. We also contribute to local societies through the operation of a diverse range of businesses, including tourist mine businesses (making use of former mining sites). Moreover, we play a part in promoting renewable energy through geothermal power generation and the utilization of geothermal heat, making effective use of advanced drilling techniques and survey methods.

Cement is an essential basic material to our modern society, not least for the construction of roads, bridges, ports and buildings. In the cement business, we have established a wide-ranging business structure, from mining limestone, the main raw material in cement, through to cement plants, transportation, sales, ready-mixed concrete plants, and construction companies, etc. With this structure, we contribute to the development of social infrastructure and undertake global activities via production and sales facilities in Japan and other countries. We supply high quality products such as low-heat cement, ultra-high strength concrete cement, and non-shrink grout, in addition to regular Portland cement and other general-purpose products. Furthermore, we actively take in difficult-to-treat waste products at our cement plants, and detoxify them using a high-temperature burning process at 1,450°C. Effectively reusing resources like this enables us to contribute to the establishment of a recycling-oriented society.

* In the process of the integration of Cement business and related businesses between UBE Corporation (formerly Ube Industries, Ltd.), on April 1, 2022, MMC's Cement business and related businesses were assumed by Mitsubishi UBE Cement Corporation (an equity method affiliate of MMC) through an absorption-type company split.

Procurement and Supplier Initiatives

Responsible Procurement of Raw Materials

Purpose of activities	Activities during fiscal 2022	Self-assessment	Targets/plans for activities from fiscal 2023 onwards
<ul style="list-style-type: none"> Operating CSR Procurement Guidelines for the Procurement & Logistics Division 	<ul style="list-style-type: none"> Supplier self-check sheets for existing suppliers were submitted by 108 companies (response rate: 66%) Supplier self-check sheets for new suppliers were submitted by 98 companies (response rate: 100%) Reviewed and assessed 219 suppliers 	A	<ul style="list-style-type: none"> Rate of collection of Self-Check Sheet is 70% or higher Assessed 200 existing suppliers Reviewed 100% of new suppliers
<ul style="list-style-type: none"> Copper Product Raw Material Procurement Initiatives 	<ul style="list-style-type: none"> Operated a policy on the responsible procurement of minerals 	A	<ul style="list-style-type: none"> Operated and maintained a policy on the responsible procurement of minerals

Self-assessment grades A: Target achieved B: Target mostly achieved C: Target not achieved

Basic Approach

As a comprehensive materials manufacturer, we work in partnership with wide range of suppliers throughout the value chain, in an effort to improve added value and promote global procurement with an emphasis on stable product supplies and more competitive products.

Stable procurement is important in terms of reducing opportunity loss and maintaining consistent operations. We therefore aim to build close relationships with all of our suppliers, ensuring that all transactions are fair, avoid corruption, comply with the law and take into account issues such as human rights.

Mitsubishi Materials Group Procurement Policy

1. Open Door/Fair Trade

When selecting suppliers, we provide a wide range of opportunities for all suppliers to engage in transactions. We select suppliers based on fair and appropriate assessments of quality, price, delivery time, management base and so on, predicated on mutual trust for the sake of mutual prosperity.

2. Legal Compliance

In conducting procurement operations, we comply with legislation in Japan and abroad.

3. Observance of Ethical Procurement

In conducting procurement operations, we do not engage in any inappropriate transfer of profits with suppliers.

4. Working Environment and Occupational Health and Safety

In conducting procurement operations, we strive to improve working environments and ensure occupational health and safety.

5. Environmental Protection and Decarbonization

In conducting procurement operations, we endeavor to protect the environment, apply every measure for the effective use and recycling of natural resources, and work toward decarbonization.

6. Respect for Human Rights

In conducting procurement operations, we respect the fundamental principles of human rights as declared internationally.

7. Information Security

In conducting procurement operations, we maintain strict confidentiality of information obtained from suppliers.

In conducting procurement operations, we promote CSR initiatives in all business activities, including the procurement of raw materials, development, production, distribution, consumption, disposal, and recycling of materials and products.

