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Editorial Policy

This report has been created for the benefit of customers, citizens of local communities, shareholders, suppliers, employees and all other stakeholders. The intention was to provide a clear outline of activities Sumitomo Metal Mining Co., Ltd. (SMM) is pursuing in order to achieve sustainable co-existence with society and the global environment.

The articles in this report focus on activities relating to the “Six Key CSR Areas,” which were selected in 2008 after three months of deliberation in six workshops by an in-house group of 20 people comprising executive officers and general managers of Head Office divisions. Their selection was based on the impact those areas have on the company and the extent of related social needs. To determine those needs, we used insight gained through regular communication with stakeholders and information from other sources (e.g. GRI guidelines and other international standards, and trends in civil society). For each of the Six Key CSR Areas, we have set a CSR Vision for 2020, and we created a road map in 2008 that shows the course to realize these visions.

Against the backdrop of changing social situations, the CSR Vision for 2020 and its road map were revised by the CSR Committee in May 2012, when the next medium-term management plan was formulated. Based on that review, the FY2012 Plan for the Six Key CSR Areas was deliberated on and approved by the Committee.

The main revisions of the CSR Vision for 2020 and its road map and the FY2012 Plan are included in this report.

This is our second report prepared in alignment with the GRI Sustainability Reporting Guidelines at an application level of A+. This declaration is externally assured.

Global Reporting Initiative (GRI): An organization established with the purpose of creating and promoting international guidelines for sustainability reports.

Boundary of the Report
Sumitomo Metal Mining Co., Ltd. (SMM)
The Sumitomo Metal Mining Group (consolidated subsidiaries)

Economic Aspects: SMM, consolidated subsidiaries and affiliates

Environmental Aspects: SMM and consolidated subsidiaries

* From the perspective of significance, we included equity-method application affiliate Nippon Ketjen Co., Ltd., but excluded consolidated subsidiaries with a low environmental impact. The following subsidiaries and affiliates have been covered. Some statements on Taganito HPAL Nickel Corporation have been made, but the company is not included in aggregate data as operations are not yet underway.


Social Aspects: SMM and consolidated subsidiaries

Period Covered
April 1, 2011 – March 31, 2012
(Some activities before or after the above period have also been included)

Publication Date
November 2012
Previous publication: October 2011
Next scheduled publication: November 2013

Referenced Guidelines
GRI Sustainability Reporting Guidelines, Version 3.0
Environmental Reporting Guidelines of the Japanese Ministry of the Environment (2012 version)

Unless otherwise stated, the term ‘ton’ refers to a metric ton.

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Photographs on this page and the front cover
Remains of the Tonaru Ore Storage Building
The Tonaru Area in the mountains in the south of Nihama, Ehime Prefecture, served as the main mining area of the Besshi Copper Mine from 1916 to 1930. Ore that was extracted from the mine was temporarily stored here.
CSR activity
understand
undertake

Interview with the President

Two years into the 3-Year Business Plan for FY2010-2012, how would you assess the progress so far?

Our aim has long been to become a major player in the non-ferrous metals industry. And we have made excellent progress toward that goal in the shape of such new activities as our participation in the Sierra Gorda Copper Mine Project in Chile.

The key element of the three-year business plan is realignment of our businesses. We operate three core businesses—Mineral Resources, Smelting and Refining, and Materials. The Mineral Resources business is being transformed to maximize our profits as a resources supplier beyond simply securing stable access to raw materials for our own smelters and refineries. The Smelting and Refining business is undergoing realignment to accommodate changes in such areas as demand, costs, and new technologies. In the Materials business, we are concentrating on particular sectors. This involves focusing on materials in the environment and energy domain for which there is high social demand—such as cathode materials for secondary vehicle batteries and LEDs for ordinary lighting—and withdrawing from areas with low expectations of growth. We have also reorganized our businesses so that all manufacturing activities fall into one of the core business categories.

Regarding the roadmap toward achieving the CSR Vision for 2020, what aspects have been modified?

In 2008, we established our CSR Vision for 2020, which covered our Six Key CSR Areas, and accordingly we undertook various activities in pursuit of that goal. However, in 2011, after a careful assessment of what we had and had not accomplished, we made modifications to our roadmap toward realizing it. During those three years, social conditions had undergone change both in Japan and overseas—and so had the needs of society. We had to ask ourselves once again what contribution we could make through our main lines of business, and we made the necessary revisions to the roadmap as a consequence.

Our overseas expansion during the period of the three-year business plan has also uncovered problems that we had previously failed to perceive. For example, we are, of course, aware of human rights issues such as poverty and child labor in emerging nations, but it is difficult to fully understand these issues from our perspective here in Japan. When we begin operating in a region where such issues are ongoing problems, however, it is our responsibility to face up to them earnestly. We hope to apply the experience we have gained in this manner to the resolution of specific social issues.
Interview with the President

actually begins when individual employees understand the issues and needs facing society and action through their jobs

Q3 What has been SMM’s policy with regard to supporting reconstruction efforts following the Great East Japan Earthquake?

A3 There has been no change in our position with respect to providing constant support for the reconstruction efforts in affected areas through our business activities. We supply the basic materials, advanced materials, and electronic materials that are essential for this reconstruction, and so we have to ensure stability in our supply.

We also want to make a long-lasting contribution by promoting the development of the human resources which will represent the future for the affected communities, as well as by providing support that leads to positive development in other communities. For example, we are currently considering joining forces with an NPO that supports human resources development to help create an appropriate system for providing grants to students who are unable to continue their studies because of the disaster. Moreover, we could identify what items are lacking in the affected communities and help supply them by procuring products made in the regions where our facilities are located, such as Niihama, Hokkaido, and Kyushu.

We have also established a system, which is not confined to the communities affected by the Great East Japan Earthquake, whereby the company will assist private participation by employees in volunteer activities.

Q4 Could you tell us about the company’s reaction to the attack in the Philippines?

A4 In October 2011, an armed group attacked Taganito on the Philippine island of Mindanao, where the SMM Group is building a plant. I am delighted to say that no one at the plant site or in the local community was injured. Construction of the plant has resumed, and we expect commercial production to begin on schedule. It was a very unfortunate event, but in a way it has forced us to break out of our shell as a company.

Since our aim is to be a major player in the non-ferrous metals industry, our operations extend all over the world. However, in some respects we have treated those activities as somewhat of an extension of our domestic business. Our approach has always been that it’s important to recognize that social conditions differ by country and by region and to become fully acquainted with the needs of local communities, in addition to meeting international standards. However, we are now aware that more is needed. It is possible that something much worse than the Taganito incident could happen elsewhere. We plan to apply the lessons we learned from this experience so that we can become more sensitive to local issues in our efforts to become a genuine major non-ferrous metals company.

Q5 How is SMM contributing to the resolution of social issues?

A5 We are making active efforts to find ways to make a contribution through our business operations. One activity where we employ our strengths to help achieve “sustainable co-existence with society and the global environment” is finding effective uses for oxide ores with low nickel content. Previously, these were unsuitable for commercial production. Making the most effective use of natural resources in this manner produces major benefits—both for society and the company.

We are therefore looking to advance our technological development by further enhancing our research framework. For example, in order to advance R&D related to recycling and other effective uses of resources, we will tap our integrated capabilities by seeking cooperation between technicians in the field, researchers and equipment engineers. Through this process, we aim to nurture the next generation of technicians. We believe that developing technologies that resolve social issues will lead to our own growth.

Q6 What role do you expect your employees to play in advancing CSR activities?

A6 I want our employees to learn about the issues facing society and fully understand them so that they can reach the point where they are able to not only explain them to others but also consider them from the perspective of their own jobs. I hope that through their jobs—and also through other activities, such as overseas experience and private volunteer activities—they will think about how social issues might be resolved and take appropriate action. And once they have attained their target, I trust they will aim for a new target, applying all the knowledge and experience they have gained.

Nobumasa Kemori
President and Representative Director

SUMITOMO METAL MINING CO., LTD. CSR Report 2012 3
Corporate Philosophy for a Sustainable Society

The Sumitomo Group has been developing its business for around 400 years through continuous adherence to the Sumitomo Business Spirit. Acknowledging the importance of the values and ethics our forerunners built into the Sumitomo Business Spirit, we will make every effort to strengthen SMM Group business and consolidate society’s trust in us.

The SMM Group upholds the Sumitomo Business Spirit in its Corporate Philosophy and Management Vision. The very activities we pursue to substantiate the visions expressed in those lines constitute SMM’s CSR activity and their implementation will take us closer toward our goal of “sustainable co-existence with society and the global environment.”

The Sumitomo Business Spirit

Article 1
Sumitomo shall achieve strength and prosperity by placing prime importance on integrity and sound management in the conduct of its business.

Article 2
Sumitomo shall manage its activities with foresight and flexibility in order to cope effectively with the changing times. Under no circumstances, however, shall it pursue easy gains or act imprudently.

“Business Principles” forming the “Rules Governing the House of Sumitomo,” formulated in 1928

SMM Group Corporate Philosophy

- Sumitomo Metal Mining Co., Ltd. (SMM), in accordance with the Sumitomo Business Spirit, shall, through the performance of sound corporate activities and the promotion of sustainable co-existence with the global environment, seek to make positive contributions to society and to fulfill its responsibilities to its stakeholders, in order to win ever greater trust.
- SMM shall, based on respect for all individuals and recognizing each person’s dignity and value, seek to be a forward-minded and vibrant company.

SMM Group Management Vision

- By developing and employing innovative technology, we shall fulfill our social responsibilities as a manufacturing enterprise.
- Based on the principles of compliance, environmental protection and operational safety, the Sumitomo Metal Mining Group shall pursue maximum corporate value through the provision, via its global network, of high-quality materials such as non-ferrous metals and electronics and advanced materials.

CSR Policy

1. SMM shall work to combat global warming by promoting recycling and effective resource utilization while also targeting technological innovation and continuous improvements in energy efficiency.
2. SMM shall promote sustainable co-existence with society by respecting the needs of local communities in which we operate around the world.
3. To continue sound business activities, SMM shall respect human rights and shall try to be a company in which diverse human resources take active parts.
4. According safety the highest priority, SMM shall provide safe, comfortable working environments and seek to eliminate occupational accidents.
5. SMM shall strengthen communications with all stakeholders to build healthy, trust-based relationships.
Six Key CSR Areas and CSR Vision for 2020

In 2008, SMM determined key areas of CSR activity for the Group and a CSR Vision for 2020 based on the impact of those areas on the Group and the extent of related social needs. We will actively pursue initiatives in those areas in line with the CSR Policy, toward our goal of “sustainable co-existence with society and the global environment.”
CSR Activity Promotion Framework

SMM’s CSR activities are promoted by the CSR Committee, which convenes at least once a year and comprises the President, as chairman, and the heads of the business and Head Office divisions.

Attached to the CSR Committee are two working groups—the Compliance and Risk Management Working Groups—and six subcommittees overseeing the following areas: efficient resource utilization, environmental preservation, corporate citizenship, human rights and human resources development, occupational health and safety, and communication. Each of these six subcommittees, which correspond to the SMM Group’s “Six Key CSR Areas,” works toward annual targets in the quest to realize the “CSR Vision for 2020.”

CSR activities consistent with these annual targets are advanced principally through initiatives at business sites and group companies. Actual implementation is carried out by all officers and employees according to their individual roles.

The CSR Committee operates a PDCA (Plan-Do-Check-Act) cycle, reviewing activities each year and evaluating the company’s performance in social, environmental and financial terms.

Examples of Social Recognition

Some of the awards received by the SMM Group in FY2011

<table>
<thead>
<tr>
<th>Recognition (Awarding party)</th>
<th>Date</th>
<th>Recipients</th>
<th>Award received for</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Commendation for Mine Safety (Ministry of Economy, Trade and Industry)</td>
<td>October 20, 2011</td>
<td>Shigeo Hata (Sumiko Resources Exploration &amp; Development Co., Ltd.)</td>
<td>Contribution over many years to development of the Hishikari Mine and dust countermeasures</td>
</tr>
<tr>
<td>Hyuga City 60th Anniversary Special Service Award (Hyuga City)</td>
<td>November 5, 2011</td>
<td>Hyuga Smelting Co., Ltd.</td>
<td>55 years of business operation and participation in activities contributing to the local community</td>
</tr>
<tr>
<td>Medal with Yellow Ribbon (Cabinet Office, Government of Japan)</td>
<td>November 15, 2011</td>
<td>Yoshinori Nitanda (Hishikari Mine Dept.)</td>
<td>Contribution over many years to stable operation of the Hishikari Mine through management of mine water and mine water channels</td>
</tr>
<tr>
<td>Best IR Award (Japan Investor Relations Association)</td>
<td>December 14, 2011</td>
<td>Sumitomo Metal Mining Co., Ltd.</td>
<td>Superior investor relations activities</td>
</tr>
<tr>
<td>Japan Mining Industry Association Awards (Japan Mining Industry Association)</td>
<td>March 30, 2012</td>
<td>Yasushi Ishitoki (Toyo Smelter &amp; Refinery)</td>
<td>Recovery of precious metals in copper anode slime by chlorine leaching technology</td>
</tr>
</tbody>
</table>
Our Stakeholders

Prior to the launch of CSR activities at SMM in 2008, deliberations were held relating to the SMM Group Corporate Philosophy, Management Vision, CSR Policy and CSR Vision for 2020, and the following entities with an interest in SMM’s activities were identified as stakeholders: customers, shareholders, employees, local communities, creditors, business partners, citizen groups, and the government. SMM aims to maximize its corporate value and has established targets that specify the “ideal company” for each stakeholder category.

Communication with Stakeholders

**Customers**
Communication with customers occurs mainly via sales personnel. Responses are made to opinions received through action at the management level for each business using the frameworks in place.

**Shareholders and Investors**
Institutional investors are informed about the running of the company through conference calls and business strategy progress briefings at the time of earnings announcements, as well as meetings held on an individual basis as the occasion arises.
Individual investors are briefed on business conditions via the company website, the Report for Shareholders, and other media.
All feedback from investors is regularly reported to the management and applied to the administration of the company.

**Employees**
In Japan, workers’ unions formed at branch offices and SMM Group companies fall under the umbrella of the Federation of Sumitomo Metal Mining Workers’ Union. SMM routinely holds briefings or discussions with each union. Overseas, organizations representing employees are regularly briefed on the business situation and opportunities for employees to offer feedback and requests are arranged. Talks between individual employees and their supervisors are also held to ascertain the progress being made to meet job targets set for the fiscal year. Many comments and questions are fielded through these talks.

**Local Communities**
The SMM Group seeks to communicate sufficiently with people in the community when making inroads into a new region. Opportunities for communication are regularly arranged even after operations commence and an effort is made to offer adequate explanations to members of the community when problems occur. We also carry out various activities to strengthen ties with the community, such as providing support for and participating in events.

**Business Partners**
This is based on friendly relationships built up over the years. Individual divisions within the SMM Group stay in touch with business partners on a daily basis to hold dialogue on business operations and products and to exchange technological information.

**Other Stakeholders**
SMM also engages in regular information exchange and round-table discussions with local government and industry groups in communities where our facilities and group companies are located, as well as with citizen groups related to our business.

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**Each SMM Stakeholder Category’s “Ideal Company”**

- **Customers**
  A company with all-round competitiveness, boasting advantage over competitors in terms of technology, quality, delivery and price

- **Local Communities**
  An attractive investment as a company aiming to raise corporate value through efficient business management and sound governance while delivering a dividend commensurate with performance and disclosing information as appropriate

- **Employees**
  A company that provides a healthy work environment where individual roles within the organization are clearly defined and employees take pride in their work

- **Business Partners**
  A company that maintains total legal compliance and contributes to the growth of the countries and communities in which it operates

- **Creditors**
  A company that provides support for and participates in events

- **Citizen Groups**
  A company demonstrating considerable technological capability and integrity while placing value on trust and with which mutual prosperity can be assured

- **Government**
  A company that offers explanations to members of the community when problems occur

- **Shareholders**
  A company that engages in an appropriate level of communication, maintaining an acute awareness of its corporate responsibilities

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SMM Group CSR
Introducing Business Operations

Overview of Business Operations

Corporate Data (March 31, 2012)

Company name: Sumitomo Metal Mining Co., Ltd.
President: Nobumasa Kemori
Founded: 1590
Incorporated: 1950
Capital: ¥93.2 billion
Listings: Tokyo Stock Exchange and Osaka Securities Exchange

No. of consolidated subsidiaries: 61
No. of equity-method affiliates: 16
No. of employees (consolidated)*: 8,658 (921)
Net sales (consolidated): ¥847.9 billion
Recurring profit (consolidated): ¥108.8 billion

* The average number of full-time employees during the year. The number of additional temporary staff is shown in parentheses.

