

Mitsubishi Materials
CSR Report
2014

For People, Society and the Earth



For People, Society and the Earth

Mitsubishi Materials Long-Term Management Policy: *Vision*

We will become the *world's leading* business group committed to supporting recycling-oriented society through *materials* innovation, with use of our *unique and distinctive* technologies.

Here at the Mitsubishi Materials Group, we consider it our mission to support people's lifestyles and the development of society through the provision of a wide range of resources, new materials, products and services, whilst at the same time producing unique, superior technologies and generating synergy.

We also recycle waste into usable resources as part of our business, harnessing the technologies, expertise and networks we have built up to date.

In spite of the increasingly serious array of issues facing the global environment, including climate change, resources and energy supplies, we are determined to boldly confront social issues through our core business.

We make the most of the precious resources and materials nature provides, so that they can be recycled and reused.

Creating a recycling-oriented society means leaving behind a sustainable world for future generations.

Inspired by dreams, and pride in everything we do, we are committed to doing our bit "For People, Society and the Earth."

Photo: Lush greenery surrounding Lake Taiheiko (Akita prefecture)

Popular with tourists for its pleasure boats, Lake Taiheiko is a manmade lake that was created following the completion of the Moriyoshi Dam in 1953. As well as its rich natural surroundings, including Komata Gorge and Mount Moriyoshi, the entire lake is designated as a wildlife protection sanctuary and attracts enthusiasts interested in activities such as bird watching and mountain stream fishing. The Moriyoshi Dam was developed as a joint project between Mitsubishi Materials (formerly Taihei Mining Co., Ltd.) and Akita Prefecture, and has continued to be operated and managed jointly to this day.



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This report is designed to inform our stakeholders – all those with a vested interest in Mitsubishi Materials and the Mitsubishi Materials Group – about the corporate social responsibility (CSR) activities undertaken by the Mitsubishi Materials Group in an easy-to-understand format. As a communication tool, it is also intended to elicit opinions and to help us advance our activities.

■ Outline of CSR Reporting Tools

We make every effort to systematically disclose CSR-related information on behalf of the Mitsubishi Materials Group using the following tools.



CSR Report 2014 (printed version, PDF)

This is an annual report on material issues, focusing primarily on Mitsubishi Materials but also featuring initiatives carried out by group companies.



Metals Company Supplementary Data Book (PDF)

We publish a supplementary data book containing detailed information on activities carried out by our Metals Company and smelting-related Group companies not included in this report.



CSR Section of our Website

Our website features content that we were unable to fit in this report, including detailed performance data, a GRI Content Index, fact sheets, data from previous reports and information on our latest activities.

<http://www.mmc.co.jp/corporate/en/csr/index.html>

* In the event that any mistakes or misprints are discovered after publication of our Corporate Social Responsibility Report, corrections are posted on the CSR section of our website.

Inclusion in Socially Responsible Investment (SRI) Indices



Mitsubishi Materials has been selected for inclusion in the DJSI Asia Pacific, the Asia Pacific section of the Dow Jones Sustainability Indices (DJSI), ever since the index was first created in 2009.



Mitsubishi Materials has been selected for inclusion in the Morningstar Socially Responsible Investment Index (MS-SRI), Japan's first socially responsible share index, consisting of the top 150 listed domestic companies in terms of the social credentials, as chosen by Morningstar.

■ Period

Fiscal 2014 (April 1, 2013 – March 31, 2014)

* It also includes selected information relating to activities before and after.

■ Boundary

Quantitative data:

- Financial data and employee numbers by region refer to consolidated figures.
- Greenhouse gas emissions include major consolidated subsidiaries (87 companies).
- Other environmental data is for major consolidated subsidiaries with manufacturing facilities (26 companies)
- CSR training data refers to the main companies subject to CSR activities (60 companies). As a rule, all other data refers to Mitsubishi Materials on a non-consolidated basis.

Qualitative data: Mitsubishi Materials and Group companies

■ Key Changes to Reporting Organizations

We have transferred operations of the following two group companies, due to restructuring.

Tamadai Corporation (December 27, 2013)

Mitsubishi Materials C.M.I. Corporation (January 6, 2014)

- As part of our disclosure activities as a member of the ICMM, we publish the Metals Company Supplementary Data Book, a detailed online report outlining activities carried out by our Metals Company, as well as activities undertaken by our four smelting-related Group companies Hosokura Metal Mining Co., Ltd., Onahama Smelting & Refining Co., Ltd., Materials Eco-Refining Co., Ltd. and PT. Smelting (Indonesia).

* For the purposes of this report, the terms "Mitsubishi Materials" and "the company" refer to Mitsubishi Materials on a nonconsolidated basis.

■ Date of publication

January 2015 (previous report published in January 2014; next report scheduled for January 2016)

■ Referenced guidelines

Global Reporting Initiative (GRI) Sustainability Reporting Guidelines (version 3.0)

* A full GRI Content Index is available via the CSR section of our website.

■ Caution Regarding Forecasts and Forward-Looking Statements

The final decision, including any investment decisions, rests with individuals. The Company assumes no responsibility or liability whatsoever for any losses or damages resulting from investments or other actions based on information in this report.

Symbols Used in This Report

- WEB Related information featured in the CSR section of our website
- P00 Related information featured on the relevant page
- Data Book P.00 Related information featured in the Metals Company Supplementary Data Book
- ★ Figures subject to external independent assurance

The Process of Compiling this Report

We place great importance on the process of compiling our CSR Reports. The process is designed with the aim of improving transparency and reliability as a company, in the interests of accountability, and of tying in with CSR activities carried out by group companies.

■ Improving Transparency and Reliability in the Interests of Accountability

Having examined and identified nine “material issues” (see [P.32](#)) from the perspectives of our stakeholders and management, they provide the basic framework for both our CSR activities and CSR reports. As the environment is constantly changing around us, not least in terms of stakeholder trends, we review our material issues on a regular basis. We also keep a close eye on matters of interest to our stakeholders, their expectations and business conditions, so that we can check and adjust the contents of our reports in precise detail.

To keep track of matters of interest to our stakeholders, their expectations and other related trends, we gather information from individual departments, based on sources such as questionnaires from SRI agencies, responses to reader questionnaires, and intensive internal interviews prior to the compilation of the current report.

We hold Stakeholder Meetings to discuss topics of particular importance (the most recent meeting focused on efforts to promote renewable energy). Meetings also help to establish a clear understanding of social issues, from various different angles, and to examine details of group initiatives.

We also obtain an “independent assurance”, to assist in comprehensively evaluating the contents of our report against international requirements, and a “third-party assessment” of our initiatives from an expert standpoint, in an effort to improve transparency and reliability.

■ Establishing a Shared Understanding of Changes in the External Environment and Improving CSR Activities

We make the most of communication activities, as part of the process of compiling this report, to improve our CSR activities, by establishing a shared understanding and raising awareness of changes in the external environment for example.

The General Affairs & CSR Department, which oversees our CSR activities, conducts internal interviews with managers and members of staff from each department over the course of five days, with the aim of efficiently verifying the contents of the current report. It is also an ideal opportunity to actively exchange opinions and share information, on subjects such as matters of interest or concern to stakeholders, issues for the future, and the direction of our activities.

Asking individual departments to produce articles for this report based on the results of internal interviews, and then exchanging opinions regarding the draft report once it has been compiled, enables departments to review their CSR activities from an external perspective and helps to develop a shared understanding of their strategic significance.

The policy for the current CSR report, its contents and other relevant details are discussed and approved by management during CSR Committee meetings. We also express our commitment to CSR activities through activities such as Stakeholder Meetings and interviews, which once again involve management staff.

The Process of Compiling this CSR Report

Gathering and summarizing feedback

October 2013 onwards

- Bringing together responses from reader questionnaires, etc.

Confirmation of editorial policy, etc.

January 2014 onwards

- Confirming basic philosophy
- Selecting priority topics

Stakeholder Meeting

March 2014

- Exchanging opinions regarding the group's role in promoting renewable energy

Internal interviews

May 2014

- Obtaining details of initiatives and issues in each department, stakeholder trends, etc.

Compilation

June-August 2014

- Asking individual departments to write articles
- Conducting interviews
- Editing report

Independent assurance

August 2014

- Independent assurance
- Third-party assessment

Publication

September 2014*

*English version published in January 2015



Carrying through the basic principle of “Safety and Health are the First” as we provide a stable supply of globally sought-after “materials.”

Hiroshi Yao
President
Mitsubishi Materials Corporation

矢尾 宏

We are acutely aware of the seriousness of the accident and will make every effort to prevent a recurrence and tighten safety management.

We express our heartfelt regret over the deaths of Mitsubishi Materials employees and workers from a partner company as a result of the explosion that occurred at our Yokkaichi Plant on January 9, 2014, and extend our sincerest condolences and apologies to the bereaved families. We would also like to offer, once again, our sincerest apologies for the anxiety and inconvenience caused to many people, including those injured in this accident and those living in the surrounding area.

We set up an Accident Investigation Committee, seeking the cooperation of people with relevant knowledge, experience and expertise from outside the company, to determine the cause of the accident and to examine measures to prevent recurrence. The investigation report resulting from the seven meetings of the committee identifies in detail the cause of the accident and makes a wide range of proposals to prevent recurrence. Based on this knowledge and these proposals, we are conducting sweeping reviews not only of the nature of operations at the Yokkaichi Plant but also of the production processes and business processes generally across the entire Mitsubishi Materials Group. At the same time, we are also taking steps to raise the safety awareness of individual employees, which is essential for preventing accidents, and to reconstruct a safety culture to foster and support such safety awareness.

In addition to these employee-related initiatives that address the “soft” aspects, we have also implemented measures to address the “hard” aspects, including positioning “strengthening the safety management structure” at the top of our corporate strategies and allocating a fixed amount of the capital investment planned from fiscal 2015 to fiscal 2017 to investments that will contribute to “safety” under our new medium-term management plan announced in May.

Trust takes a moment to lose but rebuilding it requires strong determination and resolve and the untiring effort on the part of all employees to prevent accidents of this nature and magnitude from occurring again. I used to take pride in the fact that we had repeatedly endeavored to ensure workplace safety as far as possible since the Mitsubishi Materials Group has many manufacturing plants that handle hazardous materials, but this accident has forced me to rethink this understanding. It goes without saying that we will verify and improve each of our shortcomings, but since the recent investigation report also elucidates new information about the substance that caused the accident, we plan to formulate radical recurrence prevent measures.

As the senior manager of the Mitsubishi Materials Group, I am acutely aware of the seriousness of the damage caused by the accident and intends to make every effort to prevent recurrence and enforce the safety management measures that are fundamental to our business activities.

Pursuing new possibilities for contributing to the creation of a recycling-oriented society under our long-term management policy

In corporate management, it is important to have a long view, not just a short- and medium-term focus. The Mitsubishi Materials Group has formulated a new “Long-term Management Policy” to replace the previous “2010 Vision” and to serve as a “compass” for management suited to the times ahead, and our new vision, which lies at the heart of this policy, is outlined below.

New vision

We will become the *world's leading business group committed to supporting recycling-oriented society through materials innovation, with use of our unique and distinctive technologies*.

A major feature of our business model is that we develop resources, smelt metals, produce cement, metal products, advanced materials and components, and collect end products after they are used and recycle them to produce resources that will create new value. Currently we recycle as many as 27 different elements, and cross-business collaboration such as the Smelting and Cement Recycling System, where copper smelters and cement factories use each other's waste and byproducts, is further developing this business model.

Under our new medium-term management plan, which marks the first step towards realization of this vision, "pursuing a recycling-based business model" is a major theme. We will fully utilize synergies between businesses (a Materials Premium) ~ possible precisely because we are an integrated business entity ~ and harness our "unique and distinctive technologies" to further develop the recycling-oriented value chain, opening up completely new possibilities.

We also plan to supply materials and processed products as "new materials" to key industries such as the social infrastructure, automobile and electronics industries, and to enter into the new businesses of automobile recycling and the rehabilitation of landfill sites.

The Earth's natural resources are limited. To leave a share of these finite resources to the next generation, we have to make the transition as quickly as possible from an economy and society of mass consumption and mass disposal to a recycling-oriented society that regenerates and reuses resources. Our recently formulated long-term management policy indicates a general future direction for our group and will, in my view, also lead to the solution of global social issues that have arisen in recent years.



Further accelerating global business expansion, while developing and utilizing diverse human resources.

Another key strategy under our new medium-term management policy is to strengthen our global competitiveness. As concrete measures for achieving this, we plan to expand our production and sales network and develop new customers and markets, but it is the Group's human resources that will support these initiatives and the hiring and development of human resources is essential in order to powerfully push ahead with global business expansion.

From the period covered by our previous medium-term management plan, we have focused on developing human resources who are capable of working in the international arena, and provided a wide range of education and training. To become human resources that can compete in a global market, our employees must not only study languages but also respect the business practices and cultures of different countries and improve their ability to understand and absorb information. At our Human Resources Development Center, we develop and provide programs from this

perspective and support each individual employee who transfers overseas.

In the meantime, we are not bound to the idea of self-sufficiency and also actively recruit and employ local staff overseas and, since we will also need these local staff to take on new responsibilities within the Group, we plan to further strengthen recruitment and development activities in Asia and other parts of the world. I am sure that when human resources with diverse qualities and experiences come together and spur each other on in the workplace, smoother, more flexible business expansion will be possible.

Conducting responsible business activities in regions and communities around the world.

All business activities involve social responsibility. As the Mitsubishi Materials Group grows and develops, the potential positive and negative effects of our activities on our stakeholders are greater, which means that we must always be mindful of the consequences of our actions and behavior. Especially when a company engages in "materials"-related business activities as we do, it is important to understand the effect that resource development upstream in the supply chain has on the right to life of the people living in the region and the natural environment, and to take appropriate actions. We also have to consider the overall impact of our long value chain that stretches beyond upstream resource development to our refining, manufacturing, processing, and collecting and recycling activities, and mitigate the negative impact.

In the past, we have expended maximum effort to prevent environmental pollution and reduce CO₂ emissions, while using resources more efficiently. We believe that the technical expertise we have gained as a result could put to use in various ways around the world in the future. Likewise, in the renewable energy

sector where we have been working to develop and use renewable energy resources for many years, we believe that, in addition to our technical expertise, our experience and corporate stance of being constantly mindful of coexistence with local communities will become even more useful in the future.

Fulfilling our mission of providing a stable supply of globally sought-after "materials" at a higher level.

As a diversified materials company, the Mitsubishi Materials Group delivers the basic materials and components that underpin the development of society and people's lives. While remaining constantly proud of this important mission, we intend to continue to promote aspirational initiatives. As a prerequisite to this, we will practice management that puts a premium on the safety of all the people who work for us and inhabit the surrounding areas more thoroughly than ever before.

We intend to further raise the standard of our corporate activities by listening to the candid opinions of our stakeholders and engaging in dialog. I hope we can continue to rely on your guidance and support in the future.



Explosion & Fire Accident at Yokkaichi Plant

An explosion & fire accident occurred in the high-purity polycrystalline silicon manufacturing facility at Yokkaichi Plant of Mitsubishi Materials Corporation (MMC) on January 9, 2014.

We would like to express our sorrow for the people who lost their lives in the accident and extend our sincerest condolences to the bereaved families. We would also like to convey our sincerest apologies once again for the tremendous anxiety and inconvenience caused by the accident, especially to those living in the surrounding area, the authorities, customers and shareholders.

We take the gravity of this accident seriously and are determined to continue implementing recurrence prevention measures and measures to ensure safe operations in accordance with the recommendations of the Accident Investigation Committee, and to make a concerted company-wide effort to strengthen our safety management system.

Overview of the accident

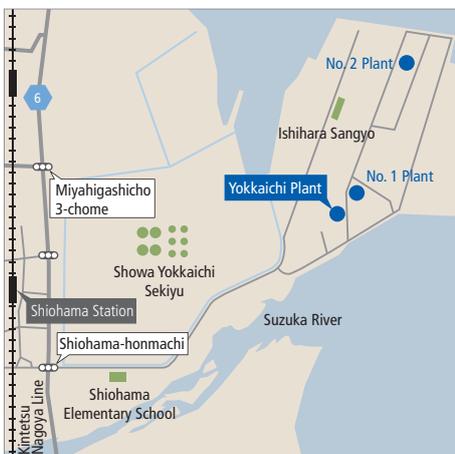
| | |
|---|---|
| Plant where accident occurred: | Yokkaichi Plant (No. 1 Plant) of Mitsubishi Materials Corporation |
| Equipment involved: | Water-cooled heat exchanger of No. 6 Hydrogen Recycling Facility |
| Date & time of the accident: | January 9 (Thursday), 2014; Around 2:05 pm |
| Casualties among personnel: | 5 people were killed (3 employees of MMC and 2 employees of partner companies) 13 people were injured (10 employees of MMC and 3 employees of partner companies) |
| Damage to facilities: | Damage to surrounding facilities, etc. |

Occurrence of accident

Overview of facilities where accident occurred

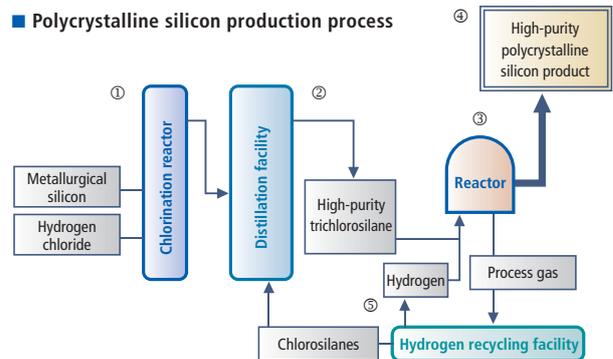
MMC's Yokkaichi Plant manufactures high-purity polycrystalline silicon used as raw materials in silicon wafers for semiconductors. The polycrystalline silicon manufacturing process is carried out by reacting metallurgical silicon with hydrogen chloride to produce trichlorosilane, purifying the trichlorosilane through distillation, and performing further reactions including thermal decomposition and reduction to produce the polycrystalline silicon, as shown in the figure below.

The water-cooled heat exchanger involved in the accident was installed in the hydrogen recycling facility (labeled (5) in the Fig. "Production process of polycrystalline silicon"), which cools the process gases discharged from the reactor and recycle hydrogen, chlorosilanes, etc. Multiple heat exchanger tubes are positioned inside the water-cooled heat exchanger. Process gases flow through the heat exchanger tubes and are cooled by water flowing around the heat exchanger tubes.

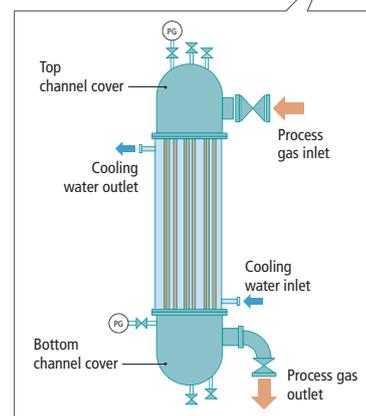


Location of Yokkaichi Plant

Polycrystalline silicon production process



Outline of Yokkaichi Plant (No. 1 Plant)



Structure of water-cooled heat exchanger

Events which led to the accident

(1) On November 27, 2013, the heat exchanger involved in the accident was removed from the hydrogen recycling facility for maintenance and placed in a designated storage place, where the following preparation for opening and cleaning were made.

| | |
|---------------------------------|--|
| November 28 to December 2, 2013 | Dry nitrogen blow was performed for 3 days |
| December 3 to December 27, 2013 | Humidified nitrogen blow was performed for 20 days |
| January 6 to January 8, 2014 | Dry nitrogen blow was performed for 3 days |

(2) On January 9, 2014, the heat exchanger involved in the accident was transported to the wash station inside the plant, which is where the accident occurred, and dry nitrogen blow was performed. Then, around 11 am, the bottom channel cover was removed and cleaned. Around 1.40 pm, procedures for opening the top channel cover were started and, around 2.05 pm, the top channel cover was opened. The explosion and fire occurred a few seconds later.

Response directly after the accident

Yokkaichi Plant set up a Disaster Task Force immediately after the accident occurred to take charge of rescuing the injured and contacting the local government and relevant authorities. Since the fire went out around 5 minutes after it started, no fire-fighting activities by the Public Fire Department, disaster prevention cooperative, etc. took place. MMC headquarters also set up an Accident Task Force headed by the President immediately after receipt of the initial report from Yokkaichi Plant to take charge of responding to relevant parties and disseminating information to those inside and outside of the company.

Resumption of operations at Yokkaichi Plant

MMC suspended operations at the production facilities of Yokkaichi Plant the day after the accident to confirm safety, but resumed operations on June 30, 2014, after implementing an inspection of production facilities and other measures in accordance with the guidance of the relevant authorities and the recommendations of the Accident Investigation Committee and confirming the safety of operations.

Occurrence of the explosion & fire accident and response

(1) Time of occurrence of the accident and time of completion of fire-extinguishing measures

| | |
|-----------------------------------|--|
| Occurrence of explosion & fire | Around 14:05 (Blast inside No. 1 Plant was heard and white smoke, etc. was confirmed.) |
| Explosion & fire were recognized. | Around 14:07 |
| Fire was extinguished. | Around 14:21 |

(2) Main responses taken after the accident

| | |
|-------|---|
| 14:07 | 119 was called to give notification of the explosion and the injured. |
| 14:08 | 119 was called to request ambulances (around 5) |
| 14:10 | 119 was called to confirm the injured and said that the fire was under control. (Since the fire was extinguished shortly after it broke out, no fire engines were dispatched by the Showa Yokkaichi Cooperative Disaster Prevention Force.) |
| 14:19 | Neighborhood community associations were contacted. |
| 14:21 | Ambulances arrived. Order for suspension of dichlorosilane distillation facility was issued by Yokkaichi City Fire Department. (16:35 Operations at dichlorosilane production plant were suspended.) |
| 14:31 | Yokkaichi Labour Standards Inspection Office was contacted. |
| 14:34 | Yokkaichi Minami Police Station (Community Safety Division) was contacted. |
| 15:05 | Showa Yokkaichi Cooperative Disaster Prevention Force, Showa Yokkaichi Sekiyu Co., Ltd. and Nippon Aerosil Co., Ltd. were contacted. From that point onward, as a result of notification given to each government office, Mie Prefecture Police Headquarters, Yokkaichi City Public Health Center, Yokkaichi City Environmental Conservation Section, Yokkaichi Labour Standards Inspection Office, Yokkaichi Minami Police Station and Yokkaichi City Crisis Management Department arrived. |

Clarification of cause by Accident Investigation Committee

MMC set up the Accident Investigation Committee on January 17, inviting external academic experts and specialists with relevant knowledge and experience, to clarify the cause of the explosion and fire, and to formulate measures to prevent reoccurrence. Through a series of seven meetings held over a five-month period, the Accident Investigation Committee analyzed the causes of the accident and made recommendations for measures to prevent reoccurrence.

Direct causes

The following items were identified as direct causes of the explosion and fire accident at the heat exchanger.

- ① Low-temperature hydrolysis of chlorosilane polymers generated materials with high ignition and explosion sensitivity, and large explosion energy.
- ② Dry conditions induced an increase in the ignition and explosion sensitivity and the explosion energy of the hydrolyzed products of chlorosilane polymers. The ignition and explosion was caused by an unidentified impact which acted as an ignition source when the top channel cover of the water-cooled heat exchanger was opened.
- ③ Lack of sufficient and accurate public scientific information regarding the risks of ignition and explosion for the hydrolyzed products of chlorosilane polymers, their generation process, and appropriate humidified processing conditions for chlorosilane polymers, led to insufficient consideration of the appropriate safety measures.

Indirect causes

The following items were identified from FTA* as causes other than direct causes, i.e. indirect causes.

*FTA (Fault Tree Analysis): A method of deductive failure analysis in which a tree diagram is used to resolve the event that triggered the accident into its causes.

① Risk assessment

Due to a lack of knowledge regarding the ignition and explosive properties of the hydrolyzed products of chlorosilane polymers which was a direct cause of the accident, as a management issue, there were insufficient risk assessments for handling of chlorosilane polymers.

② Safety management for heat exchanger

It was confirmed that the process gas flow through the heat exchanger involved in the accident was not blocked by an accumulation of chlorosilane polymers. Therefore, while no correlation was found between the accident and safety management for the heat exchanger, it is recommended to establish the management methods of the heat exchanger.

③ Standard operating procedures

As the result of insufficient knowledge regarding the ignition and explosion properties of the materials which were a direct cause of the accident, their risks were not reflected sufficiently into standard operating procedures. Also, some contents of those procedures lacked objectiveness and specificity, and relied on workers' experience.

④ Training, etc.

As the result of insufficient knowledge regarding their properties, the risks were not reflected sufficiently into training. Also, there existed insufficient confirmation methods to properly evaluate the workers for the training efficiency and their compliance to the rules.

*For further details on the accident, please refer to the Report by the Accident Investigation Committee



<http://www.mmc.co.jp/corporate/ja/01/03/yokkaichi-index.html>

Initiatives to prevent recurrence

Yokkaichi Plant is steadily implementing recurrence prevention measures based on the recommendations of the Accident Investigation Committee to ensure safe operations and is promoting initiatives in cooperation with MMC headquarters to become a Safety No. 1 Plant and foster a safety culture. Details of key initiatives are outlined below.

1. Recurrence prevention measures in heat exchanger maintenance operations

Yokkaichi Plant is implementing recurrence prevention measures as confirmed by the Accident Investigation Committee with respect to methods for opening and cleaning heat exchangers (soft aspects) and facilities for opening and washing heat exchangers (hard aspects) to ensure the safety of the heat exchanger maintenance operations in which the accident occurred.

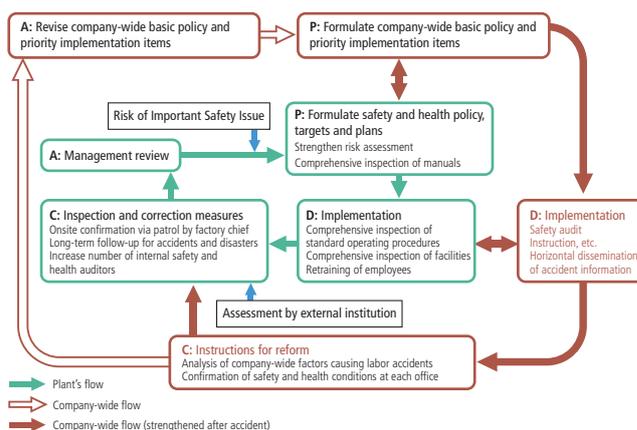
With respect to facilities for opening and washing heat exchangers, Yokkaichi Plant is installing protective walls for dedicated facilities to ensure safety on opening and washing heat exchangers in which chlorosilane polymers have accumulated. The plant will also enable opening of the channel cover using remote control. These facilities are expected to be completed in December 2014.

2. Strengthening of safety management

Yokkaichi Plant conducted risk assessments of working conditions and procedures based on the new knowledge about chlorosilane polymers and their hydrolysis products gained during the accident investigation. In the future, it plans to conduct risk assessments whenever new knowledge about a fire or explosion hazard is gained.

The plant is conducting a comprehensive inspection of all standard operating procedures, having made them as objective and specific as possible and classifying them according to degree of danger (size of effect).

The plant is rebuilding its Safety and Health Management System with the active involvement of MMC headquarters and utilizing the PDCA cycle to continuously improve safety management.



3. Establishment of a Safety Declaration Day

MMC designated January 9 as Safety Declaration Day to stop the lessons of the accident from being forgotten and to prevent similar accidents from occurring again. On Safety Declaration Day, prayers are said for those who died in the accident and everyone working for the Mitsubishi Materials Group makes a safety declaration.

4. Launch of Yokkaichi Plant Safety Culture Rebuilding Project

MMC decided that long-term fundamental reforms were needed to prevent accidents and maintain high levels of safety.

In May 2014, MMC launched the Yokkaichi Plant Safety Culture Rebuilding Project, which will promote continuous reforms to ensure that safety is further entrenched in the minds of all employees and to foster a safety culture.

| Yokkaichi Plant Safety Culture Rebuilding Project | |
|---|---|
| Leader | General Manager of Safety & Health Dept. of MMC Headquarters |
| Sub-leader | Vice-President of Electronic Materials & Components Company |
| Members | Safety & Health Dept. of MMC Headquarters, Electronic Materials & Components Company, Yokkaichi Plant |

■ Action Policy of Yokkaichi Plant Safety Culture Rebuilding Project



COMMITMENT



Shigemitsu Fukushima
Yokkaichi Plant Manager

Plant is united in resolve to achieve "Zero Danger"

I pray from the bottom of my heart that the souls of those who died in the explosion and fire rest in peace and I extend my sincerest condolences to the bereaved families. I also offer my profound apologies to all those who were injured, members of the local community, related authorities, and customers for the tremendous anxiety and inconvenience caused by the accident.

Yokkaichi Plant is acutely aware of the gravity of the accident and, on the basis of deep regret, is united in its resolve to thoroughly implement the recurrence prevention measures recommended by the Accident Investigation Committee. Besides measures to address the direct causes, we also intend to respond to and improve the various deficiencies mentioned as indirect factors, constantly questioning whether we are truly putting safety first.

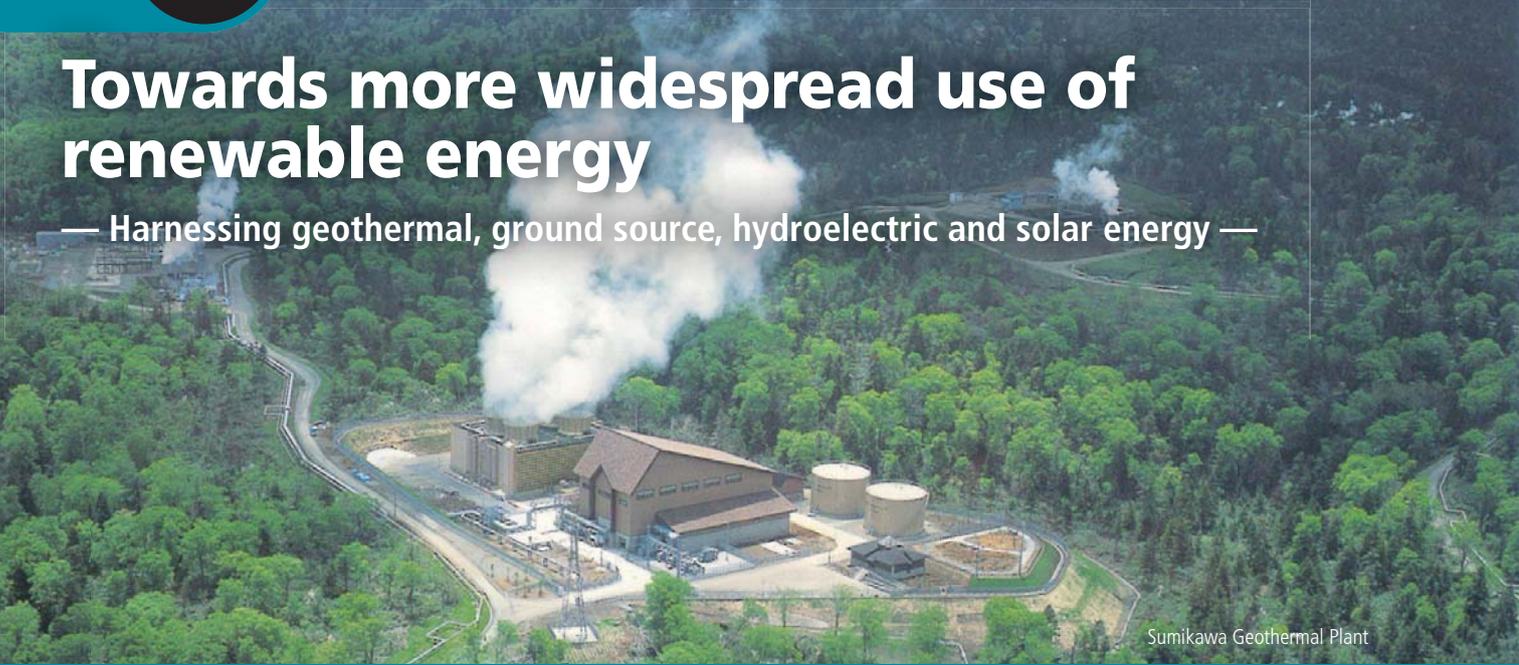
In the future, we will take up every accident - even near misses - as plant-wide problems, rather than keeping them within the unit in which they occurred, and we will pool the knowledge and opinions of each specialist unit to thoroughly clarify the cause and prevent recurrence. In my view, this is the basic principle of accident prevention based on Heinrich's law (behind every serious accident there are 29 minor accidents and 300 near miss experiences); in other words, the sum of small safety measures is important. We will also strengthen risk assessment to identify and mitigate hidden hazards relating to substances and processes with the aim of becoming a "Zero Danger" Plant.

I want Yokkaichi Plant to take the words "Nothing is more important than human life" to heart and to transform itself into a plant underpinned by strong safety foundations of people, organizations, facilities and technologies that are enhanced and energized through a strong safety culture, to prevent a tragedy like this from happening again. I believe this would be a way of making amends to those who died and is the only way to regain the confidence of the local community and society.

*The initiatives being taken by the Mitsubishi Materials Group in light of the recent accident are reported on pages 65 and 66.

Towards more widespread use of renewable energy

— Harnessing geothermal, ground source, hydroelectric and solar energy —



Sumikawa Geothermal Plant

Interest in energy-related issues has increased in the wake of the Great East Japan Earthquake. We have been active in the renewable energy field for more than a century. In line with our long-term management policy of "supporting a recycling-oriented society," we are promoting the use of diverse renewable energy sources in Japan.

Increasing use of diverse renewable energy

We have a long history of involvement in the renewable energy business, dating back to Nagata Hydroelectric Plant established to supply electricity to our Osarizawa Mine (Kazuno City, Akita Prefecture) in 1898. We later harnessed the technology built up in the mining business to go into geothermal development. In 1974, we started operations at our Ohnuma Geothermal Power Plant in the same area.

We have a high level of technological expertise and vast experience that enables us to provide one-stop-shop geothermal solutions ranging from underground investigation to facility construction, power generation, operation and management, and this technology and expertise is also being applied in the geothermal heat pump systems business of our group company Mitsubishi Materials Techno Corporation.

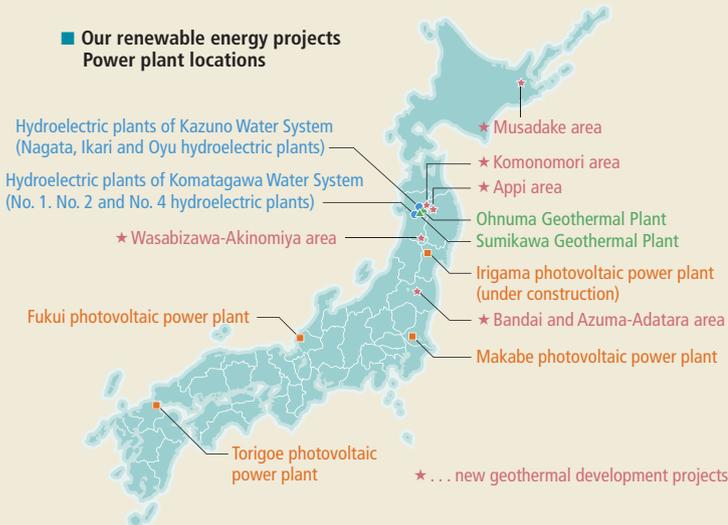
In line with our corporate philosophy of "establishing a recycling-oriented society," we intend to promote the use of renewable energy from a long-term perspective. In our geothermal and hydroelectric businesses, we aim for stable profit by promoting the upgrade of power plants and new projects and, since our entry to the photovoltaic generation business in 2013, we have brought three plants online in Japan, and are also conducting investigations for a new plant.



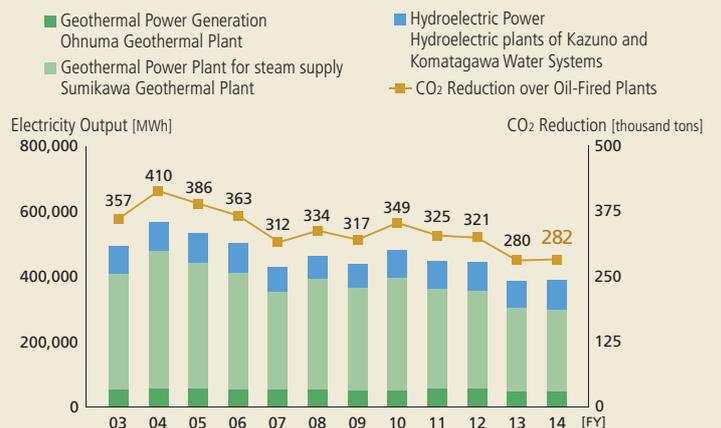
Makoto Shibata

General Manager, Energy Business Division, Mineral Resources & Recycling Business Unit

Our renewable energy projects



CO₂ reduction through renewable energies



* The above figures have been recalculated based on the latest data published by the Central Research Institute of the Electric Power Industry (2010).

Making history by being one of the first to focus on the potential of Japan's geothermal resources

Geo Power Business thermal

» Outstanding technology for harnessing precious resources

In many volcanic zone, high-temperature magma, which has enormous thermal energy, is present several kilometers below the surface. Geothermal power generation uses this thermal energy as water vapor (steam) to make electricity. Owing to its many active volcanoes, Japan has the world's third largest geothermal potential, but just 2% of these are considered to be actually used for power generation. It is estimated that geothermal power generation emits 13 grams of carbon dioxide per kWh, which is at least 700 grams per kWh less than fossil fuel power (Central Research Institute of Electric Power Industry (2010)), and geothermal power is expected to become more widely used, especially in the wake of the Great East Japan Earthquake.

The construction of geothermal plants requires prolonged and careful investigation, capital investment and highly advanced technology. Leveraging our investigation technology built up through the development of underground resources, we have been involved in the development and operation of geothermal plants for around half a century. We are currently participating in the operation of two geothermal plants in Hachimantai, Kazuno City, Akita Prefecture, namely Ohnuma Geothermal Plant (rated output: 9,500kW; brought online in 1974) and Sumikawa Geothermal Plant* (rated output: 50,000kW; brought online in 1995), and are helping to provide a stable supply of clean energy.