(Establishment date: December 1, 2021)

Operating CSR Procurement Guidelines for the Procurement & Logistics Division

In an effort to reinforce our organizational capabilities with regard to CSR priorities throughout the global supply chain, we have informed suppliers of the CSR Procurement Guidelines for the Procurement & Logistics Division and incorporated the guidelines into basic agreements.

The guidelines apply to all raw materials (excluding copper ores) and equipment. They consist of a Basic Procurement Policy, which sets out the division's responsibilities, such as respect for human rights, legal compliance, occupational hygiene, and environmental protection, and in addition to these items, we require our suppliers to comply to secure product quality and safety, workers' rights, etc., which we state in our CSR Procurement Standards.

To ensure the effectiveness of initiatives taken by suppliers, the division has been screening and evaluating suppliers since April 2016.

Before starting transactions with new suppliers, we request that they conduct self-evaluations using a Supplier Self-Check Sheet, which consists of items that assess their initiatives on social responsibilities related to human rights (such as child labor, forced labor, and unreasonably cheap labor) and procurement (including negative environmental impact), in addition to general items such as quality, cost and delivery. The division assigns scores according on their answers to the 12 evaluation items on the Self-Check Sheet.

Based on rules of the division, we request that existing suppliers evaluate themselves every other year using the Supplier Self-Check Sheet, thereby checking the progress of their initiatives. In addition, concerning major raw materials that must be managed on an item-by-item basis, the division evaluates the comprehensive performance by using the Supplier Evaluation Sheet, which consists of 28 evaluation items.

We provide feedback on the results of these evaluations to suppliers, including items that need improvement, and monitor them as needed.

In fiscal 2022, we collected Supplier Self-Check Sheets from 206 suppliers (98 new ones and 108 existing ones). We conducted screenings of all 98 new suppliers and periodic evaluations of 121 existing ones.

The division's priority activity in fiscal 2023 is to promote the use of multiple suppliers of important raw materials and equipment, which have been purchased from single supplier, from the perspective of ensuring stable procurement.

Mitsubishi Materials Corporation CSR Procurement Guidelines

The Mitsubishi Materials Corporation is an ensemble of companies operating under the composite profile of a comprehensive basic materials manufacturer. We provide resources, basic materials and energy indispensable to modern lifestyles, and adhere to a corporate philosophy that emphasizes efforts that contribute to people, society and the Earth. The Company's approach to CSR activities hinges on the idea of making this philosophy a reality, through the sincere fulfillment of the obligations and expected roles that society places on corporate citizens, disclosure and proper explanation of the Company's activities to stakeholders, and the pursuit of a deeper level of two-way communication with stakeholders, in order to promote greater mutual understanding.

Mitsubishi Materials Corporation's CSR Guidelines are composed of a Basic Procurement Policy and CSR Procurement Standards. The Basic Procurement Policy clarifies philosophies and standards to be upheld by the Company in executing its procurement duties, while the CSR Procurement Standards clarify standards that the Company requests its suppliers (and their suppliers) to observe and uphold.

These guidelines were established based on the understanding that CSR procurement is not something that can be completed as an internal effort, and that it will only be effective if efforts are made across the entire supply chain.

Basic Procurement Policy

1. Open Door/Fair Trade

When selecting suppliers, we provide a wide range of opportunities for all suppliers to engage in transactions. We select suppliers based on fair and appropriate assessments of quality, price, delivery time, management base and so on, predicated on mutual trust for the sake of mutual prosperity.

2. Legal Compliance

In conducting procurement operations, we comply with legislation in Japan and abroad.

3. Observance of Ethical Procurement

In conducting procurement operations, we do not engage in any inappropriate transfer of profits with suppliers.

4. Working Environment and Occupational Health and Safety

In conducting procurement operations, we strive to improve working environments and ensure occupational health and safety.

5. Environmental Protection and Decarbonization

In conducting procurement operations, we endeavor to protect the environment, and applies every measure for the effective use and recycling of natural resources, and works toward decarbonization.

6. Respect for Human Rights

In conducting procurement operations, we respect the fundamental principles of human rights as declared internationally.

7. Information Security

In conducting procurement operations, we maintain strict confidentiality of information obtained from suppliers

Mitsubishi Materials Corporation promotes CSR initiatives in all business activities, including procurement of raw materials, development, production, distribution, consumption, disposal, and recycling of materials and products.