Main Facilities
Head Office: 11-3, Shimbashi 5-chome, Minato-ku, Tokyo (Shimbashi Sumitomo Building)
Main branch: Osaka Branch
Branches: Nagoya Branch, Besshi-Niihama District Division (Ehime Prefecture)

Plants:
- Toyo Smelter & Refinery (Ehime Prefecture)
- Nihama Nickel Refinery (Ehime Prefecture)
- Harima Smelter (Hyogo Prefecture)
- Ome District Division (Tokyo)
- Sagami Plant (Kanagawa Prefecture)
- Isoura Plant (Ehime Prefecture)

Mine:
- Hishikari Mine (Kagoshima Prefecture)

Research centers:
- Ichikawa Research Laboratories (Chiba Prefecture)
- Niihama Research Laboratories (Ehime Prefecture)
- Battery Research Laboratories (Ehime Prefecture)

No. of countries and regions where business is conducted: 17

The Flow of Operations and Relations with Stakeholders

The SMM Group engages in a diverse range of business activities. Below is a simple outline of the flow of operations together with the main stakeholders’ expectations of the SMM Group.

Operations process

Planning/Development

Shareholders
- Raise corporate value by performing to the expected level (earnings, ethics, social contribution, and environmental/human rights considerations)

Business Partners
- Continue with mutually beneficial transactions and achieve mutual prosperity

Local Communities
- Carry out operations while ensuring the safety and security of the community
- Make a difference as a member of the community

Customers
- Supply good products and services developed with consideration of social concerns (quality, cost, delivery, consumer safety, the environment, health, human rights, etc.)

Purchasing

Creditors
- Achieve continuity of sound business management over the long term
- Attain objectives for which investments and loans were made

Citizen Groups
- Avoid contributing to social problems relating, for example, to human rights or the environment

Government
- Ensure legal compliance
- Contribute to the development of the nation and the local community (employment, payment of taxes, etc.)

Production/Processing

Employees
- Provide stable employment, favorable working conditions (wages, hours, health and safety, and working environments) and motivation, and enable self-fulfillment and pride

Sales

Citizen Groups
- Avoid contributing to social problems relating, for example, to human rights or the environment

Government
- Ensure legal compliance
- Contribute to the development of the nation and the local community (employment, payment of taxes, etc.)

Customers
- Supply good products and services developed with consideration of social concerns (quality, cost, delivery, consumer safety, the environment, health, human rights, etc.)

Net Sales by Region (Million Yen)

Japan (61%) 594,539
Southeast Asia (12.6%) 124,850
Taiwan (10%) 85,310
China (10%) 88,316
East Asia (2%) 14,552
North America (7%) 60,549

Number of Executives/Employees by Region

Japan (61.1%) 250
Southeast Asia (12.6%) 1,212
Taiwan (10.9%) 1,050
North America (3.5%) 332
China (9.2%) 882

* “Number of executives/employees by region” does not match “No. of employees (consolidated)” as it includes full-time officers, non-regular and limited-term employees.
Introducing Business Operations

*The average number of full-time employees during the year. The recurring profit (consolidated): ¥108.8 billion

No. of employees (consolidated): 8,658 (921)

No. of equity-method affiliates: 16

Securities Exchange Incorporated: 1950

President: Nobumasa Kemori

Overview of Business Operations

the SMM Group

expectations of and stakeholders

East Asia (2%) 14,552

Taiwan (10%) 85,310

China (10%) 1,050

North America (3.5%) 8

Asia

Other Regions

Mineral Resources

• Compañía Contractual Minera Candelaria (Chile)
• Compañía Contractual Minera Ojos del Salado (Chile)
• Sumitomo Metal Mining Chile Ltda. (Chile)
• Sumitomo Metal Mining do Brasil Ltda. (Brazil)
• Sumitomo Metal Mining Oceania Pty. Ltd. (Australia)
• SMM Cerro Verde Netherlands B.V. (Netherlands)
• SMM Solomon Ltd. (Solomon Islands)

Smelting & Refining

• Figesbal S.A. (New Caledonia)
• Sumic Nickel Netherlands B.V. (Netherlands)
• Vale New Caledonia S.A.S. (France)

Other Businesses

• SMM Holland B.V. (Netherlands)
CSR in Our Business

The Mineral Resources Division carries out activities such as mineral exploration and mine development in order to secure resources for the production of gold, copper and nickel. SMM makes a company-wide effort to promote the effective use of resources, which is one element of our CSR Policy, and our basic stance is to use resources effectively to achieve co-existence with nature and local communities. The mineral resources business cycle is inherently long, and therefore we currently advance the business from a medium- to long-term perspective based on a long-term vision covering up to 2021. We are also working to increase recovery of target metals from ore mined at existing copper and gold projects to ensure that resources are utilized not wasted.

Issues in the Six Key CSR Areas

Environmental preservation

In the mineral resources business, it’s essential that consideration is shown toward the environment during development and operations. At the Pogo Mine, we ensure compliance with Alaska’s stringent environmental regulations by taking comprehensive environmental measures, such as employing a system that ensures no cyanide escapes from the process. Prior to new mine development projects, we submit environmental impact statements (EIS) to the relevant governments, and in countries and regions where laws are yet to be established we voluntarily observe international standards as we go about our activities.

Contribution to society and local communities/
Stakeholder communication

We help to fulfill the needs of communities where we operate by providing support for education and community growth, such as giving donations to schools. In the Solomon Islands, we contributed grants to help fund participation in the Beijing 2008 Olympic Games, and we did the same again for the 2012 London Olympics.

When starting a project in a community, we proceed cautiously, obtaining the approval of local residents through briefings and other painstaking efforts. In all communities, we enter agreements with each landowner and make efforts to ensure residents’ rights are not violated.

In Peru, we encountered cautious opinions about mine development due to concerns about the pollution of water sources. In these cases, too, we persist with ongoing dialogue in order to communicate the company’s social and environmental initiatives and give people in the community peace of mind.

My Approach to CSR

The fundamental idea of CSR is to become a company that society can trust, and I believe there are four central elements to this. The first is looking after people. A company that cares for people well will be able to attract talented human resources and enhance its corporate value. The second element is consideration of the environment. We have to be as careful as we possibly can to avoid damage to our credibility within society due to incidents like harmful substance leaks. The third is social contribution. The SMM Group has a public duty to provide a reliable supply of non-ferrous metals and every employee needs to remember that as they go about their job. The final element is information disclosure. I believe we must communicate these ideas and activities of ours across society.

My Message to Employees

CSR cannot be forced upon employees. With each employee observing the SMM Group Code of Conduct in their work activities, taking the initiative and acting autonomously, the quality of the workforce as a whole will improve and it will become the foundation for sustainable corporate growth.

Yukio Kawaguchi
Senior Managing Executive Officer
General Manager, Mineral Resources Div.
Non-ferrous Metals Division

**CSR in Our Business**

The Non-ferrous Metals Division carries out production of gold, silver, nickel, lead, zinc, chemical products, wrought copper and copper alloy, and special steel products. As we engage in smelting and refining in the vicinity of mines in which we have invested and taken an interest, it is more important than ever before that we make full use of the resources taken out of the ground and show consideration toward communities where we set up business and the surrounding environment.

Only around 0.5% of copper ores and 1.2% of nickel ores actually become resources and improving recovery from ores is an ongoing challenge. Waste material left after refining nickel intermediates is buried in tailings dams and therefore we have to ask local residents to relocate, and the impact on ecosystems might become a problem. But through additional recovery of resources from residue, we can reduce the volume of waste material and reduce the area taken up by dams. Turning recovered iron into resources and paying taxes on their sale will also benefit local residents.

**Effective use of resources**

At the Taganito Project, scheduled to start operating in FY2013, we had to determine what to do with the waste material left after refining. To be able to sell iron contained in the waste as iron ore, chromium in the iron has to be removed. Nihama Research Laboratories have developed an efficient way to do this and we are now working with iron and steel works on making effective use of waste material.

In the zinc business, the current business format of smelting zinc from imported ore is no longer feasible cost-wise. To keep the smelter running and preserve employment in the community, we are looking for ways to continue operations using recycled raw materials obtained in Japan. In the copper business, after identifying needs within the Japanese market for slag, which remains after smelting, we generated a demand for 200,000 tons to be used in cement aggregate.

**Environmental preservation**

By extracting iron from nickel mine waste and turning it into a resource, we are indirectly causing a reduction in the development of iron ore resources. The SMM Group is also helping to curb global warming as its nickel hydroxide is used as a cathode material for hybrid vehicle batteries. We are currently working on recovering nickel resources from end-of-life vehicles for recycling back into battery materials.

**Occupational health and safety**

Unable to attain our target of five or fewer occupational accidents in one year, we will be directing further energy into safety management, promoting greater bottom-up efforts from the front line of operations. To do this, we will get small groups to have solid discussions on why safety is important as we need to get employees to the point where they will act autonomously.

**My Approach to CSR**

Corporations naturally pursue profits, but they have to make sure the profits do not go counter to their social responsibilities. Improving the substance of our business also benefits society and so we are always thinking about how to translate costs spent on environmental preservation, for example, into business advantage. I think that unless we advance CSR activities through our business, acknowledging it is worth it both from a cost perspective and in terms of social recognition, they will not last.

**My Message to Employees**

I would like employees to be able to initiate CSR activity themselves, rather than wait for instructions from above. It’s therefore important that middle managers encourage younger employees to change their way of thinking. Elements of CSR that are stressed in the CSR Report, like thinking about stakeholders and helping to resolve social issues, should be natural for our employees as members of a corporation and of society, and so they need to develop the ability to do these things as a matter of routine.

Mikinobu Ogata  
Managing Executive Officer  
General Manager, Non-ferrous Metals Div.
Materials Division

CSR in Our Business

The Materials Division was established in 2012 through the integration of the Advanced Materials Division, the Semiconductor Materials Division, and the Energy, Catalysts & Construction Materials Division. It carries out production and sales of a wide variety of advanced materials, semiconductor materials, catalysts, construction materials, and other materials. They include nickel hydroxide, automotive catalysts, and sapphire substrates for LEDs.

The basic CSR approach of the Materials Division is to contribute to society as a manufacturer by supplying products of a high quality. This is achieved by staying aware of what society demands from the SMM Group and manufacturing products with the right functionality and price to meet those needs.

Specifically, this involves contributing to energy and resource efficiency through products and actively pursuing recycling operations such as the recovery of precious metals from waste. In addition, environmental considerations are taken into account when investing in new equipment and facilities, and efforts are made to lower the environmental impact of the manufacturing process.

Issues in the Six Key CSR Areas

Respect for people and human rights

As well as observing Group-wide policy through consideration of issues like human rights and equal opportunities for men and women, we advance human resources development through on-the-job training (OJT). Prior to sending employees in Japan overseas, we teach them about behavioral guidelines in place at their destination and give them guidance to ensure that locally-hired employees or other parties are not subjected to human rights violations or discriminated against. People in charge of overseas subsidiaries also gather regularly in Japan to build a common understanding about business policies and management.

Occupational health and safety

The entire division is addressing safety management to prevent occupational accidents. If an accident does occur, thorough investigation and analysis are carried out to determine why it happened and what should be done to prevent it happening again, and the resulting measures are introduced across the division in all workplaces under its control.

My Approach to CSR

I believe it is a necessary, ongoing challenge for us to stay aware of how consistent our corporate activities are with society’s needs and to contribute to society through our business. The Materials Division employs more than half the workforce of the entire SMM Group. Compared to the Mineral Resources and Non-ferrous Metals Divisions, many of our products have short product cycles, and that alone means we have to stay well aware of our corporate responsibility to protect our employees’ jobs and lifestyles. I think it’s vital that we select and focus on strong businesses that will become a foundation for corporate growth, and create work environments where employees feel secure.

My Message to Employees

The SMM Group has a duty to supply products of a high quality to society and this is also the duty of each individual employee who works for the company. As well as taking pride in your work, while being attantive to the benefits that our products provide to society, I want you to review your job processes in pursuit of further quality and efficiency improvements.

Yasushi Hashimoto
Managing Executive Officer
General Manager, Materials Div.
Enhancing Crisis Management

2011 was a year in which the SMM Group had to face several crises. Here we describe what happened and how we responded.

The Great East Japan Earthquake of March 11, 2011 not only caused damage to buildings and other property across a large portion of the country, but even triggered a massive tsunami leading to the loss of many lives. It also resulted in secondary disasters such as oil spills and chemical leaks. The consequences were not limited to the areas directly affected by the earthquake—the disaster impacted industry all over the world as damage to infrastructure and plant facilities caused disruption to supply chains.

Within the SMM Group, fortunately no-one was hurt at the Sendai Factory of SumikoTec Co., Ltd., but buildings and production equipment were damaged by the original earthquake and subsequent aftershocks. Operations were suspended for around two weeks.

On October 3, the HPAL* plant the SMM Group is constructing in Taganito on Mindanao Island in the Philippines was attacked by an armed group. Although no-one at the plant or in the surrounding community was hurt, serious damage was done to construction machinery, the unfinished building, and facilities. The armed group gave completely unfounded reasons for the attack and it is regrettable that reports by some media outlets may have damaged the SMM Group’s credibility. The SMM Group resumed construction work after installing safety measures with the utmost importance placed on preserving human life, including the lives of residents in the local community.

* HPAL: High-pressure acid leaching

In early October, large-scale flooding in Thailand forced SMM Group company Sumiko Leadframe (Thailand) Co., Ltd. to suspend operations after its plant building and production facilities were submerged. The floods retreated by the end of November and restoration work to bring about a resumption of operations was considered. However, this plan was abandoned as production facilities were deemed irrecoverable because they had been submerged for more than a month, and it was possible to produce lead frames at another site.

These events reminded the SMM Group that crises always come to pass at some point, and their consequences may exceed all predictions. Preventive activities were not enough. The SMM Group therefore made changes to its crisis management framework, determining ways to mitigate or minimize damage and ensure the continuity of business activities when risks are actualized.

Regarding the dangers of earthquakes, we set up a Group-wide earthquake preparedness committee in May 2012 and reviewed measures in line with three basic policies: (1) to preserve human life; (2) to prevent pollution occurring as a secondary disaster; and (3) to prepare for a swift resumption of operations. The proposed measures are being systematically introduced along with the necessary capital investment, and the risks are being steadily lowered as a result.

The Group-wide crisis management framework, which includes response to overseas crises, was also reviewed. A uniform crisis response system has been introduced, whereas previously the response was prescribed differently for each type of crisis, and a framework was built to enable prompt commands and a swift initial response under a Group-wide crisis management structure with information passing quickly to top management.

We have inconvenienced stakeholders, but SMM wishes to apply the lessons learned from the crises of last year and carry out successive drills to really strengthen our crisis management framework.
Adding Internationally Accepted CSR Activity to Sumitomo’s DNA as a Driving Force for Global Growth

We presented our proposed roadmap for achieving the CSR Vision for 2020 to a number of outside experts. We asked them what they thought SMM Group needed to do to grow into a better global corporation and to help build a sustainable society, and about what employees should bear in mind and the action they should take. (The dialogue took place on April 25, 2012.)

Ways the SMM Group, as a global corporation, should address human rights

Mr. Wakabayashi  As you continue to expand your overseas operations, I think you will need to consider human rights in terms of international standards. It’s important that you stay aware of those standards, and consult the definitions and texts they prescribe as part of ongoing discussions and other training to determine what actions to take if incidents occur.

Ms. Takahashi  I think it’s very important that you routinely work to develop human resources with high sensitivity to social issues because you will need employees who can accurately grasp the issues to work out what contribution to make to society, including in the area of human rights.

Mr. Wakabayashi  I also think it’s important, when considering respect for human rights in regions with undeveloped social infrastructure or war zones, that you determine the extent of your influence and take responsibility by declaring your intent to ensure that human rights are observed within that scope of influence.

Ms. Kuroda  ISO 26000*, too, places great importance on human rights, which is a common theme throughout the standard. A key factor is how you identify whom your corporate activity affects, because passing over someone who is affected could potentially lead to serious problems. How to determine your sphere of influence, and how to respond if something does happen—a framework for implementing initiatives properly through a PDCA (Plan–Do–Check–Act) cycle needs to be considered alongside policy.