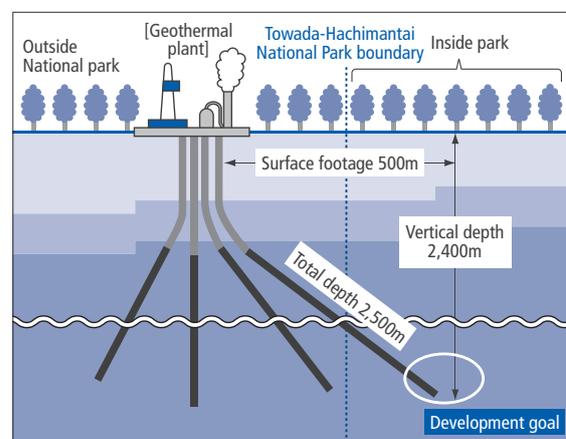
In recent years, with the establishment of the feed-in tariff scheme and promotion measures for renewable energy, social needs are much stronger and the business environment is also showing signs of improvement. We will make the most of this opportunity and push ahead with new geothermal development projects in areas including the Wasabizawa area of Akita Prefecture, the Appi area of Iwate Prefecture and the Musadake area of Hokkaido.

*At Sumikawa, we are involved steam supply.



Ohnuma Geothermal Plant

■ Schematic of directional drilling



Kazuharu Ariki
Geothermal & Electric Power
Dept., Energy Business Division,
Mineral Resources & Recycling
Business Unit, General Manager,

Valuing communication with local residents

There are many requirements for the development of geothermal resources, including temperature, geological settings, and the amount and properties of geothermal fluid (water), and the lead time from exploration to operation is around 10 years. The Japanese government is currently examining shortening the environmental impact evaluation period, and we are also aiming for early commercialization in projects currently underway, including our Wasabizawa and Appi projects. The development of mutual trust between ourselves and local communities, especially local hot spring business operators, is extremely important for facilitating the progress of projects. We monitor the characteristics of hot springs on a regular basis, reporting to local governments and hot spring business operators and providing technical assistance. We also endeavor to contribute to and communicate with the local community, establishing a committee to deliberate on the impact on hot springs and providing the hot water supply management association with hot water produced using steam from Ohnuma Geothermal Plant.

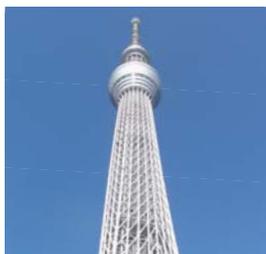
Supporting the use of renewable energy in diverse sectors

Heat Pump Systems (GSHP) Geo-thermal

» Seeking to promote use through reliable solutions

Like geothermal energy, ground-source heat is also one of the renewable energy like . With a heat source that stays almost constant throughout the year and is different from outdoor air temperatures, geothermal heat pump systems used for air-conditioning and snow-melting are extremely energy efficient and effective at reducing CO₂ emissions. They are also highly regarded as countermeasures against the so-called heat island phenomenon, because they do not discharge heat to the outdoor air.

Mitsubishi Materials Techno Corporation leverages investigation and drilling technologies used in geothermal power generation to provide reliable solutions for geothermal heat pump systems, covering everything from investigation to design, construction and maintenance. Mitsubishi Materials Techno Corporation has built up a track record of constructing systems throughout Japan and its systems have been used in many projects including Tokyo Skytree and the quadruple trucking project of Odakyu Line. In the quadruple trucking project of Odakyu Line, the system is expected reduce annual CO₂ emissions by 32% and reduce annual running costs by 33% compared with conventional air-conditioning systems.



Tokyo Skytree using the borehole method GSHP



Coiled horizontal heat exchanger laid in lower floor slab of railway tunnel

Developing and promoting diverse construction methods

Kazutoshi Sugiyama
General Manager, Drilling Dept., Natural Resources, Environment and Energy Engineering Division, Mitsubishi Materials Techno Corporation



In fiscal 2010, our geothermal heat pump system was installed in the District Heating and Cooling System for Tokyo Skytree. This drew attention to the GSHP and also raised our public profile. Ground-source heat is being more widely used in the USA, Europe and China and is also expected to become more widespread in Japan in the future. We have developed three construction methods for setting up the ground-heat exchanger: the borehole method, the pile welding method and the horizontal method, and will continue working to make geothermal energy more widely used in the future by reducing cost and other means.

Hydro-Power Businesses electric

» Passing on history to the next generation

Our first foray into using renewable energy was our hydroelectric power business. The Nagata Hydroelectric Plant, which we put into operation on the Kumazawa River (Yoneshiro River System) in Kazuno City, Akita Prefecture in 1898, supplied the power to run our Osarizawa Mine, which was operating in the same area at the time. Later, to meet growing demand for power at our Osarizawa Mine, we expanded our Ikari Hydroelectric Plant (began operations in 1907) on the Yoneshiro River and built the Oyu Hydroelectric Plant and four hydroelectric plants on the Komatagawa River, in a bid to expand our own private power generation facilities. In 1962, our power plants on the Komatagawa system began supplying power to our Akita Refinery through our own private transmission lines, but began supplying power to electric power company directly after we stopped refining zinc in 1999.

Hydroelectric power generation, which uses the energy created by falling water to produce electricity, is attracting renewed attention as a clean energy that discharges few CO₂ emissions. We see hydroelectric power as an energy source that is indispensable to local communities and are implementing initiatives for the stability of supply and operations, including the upgrade of existing facilities and the construction of new power plants, to pass our heritage of hydroelectric power business, which is more than a century old, onto the next generation.



Komatagawa No. 4 Hydroelectric Plant (Akita Prefecture)



Lake Taihei (Akita Prefecture)

Photo Power Businesses voltaic

» Making use of idle land to expand Photo-voltaic power plants throughout Japan

The Mitsubishi Materials Group's commitment to its renewable energy business is backed by a long history and an extensive repertoire of technologies and expertise. In response to increasing social needs in recent years and changes in the business environment such as the feed-in tariff scheme, we are further expanding our renewable energy business.

In 2013, we expanded and strengthened our business lineup through the addition of our photovoltaic power generation business, which make use of our idle land. As a joint venture with Mitsubishi UFJ Lease & Finance, we began constructing power plants in four locations: Irigama, Makabe, Fukui and Torigoe. The total area for the site will be approximately 230,000 m², and the total power plant capacity will be 16.4 MW. Our Makabe and Fukui power plants were brought online in December 2013, our Torigoe power plant came online in April 2014 and the remaining Irigama Plant is also expected to come online during fiscal 2015.

All the power generated is sold to local power companies, but we are also examining other business models, including supplying power to our plants and surrounding areas in the future, and we plan to continue investigations for new plants on idle land.



Irigama photovoltaic power plant (Kurihara City, Miyagi Prefecture)



Fukui photovoltaic power plant (Fukui City, Fukui Prefecture)



Makabe photovoltaic power plant (Sakuragawa City, Ibaraki Prefecture)

Column

Supplying around 70% of total rated renewable energy output in Kazuno City, Akita Prefecture

In Kazuno City, Akita Prefecture, we operate 10 hydroelectric plants (total rated output of 22.525 MW) and one wind farm (total rated output of 7.65 MW) in addition to our Sumikawa and Ohnuma Geothermal Plants (total rated output of 59.5 MW)



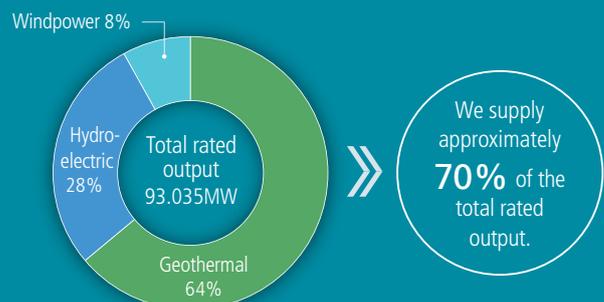
and our Nagata, Ikari and Oyu hydroelectric plants on the Kazuno River System (total rated output of 3.36 MW). The total rated renewable energy output of these power stations is 93.035 MW and we generate electricity far exceeding total energy demand in Kazuno City (population of around 37,000). According to the Sustainable Zone Report 2013 (Kurasaka office of Chiba University and Institute for Sustainable Energy Policies, 2013), Kazuno City ranks 20th out of all municipalities in Japan based on energy self-sufficiency, with an energy self-sufficiency ratio of 325.11%*, and we supply around 70% of Kazuno City's total rated renewable energy output.

* This figure is only an estimate calculated based on the amount of renewable energy generated within Kazuno City and demand within the city, and it does not mean that all the energy is actually consumed in Kazuno City.

■ Our power plants within Kazuno City and rated outputs

| | Name of power plant | Rated output |
|--------------------------------|---|--------------|
| Geothermal Power Generation | Tohoku Electric Power Sumikawa Geothermal Plant | 50.0MW |
| | Ohnuma Geothermal Plant | 9.5MW |
| Hydroelectric Power Generation | Nagata Hydroelectric Plant | 0.6MW |
| | Ikari Hydroelectric Plant | 1.8MW |
| | Oyu Hydroelectric Plant | 0.96MW |

■ Total rated output of power stations in Kazuno City and breakdown



Main themes

Thinking about the future of renewable energy

The role to be played by the Mitsubishi Materials Group in its main business

In 2014, as in previous years, we held a stakeholders' meeting to utilize feedback received through dialog with outside experts in our CSR activities from a long-term perspective. At this year's meeting, our fifth to date, we exchanged views from a broad range of perspectives on the theme of renewable energy.

We identify "promoting communication with stakeholders" as a material issue and have held a stakeholders' meeting every year since 2010.

At this year's meeting, we focused on renewable energy, given heightened public scrutiny and expectations in the wake of the Great East Japan Earthquake. We invited experts in this field and explained to them about our geothermal, hydroelectric and mega-solar businesses and about the geothermal heat pump business of Mitsubishi Materials Techno. During the exchange of views, we received valuable opinions and recommendations on aspects such as issues to be addressed in the future and the role we must play in society.



| | |
|---|--|
| ■ Date | Tuesday, March 4, 2014, 13:00-16:00 |
| ■ Venue | Conference Room at MMC Headquarters (Chiyoda-ku, Tokyo) |
| ■ Participants from the Mitsubishi Materials Group | |
| Akira Takeuchi | Managing Director (in charge of CSR) |
| Hiroshi Kondo | Senior Executive Officer (General Manager of Mineral Resources & Recycling Business Unit) |
| Makoto Shibata | General Manager, Energy Business Division, Mineral Resources & Recycling Business Unit |
| Kazuharu Ariki | General Manager, Geothermal & Electric Power Dept., Energy Business Division, Mineral Resources & Recycling Business Unit |
| Yoshio Matsuno | General Manager, Sustainable Development Dept., Corporate Production Engineering Department |
| Toshiharu Hayashi | Assistant to the General Manager, Corporate Marketing & Overseas Business Development Dept., Corporate Strategy Division |
| Yoshiaki Shibata | General Manager, Natural Resources, Environment and Energy Engineering Division, Mitsubishi Materials Techno Corporation |
| Kazutoshi Sugiyama | General Manager, Drilling Dept., Natural Resources, Environment and Energy Engineering Division, Mitsubishi Materials Techno Corporation |
| Kenji Shimamura | Executive Officer, General Manager, General Affairs Dept. |
| Toshinori Tamoto | General Manager, General Affairs & CSR Dept., General Affairs Dept. |
| | * The names of departments and titles are as of the date of the meeting. |
| ■ Facilitator | |
| Daisuke Goto | Representative Director, ideaship Inc. |

Expecting business strategies that anticipate changes in the electricity market structure and greater communication with local communities



Mariko Kawaguchi
Chief Researcher, Research Division
Daiwa Institute of Research Ltd.

Japan's electricity market is likely switch to a "two-tier structure" in the future. The "first tier" will be the existing large-scale power generation business of major power companies and the "second tier" will be community-based dispersed small-scale power generation. Business strategies that anticipate this multi-tiered market will probably be necessary in the future.

China's air and water pollution reminds us of the importance of water and air, which we have hitherto considered to be free of charge. However, around the world, efforts are being made to assess the value of such natural assets as "capital." MMC's renewable energy business would also be sure to garner more widespread empathy if you told the public how you are utilizing nature's blessings. Your ground-source heat pump technology would, I expect, also find more widespread application through creative marketing, targeting general households, including the formation of alliances with home builders.

In the renewable energy business, communication skills to achieve integration into local communities will no doubt become increasingly important. No matter how outstanding the technology may be, unless it is welcomed by the local community, continued business development will be difficult. Backed by a long history of involvement in hydroelectric power and geothermal power generation, MMC has built up a wealth of expertise in consultation. I recommend that MMC systemizes this into a business tool so that it can be harnessed in other businesses as well.

Points we identified as important comments

- Interest in community-generated energy has increased in the wake of the Great Japan Earthquake, and this is also likely to bring changes to the structure of the electricity market. In the future, environmental value will be reflected in future electricity prices and the profitability of renewable energy is expected to improve. It is necessary to formulate business strategies from a medium- and long-term perspective based on this shift.
- In the renewable energy business which uses community resources, coexistence with the local community is vital. It is important to create a win-win situation, making sure that there are advantages of some kind for the community while also ensuring business profitability.
- Given the high percentage of energy consumption accounted for by "heat," reassessing renewable energy from the viewpoint of "effective utilization of heat" may hold the key to business expansion. The creation of internal synergies and creative marketing are also crucial for promoting use of renewable energy.
- Energy and the recycling of resources are closely linked. As a company that is involved in both fields, MMC must pursue further internal synergies through integrated initiatives.

Akira Takeuchi
Managing Director
(currently Executive
Vice President)
in charge of CSR



Hiroshi Kondo
Senior Executive Officer
General Manager,
Mineral Resources &
Recycling Business Unit

Hopes for the future are pinned on the "sustainable sectors" that are essential for corporate sustainability. Further synergies between businesses are also important.



Hidefumi Kurasaka
Professor, Graduate School of Humanities
and Social Sciences, Chiba University

As illustrated by the nomination of the Japanese word *Gotochi Denryoku* (meaning "local energy") for the 2013 Vogue-word Grand Prix, support for community-based power generation is definitely growing. Though ecosystem-related businesses like renewable energy and forestry businesses that properly maintain local nature and exploit its blessings may not be businesses that generate high profits, we call these economic sectors "sustainable sectors" as opposed to "growth sectors," and we consider these to be essential business domains when it comes to corporate sustainability. Given that MMC's hydroelectric plants also have their origins in *Gotochi Denryoku*, that is, in supplying power to run a mine, MMC's business expertise in such locally produced, locally consumed energy is surely worthy of renewed attention.

Amid the general trend to move away from fossil fuels, geothermal heat pump technology is seen as an energy-saving trump card and further business expansion is expected. We believe there is also scope to examine new ways to promote use, including application in combination with MMC's geothermal power generation technologies.

Energy and the recycling of resources are closely linked and as a company that is involved in both, MMC is expected to implement integrated initiatives. Progress in the development of energy storage technologies to ensure a stable supply and the development of human resources through overseas expansion of hydroelectric and geothermal power generation is sure to open up new possibilities in the renewable energy business.

Creating a win-win relationship with local communities in anticipation of medium- and long-term profitability. "Effective utilization of heat" holds the key.



Hidefumi Nakashima
Director General, Member of the Board, Geothermal Resource Development Department,
Japan Oil, Gas and Metals National Corporation

The Feed-in-tariffs (FIT) scheme sparked a mini-boom on the renewable energy market. MMC is the only other corporation besides the power companies that has a tradition of involvement in hydroelectric and geothermal power businesses and is active across the entire energy value chain, from development to power generation. In the medium-to-long-term, we will move into an era where environmental value is reflected in future electricity prices, and the profitability of the renewable energy business is likely to increase.

Further consideration for the local community will presumably be called for in the future. When using a community's resources, it is desirable to create a win-win business model with the local community. There is perhaps also scope for considering contributing in a manner that meets the local community's requirements such as using technical expertise to provide consulting services.

It is important to reassess energy from the viewpoint of "effective utilization of heat," including biomass power generation utilizing mountain forests. The utilization of heat accounts for an extremely high percentage of total energy consumption and, at the moment, fossil fuels are used to cover most of this. We believe that cost reductions achieved through the combination of ground-source heat technology with other heating equipment and the creation of synergies with other businesses may hold the key to future business expansion.

Finally, in the geothermal power generation business, where there has been no new plant construction for 20 years, the shortage of resources is a serious issue. Also, in the interests of future overseas expansion, we would like you to put effort into the development of human resources.

1

Expansion of applications of home appliance recycling technology (development of vehicle recycling technology)

We are expanding the applications of our home appliance recycling technology and are also developing technology for the vehicle recycling sector. As part of this, we are working on developing recycling technology for recovering rare earth magnets from the motors of scrapped vehicles. The New Energy and Industrial Technology Development Organization (NEDO) decided to award a grant to our project proposal, called "Development of Technology for Recovery of Rare Metals from Scrapped Vehicles," and, from 2012 to 2013, we developed technology to recover rare earth magnets from scrapped hybrid vehicles, and verified a recycling system. With the pace of adoption of hybrid cars expected to continue increasing in the future and the technologies they incorporate expected to keep on evolving and changing, we intend to continue developing recycling technology for hybrid vehicles, and efficiently recover rare earths, precious metals, and non-ferrous metals, such as copper and aluminum from hybrid vehicles and, in this way, we hope to help build a recycling-oriented society.



Facility for verifying development of technology for recovering rare metals from scrapped vehicles

2

Removal of waste from illegal dumpsite at the Aomori-Iwate prefectural boundary

A field of 27 hectares on the border between Ninohe in Iwate Prefecture and Takko in Aomori Prefecture became one of Japan's largest illegal dump sites, when as much as around 1.5 million tons of waste, consisting mainly of compost-like material, refuse-derived fuel (RDF)-like material, sludge, waste oil and incineration ash, was dumped there.

In 2007, we began accepting and processing this waste at our Iwate and Aomori Plants, in response to requests from the relevant local governments and based on the understanding of local relevant parties. Removal of all the waste, which amounted to approximately 1.15 million tons on the Aomori Prefecture side and approximately 350,000 tons on the Iwate prefecture side, through transportation to cement plants and other processing sites, was completed in March 2014. We processed 44,000 tons of this waste at our Aomori Plant and another 32,000 tons at our Iwate Plant.



Facility that accepted waste at Aomori Plant (building in the foreground)

3

Received certificate of CFS (conflict-free smelter) for tin bullion

Conflict minerals, which are mined in conflict-affected areas of the Democratic Republic of Congo and neighboring countries and sold to help fund arms for anti-government militia that commit human rights violations and acts of violence, have become a major problem in the world.

In December 2012, our company began a CFS (Conflict-Free Smelter) program advocated by the Electronic Industry Citizenship Coalition (EICC) for tin bullion produced at our Ikuno Plant. We received CFS certification in February 2014.

We had already acquired certification of conflict-free minerals on gold bullion from the London Bullion Market Association (LBMA) in August 2013, and we will continue efforts to procure minerals more responsibly in the future. [P.67](#)



Tin smelter at Ikuno Plant



Tin bullion

● Acceptance and use of disaster waste in cement plants

In response to requests from local governments, we had been taking in and processing disaster waste in the wake of the Great East Japan Earthquake. We safely and steadily processed disaster waste confirmed as safe at our three plants in Iwate, Aomori and Yokoze, based on the understanding of local residents, etc. We finished accepting disaster waste in March 2014 and, in total, we processed around 88,000 tons of waste.

In March 2014, both our Aomori and Yokoze Plants received a letter of thanks from the Minister of the Environment in recognition of their commitment to wide-area processing of disaster waste (processing outside of the affected prefectures). We will continue to supply cement as a basic material in these areas in an effort to assist in reconstruction.



Facility that accepted waste at Iwate Plant

■ Our acceptance of disaster waste (as of March 2014)

| Plant | Period | Accepted types of waste | Amount accepted |
|---|---------------------------------|---|-----------------|
| Iwate Plant (Ichinoseki-shi, Iwate prefecture) | Since October 2011 | Waste wood, waste plastics, combustibles and incombustibles | 71,817 t |
| Yokoze Plant (Yokoze-machi, Chichibu-gun, Saitama prefecture) | From September to December 2012 | Waste wood | 490 t |
| Aomori Plant (Higashidori-mura, Shimokita-gun, Aomori prefecture) | From October 2012 | Combustibles and incombustibles | 16,118 t |

● Use of copper slag in recovery and reconstruction projects

We are facilitating the use of copper slag, a by-product of the copper smelting process, in concrete fine aggregates, with the aim of preserving natural concrete aggregates and reducing the destruction of mountain forests.

Our group company Onahama Smelting & Refining Co., Ltd. (Iwaki city in Fukushima Prefecture) is now able to produce copper slag fine aggregate CUS2.5 (JIS standards) that can be used alone after introducing industrial waste grinders and adjusting optimum granularity. As a result, copper slag is expected to become more widely used as concrete fine aggregate. We registered this technology under the name "copper slag fine aggregate for heavy concrete" in the New Technology Information System (NETIS). This registration is expected to promote its use in public works projects at ports, etc. where heavy concrete is required for persistent structures.

Already, as part of disaster recovery efforts, heavy concrete using copper slag fine aggregate (using CUS2.5 alone) has been used in breakwater and port construction in Fukushima Prefecture. We are working to promote use, checking that there are no problems with quality and construction constraints by conducting wide range of experiments prior to actual construction.

In the future, we plan to expand sales of copper slag both in East and West Japan, to help save resources and energy.



Experiment to confirm pumpability of CUS2.5 fine aggregate concrete

● Initiatives for environmental restoration in Fukushima

We are facilitating the use of copper slag, a by-product of the copper smelting process, in concrete fine aggregates, with the aim of preserving natural concrete aggregates and reducing the destruction of mountain forests.

Our group company Onahama Smelting & Refining Co., Ltd. (Iwaki city in Fukushima Prefecture) is now able to produce copper slag fine aggregate CUS2.5 (JIS standards) that can be used alone after introducing industrial waste grinders and adjusting optimum granularity. As a result, copper slag is expected to become more widely used as concrete fine aggregate. We registered this technology under the name "copper slag fine aggregate for heavy concrete" in the New Technology Information System (NETIS). This registration is expected to promote its use in public works projects at ports, etc. where heavy concrete is required for persistent structures.

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In the future, we plan to expand sales of copper slag both in East and West Japan, to help save resources and energy.



Cement solidification facility under construction at Nanbu waste disposal center in Iwaki City



Incineration fly ash after cement solidification

The Mitsubishi Materials Group at a Glance

Corporate Data

(Non-consolidated) As of March 31, 2014

| | | | |
|-------------------------|---|----------------------------------|---|
| Company Name | Mitsubishi Materials Corporation | Total Assets | ¥1,778,505 million |
| Head Office | 1-3-2, Otemachi, Chiyoda-ku, Tokyo 100-8117 Japan | Number of Employees | 4,183 (Consolidated: 23,112) |
| Date Established | April 1, 1950 | Consolidated Subsidiaries | 115 |
| President | Hiroshi Yao | Equity Method Affiliates | 20 |
| Listings | Tokyo Stock Exchange | Membership | Nippon Keidanren (Japan Business Federation), KEIZAI DOYUKAI (Japan Association of Corporate Executives), Japan Cement Association, Japan Mining Industry Association, ICMM (International Council on Mining & Metals), etc. |
| Capital | ¥119,457 million | | |

Domestic Network

□ Main Mitsubishi Materials premises ◇ Main Group companies

Kanto Region

- Head Office (Tokyo)
- Yokozoe Plant (Saitama Prefecture)
- Ceramics Plant (Saitama Prefecture)
- Energy Project & Technology Center (Saitama Prefecture)
- Saitama Property Management Office (Saitama Prefecture)
- Tsukuba Plant (Ibaraki Prefecture)
- Central Research Institute (Ibaraki Prefecture)

- Cement**
- Electronic Materials & Components**
- Resources & Recycling**
- Advanced Materials & Tools**

- ◇ Ryoko Lime Industry Co., Ltd. (Tokyo)
- ◇ Mitsubishi Materials Kenzai Corp. (Tokyo)
- ◇ Onahama Smelting & Refining Co., Ltd. (Tokyo)
- ◇ Mitsubishi Shindoh Co., Ltd. (Tokyo)
- ◇ Mitsubishi Cable Industries, Ltd. (Tokyo)
- ◇ Mitsubishi Aluminum Co., Ltd. (Tokyo)
- ◇ Universal Can Corp. (Tokyo)
- ◇ Mitsubishi Materials Trading Corporation (Tokyo)
- ◇ Mitsubishi Materials Techno Corp. (Tokyo)
- ◇ Mitsubishi Materials Real Estate Corp. (Tokyo)
- ◇ Materials' Finance Co., Ltd. (Tokyo)

Hokkaido

- Sapporo Branch (Hokkaido)

Tohoku Region

- Aomori Plant (Aomori Prefecture)
- Akita Refinery (Akita Prefecture)
- Iwate Plant (Iwate Prefecture)
- Tohoku Branch (Miyagi Prefecture)
- ◇ Mitsubishi Materials Electronic Chemicals Co., Ltd. (Akita Prefecture)
- ◇ Hosokura Metal Mining Co., Ltd. (Miyagi Prefecture)

- Cement**
- Metals**
- Cement**

Chubu/Hokuriku Region

- Nagoya Branch (Aichi Prefecture)
- Gifu Plant (Gifu Prefecture)
- Yokkaichi Plant (Mie Prefecture)
- ◇ Diamet Corporation (Niigata Prefecture)

- Advanced Materials & Tools**
- Electronic Materials & Components**

Kinki/Chugoku Region

- Osaka Regional Head Office (Osaka Prefecture)
- Sakai Plant (Osaka Prefecture)
- Ikuno Plant (Hyogo Prefecture)
- Akashi Plant (Hyogo Prefecture)
- Sanda Plant (Hyogo Prefecture)
- ◇ Japan New Metals Co., Ltd. (Osaka Prefecture)
- ◇ Tachibana Metal Manufacturing Co., Ltd. (Osaka Prefecture)

- Metals**
- Metals**
- Advanced Materials & Tools**
- Electronic Materials & Components**

Shikoku

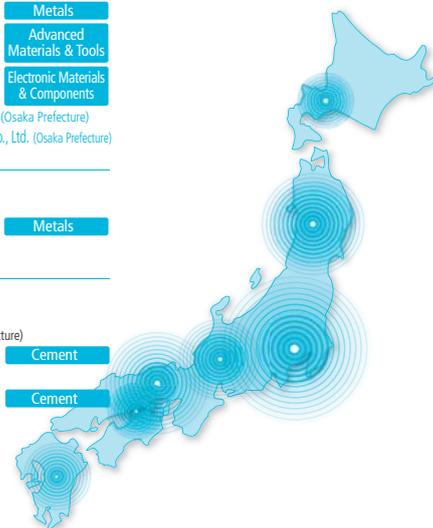
- Naoshima Smelter & Refinery (Kagawa Prefecture)

- Metals**

Kyushu

- Kyushu Branch (Fukuoka Prefecture)
- Higashitani Mine (Fukuoka Prefecture)
- Kyushu Plant (Fukuoka Prefecture)

- Cement**
- Cement**



Global Network

* The companies listed here are only a few of the overseas members of the Mitsubishi Materials Group.

Europe

Netherlands, United Kingdom, Germany, France, Spain, Italy, Russia, Poland

- **Advanced Materials & Tools**
- MMC Hartmetall GmbH (Germany)
- Mitsubishi Materials España S.A. (Spain)
- MMC Hardmetal Russia Ltd. (Russia)
- MMC Hardmetal Poland, Sp.z.o.o. (Poland)

East Asia

China, Taiwan, Korea, etc.

- **Cement**
- Yantai Mitsubishi Cement Co., Ltd. (China)
- **Advanced Materials & Tools**
- Tianjin Tianling Carbide Tools Co., Ltd. (China)
- **Corporate**
- Mitsubishi Materials (Shanghai) Corporation (China)
- **Electronic Materials & Components**
- MMC Electronics (HK) Ltd. (China)
- MMC Shanghai Co., Ltd. (China)
- MMC Electronics Korea Inc. (South Korea)
- MMC Electronic Materials Taiwan Co., Ltd. (Taiwan)

North America

Canada, United States, Mexico

- **Cement**
- Mitsubishi Cement Corp. (United States)
- MCC Development Corp. (United States)
- **Advanced Materials & Tools**
- Mitsubishi Materials U.S.A. Corp. (United States)
- **Electronic Materials & Components**
- Mitsubishi Polycrystalline Silicon America Corp. (United States)

Southeast Asia

Thailand, Malaysia, Singapore, Indonesia, India, etc.

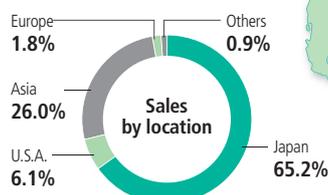
- **Metals**
- P.T. Smelting (Indonesia)
- **Advanced Materials & Tools**
- MMC Tools (Thailand) Co., Ltd. (Thailand)
- MMC Hardmetal India Pvt. Ltd. (India)
- **Electronic Materials & Components**
- MMC Electronics (Thailand) Ltd. (Thailand)
- MMC Electronics (M) Sdn. Bhd. (Malaysia)

Oceania

Australia, etc.

- **Cement**
- Mitsubishi Materials (Australia) Pty. Ltd. (Australia)

Overseas operations in 25 countries and regions



Financial Performance (Consolidated)

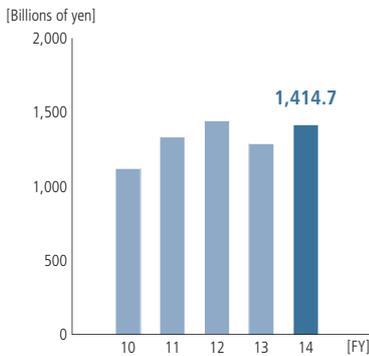
Regarding the operating environment for the Mitsubishi Materials Group, although overseas market prices fell for key metals, notably copper, operations were affected overall by a correction in the exchange rate of the Japanese yen. Furthermore, earthquake disaster recovery projects reached a strong tempo and housing construction increased, leading firm demand for cement.

In this environment, we embarked on the medium-term management plan (FY2012-2014), entitled "Materials Premium 2013—Aiming for New Value Creation". The plan embraces the basic concept of "Simultaneously implementing growth strategies and financial improvements," with two initiatives states as growth strategies: "Business advancement in overseas markets, especially

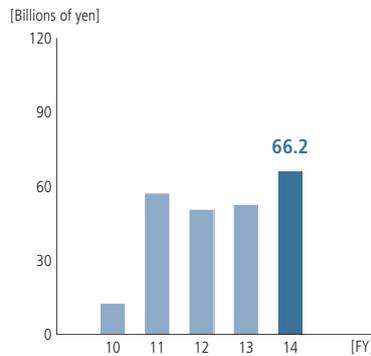
emerging markets" and "Generation of distinctive synergies as an integrated business entity." Based on this recognition, we have continued to implement various measures, expanded its network of production and sales sites, principally in Asia ex-Japan, and selected and focused on projects.

As a result, consolidated net sales for the fiscal year amounted to ¥1,414,796 million, up 9.9% from the previous fiscal year. Operating profit increased 26.3% to ¥66,281 million, and ordinary income increased 3.3% to ¥76,902 million. Net income increased 42.4% to ¥52,551 million.

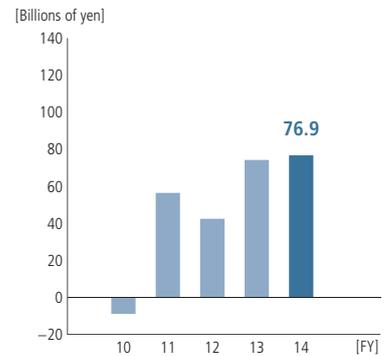
Net sales



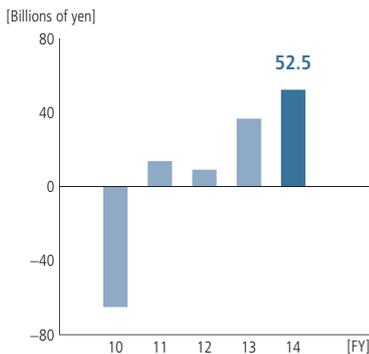
Operating profit



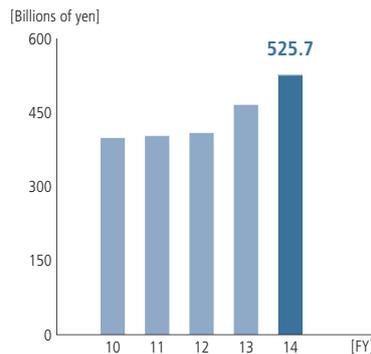
Ordinary income/loss



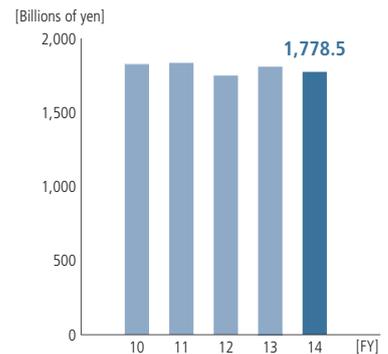
Net income/loss



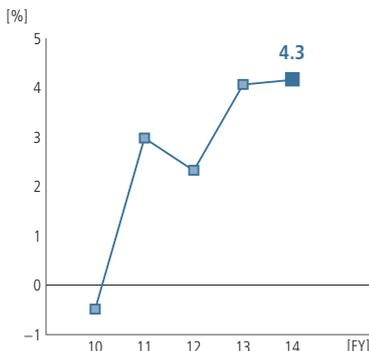
Net assets



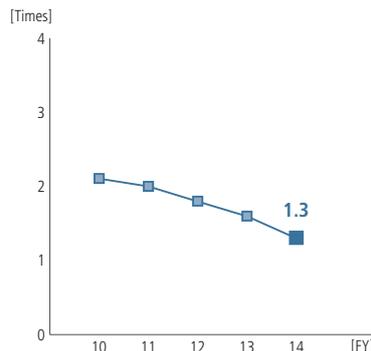
Total assets



ROA (return on assets)

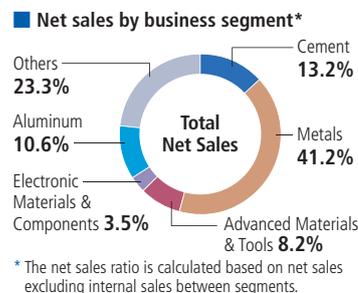


Net debt/equity ratio



Mitsubishi Materials Group Business Summary

The Mitsubishi Materials Group's main lines of business cover products from basic materials such as nonferrous metals and cement through to areas such as metal processing, aluminum can manufacturing, semiconductors and other electronic products, energy and the environment. Throughout our wide-ranging business activities, we always try to do our bit "For People, Society and the Earth."



Cement

Cement is an essential basic material for the construction of roads, bridges, ports, buildings and other forms of social infrastructure. We manufacture and sell everything from different types of cement through to ready-mixed concrete and cement products, via our wide-ranging international business framework. Outside Japan, we have established manufacturing and sales facilities in countries such as the US, China and Vietnam, where demand for cement is on the increase. Making the most of our outstanding technical capabilities meanwhile, we also supply high quality products including low heat generating cement, ultra-high strength cement and non-shrink grout.

At our cement plants, we detoxify difficult-to-treat waste products at ultra-high temperatures so that they can be recycled. Actively taking in waste like this enables us to contribute to the establishment of recycling-oriented society.



Developing and commercializing LU-10T grout for PC paving backfill at airports

The Port and Airport Research Institute and P.S. Mitsubishi Construction have developed and commercialized a method of lifting sagging PC paving. Highly durable LU-10T grout, developed by Mitsubishi Materials in conjunction with both companies, has already been used for purposes such as lifting work at Tokyo International Airport.



Work at Tokyo International Airport

Metals

Copper and other nonferrous metals are used for a wide range of purposes, including electric wiring, piping for air conditioning systems, electric and electronic components, and automotive parts. As part of our metals business, we manufacture and sell high quality products based on our high efficiency, pollution free "Mitsubishi Process," and also boast the leading share of the global market for oxygen free copper and copper alloys, as well as other types of special copper alloy. Making the most of our smelting technology meanwhile, we have established and are actively employing a system for recovering and recycling valuable metals from scrap containing gold and silver.

In the precious metals sector, our "Mitsubishi Gold" brand has a proud history dating back over 100 years. We have built on that to provide precious metal bullion products and services such as "MY GOLD PARTNER" for consumers and end users.



Establishment of a new E-Scrap Recycling Business Department in the US

With a growing percentage of used appliances and electronic devices being recycled in recent years, all over the world, we have increased the volume of "E-Scrap" containing gold and silver that we take in from other countries. In July 2014, we established an in-house recycling facility at Mitsubishi Materials U.S.A. We are working to increase collection volumes in North America even further in the future, to establish ourselves as the world's leading recycling company for E-Scrap.



A sample of recovered E-Scrap

Advanced Materials & Tools

As well as cemented carbide tools, which are essential for processing various different metal components, we supply users all over the world with precision materials and tools that are highly functional and boast outstanding properties such as heat and corrosion resistance, for use in vehicles and aircraft for instance. With manufacturing and sales facilities in China, other parts of Asia, the Americas and Europe, we manufacture high added value tools underpinned by many years of technical expertise and high levels of reliability. This enables us to provide customers the world over with products and technologies of the very highest standard.

We also develop and manufacture high performance special alloys such as foam metal, which has been thrust into the spotlight in recent years, and recycle the rare metal tungsten, as part of our commitment to recovering used cemented carbide tools.



Establishment of a sales branch office for cemented carbide tools in Turkey

To precisely cater to growing demand for cemented carbide tools in Turkey, thanks to the remarkable growth of the country's automotive industry in recent years, MMC Hartmetall GmbH established Turkey Branch Office in July 2014. Its role will be to increase sales, as a focal point for Central and Eastern Europe.



The building housing the Turkey Branch Office

Electronic Materials & Components

We manufacture and sell high quality electronic materials and components on a global scale, including semiconductor materials and various electronic components. Our world-leading distillation and reduction technologies enable us to supply high purity “eleven-nine” polycrystalline silicon, which has established a strong trusted reputation. We also supply products advanced technology, including fine materials for assembly (low-alpha solders), for which we have a world-leading market share, and sputtering targets.

As energy saving air conditioning systems become increasingly popular in emerging markets, we are increasing production capacity for sensor products and are also supplying eco- friendly products such as DBA substrates for hybrid vehicles and heat reflective coatings for windows.



Establishment of a sensor manufacturing subsidiary in Laos

Demand for sensor products, for air conditioning systems, refrigerators and other home appliances, is expected to increase in the Chinese market. In an effort to increase production capacity as part of a continuing shift towards overseas production, we established a manufacturing subsidiary in Laos in April 2014. Production is scheduled to get underway in March 2015.