CSR Procurement Standards

1. Respect for Human Rights

Suppliers shall respect basic human rights, to not discriminate with regard to employment or treatment, and to not engage in harassment, child labor, forced labor, human trafficking or unfair low-wage labor.

2. Compliance with Legislation and Corporate Ethics

Suppliers shall comply with legislation in Japan and abroad and to not act in ways that go against corporate ethics, including the provision or acceptance of inappropriate benefits and dealing with anti-social individuals or groups.

3. Fair Business Activities

Suppliers must not obstruct free competition, or engage in unfair competition.

4. Safety and Health

Suppliers shall work to ensure and improve safety and health, such as by preventing occupational accidents.

5. Development of Working Environment and Working Hours

Suppliers shall uphold the Labor Standards Act and endeavor to create a stable working environment, and comply with local applicable laws and regulations regarding employee's working hours, holidays, and vacations.

6. Freedom of Association

Suppliers shall recognize employees' right to freely associate, or not to associate, complying with local applicable laws and regulations.

7. Environmental Preservation

Suppliers shall abide by legally established environmental standards and strive to preserve the environment, such as by preventing air, water and soil pollution, endeavoring to reduce greenhouse gas emissions, and processing and disposing of industrial waste in an appropriate manner.

8. Responsible Procurement of Mineral Resources

Suppliers shall consider the impact of raw materials, which can cause human rights violations and social problems such as environment destruction, in procurement activities, and take measures to avoid their use if there is concern.

9. Ensuring Product Quality and Safety

Suppliers shall establish a quality assurance system to ensure the quality and safety required for products, and provide accurate information about products.

10. Protection of Intellectual Property

Suppliers shall not infringe on the intellectual property rights of others in the course of business activities such as R&D, production or sales, etc., of products and services.

11. Information Security

Suppliers shall establish an information management system (organization and rules) and take measures to prevent leakage of confidential information obtained in connection with transactions. In particular, the handling of acquired personal information shall be strictly controlled.

12. Disclosure of Information

Suppliers shall disclose details of business activities and risk information, etc., as required by laws and regulations in a timely and appropriate manner. In particular, suppliers shall disclose information promptly, especially if there is a risk of affecting the continuation of transactions.

13. Protection of Whistleblowers

Suppliers shall establish an internal reporting system that ensures the protection of whistleblowers, together with a system that prevents retaliation for reporting.

Mitsubishi Materials Corporation hopes that suppliers will work to extend fair transactions based on the purport and spirit of these guidelines to their suppliers, and will work together to build a resilient and competitive supply chain.

(Last revised date: December 1, 2021)

Copper Product Raw Material Procurement Initiatives

We procure copper concentrate, a raw material for copper products, primarily from the overseas mines in which we invest, to ensure a stable supply to smelters and refineries both in Japan and overseas, and while this places us in the position of a non-operator not directly involved in mine management, as a company engaged in global procurement activities, we hope to fulfill our sustainable development responsibilities.

We place importance on dialog with indigenous peoples and members of local communities. For example, we assign specific staff members to participate in the advisory committees of mines in which we have a certain scale of interests.

Moreover, our Metals Company requires the mining companies to comply with CSR Investment Standards (if we are investing) and CSR procurement standards. We also check that those standards are followed, for example through regular questionnaire surveys, and if deemed necessary, we seek to understand and improve the situation. We include environmental preservation and respect for human rights as important matters to consider in our business processes as we manage our global supply chain.

Metals Company: Outline of CSR Procurement Standards

[Continual Improvement of Environmental Performance]

- Introduce and implement environmental management systems focusing on continual improvement.
- Reduce negative environmental impact from mine development and operation.
- Take into account protected natural areas and protect biodiversity.
- Consult with stakeholders regarding environmental issues.

[Continual Improvement of Occupational Safety and Health]

- Introduce safety and health management systems focusing on continual improvement.
- Protect employees and contractors from occupational accidents. Implement disease prevention measures including local communities.

[Protection of Basic Human Rights]

- Prevent forced and child labor.
- Eliminate harassment and discrimination.
- Avoid forced resettlement, or provide compensation.
- Protect indigenous people.
- Manage and record complaints and disputes with stakeholders.
- 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.