Mr. Kogure  Human rights will always be a concern for corporations wanting to go global. But don’t think of human rights only in terms of the negative aspects. It’s very important that you also advance initiatives in areas which will be an advantage when you become a major player in the non-ferrous metals industry. Securing and nurturing global human resources, for example. I’m sure you will hire employees locally at overseas sites, but you will also need to work hard to develop a flexible Japanese workforce.
Building good community ties through shared understanding based on communication with partners

Ms. Takahashi Corporations are a part of this planet, too. They are a part of society. As such, stakeholders and corporations are partners working together to make the planet and society better. I believe corporations need to be willing to lead the way and instigate activities.

Ms. Kuroda “Partnership” is the general rule under ISO 26000. The global standard of today calls for multiple sectors of society, including corporations, NGOs and other organizations to cooperate, pooling resources and ideas in order to resolve issues faced by society or communities that a single sector cannot tackle alone. I would like to see the SMM Group take a more integrative approach in its relationships with communities and stakeholders instead of dealing with one at a time, as in “SMM and local communities” or “SMM and NGOs.”

Mr. Sato (SMM) I agree. We fully understand that corporations, residents of local communities and governments are all part of a wider circle, each relating to the others in a variety of ways. This is indeed something we have to work towards.

Ms. Takahashi Communication is the basis for all cooperation with your various stakeholders. When considering ways to communicate, I think the idea of shared understanding should be embraced. Internally, for example, executive officers and employees might take part in volunteering activities together. And I think taking part in activities with outside stakeholders, too, would similarly generate the sense of understanding being shared.

Ms. Kuroda Building good relationships with NGOs also has advantages. Engaging NGOs in your operations right from the start can facilitate ties with the community, and there are cases where a company’s image has improved because an NGO sent out a message saying its efforts were a good example. Another way is to have a third party assess the impact of the company’s operation on a community several years after setting up operations there.

Mr. Sato (SMM) What you’re saying is that praise from an NGO delivers a much stronger message than a corporation coming out saying we did this, we did that, being self-congratulatory. I, too, would like to pursue activity together with NGOs rather than just engage in dialogue.

Ms. Kuroda In last year’s CSR Report, you said you place importance on communication with local communities and I believe that’s very important in connection to your business. Through such communication with local communities you begin to see the kind of contribution you should be making to the community.

Mr. Hashinaka (SMM) Developing a business facility, particularly a mine, leads to the creation of a small town, since you need company housing, medical centers, stores, and schools. It’s therefore necessary to pursue development that’s oriented around the community so as not to destroy the pre-existing culture. I feel that communication is essential in that sense.

Ms. Takahashi With regard to social contribution, I would like to see you advance efforts in communities with the aim of resolving social issues rather than being overly concerned about receiving high praise from society.

Revisiting Sumitomo’s DNA when making tough decisions, and adding current knowledge to succeed internationally

Mr. Kogure The most important consideration when expanding overseas is corporate identity. The SMM Group has existed for 420 years thanks to the dedication of those who have gone before. That is your greatest asset and I believe people overseas will see it that way, too.

Ms. Takahashi Do you have many opportunities to reacquaint yourselves with Sumitomo’s “DNA,” or business spirit?

Mr. Asai (SMM) Yes, we do. They are drilled into us constantly from the time we start training as new employees. When faced with tough business decisions, they represent a starting point to revisit to help us work out a solution.

Ms. Takahashi And that leads to the SMM Group’s CSR being fulfilled, correct?
Mr. Kogure When something happens, it’s only human that we base decisions on ideas as to where our priorities lie, perhaps the company, or a particular person. Having a well-established CSR framework and the Sumitomo Business Spirit can make all the difference.

Ms. Takahashi The SMM Group has fantastic origins, and I believe you could achieve many things by sharing a mentality of doing highly meaningful work appropriate to the times and stage of development.

Mr. Wakabayashi I think you can be successful internationally by routinely revisiting the origins of your founding. And by making efforts at the same time to stay ahead of international human rights standards, for example, through ongoing study and accumulation of knowledge, your employees have the potential to grow into human resources who can make decisions with confidence and make a difference.

Business impacts people and society. Employees aware of this need to integrate CSR into business activities

Mr. Kusada (SMM) Individual employees are the ones who will be putting your ideas into practice. I’d like our employees to remember that business activities inevitably have some kind of impact. Employees need to stay aware of the impact their work has on which stakeholders and be ready to make changes when problems arise. Problems don’t have to be resolved overnight. I want the company and employees to aim for gradual improvements, making progress one day at a time.

Mr. Asai (SMM) With regard to CSR activity, I believe it’s employees who need to change. I’d like to see each employee confront this head on, working out for themselves what they need to do and how they should change rather than wait to be told.

Mr. Wakabayashi Society is changing dramatically as we shift from an age marked by the sole pursuit of efficiency within a market economy to an age in which corporations and individuals are forced to think about sustainability.

Strategies for building a sustainable society even give corporations a competitive advantage and lead to growth. For example, when entering an agreement with an overseas party or when giving instructions, remembering there is a real person beyond the tip of your pen or the computer screen will lead to corporate competitiveness. Those are the times we live in, which is something I hope you will recognize.

Ms. Takahashi I view sustainability narrowed down into two themes: preservation of the natural environment, and development of the next generation. One way to determine if you are on the right track is to ask yourself whether you would be willing and proud to talk to your children about what you do. I think the only way to make sure society is sound for the next generation is to lead by example.

Mr. Kogure CSR truly is an integral part of business management. I hope you will see that individual employees, as well as managers, need to be aware of and embody this idea if you wish to become a major player in the non-ferrous metals industry.

Response

If we want individual employees to understand that SMM’s corporate social responsibility is to resolve social issues through its business and to fulfill this through their jobs, it is indeed important to put our company’s origins, the Sumitomo Business Spirit, into practice. I strongly felt the need to keep communicating to our employees that by doing this we can earn trust wherever we do business. On top of that, I would like SMM to work hard to become a corporation where individual employees learn about social issues and advance CSR activities through business in line with internationally accepted approaches, making them proud of their work and the company. Thank you very much for your valuable comments.

Takashi Sugiura
CSR Executive Officer
General Manager, Safety & Environment Control Dept.
Sumitomo Metal Mining Co., Ltd.
SMM’s Response to Stakeholder Opinion

Third-party Opinions on CSR Report 2011 and SMM’s Responses

<table>
<thead>
<tr>
<th>Opinion</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMM needs to specify how it intends to encourage action within its</td>
<td>Through changes to our roadmap, we began investigating ways to</td>
</tr>
<tr>
<td>sphere of influence.</td>
<td>survey our sphere of influence (through the supply chain) and ways to</td>
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<tr>
<td></td>
<td>encourage action on human rights issues, especially overseas.</td>
</tr>
<tr>
<td>SMM should indicate specific procedures taken to incorporate human</td>
<td>We have described some procedures of how investment assessments are</td>
</tr>
<tr>
<td>rights considerations when investing.</td>
<td>implemented in our explanations of activities and we will continue</td>
</tr>
<tr>
<td></td>
<td>efforts to include clarification of such procedures.</td>
</tr>
<tr>
<td>Rather than touch upon human rights in different areas, it would be</td>
<td>After reviewing the report’s design, we have enhanced the composition</td>
</tr>
<tr>
<td>better to make human rights matters more visible under a single heading.</td>
<td>for each of the Six Key CSR Areas and have grouped topics related to</td>
</tr>
<tr>
<td></td>
<td>human rights together as much as possible.</td>
</tr>
</tbody>
</table>

Main Comments on CSR Report 2011 from Employee Survey (1,520 Responses) and SMM’s Response

<table>
<thead>
<tr>
<th>Area for Improvement</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would like to see more explanations of CSR itself.</td>
<td>Explanations of SMM’s CSR activities have been added as</td>
</tr>
<tr>
<td></td>
<td>“Understanding This Report” in the digest version.</td>
</tr>
<tr>
<td>I would like to see more detail on how businesses and work processes relate to</td>
<td>We have designed the report with a focus on our relationship to society</td>
</tr>
<tr>
<td>society.</td>
<td>throughout. The general managers of business divisions have also</td>
</tr>
<tr>
<td></td>
<td>provided comments on initiatives within their divisions.</td>
</tr>
<tr>
<td>It is hard to grasp specific initiatives relating to the Six Key CSR Areas. Please</td>
<td>Targets and initiatives were made more specific through changes to our</td>
</tr>
<tr>
<td>make improvements.</td>
<td>roadmap, and have been reflected in plans for next fiscal year.</td>
</tr>
<tr>
<td>Efforts of group companies should be highlighted more.</td>
<td>Coverage of group company initiatives has been expanded overall.</td>
</tr>
<tr>
<td></td>
<td>Clarification of the relationship between activities and the CSR Policy</td>
</tr>
<tr>
<td></td>
<td>has also been included for each of the Six Key CSR Areas.</td>
</tr>
<tr>
<td>CSR activity goes on indefinitely and so I think we need ongoing forward-looking</td>
<td>Feedback on action expected of employees was received during the</td>
</tr>
<tr>
<td>efforts. And as many aspects have not yet permeated through to all employees, we</td>
<td>stakeholder dialogue, and comments from division general managers</td>
</tr>
<tr>
<td>should be advancing activities that get employees more involved.</td>
<td>have also been included.</td>
</tr>
<tr>
<td>I think comments from stakeholders like people actually living in local</td>
<td>Comments sought from outside parties with a significant interest in</td>
</tr>
<tr>
<td>communities, rather than so-called experts, would offer more specific insight into</td>
<td>each of the Six Key CSR Areas have been included on the pages covering</td>
</tr>
<tr>
<td>the opinions of people outside the company.</td>
<td>each area.</td>
</tr>
<tr>
<td>In regard to respect for people and human rights, I felt explanations to</td>
<td>Comments on the direction and progress of initiatives relating to</td>
</tr>
<tr>
<td>employees were insufficient. I cannot ascertain what a rewarding workplace is</td>
<td>work-life balance were provided by related personnel.</td>
</tr>
<tr>
<td>supposed to be, or how one is to be created.</td>
<td>A lot of information on overseas activities and comments from overseas</td>
</tr>
<tr>
<td>I would like to see more content dealing with activities overseas (e.g. China,</td>
<td>employees has been included, as well as examples of communication with</td>
</tr>
<tr>
<td>the Philippines, and South America).</td>
<td>overseas communities.</td>
</tr>
<tr>
<td>I want to know about the issues and risks we face, how we respond to</td>
<td>Introductions to specific initiatives in the Six Key CSR Areas were written</td>
</tr>
<tr>
<td>them, and any trouble we might be having.</td>
<td>with a focus on the approaches to and motivation behind work processes.</td>
</tr>
<tr>
<td></td>
<td>And efforts to enhance crisis management were outlined as a topical theme for</td>
</tr>
<tr>
<td></td>
<td>2011.</td>
</tr>
</tbody>
</table>

Praise

| All kinds of corporations are putting effort into CSR initiatives. Targets and   | I particularly liked the piece on the Pogo Mine in Alaska. Many natural   |
| policies included some difficult terms, but the “Action Examples” from the      | disasters have struck this year and I think an increasing number of people  |
| previous year used more familiar language and were easy to follow. I also       | are taking an interest in the environment. Mine development inevitably      |
| managed to sense the relevance of CSR.                                          | involves disturbing nature and affecting the surrounding environment in    |
|                                                                                     | some way, but reading the article made me realize the extent of our        |
|                                                                                     | environmental considerations.                                             |
| The color scheme and photo layout looked good and made for easy reading.        | I was reminded that doing one’s routine work properly is also an           |
|                                                                                     | important CSR activity.                                                   |
| It was easy to ascertain that business sites make contributions through close    | Honestly speaking, I used to just flick through the report as I wasn’t     |
| links to the community.                                                          | very familiar with CSR and the content was too difficult for me to really  |
|                                                                                     | take on board. But after a number of readings of this year’s report, I     |
|                                                                                     | managed to understand what was being said to a certain extent. As a       |
|                                                                                     | member of the SMM Group, I hope to gradually progress from coming to       |
|                                                                                     | terms with the CSR issues, and then understanding the issues, to actually   |
|                                                                                     | taking action where I can.                                                |
| I used to think CSR activity had nothing much to do with me. Browsing through    | I used to think CSR activity had nothing much to do with me. Browsing      |
| this year’s report made me see that I had taken the topic to be more             | through this year’s report made me see that I had taken the topic to be    |
| complicated than it actually was. I decided to try and do what I could, taking  | more complicated than it actually was. I decided to try and do what I could,|
| responsibility and even leading by example.                                     | taking responsibility and even leading by example.                        |
## Initiatives in the Six Key CSR Areas

### Effective Use of Resources

#### CSR Vision for 2020

A company that generates resources using innovative technology

Business development through technologies to process low-grade/hard-to-process ores and recycle materials from urban sources

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### Targets, FY2011 Achievements and FY2012 Plan

<table>
<thead>
<tr>
<th>Target</th>
<th>FY2011 Achievement</th>
<th>FY2012 Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discover ore deposits through active exploration in high-potential mining areas</td>
<td>Carried out active exploration in North and South America, Australia and elsewhere</td>
<td>Continue active exploration at the Hishikari and the Pogo Mines</td>
</tr>
<tr>
<td>Expand existing mines (Cerro Verde, Morenci and Northparkes)</td>
<td>Expansion projects are underway at each mine</td>
<td>Support and evaluate the expansion plan</td>
</tr>
<tr>
<td>Explore and develop mines in the Solomon Islands (digging application* and resolution of mining zone issues)</td>
<td>Explored existing mining zones</td>
<td>Explore existing mining zones and file a digging application.</td>
</tr>
<tr>
<td>Develop the Sierra Gorda Mine (begin production in 2014)</td>
<td>Construction work progressed well</td>
<td>Advance development through active involvement in mineral processing trials and plant engineering</td>
</tr>
<tr>
<td>Acquire development concessions through active evaluation of projects</td>
<td>Considered participation in several development projects in Chile, Canada and elsewhere</td>
<td>Continue identifying and evaluating development projects</td>
</tr>
<tr>
<td>Start operations at the Taganito Project as planned (in 2013)</td>
<td>Despite suspension of construction work due to an armed group attack, resumed work in December 2011 after putting safety measures in place</td>
<td>Press ahead with construction as planned</td>
</tr>
<tr>
<td>Develop ideal processing methods for new nickel ores</td>
<td>Introduced a new mineral analysis system (Mineral Liberation Analyzer) and started using it to establish ore evaluation methods</td>
<td>Establish evaluation technology using the MLA and look into ideal processing methods for new nickel ores</td>
</tr>
<tr>
<td></td>
<td>Increase nickel production</td>
<td>Advance reinforcements for completion in 2013</td>
</tr>
<tr>
<td>Develop mineral processing technology for extracting low-impurity/ high-grade copper concentrates from high-impurity copper ores</td>
<td>Developed flotation technology for separating copper and arsenic, and looked into application to mines currently operating</td>
<td>Continue survey of ideal operating conditions</td>
</tr>
<tr>
<td></td>
<td>Increase copper production</td>
<td>Study the potential for application of impurity separation technology to new projects</td>
</tr>
<tr>
<td>Recover raw materials for iron manufacturing from nickel oxide ores</td>
<td>Achieved chromium(III) oxide concentrations suitable for commercialization through trials</td>
<td>Construct a plant for verification testing</td>
</tr>
<tr>
<td>Recover previously ignored elements in ores besides targeted metals</td>
<td>Studied processes for recovering trace elements during refining</td>
<td>Look into commercial application of processes</td>
</tr>
<tr>
<td>Advance recycling of Ni-MH batteries</td>
<td>Recovery of valuable metals from Ni-MH battery scrap is underway</td>
<td>Introduce new, more efficient recycling processes</td>
</tr>
<tr>
<td>Develop recycling processes for Li-ion batteries</td>
<td>Established a basic flow for Li-ion battery recycling processes</td>
<td></td>
</tr>
<tr>
<td>Advance processing of recycled copper raw material at the Toyo Smelter &amp; Refinery</td>
<td>Achieved the processing volume target by increasing the processing capability of the Toyo Smelter &amp; Refinery converter</td>
<td>Advance recovery of copper from recycled raw materials</td>
</tr>
<tr>
<td>Establish technology for maintaining or improving slag quality</td>
<td>Tackled JIS revisions relating to slag for concrete</td>
<td>Respond to JIS revisions relating to slag for concrete</td>
</tr>
</tbody>
</table>

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*Digging application:* Mining rights consist of exploratory rights and digging rights, which are independent of one another. A digging application refers to the preferential acquisition of digging rights by a holder of exploratory rights when it is clear ore deposits are present.
**Roadmap Revisions**

**POINT 01**
- Reclassified activities according to three objectives: effective use of natural resources; battery recycling promotion and effective use of secondary resources; and compression and effective use of products.