Resources and Recycling

We operate on an integrated basis across three areas; resources, energy, and environment and recycling.

As a business entity boasting a range of different technologies, we combine natural and recycled resources to create a “Materials Premium,” and maintain stable supplies of renewable energy, to contribute to the establishment of a recycling-oriented society.



Geothermal power plants



Recycling home appliances

① Resources

We invest in overseas mines in order to secure long-term stable supplies of copper ore, coal and other resources, and to increase our profits. We also explore and develop mineral resources, and manage mining interests and mines in which we invest.

② Energy

We make the most of our extensive range of technologies and considerable experience in the field of renewable energy, including geothermal, hydroelectric, ground heat and solar energy, and in fields associated with the nuclear fuel cycle, including nuclear waste disposal, in an effort to help create a sustainable society.

③ Environment and recycling

Working with home appliance manufacturers, we run five home appliance recycling companies, which between them operate six plants. We also coordinate with our unique smelting and cement recycling system to take in and recycle waste from sources such as so-called urban mines.

Aluminum Business

As well as the group’s aluminum rolling, processing and can manufacturing businesses, we operate Japan’s only self-contained recycling system for used beverage cans, and are always doing our bit to help create a recycling-oriented society. We also operate globally, with manufacturing and sales facilities in four other countries.



Rolled aluminum products



Aluminum beverage cans

① Rolled, extruded and processed products

The Mitsubishi Aluminum Group manufactures rolled, extruded and processed products that are used for a wide range of different purposes, including aluminum cans, vehicles, electronic components, air conditioners, solar cells and consumer items.

② Aluminum beverage cans

Universal Can Corporation manufactures aluminum beverage cans and supplies a whole host of beverage manufacturers. It has also developed and been highly acclaimed for unique and high quality products such as aluminum bottle cans and embossed cans.

③ Aluminum beverage can recycling

We have been operating a self-contained “CAN TO CAN” recycling scheme, whereby used aluminum cans are collected, melted, cast and rolled back into new cans, within the group for over 30 years now.

Affiliated Businesses

The affiliated companies that provide support for our operations here at Mitsubishi Materials, including engineering and trading companies, have accumulated expertise in different industries over the course of many years, enabling them to engage in a wide range of operations.

Lines of business range from manufacturing salt and mining coal, to pure gold cards made using gold from copper smelting, precious metal clay, high quality MJC brand jewelry, tourist mines designed to revitalize communities using former mining sites, golf courses and even driving schools.



Products from DIASALT Co., Ltd.



MJC jewelry



Hokuryo Corporation Open cast coal mine (Bibai, Hokkaido)

Long-term management policy and medium-term management plan

The Mitsubishi Materials Group drew up a new vision for the next 10 years and also formulated a new medium-term management plan in response to the changing business environment. We intend to make steady progress towards sustainable development as a "the world's leading business group" trusted by society.

Long-term management policy: Compass for the attainment of targets

In 1997, the Mitsubishi Materials Group formulated its "2010 Vision," and, for 15 years, we have conducted business operations based on this policy. The changes in the business environment during this time have been remarkable, and still further changes are expected in the future. In light of these conditions, we drew up a vision for the Group that is suited to the times ahead, and formulated a new long-term management policy, which we announced in May 2014.

The vision set out in the long-term management policy is that "We will become the world's leading business group committed to supporting recycling-oriented society through materials innovation, with use of our unique and distinctive technologies". In this context, "materials" refers not only to resources, raw materials and products, but to everything of value that the Mitsubishi Materials Group provides, including services, solutions and personnel. We will employ technologies that differentiate us from our competitors to create new value, and our target state is summed up as "By achieving its target No.1 status and earning the trust of customers, each Mitsubishi Materials operation occupies an important position in each industry and market."

In particular, we plan to further strengthen "the recycling-oriented business model unique to the Mitsubishi Materials Group" which includes resources, raw materials, processed goods and recycling.

Through these initiatives, we aim to become a corporation that makes a major contribution "For People, Society and the Earth" in line with our corporate philosophy.

Long-term targets of each segment

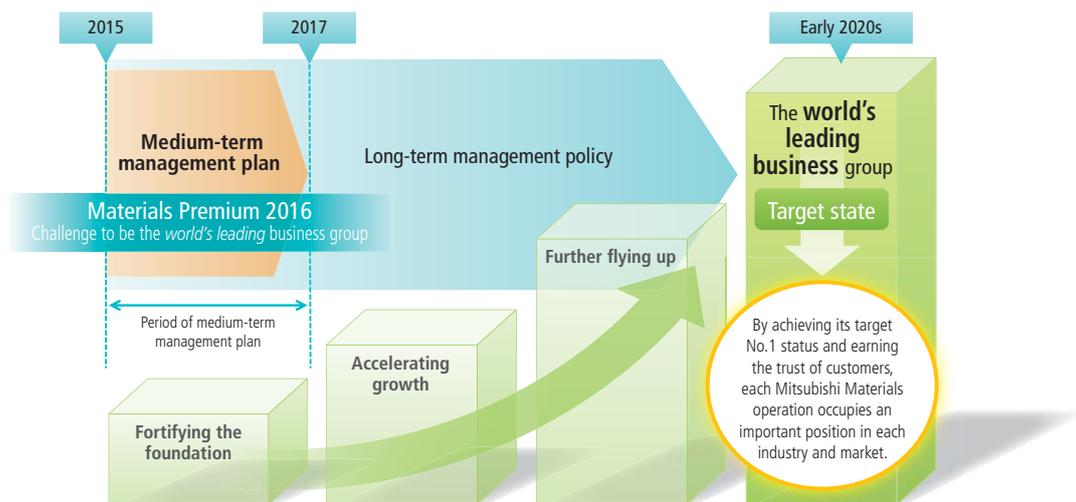
| | |
|-----------------------------------|---|
| Cement | <ul style="list-style-type: none"> No. 1 ROA in global cement industry Major player in the Pacific Rim |
| Metals | <ul style="list-style-type: none"> Mining: Captive mine ratio 50% Smelting and refinery: No.1 globally in processing of precious metals scrap (E-scrap) Copper processing: No. 1 globally in profitability |
| Advanced Materials & Tools | <ul style="list-style-type: none"> Cemented carbide products: Over 10% global share High-performance alloy products: No. 1 ROS* in industry |
| Electronic Materials & Components | <ul style="list-style-type: none"> A high-profitability operator with the world's No. 1 product lineup |
| Aluminum | <ul style="list-style-type: none"> No. 1 global market share in extruded multi-hole tubes for heat exchangers No. 1 domestic market share in aluminum cans for beverage |

*ROS: Return On Sales

Overview of long-term management policy (policy towards early 2020s)



■ Long-term management policy and medium-term management plan (fiscal 2015-17)



Medium-term management plan (fiscal 2015-17): Challenge to be the world's leading business group

In the medium-term management plan “Materials Premium 2013” to the previous fiscal year, the Company charted a basic policy of simultaneously implementing growth strategies and financial improvements. As a growth strategy, the Company focused on business development in overseas markets, especially in emerging countries, as well as realization of distinctive synergies as an integrated business entity under “Materials Premium.”

As for the financial improvements, the Company achieved its plan for improvement to its net debt-to-equity (D/E) ratio (target: 1.5 times or lower, result: 1.3 times) due to a weakening yen exchange rate, an increase in net assets due to rising share prices and a decrease in interest-bearing debt from sale of assets.

However, the Group missed its targets for ordinary income and ROA. Reasons include a significant drop in dividends received from copper mines, failure to achieve the sales volume plan for cemented carbide products and a slump in silicon business operations. Consequently, improving profitability remains an issue to tackle with renewed effort going forward.

Building on the previous plan, the new medium-term management plan “Materials Premium 2016” is based on the concept “Challenge to be the world's leading business group.” The new plan is positioned as the stage of strengthening our foundations, which is the first step towards achievement of our vision in the early 2020s.

The profitability-related management targets for Materials Premium 2016 are consolidated operating profit of ¥100 billion, consolidated ordinary income of ¥110 billion and ROA of 6% by fiscal 2017, which is the final year of the plan. With regard to ordinary income and ROA, we are once again trying to achieve the targets under our previous plan. We will seek to achieve the targets by increasing sales and profits across all segments, with expansion of US operations in the Cement business, overseas smelting and copper processing in the Metals business, and expansion of sales of cemented carbide products in the Advanced Materials & Tools business and electronic materials & components.

We will also make further financial improvements, making investments that are necessary to fortify the foundations while balancing this with operating cash flow. We aim to achieve a net D/E ratio of 1.0 or lower by fiscal 2017, the final fiscal year of the plan.

■ Targets under the medium-term management plan (fiscal 2015-17)

The figures in parentheses are results in fiscal 2014

| Management targets (Fiscal 2017) | Operating profit (100 million yen) | Ordinary income (100 million yen) | ROA (return on assets) | Net debt/equity ratio |
|----------------------------------|------------------------------------|-----------------------------------|------------------------|-----------------------|
| | 1,000 (662) | 1,100 (769) | 6% (4.3%) | 1.0 or less (1.3) |

| | | (100 million yen) | | | | |
|-------------------------------|------------------|-------------------|------------------|----------------------------|-----------------------------------|------------------|
| | | Cement | Metals | Advanced Materials & Tools | Electronic Materials & Components | Aluminum |
| Segment targets (Fiscal 2017) | Net sales | 2,290 (1,901) | 8,100 (7,509) | 1,680 (1,458) | 880 (677) | 1,750 (1,515) |
| | Operating profit | 350 (191) | 300 (237) | 230 (140) | 70 (40) | 80 (55) |
| | Ordinary income | 350 (188) | 400 (378) | 230 (139) | 60 (21) | 70 (47) |

Group-wide growth strategies

The medium-term management plan sets out three Group-wide growth strategies for achieving targets: (1) Fortifying the foundation for growth; (2) Strengthening global competitiveness; and (3) Pursuing a recycling-based business model. Corporate departments will also implement strategies to support these.

(1) Fortifying the foundation for growth

- Enhancing safety management systems and securing stable operations
- Strategic investment
- Improving financial position continuously

Recognizing that "Safety and Health are the First," we will reinforce safety measures and safety training to enhance our safety management systems and foster a safety ethos and culture.

We will also make aggressive strategic investments to achieve sustainable growth. Total investment will be ¥330 billion, an increase of ¥55 billion from the previous plan, and around 40% of this, or ¥130 billion, will be invested in maintenance and upgrading, including investment in safety. We will also allocate around 60% of this, or ¥200 billion, for expansion, rationalization and new investment to drive new growth.

Cumulative investment plan, fiscal 2015-17

| | |
|--------------------------------|---------------------------|
| Total investment | ¥330 billion |
| Maintenance and upgrading | ¥130 billion (around 40%) |
| Expansion/rationalization/new | ¥200 billion (around 60%) |
| Of which strategic investments | ¥100 billion |
| (Breakdown) | |
| Mining | (¥30 billion) |
| M&A, etc. | (¥70 billion) |

We will also improve our financial position, securing management resources by raising profitability through "business selection and focus."

(2) Strengthening global competitiveness

- Expansion of existing locations and deployment of new production and sales locations with focus on emerging countries
- Development of new customers and markets (strategic marketing)

To tap into global market growth, we will expand our existing locations in Asia, the United States, Europe and elsewhere and also strategically deploy new production and sales locations mainly in emerging countries to further accelerate global business expansion. We plan to expand our sales and production network from its current size of 119 locations in 27 countries to 141 locations in 31 countries by the end of

Corporate strategies supporting growth

- Human resource strategies
- Technology and development strategies
- Low-cost strategies

We are also planning a range of corporate strategies to support growth, including cultivating human resources who are capable of working in the international arena and group management and deploying them appropriately, realizing a culture to foster human resources who have the ability to take on challenges and get things done, speeding up development, differentiating our technologies and products, and reducing costs related to procurement, equipment and processes.

fiscal 2017. In our deployment of new production locations, we will make the Asia region our primary target and expand our sales network worldwide, with emphasis on cemented carbide products and electronic devices.

As a result of these initiatives, we plan to increase our overseas sales to around ¥570 billion, an increase of 25% from fiscal 2014, and achieve an overseas sales ratio of 35%.

Plans for deployment of new production and sales locations (by fiscal 2017)

| | Production | Sales | Other |
|--------------|------------|-----------|----------|
| Europe | – | 2 | – |
| Americas | 1 | 2 | 1 |
| China | 1 | 5 | – |
| Asia | 7 | 1 | 2 |
| Other | – | – | – |
| Total | 9 | 10 | 3 |

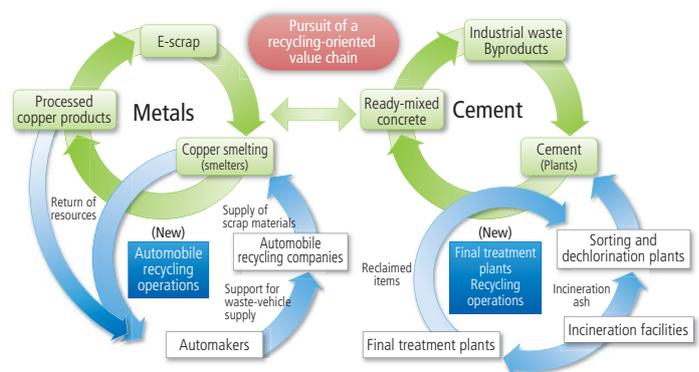
(3) Pursuit of a recycling-based business model

- Medium- and long-term growth through the pursuit of a recycling-oriented value chain
- Establishing a business model that utilizes Materials Premium, that derives from our unique strength as a conglomerate.

In each business, we will build and strengthen a recycling-oriented value chain which stretches from resources to materials, processed products and recycling. We will also pursue the possibilities of Materials Premium, generating synergies between segments. In particular, we will maximize Materials Premium with respect to materials and processed goods and actively make approaches to the social infrastructure, automobile and electronics industries.

Furthermore, as new environmental recycling businesses, we also plan to go into the automobile recycling business in collaboration with automakers and the business of rehabilitating dumpsites.

In this way, we aim to contribute to a sustainable society and achieve medium- and long-term growth.



Operating strategies by segment

In our medium-term management plan, we formulated operating strategies for each segment including the following:

| Segment | Business outlook | Business strategy |
|-----------------------------------|---|---|
| Cement | <ul style="list-style-type: none"> ● Medium- and long-term growth in demand in Southern California in the United States ● Increased demand in emerging countries ● Strong domestic demand due to earthquake disaster reconstruction, and hosting of Tokyo Olympics | <ul style="list-style-type: none"> ● Expand cement supply system and expand the ready-mix concrete business in the United States ● Deploy new locations in emerging countries (exports, joint ventures with local capital, construction of new terminals, etc.) ● Establish optimum production and distribution system for existing plants in Japan and expand environmental recycling business. |
| Metals | <p>[Smelting]</p> <ul style="list-style-type: none"> ● Easing in tight demand-supply situation of copper ore due to slowdown in the Chinese economy <p>[Smelting and copper processing]</p> <ul style="list-style-type: none"> ● Increased export pressure in China due to overcapacity ● Delay in recovery of domestic demand and increase in overseas demand <p>[Copper processing]</p> <ul style="list-style-type: none"> ● Intensifying price competition with products from emerging markets | <p>[Mining]</p> <ul style="list-style-type: none"> ● Launching of new mine development (Zafranal in Peru, etc.) <p>[Smelting]</p> <ul style="list-style-type: none"> ● Strengthening of recycling operations; responding to increasing generation of precious metals scrap by expanding collection and pretreatment capacities ● Utilizing slag (smelting by-products) effectively <p>[Copper processing]</p> <ul style="list-style-type: none"> ● Establishment of slitting* facilities and sales location in emerging countries *cutting and winding ● Expanding sales of new alloy MNEX® for volume-zone markets in emerging countries ● Cultivating new markets with lead-free products ("ECOBASS®") and discoloration-resistant antimicrobials products ("CLEANBRIGHT®") |
| Advanced Materials & Tools | <ul style="list-style-type: none"> ● Demand is continuously expanding for products used for automobiles, aircraft and medical equipment. | <ul style="list-style-type: none"> ● Expansion and development of overseas locations <p>[Cemented carbide products]</p> <ul style="list-style-type: none"> ● Expansion of sales for automobiles, aircraft and medical equipment through industry-based teams ● Expansion of sales networks and production locations, focusing on emerging countries ● Enhancing tungsten recycling <p>[High-performance products]</p> <ul style="list-style-type: none"> ● Expanding existing production locations and opening new ones ● Improving quality and reducing costs of eco-car parts |
| Electronic Materials & Components | <p>[Advanced materials]</p> <ul style="list-style-type: none"> ● Demand is expected to increase for semiconductors, products used in displays and heat-dispersion substrates for railways and industrial equipment <p>[Electronic devices]</p> <ul style="list-style-type: none"> ● More widespread use of inverters due to energy-saving regulations. ● Demand for sensor products will expand due to introduction of emissions regulations in Europe | <p>[Advanced materials and electronic devices]</p> <ul style="list-style-type: none"> ● Strengthening of production and sales systems for advanced materials and devices ● Promotion of marketing-driven development of high value-added products <p>[Silicon]</p> <ul style="list-style-type: none"> ● Establishment of systems for safety and production technology at Yokkaichi Plant ● Ensuring early stabilization of overall silicon business |
| Aluminum Business | <p>[Rolling and processing]</p> <ul style="list-style-type: none"> ● Domestic demand will hit a ceiling and market expansion in emerging countries will cause intensifying competition. <p>[Can manufacturing]</p> <ul style="list-style-type: none"> ● Domestic demand is stable but beverage producers are becoming more selective for can suppliers. | <p>[Rolling and processing]</p> <ul style="list-style-type: none"> ● Strengthening of existing overseas locations for extruded multi-hole tubes for heat exchangers and sheet metal ● Serving needs for light weight and low cost in automobiles and electronics <p>[Can manufacturing]</p> <ul style="list-style-type: none"> ● Strengthening bottle can sales overseas ● Strengthening collaboration among collection, casting and rolling in aluminum-can recycling |
| Others | <ul style="list-style-type: none"> ● Growing social expectations and needs in relation to environmentally friendly energy | <ul style="list-style-type: none"> ● Promotion of geothermal power generation projects throughout Japan ● Upgrading of existing hydroelectric plants |

Our Approach to CSR

The Mitsubishi Materials Group drew up a new vision for the next 10 years and also formulated a new medium-term management plan in response to the changing business environment. We intend to make steady progress towards sustainable development as a “the world’s leading business group” trusted by society.

Incorporating Social Expectations into Management Practices

We run our business based on the Mitsubishi Materials Group Corporate Philosophy and Code of Conduct, which outline the overriding principles behind all of our management activities, namely “The Principles We Stand on — For People, Society and the Earth” and “The 10 Articles of Our Code of Conduct.”

In line with our Corporate Philosophy and Code of Conduct, in 2005 we established a framework for the promotion of CSR activities based on reinforced compliance and risk management aimed at maintaining levels of public trust in the company. In 2006 we set out a CSR Definition, clearly specifying the direction of our CSR activities on a groupwide basis, and formulated a Medium-Term CSR Direction outlining important areas that need to be addressed on a priority basis. Reflecting its role as a fundamental long-term policy on CSR activities, we renamed our Medium-Term CSR Direction to CSR Direction in April 2010 and are continuing to implement initiatives accordingly.

Identifying Material Issues and Reinforcing Initiatives

In light of changes in the external environment, during the second half of fiscal 2008 we reviewed all factors that could have a serious impact on the corporate value of the Mitsubishi Materials Group over the medium to long term (material issues) from a companywide perspective, focusing in particular on sustainability on a global scale. As a result, we successfully identified nine material issues and established a clearer emphasis for our future activities. We intend to actively address these nine material issues to firmly establish management practices based on a stronger awareness of our stakeholders’ needs, whilst also striving to achieve sustainable growth for both the company and society as a whole.

Taking on Board Emerging Societal Needs, and Revising our Corporate Philosophy and Code of Conduct

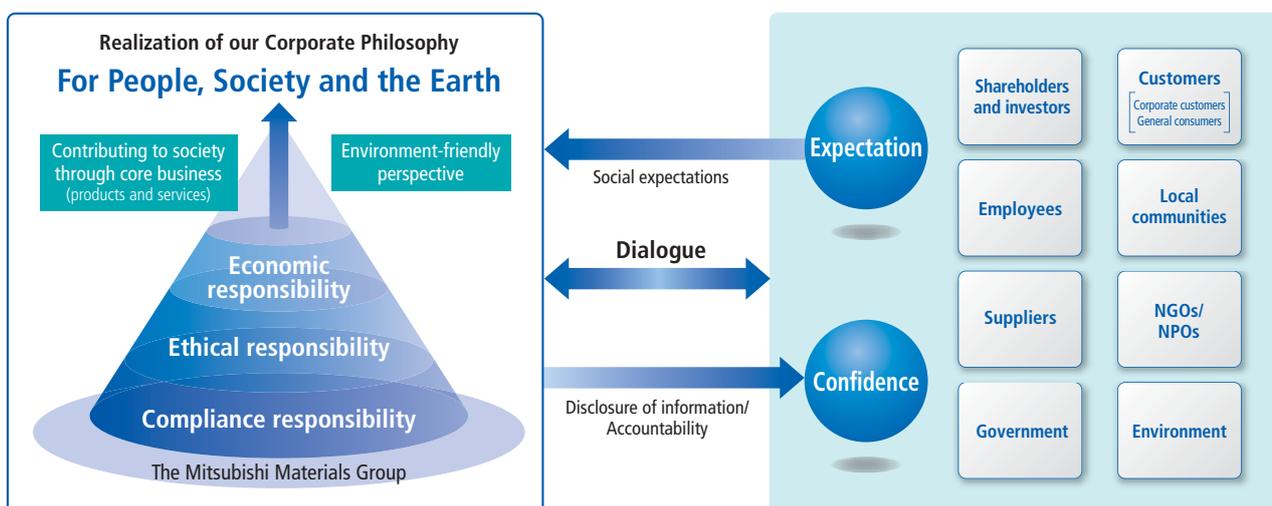
“The 10 Articles of our Code of Conduct,” which serve as the Mitsubishi Materials Group’s code of conduct, were formulated in 1997 and subsequently revised in 1998 and 2003. Reflecting shifts in public awareness and changing needs since then, however, as well as principles set out by the likes of the International Council on Metals and Mining (ICMM), of which we are a member, in April 2010 we revised specific details of our Code of Conduct and added the following items.

Additions to Specific Details under the 10 Articles of Our Code of Conduct (April 2010)

- 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

Having developed a new vision under our long-term management policy in April 2014, we have made partial revisions to reflect our Corporate Philosophy and Code of Conduct. Our vision acts as a compass, guiding long-term management here at Mitsubishi Materials.

■ The Mitsubishi Materials Group’s Approach to CSR



Corporate Philosophy

The Principles We Stand On – For People, Society and the Earth –

As a diversified materials company, Mitsubishi Materials has contributed to the creation of an affluent society through the supply of basic materials indispensable to the world.

Today, our activities cover a wide range, from the manufacture of resources and basic materials to fabricated products and new materials with high-performance features, as well as the provision of systems, engineering services and resource recycling.

To respond to the various needs of society, we are constantly tackling research and development on our unique technologies and products, and endeavor to provide ever more superior products, systems and services to the world.

We will continue to address the requirements of the world in this new era, such as technical innovation, development of information technology, globalization and a heightened awareness of environmental protection, through our fair business activities, and to create new materials* on the Earth with an aspiration to contribute to the sustainable development of society.

At the same time, we will carefully and efficiently use natural resources and raw materials, which are gifts of the Earth, and will aim to be the leading corporate group that contributes to society based upon resource recycling.

It is thus our principles to serve people, society and the Earth through our varied business activities.

* Materials include all kinds of value that the Mitsubishi Materials Group is capable of offering, such as raw materials, products, services, solutions and human resources.

Code of Conduct

The 10 Articles of Our Code of Conduct

- Article 1** We will seek to create a Mitsubishi Materials Group receptive to diverse personalities and value perceptions by encouraging each member of the Group to be fully motivated and committed to self improvement.
- Article 2** We will engage in efficient business management and pursue sustainable corporate development.
- Article 3** We will respect the basic human rights of all people and create a spirited, safe and comfortable work environment.
- Article 4** We will conduct fair and equitable business transactions by providing safe, high-quality products, systems and services at reasonable prices.
- Article 5** We will endeavor to secure the understanding and trust of society, and will maintain a harmonious coexistence with society.
- Article 6** We will comply with laws and regulations and conduct fair business activities with common sense.
- Article 7** We will carry out our duties with integrity, in line with the rules and standards established by the Company.
- Article 8** We will endeavor to protect the environment, and will apply every measure for effective uses and recycling of natural resources.
- Article 9** We will carry out proactive corporate communications, and will respect the values and inherent rights of all people with regard to information.
- Article 10** We, as members of the international community, will contribute to the development of each region where we maintain a presence.

CSR Definition

The Mitsubishi Materials Group is an ensemble of companies operating under the composite profile of a comprehensive basic materials maker. As a group, we provide resources, basic materials and energy indispensable to modern lifestyles, and in these efforts, we adhere to a corporate philosophy that emphasizes efforts that contribute to people, society and the Earth.

CSR for the Group thus hinges on making this philosophy a reality, through the sincere fulfillment of the obligations and expected role that society places on a corporate citizen, disclosure of the approaches taken—with proper explanation—and the constant pursuit of two-way communication with stakeholders to promote greater mutual understanding.

These actions will underpin a position of trust in society.

CSR Direction

- 1 Respecting relationships with people: Reinforcing ties to stakeholders**
Through mutual communications, plants and companies under the Group umbrella will go to great lengths to maintain favorable perceptions of the Group — as held by shareholders, customers, suppliers, employees and other stakeholders — deepen their understanding of stakeholder points of view, and work hard to ensure a high level of stakeholder satisfaction.
- 2 Respecting promises made to society: Ensuring thorough compliance and risk management practices**
We will systematically reinforce levels of compliance and risk management to ensure legal compliance — a vital prerequisite for expanding corporate activities — and to prevent business-related problems from arising.
- 3 Respecting the Earth: Reducing environmental impact**
In our activities, which serve to reduce environmental impact, we will direct efforts toward such measures as saving energy and resources, cutting waste and limiting the use of hazardous substances.

Initiatives on Material Issues

Here at the Mitsubishi Materials Group, we have set out nine material issues as part of our business activities and are working to reinforce initiatives accordingly. In 2012, we reviewed our initiatives from the perspectives of our stakeholders and management, so that we can focus particularly on issues that have become more important.

We recognize that we need to continually reappraise material issues to be addressed so as to ensure that we make a substantial contribution to society through our business activities, maintaining a clear focus on the sustainability of society as a whole and the perspective of our stakeholders. Having identified nine material issues (factors that could have a serious impact on our corporate value) to be addressed in fiscal 2008, we have continued to step up our initiatives ever since, always keeping the purpose outlined on the right in mind.

Purpose of identifying material issues

- ① **Business Strategy**
To identify potential business risks and opportunities in the interests of the sustainability of society as a whole and to pinpoint the most important issues from a business standpoint so as to incorporate them into our business strategy
- ② **Accountability**
To disclose details relating to material issues that are of particular interest to our stakeholders and likely to have a significant impact on their decisions on an ongoing basis via our Corporate Social Responsibility Reports

Identifying material issues (FY2008)

We set out to pinpoint risks and opportunities relating to 30 of our corporate divisions and in-house companies.

Having pinpointed about 230 risks and opportunities, we then reexamined, plotted and prioritized them from the perspectives of both our stakeholders and corporate management, before finally identifying nine material issues.

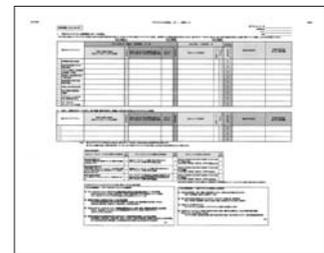
Regularly reviewing material issues and stepping up initiatives

As we operate within a constantly changing environment, both internally and externally, we accept that we need to continually reappraise previously identified material issues, and have continued to do so on a regular basis since fiscal 2010. In April 2012, four years after we initially identified our nine material issues, we carried out the following review.

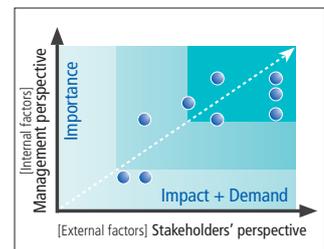
Validating material issues

We quantified the overall "significance" of risks and opportunities and reappraised them from the perspectives of our stakeholders (impact + demand) and corporate management (importance).

Although we didn't identify any new material issues that aren't covered under the current nine headings, we intend to step up initiatives in response to issues that have increased in importance and incorporate our findings into our reports.



Material Issue Review worksheet



Key perspectives for reviewing material issues (based on GRI Guidelines)

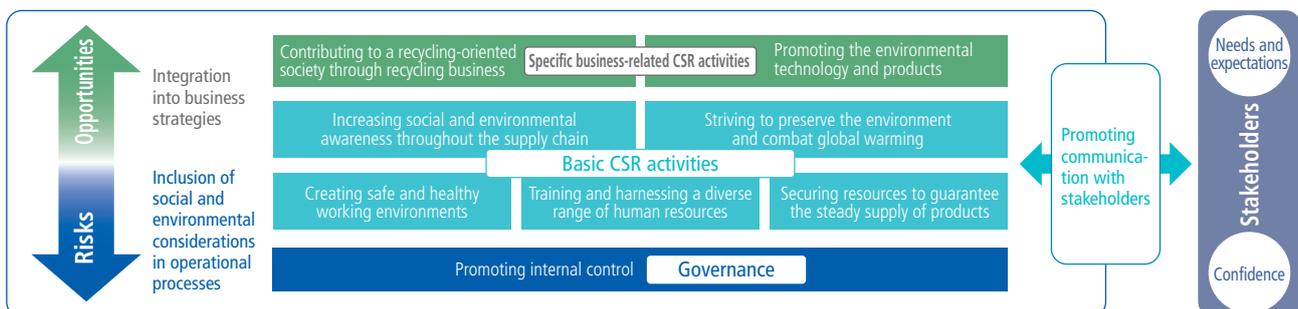
[External factors] Stakeholders' perspective

- ① Key areas of interest, issues and indicators raised by stakeholders in relation to sustainability
- ② Industry-specific issues and future priorities reported by peers and competitor
- ③ Legislation, regulations, international agreements and voluntary agreements of strategic importance to the Mitsubishi Materials Group and its stakeholders
- ④ Impact of sustainability risks and opportunities identified as a result of reliable external research, etc.

[Internal factors] Management perspective

- ① Relationship to the Mitsubishi Materials Group's corporate value, policies, strategies, corporate management systems, goals and targets
- ② Areas of interest to stakeholders and their expectations that could particularly provide a source of growth for the Mitsubishi Materials Group
- ③ Significant risks to the Mitsubishi Materials Group
- ④ The Mitsubishi Materials Group's core competencies and the manner in which they can or could contribute to sustainable development

Positioning of our nine material issues



Mitsubishi Materials' Nine Material Issues

Points revised in April 2012 to reflect their increased significance are underlined.

We are committed to stepping up initiatives in all related divisions and will continue to disclose details of initiatives in our reports wherever possible.

| | | Relevant pages |
|-------------------------|--|----------------|
| Governance | <p>1 Promoting Internal Control</p> <p>In addition to ensuring sound, legitimate management in accordance with the law, it is essential as a company to continually enhance objective auditing and supervisory capabilities, effectively manage risks, and improve the transparency of business management. We are therefore working to establish internal control systems that are both efficient and effective, strengthen our groupwide risk management framework, <u>including business continuity plans (BCP)</u>, enhance internal auditing capabilities, and <u>reinforce governance in the context of group management including overseas operations.</u></p> | PP. 35-40 |
| Resources and Recycling | <p>2 Securing Resources to Guarantee the Steady Supply of Products</p> <p>Risks relating to the procurement of resources are on the increase due to factors such as growing demand for resources in emerging nations, the increasing dominance of major resource suppliers and the rise of resource-based nationalism amongst resource-producing countries. We are therefore pushing ahead with initiatives such as promoting active exploration, investing in mines and strengthening relationships with mining and mineral companies, whilst also taking into account local residents and the surrounding environment in resource-producing countries. <u>We are also taking steps such as diversifying raw material sources in an effort to secure sufficient resources to maintain stable product supplies.</u></p> | PP. 41-42 |
| | <p>3 Contributing to a Recycling-Oriented Society Through Recycling Business</p> <p>As a resource-poor country, Japan is facing a growing need to establish a recycling-oriented society. The Great East Japan Earthquake threw the spotlight on waste treatment technologies at cement plants, alongside treatment technologies at nonferrous metal smelting plants. This has placed even greater expectations on the Mitsubishi Materials Group, due to our <u>wide-ranging recycling technologies and processes.</u> <u>With an emphasis on global business development,</u> we are constantly taking on challenges in new technical areas too, including recovering rare metals from urban mines, in an effort to contribute to the creation of a recycling-oriented society.</p> | PP. 43-46 |
| Environment | <p>4 Striving to Preserve the Environment and Combat Global Warming</p> <p>Companies are finding themselves under increasing pressure to continually reduce the environmental impact of their business activities and take action to help prevent global warming.</p> <p>We make every effort to proactively respond to environmental regulations and to protect the environment and biodiversity through initiatives such as forest certification. We also implement various measures aimed at combating global warming, including reducing emissions based on clear greenhouse gas reduction targets, <u>visualizing and sharing data,</u> and actively developing a range of environmental technologies in areas such as alternative energy and energy saving.</p> | PP. 47-58 |
| | <p>5 Promoting Environmental Technology and Products</p> <p>The urgent need to <u>develop products that reduce environmental impact, conserve resources, save energy, and contain no harmful substances is driving up demand on the global market.</u> We are therefore actively promoting the development of eco-products and processes through initiatives such as developing alternative materials to replace scarce resources, developing products that are free from environmentally harmful substances, and introducing low environmental impact manufacturing processes.</p> | PP. 59-60 |
| Society | <p>6 Training and Harnessing a Diverse Range of Human Resources</p> <p>All companies need to secure, train and make effective use of talented human resources in order to ensure sustained growth. We therefore make every possible effort to secure and harness a diverse range of human resources, offer a full program of employee training and enable employees to achieve a work-life balance, through initiatives such as creating pleasant, worker-friendly environments.</p> <p>In the future, we believe that it will be crucial to secure and train global human resources who are capable of making a valuable contribution at overseas premises and group companies in particular.</p> | PP. 61-64 |
| | <p>7 Creating Safe and Healthy Working Environments</p> <p>Ensuring employee health and safety must always be one of the top priorities of any company. In addition to establishing a Companywide Zero Accident Committee and Companywide Zero Accident Labor-Management Meeting and continually promoting companywide health and safety activities at Mitsubishi Materials, we are also proactively providing <u>support measures in areas such as mental healthcare.</u></p> | PP. 65-66 |
| | <p>8 Responding to Social and Environmental Risks Throughout the Supply Chain</p> <p>Companies are required to take <u>social factors, such as human rights,</u> and environmental considerations into account at every stage of the process from procuring raw materials through to supplying finished products. We have introduced a set of CSR Procurement Standards aimed at checking and encouraging social and environmental awareness amongst our raw material and product suppliers, and have continued to focus on reinforcing chemical management. We are also <u>stepping up initiatives aimed at preventing complicity in human rights violations and other such abuses from occurring throughout our global supply chain.</u></p> | PP. 67-68 |
| | <p>9 Promoting Communication with Stakeholders</p> <p>In order to promote CSR activities, it is essential for companies to <u>keep track of global trends and identify the needs and expectations of their stakeholders,</u> so that they can incorporate them into their management activities. Companies also need to disclose any corporate information that is of interest to their stakeholders.</p> <p>We make every effort to disclose as much information as possible via our Corporate Social Responsibility Reports and the Mitsubishi Materials website and promote dialogue with our stakeholders at every opportunity, whilst also expanding the range of communication channels we have available through initiatives such as dialogue with stakeholders.</p> | PP. 69-74 |

Activities during fiscal 2014 and priorities for the future

Having identified main categories based on our nine material issues, we map out the purpose of our activities, set ourselves targets and carry out CSR activities accordingly. We intend to report on and examine the results of our activities during fiscal 2014, including self-assessment grades, and incorporate our findings into our activities for the future.