Metals Company: Outline of CSR Investment Standards

[Protection of basic human rights]

Protect the basic human rights of people impacted by our 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 impact on cultural and natural heritage, and risks to biodiversity at every stage 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 social impact assessments with regard to indigenous people and provide appropriate compensation.

[Relationship with the local community]

Verify if there are any disputes or lawsuits with the local community. Engage in consultation and dialogue to explain business plans.

[Environmental preservation]

Conduct environmental impact assessments (EIA) and obtain appropriate permits. Set out specific policies to reduce the environmental impact of mine development and operation.

[Mineral resources and economic development]

Contribute to sustainable economic development at the regional and national level.

■ Environmental Impact Assessment for Zafranal Project (Peru)

Mitsubishi Materials Corporation joined Zafranal copper mine development project in Peru with Canadian mining company Teck Resources Limited and its subsidiary.

Compania Minera Zafranal S.A.C. (CMZ) operates the project. Mitsubishi Materials Corporation (MMC) has 20% share of the project and assigns personnel at the subsidiary established in Peru. MMC communicates closely with CMZ and works together in order to progress the project.

CMZ prizes the cultures, values, traditions and historical heritages of local communities, and has been establishing transparent and sincere long-term partnership with them. CMZ is having dialogues with local communities and additional stakeholders, and also conducting individual briefing, responding their inquiries. CMZ has been building public trust with taking in local opinions and needs through these activities.

In preparation for the legal process and to get approval of the Environmental Impact Assessment, CMZ is consulting with local communities, and undertaking environmental and social baseline studies in the project and related infrastructure areas.

As a Responsible Business Operator Procuring and Smelting Minerals

From Conflict Mineral Management to Responsible Mineral Procurement Management

The United States' Dodd-Frank Wall Street Reform and Consumer Protection Act requires all companies listed in the US to disclose whether their products contain "conflict minerals," defined as gold, tin, tantalum and tungsten, along with details of reasonable survey on producing countries and the survey results, in an effort to prevent minerals mined in the Democratic Republic of Congo (DRC) or its neighboring countries from being used to fund the activities of armed groups responsible for human rights violations and other acts of violence. Recently, considerations are given beyond the scope of conflict minerals and from a broader perspective of responsible mineral procurement, mainly in EU countries. At present, cobalt and silver are also examined, and in tandem with movements of OECD and SEC, organizations such as RMI^{*1} and LBMA^{*2} have formulated guidance related to the issue of conflict minerals (responsible mineral procurement management).

As a responsible business operator smelting gold, silver, and tin, we promoted initiatives to respond to these global requirements, formulated a related policy, and disclosed it.

*1 Responsible Minerals Initiative (RMI)

*2 London Bullion Market Association (LBMA): The LBMA implements and oversees compliance with quality requirements for gold and silver bullion circulated in the market.

Metals Company (Initiatives with Respect to Gold, Silver, and Tin)

The Metals Company has pledged its support for a campaign to ensure a transparent flow of funds related to mineral resources, as promoted by the Extractive Industries Transparency Initiative (EITI)^{*1} since June 2011.

We began preparations for tackling the issue of conflict minerals in 2012, obtained certification in August 2013 for our compliance with the London Bullion Market Association (LBMA)^{*2} gold guidance on avoiding use of conflict minerals and have had this certification renewed every year since. We have also begun operations and obtained certification with regard to silver. Since February 2014, we have received annual certification of our conformance with the RMI^{*3} of RMAP^{*4} regarding tin.

*1 Extractive Industries Transparency Initiative (EITI): The EITI is a global framework established to improve the transparency of financial flows from extractive industries engaging in the development of oil, gas and mineral resources to the governments of resource-producing countries. Its aim is to prevent corruption and conflicts, and thus to promote responsible resources development that can facilitate growth and help to reduce poverty. <http://eiti.org/>

*2 London Bullion Market Association (LBMA): The LBMA implements and oversees compliance with quality requirements for gold and silver bullion circulated in the market. <http://www.lbma.org.uk/>

*3 Responsible Minerals Initiative (RMI)

*4 Responsible Minerals Assurance Process (RMAP, formerly the Conflict-Free Smelter Program [CFSP])

Contact [the Responsible Minerals Control Hotline](#) if you identify any act in violation of the provisions of our Responsible Minerals Control Policy.