**POINT 02**
- Added the recovery and effective use of accessory trace elements* as a new activity.

**POINT 03**
- Relabeled activity to use, and increase processing of, low-grade nickel ores as “Apply refining technology to make effective use of low-grade/hard-to-process ores” and reclassified this activity into four categories: launch of Taganito Project operations; establishment of other nickel resource processing methods; increased nickel production; and development of mineral processing technology.

* Accessory trace elements: Previously ignored elements in ores other than targeted metals

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**Stakeholder Comment**

Resource processing technologies initiated through mine development are used for processing large volumes. They consist of low-cost processes, making them ideal for application to recycling, waste processing and environmental remediation. It is hoped they will evolve into resource recycling technology that will bring about a swift resolution to environmental and resource issues. Through our research relating, for example, to the recovery of phosphorus from sewage sludge, full recycling of waste concrete, the recovery of cenospheres from coal fly ash, and the recovery of rare earth materials from waste fluorescent lamps, we have shown that the application of resource processing technologies enables the relatively low-cost recovery of valuable materials from resources which would previously have been discarded or used as cement material.

SMM has paved the way for commercial nickel refining operations that use low-grade nickel oxide ores as the raw material. This and other accomplishments demonstrate SMM’s technological prowess, but I also feel they have been a driving force behind recent advances in R&D activities. Kyushu University conducts joint research with SMM through our Comprehensive Collaboration service, with many achievements in terms of both research and human resources development. I believe this kind of collaboration on research between industry and academia is vital not only for enhancing Japan’s technological prowess, but also for developing human resources for the resources field, and it will have an influence on future university education. I hope SMM will continue to collaborate with academia on areas such as human resources development.

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**Subcommittee Chairman’s Comment**

In our revisions to the roadmap this fiscal year, we clarified initiatives for making efficient use of resources by organizing them into the following three categories:

1. **Effective use of natural resources**
2. **Battery recycling promotion and effective use of secondary resources**
3. **Compression and effective use of products**

We will make effective use of low-grade and hard-to-process ores as resources by employing proprietary technologies while targeting the acquisition of new resources through active exploration and mine development. Recovering accessory elements in ores besides targeted metals and turning them into resources is another important initiative. In the area of recycling, we will press ahead with our nickel metal hydride (Ni-MH) battery recycling operation, and we will look to establish processes for recycling items like lithium ion (Li-ion) batteries. Effective use of products will involve promoting slag reuse by improving and maintaining the quality of slag.

Through these initiatives, we aim to become, and continue to develop as, “a company that generates resources using innovative technology.”
Initiatives for Effective Use of Resources

Basic Approach
SMM Group business centers on the utilization of the Earth’s valuable, yet limited, resources. Effective use of resources is therefore considered an important issue for management as we seek sustainable business development. Based on this understanding, the SMM Group has included “effective use of resources” as one of its Six Key CSR Areas and is advancing recycling efforts. As the CSR Vision for 2020 depicts “a company that generates resources using innovative technology,” we are developing technologies that will assist with the effective utilization of natural resources which have not previously been converted into resources, such as low-grade and hard-to-process ores. We are also endeavoring to recover precious and other valuable metals from items such as used home appliances and electronic devices, and develop and refine recovery technologies.

Environmental Impact Reductions from Effective Utilization of Resources

Slag as a Recycled Material
Copper slag is a by-product produced during smelting at the Toyo Smelter & Refinery, which manufactures electrolytic copper. The main use for copper slag, for almost two thirds of the total volume, is cement production in Japan and overseas. With an iron content of around 40%, copper slag is widely used as a source of iron for cement. Copper slag output in FY2011 was around 670 kilotons. The volume of copper slag sold was around 860 kilotons.

Hyuga Smelting manufactures ferro-nickel, a material used in stainless steel. It generated around 810 kilotons of ferro-nickel slag in FY2011. Around 770 kilotons of ferro-nickel slag was sold as a recycled material, its main destination being blast furnaces for steelmaking. With a magnesia content of around 30%, ferro-nickel slag is used as a source of magnesia for blast furnace flux. Both copper slag and ferro-nickel slag are also used as substitutes for natural sand in concrete aggregate and public works in ports and harbors.

Zero Emissions Initiatives at Ome District Division
Supply chain management is indispensable for achieving zero emissions. Instead of limiting efforts to minimizing waste emissions during the production stage, primarily through the design of environmentally-friendly production processes, we must also ensure that considerations toward the environmental impact of consumption and disposal are incorporated into the selection and production processes for raw materials.

The Ome District Division has been pursuing environmental impact reductions through waste reduction since FY2001. Zero emissions were achieved in FY2003 when the district division sought to recycle waste as resources together with a number of other companies, and the status has been maintained since (except for FY2006).

Employees are highly committed to waste reductions and their efforts in support of thorough waste sorting and recycling contributed to continued zero emissions in FY2011, with 0% of waste disposed in landfills.

1. Zero emissions: When less than 1% of total waste is disposed in landfills.

Making Effective Use of Low-grade Ore

The plant of Coral Bay Nickel Corporation (CBNC) on Palawan Island in the Philippines commenced full-scale operations in April 2005. Adjacent to the plant, the Rio Tuba nickel mine has been excavating nickel oxide ore ever since it opened. However, while high-grade oxide ore buried deep in the earth was being mined, low-grade oxide ore with low nickel content existing close to the surface was not processed. Because this low-grade oxide ore makes up around 70% of all oxide ore, there was global demand for the development of technology that would allow it to be processed.

Recovering nickel from this low-grade oxide ore requires the use of high-pressure acid leaching (HPAL), a hydrometallurgical technique. Large-scale production using this process demands a high degree of equipment engineering and operational skill. Industry players the world over had been struggling with application of HPAL technology, but SMM overcame many technical hurdles to become the first company in the world to successfully apply HPAL technology to commercial production. Turning previously unusable low-grade ore into resources also has tremendous social significance.

In order to make full use of this HPAL technology, SMM embarked on its Taganito Project in 2009. The project entails the construction, in the Taganito District on Mindanao Island in the Philippines, of a large HPAL process plant with an annual production of 30 kilotons of nickel intermediate raw materials. The project is progressing well and operations are scheduled to get underway in 2013.

2. Coral Bay Nickel Corporation (CBNC)
Capital: 587.5 million Philippine pesos. Shareholders: Sumitomo Metal Mining Co., Ltd. (54%), Mitsui & Co., Ltd. (18%), Sojitz Corp. (18%), Rio Tuba Nickel Mining Corp. (10%). Head Office: Rio Tuba, Bataraza, Palawan Province, Philippines.

Employee’s Perspective

Improving Copper Recovery by Reducing Copper Loss in Slag

Keisuke Yamamoto
Assistant Manager, Smelting Section
Toyo Smelter & Refinery

Slag generated during the copper smelting process contains copper—less than 1%. From the perspective of utilizing resources effectively, it’s very important that we reduce the amount of this copper lost in slag. In September 2011, Toyo Smelter & Refinery completely renovated the brickwork of its flash furnace for the first time since operations began in 1971.

Now we have an environment in place allowing high-intensity flash smelting and the development of a concentrate burner. We will also aggressively pursue additional technological improvements to help reduce copper loss.
SMM engages in the manufacture and sale of materials for the nickel metal hydride (Ni-MH) batteries employed in hybrid vehicles. Since FY2000, we have also been conducting research into the recycling of Ni-MH batteries. With the growing popularity of fuel-efficient hybrid vehicles, demand for Ni-MH batteries, an essential component, has jumped. SMM anticipates the launch of a used Ni-MH battery collection and recycling operation. In 2010, it commenced the recycling of nickel electrode plates at its Niihama Nickel Refinery in Ehime Prefecture, becoming the first company in the world to realize “battery to battery” recycling.

By applying nickel manufacturing technologies to the recycling of materials, we are working to ensure effective use of resources and thereby contribute to environmental preservation.

### Recyling of Nickel Metal Hydride Batteries

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### Employee's Perspective

**Taganito Project**

Osamu Nakai
Manager of Process Technology Sect., Taganito Project Div.

High-pressure acid leaching (HPAL) is a technology used to recover nickel and cobalt from low-grade nickel oxide ores, which are traditionally difficult to process. SMM’s group company Coral Bay Nickel Corporation (CBNC), which has drawn global interest, was the first in the world to successfully apply HPAL technology on a commercial scale. CBNC produces mixed nickel-cobalt sulfides which are then exported to SMM’s Niihama Nickel Refinery for refining into nickel and cobalt metal. At the Taganito Project, the plan is to process low-grade oxide ores even further. HPAL technology is a response to society’s requirement that limited resources are used effectively, and I believe we have an important duty to improve upon it even further. Construction at the Taganito Project is underway and commercial production is scheduled to begin in 2013.

### Employee's Perspective

**Development of Battery Recycling Processes**

Hitoshi Ishida
Manager of Niihama Research Laboratories

In Toyota Motor Corporation’s Environmental Report 2011 it says, “Toyota, jointly with... Sumitomo Metal Mining Co., Ltd.,... has launched [in October 2010] the world’s first ‘battery-to-battery’ business to recycle nickel in used hybrid-vehicle nickel-metal-hydride batteries for use in new batteries.” The tendency under current recycling practices is to use resources from products of a higher grade in those of a lower grade, but there is a social need for resources to be reused in the products they were originally used for. We need to develop processes allowing the recovery of high-purity resources to be reused as battery materials instead of throwing them into an electric furnace as a raw material for stainless steel. I think this flow of resources would also lead to greater stability in manufacturing operations as we shift to a society based on recycling, rather than large-scale consumption. Automotive lithium-ion batteries, which are soon expected to emerge in large volumes, are no exception, so we are currently aiming to develop original recycling and recovery technologies and realize low-cost processes.

### Chemical processing (Recovery of nickel / cobalt and rare earths)

**SMM**

- Nickel sulfate
- High-purity cobalt metal
- Cobalt chemicals

**Battery material manufacturing**

- HV battery production
- HV production

**End-of-life vehicles**

- Dismantling and removal of Ni-MH batteries
- Pre-processing/Material sorting

**Ni-MH Battery Recycling: Flow Diagram**

- HV battery production
- HV production

---

**Effective Use of Resources**

3. **High-pressure acid leaching (HPAL)**
   A method used to extract nickel and cobalt using sulfuric acid in a high-temperature, high-pressure autoclave (pressure vessel).

4. **Nickel intermediate raw materials**
   Mixed nickel-cobalt sulfides (approx. 55% nickel). All mixed nickel-cobalt sulfides are processed at SMM’s Niihama Nickel Refinery (Ehime Prefecture), where they are turned into electrolytic nickel and electrolytic cobalt.

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**Employee’s Perspective**

**Taganito Project**

Osamu Nakai
Manager of Process Technology Sect., Taganito Project Div.

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---

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By applying nickel manufacturing technologies to the recycling of materials, we are working to ensure effective use of resources and thereby contribute to environmental preservation.
Initiatives for Effective Use of Resources

Using Resources Effectively through Recycling

Besides procuring copper and precious metal scrap from scrap dealers, the SMM Group recovers precious metals and other valuable metals from electric furnace dust, waste circuit boards, and other such items. In FY2011, the recycled materials ratio increased slightly to 3.1% due to an increase in secondary copper materials and electric furnace dust (see Table 1).

Recovery and recycling of copper, the archetypal non-ferrous metal, and its alloys was readily pursued even before the 3Rs (Reduction, Reuse and Recycling) were advocated because of their high scrap value. Almost all the copper shavings are recycled as raw material by manufacturers of electric cables and wrought copper and copper alloy products.

The SMM Group, too, collects waste cables and uses copper pipes and converts the copper into new resources. In FY2011, recycled copper materials amounted to the equivalent of around 52 kilotons of product, or 15.5% of output (FY2010: 10.5%).

Recycled zinc materials amounted to the equivalent of around 30 kilotons of product, or 43% of output (FY2010: 40%).

Table 1 Recycled Materials as a Percentage of Materials Used

<table>
<thead>
<tr>
<th></th>
<th>FY2009</th>
<th>FY2010</th>
<th>FY2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycled materials (kt)</td>
<td>160</td>
<td>204</td>
<td>218</td>
</tr>
<tr>
<td>Recycled materials ratio (%)</td>
<td>2.3</td>
<td>3.0</td>
<td>3.1</td>
</tr>
<tr>
<td>Total volume of materials used (kt)</td>
<td>6,875</td>
<td>6,861</td>
<td>7,107</td>
</tr>
</tbody>
</table>

Final Disposal Volumes of Industrial and Mining Waste

The SMM Group has long been making efforts to reduce the amount of wastewater sludge (mining waste) from the mine-affiliated Toyo Smelter & Refinery, and industrial waste that undergoes final disposal.

In FY2011, the total volume of final disposal, including final disposal of industrial waste, came to 103 kilotons, an increase of around 22 kilotons from the previous year. One of the main reasons for this was an increase in the production of iron pellets—reduced and concentrated iron from electric furnace dust, manufactured as recycled iron raw materials at Shisaka Smelting during the recovery of zinc from electric furnace dust—due to increased processing of electric furnace dust, but a decrease in the volume of pellet sales despite promotion efforts targeting electric furnace operators (see Fig. 1).

As well as advancing efforts to promote sales of residue from iron pellet processing, we aim to reduce the final disposal volume by increasing the amount of wastewater sludge from Toyo Smelter & Refinery returned to the refining process.

We have summarized the volumes of waste generated at all business sites, including overseas sites, according to the disposal or processing method, and whether disposal or processing was performed directly or contracted (see Table 2).

Fig.1 Final Disposal Volumes 1 of Industrial and Mining Waste in Japan

<table>
<thead>
<tr>
<th></th>
<th>Industrial waste</th>
<th>Mining waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2008</td>
<td>100</td>
<td>8</td>
</tr>
<tr>
<td>FY2009</td>
<td>49</td>
<td>4</td>
</tr>
<tr>
<td>FY2010</td>
<td>75</td>
<td>6</td>
</tr>
<tr>
<td>FY2011</td>
<td>98</td>
<td>9</td>
</tr>
</tbody>
</table>

Table 2 Volume of Waste (Hazardous/Non-hazardous3) by Disposal or Processing Category

<table>
<thead>
<tr>
<th>Processing method</th>
<th>Total (kt)</th>
<th>Hazardous (kt)</th>
<th>Non-hazardous (kt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycling</td>
<td>48</td>
<td>2</td>
<td>46</td>
</tr>
<tr>
<td>Landfill</td>
<td>5,364</td>
<td>97</td>
<td>5,267</td>
</tr>
<tr>
<td>Incineration</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Volume reduction, etc.</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>5,415</td>
<td>100</td>
<td>5,315</td>
</tr>
</tbody>
</table>

Employee’s Perspective

Oxide Ores Only

In April 2012, Harima Smelter switched to an “oxide ores only” operation to reduce waste and promote recycling. This involves manufacturing zinc metal without imported zinc concentrates through the processing of only recycled oxide ores.

The oxide ores used mainly consist of zinc which group company Shisaka Smelting recovers through the processing of dust generated by steel manufacturers that operate electric furnaces. Harima Smelter has introduced technology for manufacturing zinc metal using only recycled materials like these by the imperial smelting process (ISP), a method for simultaneous smelting of zinc and lead.

As well as making a continued contribution to waste reduction in Japan, Harima Smelter will contribute to society through the recovery and recycling of zinc and other valuable metals.

Atsushi Kaikake
General Manager, Harima Smelter
Freshwater usage increased modestly in FY2011. The SMM Group has commenced initiatives to reduce water usage with a view to preserving biodiversity.

The Niihama Division of Nippon Ketjen reduces water usage through repeated use of water for cleaning aluminum hydroxide cake.

Seawater usage decreased about 18% due to suspension of the Toyo Smelter & Refinery for full furnace renovation work (see Fig. 2).

**Fig. 2 Water Usage (Freshwater/Seawater)**

- **Freshwater**
  - 2008: 30.1 million m³
  - 2009: 30.8 million m³
  - 2010: 31.0 million m³
  - 2011: 31.5 million m³

- **Seawater**
  - 2008: 156 million m³
  - 2009: 160 million m³
  - 2010: 176 million m³
  - 2011: 144 million m³
Initiatives in the Six Key CSR Areas

Environmental Preservation

CSR Vision for 2020

A company that meets international anti-global warming standards by using advanced technologies

- Zero industrial waste emissions
- An expansion of material business concerning products with low environmental impact (creating, storing, and saving of energy)

*Revisions to the CSR Vision for 2020: Outlined in of the roadmap revisions.