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

■ Results of activities during fiscal 2014 and targets/plans for improvements from fiscal 2015 onwards

| Material issue | Main Categories | Purpose of activities | Activities During Fiscal 2014 | Self-assessment | Targets/plans for activities from fiscal 2015 onwards | |
|---|--------------------|---|---|---|---|--|
| ① Promoting Internal Control | Governance | Establish an evaluation framework for internal control over financial reporting and an internal auditing system | <ul style="list-style-type: none"> Made steady progress in rectifying deficiencies by developing more in-depth auditing techniques through documentary survey and providing feedback based on survey results | A | <ul style="list-style-type: none"> Look at ways to reduce labor while maintaining the characteristics of documentary survey (completeness, manual function, CSA function, risk approach indicator function, etc.) | |
| | | Improve internal auditing at overseas premises, especially in emerging countries | <ul style="list-style-type: none"> Refined overseas documentary survey based on the laws and regulations and practices of each country, and produced a survey form for Thailand in FY2014 | A | <ul style="list-style-type: none"> Produce documentary survey form for Indonesia in FY2015, and improve the auditing framework at these overseas business premises | |
| | | Support subsidiaries in improving their business operations | <ul style="list-style-type: none"> Supported subsidiaries in improving business operation → Provided support with two subsidiaries at their request Introduced group accounting system, provided relevant support and improved operational efficiency Strengthened internal control (reviewed and improved business flow) | A | <ul style="list-style-type: none"> Provide support for business process improvement to domestic non-consolidated subsidiaries that are to be consolidated [Target: Support improvement at 3 companies] | |
| | Compliance | Reinforce compliance framework | <ul style="list-style-type: none"> Analyzed accidents and compliance issues within the group, and looked into and finalized preventive measures [Target for organization of Compliance Panel meetings and Risk Management Panel meetings: 6 → Actual: 2] | B | <ul style="list-style-type: none"> Hold more in-depth Compliance Panel meetings (promote measures to strengthen compliance through internal cooperation) | |
| | | Establish a framework to ensure that all group employees undergo CSR and compliance training at least once a year | <ul style="list-style-type: none"> Group employees undergoing CSR training this year [Target: 15,000 → Actual: 13,528] Organized CSR and environmental training in Thailand and Malaysia | B | <ul style="list-style-type: none"> Promote CSR training at each business premises and group company by continuing to train instructors Review the framework for promotion of compliance overseas | |
| | | Raise awareness of and effectively operate the in-house reporting system | <ul style="list-style-type: none"> Promoted in-house reporting systems during training sessions and other activities (reports received in fiscal 2014: 22) | B | <ul style="list-style-type: none"> Extensively promote in-house reporting systems and take appropriate action | |
| | Risk Management | Establish in-depth risk management practices | <ul style="list-style-type: none"> Planned and produced concrete proposals for measures to reinforce links between crisis management and risk management | B | <ul style="list-style-type: none"> Pursue reinforcement of links between accidents and incidents, crisis management and risk management Ensure systematic follow-up in relation to overseas companies | |
| | | Reinforce the crisis management framework | <ul style="list-style-type: none"> Revised domestic and overseas crisis management manuals Secured reliable communication methods in an emergency through the introduction of emergency communication devices (MCA transceivers) and the enactment of rules on the use of emergency communication devices Organized crisis management training for employees posted overseas | A | <ul style="list-style-type: none"> Check the status of development of manuals at group companies Develop a framework for cooperation with support facilities and carry out desktop exercises to verify and check this framework | |
| | | Information security | <ul style="list-style-type: none"> MMC and domestic group companies: Repeated the PDCA cycle in activities, and strengthened technical security measures for smart devices Overseas group companies: Strengthened technical security measures and coordinated with management systems [FY2014 target: 12 business premises → Actual: 16 business premises] | B | <ul style="list-style-type: none"> MMC and domestic group companies: Maintain and increase levels of security mainly through repeated implementation of the PDCA cycle in activities Overseas group companies: Reinforce technical security measures, and improve and expand coordination with management systems [FY2015 target: 16 companies] | |
| ② Securing Resources to Guarantee the Steady Supply of Products | Securing Resources | Ensuring stable procurement of raw materials | Cement | <ul style="list-style-type: none"> Ensured the long-term stable supply of limestone resources through the joint venture between Higashitani Mine and the adjacent mine [Target supply to Kyushu Plant: 2.2 million tons → Actual: 2.23 million tons] | A | <ul style="list-style-type: none"> Limestone supply target for Kyushu Plant [FY2015 target: 3.2 million tons] *Subject to change depending on operation of the joint venture |
| | | | Metals | <ul style="list-style-type: none"> Participated in Zafranal project | A | <ul style="list-style-type: none"> Improve operations of existing projects, make steady progress with Zafranal Project, and realize further new projects |
| | | | Advanced materials & tools | <ul style="list-style-type: none"> Further diversified sources of tungsten raw materials | A | <ul style="list-style-type: none"> Diversify tungsten ore purchasing Expand recycling of cemented carbide tools |
| | | Electronic materials & components | <ul style="list-style-type: none"> Sought to strengthen relationships with major suppliers and promoted diversification of procurement sources | A | <ul style="list-style-type: none"> Adapt to changes in demand and continue to diversify procurement sources | |
| | | Securing stable supplies of coal as a source of energy | <ul style="list-style-type: none"> Delivered new coal to users and continued to expand the scope of usable coal | A | <ul style="list-style-type: none"> Achieve repeat deliveries of new coal delivered to users | |
| ③ Contributing to a Recycling-Oriented Society Through Recycling Business | Recycling | Accepting and processing a steady stream of waste (Cement) | <ul style="list-style-type: none"> Processed and treated approximately 4.061 million tons of wastes and byproducts (approx. 420kg per ton of cement) | A | <ul style="list-style-type: none"> Increase intake of thermal power plant coal ash, sewage sludge, etc. and continue to improve grade of limestone for this Increase the range of new items processed (incinerated ash from municipal waste, etc.) | |
| | | | <ul style="list-style-type: none"> Contributed to society by treating wastes from the earthquake [approx. 49,000 tons processed at our Iwate and Aomori Plants at the request of local authorities in FY2014] | A | <ul style="list-style-type: none"> (Complete acceptance at the request of the local authorities) | |
| | | Expanding recycling operations (Metals) | <ul style="list-style-type: none"> Reinforced domestic and overseas collection framework, and expanded overseas collection activities Used sampling facilities capable of handling high-grade raw materials, in line with the diversification of raw materials being collected overseas | A | <ul style="list-style-type: none"> Establish overseas business premises to reinforce overseas collection framework | |
| | | Promoting recycling of tungsten (Advanced Materials & Tools) | <ul style="list-style-type: none"> Expanded volume of cemented carbide scrap recovered | B | <ul style="list-style-type: none"> Undertake awareness-raising activities to expand recovery sources Establish technology to treat difficult-to-treat materials and introduce facilities | |
| | | Promoting recycling of fluorine resources (Electronic Materials & Components) | <ul style="list-style-type: none"> Secured recovery sources and improved recycling rate | A | <ul style="list-style-type: none"> Continue to improve technologies in order to expand the scope of materials we can process | |
| | | Facilitating the 3Rs as part of aluminum can operations (Aluminum) (3Rs = Reduce, Reuse, Recycle) | <ul style="list-style-type: none"> Executed cans recycling as part of the Japan Aluminum Can Recycling Association's secondary voluntary action plan to promote the 3Rs via aluminum cans | B | <ul style="list-style-type: none"> Provide support for Universal Can Corporation, etc., in order to achieve the Japan Aluminum Can Recycling Association's action plan | |
| | | Recycling increasingly sophisticated home appliances and become the leading processor of e-waste in Japan (Mineral Resources & Recycling) | <ul style="list-style-type: none"> Implemented the "Development of Technology for Recovery of Rare Metals from Scrapped Vehicles." Project under a grant from NEDO Achieved 20.5% share of the domestic home appliance recycling market (weight ratio, leading domestic share for a material manufacturer) | A | <ul style="list-style-type: none"> Expand recycling of increasingly sophisticated home appliances Expand applications of vehicle recycling technologies | |

| Material issue | Main Categories | Purpose of activities | Activities During Fiscal 2014 | Self-assessment | Targets/plans for activities from fiscal 2015 onwards | |
|--|---|--|---|--|---|---|
| ④ Striving to Preserve the Environment and Combat Global Warming | Environmental Preservation | Complying with environmental legislation Continuing to reduce environmental impact | <ul style="list-style-type: none"> Enhanced training on environmental legislation, and expanded to overseas offices Undertook awareness-raising activities in relation to future environmental regulation, including enactment of the Minamata Convention Inspected all facilities in connection with revision of the Water Pollution Control Act | A | <ul style="list-style-type: none"> Gather information on overseas environmental regulation and disseminate information internally Provide training concerning ISO14001 revision | |
| | | Promoting biodiversity-oriented activities | <ul style="list-style-type: none"> Undertook activities to protect rare species of plants in nature conservation areas Conducted tree-planting activities at mines | A | <ul style="list-style-type: none"> Raise awareness of biodiversity through internal environmental training Undertake activities to protect rare species of plants and continue tree-planting activities | |
| | | Ensuring sustainable management of company-owned forests | <ul style="list-style-type: none"> Hayakita Forest: Responded to regular screening in September 2013 and improvement targets Teine Forest: Carried out zoning and animal and plant surveys to obtain SGEC forest certification | A | <ul style="list-style-type: none"> Carry out procedures to obtain SGEC forest certification at Teine Forest Create a database of company-owned forests using forest information systems such as GPA and GIS | |
| | Efforts to Combat Global Warming | Promoting energy saving initiatives | <ul style="list-style-type: none"> Improved operations in terms of reviewing fuel, using unutilized energy, improving facilities, installing high efficiency equipment, rationalizing capacity in terms of power, etc., and revising operations | A | <ul style="list-style-type: none"> Further reinforce energy management, including obtaining a third-party energy-saving diagnosis, and exchange information on successful improvements and new technologies, etc. | |
| | | Formulating and promoting low-carbon society strategy | <ul style="list-style-type: none"> Firmly established monthly record management system and shared up-to-date information Ran trials with respect to domestic group companies from the second half, focusing on large locations, and identified areas for improvement, etc. | A | <ul style="list-style-type: none"> Seek to promote monthly record management system at domestic groups companies with comparatively large production sites, and share up-to-date information | |
| | | Promoting geothermal development | <ul style="list-style-type: none"> Conducted geothermal surveys and development in new areas and engaged in dialog with communities Study meetings to promote new geothermal development projects [Target: 12 meetings ⇨ Actual: 15 meetings] | A | <ul style="list-style-type: none"> Strengthen cooperative relationships with joint venture partners | |
| ⑤ Promoting Environmental Technology and Products | Promoting Environmental Technology and Products | Promoting the exploration of themes and the development of technologies | <ul style="list-style-type: none"> Determined themes as the focus for new business development in the medium- and long-term | A | <ul style="list-style-type: none"> Promote new business development | |
| | | Strengthening internal and external cooperation | <ul style="list-style-type: none"> Promoted technological exchange with group companies Promoted joint R&D with universities in Japan and overseas | B | <ul style="list-style-type: none"> Promote collaborative development with customers | |
| ⑥ Training and Harnessing a Diverse Range of Human Resources | Human resource development | Promoting human resource development | <ul style="list-style-type: none"> Rolled out a wide-range of training activities for all employees, including group companies, in line with an increasingly wide range of human resource needs, including position-specific training, optional training and global human resource training Also reviewed training structure and menu | A | <ul style="list-style-type: none"> Expand global training for young employees Look at and implement national staff training programs Look at and implement training programs in line with an increasingly wide range of human resource needs | |
| | | Securing and utilizing talented local members of staff at overseas facilities | <ul style="list-style-type: none"> Recruited local members of staff in India, and began to research the market, customers and systems Provided training for local members of staff in China and Southeast Asia | B | <ul style="list-style-type: none"> India: Improve the content of research operations Southeast Asia: Further utilize local members of staff to strengthen the functions of Southeast Asia management organization China: Expand support operations through the reinforcement of local members of staff | |
| | | Establishing culture of craftsmanship (monozukuri) and promote groupwide internal reform initiatives | <ul style="list-style-type: none"> Continued to publicize, raise awareness of and promote group-wide internal reform activities, organized companywide panel meetings and planned and organized opportunities for exchange in the workplace | A | <ul style="list-style-type: none"> Promote shop-floor reform initiatives incorporating a wide range of improvement methods, including TPM, TQM or JIT, and promote the horizontal deployment of successful improvements through the use of best practice, including exchange in the workplace | |
| | | Promoting disabled employment | <ul style="list-style-type: none"> Implemented measures to boost motivation for disabled employees Rate of disabled employment [Target: 2.5% ⇨ Actual: 2.56%] | A | <ul style="list-style-type: none"> Implement measures to maintain and boost motivation for disabled employees Continue to maintain 2.5% rate of disabled employment | |
| | | Promoting a work-life balance | <ul style="list-style-type: none"> Established partially paid childcare leave and a childcare fee subsidy program. Introduced a lump-sum benefit for early return from childcare leave, etc. Implemented reduced-hours scheme aimed at reducing overall working hours Percentage of paid holiday taken [Target: 80% ⇨ Actual: 83.3%] | A | <ul style="list-style-type: none"> Implement reduced-hours scheme aimed at reducing overall working hours Implement support measures to promote diverse human resource development and a wide range of working patterns | |
| ⑦ Ensuring Safe, Healthy Working Environments | Health and safety | Promoting health and safety activities | <ul style="list-style-type: none"> Prevented occupational accidents caused by unsafe conduct through the introduction of safety instructors Continued to promote activities aimed at raising awareness, through initiatives such as "self-care" and "line-care" training Prevented mental health issues through workplace surveys and stress checks Promoted appropriate responses to hazardous substances (indium, cobalt, etc.) | B | <ul style="list-style-type: none"> Promote group-wide zero accident project Strengthen safety management systems of the Mitsubishi Materials Group Further enhance ability to identify risk in advance Expand occupational health staff and develop health management framework | |
| ⑧ Responding to Social and Environmental Risks Throughout the Supply Chain | CSR procurement and quality management | CSR procurement initiatives | Dealing with the issue of conflict minerals | <ul style="list-style-type: none"> Published the Procurement & Logistics Dept.'s CSR Procurement Guidelines on our website and increased awareness of our CSR Procurement Standards among suppliers [Target: 100 companies ⇨ Actual: 29 companies] Developed an internal framework in relation to the issue of conflict minerals, and formulated and released a company-wide policy (General Affairs & CSR Dept.) Effectively operated our conflict mineral management system and obtained certification for gold (LBMA) and tin (EICC) (Metals Company) Established a standard point of contact for corporate customers and shared information (Advanced Materials & Tools Company) | A | <ul style="list-style-type: none"> Maintain list of suppliers and continue to raise awareness amongst suppliers who are unaware [Target: 50 companies] Grasp trends in each country, including the EU, and share information |
| | | | Reinforcing management of chemical substances contained in products | <ul style="list-style-type: none"> Gathered information through participation in seminars, etc., and disseminated information through quality coordinating committee meetings, etc. Gathered information through quality coordinating committee members and made various registrations Established a framework for gathering information on the status of development of relevant legislation in foreign countries outside the EU | A | <ul style="list-style-type: none"> Continue to operate our conflict mineral management system. Undergo third-party audit, and renew certification for gold (LBMA) and tin (EICC) each year Obtain external certification in relation to tungsten (Japan New Metals) |
| | | Step up receipt and dissemination of information through quality coordination committee meetings, etc. | <ul style="list-style-type: none"> Gather information and create organizations to respond to the laws and regulations in each country | A | <ul style="list-style-type: none"> Step up receipt and dissemination of information through quality coordination committee meetings, etc. Gather information and create organizations to respond to the laws and regulations in each country | |
| ⑨ Promoting Stakeholder Communication | Communication with shareholders and investors | Ensuring timely and appropriate disclosure, and promoting understanding of our business | Organized press releases, interviews and presentations for investors, improved our website and group newsletter, and produced corporate profile DVD | A | <ul style="list-style-type: none"> Increase press releases [FY2015 target: 200 releases] Reinforce the implementation of measures at all levels of the company through the issuing of a house journal in color Expand and improve Web content, including streaming of video of results briefing Strengthen contact with individual investors and overseas investors | |
| | | | Organized briefings for investors [FY2014 target: 250 meetings ⇨ Actual: 249 meetings] | A | <ul style="list-style-type: none"> Number of meetings with overseas investors [FY2015 target: 50 meetings] | |
| | Communication with customers | Promoting customer satisfaction (CS) initiatives (MJC Business Dept., Affiliated Corporations Div.) | <ul style="list-style-type: none"> Conducted questionnaires at mail order call centers and jewelry fairs Held lecture on jewelry at Daito Bunka University | B | <ul style="list-style-type: none"> Ascertain customer satisfaction (CS) on a regular basis via mail order, fairs, website, etc. Continue consumer training support activities | |
| | | Expanding and improving exhibitions and information meetings for important customers, etc. | <ul style="list-style-type: none"> Organized exhibitions and information meetings for important customers [FY2014 target: 4 exhibitions/meetings ⇨ Actual: 6 meetings/exhibitions] Organized and improved presentations for important customers [FY2014 target: 10 presentations ⇨ Actual: 12 presentations] | A | <ul style="list-style-type: none"> Improve organization of domestic exhibitions and information meetings for important customers [FY2015 target: 5 exhibitions/meetings] Continue to hold information meetings for important customers in China and Southeast Asia | |
| | Other types of communication | Promoting disclosure and improve communication | <ul style="list-style-type: none"> Organized a fifth stakeholder meeting, and shared views on the possibilities and challenges of renewable energy Validated and reassessed our nine existing material issues Expanded the scope of disclosure of environment-related data | B | <ul style="list-style-type: none"> Organize a sixth stakeholder meeting Make an early response to GRI Guidelines (G4) Expand scope of disclosed data | |

Corporate Governance and CSR Promotion Framework

We are constantly reinforcing corporate governance and make every effort to contribute to society through fair business activities, whilst at the same time enhancing the corporate value of the Mitsubishi Materials Group. We also appoint the heads of each of our group companies as CSR Supervisors, as part of our groupwide activities.

Corporate Governance

Decision-Making and Executive Framework

All important matters relating to our business are overseen and determined by the Board of Directors, which currently consists of nine directors in total, eight inside and one outside. As well as being the ideal size to enable us to make decisions quickly, we feel that this is the right composition in terms of management objectivity and transparency. We have also decided that this is an appropriate number of outside director, based on the total number of directors and the roles they perform.

Matters to be resolved by the Board of Directors are first reviewed and discussed in detail by our Corporate Strategy Committee, which is made up of the President and Executive Vice Presidents, in order to make the decision-making process more efficient and effective.

We have also adopted an executive officer system and an in-house company system in order to operate more flexibly and appropriately as an integrated business entity involved in Cement, Metals, Advanced Materials & Tools, Electronic Materials & Components.

Policy regarding the determination of remuneration

1. Directors

We make it a basic policy to appropriately link the remuneration for Directors to corporate performance and performance of individual Directors. The remuneration for Directors is comprised of basic remuneration and bonuses (not paid to part-time Directors).

Firstly, the amount of basic remuneration is determined in accordance with the title and performance of each Director.

The portion of basic remuneration is paid as stock-based remuneration (not paid to Outside Directors) and used for purchasing the Company's shares through the Company's director shareholding association. The Company's shares acquired based on the remuneration cannot be sold at least during each Director's term of office. This aims to link the remuneration to medium- and long-term corporate performance.

Secondly, the amount of bonuses, as remuneration linked to short-term corporate performance, is determined after the end of the fiscal year by making as indicators consolidated net income and ordinary income during the fiscal year and taking into consideration performance of individual Directors. The bonuses can be reduced or removed entirely depending on business conditions and the amount of dividends for the fiscal year.

2. Auditors

The remuneration for Corporate Auditors is set at an appropriate level based on discussions among them and is not linked to corporate performance in light of the fact that they assume the responsibility for auditing the execution of duties by Directors as an independent body entrusted by shareholders.

Auditing Framework

The Internal Audit Department audits Mitsubishi Materials and other group companies in order to check that their operations are being run effectively and efficiently, and to verify the reliability of financial reports, the maintenance and effective use of assets, the status of risk management activities, and compliance with legislation, internal regulations and other applicable standards.

We begin our basic internal auditing procedure by conducting extensive documentary questionnaires across all facilities. We then select facilities that are particularly susceptible to risks and provide advice regarding remedial measures as quickly as possible. After a certain period of time has passed, we carry out general audits to check on operational performance after remedial measures have been taken. Documentary questionnaires also include evidence for questions and details of remedial measures, to enable the facility being audited to rectify issues itself.

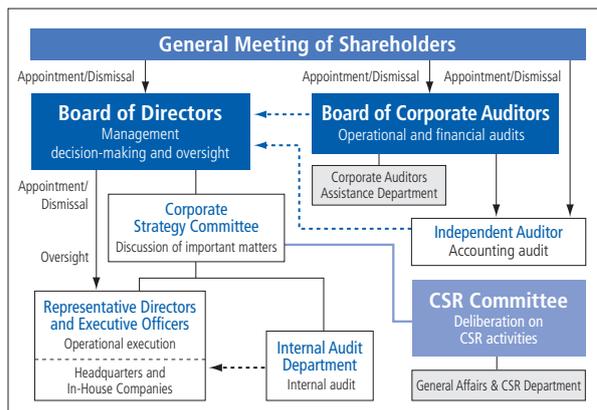
We also conduct specific themed audits, in order to focus on auditing activities in areas such as compliance with important legislation. Combining these auditing techniques, we follow up on highlighted issues every six months, in an effort to make audits more effective and enhance the corporate value of the group as a whole.

Internal Control

Since establishing the Internal Control System Improvement Committee in January 2006, we have taken steps such as developing a set of basic principles for improving the group's internal control systems, and ensuring compliance with requirements to introduce internal control evaluation and disclosure systems in relation to financial reporting, in an effort to ensure compliance with the Companies Act, the Financial Instruments and Exchange Act and other relevant legislation, and to establish optimal internal control systems for both Mitsubishi Materials and the Mitsubishi Materials Group.

Evaluations conducted during fiscal 2014 found our internal control systems in relation to financial reporting to be sufficient and effective, with no material weaknesses in disclosure identified. The results were then submitted in June 2014 in the form of an Internal Control Report with the unqualified opinion of an auditing firm.

Overview of the Corporate Governance Structure



WEB Report on corporate governance (Japanese version is available via our website)

Reinforcing Governance at Overseas Group Companies

Strengthening Corporate Governance through Information Sharing and Educational Activities

As part of our efforts to establish regulations at overseas group facilities, we have now completed key regulations underpinning group management. In fiscal 2014, we focused on reinforcing governance at overseas group companies, including the establishment of an export control framework for overseas subsidiaries. Although we were forced to abandon plans in Southeast Asia due to the worsening security situation in Thailand, we continued to organize representative meetings at overseas facilities in the Americas and East Asia, to create a stronger sense of group awareness amongst management personnel at overseas subsidiaries and make sure everyone is on the same page.

Improving Internal Audits

We operate a system of overseas documentary questionnaires for overseas group companies, taking into account legislation, customs and other factors specific to each country. We work in partnership with overseas auditing companies and other such parties to conduct audits at our subsidiaries and then produce documentary questionnaire forms that reflect the results.

Having conducted audits in China, Thailand and India since 2012, in fiscal 2015 we will be implementing similar procedures in Indonesia too. We will continue to take measures such as these to reinforce governance at overseas group companies and other facilities in the future.

CSR Promotion Framework

We established the CSR Committee, chaired by the President, and a dedicated CSR Department (now the General Affairs & CSR Department) in order to actively promote CSR activities at Mitsubishi Materials in January 2005. In recognition of the need to raise awareness of CSR activities throughout the Mitsubishi Materials Group, we also assign responsibility for CSR to the heads of each of our in-house divisions and group companies, and appoint CSR Managers and CSR Supervisors lower down in each organization to oversee groupwide CSR activities.

The CSR Committee, which is run by the General Affairs & CSR Department, meets four times a year in order to discuss policies relating to CSR activities in general and planned activities for the current fiscal year. The committee also reviews reports outlining the status of compliance within the Mitsubishi Materials Group, reports received via the Internal Contact Office (number and type of reports), and risk management operations.

Having established a dedicated Environmental Management Panel in April 2009 and an Information Security Panel in October 2010 as part of the CSR Committee, we have explicitly positioned issues relating to the environment and information security as CSR issues.

The framework that we have in place is structured so that any compliance issues occurring within the Mitsubishi Materials Group are reported to the General Affairs & CSR Department by the department concerned. The General Affairs & CSR Department then coordinates with other related departments to immediately investigate the causes of the issue, implement measures to prevent a recurrence and take any other necessary action. All aspects of CSR activities at Mitsubishi Materials and other group companies are also monitored via internal audits conducted by Mitsubishi Materials' Internal Audit Department.

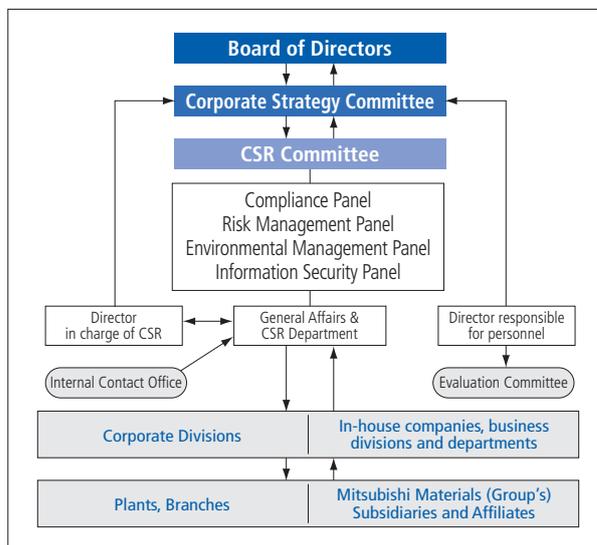
Items Discussed by the CSR Committee Each Year

As a rule, the CSR Committee meets four times a year, in January, March, July and November. The committee primarily discusses the following items, whilst also discussing serious compliance issues and other such matters affecting group companies as and when necessary.

Items Discussed by the CSR Committee Each Year

- Jan.**
 - 1 Summary report of accidents, compliance issues and other incidents occurred at group companies during the previous year
 - 2 Summary of reports received by the Internal Contact Office during the previous year (number and nature of reports)
- Mar.**
 - 1 Basic policy for CSR activities for the following fiscal year, planned activities (including education, training and risk management) and figures for the current fiscal year
 - 2 Summary of findings from corporate ethics surveys completed by employees participating in education and training activities
 - 3 Summary report on Stakeholder Meetings
- Jul.**
 - 1 Breakdown of priority risks as part of risk management activities for the current fiscal year
 - 2 Risk management performance evaluation for the previous fiscal year and progress report on measures in response to priority risks
 - 3 Outline of Corporate Social Responsibility Report
- Nov.**
 - 1 Presentation of example CSR activities at Mitsubishi Materials premises and group companies
 - 2 Report from the Environmental Management Panel

CSR Promotion Structure



We consider compliance with the law, rules and regulations to be one of the most fundamental and vital aspects of our business activities. We provide CSR training throughout the Mitsubishi Materials Group, at overseas subsidiaries as well as here in Japan, and are constantly working to improve compliance awareness amongst individual employees.

We take a broader view of compliance, incorporating elements such as corporate ethics and social norms, and are determined to live up to our stakeholders' expectations, rather than merely complying with legislation. We regard compliance as the cornerstone of both risk management and our CSR activities, and take every opportunity to put our Corporate philosophy "For People, Society and the Earth" and the guidelines set out in the "10 Articles of our Code of Conduct" into practice throughout the Mitsubishi Materials Group.

Effectively Implementing Compliance

Further Reinforcing our Compliance Framework

We have established a Compliance Panel, as part of our CSR Committee, in an effort to actively reinforce our groupwide compliance framework. We are focusing on initiatives such as the following, with the dual aim of developing mechanisms to prevent incidents before they occur and encouraging sensitivity so as to avoid incidents in the first place.

We also organize meetings at major group companies, attended by the heads of their respective CSR divisions, in an effort to share information on compliance-related incidents throughout the group and reinforce our compliance framework.

Extending CSR Education to all Group Employees

As a member of the Mitsubishi Group, we uphold the "Three Principles" that underpin the group's management philosophy, and carry out our business activities in accordance with our own Corporate Philosophy and Code of Conduct. To promote these philosophies and establish genuine compliance awareness, we believe that it is important to provide an ongoing program of innovative education and training in all aspects of CSR. That is why we provide education on both a horizontal and vertical basis, aimed at entire facilities or group companies and staff in specific positions respectively.

Educational and Training Program Attendance during Fiscal 2014 (Including Group Companies)*

| Education/Training Program | Attendance |
|---|------------|
| CSR education at domestic facilities, branches and group companies | 12,500 |
| CSR training at headquarters | 1,028 |
| Education as part of global human resource development (preliminary training for employees assigned overseas) | 40 |
| CSR education at overseas group companies | 86 |
| Position-specific training (including training for young employees) | 770 |
| Other training (risk management training, etc.) | 481 |
| Total | 14,905 |

Instructor Training

We have in place a framework that enables every employee throughout the Mitsubishi Materials Group to undergo CSR training once a year. Since 2012, we have therefore been training instructors to handle CSR training, including at group companies. As the driving force behind CSR activities at individual facilities and group companies, instructors are crucial in terms of talking directly to employees about subjects such as our philosophy, Code of Conduct and compliance, and providing opportunities for trainees to think about CSR activities. We will continue to train human resources to serve as instructors in the future.

Overseas CSR Education

We are continually providing CSR training for overseas subsidiaries, and organized training courses at six companies in Thailand and Malaysia in fiscal 2014.

As part of preliminary training for employees assigned overseas meanwhile, we take advantage of educational opportunities such as global human resource training courses to provide education on CSR-related issues throughout the supply chain, including conflict minerals, human rights in emerging countries (child labor, forced labor), competition law in related countries and overseas anti-corruption measures, to develop the human resources we need to expand our operations on a global scale.

Topics !

Compliance Education for Purchasing Staff at Overseas Subsidiaries

Our Procurement & Logistics Department organized compliance education sessions for local staff handling purchasing in Thailand (five companies) and Malaysia (one company) in December 2013, in line with recent social trends around the world and demand from overseas subsidiaries in Southeast Asia. The aim is to encourage local staff to be more aware of their key role in terms of dealing with suppliers on the company's behalf, and to instill a strong sense of ethics. Based on regulations, policies and other procedures set out by Mitsubishi Materials, sessions are designed to improve understanding amongst members of staff, incorporating trends in areas such as fair trade and anti-corruption measures, and specific examples reflecting local conditions. With education set to play an increasingly important role, we are planning to roll out activities to local subsidiaries in other regions in the future.



Education session for local staff

Using Educational Tools to Raise CSR Awareness

We produce the following tools in an effort to instill our Corporate Philosophy and Code of Conduct into all Mitsubishi Materials Group employees.

- 1 Booklets and cards outlining our Corporate Philosophy and Code of Conduct
- 2 Compliance Case Study File (Vol. 1 & 2)

We also make case study files and training materials compiled by the General Affairs & CSR Department available via the intranet, so that individual departments can use them for activities such as staff training. Materials are designed so that the contents are easy to understand and practical, incorporating feedback from think tanks and other outside experts, as well as examples of both internal and external compliance incidents.

Improving Legal and Regulatory Education

In addition to legal and regulatory education as part of training for new recruits and mid-level employees, and other position-specific training schemes, we also organize occupational legal and regulatory training in line with employees' level of experience and job title. This provides an opportunity to educate employees in individual laws and regulations, including the Antimonopoly Act and export control legislation, and to raise awareness of compliance in general.

On a specific level, we are working to reinforce our compliance framework by providing in-house education in specific legislation that is relevant to employees' duties, featuring examples based on our own operations, and encouraging employees to attend courses organized by the authorities. We are also extending selected educational activities to include group companies and are similarly working to reinforce our compliance framework on a groupwide basis.

Initiatives during the Corporate Ethics Month

Here at the Mitsubishi Materials Group, we have designated October as the Corporate Ethics Month every year since 2006 and encourage individual divisions and group companies to implement their own unique activities.

We engage in a wide range of activities, including reciting our Corporate Philosophy and Code of Conduct, holding discussions using case study files, and organizing employee meetings.

Operating an In-House Reporting System

We established an Internal Control Office in December 2002 as a consultation service to deal with reports and inquiries from employees working for Mitsubishi Materials and other group companies. We also set up an external reporting system in April 2006, as an outsourced service operated by an independent law firm. We continue to raise levels of awareness by issuing all employees with information cards, and continue to provide employees with information on subjects such as the availability and significance of our internal reporting system, procedure for filing internal reports, and whistleblower protection measures, through channels such as our group newsletter and CSR education and training activities.

Number of Reports and Inquiries Received via our In-house Reporting System [FY]

| 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|------|------|------|------|------|------|------|
| 21 | 24 | 22 | 28 | 32 | 19 | 22 |

Intellectual Property Management

We always respect third party intellectual property rights, whilst at the same time making sure that we adequately protect and reinforce our own rights. To do that, we use a system to precisely manage all of the latest information on intellectual property associated with our business activities, so as to minimize related risks. We file applications and establish rights based on the results of advanced research and development in line with our business strategy, as we continue to build a powerful array of intellectual property rights. We also provide ongoing education in intellectual property management for employees at all levels. We then share knowledge and issues identified during activities such as these through channels such as group intellectual property meetings, in an effort to minimize risks and maximize value throughout the Mitsubishi Materials Group.

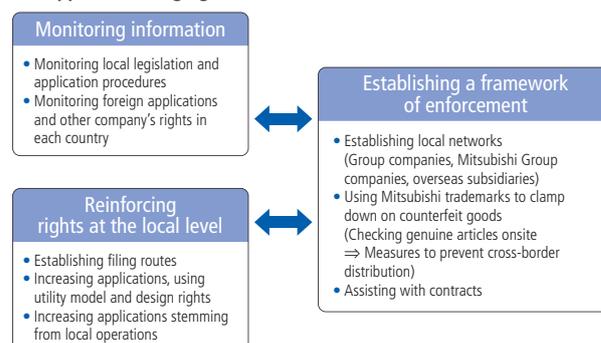


A group intellectual property meeting

Reinforcing Intellectual Property Management, Including in Emerging Countries

The environment surrounding intellectual property rights in emerging countries continues to change at a rapid pace. Similarly, we have continued to reinforce cooperation with Mitsubishi Materials Group companies, Mitsubishi Group companies and overseas subsidiaries to develop a framework that will enable us to gather accurate information and adequately protect our rights. We are working to establish intellectual property rights in China, India and Southeast Asia as quickly as possible, as part of efforts to bolster our business strategy. We are also taking steps such as clamping down on counterfeit goods from China.

Support in Emerging Countries



Monitoring information

- Monitoring local legislation and application procedures
- Monitoring foreign applications and other company's rights in each country

Reinforcing rights at the local level

- Establishing filing routes
- Increasing applications, using utility model and design rights
- Increasing applications stemming from local operations

Establishing a framework of enforcement

- Establishing local networks (Group companies, Mitsubishi Group companies, overseas subsidiaries)
- Using Mitsubishi trademarks to clamp down on counterfeit goods (Checking genuine articles onsite ⇒ Measures to prevent cross-border distribution)
- Assisting with contracts

Risk Management

We implement risk management activities throughout the Mitsubishi Materials Group, to ensure that we can continue to operate our business soundly. We are rolling out business continuity plans (BCP) based on lessons learnt from the Great East Japan Earthquake, and make every effort to adequately control risks, in order to prevent accidents and other issues from occurring.

Promoting Risk Management Activities

Basic Approach

We carry out risk management activities in order to control the root causes of incidents that could have a negative impact on our performance and provide ongoing support for sound business activities throughout the Mitsubishi Materials Group. In order to achieve that goal, we have set out and actively implement the following three basic policies.

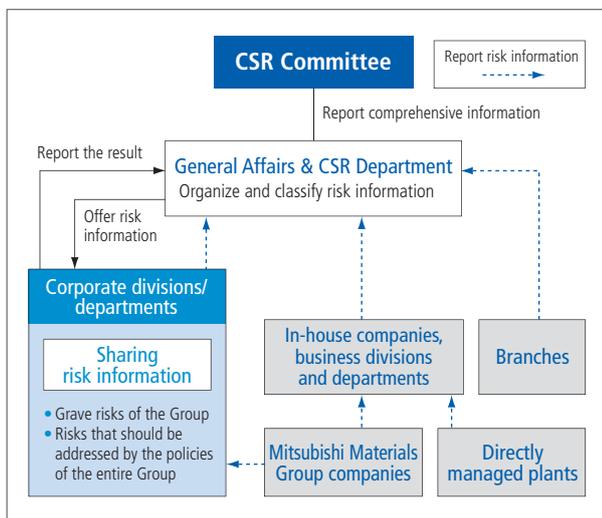
Risk Management Basic Policies and Objectives

- 1 **Tackling high priority risks:** Assigning priority to risks and implementing measures accordingly
- 2 **Identifying unrecognized risks:** Using Risk Management Records to establish a comprehensive overview of all risks
- 3 **Sharing information on risks:** Disclosing details of companywide risks to all concerned parties

Risk Management Framework

Risk management activities are implemented by risk management departments throughout the Mitsubishi Materials Group, at head office as well as individual facilities and group companies, in conjunction with the CSR Committee. Every fiscal year, risk management departments identify risks and specify issues that particularly need to be addressed, so that they can then take effective measures to minimize the relevant risks. We carry out performance assessments towards the end of the fiscal year, to check on our progress to date and to enable us to improve activities the following year. Progress reports and other details of measures in response to serious risks are regularly submitted to the CSR Committee, which then shares information on risks with senior management.

Sharing Risk Information



Risks Relating to our Business Activities

Companywide risks are serious risks that could have a major impact on the entire company and include specific risks relating to the following areas.

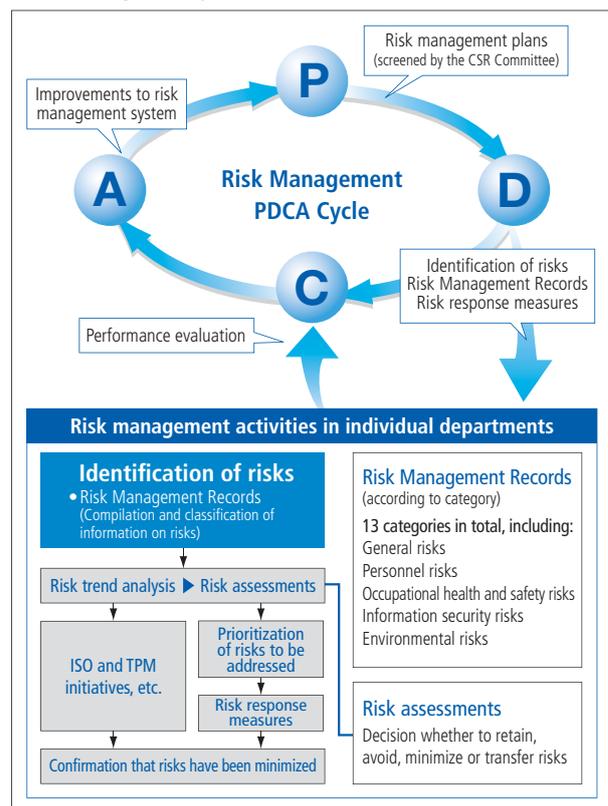
Serious Risks Affecting the Entire Company

- | | |
|-----------------------|----------------------------------|
| 1 Major earthquakes | 5 Occupational health and safety |
| 2 Infectious diseases | 6 Production facilities |
| 3 Antimonopoly Act | 7 Quality control |
| 4 Human rights | 8 The environment |

Risk Management PDCA Cycle

Risk management activities throughout the Mitsubishi Materials Group are conducted by individual departments according to plans approved by the CSR Committee, in conjunction with the General Affairs & CSR Department and based on the PDCA (plan-do-check-act) cycle. To ensure that each of the PDCA processes functions effectively, the General Affairs & CSR Department provides feedback to relevant departments as necessary, and organizes themed workshops aimed at key members of staff, including those responsible for implementing activities in each department and carrying out performance reviews to check progress with activities. We also bring in outside consultants to run advisory meetings, in an effort to support activities throughout the group.

Risk Management System



Reinforcing our Crisis Management System

We have continued to reinforce our crisis management framework, spearheaded by our Crisis Management Committee, to enable departments to work together, and respond quickly and precisely in the event of an emergency.