Mitsubishi Materials Corporation Metals Company Responsible Minerals Control Policy

Establishment date: 19th June 2013

Last revised date (Rev. 6): January 27, 2022

The Metals Company (hereinafter the "Company") engages in bullion manufacturing for gold, silver and tin. The Company does not procure materials originating from high risk areas, such as conflict-affected areas, connected to human rights abuses, terrorist financing, money laundering and illegal trade. Also, the Company recognizes the importance of addressing Environment and Sustainability responsibilities for procurement of materials. To rigidly maintain this practice, the Company has adopted a control system that follows the London Bullion Market Association (LBMA) guidance for gold and silver, and the Responsible Mineral Initiative (RMI) Responsible Minerals Assurance Process (RMAP) for tin and undergoes regular audits by third-party bodies.

The Company hereby sets out its responsible minerals control policy applicable to gold, silver and tin as follows and will implement the following measures.

1. General Provisions

(1) The Company will respect human rights and avoid direct or indirect involvement with inhumane acts. For this purpose, the Company will not use suspicious minerals which may be connected to conflict-affected and high risk areas where armed conflict, widespread violence and other risks may harm individuals. Risks listed in "OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas" AnnexII (listed below) are managed.

- ①Direct or indirect support to non-state armed groups
- ②Serious abuses associated with the extraction, transport or trade of minerals
- ③Public or private security forces
- ④Bribery and fraudulent misrepresentation of the origin of minerals
- ⑤Money laundering
- ⑥Payment of taxes, fees and royalties due to governments

In addition, in accordance with LBMA's guidance on gold and silver, the Company will not procure suspicious minerals against its Environment and Sustainability responsibilities.

(2) The Company will immediately stop a transaction when its risk controls on material procurement detects that the minerals are connected to those in power in conflict-affected and high-risk areas, or suspicious against Environment and Sustainability responsibilities of the Company.

(3) The Company annually receives third-party assurance on its procurement of materials containing gold, silver and tin, and reports the audit results concerning gold and silver to LBMA and those concerning tin to RMI.

2. Control System and Responsibility

(1) The Company's headquarters deals with all operations for mineral control. Smelters and refineries do not procure materials independently.

(2) The compliance officer appointed by the Company assumes authority and responsibility stipulated in the control manual, including those for overseeing relevant sections and divisions and for operating the control system.

(3) The supply chain officer appointed by the Company assumes authority and responsibility stipulated in the control manual, including those for overseeing the entire control system and for regularly conducting management reviews.

3. Judgment Criteria for Material Procurement from Conflict-Affected and High-risk Area.

The Company considers the procurement of materials containing gold, silver and tin as a high-risk when those materials are determined to have a high relation to any suspected OECD Annex II risks(1.General Provisions (1)①-⑥) in conflict-affected and high-risk areas defined by the Company. The Company also considers the procurement of materials containing gold and silver as a high-risk when those materials are determined or highly suspected to be non-compliant with Environment and Sustainability legal requirements.

4. Implementation of Due Diligence on Material Suppliers

The Company will practice due diligence and perform risk assessments on all suppliers of materials containing gold and silver and all suppliers of materials containing tin. The Company will immediately stop a transaction when it is deemed by the supply chain officer as being high risk, as a result of the risk assessment.

5. Monitoring of Materials Purchased by the Company's Headquarters

- (1) Materials purchased by the Company headquarters are supplied to smelters and refineries, which will check the actual goods and analyze the content of gold, silver, tin and/or other metals for every lot, to examine consistency with the information from suppliers provided in advance by the Company headquarters and to report the findings to the Company headquarters.
- (2) The Company will effectively utilize the monitoring system for incoming materials, which has long been in place, for the purpose of responsible minerals procurements control at the Company headquarters and operate it as a system for the prevention of contamination with high risk minerals.