**Targets, FY2011 Achievements and FY2012 Plan**

<table>
<thead>
<tr>
<th>Target</th>
<th>FY2011 Achievements</th>
<th>FY2012 Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Continue reducing unit energy consumption by 1% compared to the previous year</td>
<td>Implemented energy-saving efforts, including the introduction of energy-efficient facilities which minimize energy conversion loss and a reduction of steam consumption through thorough operation management. Reduced unit energy consumption of the SMM Group in Japan, weighted by usage, by 1%. Reduced CO₂ emissions by 11 kilotons.</td>
<td>Continue the Technology Division’s business site patrols. (Support smooth implementation of the PDCA cycle for energy management.)</td>
</tr>
<tr>
<td>● Reduce CO₂ emissions by the entire SMM Group</td>
<td>The Technology Division patrolled designated energy management factories (18 sites) and gave guidance relating to energy management systems. The Engineering Division helped Hyuga Smelting identify energy-saving measures and proposed activity themes with large improvement effects.</td>
<td>Continue the Engineering Division’s identification of energy-saving themes. (Support accurate evaluation of improvements.)</td>
</tr>
<tr>
<td>● Reduce final disposal of industrial waste to zero</td>
<td>Final disposal of industrial waste increased by around 22 kilotons overall. This includes an increase in iron clinker* of around 24 kilotons, and a 2-kiloton reduction of other waste.</td>
<td>Carry out energy-saving investment as planned by individual divisions and achieve planned CO₂ emissions reductions.</td>
</tr>
<tr>
<td></td>
<td>In the zinc smelting business, trial operations began, with the aim of switching from the use of both ore and recycled materials as raw materials to the use of only recycled materials. Prevention of zinc slag generation is within reach given the scheduled start of “recycled materials only” operation in FY2012.</td>
<td>Carry out thorough environmental alleviation measures.</td>
</tr>
<tr>
<td></td>
<td>Toyo Smelter &amp; Refinery (copper smelting), formulated a capital investment plan for FY2012 enabling the return of precipitate generated during wastewater treatment to the refining process.</td>
<td>Supply chain and urge implementation of risk management systems.</td>
</tr>
<tr>
<td></td>
<td>Waste-related 3R activities were implemented at business sites with positive effects.</td>
<td>Achieve a smooth launch and stable continuation of “recycled materials only” operation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Invest in facilities for processing wastewater treatment precipitate to enable the returning of precipitate to the refining process.</td>
</tr>
<tr>
<td>● Develop products that have a low environmental impact</td>
<td>Development progressed, with the goal of commercializing solar cell materials and secondary battery cathode materials and creating next-generation products.</td>
<td>Advance development toward attainment of targets and expand sales of new products and existing materials.</td>
</tr>
<tr>
<td></td>
<td>Environmental management systems (EMS) had positive effects at business sites by saving energy (reducing CO₂ emissions), reducing final disposal of industrial waste, and reducing chemical substance releases.</td>
<td>As measures for alleviating environmental impact using EMS, advance energy-saving (CO₂ emissions reduction) activities, reduce final disposal of industrial waste, reduce chemical substance releases and transfers, and reduce water usage.</td>
</tr>
<tr>
<td></td>
<td>Conducted a baseline study of water quality and biota for the Taganito Project.</td>
<td>Ascertain the environmental impact of the supply chain and urge implementation of risk alleviation measures.</td>
</tr>
<tr>
<td></td>
<td>Requested a report on systems for environmental monitoring during construction at the Sierra Gorda Project from the joint venture’s environmental safety committee, and made recommendations.</td>
<td>Carry out thorough environmental management at overseas projects in compliance with international standards.</td>
</tr>
</tbody>
</table>

* Iron clinker: Iron pellets which undergo final disposal as industrial waste.
Roadmap Revisions

The previous roadmap prescribed that 50% of new products should be products with low environmental impact. Given our aim to contribute to society through our business, the revised roadmap prescribes expansion of the materials business targeting products with low environmental impact, which includes existing products, not just new products.

- Creating energy: Materials for power-generating solar cells and fuel cells, etc.
- Storing energy: Materials for power-storing secondary batteries
- Saving energy: Materials for devices which make a large contribution to energy savings

“Zero industrial waste emissions” means reducing the volume of industrial waste that undergoes final disposal to zero. If products, such as iron pellets, generated by recycling operations (intermediate processing of industrial waste) are not all reused, they must inevitably undergo final disposal. As reducing this amount to zero is difficult, a target for industrial waste final disposal volume to achieve by 2020 will be set and reduction efforts made.

Stakeholder Comment

I am pleased to be involved with SMM’s Taganito Project (THPAL) in the Philippines through the provision of finance.

I even had the chance to visit the location and I was impressed by the community’s high regard for SMM. This is due to environmental efforts, such as carrying out a baseline study of vegetation, and social initiatives which, besides the introduction of a social development program based on guidelines provided by the local government, include many self-initiated community contribution activities, as well as the establishment of a framework for conducting regular hearings to identify the community’s requests relating to the project and reflecting those findings in CSR activities.

Even after operations begin at THPAL, I hope SMM will persist with its social initiatives, as well as its efforts to build medium- to long-term relationships of mutual trust with the local government and the local community, such as through the incorporation of environmental considerations into operations and studies of the environmental impact of operations.

Subcommittee Chairman’s Comment

The aim of the SMM Group’s CSR activities is to help resolve social issues through our business. All social issues relating to environmental preservation, such as biodiversity preservation and global warming prevention, are particularly serious, and solutions need to be found quickly.

The Environmental Preservation Subcommittee refers to products in domains relating to the storing, creating and saving of energy as “products with low environmental impact,” and we have partially revised our CSR Vision for 2020 believing we should contribute to society by expanding our business of supplying materials used in such products. We aim to contribute to society through technologies employed within the SMM Group’s materials business.

In order to preserve biodiversity, besides the contribution we make through our products, it’s vital that we lower our impact on the environment during manufacturing. This involves saving energy (unit energy consumption) and reducing CO2 emissions, industrial waste, chemical substance releases, and water usage. Each job process we perform at our workplace also has a role in reducing environmental impact, for example through energy savings, reduction of vehicle idling, waste reduction, reuse, and prevention of constantly running water. I hope all employees of the SMM Group will get actively involved in these efforts and I look forward to working with them on this.

Takashi Sugiura
Chairman, Environmental Preservation Subcommittee
Executive Officer
CSR Executive Officer
General Manager, Safety & Environment Control Dept.

Junsuke Arita
Div. 1, Mining and Metals Finance Dept.
Energy, Natural Resources and Environment Finance Group
Japan Bank for International Cooperation
Policy and Vision

Protecting and co-existing with the global environment are duties we must fulfill to sustain a healthy planet for the benefit of the generations to come and important managerial challenges that can provide stability to our business base.

Applying this way of thinking to our day-to-day activities and conduct, we have engaged in business according to the SMM Group Code of Conduct, which calls for officers and staff to “act in a manner enabling them to contribute to the resolution and/or improvement of…environmental problems of global scale,” and the CSR Policy, which states that “SMM shall work to combat global warming by promoting recycling and effective resource utilization while also targeting technological innovation and continuous improvements in energy efficiency.”

In addition to ongoing efforts relating to pollution and contamination prevention, chemical substance management and other major environmental issues pertaining to operations of the SMM Group, we have also identified key challenges for adoption by the Group, taking into account issues of a global nature and the Group’s current situation. They include reducing CO₂ emissions (energy savings) and zero disposal of industrial waste at landfills, as well as expanding the materials business targeting products with a low environmental impact as a way to contribute to CO₂ emission reductions through our products.

We are taking up these key challenges through a roadmap of activities that will direct SMM toward its CSR Vision for 2020.

Environmental Education

We seize every available opportunity to provide education, covering introductions to environmental issues through to seminars on preservation and management practices. We also encourage acquisition of pollution control manager and other public environmental qualifications by employees.

On-site Introductory Education

Education is provided to raise awareness among newly graduated and mid-career employees, helping them to acknowledge the importance of environmental preservation and recognize the direct influence of day-to-day tasks on environmental matters.

After placement, employees undergo education programs that are determined according to the needs of each workplace. Programs might include education relating to work procedures for avoiding environmental impact, chemical substances, and environmental preservation activities in the workplace and their respective roles, as well as emergency drills.

Environmental e-learning

An e-learning course dealing with principal environmental legislation was launched in the second half of FY2008 with the objective of raising levels of compliance. By the end of the year, more than 1,900 people had taken the course, which is intended for administrators and supervisors of environmental management processes as well as internal environmental auditors. We will update the course by modifying content to reflect law revisions, ensuring its continued effectiveness as a tool for learning by newly appointed internal environmental auditors and other personnel, for confirming regulations and statutory limits, and for education about laws relating to workplaces.
**Internal Environmental Audit Seminars**

This is a program for training internal auditors, who play a central role in environmental management activities, taking responsibility, for example, for performing internal audits of their respective divisions. Participants who pass a final examination after completing the two-day curriculum become certified auditors. More than 2,150 internal environmental auditors have been trained through a total of 109 seminars between 1999 and 2011.

**Issues and Targets**

SMM will continue to do its utmost to ensure compliance and the prevention of environmental accidents.

We will pursue biodiversity preservation through consideration of the indirect influences of our production activities and work to reduce our environmental impact. We will also consider direct influences during development as part of new projects and continue advancing energy-saving activities to contribute to the prevention of global warming.
Material Flows within Business Activity

The SMM Group ascertains the amount of resources and energy it consumes, as well as the Group’s overall environmental impact in quantitative terms, and carries out various activities to lower environmental impact. Here we summarize the inputs and outputs to and from operations in Japan and overseas during FY2011.

### Input

**Resources & Energy**

<table>
<thead>
<tr>
<th>Component</th>
<th>Unit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy fuel oils</td>
<td>kl</td>
<td>60,389 (2,485,549 GJ)</td>
</tr>
<tr>
<td>Coal/Coke</td>
<td>t</td>
<td>428,284 (11,337,390 GJ)</td>
</tr>
<tr>
<td>Gasoline/Kerosene</td>
<td>t</td>
<td>23,799 (892,769 GJ)</td>
</tr>
<tr>
<td>LPG</td>
<td>t</td>
<td>8,271 (420,169 GJ)</td>
</tr>
<tr>
<td>City gas</td>
<td>Ml</td>
<td>695 (30,982 GJ)</td>
</tr>
<tr>
<td>Purchased electricity</td>
<td>MWh</td>
<td>1,661,921 (16,172,420 GJ)</td>
</tr>
<tr>
<td>Purchased steam</td>
<td>GJ</td>
<td>4,733 (4,827 GJ)</td>
</tr>
</tbody>
</table>

### Output

**Products & Emissions**

<table>
<thead>
<tr>
<th>Component</th>
<th>Unit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrolytic copper</td>
<td>kt</td>
<td>333</td>
</tr>
<tr>
<td>Gold</td>
<td>t</td>
<td>32</td>
</tr>
<tr>
<td>Dore</td>
<td>t</td>
<td>10</td>
</tr>
<tr>
<td>Silver</td>
<td>t</td>
<td>223</td>
</tr>
<tr>
<td>Electrolytic nickel</td>
<td>t</td>
<td>41</td>
</tr>
<tr>
<td>Nickel sulfate</td>
<td>t</td>
<td>10</td>
</tr>
<tr>
<td>Electrolytic cobalt</td>
<td>t</td>
<td>2</td>
</tr>
<tr>
<td>Prime western grade zinc</td>
<td>t</td>
<td>70</td>
</tr>
</tbody>
</table>

### Energy

<table>
<thead>
<tr>
<th>Component</th>
<th>Unit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO2</td>
<td>2,459 kt</td>
<td></td>
</tr>
<tr>
<td>Indirect emissions</td>
<td>1,548 kt</td>
<td></td>
</tr>
<tr>
<td>Emissions during transportation (Japan)</td>
<td>t</td>
<td>22</td>
</tr>
<tr>
<td>SOx</td>
<td>1,632 t</td>
<td></td>
</tr>
<tr>
<td>NOx</td>
<td>797 t</td>
<td></td>
</tr>
<tr>
<td>Soot and dust</td>
<td>t</td>
<td>176</td>
</tr>
<tr>
<td>PRTR substances</td>
<td>t</td>
<td>23</td>
</tr>
</tbody>
</table>

### Recycled Materials

<table>
<thead>
<tr>
<th>Material</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper scrap</td>
<td>kt</td>
</tr>
<tr>
<td>Secondary zinc</td>
<td>kt</td>
</tr>
<tr>
<td>Secondary precious metals</td>
<td>kt</td>
</tr>
<tr>
<td>Scrap for metalworking</td>
<td>t</td>
</tr>
<tr>
<td>Electric arc furnace dust</td>
<td>t</td>
</tr>
<tr>
<td>ALC waste</td>
<td>t</td>
</tr>
</tbody>
</table>

### Raw Materials

<table>
<thead>
<tr>
<th>Component</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold and silver ore</td>
<td>kt</td>
</tr>
<tr>
<td>Copper concentrates</td>
<td>kt</td>
</tr>
<tr>
<td>Nickel oxide ore</td>
<td>kt</td>
</tr>
<tr>
<td>Nickel matte, etc.</td>
<td>kt</td>
</tr>
<tr>
<td>Zinc concentrates</td>
<td>kt</td>
</tr>
<tr>
<td>Lead concentrates, etc.</td>
<td>kt</td>
</tr>
</tbody>
</table>

### Materials

<table>
<thead>
<tr>
<th>Component</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica sand (for copper smelting)</td>
<td>102 kt</td>
</tr>
<tr>
<td>Chemicals (lime-based)</td>
<td>636 kt</td>
</tr>
<tr>
<td>Chemicals (sodium-based)</td>
<td>49 kt</td>
</tr>
<tr>
<td>Chemicals (magnesium-based)</td>
<td>7 kt</td>
</tr>
<tr>
<td>Cement, etc.</td>
<td>60 kt</td>
</tr>
</tbody>
</table>

### Recycling-derived products ratio | 2.96%

### Water Usage

<table>
<thead>
<tr>
<th>Component</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshwater total</td>
<td>Ml</td>
</tr>
<tr>
<td>Industrial water</td>
<td>Ml</td>
</tr>
<tr>
<td>Groundwater</td>
<td>Ml</td>
</tr>
<tr>
<td>Tap water</td>
<td>Ml</td>
</tr>
<tr>
<td>Surface water</td>
<td>Ml</td>
</tr>
<tr>
<td>Seawater</td>
<td>Ml</td>
</tr>
</tbody>
</table>

### Waste (including items of value)

<table>
<thead>
<tr>
<th>Component</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total waste</td>
<td>kt</td>
</tr>
<tr>
<td>Landfill on premises</td>
<td>kt</td>
</tr>
</tbody>
</table>

### Breakdown of total waste

<table>
<thead>
<tr>
<th>Component</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spoil</td>
<td>kt</td>
</tr>
<tr>
<td>Flotation tailings</td>
<td>kt</td>
</tr>
<tr>
<td>Wastewater sludge from CBNC, etc.</td>
<td>kt</td>
</tr>
<tr>
<td>Industrial waste (Japan)</td>
<td>kt</td>
</tr>
<tr>
<td>Other</td>
<td>kt</td>
</tr>
<tr>
<td>PRTR substances</td>
<td>t</td>
</tr>
</tbody>
</table>

---

1. Calorific values for both Japan and overseas are calculated using coefficients conforming to the Japanese Act on the Rational Use of Energy. Fuels used as reducing agents are also included. Figures in parentheses indicate the primary energy input in the case of purchased electricity and purchased steam, and calorific value for all others.
2. Does not include materials recycled inside plants.
3. Direct emissions for both Japan and overseas are calculated using emission factors conforming to the Japanese Act on Promotion of Global Warming Countermeasures. Besides CO2 emissions resulting from regulated activities, this includes CO2 emissions (208 kt-CO2) resulting from the use of limestone, which is not regulated.
4. Emission factors used by electric power suppliers are employed for electricity purchased in Japan. Emission factors for overseas are based on International Energy Agency (IEA) data.
5. Greenhouse gas SF6 was released into the atmosphere due to work to restore equipment damaged in the Great East Japan Earthquake.
6. Emissions into rivers flowing into enclosed seas are included as “emissions into seas.”
7. Total transfers to sewerage and off-site transfers.