In fiscal 2014, we focused on expanding emergency communications equipment on the domestic front, whilst improving crisis management manuals overseas.

In fiscal 2015, we intend to review regulations and reinforce our framework for coordination with support sites in the Kansai area in case of a loss of functionality at our headquarters, in an effort to further strengthen our domestic crisis management capabilities on a groupwide basis. Overseas, we intend to prepare regional crisis response manuals and establish a framework for the local provision of CSR and risk management training. The aim is to reinforce internal controls particularly in Asia, which is central to the group's business expansion and more susceptible to business risks.

Following up on BCP at Group Companies and Overseas Facilities

Having formulated a business continuity plan (BCP) in the event of a major earthquake in fiscal 2012, we formulated earthquake response manuals and BCP at 39 key group companies in Japan in fiscal 2013, and BCP tailored to suit specific local risks at 59 key facilities in other countries (BCP for ensuring employee safety, BCP for maintaining and restoring important operations).

We follow up on BCP and other such plans once they have been formulated at group companies and overseas facilities, to check that their contents would still be effective in an emergency, and will continue to review plans annually to ensure that they are more than mere formalities.

Topics !

Providing Overseas Crisis Management Training for Employees Assigned Overseas

As part of our program of education for global human resource development, we provide overseas crisis management training for employees assigned overseas.

Training is designed to educate employees assigned overseas regarding subjects such as groupwide crisis management frameworks and key points while stationed overseas. We bring in outside consultants to explain key points and other such matters. A total of 64 employees underwent training over the course of four sessions in fiscal 2014. In addition to educational activities such as these, we intend to raise awareness of crisis management in line with overseas expansion in fiscal 2015, including training for employees assigned to Laos, where we are currently establishing operations.

Information Security and Personal Information Protection

We regard information security as one of our top priorities in terms of CSR management. We consider personal information in particular to be one of the most important information assets in our possession, and make every effort to minimize any risk of information being leaked, lost or damaged.

In terms of information security activities, we are constantly working to reinforce and improve our information infrastructure, including business continuity measures in the event of a large-scale disaster. With support from the Information Security Panel, a subdivision of our CSR Committee, we are also focusing on reinforcing technical measures in relation to information systems and implementing new management systems. We are committed to tackling risks associated with new ventures too. From a technical standpoint, we are reinforcing measures based on systems at overseas companies for instance, in line with globalization. Measures from a management standpoint meanwhile include reviewing information handling procedures as and when necessary, organizing ongoing educational activities for employees, and promoting the use of company-owned smartphones based on MDM (mobile device management).

Adequately Managing Customer Information (Precious Metals Dept., Metals Company)

Including customers belonging to our gold saving scheme, our Precious Metals Department handles around 1.2 million items of personal information. We consequently implement a range of measures aimed at protecting personal information, including restricting access to databases, getting outside experts to conduct security checks, and organizing regular in-house training sessions on how to handle personal information.

Topics !

Earthquake Measures at Production Facilities

Our Production Engineering Center diagnoses earthquake resistance and promotes earthquake reinforcement work on existing buildings at production sites, as well as providing design and architectural support to optimize earthquake resistance and costs for new buildings. When conducting reinforcement work or upgrading buildings, we ascertain earthquake risks based on a three-tier safety index devised exclusively by Mitsubishi Materials. We then select a method of reinforcement based on the importance of the building. This raises onsite awareness regarding earthquake resistance and helps to create safer working environments.



Building with earthquake reinforcements



Improved earthquake resistance at our offices at the Naoshima Smelter & Refinery (artist's impression of completed building)

Resource Strategy for Stable Product Supplies

As a comprehensive materials manufacturer, we have an important duty to maintain reasonable prices, uphold fair trade and ensure the stable supply of our products. We make every effort to secure stable supplies of resources by investing in promising overseas mines, strengthening relationships with our suppliers and promoting recycling.

Basic Approach

Mineral prices on the global market have tended to fluctuate wildly in recent years, due to factors such as growing demand in line with the industrial development of emerging nations, export restrictions as a result of resource security policies in resource producing countries, strikes at major mines, and the impact of speculative investment.

Securing resources and ensuring steady product supplies whilst also maintaining reasonable prices and upholding fair trade has become a major issue in Japan, which is essentially a resource-poor country. As a comprehensive materials manufacturer, we also consider this to be one of our key duties in order to maintain and strengthen competitiveness across the wide range of industries that we serve.

As part of our recycling operations, we make sure that we use valuable underground resources in a sustainable manner, and make the most of advanced technologies to recycle and reuse materials. This forms a key component of our growth strategy, as specified in our medium-term management plan, based on harnessing unique synergy to establish a Materials Premium.

Role of the Mineral Resources & Recycling Business Unit

In an effort to propel our growth strategy forward, in April 2011 we combined our resource, energy and recycling operations and established the Mineral Resources & Recycling Business Unit. We bring together expertise, technologies and human resources that we have built up as a group in order to reinforce our operations, including potentially expanding into emerging markets.

Securing Stable Products Supplies: Copper Products

Copper, the base metal that forms an essential part of our communications and everyday infrastructure, is increasingly subject

to procurement risks due to factors such as economic growth in emerging markets, the growing dominance of major global resource suppliers, and protectionism and national resource policies, as evidenced by tightening restrictions on foreign investment.

Since the closure of our Akenobe Mine in 1987, we have procured copper concentrate, the main raw material used in our products, through channels such as investing in and purchasing ore from overseas mines. Depending on our level of investment, we also assign personnel to local operating companies and provide support to ensure that mines are developed sustainably in the best interests of the environment and the local community.

In June 2011, we restarted operations at the previously closed Copper Mountain Mine in Canada, in which we have a 25% stake. This has taken the percentage of copper concentrate procured from mines in which we invest to approximately 70%.

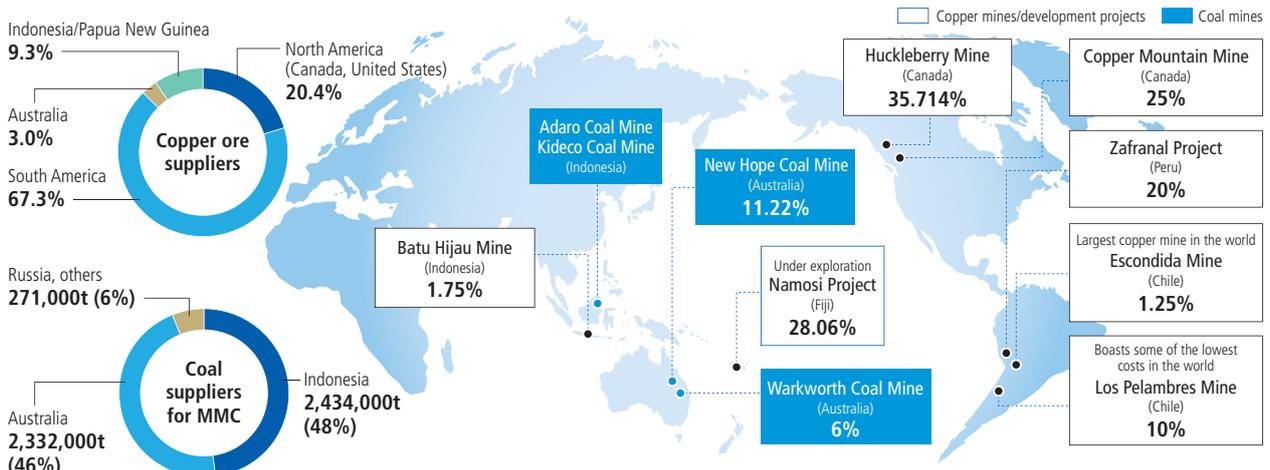
From a longer-term perspective, we are also working on a number of joint exploration projects in an effort to secure interests in promising mining areas as soon as possible. In the Namosi area of Fiji for instance, we are currently carefully undertaking pre-feasibility studies. In June 2013 meanwhile, we signed up to and acquired a 20% interest in the Zafranal Copper Mine Development Project in southern Peru. The mine's ideal

ICSG* worldwide copper demand forecast



Source: Based on the Japan Oil, Gas and Metals National Corporation (JOGMEC) Metal Resources Report (March 2013) with selected additions
*ICSG: International Copper Study Group

Overseas Copper and Coal Mines



*Figures indicate ownership interest in mines and development projects

situation, located at a relatively low altitude of 2,900 meters and approximately 80 kilometers from the coast, is likely to provide a major advantage in terms of cost competitiveness.

Securing Stable Products Supplies: Cement

Limestone Raw Materials

Every year, our cement plants procure approximately 10 million tons of limestone, the main raw material in cement, from mines operated by ourselves or our affiliates. At our core Higashitani Mine, we are jointly developing an untapped area between our premises and the adjacent Kokura Mine, which is operated by Sumitomo Osaka Cement Co., Ltd. Having started mining in July 2012, this will enable us to effectively tap into approximately 300 million tons of untouched limestone. We mined a total of approximately 2.7 million tons from this new area in fiscal 2014, and hope to ultimately mine 5 million tons per year in the future, equivalent to half of the output from our Higashitani Mine.

At the Une Mine operated by Ryoko Lime Industry Co., Ltd. meanwhile, we worked with one of our neighboring mining partners to stabilize a long retaining wall, which has given us access to new seams of limestone from 120 meters below the existing level. We will continue to work with neighboring mines at both locations in the future, in an effort to stabilize operations even further.



Higashitani Mine (Fukuoka prefecture)

Securing Stable Products Supplies: Cemented Carbide Products

Supplies of tungsten, the main raw material used in our cemented carbide tools, is becoming increasingly scarce as China, which supplies more than 80% of worldwide demand for tungsten, prohibits the export of tungsten ore. As such, we are making a concerted effort to expand our network of suppliers while also diversifying sources of raw materials. Given that recycling used cemented carbide tools, so that the raw materials can be reused in new products, has become an invaluable source of tungsten, we are stepping up initiatives aimed at recovering used cemented carbide tools within Japan in conjunction with our customers and major suppliers. We will also be focusing on expanding recycling at Japan New Metals Co., Ltd., which manufactures the raw materials for our cemented carbide tools but can also recycle used tools into alternative raw materials.

Procuring Coal as an Energy Resource

Worldwide supply and demand for coal is starting to ease off, due to factors such as the Chinese economy slowing down and the increasing use of shale gas in the US. At the same time however, other factors are emerging that could put pressure on supply and demand once again. For one, there is a possibility that exports from Indonesia, one of the world's major exporting countries, could tail off as domestic demand increases on the back of economic development. Another factor is the trend towards more coal-fired power stations, as we review our energy supply structure in the wake of the Fukushima nuclear disaster. With that in mind, we will continue to maintain and strengthen relationships with mines, through measures such as new investment, so that we can reliably secure supplies of coal in the future.

Topics !

Environmental and Social Initiatives at Huckleberry Mine (Canada)

As Huckleberry Mine (Canada) is able to produce copper concentrate with few impurities, the decision has been made to extend its life span until 2021, to cater to demand from domestic smelters subject to strict environmental standards.

Since the early stages of development, the mine has been accumulating the necessary funds for environmental restoration plans after closure, and has even reviewed plans on a regular basis to ensure that they are still valid. It is particularly careful to manage concerns regarding the environmental impact of mine waste, tailings and other such substances*, through activities such as regular monitoring of water and aquatic organisms.

In terms of consideration for local residents' groups, which tends to be the most noted issue with mine development, the mine has signed a "community investment agreement" to provide jobs, contract work and training support. It also holds Business Development Meetings to improve communication. With over 17% of employees coming from the local population, the mine is working to build close relationships as part of its project to extend the life of the mine, including outsourcing important development services to related organizations.

*Mine waste: Stones with minimal copper ore content

Tailings: Waste particles from the ore concentration process, with virtually no copper content



Regular monitoring of water quality and aquatic organisms

Recycling Based on Business Characteristics and Processes

Making the most of the Mitsubishi Materials Group's extensive technologies and expertise, underpinned by mining and concentration technologies, we recycle materials across a wide range of fields, including home appliances, aluminum cans, tungsten and palladium, so that we can do our bit to recycle resources through our business activities.

Recycling-Oriented Business Model

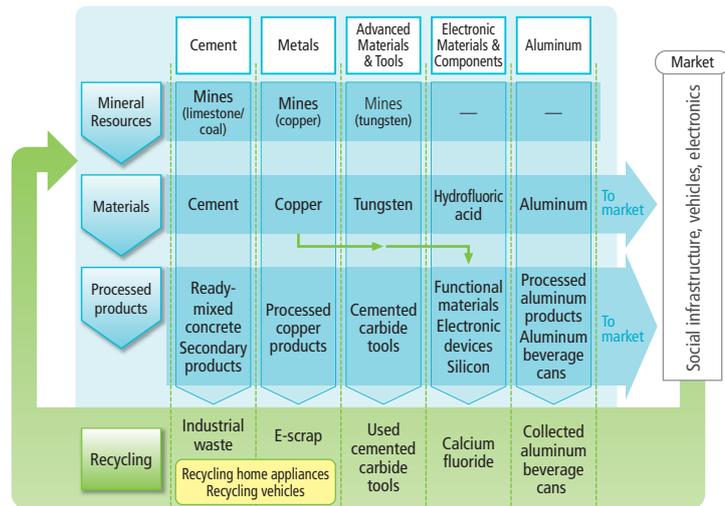
Overview of our Recycling-Oriented Business Model

The Mitsubishi Materials Group is a complex corporate entity encompassing a wide range of technologies and expertise, from resources upstream to materials midstream to processed products downstream.

We have continued to make the most of those capabilities across different sectors, in an effort to establish a recycling-oriented business model based on recovering resources from a wide range of waste products.

We strive to create cyclical value chains in each of our businesses, so that resources and materials are processed into products and then recycled back into materials. As well as enabling sustainable growth, this also helps to promote recycling-oriented social systems.

■ Recycling-Oriented Business Model (by segment)



Recycling in Individual Businesses

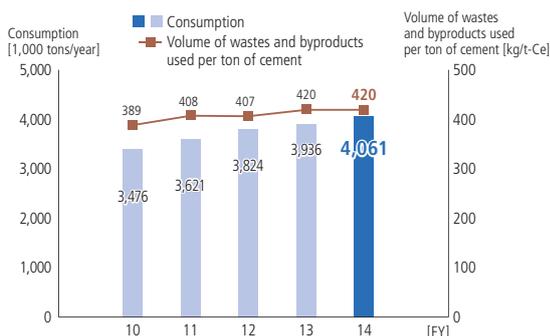
Cement

Recycling Industrial Waste and Byproducts

Using an ultra-high temperature burning process, our cement plants detoxify and make effective use of industrial waste and other difficult-to-treat materials. As well as using substances such as construction sludge, coal ash, copper slag byproducts from copper smelters, and gypsum as raw materials to make cement, we use waste materials such as plastic, tires and wood as a source of thermal energy.

As chlorine contained in waste products such as these can affect plant operations and the quality of cement, we have installed and are upgrading high performance chlorine bypass facilities at each of our plants. As a result, we continue to increase the volume of waste and byproducts we receive, and the volume that we use per ton of cement.

■ Consumption of wastes and byproducts and volume of wastes and byproducts used per ton of cement produced



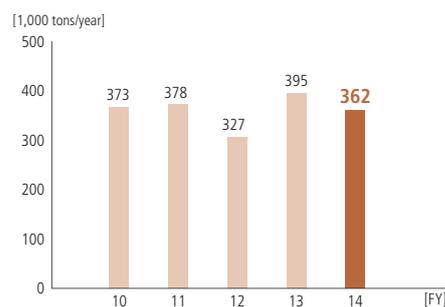
Metals

Recycling Scrap

We use smelting technology for the purpose of recycling at our smelters and refineries. We take in a wide variety of scrap, including shredder dust and used batteries from sources such as used home appliances or scrap vehicles, and scrap containing gold and silver (E-Scrap) from sources such as used substrates and connectors. We then recycle scrap, by using it for raw materials or thermal energy, and recover valuable metals.

We also take in clinker dust, as a byproduct from our cement plants, and use components such as calcium as auxiliary raw materials for smelting. After use, clinker dust turns into copper slag, which is then recycled back into raw materials at our cement plants.

■ Volume of Scrap Processed



Metals

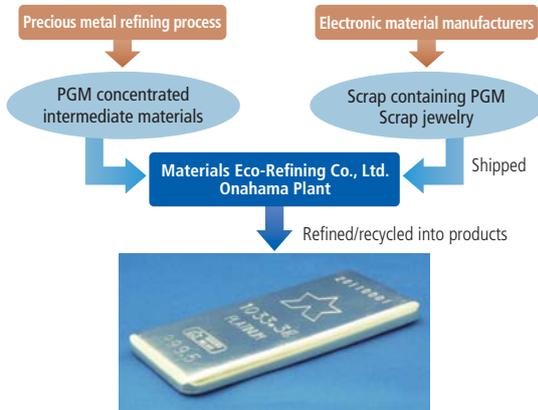
Recycling Rare Metals

PGM* are rare metals that are found in copper concentrate. Group company Material Eco-Refining Co., Ltd. refines PGM intermediate materials obtained from our Naoshima Smelter & Refinery, to create products such as metals and chemical compounds.

Platinum and palladium in particular are key materials in the automotive, electric and electronic sectors. With that in mind, we applied to register our brand with the London Platinum and Palladium Market (LPPM), as a means of offering market assurance, and successfully obtained certification in September 2012. We are determined to keep on improving the quality of our products, and make every effort to ensure stable supplies of rare metals.

*PGM: Platinum group metals

The Rare Metal Recycling Process



Advanced Materials & Tools

Recycling Tungsten from Urban Mines

Waste containing rare metals is often found in the form of "urban mines", which contain such a high percentage of rare metals that it is possible to extract them more efficiently than obtaining metals from natural resources. A prime example is tungsten, the main raw material used in cemented carbide products. Making the most of the Mitsubishi Materials Group's comprehensive capabilities as a manufacturer, from raw materials through to finished products, we are currently focusing on recycling used cemented carbide products in an effort to secure stable supplies of raw materials.



Recovered cemented carbide products

Electronic Materials & Components

Recycling Fluorine Resources

We manufacture a range of fluorine compounds at group company Mitsubishi Materials Electronic Chemicals Co., Ltd., including materials for use in semiconductor manufacturing, flame retardants, antistatic agents and other functional materials, as well as hydrofluoric acid. We also recover calcium fluoride sludge produced by companies using fluorine compounds. We have been recycling sludge back into fluorine resources that can be used as an alternative raw material for fluorite ever since fiscal 2007, enabling us to substitute a high percentage of resources as part of our operations. We remain fully committed to recycling fluorine resources in the future, through continued technical innovation.

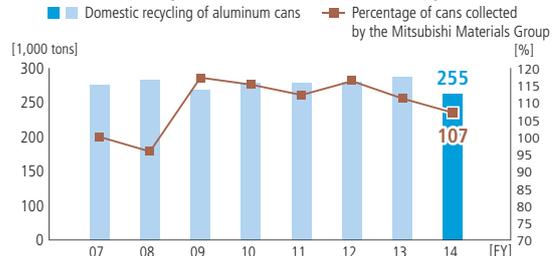


Aluminum

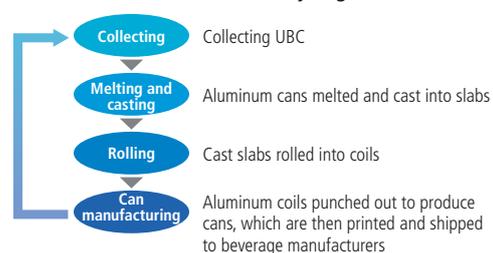
Recycling Aluminum Beverage Cans

We have been operating a total CAN TO CAN recycling system within the Mitsubishi Materials Group (Universal Can Corp. and Mitsubishi Aluminum Co., Ltd.), based on a cycle of can manufacturing, collecting, melting, casting and rolling, for over 30 years now. The largest operation of its kind in Japan, our system is uniquely integrated within the group and enables us to process around 40,000 tons of used beverage cans (UBC) every year, thereby helping to conserve aluminum resources. We also do our bit to prevent global warming by manufacturing slabs of recycled aluminum from UBC. As this only requires about 3% as much energy as manufacturing aluminum from scratch, it enables us to substantially reduce energy consumption.

Domestic recycling of aluminum cans and the percentage of cans collected by the Mitsubishi Materials Group (FY2007 = 100%)



The Flow of Aluminum Can Recycling



Smelting and Cement Recycling System

To help create a recycling-oriented society, we effectively reuse byproducts from our nonferrous smelting facilities as raw materials for our cement manufacturing facilities, and vice versa. As part of our accelerated efforts to promote a Materials Premium, we also use copper slag to help shore up ports to protect from tsunami.

Recycling Resources with No Need for Landfill Sites

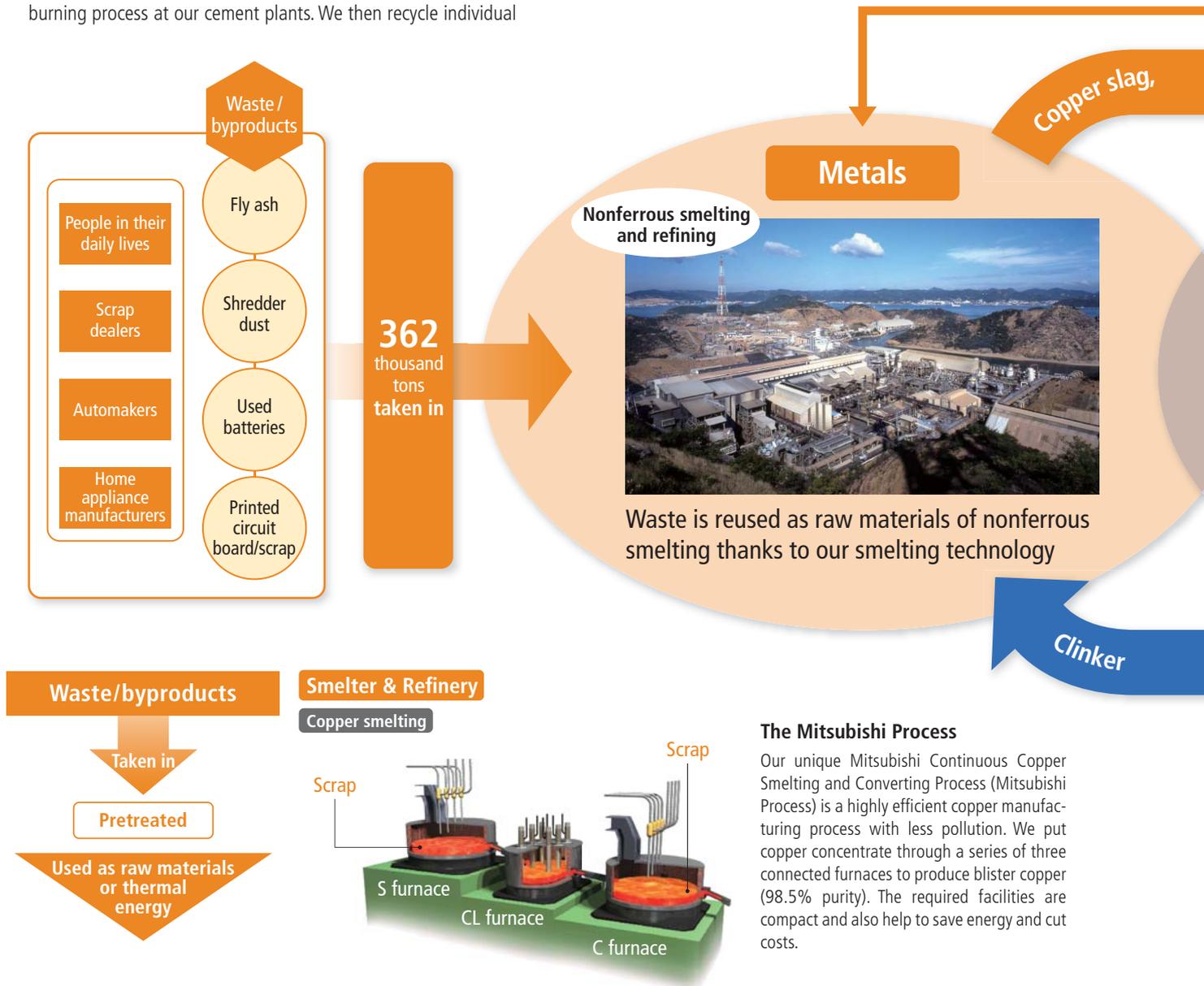
Operating our Smelting and Cement Recycling System

As a result of an increasing volume and variety of waste products, Japan is facing issues such as pressure on landfill sites and a growing percentage of difficult-to-treat materials. Recovering and recycling waste without producing secondary waste has therefore become a top priority.

We run a smelting and cement recycling system as part of our environmental recycling operations here at the Mitsubishi Materials Group. Based on close cooperation between our nonferrous smelting and cement plants, the system is attracting considerable attention. Using smelting technologies from our smelter and refinery, we detoxify waste using an ultra-high temperature burning process at our cement plants. We then recycle individual

waste products and effectively reuse them as raw materials. Using byproducts in this way enables us to recycle waste without any need for landfill sites.

We are making the most of Mitsubishi Materials Group systems, which are capable of recycling a wide range of difficult-to-treat waste, to contribute to the recovery from the Great East Japan Earthquake. We have continued to safely and effectively process rubble and waste from the earthquake at our cement plants. At our smelter and refinery, meanwhile, we are actively using the byproduct copper slag in materials for use in reconstruction work.



The Mitsubishi Process

Our unique Mitsubishi Continuous Copper Smelting and Converting Process (Mitsubishi Process) is a highly efficient copper manufacturing process with less pollution. We put copper concentrate through a series of three connected furnaces to produce blister copper (98.5% purity). The required facilities are compact and also help to save energy and cut costs.

Home appliances are made from various combinations of different materials, including iron, aluminum, copper and other metals, glass, plastic and rubber. After separating materials at our home appliance recycling plants, primarily by dismantling appliances by hand, we then recover copper and precious metals from difficult-to-treat printed circuit boards, using copper smelting processes. Initiatives such as these enable us to fully harness synergy with other group companies.

In fiscal 2014, the five recycling companies (six plants) in which we have a stake recycled 2.322 million home appliances, which translates into a reduction in landfill waste of approximately 110 thousand tons.

Number of home appliances processed



Home appliance recycling plants



Processing refrigerators

We dismantle recovered home appliances and pass them on to our nonferrous smelting and cement plants for use as raw materials.



gypsum

Cement Business

Cement plants



Resources are reused without producing secondary waste by burning them at ultra-high temperatures

dust

4,061 thousand tons taken in

Waste / byproducts

Sewage and drainage sludge

Waste plastic and tires

Waste soil from construction
Contaminated soil

Slag and coal ash

People in their daily lives

Construction companies

Power plants

Steelmakers

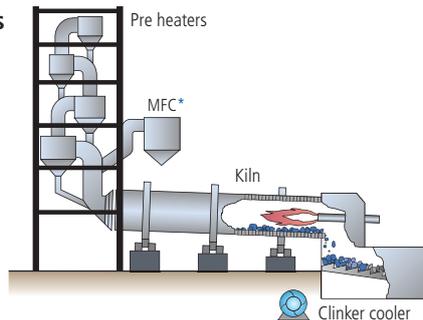
Cement plants

Ultra-High Temperature Burning Process

Raw materials (including wastes and byproducts) are prepared during the raw material grinding process and then sintered at high temperatures to produce a hydraulic mineral during the burning process.

Once the raw mixture has reached the maximum temperature (1,450°C) and a series of chemical reactions are completed, it is quickly cooled into an intermediate product called clinker.

*MFC: Mitsubishi fluidized calciner, developed exclusively by Mitsubishi Materials for the purpose of facilitating decarbonation reactions in limestone



Waste/byproducts

Taken in

Pretreated

Used as raw materials

Used as thermal energy

Raw material grinding process

Burning processes

Environmental Management

We are committed to preserving the environment in accordance with the Mitsubishi Materials Group Code of Conduct, which specifically refers to the effective use and recycling of resources. We are constantly working to tackle environmental issues on a global scale while addressing priorities such as preventing pollution.

Environment Policy

Based on our Corporate Philosophy “For People, Society and the Earth,” we recognize the importance of environmental preservation on a global scale and strive to contribute to the creation of a sustainable society through our business activities, in line with the 10 Articles of our Code of Conduct. As a comprehensive materials manufacturer, with operations ranging from cement, copper and metalworking through to electronic materials and components, we supply many of the basic materials and products that are essential to our industrialized society. Indeed, our materials and products are widely used in many aspects of daily life.

Whereas operations within the materials industry inevitably have a high environmental impact at the manufacturing stages, they also present opportunities to effectively harness and recycle resources through initiatives at the waste processing and recycling stages.

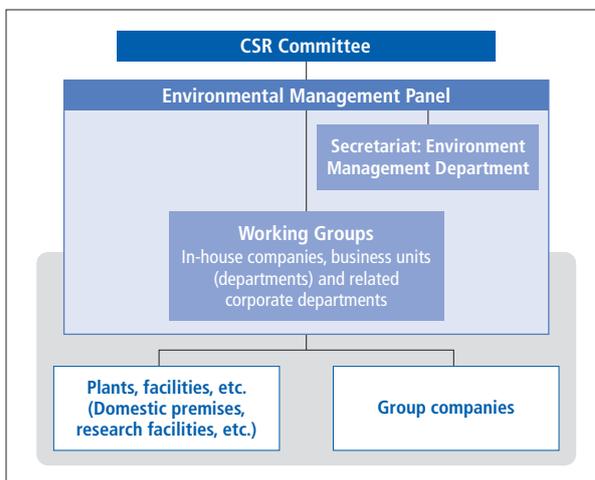
We take the environment into consideration in everything that we do and are committed to environmental management, capitalizing on the nature of our operations to strike a balance between business and the environment. With that basic philosophy in mind, we are determined to do our bit to help create a recycling-oriented society that has a low impact on the environment, through strict legal compliance and operations such as supplying and recycling essential everyday materials and products. [WEB](#)

Framework

As a comprehensive materials manufacturer, we engage in a wide range of business activities across the Mitsubishi Materials Group. Given that our activities therefore impact on the environment in different ways, we implement ISO 14001 and other environmental management systems at all Mitsubishi Materials and group company facilities, and carry out environmental preservation activities based on specific factors such as the nature of our operations and the local area. When dealing with groupwide issues, we discuss options via the Environmental Management Panel, one of the dedicated subcommittees that form part of our CSR Committee, and then roll out measures to individual facilities as necessary.

As part of our cement and copper smelting operations, we take in waste produced by various industries and process it into raw materials or energy sources. Issues associated with waste have a serious impact on the future of our recycling business, and require adequate waste management from a social standpoint too. We have therefore positioned waste management as one of our top priorities, and have installed organizational and educational frameworks to ensure that we manage all waste in an appropriate manner.

Positioning of the Environmental Management Panel



Environmental Education

We run training seminars for supervisors handling environmental management every year, covering basic areas such as air pollution, water quality and waste management. To ensure adequate environmental management, we also provide training aimed at managers, including environmental risks, examples of environmental accidents, and other managerial requirements.

Environmental Management Training

We provide text-based handouts and e-learning content for management at all of our facilities, so that they understand our management structure for pollution prevention and the need to effectively implement ISO 14001 or other environmental management systems, and appreciate what is required of them as management.

For supervisors at individual facilities, we organize seminars to provide an understanding of the specific contents of relevant legislation, focusing particularly on the Air Pollution Control Act and the Water Pollution Control Act, which are applicable to many of our group facilities.

Waste Management Training

We appoint managers and supervisors to handle practical matters at each of our facilities. For managers, we mainly provide text-based handouts and e-learning content designed to establish an understanding of the risks associated with waste produced by the group. For supervisors meanwhile, we organize seminars that provide an understanding of the specific contents of regulations under the Waste Disposal Act.

Internal Environmental Auditor Training

Having introduced environmental management systems in accordance with ISO 14001 at many of our manufacturing facilities

throughout the Mitsubishi Materials Group, we organize seminars to train internal environmental auditors. As well as learning about ISO 14001 standard and environmental legislation, training involves studying initiatives based on simulated examples, with the aim of identifying environmental concerns, assessing applicable legislation and reducing environmental impact, and checking for non-compliance.

Overseas Environmental Education

We have been providing environmental education at overseas group companies as part of CSR training since fiscal 2012. We provided training for employees assigned overseas and local staff in Malaysia and Thailand in fiscal 2014, covering subjects such as environmental risks associated with our business activities, introductions to legislation in each country, and environmental management systems.

■ Environmental Education in FY2014

| | | Participants |
|--|--------------------------|--------------|
| Environmental management training | e-learning for managers | 93 |
| | Seminars for supervisors | 62 |
| Waste management training | e-learning for managers | 22 |
| | Seminars for supervisors | 176 |
| ISO 14001 internal environmental auditor seminar | | 127 |
| Overseas environmental education | Malaysia (4 companies) | 72 |
| | Thailand (2 companies) | 16 |

Compliance with Environmental Legislation

We provide information on revised legislation via our intranet and also distribute information directly to the relevant supervisors. In the event of major revisions that require steps such as changing equipment, we organize presentations so that we are adequately prepared to take action at all of our facilities.

In addition to performing regular self-checks based on current legislation at each of our facilities, our Internal Audit Department also audits areas such as compliance with environmental legislation, chemical-related initiatives and standards of equipment management. We immediately take action to rectify any issues identified during audits, and roll out initiatives to all related facilities, in an effort to improve management standards throughout the group.

Compliance with Environmental Legislation in FY2014

We were not subject to any form of disciplinary action by the regulatory authorities (suspension of licenses, orders to suspend operations, orders to suspend use of facilities, fines, etc.) in relation to compliance with environmental legislation during fiscal 2014.

Dealing with Environmental Risks

If any of the harmful chemicals that we use at our facilities were to pollute the air, water or soil, it could have a detrimental effect on people's health and surrounding ecosystems. An added concern is that it could also cost a great deal to clean up any such pollution.

We regard the occurrence of any incident associated with air, water or soil pollution, unpleasant odors, noise, vibrations, or inadequate waste disposal, as a serious risk that could impact on the entire group. That is why we carry out appropriate measures as part of our groupwide risk management activities.

We are constantly working to prevent pollution at each of our facilities. In addition to carrying out inspections on facilities using chemicals and taking steps to prevent leaks, we have also implemented measures such as installing dikes to limit any impact in the event of a leak and providing training in deploying oil fences.

Environmental Accounting

One of the ways in which we evaluate our environmental initiatives is to compile figures for investment and expenditure on environmental preservation, in accordance with the 2005 version of Environmental Accounting Guidelines published by the Ministry of the Environment. In fiscal 2014, we invested approximately ¥2.2 billion in installing new equipment and making improvements, with the aim of preventing air pollution and unpleasant odors at our cement plants, preventing air and water pollution at our copper smelters, and preventing air pollution and noise as part of our advanced materials and tools operations. Expenditure on environmental preservation meanwhile totaled approximately ¥4.9 billion, including depreciation on equipment to prevent pollution, waste disposal outsourcing costs, maintenance of environmental management systems, groundwater treatment measures, and pollution load charges.

■ Spending on Environmental Preservation in FY2014 [Million yen]

| Cost Category | Investment Amount | Expense Amount |
|-----------------------------------|-------------------|----------------|
| Pollution prevention | 1,293 | 2,061 |
| Global environmental conservation | 204 | 557 |
| Resource circulation | 495 | 1,403 |
| Upstream/downstream | 0 | 0 |
| Administration | 12 | 310 |
| R&D | 178 | 259 |
| Social activity | 7 | 94 |
| Environmental remediation | 0 | 171 |
| Total | 2,189 | 4,855 |

* Calculations are based on the 2005 version of the Environmental Accounting Guidelines published by the Ministry of the Environment.

* Figures refer to Mitsubishi Materials on a non-consolidated basis.

Overall Environmental Impact

Here at the Mitsubishi Materials Group, we maintain an underlying commitment to conserving resources, saving energy, reducing waste and recycling. We continually monitor and strive to reduce all forms of environmental impact resulting from our business activities.

INPUT



Total Energy Input *

» **41.7** petajoules
(Equivalent to 1.08 gigaliters of crude oil)



Raw Material Input

» **17.9** million t
(Volume of incoming recycled resources: 3.7 million t)



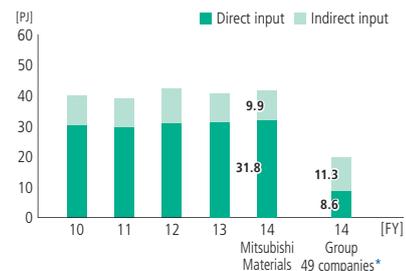
Water Use

» **415** million m³
(Salt water: 402 million m³)
(Fresh water: 13 million m³)



Total Energy Input*

Total energy input (Mitsubishi Materials) rose by approximately 2% (0.8PJ, equivalent to 30,000 kiloliters of crude oil) in fiscal 2014 compared to fiscal 2013. This was down to increased production of cement, copper and other materials, due in part to a gradual economic recovery in fiscal 2014. We were able to improve energy consumption per unit by 0.4% compared to fiscal 2013, thanks to increased production and various improvements in efficiency on the back of energy saving activities at individual facilities.

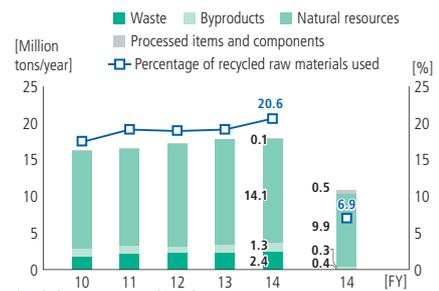


* 1 PJ (petajoule) = 10¹⁵ J (joules) = 1,000 TJ (terajoules)
* A breakdown of annual direct and indirect energy input is included in the Fact Sheet.
* Figures are based on different boundaries for energy input.



Raw Material Input

We continued to recycle waste and byproducts into raw materials during fiscal 2014, in an effort to help create a recycling-oriented society. We used a total of 3.7 million tons of waste and byproducts (up approximately 9% on the previous year) at Mitsubishi Materials, taking our raw material input to roughly 21%.