6. Operation of the Responsible Minerals Sourcing Control System

- (1) The compliance officer will provide education and training to the relevant sections and divisions of the Company headquarters and to the smelters and refineries as needed.
- (2) The compliance officer will perform at least one internal monitoring per year of the relevant sections and divisions of the Company headquarters and of the smelters and refineries to assess if operations are properly performed in accordance with the responsible minerals sourcing control system or if there are any deviances from the system.
- (3) In the event of starting transactions with a new supplier for material procurement, the Company will ensure that the information is communicated to the compliance officer in an effort to prevent contamination with high risk minerals.
- (4) The compliance officer will keep the records of all operations concerning responsible minerals sourcing control and retain them for five years. The relevant documents of the control manual will be revised as needed and properly managed.

[PDF LBMA Responsible Gold Guidance Compliance Report and the Independent Assurance Report \(KPMG AZSA Sustainability Co., Ltd.\) \(853KB\)](#)

Japan New Metals Co., Ltd. (Supervised by the Metalworking Solutions Company) (Initiatives with Respect to Tungsten)

In June 2021, Japan New Metals Co., Ltd., a Group company whose operations include tungsten smelting and refining, revised its system for managing the use of conflict-free minerals based on the Conflict Mineral Management Policy to the system based on the Responsible Mineral Procurement Management Policy, which has expanded its scope of control to a wider range of areas and minerals. As a company smelting and refining tungsten in Japan, Japan New Metals Co., Ltd. carries out management to ensure that raw materials put into the smelting and refining process are ones conforming to the Responsible Mineral Procurement Guidelines. The company also carries out the similar management for raw materials purchased from external tungsten smelting and refining companies. In November 2021, the company acquired the Responsible Minerals Assurance Process (RMAP) conformance certification, which was updated from the CFS Certification.



RMAP certification obtained by
Japan New Metals Co., Ltd.

Product Quality and Safety

Product R&D and Approval Risk Management

We endeavor to prevent quality issues by engaging in risk management activities for reducing quality risks at Group companies both in Japan and overseas, in order to prevent quality risks from materializing.

So as to ensure that delivery time and cost are not prioritized over quality, we have established the order of priority for decision making in the performance of duties as SCQDE^{*1}. By repeatedly informing and educating employees, we are fostering an environment that will prevent hesitation in judgment. The same concept is applied in product R&D, and is fundamental to all decisions that require problem solving or response to potential risks. We have also established front-loading system guidelines, whereby the design, R&D, manufacturing, quality assurance, research and sales departments identify risks and problems that may be considered during production or mass production, and deliberate on improvements and measures. Expert reviews and customer evaluations are conducted at each stage of the design and prototyping, and proper execution of new businesses is ensured by approval before the transition to mass production.

*1 SCQDE" shows the order of priority of our business decisions. In providing products and services to customers, we must thoroughly implement SCQ and satisfy D. We believe that we will be able to obtain trust from customers and society by continuously executing SCQD in good faith, and this will produce a reasonable profit.

1 . S (Safety & Health: safety and health come first)

2 . C (Compliance & Environment: legal compliance, fair activities and environmental conservation)

3 . Q (Quality: quality of products and services provided to our customers)

4 . D (Delivery: strict adherence to delivery deadlines)

5 . E (Earnings: appropriate earnings)

With reflection on quality Issues, we prioritize adherence to SCQ.

The trust of customers is secured only when all requirements up to and including D have been satisfied. E is obtained based on the trust of customers after satisfying SCQD.

Product Safety

As a manufacturer, we are committed to providing our customers with safe, high quality products. We therefore implement a range of quality and safety initiatives, as a precautionary approach and to ensure compliance with the law and other applicable regulations. We have also developed a set of regulations for the control of hazardous chemical substances contained in our products. As well as ensuring that we do not release any products containing hazardous substances to customers, including via group companies, we are committed to disclosing product information when deemed necessary.

Ensuring Safety in Transit

We make every effort to guarantee safety when transporting products that require additional safety measures in transit, such as sulfuric acid. Specific measures include ① avoiding contact with other substances, ② using protective equipment when loading and unloading products, ③ preventing leaks or dispersal from containers, and ④ providing drivers with SDS clearly outlining measures in the event of an accident.

Providing Safety Information

Providing safety information on our own products is vitally important, to ensure product safety further along the supply chain. We therefore attach Safety Data Sheet (SDS) to Mitsubishi Materials products so as to effectively disclose and convey information on chemical substances.