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SUMITOMO METAL MINING CO., LTD. CSR Report 2012
Initiatives for Reducing Environmental Impact

**Basic Approach**

The history of our copper smelting and refining business, forming the core of the SMM Group, also tells the history of our action against smoke pollution, which manifests as damage to crops caused by sulfur dioxide released during the smelting process. Initiatives for reducing environmental impact have therefore been sustained by successive generations as an essential part of business. The scope of initiatives has also been expanded to encompass themes like reduction of water usage out of consideration for biodiversity preservation.

Learning from the JCO criticality accident of 1999, the SMM Group has established, and acquired ISO 14001 certification for, environmental management systems at all business sites in Japan to ensure strict compliance with laws, covenants and other regulations. These systems are the basis of the Group’s initiatives for reducing environmental impact. Risk management activities are also implemented to reduce the number of environmental risks.

**Initiatives for Responding to Environmental Accidents**

The SMM Group handles large amounts of chemical substances during the manufacturing of products, particularly in smelting and refining operations, and for that reason some business sites bear considerable environmental risk. Environmental care activities involving visits to these sites to check up on initiatives for lowering the risk of environmental accidents have been carried out since FY2008.

During environmental care activities, the Safety & Environment Control Department uses checklists to make sure there are no outstanding issues relating, for example, to chemical substance management procedures at each stage—acceptance, storage, management, monitoring and measurement, and disposal—or to the education of employees who handle the substances, and performance. Actual procedures are confirmed on site and issues (areas for improvement) are identified. Reports on findings are prepared in order to share issues among site representatives and heads of related divisions.

In FY2011, 17 sites underwent such checks. Detailed management and on-site checks were performed, identifying 101 issues and recommendations. Checks will be continued to ensure ever tighter management of chemical substances.

No major spills or environmental infringements (against international treaties, covenants, laws or ordinances) occurred during FY2011.

**Risk Management for Mining Waste**

The SMM Group carries out appropriate management of mining waste generated by the mineral resources business, such as topsoil, spoil, tailings, sludge, and slag.

Oxidization of rocks (spoil) containing sulfide minerals can cause acidic water that contains sulfate ions or water containing heavy metal ions, and therefore wastewater from mines is properly processed in water treatment facilities before release. The Pogo Mine further alleviates risk by surrounding all mineralized spoil with dehydrated flotation tailings so as to isolate it from the outside environment. Tailings containing chemicals that are a high risk to the environment are stabilized by mixing them with cement for use as backfill, while all other tailings are stored outside the mine after undergoing dehydration to reduce volume. Reducing the volume of the tailings reduces the area required for accumulation sites and alleviates risk related to the structural stability of sites. At the Hishikari Mine, crushed ore is shipped as a product, and no tailings are generated as a result of operations.

**Employee’s Perspective**

**Environmental Management of Closed/Suspended Mines**

Ever since the closure of the Sazare Mine in Japan in 1979, the Sazare Office has been managing and maintaining the waste and slime accumulation sites and, since 1996, treating mine water. The two serious management risks are the release of substances from those accumulation sites and the release of untreated water.

Storing of water inside the mine for treatment began in 2005 and the treatment facility was brought closer to completion the following year with the installation of a remote monitoring system allowing automatic shutdown in emergencies. To prevent substance releases from the accumulation sites, a dam was installed in 2007 in readiness for emergencies. However, an earthquake on a par with the Great East Japan Earthquake of 2011 might cause unforeseen damage and we cannot rule out a worst-case scenario of damage to property in communities downstream or environmental devastation of the river. At the Sazare Office, we envisage the worst scenarios and carry out annual drills for minimizing damage in the case of a serious crisis. The office has three employees and we go about our day-to-day management tasks with the objective of lowering risks as much as possible.

**Soot and Smoke Emissions**

SOx emissions increased by around 17% in FY2011 compared to FY2010. The main reasons for this were increased capacity utilization at Hyuga Smelting and Coral Bay Nickel Corporation (CBNC) and the difficulty of procuring low-sulfur and low-nitrogen fuels at CBNC. (See Fig. 1 on the following page)

NOx emissions increased by around 12% compared to FY2010. At CBNC, NOx emissions increased by around 50% due to the same reasons as for the rise in SOx emissions. Looking only at business sites in Japan, NOx emissions decreased by around 21%. One factor was the suspension of the Toyo Smelter & Refinery due to full furnace renovation work. Another factor was the 30% decrease in NOx emissions resulting from a reduced coal use ratio at Hyuga Smelting. (See Fig. 2 on the following page)

Soot and dust emissions have been tabulated and disclosed in this report for business sites in Japan since FY2010 and CBNC since FY2011. (See Fig. 3 on the following page)
Many SMM Group sites face onto Japan’s Seto Inland Sea and are subject to controls on the total amounts of chemical oxygen demand (COD), nitrogen and phosphorus emissions under the Act on Special Measures Concerning Conservation of the Environment of the Seto Inland Sea.

COD in FY2011 increased slightly from the previous year. Reasons included increased capacity utilization and localized heavy rainfall. (See Fig. 4)

The following is an overview of FY2011 releases and transfers of chemical substances in Japan managed in line with the Pollutant Release and Transfer Register (PRTR) system.

The SMM Group had 26 data-submitting sites and the number of substances requiring registration was 40, the same as in FY2010.

The total release and transfer volume (releases + transfers) rose considerably to 2.281 kilotons due to an increase in transfers. This was the result of a greater volume of manganese compounds due to the increase in final disposal of residue (iron clinker), in which it is contained, following zinc recovery at Shisaka Smelting. (See Fig. 5)

Releases into the atmosphere stayed level, while releases into water rose slightly due to an increase in releases of substances such as boron compounds. (See Fig. 6)

No ozone-depleting substances were released from production processes of the SMM Group.

### Chemical Substance Releases and Transfers

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### Initiatives for Strengthening Exhaust Gas Management

Environmental fume collection systems suck in, via a special hood, and detoxify gas generated when melt (molten metal) is fed into or removed from flash furnaces, converting and refining furnaces, and other smelting furnaces. The systems previously comprised four exhaust gas suction fans, four desulfurization towers, and four rows of single-stage wet electrostatic precipitators.

Toyo Smelter & Refinery, however, aimed for further strengthening of exhaust gas management, creating a dual system with four additional wet electrostatic precipitators in 2005. This allowed us to reduce the environmental impact even more. We will make sure to live up to the label of a clean smelter through continued environmental management.

Employee’s Perspective

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### COD and BOD Pollution Loads

Many SMM Group sites face onto Japan’s Seto Inland Sea and are subject to controls on the total amounts of chemical
We have worked to curb PRTR substance releases into the atmosphere through maintenance of environmental facilities and more stringent operational management. We will now set medium- to long-term targets and aim for further release reductions through measures including improvements to facilities. PRTR substance transfers are linked to changes in the final disposal volume of iron clinker generated at Shisaka Smelting (through intermediate processing of industrial waste). For this reason, we will continue efforts to reduce this final disposal volume, by, for example, improving the quality of the iron clinker and promoting its sales.

At the Hishikari Mine, hot spring water rising within the mine is removed during the mining of ore. This water contains boron, but as there are no suitable methods for removing it, the mine operates under provisional wastewater standards. We have been trying to develop boron removal technology ever since standards were set for wastewater boron content and we will continue to advance efforts jointly with research organizations.

Initiatives for curbing SOx and NOx emissions will need to include reducing inputs of coal to processes where it is used as a fuel or reducing agent, given the direct impact on emissions of its sulfur and nitrogen content. As well as aiming to maintain or reduce unit coal consumption through operational management, we will work to enable stable procurement of low-sulfur and low-nitrogen coal.

### Issues and Targets

<table>
<thead>
<tr>
<th>Chemical substance</th>
<th>Releases</th>
<th>Transfers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Atmosphere</td>
<td>Water</td>
</tr>
<tr>
<td>Zinc compounds</td>
<td>0.0</td>
<td>1.8</td>
</tr>
<tr>
<td>Antimony and its compounds</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Ferric chloride</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Cadmium and its compounds</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Xylenes</td>
<td>0.2</td>
<td>0.0</td>
</tr>
<tr>
<td>Silver and its water-soluble compounds</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Chromium and chromium(III) compounds</td>
<td>0.1</td>
<td>0.0</td>
</tr>
<tr>
<td>Chromium(VI) compounds</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Cobalt and its compounds</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Ethylene glycol monomethyl ether acetate</td>
<td>1.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Inorganic cyanide compounds</td>
<td>0.3</td>
<td>0.0</td>
</tr>
<tr>
<td>Dichloromethane (methylenecarbom chloride)</td>
<td>13</td>
<td>0.0</td>
</tr>
<tr>
<td>Selenium and its compounds</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Copper salts (water-soluble)</td>
<td>0.0</td>
<td>0.7</td>
</tr>
<tr>
<td>1,2,4-trimethylbenzene</td>
<td>0.3</td>
<td>0.0</td>
</tr>
<tr>
<td>Toluene</td>
<td>2.8</td>
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</tr>
<tr>
<td>Naphthalene</td>
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<tr>
<td>Lead</td>
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</tr>
<tr>
<td>Lead compounds</td>
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<tr>
<td>Nickel</td>
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<td>0.0</td>
</tr>
<tr>
<td>Nickel compounds</td>
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<td>0.4</td>
</tr>
<tr>
<td>Vanadium compounds</td>
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<td>0.2</td>
</tr>
<tr>
<td>Arsenic and its inorganic compounds</td>
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<td>0.3</td>
</tr>
<tr>
<td>Hydrogen fluoride and its water-soluble salts</td>
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<td>8.9</td>
</tr>
<tr>
<td>Water-soluble salts of persulfate acid</td>
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<td>0.3</td>
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<td>Boron compounds</td>
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<tr>
<td>Formaldehyde</td>
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</tr>
<tr>
<td>Manganese and its compounds</td>
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<td>0.5</td>
</tr>
<tr>
<td>Methylphenanthrene</td>
<td>0.9</td>
<td>0.0</td>
</tr>
<tr>
<td>Molybdenum and its compounds</td>
<td>0.1</td>
<td>0.3</td>
</tr>
</tbody>
</table>

**Dioxins**

|                | 290     | 0.0    | 0.0  | 0.0 | 0.0 | 55 |

* Of 40 registered substances, only those with release/transfer amounts of 0.1 t or above are shown.
Initiatives in Global Warming Control

**Basic Approach**

SMM views climate change due to global warming as one of the more critical environmental challenges confronting the human race, and a potentially serious risk factor for business activities of the SMM Group. SMM aims to become “a company that meets international anti-global warming standards by using advanced technologies,” as stated in our CSR Vision for 2020. The company is focusing both on reducing CO2 emissions directly generated by business activities and reducing CO2 emissions through products and services.

Our main objective in FY2011 was to contribute to global warming countermeasures through energy conservation activities, with reduction of CO2 emissions across the entire Group and a 1% year-on-year reduction in energy consumption per unit of production put forward as targets for environmental preservation, one of the Six Key CSR Areas.

We also put in place an energy management framework, applicable to the entire Group, in line with CSR objectives and in response to revisions to the Act on the Rational Use of Energy, which oblige business operators to manage energy consumption. Specifically, efforts to stimulate energy-saving initiatives and reduce CO2 emissions across the entire Group are headed by the Technology Division.

Individual business facilities have set out to achieve the 1% year-on-year unit energy consumption reduction target by working toward environmental management system (EMS) targets. Their energy-saving measures have had success, with improvements made to facilities, including the introduction of inverters for pumps and blowers and lighting upgrades, and management improvements mainly involving reviews of boiler and compressor operation methods.

**Initiative Examples**

**(1) Toyo Smelter & Refinery**

The flash furnace in the copper smelting line produces matte using a concentrate burner where copper concentrate reacts with oxygen-enriched air.

Conventional concentrate burners achieve high oxygen utilization efficiency and low dust generation using a superheater to heat the oxygen-enriched air and improve reactivity. Through its own technological development, SMM managed to improve the performance of its concentrate burner, ensuring reactivity even when the temperature of the oxygen-enriched air is lowered.

The superheater used for many years was retired in December 2011 and use of fossil fuels has declined dramatically.

**(2) Ome District Division (Compliance with Tokyo Ordinance)**

The Ome District Division has worked hard to establish global warming countermeasures. The Tokyo CO2 Emission Reduction Program introduced by the Tokyo Metropolitan Government has required large-scale business facilities to calculate, report, and set targets for greenhouse gas emissions since FY2002. Additional mechanisms were put in place in 2005 whereby the metropolitan government provides instruction and advice and also assesses and publicizes achievements. Following revisions in 2008, Tokyo became the first prefectural government in Japan to make the reduction of total CO2 emissions mandatory and introduce an emissions trading scheme, effective from FY2010.

As well as continuing power-saving efforts, the Ome District Division is currently making preparations to comply with the regulations through initiatives such as the purchasing of green electricity.

**(3) Reduction of Peak Power Usage**

The biggest events of 2011 were the Great East Japan Earthquake of March 11 and the resulting accident at the Fukushima Daiichi Nuclear Power Station. Immediately after the earthquake, rolling blackouts were introduced as an emergency measure to cope with a major deterioration in power supply capacity in areas supplied by Tokyo Electric Power Co., Inc. (TEPCO) and Tohoku Electric Power Co., Inc.

In June, prior to the summer period when power demand is at its highest, the Japanese government called for power saving efforts to reduce demand for areas supplied by TEPCO and Tohoku Electric Power during the peak period (9am to 8pm on weekdays from July to September) by 15% compared to 2010. Large power users, in particular, were subject to restrictions on electricity use in line with Article 27 of the Electricity Business Act.

After submitting a program of specific initiatives, the SMM Group set out to reduce peak power usage by 25%. That was the target indicated by the government in its outline of power supply and demand measures for the summer period issued to large power users in April and adopted by Keidanren (Japan Business Federation). The seven business sites in the area supplied by TEPCO achieved a dramatic 37% reduction in power consumption, surpassing the 25% target, mainly through measures advanced under the Scheme for Joint Restriction of Electricity Use, including rolling suspension of operations and peak shifting. The larger than expected drop in production and lower than expected temperatures also had an

Flash furnace at Toyo Smelter & Refinery
impact. The switch to a gas absorption refrigeration system for air conditioning at the Head Office building in FY2011 was another factor.

Efforts to reduce peak power usage resulted in a total decrease in power consumption by the SMM Group in the area supplied by TEPCO of around 2,000MWh for July and August compared to 2010. CO2 emissions also decreased by around 0.8 kilotons.

(4) Green Power Certificates
SMM has purchased 1 million kWh of wind-generated green electricity, a form of renewable energy, each year since FY2002. We decided to retire the credits earned from the green power certificates issued after 2008 for emission credits under Tokyo’s emissions trading scheme in order to attain the CO2 emissions reduction target made mandatory under the Tokyo ordinance. This allows us to grow as a business and reduce CO2 emissions.

In our Japanese smelting and refining business, unit energy consumption increased 11.3% in FY2011 compared to FY2010 due to an 8.9% decrease in output caused by a drop in copper production. This was the result of major energy losses at the start of operations at the Toyo Smelter & Refinery after the first long suspension in around 40 years.

CO2 emissions by our Japanese smelting and refining business increased around 9 kilotons compared to FY2010 due to an increase in zinc and ferronickel production pushing up energy consumption, despite reductions achieved through energy conservation activities and the lowering of CO2 emission factors by power suppliers.

In FY2012, we aim for a 40-kiloton reduction of CO2 emissions in smelting and refining and other businesses in Japan by preventing circumstances like those mentioned above and through a continuation of painstaking energy conservation activities and new measures. However, power suppliers are expected to make large increases to emission factors.

CO2 emissions from transportation within Japan, which are indirect emissions, are being reduced through efforts to increase the use of ship transportation and improve load efficiency. During FY2011, these emissions totaled 22 kilotons, a decrease of around 1 kiloton from the previous year. This was caused by a drop in freight due to the long-term suspension of operations in the smelting and refining business.

Employee’s Perspective

Energy-efficient Wet Electrostatic Precipitator Development

Wet electrostatic precipitators are highly efficient in removing soot and dust and harmful substances from exhaust gas. Sumitomo Metal Mining Engineering (SMMEC) has been supplying them to iron, non-ferrous metal and chemical manufacturers and waste treatment plants for the last 40 years. They are particularly popular for use in sulfuric acid production processes at non-ferrous metal refineries.