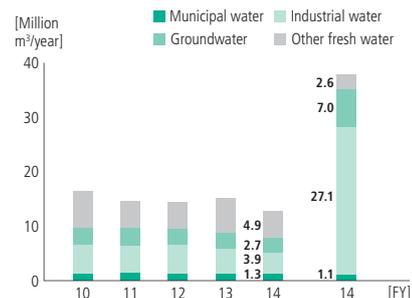


* Excludes seawater used in salt manufacturing



Water use

The vast majority of the water we consume is salt water used as coolant for thermal power generation facilities at our cement plants and at our copper smelting facilities. We used a total of 415 million m³ of water at Mitsubishi Materials during fiscal 2014. Only 13 million m³ (3%) of that total however was fresh water.



* Excluding fresh water used in hydroelectric power generation
* Excluding seawater

OUTPUT



Greenhouse Gas Emissions

» **8,116** thousand t (CO₂ equivalent)
(Further details outlined on P.51)



Volume of Industrial Waste

» **11.1** thousand t
(6.8 thousand t of which was recycled)



Chemicals Released or Transferred

» Emitted: **41** t Transferred: **571** t



Water discharged

» **410** million m³
(Salt water: 404 million m³)
(Fresh water: 6 million m³)



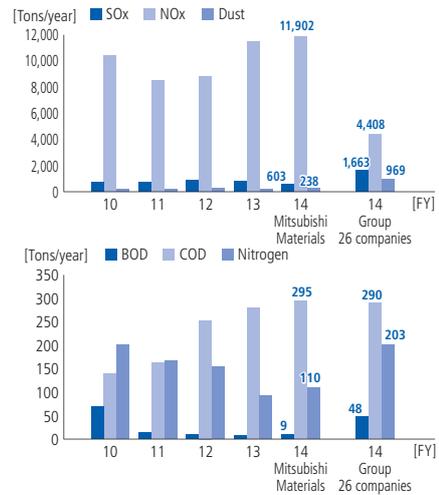
Emissions into the Air and Bodies of Water

» Airborne emissions SOx: **603** t NOx: **11,902** t
» Water emissions BOD: **9** t COD: **295** t Nitrogen: **110** t



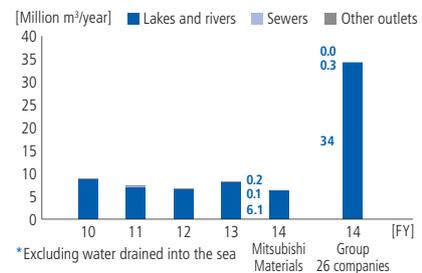
Emissions into the Air and Bodies of Water

We monitor emissions of substances that contribute to air pollution. These include sulfur oxides (SOx), which are produced as a result of burning fossil fuels or oxidation reactions with substances contained in raw materials, and nitrogen oxides (NOx), which are produced by coal-fired power plants or during the process of burning raw materials, and dust. We also monitor wastewater for levels of biochemical oxygen demand (BOD), chemical oxygen demand (COD) and substances such as nitrogen and phosphorus. In fiscal 2014, SOx emissions for Mitsubishi Materials fell by approximately 26% compared to the previous year, with COD levels in wastewater up by approximately 6%. The decrease in SOx emissions was down to reduced sulfur content in coal fuels. The increase in COD meanwhile was due to an increase in COD levels in seawater.



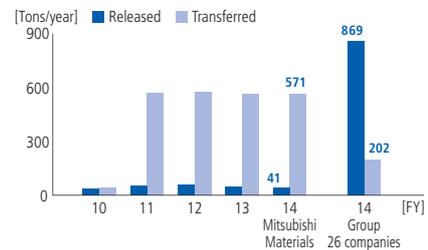
Water discharged

The volume of water discharged by Mitsubishi Materials (excluding water drained into the sea) fell by approximately 22% during fiscal 2014 compared to the previous year, due to reduced usage of fresh water in manufacturing processes. Of the 404 million m³ of water drained into the sea by Mitsubishi Materials, the vast majority was seawater that had been used as coolant.



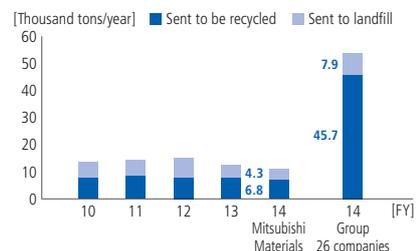
Chemicals Released or Transferred

The volume of chemicals released by Mitsubishi Materials fell by approximately 9% during fiscal 2014 compared to the previous year. The volume transferred meanwhile increased by approximately 3%. The significant increase in transfers since fiscal 2011 is down to revisions to chemical substances covered under PRTR system, resulting in an increase in the volume of newly regulated substances being transferred.



Volume of Industrial Waste

The volume of waste sent to landfill by Mitsubishi Materials fell by approximately 13% in fiscal 2014 compared to the previous year, due in part to the temporary suspension of plant operations. The percentage of industrial waste that we sent to be recycled totaled approximately 61%.



Efforts to Prevent Global Warming

Here at the Mitsubishi Materials Group, we consider it our duty to reduce greenhouse gas emissions, and to develop and supply products, materials and services that will help to create a low-carbon society. We are also committed to generating and increasing usage of renewable energy.

Global Warming Prevention Policy and Framework

We set ourselves clear targets in each sector and carry out a range of ongoing initiatives aimed at minimizing levels of greenhouse gases emitted as a result of our business activities, including saving energy and reducing CO₂ emissions. We also consider it our duty to develop and supply products, materials and services that will be essential to the creation of a low-carbon society.

The fact that we use limestone as the main raw material in cement means that we can never eliminate CO₂ emissions entirely. If restrictions on greenhouse gas emissions or carbon-based tax systems were to be introduced domestically or internationally in the future, it could pose a serious financial risk. At the same time, however, we could expect to see a substantial increase in opportunities for customers to use our wide-ranging technologies and products to help save energy and reduce their own CO₂ emissions.

The Global Environment and Energy Committee implements strategic initiatives from a more comprehensive, medium to long-term perspective, focusing particularly on risks and opportunities such as these, associated with the issue of global warming.

Organizational structure of the Global Environment and Energy Committee



Greenhouse Gas Reduction Targets and Progress

In fiscal 2014, we continued to work towards the same company-wide emissions target as fiscal 2013, and towards targets for energy consumption per unit in each of our divisions.

In terms of our companywide target, we achieved a 17% reduction in emissions compared to levels in fiscal 1991. Based on energy consumption per unit on the other hand, we managed to achieve our target in the cement sector, which accounts for over 80% of the energy we consume, but were unable to do so in other sectors.

From fiscal 2014, we have also started to obtain independent assurance for collated data from domestic group companies.

Global Warming Countermeasure Targets at Mitsubishi Materials

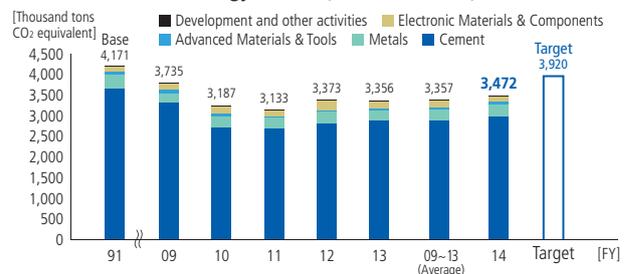
Target for CO₂ Emissions from Energy Sources

▶▶▶ 3.92 million tons (down 6% from fiscal 1991)

Segment-Specific Targets

- Metals, Advanced Materials & Tools, Electronic Materials & Components
 - ▶▶▶ Achieve annual improvement of 1% in energy consumption per unit
- Cement
 - ▶▶▶ Maintain fiscal 2005 level of energy consumption per unit

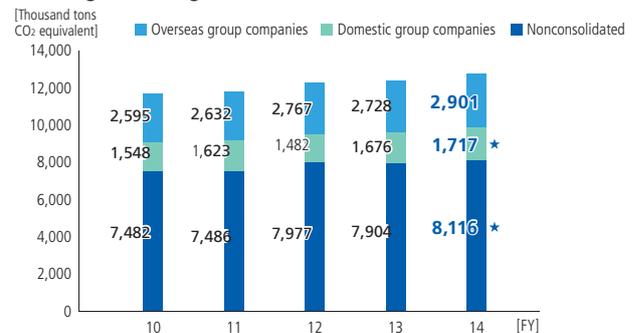
CO₂ Derived from Energy Sources (nonconsolidated)*



* CO₂ derived from non-energy sources comes mainly from limestone, which is used as a raw material. As it is difficult to substitute or reduce volumes of limestone, however, our emissions target covers CO₂ emissions derived from energy sources, which can be reduced by energy saving initiatives.

* Excludes data for the former Iwaki Plant

Total greenhouse gas emissions (nonconsolidated + main consolidated subsidiaries)



Breakdown of Total Emissions for Fiscal 2014

| Category | | Non-consolidated* | Domestic group companies* | Overseas group companies | Total companies | |
|---|-----------------------------------|-------------------|---------------------------|--------------------------|-----------------|-------|
| Scope 1 (direct) | From energy sources (fuel, etc.) | 2,872 | 619 | 971 | 4,462 | |
| | From non-energy sources | Processes | 4,223 | 186 | 1,310 | 5,719 |
| | | Waste | 405 | 250 | 32 | 687 |
| | | Other gases | 18 | 5 | 0 | 23 |
| (Reference) Total from non-energy sources | | 4,645 | 441 | 1,342 | 6,428 | |
| Subtotal | | 7,517 | 1,061 | 2,313 | 10,890 | |
| Scope 2 (indirect) | From energy sources (power, etc.) | 600 | 656 | 588 | 1,844 | |
| (Reference) Total from energy sources | | 3,472 | 1,276 | 1,559 | 6,306 | |
| Total | | 8,116 | 1,717 | 2,901 | 12,735 | |

* "Group companies" refers to our 87 main consolidated subsidiaries. (Excludes data from two group companies; Tamadai Corporation and Mitsubishi Materials C.M.I Corporation)

* The above figures have been calculated in accordance with Version 3.5 of the Manual for Calculating and Reporting Greenhouse Gas Emissions issued by the Ministry of the Environment and Ministry of Economy, Trade and Industry.

Reduction Initiatives During Fiscal 2014

Constantly Exploring the Possibilities of Saving Energy

We organize meetings of the Energy Saving Committee every year, in order to promote energy saving initiatives on a groupwide scale. During meetings, energy managers and other participants report on energy-related trends in society, the results of activities and plans at individual facilities, and examples of effective initiatives, as well as actively exchanging opinions and information.

The Mitsubishi Materials Group is a heavy consumer of energy, with wide-ranging manufacturing operations including cement, metals, advanced materials and tools, electronic materials and components, rolled aluminum products, aluminum cans, and copper and brass products. That is why we are constantly exploring the possibilities of saving energy, so that we can secure an even greater competitive advantage.

Major Initiatives in Each Sector

We consider it to be our social duty to effectively save energy at our plants and manufacturing facilities. That is why we are so committed to energy saving activities.

Specific priorities include reviewing fuels, harnessing untapped energy, upgrading equipment, installing high efficiency equipment, optimizing input and capacity, and reviewing operating practices. We are constantly working to reduce energy consumption and improve efficiency at our smaller facilities too, including Head Office, branches, sales offices and research facilities, through measures such as installing LED lighting and solar power facilities.

■ Cement

As well as using heat more efficiently as part of the cement manufacturing process, by improving the efficiency of equipment such as clinker coolers and fans, we are also working to increase the amount of alternative thermal energy sources that we use.

■ Metals

We are upgrading equipment used in manufacturing processes, including inverters for fans and blowers, to higher efficiency models in order to reduce power consumption. We are also working to reduce oil consumption by improving furnace equipment and operations.

■ Advanced Materials & Tools, Electronic Materials & Components

We are working to improve efficiency through measures such as upgrading to high efficiency air conditioning systems, pumps, unit coolers and transformers, and reviewing manufacturing conditions, operating hours and processes. We are also reinforcing routine management, including preventing heat and air leaks, and precisely controlling equipment operations, in an effort to improve energy consumption per unit.

Reducing Greenhouse Gas Emissions from Logistics

CO₂ emissions increased by 5,936 tons during fiscal 2014 compared to the previous year, due to an increase in shipping volumes. As 90% of goods were transported via high efficiency shipping vessels however, we were able to increase transport efficiency and limit energy

consumption per unit to 15.77 kiloliters per million ton-kilometers, an improvement of 2% on the previous year. Including six group companies*¹, total CO₂ emissions came to 81,019 tons (an increase of 3,786 tons on the previous year), with energy consumption per unit totaling 19.69 kiloliters per million ton-kilometers*² (an improvement of 1.9% on the previous year)

*¹ Calculations based on six companies classed as "specified shippers", accounting for over 90% of emissions from domestic group companies.

*² Refers to the amount of energy consumed in kiloliters crude oil equivalent (kl) divided by transportation in ton-kilometers (million ton-kilometers)

*Data for FY2012 and FY2013 has been altered to reflect changes in notation rules, etc.

■ CO₂ emissions according to mode of transport (Unit: Tons CO₂)

| | FY2012 (Mitsubishi Materials) | FY2013 (Mitsubishi Materials) | FY2014 (Mitsubishi Materials) | FY2014 (6 group companies) |
|-------|----------------------------------|----------------------------------|----------------------------------|-------------------------------|
| Total | 41,685 | 39,669 | 45,605 | 35,414 |
| Road | 7,256 | 8,449 | 8,010 | 27,312 |
| Rail | 8 | 4 | 1 | 28 |
| Sea | 34,421 | 31,216 | 37,594 | 8,069 |
| Air | 0 | 0 | 0 | 5 |

Topics !

Fourth Eco Contest

We have been running our Eco Contest since fiscal 2011, as an award scheme to promote eco-friendly activities at facilities throughout the Mitsubishi Materials Group.

Grand Prize (Facility): Iwate Plant

Our Iwate Plant has been making the most of its existing recycling technologies to actively take in rubble from the Great East Japan Earthquake. It has also been operating its previously unused in-house generation facilities at full capacity to provide the local area with power in the event of power shortages, and has even been commended by local companies.

Grand Prize (Activity): Tsukuba Plant

Our Tsukuba Plant has reduced power consumption during sintering and improved the quality of sintered products, by developing thermal insulation materials that have a huge effect on the average heat inside furnaces. This has made a significant difference to users in terms of saving energy and conserving resources.

■ Results

Facility Awards Division

| Award | Facility | Division |
|-------------------------------|---|----------|
| Grand Prize | Iwate Plant, Mitsubishi Materials Corporation | Cement |
| Outstanding Achievement Award | Onahama Smelting & Refining Co., Ltd. | Metals |
| | Universal Can Corporation | Aluminum |

Activity Awards Division

| Award | Facility/Area | Division |
|-------------------------------|--|----------------------------|
| Grand Prize | Tsukuba Plant, Mitsubishi Materials Corporation | Advanced Materials & Tools |
| | Saving energy and conserving resources through the technical development of a new cemented carbide sintering process | |
| Outstanding Achievement Award | Naoshima Smelter & Refinery, Mitsubishi Materials Corporation | Metals |
| | Four-year copper smelting furnace repair campaign | |

Setting New Targets for a Sustainable Society

Integrated Initiatives to Prevent Global Warming and Create a Recycling-Oriented Society

In the long-term management policy that we announced for the Mitsubishi Materials Group at the start of fiscal 2015, we set out a vision to “become the world’s leading business group committed to supporting recycling-oriented society”. P.25

Having previously set standalone targets in relation to global warming, we decided to combine targets across sectors in which we can contribute to the creation of a recycling-oriented society, based on our new vision and a broader outlook towards a more sustainable society.

As our operations span such a wide range of areas across the Mitsubishi Materials Group, the ways in which we can help to create a sustainable society differ from one sector (and facility) to another. It has become necessary to set targets based on a precise understanding of the realities at each of our sites, so that we can carry out activities more effectively.

With that in mind, we have set out the following new targets for 2020. We intend to make the most of existing initiatives, including manufacturing improvement activities and our Eco Contest, as part of a more integrated approach in the future.

In terms of CO₂, we will continue to work on reducing emissions by 6% compared to 1990 levels.



■ New targets for 2020

| Sector | Applicability | Details | Targets | |
|--|---|---|---|---|
| | | | Preventing global warming | Creating a recycling-oriented society/ contributing to the environment |
| Cement | All facilities (Aomori, Iwate, Yokoze, Kyushu, Higashitani) | Improve energy efficiency through the ongoing installation of energy saving equipment. Continue working to increase volumes of waste accepted, in order to make more effective use of different types of waste. | •Energy consumption per unit 1.2% reduction (compared to FY2011) | •Waste/byproducts per unit 435 kilograms per ton •Percentage of alternative thermal energy Increase of 2% (compared to FY2011) |
| Metals | Naoshima Smelter & Refinery | Upgrade waste heat recovery and other equipment at copper smelting facilities in order to improve energy efficiency. Cater to the growing volume of E-Scrap overseas, reinforce pre-treatment facilities, and step up recycling operations. | •Energy consumption per unit Reduction of 1% per year | •Volume of E-Scrap processed Over 100,000 tons per year |
| | Sakai Plant | Upgrade equipment to energy saving models as part of manufacturing processes for copper and brass materials, copper alloys and processed copper products. | •Energy consumption per unit Reduction of 1% per year | •Waste oil/acid: Reduction of 40% (compared to FY2006) |
| Advanced Materials & Tools | Tsukuba Plant | Upgrade water chillers and heaters, and other equipment, to energy saving models as part of the manufacturing process for cemented carbide tools, and improve the overall efficiency of production equipment. | •Energy consumption per unit Reduction of 20% (compared to FY2006) | •Scrap generated: Reduction of 40% (compared to FY2010) |
| | Gifu Plant | Upgrade compressed air equipment as part of the manufacturing process for cemented carbide tools, reduce liquid waste through measures to prevent leaks, and focus on development of environmentally friendly products. | •Energy consumption per unit Reduction of 15% (compared to FY2006) | •Incorporate industrial waste indicators (volume of industrial waste produced per production value) into all medium-term plans, and continue to achieve 100%. •Continue to achieve targets for the number of certified environmentally friendly products set out in medium-term plans. |
| | Akashi Plant | Reduce losses as part of the manufacturing process for cemented carbide products, through TPM activities, and improve wastewater processes. | •Energy consumption per unit Reduction of 10% (compared to FY2011) | •COD load No more than 1 ton per year |
| Electronic Materials & Components | Yokkaichi Plant | Upgrade refrigeration systems and other equipment to energy saving models as part of the manufacturing process for silicon products, and improve treatment processes for wastewater with additives. | •Energy consumption per unit Reduction of 1% per year | •Industrial waste generated per unit (Tons per ton-products) Reduction of 5% per year |
| | Ceramics Plant | Upgrade air conditioning systems and other equipment to energy saving models as part of the manufacturing process for electronic devices. Develop commercial oil temperature sensors for motorcycles. | •CO ₂ per unit Reduction of 1% per year | •Number of environmentally friendly products At least one per year |
| | Sanda Plant | Upgrade coolant water systems and other equipment to energy saving models as part of the manufacturing process for functional materials. Continue to develop next generation components for high efficiency inverters. | •Energy consumption per unit Reduction of 1% per year *Specific to this plant | •Improve efficiency of inverter products (Reduction in CO ₂ emissions when using products At least 3x higher compared to 2008) |

Producing Renewable Energy

Geothermal Power

We generate clean, stable power through our Ohnuma Geothermal Plant and Sumikawa Geothermal Plant (steam supply only), both in the Hachimantai area of Kazuno, Akita prefecture. In fiscal 2014, we generated a total of 300 gigawatt-hours of power, which equates to a 220,000-ton reduction in CO₂ emissions compared to oil-fired power.

In terms of new locations, we are conducting environmental impact assessments in Wasabizawa in Akita prefecture (joint study with Electric Power Development Co., Ltd. (J-POWER) and Mitsubishi Gas Chemical Co., Ltd.), and are also conducting ongoing studies in Appi in Iwate prefecture, Musadake in Hokkaido (joint study with Japan Petroleum Exploration Co., Ltd. (JAPEX) and Mitsubishi Gas Chemical Co., Ltd.), Bandai in Fukushima prefecture (joint study with nine other companies), and Komonomori in Akita prefecture, as we continue to work on increasing clean power.

P.14

New geothermal projects



Hydroelectric Power

We have a long history of generating hydroelectric power. In Akita prefecture, we built seven hydroelectric power plans for the purpose of supplying enough power to run Osarizawa Mine. Of those power plants, six are still operating today (as of July 2014), selling on the power that they generate to power companies. In fiscal 2014, our hydroelectric power plants generated a total of 89 gigawatt-hours of power. As this equates to a 70,000-ton reduction in CO₂ emissions compared to oil-fired power plants, so that we have a role to play in global warming countermeasures.

P.15

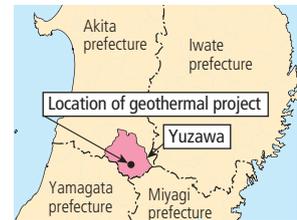
Topics

Dialog with local people as part of new geothermal development

Yuzawa Geothermal Power Corporation (owned 30% by Mitsubishi Materials Corporation, 50% by J-POWER and 20% by Mitsubishi Gas Chemical Co., Ltd.) submitted Environmental Impact Assessment preliminary documents* to the Ministry of Trade, Economy and Industry in March 2014, before going on to organize a presentation in Yuzawa, Akita prefecture, in April.

We explained to local residents that we would be carrying out a predictive assessment based on the results of environmental studies, construction plans and facility plans, and assured them that we would be implementing environmental preservation measures to avoid or minimize environmental impact wherever possible, and would be complying with environmental standards.

Yuzawa Geothermal Power is planning to finalize the environmental impact assessment* by the end of fiscal 2015, with the aim of starting construction in fiscal 2016 and commencing operations at a 42,000 kilowatt geothermal power plant in the Wasabizawa-Akinomiya area in May 2019.



* A summary of the Environmental Impact Assessment preliminary documents is available on the Yuzawa Geothermal Power website. http://yuzawa-geothermal.com/wordpress/wp-content/uploads/2014/03/press_140331_02.pdf



Presentation for local residents

Environmental assessment



Upper-air observation



Noise/vibration study



Botanical study



Ecosystem study (food consumption study)

Efforts to Protect the Environment

Bearing in mind our wide-ranging business activities here at the Mitsubishi Materials Group, we carry out environmental preservation activities in line with the nature of our operations and the characteristics of each area. Initiatives include preventing environmental contamination, organizing drills to prevent contamination from spreading in the event of an accident, and reducing waste.

Preventing Air Pollution at Cement Plants

The process of manufacturing cement consists of a number of different processes. The raw material process first of all includes preparing, drying and pulverizing raw materials such as limestone and clay. The firing process then involves firing pulverized raw materials at ultra-high temperatures (approximately 1,450°C) to produce an intermediate product called clinker. The finishing process then entails adding gypsum and pulverizing once again. As both the raw materials and finished products are in powdered form, the gases that flow through each of these processes also carry powder with them. That is why we install equipment such as electric dust collectors and bag filters at numerous points in the process, and make sure that we maintain such equipment effectively, in order to clean the waste gases that we emit.

Cement factories can also produce nitrogen oxides (NOx) and sulfur oxides (SOx). To deal with NOx, we use additives such as reducing agents if necessary, to ensure low-NOx operations.

With regard to SOx meanwhile, we make sure that we comply with legislation designed to prevent air pollution, helped along by exceptionally low SOx emissions due to the desulfurizing effects of calcium oxide, large quantities of which are contained in cement raw materials.

Achieving Zero Emissions and Conserving Resources in the Advanced Materials & Tools Sector

We are working to achieve zero emissions at all facilities where our Advanced Materials & Tools Company manufactures cemented carbide tools and ultra precision machine tools, through measures such as minimizing waste, carefully separating waste, and selling waste materials.

At our Akashi Plant, we have put in place a recycling system for 100% of industrial waste, based on effective separation of grindstones that had previously proved difficult to recycle. In fact, the plant received a special environmental award from the Japan Solid Cutting Tools Association in 2013. We have also established an efficient method of recovering rare metals from scrap produced at the plant during the manufacturing process for cemented carbide tools.



Akashi Plant (Hyogo prefecture)

Preventing Air and Water Pollution at Copper Smelting Plants

We manufacture 99.99% pure copper from copper concentrate via smelting and electrolysis processes at our copper smelting plants. We also manufacture precious metals from residues left over from the copper smelting process, and substances such as concentrate sulfuric acid and gypsum from exhaust gas produced by our copper smelting furnaces. We therefore have to take a wide range of environmental preservation measures, including suppressing dust from raw materials, treating exhaust gas from the smelting process, and preventing oil leaks. We have set management targets that are even more stringent than legal requirements at our Naoshima Smelter & Refinery, in an effort to prevent air and water pollution. We regularly measure the concentration of smoke and wastewater, and publish the results. In the event of a leak, we deploy equipment to prevent the leak from spreading outside our premises, and also organize drills based on envisioned scenarios.

Reducing CO₂ Emissions in the Electronic Materials & Components Sector

We have installed solar panels for our own use at our Sanda Plant, which manufactures electronic materials and tools, so that we can fulfill our social responsibility to address concerns regarding power shortages and help to reduce CO₂ emissions. Sputtering targets manufactured at the same plant were used in the production of the CIGS compound semiconductor solar cells of the panels, which also helps to raise eco awareness amongst employees.

With an overall generation capacity of approximately 280 kilowatts, the panels are expected to reduce CO₂ emissions by around 104 tons per year. That is equivalent to the amount of CO₂ absorbed by approximately 300,000m² of forestland.



Generating solar power at our Sanda Plant (Hyogo prefecture)

Managing Closed Mines

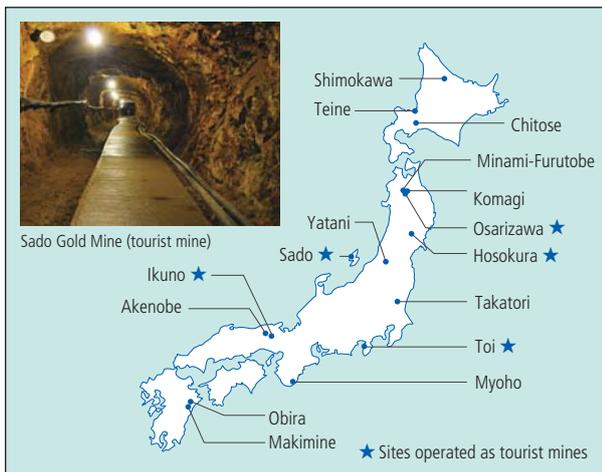
As a company with its origins in the mining industry, the Mitsubishi Materials Group owns a wide range of different mines around Japan, including limestone, coal, and nonferrous metals such as copper, lead and zinc. Although we have suspended or discontinued mining operations at all of our nonferrous mines, we continue to manage dumps (sites used to dump rubble from mining, slag from concentrate, and neutralized sediment from mine drainage treatment), and treat acidic mine drainage containing heavy metals from disused mines and dumps.

We currently have 16 closed nonferrous mines that are owned by the Mitsubishi Materials Group and managed by full-time personnel. As our mining operations have followed in the footsteps of a long line of predecessors ever since the mines were commissioned, we have a wide range of management responsibilities in terms of dealing with the environmental impact of mining activities. We engage in extensive management at closed mines too, including ensuring safety and preserving the environment at mine mouths and mining sites, as well as treating mine drainage and maintaining dumps.

In addition to such management activities, in recent years we have been exploring mine filling technologies, unmanned mine drainage treatment technologies (permeable reactive barriers) and other technologies designed to prevent damage from mines in the event of torrential rains or an earthquake, or to reduce the volume and improve the quality of mine drainage. We are constantly working to reduce levels of environmental impact even further.

Elsewhere, we have turned a number of our closed mining sites into tourist mines, so that members of the public can see how they operated in the past, gain an understanding of mining technology, and familiarize themselves with mining as a form of cultural heritage.

Mitsubishi Materials Group closed mines (nonferrous metals)



Mine Drainage Reduction Initiatives

There are cavities left behind from excavated minerals or pits in certain locations underneath our closed mines. If cavities are located above groundwater level, they can cause discharge of acidic mine water. We are working to reduce discharge into water inside our mines through the development of filling materials made from neutralized sediment from mine drainage treatment, and technology to back-fill underground cavities with filling materials. We are also working to reduce the risk of rain water seeping into the ground and becoming acidic due to heavy metal content from contact with minerals or other substances inside our mines, and to develop technologies to improve the quality of mine water.

We are conducting research in this area on a commissioned basis, as part of a Ministry of Economy, Trade and Industry project to develop advanced mine drainage treatment technology.

Overflow Incident due to Torrential Rains in the Tohoku Region

Historically high levels of rainfall were recorded in locations throughout Akita and Iwate prefectures on August 9, 2013. These torrential rains caused damage throughout the region, due to issues such as flooding, collapsing slopes and landslides. A mine drainage treatment facility at a closed mine operated by the Mitsubishi Materials Group was also badly damaged, causing untreated water to overflow into the river for a time. We commenced emergency remedial work immediately after the incident, and have since taken steps to prevent the overflow of untreated water and to repair treatment facilities.

VOICE

Japan Mining Industry Association Award for Artificial Wetland Technology to Remove Zinc from Mine Water



Shigeyuki Arai
General Manager, Environmental
Technology Research Center

Mine drainage containing heavy metals continues to be discharged from nonferrous mines even after they are closed. In experiments however, we have confirmed that it is possible to remove low concentrations of heavy metals by passing mine drainage through artificial wetlands, which harness the properties of aquatic plants and soil microorganisms. We have

also found that permeable reactive barriers combining iron powder, limestone, organic matter and other functional materials are effective against high concentrations of heavy metals. We are working to develop practical treatment technologies that keep manpower and chemicals to a bare minimum.

Leaving a Rich Natural Environment for Future Generations

We always take biodiversity and the natural ecosystem into consideration here at the Mitsubishi Materials Group, to ensure that our business activities remain in harmony with society and the environment. As well as conducting environmental studies and working to preserve the environment at mines and facilities located in or adjacent to natural parkland, we are also committed to the sustainable management of company-owned forests.

Preserving Biodiversity

Initiatives at Overseas Mines in which we Invest

We invest in overseas copper and coal mines so that we can reliably secure raw materials and maintain supply sources for copper smelting. We then evaluate whether or not biodiversity is being taken into consideration as part of the management of mines in which we invest, from the standpoint of our shareholders.

■ Copper Mountain Mine, Huckleberry Mine (Canada)

Located in British Columbia, Canada, we regularly monitor the quality of water in local rivers at both of these mines, in accordance with water quality guidelines issued by the State of British Columbia, and report our findings to the government. At Copper Mountain Mine, we have also carried out rainbow trout hatching tests in nearby rivers and have obtained positive results.



Rainbow trout hatching tests



Rainbow trout eggs

■ Namosi Copper Mine/Gold Ore Joint Project (Fiji)

As part of this project, which is currently at the pre-feasibility study, we are conducting studies into the environmental impact of establishing infrastructure (roads, bridges, etc.) if we were to proceed with development. In fiscal 2014, we conducted studies into plants and wildlife on the proposed mining site, an area to the northeast and the proposed site for port facilities in partnership with experts from the University of the South Pacific (Fiji).

Initiatives at Hokuryo Bibai Mine

Hokuryo Corporation operates Hokuryo Bibai Mine, an open-pit mine in Hokkaido. Having conducted studies into the impact that starting operations would have on forestland, we confirmed the presence of Amur Adonis flowers, which are designated as an endangered species in the 2001 Hokkaido Red Data Book listing species of plants and wildlife at risk of extinction within Hokkaido. As a result, we have been transplanting any Amur Adonis flowers found in the capped area to locations outside the sphere of our operations.



Transplanting flowers

Removing Foreign Plant Species from Hachimantai

Our operations include generating geothermal power in the Hachimantai area of Towada-Hachimantai National Park, which spans Aomori, Akita and Iwate prefectures. The Hachimantai area provides a rich ecosystem, consisting of marshland interspersed between extensive wooded areas including trees such as beech, Erman's birch and Marie's fir. Foreign species of plants such as daisies and dandelions however are growing along roads and paths throughout the area, affecting both native plant life and the scenery. As a member of the Keep Hachimantai Beautiful Society, our Tohoku Power Service Station is involved in activities to remove foreign plant species from the Hachimantai area, as part of the Ministry of the Environment's Green Worker Program.



Removing plants

Protecting Rare Plant Species on Mount Buko

At the Une Mine operated by Ryoko Lime Industry Co., Ltd., we mine limestone from Mount Buko, located at the southeastern end of the Chichibu Basin in the western part of Saitama prefecture, in conjunction with two neighboring mining companies. As Mount Buko is home to a number of rare plant species unique to the area, including primroses, wild lilies and cherry blossom, we carry out activities to preserve these species when mining the area. Having established the Buko Rare Plants Garden at one of our company-owned forests in 1988, we were commissioned by the Yokoze Town Board of Education (Chichibu) to protect and propagate rare plant species under the guidance of experts in the field.



Chichibu primroses

■ Main facilities located in or adjacent to natural parkland

| Location and adjacent facility | Site area (thousand m ²) | Natural parkland |
|--|--------------------------------------|--|
| Mitsubishi Cement Corporation (USA) | 4,006 | San Bernardino National Forest |
| Mitsubishi Materials: Higashitani Mine (Fukuoka prefecture) | 3,358 | Kitakyushu Quasi National Park, Chikuhō Prefectural Park |
| Mitsubishi Materials: Naoshima Smelter & Refinery (Kagawa prefecture) | 1,811 | Setonaikai National Park |
| Ryoko Lime Industry Co., Ltd.: Ubukawa Plant, Une Mine, Research & Development Center, Transport Division (Saitama prefecture) | 823 | Buko Prefectural Park |
| Mitsubishi Materials: Yokoze Plant, Ceramics Plant (Saitama prefecture) | 281 | Buko Prefectural Park |

* Based on Mitsubishi Materials and 26 group companies

Sustainable Management and Operation of Company-Owned Forests

Basic Approach to Sustainable Forest Management

We currently own around 14,500 hectares of forestland in Japan, mainly in Hokkaido, and are committed to sustainable forest management so that forests can perform their various functions to the full. We are working to obtain certification from the Sustainable Green Ecosystem Council (SGEC) for all of our major forests, starting with Hayakita Forest, which secured SGEC certification on October 1, 2012. We are also working with Mitsubishi Materials Real Estate Corp., which manages our company-owned forests, to maintain effective forest management in the future, with the aim that Mitsubishi forests will lead the way for forests throughout Japan.

Role of Individual Forests

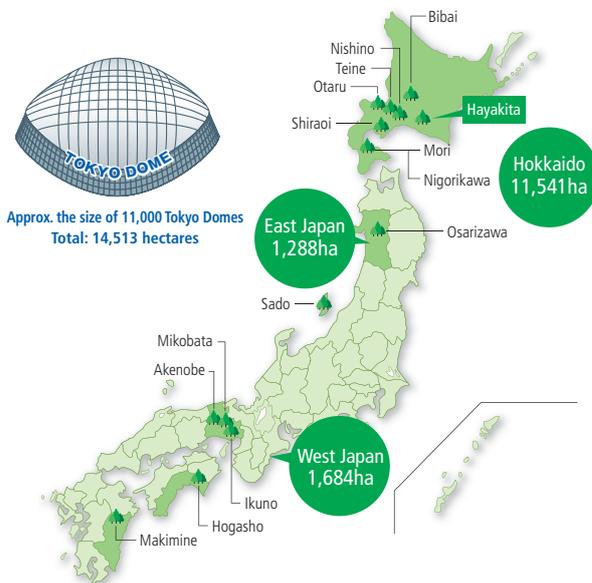
Positioned as a "resource forest" striking a balance between forest management and preservation of the surrounding ecosystem, Hayakita Forest is located close to the paper manufacturing town of Tomakomai, as well as the Port of Tomakomai for shipping outside Hokkaido. At Teine Forest meanwhile, we embarked on various processes in fiscal 2014 with the aim of obtaining SGEC certification. Located in Sapporo, the forest is well suited to growing useful trees such as Japanese oak, monarch birch and Japanese lime. We have therefore established appropriate zoning and positioned it as a suburban "environmental forest", designed to familiarize local people with our forest management policy.

We have also set out clear roles for other major forests in Hokkaido, as part of our policy of rational, efficient forest operations and management.

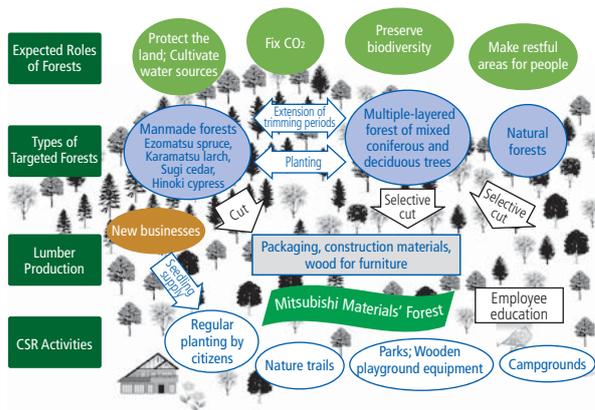


The diversity of Hayakita forest in the fall

Distribution and scale of company-owned forests



Vision for management and operation of company-owned forests



VOICE

Taking Responsibility for Maintaining and Protecting Forest Ecosystems

In spring every year, rare northern goshawks come to Hayakita Forest in Hokkaido to nest. All of us in the Forest Division listen out for the cries of northern goshawks and try to spot nesting sites when we go up into the mountains in the spring, to carry out studies for instance. Having heard reports of cries in early May, I went out to a manmade forest in Karamatsu to have a look. Through my binoculars, I saw a northern goshawk, sitting on a nest. Shortly after that, as the trees were turning green in June, the white feathers of newly hatched chicks started to appear in the nest too. By July, the chicks had grown quite large. They began to fly freely around the forest after that, before leaving Hayakita Forest behind, for a while at least.

Throughout the cycle of planting, growing and cutting down trees, we watch over the birds with genuine affection, to make sure that we don't disturb them. We need to maintain our company-owned forest so that there will be somewhere for grown chicks to come back and nest again in the future. There are various other rare species living or growing in our company-owned forests, including black woodpeckers, Japanese crayfish, Japanese sable and acer miyabei. We make a concerted effort to ascertain numbers of each species through monitoring surveys, to check that populations aren't declining.

If something goes wrong with the cycle that underpins the forest ecosystem, it is difficult to restore the balance. As well as enabling a wide range of forest operations, as an owner of large areas of forestland we must never forget that we are also custodians of prized assets belonging to the local area.



Hideyuki Kawai
Forest Division
Mitsubishi Materials Real Estate Corp.