Controls on Chemical Substances Contained in our Products

We have formulated a set of regulations for the control of hazardous chemical substances contained in our products, and continue to reinforce management and ensure legal compliance in relation to chemical substances contained in our products. We register, maintain and manage chemical substances based on the Revised Chemical Substances Control Law^{*2} We

successfully completed the registration of substances covered under REACH regulations^{*3} by September 2017, and currently maintain and manage those substances. We are also gathering information on and responding to chemical-related laws and regulations in other countries as needed.

We provide Group companies with the latest information through quality liaison conferences and quality meetings, and give them advice on compliance with all applicable legislation.

*2 Revised Chemical Substances Control Law: Act on the Partial Revision of the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.

*3 REACH (Registration, Evaluation, Authorization and Restriction of Chemicals): EU regulation that governs the registration, evaluation, authorization and restriction of chemical substances manufactured within or imported into the EU.

Impact Assessments at the Development and Prototype Stages

We carry out a review during R&D at four key stages, when exploring areas of R&D, conducting R&D and trial production, conducting mass production trials, and commercializing products. We repeatedly confirm and meticulously examine all of our products from the very beginning, including checking for the use of hazardous chemical substances, guaranteeing that products meet customers' requirements and ensuring legal compliance, always taking into consideration the safety of products and processes as we engage in development works.

Quality Management and Group-wide Quality Initiatives

Establishment of Quality Review Day

The Group has declared November 1 to be our Group-wide Quality Review Day so that the quality issues that occurred in 2017 will not be forgotten and the same issue will not occur again.

In fiscal 2022, this is an opportunity to review quality issues by watching a video message from the President and a video of lessons learned from the series of quality issues. It is also an opportunity to verify that the products and services provided to customers at each site do not have quality issues.

We have also implemented various initiatives, including the verification of the effectiveness of the measures for preventing the recurrence of complaints, and a review of the standards and procedures.

Quality Management Strategy

We operate in accordance with the "Fundamental Quality Provisions at Mitsubishi Materials Group" in order to enhance governance relating to quality. Under the quality provisions, we have established a Group-wide "Quality Policy" that aims to provide first-class products and to obtain customer satisfaction, and established and operate the "Quality Control Guidelines at Mitsubishi Materials Group" to complement the Group Quality Policy. We have established and are striving to maintain our quality management, from design and development to production, shipping and sales, for all organizations involved in quality improvement of products and services provided by us.

We handle a wide variety of products at the domestic and overseas sites of our Group companies, and it is important to share the information related to quality management.

At this meeting, Professional CoE's Safety, Environment & Quality Dept. provides and shares the variety of up-to-date information about our quality. Participants can then share examples of improvement at each site and hold group discussions on specific topics.

The purpose is to deepen the understanding of quality representatives and bring back the shared information and the outcomes from discussion to each site to enable further improvements.

We have also set up a Quality Liaison Conference comprised of the persons in charge of quality from Professional CoE's Safety, Environment & Quality Dept., each in-house company, and others, in our efforts to enhance our governance system. At the quality liaison conference, the progress and status of quality training, quality audits, the automation of testing equipment, and quality initiatives at each in-house company, including Group companies, are reported. The necessary information is then shared by participants.

Further, where necessary, we hold quality meetings that are aimed at sharing quality information. At quality meetings, we provide detailed support to each site, such as checking and discussing the situation of quality management, etc., individually with quality person in charge of the sites. The Quality Audits as a part of the Theme Audits led by the Internal Audit Dept. are conducted. The purpose of the quality audit is to confirm by objective evidence that there is no quality fraud and that effective quality management is implemented. It also aims to identify issues and improvements related to quality, and to provide an opportunity for the audited sites to make continuous improvements.

Quality Training

Given the reflection that Group-wide crisis sharing was not working with a poor sense of ownership when the quality issues occurred, quality training is conducted for each level of younger employees, middle employees and managers, to continue to change their mindset on quality. The quality management system (QMS) based on ISO 9001 is fundamental to our quality management and quality assurance.

ISO9001 internal auditor training is conducted regularly for newly appointed auditors.