Our products use a higher than normal voltage (more than 70,000 volts), enabling higher efficiency. We have also recently developed technology allowing optimal control of the load voltage depending on the customer’s operating conditions. When the same voltage is applied, a wet electrostatic precipitator’s electric current is smaller with higher exhaust gas concentrations and larger with lower concentrations. Power consumption drops as a result. The customer is pleased, and at the same time we make a significant contribution to energy conservation (reduction of CO2 emissions).
SMM has introduced a full range of initiatives for cutting greenhouse gas, primarily CO₂, emissions generated by business activities, but in order to bring about further benefits, we are going to have to invest considerably in facility and process improvements. Given that the rising of electricity costs and fuel prices has become more pronounced since FY2011, we will also continue to explore initiatives previously set aside as being factors in increasing costs, such as the introduction of renewable energy and switching fuels.

In the smelting and refining business, our energy requirements will inevitably rise due to the degradation of ores, the raw material. Striking a balance between lessening environmental impact and securing profit will therefore require great resourcefulness, accompanied by technological innovation, and not just an extension of initiatives advanced so far. The SMM Group accepts this challenge, aiming to reduce unit energy consumption by 1% each year.

In relation to power supply and demand, too, we will implement effective measures for reducing peak power usage without causing a contraction of output or deterioration of work environments.

**Unit Energy Consumption Index**

Boundary: smelting/refining business in Japan

(Unit energy consumption index)

<table>
<thead>
<tr>
<th>Year</th>
<th>1990</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index</td>
<td>1.000</td>
<td>0.823</td>
<td>0.864</td>
<td>0.827</td>
<td>0.807</td>
<td>0.898</td>
</tr>
</tbody>
</table>

* Unit energy consumption index: The amount of energy consumed during the production of 1 ton of product, assuming the FY1990 value to be 1. Fuels used as reducing agents are also included.

As a portion of coal was measured in dry weight in data for FY2007 to FY2010, the data has been revised to wet weight.

**CO₂ Emissions**

FY1990 boundary: smelting/refining business in Japan
FY2008-2011 boundary: mining and smelting/refining businesses

<table>
<thead>
<tr>
<th>Year</th>
<th>1990</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission (kt-CO₂)</td>
<td>2,006</td>
<td>2,129</td>
<td>2,118</td>
<td>2,202</td>
<td></td>
</tr>
</tbody>
</table>

* Fuels used as reducing agents are included. We used to apply a flat emission factor of 0.555kg/kWh for electric power. For calculations from FY2009, however, we apply emission factors used by individual electric power suppliers for each year.

As a portion of coal was measured in dry weight in data for FY2008 to FY2010, the data has been revised to wet weight.

CO₂ emissions from limestone usage have been added to data for FY2008 to FY2011.
Biodiversity Considerations

Basic Approach

Mineral resources business operators cannot choose where to operate as they are only able to mine where there are ore deposits. This is one major difference from other industries. Incorporating environmental considerations into business activities is therefore a challenge for mineral resources business operators that will go on indefinitely.

These operators must also endeavor to restore the land to its original state on closure of a mine. Smelting and refining, a core business of the SMM Group, is another industry in which due consideration of the environment is required, as the history of smoke pollution shows.

The SMM Group acknowledges that it cannot do business without environmental initiatives. When planning a new operation, we carry out detailed studies in advance on the expected environmental impact and take appropriate action according to those findings.

SMM’s Hishikari Mine, where production of ore began in 1985, is today the only metal mine in Japan operated on a large scale. Prior to the start of operations, we carried out a voluntary environmental assessment, steps ahead of Japanese domestic legislation at the time.

SMM also advances initiatives relating to biodiversity and ecosystem services, acknowledging that the type of business we are involved in makes it paramount that we consider both the direct impact of new projects and the indirect impact of factors such as emissions of CO2 and various kinds of chemical substances from existing businesses.

Biodiversity Considerations

Together with global warming prevention, the preservation of biodiversity, or the intricate balance of living things, is often put forward as a major environmental challenge.

Both mining businesses operating in the midst of nature and smelting or refining businesses with their varied environmental aspects have an impact on biodiversity, whether it is direct or indirect.

Right from the design stage of all projects undertaken by the SMM Group, due consideration is paid to the surrounding environment in accordance with laws as we pursue development and operations. It is also our basic policy to engage in adequate communication with citizens of local communities and governments at national and regional levels, and to disclose information where permissible as requested by citizen groups and other parties.

For projects over a certain size, checks are undertaken to determine whether there is any risk of biodiversity being undermined. If it is determined, through third-party environmental surveys performed prior to development, that development and business activities in a locality will have a significant impact on rare species, then we will prepare and implement management plans for preventing or minimizing, restoring and compensating that impact. No localities have required preparation of management plans as a result of preliminary environmental surveys pertaining to current projects. (see Table 1)

The SMM Group has always paid due consideration toward the protection of nature in the running of our business and we will continue with efforts to preserve biodiversity based on the above approach.

Hishikari Mine Surveys of Protected Species

The Sendai River running through Isa, Kagoshima Prefecture, where the Hishikari Mine is located, is home to chisujinori (Thorea okadae)
, a threatened red algae protected as a Japanese natural monument, and kawagoke-so (Cladopus japonicus), a riverweed designated as a prefectural natural monument.

The Hishikari Mine carries out independent monitoring of chisujinori and kawagoke-so growth and reports findings to government authorities and local citizens.

Table 1

<table>
<thead>
<tr>
<th>Area</th>
<th>Size of production site (1,000 m²)</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seto Inland Sea</td>
<td>620 (Minoshima &amp; Ienoshima islands)</td>
<td>The Shisaka Plant operates on Minoshima and Ienoshima, neighboring the Setonaikai National Park (IUCN: Category 2)</td>
</tr>
<tr>
<td>The Philippines</td>
<td>3,237</td>
<td>Coral Bay Nickel Corporation operates on Palawan Island (in hunting-prohibited and bird protection areas (IUCN: Category 4))</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area of Land Developed and Revegetated (hectares)</th>
<th>A: Total area of land developed but not revegetated (as of the end of FY2010)</th>
<th>B: Area of land newly developed in FY2011</th>
<th>C: Area of land newly revegetated in FY2011</th>
<th>D: Total area of land developed but not revegetated (A+B-C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hishikari Mine</td>
<td>18.6</td>
<td>3.2</td>
<td>0</td>
<td>21.8</td>
</tr>
<tr>
<td>Pogo Mine</td>
<td>151</td>
<td>0</td>
<td>0</td>
<td>151</td>
</tr>
</tbody>
</table>
2. **Chisujinori** (*Thorea okadai)*: A protected freshwater algae species endemic to Japan belonging to the Thoreaceae red algae family and whose distribution is limited to select rivers in central and southern Kyushu. It grows mainly in flowing water, clinging to rocks and trees. The Japanese name (lit. “blood-vessel moss”) comes from its similarity in color and shape to blood vessels.

3. **Kawagoke-so** (*Cladopus japonicus*): A rare algae-like plant found in Japan only on the island of Yakushima and in parts of mainland Kagoshima Prefecture and Miyazaki Prefecture. It grows in fast-flowing rivers in tropical and subtropical areas, adhering to bedrock and large loose rocks. As the plant can only grow in clear rivers with extremely high water quality, it serves as an indicator of river pollution and other environmental change.

**Biodiversity Preservation through Wastewater Management**

The manufacturing line at Nippon Ketjen’s Niihama Division (NK) switches between products around 100 times a year in order to supply catalysts suited to particular customer needs. Wastewater management requirements differ as a result. NK acquired ISO 14001 certification in 1998 and manages wastewater in line with this standard. We conduct morning patrols and share the findings and management requirements of the facilities with the staff at the shift briefings, in order to raise the overall standard. Frequent checks of the facilities are carried out to respond flexibly to different production patterns. We also assess the environmental impact prior to new product development and equipment replacement. The Seto Inland Sea provides us with natural blessings and it is our job, as a producer, to make sure future generations also have access to all the delicious seafood. Bearing that in mind, we incorporate environmental considerations into all our activities.

**Biodiversity Considerations at Mines and Refineries**

**Initiatives in Development of the Pogo Mine**

The Pogo Mine in Alaska, U.S.A., required 83 separate permits before operations could begin as it falls under extremely stringent environmental protection standards enforced by state and federal governments.

SMM undertook exhaustive environmental considerations right from the design stage, seeking to preserve ecosystems as well as infrastructure sustaining indigenous communities in the mine vicinity. Particularly important issues were protection of rivers where salmon return to spawn and prevention of adverse effects on moose habitats.

Groundwater from the mine is purified by a treatment plant and partially reused in production processes. In gold extraction, water that comes into contact with chemicals during the process is isolated within a closed system to make sure it is not released. The impact of mine operations is confirmed through annual monitoring of the salmon run, as well as by catching and analyzing fish to check for abnormal levels of heavy metals.

We have also tried to minimize the impact of mine access road construction on moose habitats by circumventing breeding grounds and prohibiting traffic not related to the mine.

**Environmental Considerations in Operations at Coral Bay**

Coral Bay Nickel Corporation (CBNC) in the Philippines produces intermediates used in the manufacture of electrolytic nickel.

To construct a refinery in the Philippines, we first had to obtain an Environmental Compliance Certificate (ECC) from the Department of Environment and Natural Resources (DENR). This required undertaking various procedures (see Fig. 1) before submission of an Environmental Impact Assessment (EIA) summarizing the environmental effects to the DENR.

When constructing the refinery, we sought adequate dialogue with the Philippine government, local authorities and local citizens right from the planning stage. Efforts were made to construct a plant that would have a minimal impact on the environment. For example, a pier used to deliver sulfuric acid and methanol to the plant was made to circle around the coral reef, and wastewater outlets were also positioned to ensure the reef’s protection.

CBNC, with its environmentally-friendly design, commenced operations in 2005. An Environmental Management Office (EMO) under the direct supervision of the plant’s general manager was set up to head environmental management activities. Besides environmental surveys by the EMO, a team of representatives from organizations such as the DENR, local authorities and NGOs carry out regular sampling of air, water, flora and fauna, ensuring ongoing monitoring of the environment.

**Employee’s Perspective**

The manufacturing line at Nippon Ketjen’s Niihama Division (NK) switches between products around 100 times a year in order to supply catalysts suited to particular customer needs. Wastewater management requirements differ as a result. NK acquired ISO 14001 certification in 1998 and manages wastewater in line with this standard. We conduct morning patrols and share the findings and management requirements of the facilities with the staff at the shift briefings, in order to raise the overall standard. Frequent checks of the facilities are carried out to respond flexibly to different production patterns. We also assess the environmental impact prior to new product development and equipment replacement. The Seto Inland Sea provides us with natural blessings and it is our job, as a producer, to make sure future generations also have access to all the delicious seafood. Bearing that in mind, we incorporate environmental considerations into all our activities.
Initiatives for the Taganito Project


As the site for the plant had already been used to grow coconuts, we considered the impact of the project on ecosystems would be small. A preliminary survey of flora and fauna by outside experts discovered no rare species on the construction site itself. However, a number of wildlife species in the surrounding area, where there is potential for adverse environmental effects as a result of the plant development, are included on red lists of endangered species issued by the International Union for Conservation of Nature (IUCN)—three bird species and one mammal species—and the Philippine government—eight plant species.

Although the plant vicinity has not been designated an important area (an area that, if threatened, will affect the survival of the species) for any of the species, we conduct quarterly monitoring from a perspective of biodiversity preservation. The project will be advanced cautiously while ensuring that plant construction and operations do not have a significant impact on ecosystems and minimizing the environmental impact of wastewater and other factors.

Employee’s Perspective

Initiative for Tailings Dam Rehabilitation

The Coral Bay Nickel Corporation’s reddish brown tailings soil in the decommissioned tailings storage facility no.1 (TSF-1) is now mostly colored green with a thriving surface cover, a productive farm and potential pastureland. The TSF-1, with a surface area of about 80 hectares and an outside slope area of about 13 hectares, was decommissioned in July 2010 and rehabilitation began in May 2011. It was conducted with three main objectives: (1) physical stability, (2) visual acceptability, and (3) self-sustainability. Appropriate strategies were implemented in order to grow plants in practically barren soil. Because of TSF-1’s vast area, topsoil is not used to cover the whole surface and only the holes for planting are filled with fertile soil. Locally growing vines and grasses (i.e. forage species) are initially planted in order to cover the surface and to prevent soil erosion during rainy days or dust emissions during the dry months. Fertile soil media is mainly composed of topsoil acquired from nearby farms, mixed with carbonized rice hull and vermicompost that our environmental group produces. After just a year of rehabilitation, 38 hectares of the tailings surface and 12 hectares of the dam slope are growing and sustaining plants. This attains our objectives of making sure that the dam structure is stable, the appearance of a previously scarred landscape is improved, and the newly established ecosystem is highly sustained. Trial planting of rice and vegetables on the tailings surface has also been conducted with impressive results. The additional impact of the TSF-1 rehabilitation project is the livelihood provided to more than 100 indigenous people who work in the fields. The growing plants, serving as a carbon sink, will contribute greatly to the mitigation of climate change. In about one more year, the whole TSF-1 will be totally rehabilitated once a functional ecosystem has been achieved.

Briccio T. Abela
EMQC (Environment Management & Quality Control) Section Head
CBNC

Third-party monitoring near the CBNC pier
The SMM Group is making every effort to reduce the environmental impact of its manufacturing, distribution and other business activities. The Group also makes use of technology and knowledge related to metals and minerals gathered over the years through the manufacture of non-ferrous metals to maximize the unique potential of each material.

We are also strengthening SMM Group supply chains to increase our involvement in efforts to reduce the environmental impact of final product use.

By focusing on energy-related materials, the SMM Group aims to provide materials for products with low environmental impact (including existing products), and expand its business in the domains shown in the diagram below relating to the creating, storing, and saving of energy.

Employee’s Perspective

Providing a Stable Supply of Large-diameter Sapphire Substrates for LEDs

Sapphire substrates are used to grow gallium nitride, a material used in the manufacture of white and blue light-emitting diodes (LEDs). With one-eighth the power consumption of incandescent bulbs, white LEDs have superior energy performance and are also long-lasting. Another benefit is that they contain no hazardous substances such as mercury. Given the comparatively low energy use and small environmental footprint of this next-generation light source, the LED market is expected to grow rapidly.

One factor limiting the spread of LEDs is their higher prices relative to conventional lighting. Until recently, LED makers used sapphire wafers with a diameter ranging from 50 to 100 mm. But by switching to larger wafers, they have been able to produce more LEDs at one time, thus saving on manufacturing costs and accelerating the decline in LED prices. As a result, the demand for 6-inch (about 150-mm) wafers is growing. But making 6-inch wafers requires large single crystal sapphire, the manufacture of which is extremely difficult. Few manufacturers in the world are capable of producing it.

Building on our long-cultivated crystal-growing technologies, Okuchi Electronics has developed a technology for mass-producing large single crystal sapphire and established a system for reliably supplying high-quality 6-inch sapphire wafers. By supplying large-diameter sapphire wafers—and in so doing playing a part in the price-reduction and popularization of LED lights around the world—we will help protect the global environment.
SMM Group companies are working together on the management of chemical substances used in products. Through proper management of chemical substances—from the product design and development stage, in the selection of raw materials, and right up to procurement and manufacturing processes—we are striving to comply with domestic and foreign laws and regulations and customer requirements, as well as to provide appropriate information in an expeditious manner. Here we will introduce initiatives in the materials business.

Semiconductor materials and advanced materials are incorporated into products such as electronic components and circulated widely to domestic and foreign markets. SMM therefore places importance on communication with suppliers and customers for promoting green procurement and providing information on substances contained in our products.

Some of our products are ultimately exported to countries within the European Union (EU) after finding their way into our customers’ products via the supply chain. The SMM Group has frameworks in place for complying with the RoHS Directive¹ and REACH Regulation², EU-enforced regulations with objectives including the protection of human health and the environment.

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RoHS and REACH Compliance
Under the RoHS Directive, electrical and electronic equipment sold in EU states since July 1, 2006, is not allowed to contain any of six substances—lead, mercury, cadmium, chromium (VI), polybrominated biphenyls (PBB) and polybrominated diphenyl ether (PBDE). And under the REACH Regulation, chemical substances are gradually being announced as candidates for inclusion as substances that cannot be manufactured or imported except under authorized conditions covering application and control methods (Candidate List substances).