Black woodpecker



Russian flying squirrel



Ural Owl

Establishing a Materials Premium Based on Unique Technologies

We believe that research and development (R&D) holds the key to a brighter future for the Mitsubishi Materials Group, spearheaded by our Central Research Institute. We are committed to strengthening cooperation with in-house and group companies, and to establishing a "Materials Premium" based on wide-ranging and unique technologies that make the most of our extensive human resources.

Basic Policy on R&D

We have always contributed to society based on the Mitsubishi Materials Group's unique technologies, built up over many years in manufacturing. We consider it our mission to continue creating new "materials" on earth, in the form of "distinguished new products and technologies," now and in the future. Our R&D activities are the fundamental source of that mission.

Our basic policy on R&D revolves around "precisely identifying customers' needs and future trends in technology, so that we can develop and provide distinguished products and technologies in a timely manner."

Specifically, we intend to actively focus on developmental marketing activities, including exchanging technologies with customers and participating in exhibitions, in close cooperation with in-house companies and the Corporate Marketing & Overseas Business Development Department's Marketing Division. At the same time, we plan to strengthen activities in relation to the basic and core technologies of the CRI, which is the core organization of our R&D

activities, and furthermore activities associated with intellectual property. We intend to polish our unique technologies, by bringing together the material, processing, and recycling technologies of the Mitsubishi Materials Group, and the human resources responsible for those technologies, in order to establish a Materials Premium through the "generation of distinctive synergies as an integrated business entity."

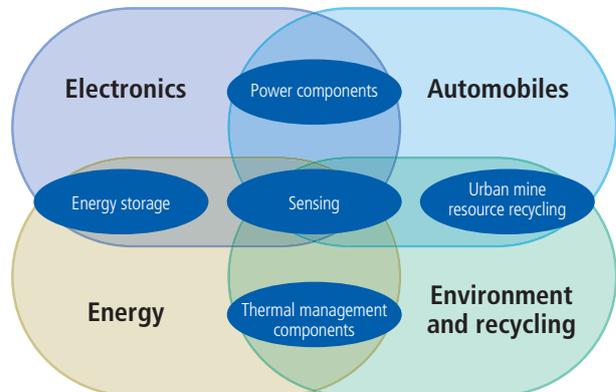
The key to establishing Mitsubishi Materials as the number one, or "only one," in each sector depends on creating new products and technologies on a timely basis, and with a real sense of speed. We are also committed to developing new lines of business that will tap into next generation needs and grow into core businesses over the medium to long term, in core sectors such as vehicles, electronics, energy, and the environment and recycling. We have set ourselves the challenge of boldly creating inspirational technologies for the future.

R&D Policy



* CAE: Computer-Aided Engineering

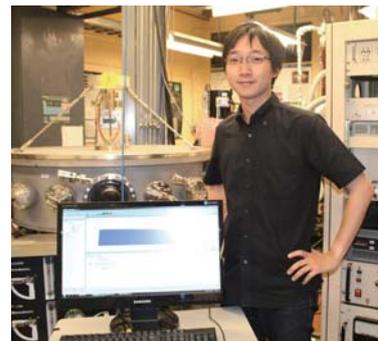
Focused areas



Topics !

Developing Global R&D Human Resources

With research and development of products for overseas markets on the increase, along with joint R&D in partnership with overseas universities and research institutions, global human resources have become a crucial part of R&D activities. As well as mastering cutting-edge technologies from other countries, human resources need to deeper understanding of overseas market's needs and capable of communicating with researchers around the world on an even footing. We promote global human resource development in R&D divisions via overseas study schemes, with young researchers currently on assignment at the Lawrence Berkeley National Laboratory, U.S.A., and the SUNCAT; Center for Interface Science & Catalysis, SLAC National Accelerator Laboratory (in Stanford University), U.S.A. We are also developing global human resources specialized in the field of intellectual property, through studying abroad assignment at overseas patent offices.

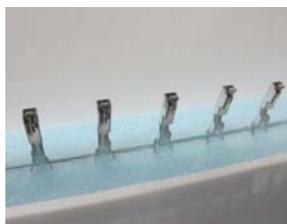


Employee Koichi Tanaka, currently on assignment at Lawrence Berkeley National Laboratory

Establishing a Materials Premium

Here at the Mitsubishi Materials Group, we are committed to establishing Materials Premium through the “generation of distinctive synergies as an integrated business entity.” One successful example of this in terms of R&D has been the development of the “flexible thermistor sensor,” a groundbreaking, bendable product that is the thinnest of its kind in the world, made possible through a combination of cemented carbide tool and electronic material technologies. We have also developed the following new products, as part of our continuing quest to establish a Materials Premium.

- Large silver alloy and seamless, long cylindrical sputtering targets, based on collaboration between raw material procurement, recycling, melting, casting and rolling technologies, etc.
- New copper alloy MNEX (high performance copper alloy for automotive terminal connectors) and DBA substrate with Ag fired film (high performance insulated circuit board for use in next generation power modules), based on various non-ferrous alloy technologies



Seamless long-sized cylindrical sputtering target Automotive terminal connectors

Topics !

Development of the Flexible Thermistor Sensor

Thermistor sensors are used to detect temperature for various different purposes, including electronic devices, air conditioning systems and automobiles.

In March 2014, we announced that we had developed the world’s first flexible thermistor sensor, a product that is not only bendable but also the thinnest of its kind in the world with a thickness of less than 100µm.

This unique technology of being thin and bendable is expected to open up new applications that have not existed previously.

We were able to achieve such groundbreaking results through a combination of cemented carbide tool and electronic material technologies, or to put it another way, thanks to our Materials Premium.



Flexible Thermistor Sensor

Mitsubishi Materials Group Eco-Products

CLEANBRIGHT discoloration resistant antibacterial copper alloy

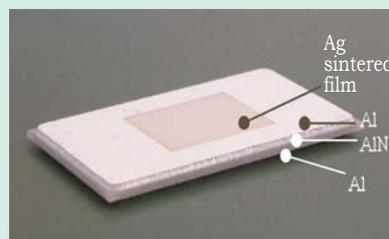
Developed by Mitsubishi Shindoh Co., Ltd., CLEANBRIGHT copper alloy has powerful antibacterial properties and improved resistance to discoloration, meaning that products retain their beauty for a longer period of time. Besides that, it is also roughly twice the hardness compared with steel materials. Door handles made of CLEANBRIGHT have been used in a newly built hospital of Kitasato University, where they have proved popular with hospital staff due to their antibacterial properties and warm color.



CLEANBRIGHT door handles at the newly built hospital of Kitasato University

DBA substrate with Ag sintered film which plating surface preparation is not necessary.

DBA substrates are circuit substrates used for inverter modules. When used in hybrid vehicles, inverter circuit substrates have to operate at high temperatures. Joining high temperature semiconductor devices used to require treatment with Ag plating, which is highly heat resistant. As this substrate has an Ag sintered film however, it is possible to join devices directly. The fact that plating surface preparation is no longer necessary also reduces the environmental impact from the use of plating solution.



DBA substrate with Ag sintered film

Initiatives on Material Issues

We are fully committed to training and harnessing human resources, as the basis of our competitive edge as a company. We provide our employees with opportunities to improve themselves and achieve self-realization, through a range of experiences stemming from our wide ranging business activities and through extensive training programs, and make every effort to create an environment in which employees find their work rewarding.

Basic Approach to Human Resources

We believe that human resources are the cornerstone of corporate growth. That is why our human resource strategy is firmly focused on developing employees' skills and making their work more rewarding. We are committed to passing on the skills and technologies we have built up over the course of our long history in manufacturing to future generations, and aim to develop human resources who are capable of providing society with new forms of added value.

Reinforcing global human resource development

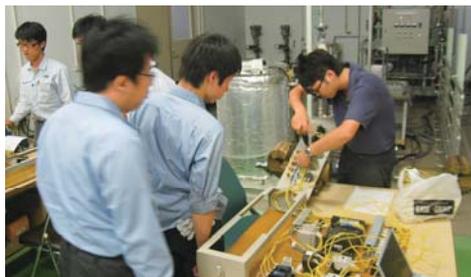
One of the key companywide strategies under our current medium-term management plan is strengthening global competitiveness. With that in mind, we are working to expand and improve our global human resource development activities even further. We select employees who are due to be assigned overseas and young employees who are expected to make a considerable global contribution in the future, so that we can provide them with the necessary training. A total of 121 such employees commenced training in fiscal 2014 and 2015. As part of this scheme, we are planning to provide training for around 300 global human resources over the course of five years from fiscal 2014 onwards.

Passing on skills

In addition to training of new recruits and mid-level employees, and other position-specific training schemes, as a manufacturing company we also provide training in maintenance skills for plant equipment. We make every effort to sustain and improve maintenance skills, in line with the various technologies used on the shop floor as part of our wide-ranging businesses. We

also organize training for Facility Management Engineers, using dedicated equipment to pass on skills and train employees into maintenance specialists*.

*Human resources responsible for maintaining equipment using advanced special skills



Training for Facility Management Engineers

Getting New Recruits Involved in Social Contribution Activities

As part of our induction training for new recruits, in fiscal 2012 we began to get all new recruits actively involved in social contribution activities. The aim of this is to get employees to think about their relationship with society as soon as they join the company, and to give them a high level of CSR awareness as a member of Mitsubishi Materials.

Support for Volunteer Activities

We introduced a volunteer activity support system in August 2013, so that individual employees find their work more rewarding and fulfilling, through participation in activities that contribute to society, and so that we can promote a work-life balance. The system includes measures such as granting leave and assisting with expenses, subject to certain conditions.

Topics !

Global Human Resource Development Framework

We provide the following training as part of our efforts to develop global human resources, focusing particularly on essential language training.

• Training for employees due to be assigned overseas

We provide group training to equip employees with industry-ready skills and expertise, including training in global specialist knowledge by internal instructors and training led by external instructors, covering areas such as overseas crisis management, English contracts, English corporate accounting and international personnel administration.

• Training for young employees

We provide group training designed to raise awareness of overseas operations, and overseas on-the-job training (OJT) to enable employees to build up overseas experience. We are also looking towards development programs for key national staff at overseas facilities in the future, in an effort to secure the human resources we need to strengthen global competitiveness.

| Global Human Resources | | | |
|--|--|---|---|
| Expanding global development for young employees Exploring, devising and implementing development programs for national staff | | | |
| Eligibility | Employees in their 2nd to 8th year with the company | Employees expected to be assigned overseas within two to three years | National staff (locally recruited employees at overseas facilities) |
| Program | Junior Global Program (JGP) | Global Management Program (GMP) | Plans to establish development programs in the future based on specific needs, including in-house company and divisional policies for overseas operations, and policies for making the most of national staff |
| Details | <ul style="list-style-type: none"> Language training Training in awareness, skills and expertise (external instructors) Overseas OJT (2014 onwards) | <ul style="list-style-type: none"> Language training Training in specialist knowledge (internal instructors) Training in skills and expertise (external instructors) | |

Fair Assessments and Feedback

As well as developing human resources, we also want to make work as rewarding as possible for our employees. We therefore produce written definitions and criteria that clearly specify the roles expected of employees and the criteria on which they will be assessed. We use these to assess employees according to their respective role, ensuring that assessments are carried out impartially based on individual performance and achievements, and that everyone is treated fairly. We also make every effort to facilitate employee development and improve in-house communication by providing individuals with feedback based on their assessment results, along with appropriate suggestions and advice from their superior.

Overseas Human Resource Development

In order to expand the Mitsubishi Materials Group's overseas operations with a sense of speed, we need to actively make the most of overseas human resources. With that in mind, we are planning to establish development programs for locally recruited employees at overseas group companies (national staff), based on specific policies aimed at localization and harnessing overseas human resources.

VOICE



Wei Xia
Sales Dept. 1 (Hard Alloy Div.)
Mitsubishi Materials (Shanghai)
Corp.

Human resource development at overseas facilities (Shanghai, China)

I work in sales, providing cutting tools for the metalworking industry in Shanghai and other parts of eastern China.

As well as exchanging information with distributors on a daily basis, I regularly go out to visit customers so that I can learn more about their needs. I also take on board advice from my superiors and senior colleagues, so that I can offer customers the ideal cutting tools and processing methods when they need them most.

There are times when I spend hours on the shop floor, observing cutting tests despite the sweltering heat of mid summer. Even so, the sense of achievement when a customer is able to process products to their requirements using tools I have provided is simply unforgettable.

I hope to become a key member of our sales team, so that I can showcase Mitsubishi Materials (Shanghai) as a comprehensive cutting tool manufacturer throughout China, and keep on increasing sales.

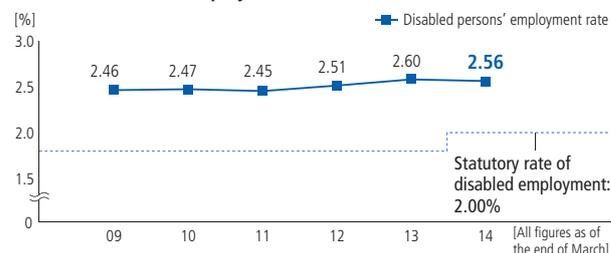
Diversity Initiatives

Promoting Disabled Employment

We provide a suitable environment for disabled employment at our Human Resources Development Center (Saitama), so that disabled employees can engage in rewarding work that gives them a sense of purpose and motivation. We have also introduced a range of ini-

tiatives, including improvement proposal and skill development systems, and our Target Challenge Scheme, in an effort to create workplaces in which disabled employees can work with confidence and pride. Our Only-One Scheme meanwhile is designed to master tasks that are best suited to individual employees, so as to maintain high levels of motivation. In fiscal 2014, we received a President's Certificate from the Japan Organization for Employment of the Elderly, Persons with Disabilities and Job Seekers (JEED), in recognition of our efforts as an outstanding workplace for disabled employees.

Disabled Persons' Employment Rate*



Rehiring the Recently Retired

In 2004 we introduced a rehiring program designed to give retired employees who wish to work the opportunity to find reemployment at one of our offices or affiliated companies, enabling us to continue to benefit from the skills and expertise of employees who have reached mandatory retirement age. A total of 49 people* were newly rehired as part of this program during 2013.

We are considering reviewing this scheme in consultation between labor and management, in light of changing employment conditions for people aged 60 or over.

Topics

Greater Roles for Female Employees

We have made it one of our key management strategies to harness a diverse range of human resources. We are particularly focused on recruiting more female employees, and organize presentations exclusively for female students as part of our graduate recruitment activities. To precisely address the concerns of female students, including their perception of working for Mitsubishi Materials and how they envision their future, we provide opportunities to talk to female employees who are in managerial positions whilst also raising children. Positive feedback from participants has included comments such as "it was incredibly helpful to hear directly about maternity and childcare leaves and how they are actually used, and about the atmosphere within the company."

We are also planning a wider range of schemes to enable female employees to play a greater role and maintain a work-life balance, including support schemes for employees raising children and initiatives to reduce working hours.

P.63



Presentation for female students

Respect for Human Rights

Basic Approach

One of the articles of our Code of Conduct states that “we will respect the basic human rights of all people and create a spirited, safe and comfortable work environment”. As well as ensuring that we respect the dignity of each and every individual, and preventing any infringement on their honor or privacy, we also make sure that we do not discriminate unfairly based on race, gender, religion, nationality or any other factors not related to the relevant individual’s abilities and performance. To achieve that, we organize human rights awareness training on an ongoing basis in order to encourage individual employees (including short-term, part-time, temporary and contract employees) to take a personal interest in human rights issues, and to ensure that they maintain a deep-rooted awareness of the importance of human rights as part of their day-to-day activities, based on a resolute determination not to engage in, allow or tolerate any form of discrimination. As a result of promoting human rights awareness training on a companywide scale, 3,051 employees underwent a combined total of 3,900 hours of training during fiscal 2014.

Preventing Harassment

Sexual, power-related and other forms of harassment can stifle employees’ enthusiasm and erode an otherwise congenial working environment. We believe that stepping up educational and training programs, and implementing a range of preventive and response measures, are both effective ways of combating harassment. In addition to operating an Internal Contact Office, we also appoint in-house supervisors at each of our facilities to provide employees with advice on sexual harassment, and have established an externally operated independent consultation service to ensure that all matters are handled appropriately. (Consultation services were contacted with regard to 11 matters during fiscal 2014)*.

VOICE

Training instructors for human rights awareness training



Kiyoshi Take, General Manager (left)
Kaoru Mishima (right)
Human Rights Advancement Group
Human Resources Dept.

In 2013, we began to run instructor training courses for human rights training, with the aim of producing instructors capable of training Mitsubishi Materials and Mitsubishi Materials Group employees, so as to raise awareness of human rights on a groupwide basis. Human rights awareness training in 2014 focused on the theme of preventing sexual harassment and included discussions between participants based on case studies. The aim was to appreciate how individuals think and perceive things differently, and to encourage participants to rethink their own words and actions. A total of 103 supervising instructors underwent training in the spring of 2014.

Work-Life Balance

We are committed to creating working environments that enable our employees to strike a balance between their work and their private lives. We make every effort to establish and continually improve a range of support schemes to ensure that individual employees are able to advance their careers and take on challenging jobs at work, whilst also taking care of their obligations at home and in the community, including everything from giving birth, raising children and looking after relatives through to local community activities.

Strengthening Childcare Support Systems

We operate a range of childcare support systems that go above and beyond legal requirements. As well as allowing employees to work reduced hours until their children reach third grade in elementary school, in January 2014 we introduced the new practice of partial paid leave for employees nursing children and established a childcare subsidy system. We have also introduced a lump sum system to facilitate a quick return to work after taking childcare leave, with the aim of supporting a wide range of working patterns and encouraging male employees to take childcare leave too.

■ Use of Major Systems (FY2014)*

| Breakdown | Men | Women | Total |
|--|-----|-------|-------|
| Percentage of paid holidays taken | — | — | 83.3% |
| Number of employees taking maternity leave | — | 21 | 21 |
| Number of employees taking childcare leave | 2 | 38 | 40 |
| Number of employees taking leave to care for a family member | 1 | 0 | 1 |
| Employees using the childcare subsidy system | 35 | 30 | 65 |

Initiatives to Reduce Working Hours

Having established an exploratory committee on reducing working hours, consisting of both management and employees, we are working to reduce out-of-hours work and encourage employees to take paid leave, in line with actual operations at each of our facilities. Average annual work hours for union members were projected at 2,015 for 2013. As a result of effective initiatives such as No Overtime Day and Paid Leave Day however, the actual total came to 1,999 hours (a reduction of 29.6 hours compared to the previous year).

VOICE

Comments from an employee who has used childcare support systems



Haruki Saeki
Alloy Manufacturing Dept., Gifu Plant

When my eldest daughter was eight months old, we found out that we were expecting a second child. I wanted to do my bit to ease the strain on my wife, who was unwell from the initial stages of pregnancy until shortly before the birth. After feeding and bathing my daughter and getting up in the night when she was crying, as well as doing household chores, I realized just how tough it is to strike a balance between work and raising children. That’s why I took a month and half childcare leave.

I was truly grateful for the opportunity to spend this precious time with my wife and daughter, not only to my superiors and colleagues for their understanding, but also to the company for its lump-sum return to work scheme and other excellent systems.

Welfare

Wellness Leave

We allow our employees to carry over up to five days of unused paid leave each year, up to a maximum of 45 days, and then use those days to take "wellness leave".

Employees can use wellness leave for purposes such as recuperating from illness or injury, caring for family members, taking part in volunteer activities or attending medical examinations. Employees working away from their families meanwhile can take leave to go back home to visit. We are working to extend this system even further in fiscal 2015, including extending eligibility to in- and out-patient fertility treatment.

Optional Welfare Scheme

We have introduced an optional welfare scheme in an effort to cater to our employees' increasingly diverse needs. Figures show that the number of employees using this scheme under each option, to go traveling or provide support, rose to 80% in fiscal 2014. Clearly, a great many employees are using the scheme to spend time with their families.

Supporting In-house Regional Events

We promote exchange through sporting activities, both inside and outside the company, and support sporting events organized by employees, by assisting with expenses for instance, in an effort to breathe new life into club activities. A great many employees take part in futsal (five-a-side football) tournaments, regattas and other such competitions organized every year.

Employment Statistics (As of March 31, 2014)*

Payroll (full-time equivalent)

| Breakdown | Full-Time Employees | Temporary Staff |
|-----------------|---------------------|-----------------|
| Nonconsolidated | 4,183 | 901 |
| | 23,112 | |
| Consolidated | | 5,114 |
| | Japan 15,526 | |
| | Overseas 7,586 | |

Employee numbers according to location (consolidated)

| Location | Employees |
|---------------|-----------|
| Japan | 15,517 |
| Asia | 4,260 |
| North America | 2,851 |
| Latin America | 32 |
| Europe | 428 |
| Oceania | 24 |
| Total | 23,112 |

Breakdown of Employees (full-time equivalent)

| Breakdown | Managerial staff* | Regular employees | Total | (Average service) | (Average age) |
|-----------|-------------------|-------------------|-------|-------------------|---------------|
| Men | 1,134 | 2,622 | 3,756 | 17.6 years | 42.0 years |
| Women | 15 | 412 | 427 | 13.4 years | 39.6 years |
| Total | 1,149 | 3,034 | 4,183 | 17.2 years | 41.7 years |

* Percentage of women in management positions: 1.30%

Labor Union and Management Partnership

Our union shop scheme enables us to establish a shared awareness by providing regular opportunities to report on and discuss issues such as management performance and operating conditions between labor and management. We also make time to fully explain and consult on measures such as business restructuring.

As of the end of March 2014, the number of union members amongst those employed directly by Mitsubishi Materials (including employees on assignment) stood at 3,452. Including group companies, the total number of members was 6,293.



Central Labor-Management Conference

Employee Training

| Total hours of training (annual) | Average hours per employee (annual) |
|----------------------------------|-------------------------------------|
| 80,779 hours | 19 hours |

Graduate Recruitment

| Breakdown | Graduate recruitment | |
|-----------|--|-----------------------|
| | University graduates (including graduate school) | High school graduates |
| Men | 61 | 61 |
| Women | 10 | 10 |
| Total | 71 | 71 |

* We ensure fair treatment irrespective of gender, with no difference in benefits or wages between male or female employees.

Employee Turnover (employees leaving the company in FY2014)

| Breakdown | | Aged under 30 | Aged 30-49 | Aged 50 or over | Total |
|-----------|----------|-------------------------------------|------------|-----------------|-------|
| | | Number of employees leaving company | Men 16 | 57 | 112 |
| | Women 6 | 3 | 7 | 16 | |
| | Total 22 | 60 | 119 | 201 | |
| Turnover | Men | 2.3% | 2.9% | 10.0% | 4.9% |
| | Women | 7.8% | 1.1% | 9.6% | 3.7% |
| | Total | 2.8% | 2.7% | 10.0% | 4.8% |

Efforts to Create Safe, Pleasant Workplaces

We take the fire and explosion that occurred at our Yokkaichi Plant in January 2014 extremely seriously, and are joining forces as a group to create working environments that are safer, more secure and as pleasant as possible, both mentally and physically.

Learning from the Accident at our Yokkaichi Plant

We are committed to promoting safety and health activities, based on our underlying philosophy of ensuring safety and protecting people's health in everything that we do. The fact that a fire and explosion nonetheless occurred at our Yokkaichi Plant is something we take extremely seriously. As a result, we have fundamentally reviewed all of our existing initiatives.

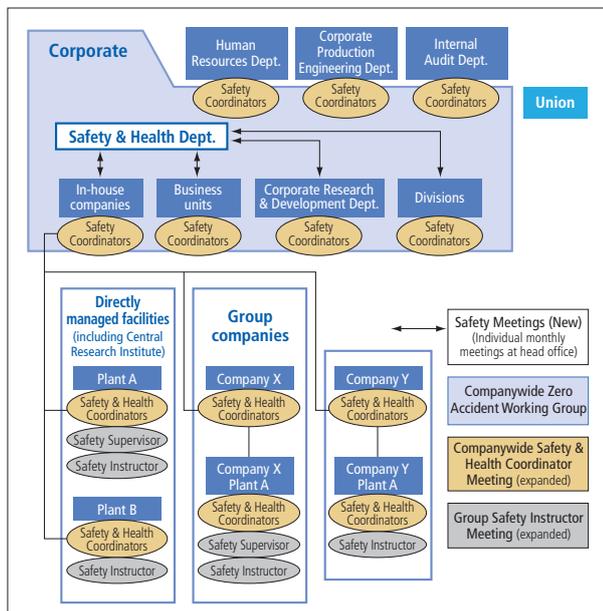
Based on recommendations from the Accident Investigation Committee, we have revised our safety management policy as detailed below, including essential systems and preventive measures.

Establishing a New Framework

We began restructuring our groupwide safety management framework in March 2014, by strengthening the capabilities and authorities of our existing Occupational Safety & Health Department and establishing an independent Safety & Health Department. We now hold monthly Company Safety Meetings at each of our in-house companies. Meetings include monthly reports from relevant manufacturing facilities and group companies, and provide an opportunity to share information, give detailed advice and follow up on previous initiatives.

Corporate divisions at Mitsubishi Materials are also getting more involved in group companies, through activities such as Group Safety Meetings attended by the heads of safety departments from group companies, as we continue to work in partnership between labor and management.

Framework



New Companywide Zero Accident Project

Having substantially reviewed existing zero accident activities, in April 2014 we launched the new Companywide Zero Accident Project. We have expanded the scope of activities and are now working on a groupwide basis.

Outline of the New Companywide Zero Accident Project

- Conducting full safety inspections, including manuals, operating procedures, etc.
- Assigning Safety Instructors and Supervisors to group companies
- Sharing information through Company Safety Meetings, Group Safety Meetings, Group Safety & Health Coordinator Meetings, etc.
- Organizing workplace tours, seminars and other such activities led by outside consultants
- Providing safety training for partner companies and contractors
- Looking into award and warning schemes

Conducting Full Safety Inspections on Operating Procedures

To start with, we conducted full inspections into safety standards across manuals, operating procedures and other documentation at all group facilities, taking three months to complete the confirmation process. Details were then revised for any potential risks identified during that process, including explosions, fires, falling, flying debris, electrocution, and getting caught in machinery, and improvements made to methods and equipment as quickly as possible. The Safety & Health Department visited individual facilities in turn, to check details that had been revised as a result of inspections, and to provide guidance if necessary, in an effort to minimize risks.

Assigning and Passing on Skills of Safety Instructors and Supervisors

We have started to assign Safety Instructors and Supervisors to group companies as well as directly managed facilities, as previously. Having earmarked 78 facilities with manufacturing departments as "priority management sites," we have appointed experienced employees at each site as Safety Instructors, tasked with advising plant management and passing on skills to younger employees.

Safety Instructors visit individual workplaces giving employees, including those at partner companies, advice on safety and on unsafe equipment and practices. They also engage in active communication in the workplace and make every effort to precisely identify problem areas.

For facilities that have been singled out by their prefectural labor bureau as requiring special guidance on safety and health management, or other such measures, and facilities where fatal accidents have occurred, we assign Safety Supervisors with greater authority than Safety Instructors. The aim is to reinforce safety management and promote safety activities. We organize meetings

for Safety Instructors and Supervisors twice a year, so that they can share information on initiatives at individual plants.

Sharing Information at Group Safety & Health Coordinator Meetings

We are also planning to extend the scope of biannual Safety & Health Coordinator Meetings to include group companies in the future, in the form of Group Health & Safety Coordinator Meetings. As well as allowing coordinators to exchange opinions, meetings enable group discussion regarding actual accidents and other such subjects. They are designed to improve the skills of Safety & Health Coordinators, to share information on case studies and accidents at individual plants, and to promote and roll out safety activities throughout the group.

Hiring Outside Consultants to Improve Training Standards

We are continuing to hire outside consultants to carry out workplace patrols and deliver seminars, with the aim of providing objective recommendations and advice regarding safety management.

We are also providing and reinforcing safety training for members of staff from partner companies and contractors, to the same standard as training for our own employees. This includes additional KY (*kiken yochi* – hazard prediction), near miss and risk simulation training.

COMMITMENT



Hiroaki Anzai
Executive Officer
General Manager, Safety & Health Dept.

Pledging to prevent accidents and fundamentally reviewing safety management

Five of our colleagues lost their lives as a result of a fire and explosion at our Yokkaichi Plant on January 9, a date that will live on in our memory for as long as we remain in business.

Having restarted operations at the plant at the end of June, we have renewed and deepened our appreciation of the importance of safety. We are determined to apply that to every one of our tasks on a day-to-day basis.

As the General Manager of the Safety & Health Department, a newly created department tasked with spearheading preventive measures, I intend to do everything in my power to prevent accidents, improve safety training and enforce safety measures. I am determined to establish a culture of safety throughout the group, in dedication to those who lost their lives.

The accident at the Yokkaichi Plant highlighted a number of issues with regard to group safety measures, including a lack of communication between departments, insufficient training and failure to enforce safety management. Under our new Zero Accident Project, we will learn from these crucial lessons and redouble our efforts for the future, in terms of both mechanisms to enforce safety management and individual levels of safety awareness.

We can never do too much when it comes to safety initiatives. We will continue to dedicate ourselves to identifying new issues on a daily basis.

Initiatives in 2013

Every year, we carry out safety and health activities with the aim of achieving “zero accidents”, in accordance with our annual companywide safety and health management priorities. In 2013, we carried out activities based on the following priorities.

2013 Companywide Safety and Health Management Priorities

Effectively implement Occupational Safety and Health Management Systems (OSHMS) in order to improve standards of occupational safety and health

1 Prevent occupational accidents

- (1) Improve management of irregular procedures
 - Confirm safe operating procedures and methods in advance
 - Clearly reinforce safe operating instructions
 - Monitor compliance with operating methods and instructions
- (2) Improve skills
 - Expand, evaluate and improve safety and health training
- (3) Improve equipment and procedural safety
 - Improve operating methods based on risk assessment results and continue to improve machine safety

2 Create mentally and physically pleasant workplaces

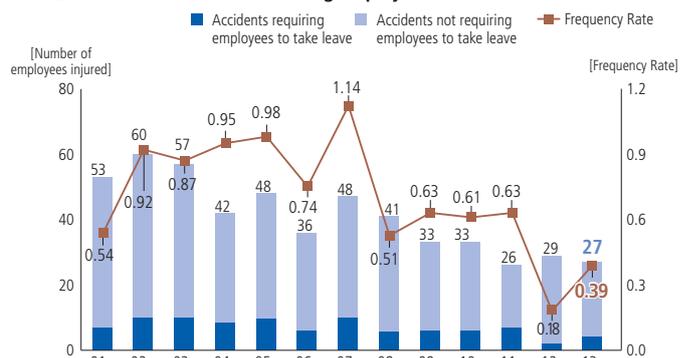
- (1) Step up companywide mental healthcare initiatives
- (2) Continue to improve working environments in order to prevent work-related diseases, and to maintain and improve workers' health

Safety Record

The total number of employees involved in accidents has remained at roughly the same level over the last few years. The number of employees involved in accidents with lost-days or fatalities was four, with two of those sadly losing their life (totals are based on calendar years and therefore do not include the accident at the Yokkaichi Plant).

Compared to 2012, there were more accidents as a result of failure to sufficiently identify risks in advance, including operating machinery incorrectly and standing too close to hazards. We will continue to reinforce risk assessments in 2014, as well as taking on board lessons learnt from the Yokkaichi Plant accident.

Number of Accidents Involving Employees*



* Figures based on calendar years [Calendar Year], figures do not include minor accidents

Procurement and Supplier Initiatives

Working in accordance with our CSR Procurement Guidelines, we procure raw materials via a global supply chain, with the assistance of countless suppliers. As part of our procurement activities, we also pay close attention to issues such as conflict minerals and the impact that our overseas mining development operations have on human rights and the local environment.

Basic Approach

As a comprehensive materials manufacturer, we work in partnership with stakeholders throughout the supply chain and rely on assistance from a wide range of suppliers in order to procure the raw materials we need. We aim to build close relationships with all of our suppliers when procuring materials meanwhile, ensuring that all transactions are fair, avoid corruption, comply with the law, and take into account issues such as human rights.

Formulating Procurement & Logistics Division CSR Procurement Guidelines

We formulate green procurement guidelines that are suitable for each manufacturing facility, and are constantly working to ensure full compliance with regulations governing hazardous substances contained in our products. In an effort to reinforce the organizational capabilities of our Procurement & Logistics Division, with regard to compliance and other CSR priorities, we formulated and introduced a set of Procurement & Logistics Division CSR Procurement Guidelines in June 2009. [WEB](#)

We are currently in the process of explaining our guidelines and requesting compliance, starting with major suppliers whom we have signed basic business contracts. We have provided explanations to a total of 605 companies so far (as of fiscal 2014). With interest in CSR on the increase, as evidenced by the recent focus on the issue of conflict minerals, we intend to continue with initiatives such as these in the future.

Raw Material Procurement Initiatives

Given that we procure large quantities of natural resources from around the world to use as raw materials, we pay particular attention to the countries and regions that produce and supply those materials. We attach the utmost importance to sustainable development initiatives, focusing on areas such as environmental preservation, the human rights of local residents, and employment and labor issues.

CSR Requirements for the Procurement of Materials from Overseas Mines, etc.

As Mitsubishi Materials is a non-operator that does not operate any mines directly, we procure the majority of our copper ore from overseas mines in which we invest. We have nonetheless signed up to the International Council on Mining and Metals (ICMM, [P.74](#)) and are committed to fulfilling our responsibilities as a company engaging in global procurement activities.

► Consideration for local communities, including human rights and the environment

If we have interests in a mine over and above a certain scale, we assign members of staff and go out of our way to engage in dialog with local residents and members of the local community, through advisory committees for example. [P.42](#)

Our Metals Company meanwhile makes every effort to monitor conditions at its suppliers, through measures such as implementing CSR procurement and investment standards, and conducting regular surveys, and advises mine operators to make improvements if necessary. We are determined to reduce environmental impact throughout our global supply chain and are constantly working to ensure that we are in no way complicit in human rights violations.

Reinforcing Initiatives in Response to the Issue of Conflict Minerals [WEB](#)

In an effort to prevent minerals mined in the conflict-stricken 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, the US Securities and Exchange Commission (SEC) has classified tin, tantalum, tungsten and gold as "conflict minerals." As a result, all companies listed in the US are required to disclose whether their products contain such minerals along with details of producing countries.

■ Responsible procurement of minerals and smelting operations

In June 2011, our Metals Company pledged its support for activities carried out as part of EITI*¹. Having been working to tackle the issue of conflict minerals since 2012, we also obtained certification from the LBMA*² in August 2013, confirming that we use conflict-free minerals in our gold products. In February 2014, we obtained CFS*³ certification from the EICC, indicating that all of the tin we use is conflict-free. [Data Book P.19](#)

In addition to all this, group company Japan New Metals Co., Ltd., whose operations include refining tungsten, is working with the international industry organization TI-CMC*⁴. As well as monitoring conditions at its

suppliers in China, by going out to visit sites in person, it is calling on all suppliers to obtain external certification for the use of conflict-free minerals. Japan New Metals is also working to obtain certification itself.

■ Establishing a shared awareness of human rights issues throughout the supply chain and strengthening companywide measures

Establishing a fundamental understanding of human rights issues throughout the supply chain is key to tackling the issue of conflict minerals. We have therefore established a stronger, more wide-ranging shared awareness at all levels throughout the group, through initiatives such as seminars for management staff and CSR training for employees, including those at group companies. In July 2013, we formulated a Companywide Policy on Conflict Minerals, to ensure that we deal with this issue appropriately on a companywide scale. We also hold information-sharing meetings between related departments, as part of our varied approach to tackling this issue.



CSR training

*1 Extractive Industries Transparency Initiative (EITI) <http://eiti.org/>

*2 The London Bullion Market Association (LBMA) <http://www.lbma.org.uk/responsible-gold>

*3 Conflict-Free Smelter (CFS) Program, an external certification scheme put forward by the Electronics Industry Citizenship Coalition (EICC) <http://www.eiccoalition.org/>

*4 Tungsten Industry-Conflict Minerals Council (TI-CMC) <http://www.ti-cmc.org/index.asp>

Reinforcing Product Quality Management

We have formulated a companywide quality policy, and carry out companywide quality control and assurance activities based on quality management systems in accordance with ISO 9001, in order to provide superior quality products that our customers can use with confidence

Promoting Companywide Quality Activities

Basic Approach to Companywide Quality Activities

We are committed to establishing a comprehensive quality assurance system, covering everything from the design and development stages through to manufacturing and shipping, and ensuring that our products are safe and reliable, in accordance with our Code of Conduct. With that in mind, we have set out a companywide quality policy with an emphasis on supplying first-rate products that guarantee customer satisfaction. We also promote companywide quality activities based on the principles of quality control and quality assurance outlined under the ISO 9001 standard for quality management systems (QMS). We have now obtained ISO 9001 certification at all of our manufacturing sites.

Companywide Quality Meetings

We exchange information through quality committees and meetings in order to monitor progress with activities and improve QMS at in-house companies and other organizations. We gather quality-related information from group companies and in-house companies every quarter, so that information can be shared. We also hold regular quality meetings with each company, to keep track of the latest developments. We go out to visit 26 facilities, including group companies, to check on progress with activities and gather information on successful initiatives, so that they can be rolled out throughout the group.



Quality meeting

Quality Management in the Jewelry Sector (MJC) and throughout the Supply Chain

Our MJC jewelry range specializes in providing outstanding quality at reasonable prices. To enable us to provide such high added value products, we carefully control the quality of all items throughout the supply chain, from manufacturing raw materials through to processing and distributing finished products.

We address the issue of conflict diamonds by confirming compliance with the Kimberley Process*, to ensure that we do not obtain stones from unlawful channels. Other initiatives include metal allergy measures, ensuring traceability and complying with the Washington Convention. Having formulated our own Jewelry Quality Rule Book, we are committed to raising awareness amongst our main suppliers (approx. 120 companies) and organize quality meetings every year to ensure that they are adhering to our strict quality rules.

*Introduced in Japan in January 2003, the Kimberley Process is an international certification scheme designed to combat illegal trade in rough diamonds, used to fund conflict. It prevents member countries (approx. 69) from importing stones that do not have a certificate of origin. Consumers can require proof that the products they are purchasing from retailers do not contain conflict diamonds.

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.

Tightening 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 successfully completed registration of three substances covered under REACH regulations*¹ by June 2013. We are also compliant with the CLP Regulation*². We submitted our 2013 notification for substances covered under the revised Chemical Substances Control Law*³ meanwhile in June 2014.

*¹ REACH (Registration, Evaluation, Authorization and Restriction of Chemicals): EU regulation that governs the registration, evaluation, authorization and restriction of chemicals manufactured within or imported into the EU.