In fiscal 2022, nine classes were held with a total of 150 participants. In addition to this, we also held seven classes aimed at maintaining and improving the auditing skill and capabilities for the experienced internal auditors. A total of 61 people participated in these classes.

Quality Management Initiatives at Overseas Manufacturing Sites

Our Metalworking Solutions Company has 10 manufacturing sites in Europe, the United States and Asia, which manufacture high quality products in conjunction with our domestic sites.

To accommodate the expansion of locally manufactured products overseas, we have continued efforts to provide technical instructions from domestic sites on equipment maintenance, production technologies, inspection standard and other matters. This initiative over a number of years has resulted in spontaneous activities by local employees overseas, e.g. kaizen (improvement) meetings and reviews of QC systems. Their motivation to acquire new skills and technologies is driving improvements in quality. We engage in activities to improve quality, such as the raising of quality awareness and the improvement of quality documents through ongoing quality training.

Also, electronic components business, a part of Advanced Products Company, was expanded to Southeast Asia early and has transferred the production to the region.

Today, in Southeast Asia, we have a total of five manufacturing sites of subsidiaries and subcontractors dedicated to the business, and have worked closely with the Ceramics plant in Japan as the "mother plant" to develop a business scheme.

The Copper & Copper Alloy Div., too, has a total of 12 sites in Europe, the United States and Asia, and is working to maintain and improve the level of quality management by enhancing an alliance with Japanese sites and head office.

In particular, to reduce customer complaints about product quality and maintain governance, we encourage the sharing of information and conduct multifaceted activities aimed at further raising awareness and improving the abilities of local staff and personnel posted overseas, including Advanced Products Company quality supervisor meetings, small group activities and presentation meetings, quality audits conducted by the in-house company, and web conferences held on a timely basis.

Governance Restructure Relating to Quality Management and Preventive Measures

As the result of efforts to implement and strengthen prevention measures for recurrence within the Group's quality management, we have improved both quality awareness and control level across the Group and various measures have been disseminated across the Group. To prevent the recurrence of quality issues going forward, we will incorporate a series of measures to prevent quality issues into our quality management systems such as the systems that comply with the ISO 9001 standard, and continuously implement them.

Main causes of the shipment of non-conforming products	Preventive Measures for Quality Issues	Concrete Measures
<ul style="list-style-type: none"> ◆ Inadequate framework for exerting influence on product development and order receiving processes at order receiving stage ◆ Attitude excessively prioritizing "order receiving" and "delivery date" ◆ Order received and mass production that the specifications exceeding manufacturing capability 	<p>① Implementation of a Front Loading System (FLS) for Order Receiving</p>	<ul style="list-style-type: none"> • Implementation of the Front Loading System Guidelines was confirmed through quality audits, etc.
<ul style="list-style-type: none"> ◆ Insufficient framework of quality assurance system ◆ Pressure on quality assurance departments from other departments 	<p>② Enhancement of the Framework and Authority of the Quality Control Department</p>	<ul style="list-style-type: none"> • Authority including independence of quality assurance function, and the implementation were confirmed through quality audits, etc.
<ul style="list-style-type: none"> ◆ Low awareness of compliance with specifications ◆ Arrogance in thinking that quality management is being achieved ◆ Low sensitivity to risk in relation to quality issues 	<p>③ Expansion of Quality Training</p>	<ul style="list-style-type: none"> • Continued implementation of quality training for employees at domestic and overseas sites. • Implementation of quality training on the basics of quality control for younger employees. • Implementation of quality compliance training for mid-level employees and managers. • Implementation of quality training to improve professional quality management skills, including ISO9001
<ul style="list-style-type: none"> ◆ Insufficient business resources (insufficient inspectors, inspection equipment, etc.) 	<p>④ Promoting Automated Inspection Equipment</p>	<ul style="list-style-type: none"> • Continued implementation of automated inspection equipment
<ul style="list-style-type: none"> ◆ Audit procedures that have become a mere facade 	<p>⑤ Enhancement of Quality Audits</p> <p>⑥ Utilization of Outside Consultants</p>	<ul style="list-style-type: none"> • Continued to conduct quality audits at necessary sites • Continued implementation of consultations and seminars by quality consultants