*² CLP Regulation: EU regulation on the Classification, Labeling, and Packaging of substances and mixtures

*³ 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.

Impact Assessments at the Development and Prototype Stages

We carry out in-depth research and development reviews (RDR) at four key stages, when exploring R&D themes and also at the market analysis, prototype and commercialization stages. We meticulously examine all of our products from the very beginning, including checking for the use of harmful chemical substances, guaranteeing that the products meet customers' requirements and ensuring legal compliance, and make sure that product safety is always our top priority during development.

Using Safety Data Sheets (SDS)

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

Safety Measures at the Logistics Stage

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

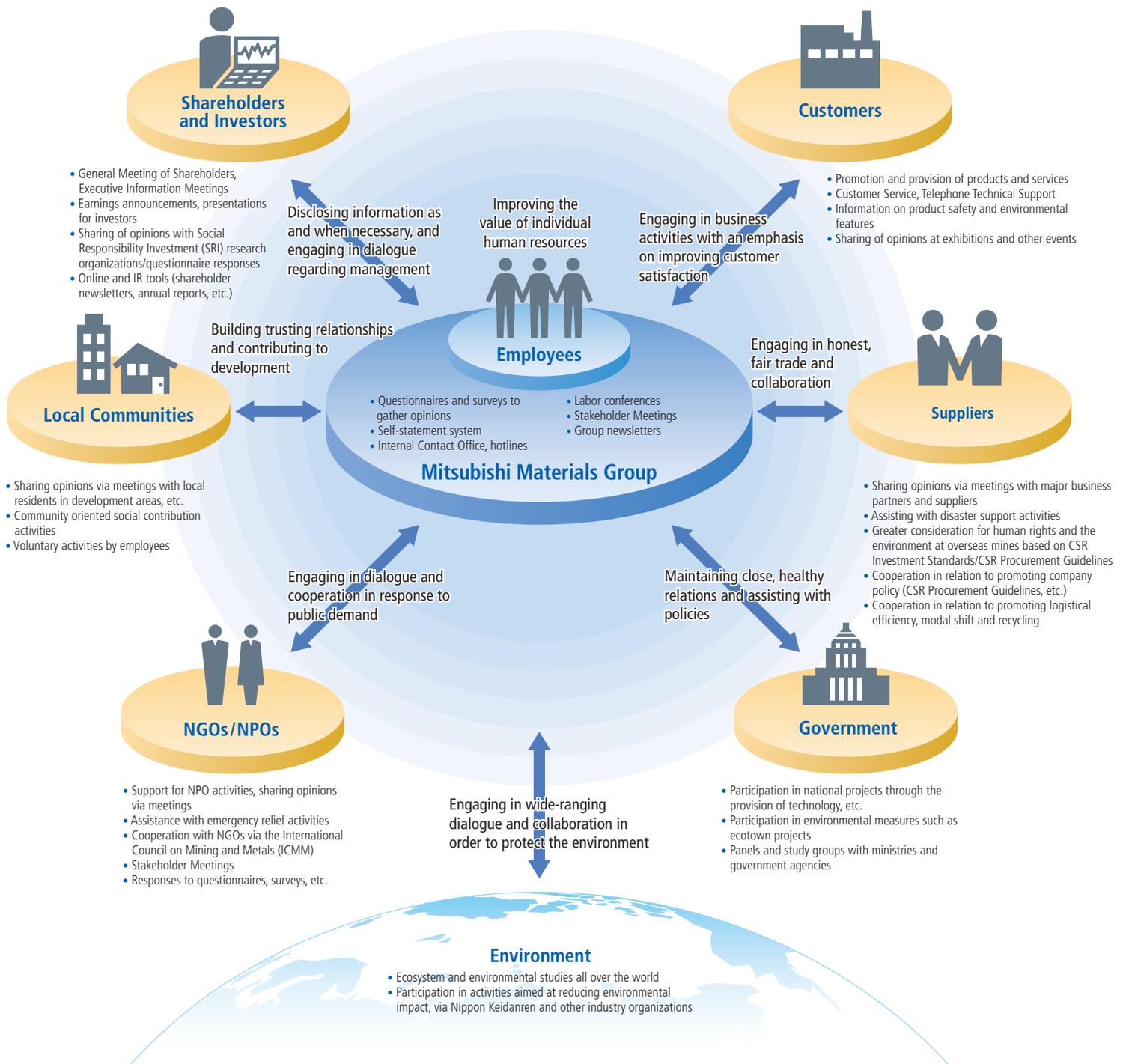
Thanks to all of the above initiatives, there was no breach of the law relating to product safety and the provision of products and services during fiscal 2014.

Interaction with Stakeholders

One of the objectives outlined in our CSR Direction is to strengthen communication with stakeholders. As well as creating a wide range of opportunities for communication and striving to improve levels of mutual understanding, we also make every effort to incorporate stakeholder feedback into our management activities.

Basic Approach to Building Relationships with our Stakeholders and Key Means of Communication

In the interests of sustainable corporate management, we believe that communicating with our stakeholders is crucial if we are to reflect their expectations and requirements in our business strategies and activities. Through the process of identifying material issues (P.31) and other such initiatives, our aim is to incorporate stakeholders' perspectives into our management practices to a greater extent than ever before.



Response to Key Comments from Stakeholders

We consider comments and suggestions from our stakeholders to be an invaluable source of information, which we can then use to improve our CSR activities and CSR Reports. We have launched a number of initiatives in response to key comments regarding our 2013 CSR Report and group activities during fiscal 2014, including the following.

| Key comments and their source | | Group response |
|---|--------------|--|
| Preventing accidents and reinforcing safety measures | ⑤ ⑥ | <ul style="list-style-type: none"> Investigating the causes of the fire and explosion at the Yokkaichi Plant (via an Accident Investigation Committee including outside experts and specialists) and taking preventive measures P.10 Fundamentally reviewing groupwide safety measures and reinforcing preventive measures P.65 |
| Continuing to expand and improve resource recycling initiatives | ① ② ③ ⑤ ⑥ | <ul style="list-style-type: none"> Explicitly "pursuing a recycling-oriented business model" as part of our medium-term management plan and promoting recycling operations P.27 Launching new environmental recycling businesses (automobile recycling business, business of rehabilitating dumpsites) P.19 P.27 |
| Promoting measures to combat global warming (especially from a long-term perspective) | ① ② ③ ⑤ ⑥ | <ul style="list-style-type: none"> Implementing continuous, multi-faceted initiatives to save energy and reduce CO₂ emissions at all production facilities P.52 Promoting the use of sustainable energy (geothermal, ground source, hydraulic, solar) over the medium to long term P.13 P.54 Developing and providing environmental technologies and products that will help to save energy and reduce CO₂ emissions P.59 |
| Preserving biodiversity (company-owned forests, areas around mines) | ② ③ ⑤ ⑥ | <ul style="list-style-type: none"> Obtaining SGEN certification for company-owned forests and promoting sustainable forest management P.58 Confirming that biodiversity has been factored into mines in which we invest, and carrying out preservation activities at facilities located adjacent to national parks P.57 |
| Greater focus on human rights throughout the supply chain | ② ③ ⑥ | <ul style="list-style-type: none"> Calling on even more suppliers to comply with our Procurement & Logistics Division CSR Procurement Guidelines P.67 Promoting communication with local communities around mines in which we invest, and taking into account human rights, subsistence rights and the natural environment P.42 P.67 Stepping up efforts to tackle the issue of conflict minerals and expanding disclosure P.67 |
| Developing human resources capable of tackling global issues | ② ③ ⑥ | <ul style="list-style-type: none"> Continuing to step up global human resource development P.61 Developing and harnessing overseas human resources P.62 |
| Contributing to recovery from the Great East Japan Earthquake | ② ③ ⑤ ⑥ | <ul style="list-style-type: none"> Accepting and reusing disaster waste at our cement plants, and turning copper slag into concrete aggregate and other construction materials P.20 Participating in decontamination operations in Fukushima, and carrying out research and development to find medium-to long-term solutions to help restore the environment P.20 |
| Expanding the scope of quantitative data included in reports | ② ④ | <ul style="list-style-type: none"> Expanding the scope of disclosure for environmental and CO₂-related data in phases (broadly scheduled for completion in our 2015 report) and preparing to expand the scope of social data P.49~P.52 |
| Reviewing important aspects of our CSR Report | ② ③ ⑥ | <ul style="list-style-type: none"> Reexamining material issues affecting the group |

① Stakeholder Meeting, ② independent assurance/third party assessment, ③ reader questionnaire (including group employees), ④ SRI survey, ⑤ dialogue with local communities, etc., ⑥ expectations/requests from suppliers, customers, NGOs, etc.

Distribution of Economic Value to Stakeholders*

As we continue to generate our operating revenue thanks to the involvement of our many and varied stakeholders, we believe that it is important to fulfill our social responsibilities and adequately distribute that revenue amongst our stakeholders. The table on the right breaks down our generated economic value structure for fiscal 2014 on a non-consolidated basis and calculates the distributed economic value to our stakeholders.

After subtracting ¥724.4 billion in operating costs, including payments made to suppliers, from our total revenue, economic value came to ¥93.6 billion. Personnel costs, which includes statutory welfare expenses and represents the portion of revenue distributed to our employees, came to ¥35.9 billion, with obligations relating to unfunded lump-sum severance payments plan and funded defined benefit pensions plan totaling ¥33.5 billion and ¥38.6 billion respectively. ¥53.2 billion of this total was paid out in the form of pension assets to outside funds (coverage: 73.7%). A further ¥8.0 billion was registered as expenses in the form of accrued retirement benefits, with the remaining ¥10.9 billion classed as unrecognized benefit obligations. We plan to amortize all unrecognized benefit obligations over the next ten years.

We distributed a total of ¥5.0 billion to creditors in the form of interest on borrowings. We paid ¥10.2 billion to the government, includ-

ing income tax and other taxes and public dues liable as expenses. We received ¥14.4 billion in grants, subsidies and other financial assistance from the government. We gave back a total of ¥0.1 billion to the community in the form of social contribution activities, including donations, the public lending of our facilities (to support community infrastructure) and the provision of employees' services.

| Revenues | Stakeholder | (million yen) | Basis |
|----------|---|---------------|---|
| | Customers and suppliers | 818,028 | Net sales, non-operating income, extraordinary income |
| Payments | Stakeholder | (million yen) | Basis |
| | Suppliers associated with operating costs, etc. | 724,426 | Cost of sales and selling, general and administrative expenses, with the exception of personnel costs, tax and public charges and donations |
| | Employees | 35,874 | Personnel costs |
| | Shareholders | 7,864 | Cash dividends paid |
| | Creditors | 5,002 | Interest expense |
| | Government | 10,218 | Income tax and other taxes and public charges liable as expenses on income statement |
| | Community | 131 | Donations, etc.* |
| | Retained earnings | 34,513 | Net income minus cash dividends paid |

* Calculated based on the value of items such as donated goods, public lending of our facilities and the provision of employees' services as well as cash donations, as specified by Nippon Keidanren.

Communication with Shareholders and Investors

We make every effort to ensure timely and appropriate disclosure, by means such as General Meetings of Shareholders, presentation meetings and other IR tools, so that our shareholders and investors have a thorough understanding of our operations and continue to support us over the long term.

Through General Meetings of Shareholders and Executive Information Meetings

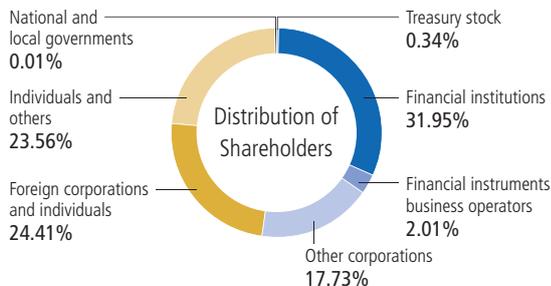
General Meetings of Shareholders

We regard our annual General Meeting of Shareholders as an invaluable opportunity for management staff to talk directly with shareholders. That is why we send out a convocation notice as early as possible, and provide details on our website, so that our shareholders have sufficient time to think about matters due to be reported and resolved at the meeting. We have continued to expand our efforts to disclose information since 2012, by posting information on our website even earlier and adding new content to information sent out with our annual business report, including details of our policy on executive pay and corporate governance.

As well as enabling shareholders to exercise their voting rights in writing or online, we also use an electronic voting platform for institutional investors both in Japan and overseas.

In the General Meeting of Shareholders, we use slides and narration to help make the contents of our presentations easier to follow. We also publish shareholder voting figures for all resolutions immediately after the meeting, via channels such as our website.

Distribution of Shareholders



Executive Information Meetings

Since fiscal 2004, we have invited shareholders to stay after the General Meeting of Shareholders for an executive information meeting. At the executive information meeting in June 2013, senior management staff gave a presentation outlining our operations. We also used the meeting as a forum to enable attending shareholders to talk freely and openly to senior management and other business managers whilst looking at our products and display panels. We will continue to focus on promoting mutual communication with our shareholders in the future.



Communication at the executive information meeting

Through Various Information Meetings

We organize earnings information meetings for institutional investors and securities analysts to coincide with our quarterly earnings announcements. In addition to providing a breakdown of our earnings and explanations regarding matters such as management policy, we also accept questions and comments from participants so as to reflect their views in our IR activities via channels such as feedback to management. We also organize facility tours on an ongoing basis and arrange interviews with institutional investors and securities analysts at home and abroad. As exercises in active communication, such interviews enable us to clarify operating strategies and other aspects of our business and engage in constructive exchanges of opinions.

We began participating in information meetings for individual investors in fiscal 2010, and are committed to maintaining an active IR schedule and ensuring adequate disclosure in the future, for the benefit of all of our investors.



A presentation at this year's executive information meeting (President Yao)

IR Activities in Fiscal 2014

| Description | Number of times during fiscal 2014 |
|---|------------------------------------|
| Interviews with institutional investors | 195 |
| Overseas IR visits (Europe, USA, Asia) | 46 |
| Facility tours for institutional investors | 6 |
| Earnings information meetings for institutional investors | 4 |
| Corporate information meetings for individual investors | 6 |

Through IR Tools

Mitsubishi Materials maintains an IR page on its Japanese website and uploads pertinent corporate information, such as fiscal results, news releases and information meeting materials, on a timely basis. We are committed to adequately disclosing information for non-Japanese investors, particularly those abroad, by posting content such as fiscal results and English versions of our annual reports on our English website.

To elicit an accurate perception of the current status of the Mitsubishi Materials Group, we will continue to utilize IR tools to disclose information in a timely and appropriate manner.



Material Tsushin (Interim report for the year ended March 2014)

Communication with Customers

We make every effort to adequately disclose product information and maintain close communication with our customers to improve levels of customer satisfaction (CS).

We also use customers' comments to help us improve the quality of our products and develop new products.

Adequate Disclosure of Product Information and Communication

In addition to sorting information on our wide range of products according to sector and publishing it in an easy to understand format via media such as our website and product leaflets, our Corporate Marketing & Overseas Business Development Department also plays a crucial role in terms of two-way communication with our customers, acting as a one-stop shop providing them with all the information they require and promptly dealing with inquiries. We always try to provide accurate information on our products and operations as part of our advertising and marketing communication activities, in accordance with our Code of Conduct, and take great care to avoid misleading our customers.

Improving Customer Satisfaction

Metals

We strive to achieve customer satisfaction by providing products and services that meet our customers' needs. With more and more home appliances and electronic devices being recycled in recent years, in all corners of the world, we are focusing on processing waste substrates containing precious metals (gold and silver slag). Operations take place at our Naoshima Smelter & Refinery, which introduced a new online system for customers in 2014, called "NEWS". This will enable us to process transactions quickly and smoothly online, from making appointments to bring in gold and silver through to checking progress and payment details.

Advanced Materials & Tools

At our Machining Technology Center, we provide various technical support to help our customers use our cutting tools correctly and efficiently. Services include organizing seminars to improve knowledge of tools, offering cutting demonstrations and technical services to ensure that tools are being used efficiently, and a toll-free technical advice line.

We believe that support activities such as these are important because they help to resolve difficulties and issues facing our customers, and give us an accurate understanding of customers' needs so that we can offer solutions. Therefore we are focusing on constant communication with our customers and prompt service.

Aluminum Business

Customer Satisfaction (CS) activities at Mitsubishi Aluminum Co., Ltd. revolve around its customer information sharing tool MACS*, with a particular emphasis on information from customer satisfaction surveys and sales departments. In addition to analyzing information from various different angles, we share information and work on improvement activities irrespective of internal divisions

between areas such as sales, manufacturing, development and quality assurance, in an effort to continually improve levels of customer satisfaction.

* MACS (Mitsubishi Aluminum Communication System)

System that provides feedback based on various types of customer information, input by sales departments and stored in a database

Jewelry (MJC)

As jewelry is one of our few BtoC (business-to-consumer) lines of business where we come into direct contact with our customers, we have always placed top priority on improving levels of customer satisfaction (CS), ever since we started out in business. This approach is greatly appreciated by our customers. Thanks to the high quality and reasonable prices of our extensive product range, our MJC Jewelry Fair and jewelry mail order services have proved so popular that they have become one of the largest scale businesses in the country.

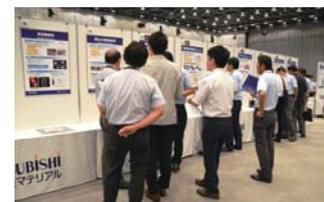
We are currently restructuring operations from a fresh perspective in an effort to continually repay the trust that our customers have placed in us. In terms of quality in particular, we are focusing on quality control initiatives throughout the supply chain.

To provide our customers with the products and services that they want, and that live up to their expectations, we run a qualification scheme and provide in-house training for sales assistants, in order to equip them with specialist product knowledge and improve their consulting capabilities. To ensure customer satisfaction, we also place top priority on employee satisfaction (ES) and are always coming up with new ways to increase motivation amongst members of staff.

Topics

Developing Products through Dialog with Customers

We organize exhibitions at our customers' offices so that we can meet our corporate customers in person and provide simple explanations outlining the performance and features of the Mitsubishi Materials Group's wide range of products. We once again held internal and external events for a number of leading companies in fiscal 2014, including manufacturers of vehicles, automotive parts, electronics and home appliances. Such events give us access to invaluable comments and suggestions from our customers. Their recommendations help us refine our products, improve quality and develop new products. We will continue to communicate with our customers through exhibitions in the future, in an effort to identify customers' needs.



Sharing comments and suggestions with our development divisions

Communication with the Community

We communicate with the local community and engage in a whole host of social contribution activities, making the most of the unique characteristics of the Mitsubishi Materials Group's various facilities around the world. We also carry out a range of initiatives in an effort to do our bit "For People, Society and the Earth".

The Mitsubishi Materials Group's Social Contribution and Communication Activities

The Mitsubishi Materials Group's roots lie in mining. As community oriented activities form an essential part of mine management, we have always been focusing on the questions "what can we do for the community?" and "what sort of role should we play". That tradition lives on to this day, as the cornerstone of our social contribution and communication activities, throughout the group.

Wide-Ranging Activities in Support of Local Communities [P.T. Smelting]

P.T. Smelting set up in Indonesia in 1996, to tap into the country's extensive mineral resources. Having introduced the Mitsubishi Continuous Copper Smelting and Converting Process (Mitsubishi Process), it is now focused on becoming a 21st century smelter committed to eliminating pollution, operating efficiently and saving energy.

In the belief that management should be firmly rooted in the local community, P.T. Smelting is keen to recruit local employees and promote them to managerial positions, and is committed to promoting communication between labor and management. It also engages in a wide range of social contribution activities at the request of the local community. From providing food and assistance for those affected by flood damage, to helping to extend elementary schools, to offering vocational support for women learning to make handicrafts, the company's wide-ranging activities make a real difference to the development of local communities.



Providing food and assistance for local people affected by flood damage

Lively Communication with the Local Community

Getting New Recruits Involved in Social Contribution Activities

VOICE



Junko Isomura
Onahama Branch
Electronic Materials Research Dept.
Central Research Institute
Mitsubishi Materials

Helping to revitalize local agriculture in Fukushima

I wanted to do something useful for the local community where I work in Onahama, so I signed up for the Fukushima Organic Cotton Project in support of agriculture in Fukushima prefecture. As well as picking cotton, I helped guide volunteers from Tokyo and provide food. It made me think about the earthquake from the point of view of local residents and gave me a new perspective.

[Mitsubishi Materials Kyushu Plant]

Once a year, we open up the employee accommodation car park at our Kyushu Plant (Fukuoka prefecture) and host a beer party for local residents, employees, members of staff from partner companies and family members to get to know one another better.

The aim is to improve communication with all those who have a hand in our operations. We will continue to make the most of this event in the future too, as an opportunity to thank everyone for their hard work on a daily basis, and to build closer relationships with local people.



Local people and employees getting on together at the beer party

Contributing to the Community by Providing Self-Support for Disabled People [Mitsubishi Materials Gifu Plant]

Every week, we set aside part of our Gifu Plant (Gifu prefecture) and organize a bake sale featuring bread and cookies made by mentally disabled people from the local community.

We fully support social welfare activities designed to make disabled people a closer part of society, and are committed to promoting coexistence and harmony as a member of local community, now and in the future, through initiatives such as actively creating and maintaining employment.



Enjoying bread and cookies from the Welfare Factory

Using voluntary activity support system

VOICE



Tadashi Iwata (left)
Mihoko Watanabe (right)
Shizuoka DBA Center, Sanda Plant
Mitsubishi Materials

Providing ongoing support for the affected area, in partnership with the community

In partnership with a local government association, we have been giving donations to the town of Shinchi in Soma, Fukushima prefecture, and providing food for those living in temporary accommodation since 2011. Having been out to visit the area via the support system in 2013, as part of the third round of activities, it made us proud to have such a system. Ongoing visits provide a great opportunity to think about how precious life is, and the importance of being prepared for a disaster.

For more details, please see **P.61**

Activities via the International Council on Mining and Metals (ICMM)

We have been a member of the International Council on Mining and Metals (ICMM) since 2002. As an international organization whose aim is to promote CSR throughout the global mining and metals industry, the ICMM places great importance on involving the CEOs of member companies in the decision making process. As such, communication between the President of the ICMM and the CEOs of member companies is a top priority. In fact, information shared via this process is used by the ICMM to assist with its global measures.

In November 2013, ICMM President Anthony Hodge came over to Japan for the second time. He met with Mitsubishi Materials President Hiroshi Yao and Managing Director Osamu Iida, and discussed the ICMM's recent activities and plans for the future. They also exchanged opinions regarding changes in the environment surrounding the mining and metals industry, making it an invaluable opportunity all round.



Meeting with the President of the ICMM during a visit to Japan

Activities via the Japan Cement Association (Promoting concrete paving)

As a member of the Japan Cement Association (JCA), we are working together to promote concrete paving as a means of reducing environmental impact. Compared to asphalt,

concrete paving has advantages such as reducing CO2 emissions by improving vehicles' fuel efficiency, and combating the heat island effect by reducing the temperature of road surfaces. Another potential benefit is the fact that concrete uses cement, which can be produced by processing various types of waste.

Previously, the main issue with concrete paving was that it usually requires a curing period of around 14 days, meaning that it takes time for roads to be opened to traffic. The JCA however has responded by developing "1 DAY PAVE". As well as drastically shortening the curing period so that traffic can use roads the day after paving has been laid, this revolutionary concrete paving method also reduces the life cycle costs of paving by up to two thirds.

In fiscal 2014, we installed concrete paving in three locations; at our Yokoze Plant in Saitama prefecture, at Torigoe Solar Power Plant next to our Kyushu Plant in Fukuoka prefecture (the first location in Kyushu), and at our Naoshima Smelter & Refinery in Kagawa prefecture (the first location in Shikoku). Demonstration events at the Yokoze Plant and Torigoe Solar Power Plant attracted large numbers of local government officials, industry insiders and other guests, underlining growing levels of interest in concrete paving.



Demonstration event at Torigoe Solar Power Plant

Main Recognition for the Mitsubishi Materials Group's Activities

Main Awards and Commendations from Outside Organizations in Fiscal 2014

| Recipient | Awarding body or organization | | Details | |
|--|--|---|--|---|
| Mitsubishi Materials Corp. | Environmental Technology Research Center | Japan Mining Industry Association (JMIA) | Japan Mining Industry Association Award | Technology harnessing artificial wetlands to remove zinc from mine water |
| | Central Research Institute | | | Development of new thermistor materials catering to demand in the automotive industry for measurement over a wide temperature range |
| | Ceramics Plant | Japan Organization for Employment of the Elderly, Persons with Disabilities and Job Seekers | President's Award | Commendation for special achievement/contribution |
| | Human Resources Development Center | Minister of the Environment | Certificate of appreciation | Support activities in relation to the processing of disaster waste across a wide area |
| | Aomori Plant Yokoze Plant | Mining and Materials Processing Institute of Japan | Watanabe Prize | Recognition as part of a joint project in Hiraodai |
| | Higashitani Mine | Kyushu Industrial Safety and Inspection Department | Commendation for special achievement/contribution Commendation for security personnel | Recognition for tireless efforts and outstanding achievement in terms of preventing disasters and mine pollution |
| Mitsubishi Polysilicon America Corporation | State of Alabama (USA) | | Outstanding Safety Award | Outstanding safety record (second consecutive year) |
| Universal Can Corporation | Japan Packaging Institute | | Beverage Packaging Award | 2013 Japan Packaging Contest |
| | Sayers Publishing Group Ltd. | | Silver Award | Cans of the Year Awards 2013 (Ends, Caps & Closures) |
| Dia Consultants Co., Ltd. (Tohoku Branch) | Tohoku Regional Bureau, Ministry of Land, Infrastructure, Transport and Tourism Director General, Fukushima River and National Highway Office | | Certificate of appreciation | Emergency inspection of fallen roof sections in tunnel |
| | | | Award for Outstanding Technology | Maintenance and design work on tunnels in Fukushima |

Independent Assurance Report



Independent Assurance Report

To the President and Chief Executive Officer of Mitsubishi Materials Corporation

We were engaged by Mitsubishi Materials Corporation (the "Company") to undertake a limited assurance engagement of the environmental, social and economic performance indicators marked with a star ★ for the period from April 1, 2013 to March 31, 2014 (the "Indicators") included in its CSR Report 2014 (the "Report") and CSR Report 2014: Metals Company Supplementary Data Book (the "Data Book") for the fiscal year ended March 31, 2014; the Company's self-declaration on the Global Reporting Initiative (GRI) application level (A+); the alignment of the Company's policies to the International Council on Mining and Metals (ICMM)'s 10 Sustainable Development (SD) Principles and the applicable mandatory requirements set out in ICMM position statements; the Company's identification and prioritization of material issues; and the Company's approach and management of its material issues.

The Company's Responsibility

The Company is responsible for the preparation of the Indicators in accordance with its own reporting criteria (the "Company's reporting criteria"), as described in the Report and the Data Book, which are derived, among others, from the Sustainability Reporting Guidelines version 3.0 of the GRI and Environmental Reporting Guidelines of Japan's Ministry of the Environment; self-declaring a GRI Application Level in conformance with the application level criteria stipulated by the GRI; reporting on the alignment of the Company's policies to the ICMM's 10 SD Principles and the applicable mandatory requirements set out in ICMM position statements; reporting on the Company's identification and prioritization of material issues; and reporting on the Company's approach and management of its material issues.

Our Responsibility

Our responsibility is to express a limited assurance conclusion on the Indicators based on the procedures we have performed. We conducted our engagement in accordance with 'International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information', 'ISAE 3410, Assurance Engagements on Greenhouse Gas Statements', issued by the International Auditing and Assurance Standards Board, and the 'Practical Guidelines for the Assurance of Sustainability Information' of J-SUS. The limited assurance engagement consisted of making inquiries, primarily of persons responsible for the preparation of information presented in the Report and the Data Book, and applying analytical and other procedures, and the procedures performed vary in nature from, and are less in extent than for, a reasonable assurance engagement. The level of assurance provided is thus not as high as that provided by a reasonable assurance engagement. Our assurance procedures included:

- Interviewing with the Company's responsible personnel to obtain an understanding of its policy for the preparation of the Report and the Data Book and reviewing the Company's reporting criteria.
- Inquiring about the design of the systems and methods used to collect and process the Indicators.
- Performing analytical reviews of the Indicators.
- Examining, on a test basis, evidence supporting the generation, aggregation and reporting of the Indicators in conformity with the Company's reporting criteria, and also recalculating the Indicators.
- Visiting to the Company's Ikuno Plant, Materials Eco-refining Co., Ltd.'s Ikuno Plant and the Company's Yokoze Plant selected on the basis of a risk analysis.
- Evaluating the overall statement in which the Indicators are expressed.
- Evaluating the Company's self-declared GRI application level against the application level criteria.
- Assessing the alignment of the Company's policies to the ICMM's 10 SD Principles and the applicable mandatory requirements set out in ICMM position statements through documentation reviews and interviews.
- Interviewing with the Company's responsible personnel and reviewing documents with respect to the Company's process of identifying and prioritizing its material issues.
- Interviewing with the Company's responsible personnel and reviewing documents with respect to the Company's approach to and management of its material issues.

Conclusion

Based on the procedures performed, as described above, nothing has come to our attention that causes us to believe that:

- the Indicators in the Report and the Data Book are not prepared, in all material respects, in accordance with the Company's reporting criteria as described in the Report and the Data Book;
- the Company's self-declaration on the GRI application level does not conform to the application level criteria stipulated by the GRI;
- the Company's policies are not aligned to the ICMM's 10 SD Principles and the applicable mandatory requirements set out in ICMM position statements as described on pages 7 and 8 of the Data Book;
- the Company has not identified and prioritized its material issues as described on page 31 of the Report; and
- the Company has not approached and managed its material issues as described on page 32 of the Report.

Our Independence and Quality Control

We have complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. In accordance with International Standard on Quality Control 1, we maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

KPMG AZSA Sustainability Co., Ltd.

KPMG AZSA Sustainability Co., Ltd.
Tokyo, Japan
December 17, 2014

Last year, Mitsubishi Materials broadened its boundary for GHG emissions to include its consolidated subsidiaries in and outside of Japan. The Company expanded the boundary for the other environmental performance indicators this year to include its 26 domestic consolidated subsidiaries with manufacturing operations, but we would suggest Mitsubishi Materials should expand the boundary further to include consolidated subsidiaries outside of Japan. In addition, we would expect that the Company expand the boundaries for social performance indicators, such as occupational safety and health performance indicators and employee-related indicators.

Mitsubishi Materials set new 2020 targets for the two areas 'Preventing global warming' and 'Creating a recycling-oriented society/contributing to the environment'. Although the Company's targets for 2020 have been made clear by this, it could still consider establishing Group-wide targets. Furthermore, compared with the descriptions on its initiatives for preventing global warming, those on other areas are limited. In particular, we would suggest that more detailed account should be given on its initiatives for meeting its targets for 'Creating a recycling-oriented society/contributing to the environment' and its performance.



Shinichiro Akasaka
KPMG AZSA Sustainability Co., Ltd.

Application level with the GRI Sustainability Reporting Guidelines (Version 3.0)

The Global Reporting Initiative (GRI) is a non-governmental organization (NGO) tasked with formulating international guidelines for sustainability reporting. The GRI Sustainability Reporting Guidelines encourage the inclusion of a declaration so that readers can easily see the extent to which the report complies with the relevant guidelines. In conjunction with the Metals Company Supplementary Data Book, which is available on our website, our 2014 Corporate Social Responsibility Report achieves Level A+ application as specified in the GRI guidelines.

| Report Application Level | C | C+ | B | B+ | A | A+ |
|--------------------------|--|--|--|--|---|----|
| Standard Disclosures | G3 Profile Disclosures | Report on: 1.1 2.1-2.10 3.1-3.8, 3.10-3.12 4.1-4.4, 4.14-4.15 | Report on all criteria listed for Level C plus: 1.2 3.9, 3.13 4.5-4.13, 4.16-4.17 | Same as requirements for Level B | | |
| | G3 Management Approach Disclosures | Not Required | Management approach disclosures for each indicator category | Management approach disclosures for each indicator category | | |
| | G3 Performance Indicators & Sector Supplement Performance Indicators | Report on a minimum of 10 Performance Indicators, including at least one from each of: social, economic, and environment | Report on a minimum of 20 Performance Indicators, at least one from each of: economic, environment, human rights, labor, society, product responsibility | Report on each core G3 and Sector Supplement* indicator with due regard to the materiality Principle by either: a) reporting on the indicator or b) explaining the reason for its omission | | |

A GRI Content Index is available via the CSR section of our website. [WEB](#)

* Sector supplement in final version

Third-Party Assessment of the Mitsubishi Materials CSR Report 2014

There is a growing focus on CSR activities underpinned by strategic management, aimed at helping to improve both social and corporate value. Although this report sets out nine material issues facing Mitsubishi Materials, my attention was initially drawn to the company's inimitable commitment to "contributing to a recycling-oriented society" as a company "providing a stable supply of globally sought-after materials."

Many of the environmental issues we are currently facing are the inevitable consequence of manmade intrusions into the flow of material cycles within natural ecosystems, nurtured over long periods of time by the Earth and ecosystems themselves, and of mankind producing and disposing of countless materials that simply do not fit into those material cycles. Current environmental measures may focus on global warming, saving energy and harnessing natural energy, but the fundamental key to resolving environmental issues depends on establishing cyclical systems that can effectively recycle the materials that mankind produces, rather than leaving it up to biological cycles in the natural world. Mitsubishi Material's current medium-term management plan mentions "pursuing a recycling-based business model," which is indicative of a truly admirable management strategy aimed at enhancing both social and corporate value.

By recycling industrial waste and byproducts in the cement sector, scrap in the metals sector, and copper slag, gypsum and clinker dust across both sectors, Mitsubishi Materials has created a complex recycling loop that spans operations in different areas and cannot be imitated by other companies. With supply and demand of natural resources coming under increasing pressure on a worldwide scale, risks such as environmental contamination and poor working conditions have become serious social issues in relation to mining new mineral resources. The ability to effectively recycle metal resources is therefore set to become even more important in the future. This is inextricably linked to the two material issues of securing resources and factoring environmental and social considerations into the supply chain. It is now a key management priority to take into account the environmental and social impact of metal mining and smelting processes, including issues such as conflict minerals.

Given the huge impact that mining minerals has on the surrounding ecosystem, it is also important to preserve biodiversity. In addition to overseas initiatives, the company is expected to carry out long-term initiatives at its domestic facilities, including biotic conservation and certification of company-owned forests. Mitsubishi Materials may be a cement manufacturing company that produces CO₂ from its manufacturing processes, but I would recommend ongoing efforts to save energy on a companywide scale, in order to combat global warming in other sectors as well as cement. In view of recent examples of extreme weather conditions, Mitsubishi Materials is set to play an increasingly important role in areas such as

environmental preservation and forest management. I hope to see the company making an active commitment in such areas in the future.

Mitsubishi Materials has a tangible advantage in the renewable energy sector. With over a century's experience generating hydroelectric power and with the proactive use of idle land for solar power, the company makes effective use of its own resources on both fronts. It is able to fully harness its underground expertise in the geothermal sector too, prompting high hopes for its future potential as an energy source unique to Japan's volcanic landscape.

Considering that enhancing global competitiveness is one of the stated aims of the company's medium-term management plan, it may be necessary to adopt a more flexible approach to staff, including formulating global policies that can be spearheaded by overseas staff with expertise in areas where Japan is lagging behind, such as raising awareness of human rights and providing support to enable female employees to play a greater role, in addition to delegating authority to local executives. As a specialist in resources and materials, I would encourage Mitsubishi Materials to focus on human resource development further upstream in the resource development sector.

Finally, the opening report on the explosion & fire accident at the Yokkaichi Plant conveys the fact that the company spent six months investigating the causes of the accident and carrying out a fundamental review of safety measures before restarting operations, and is making a concerted effort to prevent a recurrence. Safety measures such as these however rely on frontline employees making an effort themselves. To raise awareness amongst all employees and encourage more active communication, one option would be to maintain ongoing dialog within the company, driven by frontline employees.

To be an advanced materials company these days, it is essential to earn recognition from shareholders and the public, based on comprehensive environmental, social and safety initiatives throughout the supply chain, from upstream mining operations to the manufacturing shop floor. I hope that Mitsubishi Materials will demonstrate its leadership skills now more than ever.



Mariko Kawaguchi
Chief Researcher, Research Division,
Daiwa Institute of Research Ltd.

Profile

Mariko Kawaguchi joined Daiwa Securities in 1986. Following a spell in management strategy research at Daiwa Institute of Research, she worked as Manager of the CSR Division and head of CSR in the Corporate Communication Department at the Daiwa Securities Group's Head Office. In April 2012, she returned to Daiwa Institute of Research as Chief Researcher in the Research Division. Her specialist areas include CSR and socially responsible investment (SRI). She also serves as Chief Executive and Secretary General of the Japan Sustainable Investment Forum.

Response to the Third Party Assessment

We ask outside parties to objectively examine and assess our CSR activities, and our efforts to disclose information via our CSR Report, to help us to expand and improve our activities.

Having been asked to provide a third-party assessment for the first time this year, Mariko Kawaguchi has highlighted fundamental environmental issues from the standpoint of "material cycles within natural ecosystems," and praised Mitsubishi Materials highly for our "recycling-oriented business model." As issues surrounding resources and the environment are likely to become increasingly serious in the future, we will continue to harness our unique technologies, systems and expertise to make an even greater contribution to society, not least in the renewable energy sector.

Ms. Kawaguchi has also suggested that we raise awareness amongst employees and encourage more active communication in relation to safety measures following the accident at our Yokkaichi Plant. As a company, we are obviously committed to taking preventive measures and reinforcing safety management, but it is also crucial that we maintain and improve safety awareness amongst individual employ-

ees, including those at partner companies. We have set aside January 9, the date of the accident as "Safety Declaration Day" throughout the Mitsubishi Materials Group. The aim is to take a day to reflect on the seriousness of the accident, do away with over-familiarity and false confidence, and promote safety communication on a groupwide scale.

This year's independent assurance meanwhile underlines the need to expand our scope of disclosure for social data and highlights challenges relating to setting new environmental policy targets. We will continue to expand the scope of data that we disclose, and to explore and implement new targets on an ongoing basis in the future.



Akira Takeuchi
Mitsubishi Materials
Executive Vice President

Profile

June 2009 Managing Director
June 2012 Vice Chair, CSR Committee (current position)
April 2014 Executive Vice President (current position)

 **MITSUBISHI MATERIALS CORPORATION**

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