The Materials Division has been implementing initiatives to strengthen chemical substance management since 2005, establishing a set of green procurement guidelines for suppliers in order to exclude at the source substances that will potentially be targeted by these regulations, or at least to properly identify such substances. We have also modified our chemical substance database (originally created to comply with Japanese legislation) to achieve additional compliance with the RoHS Directive and REACH Regulation. Harmful chemical substance management information for the entire electronics and advanced materials sector is centrally managed. Responding to the RoHS Directive, SMM has made efforts to shift to lead-free products, managing to commercialize lead-free solders as well as pastes employing resistive glass, a focal product group. For products containing chemical substances that will potentially be targeted by the REACH Regulation, we are searching for alternative substances that will not be targeted and having customers evaluate the prototypes we develop.

Information on chemical substances contained in SMM products is conveyed to customers through the submission of material safety data sheets (SDS)³ or the provision of information about Candidate List substance content. To ensure implementation within the supply chain, we carry out reconfirmation each time a Candidate List substance is announced to check whether it is contained in any of our products.

2. REACH Regulation: The Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals.
3. SDS (Safety Data Sheet): A sheet of paper outlining safety data that must be handed to other business operators when delivering products containing certain chemicals stipulated under Japan’s Law Concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management; the Industrial Safety and Health Act; and the Poisonous and Deleterious Substances Control Act.
Initiatives in the Six Key CSR Areas

Contribution to Society and Local Communities

**CSR Vision for 2020**

*Revisions to the CSR Vision for 2020:*
The wording for the vision was revised to emphasize that the company and employees view social contribution activities very responsibly and because it portrays more of an image of activities being promoted in sympathy with local communities.

### FY2011 Targets and Achievements

<table>
<thead>
<tr>
<th>Target</th>
<th>FY2011 Achievements</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Participate in environment-related activities</td>
<td>Besshi-Nihama District Div. participated in Sumitomo Railway Club activities and preservation of the tsugazakura (Phyllocladus nipponica) in the hills around the copper mine. Sumiko Kunitomi Denshi participated in the Kyowa Town cleaning campaign. Hishikari Mine Dept. participated in the cleanup and beautification of city roads. Nagoya Branch participated in the Clean Campaign Nagoya.</td>
</tr>
<tr>
<td>● Support activities relating to culture, education and welfare</td>
<td>Hosted tours and hands-on experiences, etc. for students at many of our facilities</td>
</tr>
<tr>
<td>● Provide disaster relief to local communities</td>
<td>Donated relief supplies to victims of the Great East Japan Earthquake, and sent relief funds for victims of the flooding in Australia and Thailand, the typhoons in the Philippines, and the heavy rains in Niigata and Fukushima prefectures.</td>
</tr>
<tr>
<td>● Support and participate in community events</td>
<td>Sumiko Kunitomi Denshi participated in the Kunitomi Bon Festival dance and other activities. It also sent traffic safety instructors to schools and formed a fire brigade. Shisaka Plant participated in the Suigun Boat Races. Hishikari Mine Dept. participated in Dragon Boat Racing and the Isa Home Town Festival.</td>
</tr>
<tr>
<td>● Conduct social contribution activities with voluntary participation by employees</td>
<td>Head Office continued to support Ecocap Movement activities and a charity calendar market, and donated secondhand books to the Midori no Bokin’s environmental fund calendar bazaar exhibition.</td>
</tr>
</tbody>
</table>

1. The Sumitomo Railway Club is an assembly of like-minded persons from neighborhood associations and local senior citizen clubs. It carries out tree-planting activities along the bicycle/pedestrian path built along the former Besshi Copper Mine Railway line (total length: 5.6 km). As a member of the club, SMM supports these activities and makes donations.  
2. For example, Hishikari Mine Dept. provided a two-day work experience for three students from the local Hishikari Junior High School as an opportunity for them to approach learning enthusiastically with an “occupation perspective.”  
3. With the cooperation of an NPO, SMM presented 2.5 tons of rice donated from Saijo City in Ehime Prefecture to victims of the earthquake. SMM also added to the ¥2 million in gifts of money donated from Kyowa Town in Hokkaido, and purchased 19 tons of Kyowa-grown potatoes. Again with the cooperation of the NPO, SMM employees visited the stricken areas to distribute them to the victims.  
4. Since 1982, when company housing was concentrated in the urban districts of Kunitomi, the Bon Festival dance and other Kunitomi festivals have been held as sponsored events in cooperation with the corporate housing association and Kunitomi neighborhood associations. Together with local residents, Sumiko Kunitomi Denshi employees have worked hard carrying the mikoshi palanquins and dancing the Hokkai Festival dance in an effort to contribute to the preservation of local culture.  
5. In April 2011, an awards system was established recognizing officers and employees who raise the social credibility of the SMM Group through social contribution activities.

### FY2012 Targets and Plan

<table>
<thead>
<tr>
<th>Target</th>
<th>FY2012 Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engage in support activities that are embedded in local communities</td>
<td>Provide support for measures rooted in local communities for improving techniques and skills</td>
</tr>
<tr>
<td>● Support the development of human resources in local communities</td>
<td>Accept international students who have the potential to play a future leadership role in local (national) communities</td>
</tr>
<tr>
<td>● Contribute to maintaining and developing the living conditions, culture and traditions of local communities without impeding their independence or harmony</td>
<td>Continue support for NPOs that conduct relief work for preschool children</td>
</tr>
<tr>
<td>● Have employees also actively participate in social contribution activities</td>
<td>While expanding business, devote efforts to the development of infrastructure, such as roads, schools, hospitals and housing</td>
</tr>
<tr>
<td>● Provide support for recovery and reconstruction after large-scale disasters</td>
<td>Provide tangible and intangible support to the maintenance of cultural facilities and traditional cultures</td>
</tr>
<tr>
<td>● Implement as many assistance measures as possible to help with recovery and reconstruction following devastating disasters anywhere in the world</td>
<td>Provide support to academic activities</td>
</tr>
<tr>
<td>● Provide ongoing assistance to victims of the Great East Japan Earthquake</td>
<td>Build mechanisms that make social contribution activities feel more familiar</td>
</tr>
<tr>
<td></td>
<td>Develop internal systems that make it easy for employees to participate in social contribution activities</td>
</tr>
<tr>
<td></td>
<td>Provide timely assistance by ascertaining which organizations and methods can deliver the supplies and funds, etc. needed by affected areas and victims in the most efficient and fastest way</td>
</tr>
<tr>
<td></td>
<td>Where possible, deliver goods produced at business centers, etc. to affected areas</td>
</tr>
<tr>
<td></td>
<td>Provide scholarship support through NPOs</td>
</tr>
</tbody>
</table>
Revised overall targets as “Engage in support activities that are embedded in local communities” and “provide support for recovery and reconstruction after large-scale disasters.”

Clarified the targets regarding supporting the development of human resources, respecting culture and traditions, and not impeding the autonomy of communities when promoting social contribution to local communities.

Clarified methods for supporting the voluntary social contribution activities of employees.

Clarified the ongoing reconstruction support for the areas affected by the Great East Japan Earthquake.

**Stakeholder Comment**

SMM employees account for about a third of the membership of our Sobiraki District Neighborhood Association. The Federation of Neighborhood Associations comprises 14 neighborhood associations. Combining the activities of each individual neighborhood association and collaborative activities between our associations means that we conduct routine activities like community clean-ups every week. There are also major events such as the Yusuzumi Festival, held in the cool of a summer evening, and the Cultural Festival in autumn which attract close to 1,300 participants, from elderly people to children. SMM employees and their families actively participate in these community events, fitting in as members of the local community. Many SMM company-owned houses are located within the Sobiraki District Federation of Neighborhood Associations. Talking with the employees who are relocated here and listening to stories of their experiences around the country and back home is fun for us and indeed an asset nowadays.

Once a year, SMM employees attend the board meeting of the Federation of Neighborhood Associations. It’s an opportunity to hear about how the company’s business is faring. Participating in the meeting, I was surprised to hear that materials that are essential for our lives are being made in factories located in our neighborhood and that they have state-of-the-art technology. I was also relieved to hear about their safe operations.

I am interested in the preservation and utilization of industrial heritage for the purpose of conveying the history of manufacturing and community development to the next generation. I hope that we can find ways to collaborate with local companies and the government in this endeavor.

**Subcommittee Chairman’s Comment**

In reconsidering the Corporate Citizenship Subcommittee’s CSR Vision for 2020, we took account of the valuable opinion of external experts, that, “the SMM business has been handed down for just over 420 years, and given that it has continually developed alongside society, this should be brought to the forefront.” Despite discussion among members of the subcommittee, we could not come up with any suitable wording to express this. We also thought that it would sound a little too pretentious if we put this opinion into words. Ultimately, we decided on “A company in which employees are proud to work along with the company on social contribution activities rooted in the area.” Rather than the former “A company respected for its social contribution,” which could be interpreted negatively, it expresses the hope of being a company where employees feel joy and pride in SMM’s activities to coexist sustainably with society.

Although social contribution activities are wide and varied, rather than viewing them simply as a kind of charity where a portion of our profits is donated to “such and such a place”, our aim is to pursue the true nature of SMM by really racking our brains and putting in a big effort into this area. Moreover, we hope that employees will also develop themselves through volunteering and other social contribution activities, and will share with the company the joy and pride felt from having a relationship with society and nature.

The Sumitomo Business Spirit has always shown a very clear approach to the coexistence of business and society. It embraces the idea “Jiri-rita Koshi-ichinyo,” meaning that Sumitomo’s business must contribute to the development of society at large, not just development of the company itself. I really hope that all the group companies and employees will realize the significance of these words and will put them into practice, both at work and in their private lives.
The SMM Group has long been contributing to local communities while advancing its business, not only by securing housing for employees and their families, but also by supporting a wide range of areas such as health care, education and culture. We have also shown concern for regional environments. The Group continues to incorporate consideration toward local communities into activities today in line with the SMM Group Corporate Philosophy and Management Vision, and the CSR Policy. Due deliberation is made during meetings of various kinds to ensure that decisions made within various projects do not act counter to SMM Group policy or philosophy.

Business facilities where SMM Group activities have a considerable impact on the local economy contribute to the community in a variety of ways, for example through considerations regarding supplier selection and employment. For example, the Pogo Mine procures materials and equipment from some 177 suppliers in Alaska, and the total value of those transactions is around US$62 million a year. Efforts have been made to employ local Alaskans, and now roughly 65% of around 300 employees live in Alaska. Our other efforts have included providing ongoing financial assistance to the city of Delta Junction, the closest municipality to the mine, and making donations to the University of Alaska Fairbanks.

At Coral Bay Nickel Corporation (CBNC) in the Philippines, we are supporting the local community by conducting activities in such areas as school education, health care, hygiene and better living. The percentage of CBNC employees hired locally is 53%.

When starting up business in a region, or withdrawing from it, meetings are held by the Management Committee and others involved to determine how to respond to political and economic risks, risks to humans, and other risks relating, for example, to region-specific diseases, employment, labor disputes and other labor issues, religious constraints, and border disputes. If a crisis occurs, we clearly identify the causes and take swift action. The SMM Group requires serious matters at any business facility, subsidiary, or affiliate to be discussed in a timely fashion.

Taking into consideration the treatment procedures that must be carried out once mining is finished, the SMM Group makes an effort to minimize the impact on the environment during the development stage. When actually closing a mine, procedures are advanced in a proper manner in keeping with the SMM Group Corporate Philosophy and in accordance with laws and regulations. At mines in which SMM has more than a 50% interest, we draw up suitable plans once closure of the mine is foreseeable. Closure formalities and management are carried out according to the laws of the country in question.

Future environmental considerations at the Hishikari Mine include shaping spoil heaps into slopes, covering them with soil if necessary, and then spraying with seed to create vegetation. The costs are covered by reserves put aside for the purpose of mine pollution control in line with Japanese law. The Pogo Mine in the United States falls under Alaskan state law, which requires sites to be covered in soil and revegetated after all mine facilities have been removed. The law stipulates the remedial programs required and their extent, water quality parameters to be monitored, and the costs required for remedial work and revegetation.

SMM Group employees who used to work at the Besshi Copper Mine and other Japanese mines that are now closed have been transferred to other workplaces or given assistance in finding new jobs.
In the Philippines, we are required to submit a closure and cleanup plan, not only for closure of the mine, but also for the refinery and mineral processing plant at the Coral Bay Nickel Corporation (CBNC). We are also required to put aside funds needed for the closure of any related workplaces. The total cost according to the closure plan submitted by CBNC to DENR5 is 110 million pesos, and funds will be set aside every year for a seven-year period starting in 2012. We are also providing assistance via SDMP to help local residents make a living (such as in the farming and fishing industries) even after closure of a facility.

1. DENR: Department of Environmental and Natural Resources
2. SDMP: Social Development Management Program, conducted by a company for the sake of the welfare of residents living in an area of its business activities

Employee’s Perspective
Initiatives for the Pogo Mine

The Pogo Mine is located in the hinterland of the U.S. state of Alaska. It employs around 300 workers and produces about 11 tons of gold each year. From the time the mine first opened, efforts were made to employ local Alaskan workers. As of 2011, employees living in Alaska accounted for 66% of the workforce, a 5% improvement from 2010. Employees work either two-week or four-week shifts separated from their families, so consideration needs to be given to their meals and entertainment. We also have to carefully consider health and safety issues and the surrounding environment so that we can coexist with the government, local residents and other stakeholders, and workers will be proud to work at the Pogo Mine. Based on a long-term perspective, a decision has been made to donate a total of US$1 million over three years to the Department of Mining and Geological Engineering at the University of Alaska Fairbanks. Our wish is to contribute to mining in Alaska by helping to nurture the human resources who will work in mining operations in the future.

Employee’s Perspective
Initiatives by SMM Peru

Many people live in the mountainous areas of Peru, even at altitudes over 5,000 m. Communication with urban areas is not easy because of economic problems, transport and communications difficulties, and language and cultural barriers. In general, land is owned collectively by rural communities. However, the information contained in land registers is not always clear or precise, and sometimes land remains unregistered. There are also occasional disputes over territorial boundaries. As part of our exploration activities, we disclose information through dialogue with local residents, and strive for mutual understanding while garnering government support. Under Peru’s mining law, consent from residents is only required from the drilling phase, but we conclude written agreements with rural communities from the preliminary stages of exploration, even before prospecting for minerals. Furthermore, given that there are many dangers associated with altitude sickness and working in mountainous areas, and that the emergency response infrastructure, such as roads, means of communication and medical facilities, are of poor quality, we exercise due care for health and safety as we engage in our operations.
Employees' Perspective

Initiatives for the Hishikari Mine

Mines cannot be operated without the land that contains the ore. Therefore, remaining in business requires having a mutual understanding with the local community, which also requests such a relationship.

What is the aim of the Hishikari Mine’s operations? What is the mine’s position and degree of sensitivity to environmental activities? What kind of people work at the mine? This kind of information cannot easily be conveyed without people actually coming to the mine site and meeting and talking with us. To provide opportunities for this, the Hishikari Mine is making efforts to promote mutual understanding: holding briefing sessions for administrative agencies; hosting the Yamada District Pollution Prevention Council, which is made up of local representatives; organizing the Sanjinsai (Mountain Gods Festival); and participating in local events. We will take every opportunity to inspire local people with confidence in our operations at the Hishikari Mine.

Response to Emergencies

Emergency drills are conducted at all business divisions in line with our risk management system. In order to enhance the drills, in FY2011 we formulated the Training Guidelines as a guide for drills conducted at each workplace.

At SMM Head Office, for example, earthquake response drills are conducted. Under the scenario of an earthquake registering a strong 6 on the Japanese seismic scale of 7, the safety of employees is confirmed using roll calls and a mobile phone-based safety confirmation system, and an earthquake response headquarters is set up. Safety confirmations are received from each Head Office department and all divisions, and checks are made for any damage to the Shimbashi Sumitomo Building. The response headquarters issues instructions on the treatment of any injured people, and makes arrangements for anyone stranded due to the earthquake. Some personnel are sent to Shimbashi Station and to the Minato City Office to collect information, and others get information on damage sustained by nearby businesses. The information is collated at the headquarters, and instructions for new countermeasures are issued.

Along with the drills, crisis response personnel, including members of the headquarters, confirm the location and condition of the emergency supplies stored in the Head Office building.

Following the drills, we have sought to enhance our response to emergencies. Questionnaires and review meetings have been used to identify any issues in the actual training and in risk management, and improvements have been made ahead of the next drills. And revisions have been made to the crisis management system for earthquake disasters.
The SMM Group carries out a wide range of social contribution activities in Japan and overseas. The Corporate Citizenship Subcommittee within the CSR Committee has been deliberating on specific social contribution measures suitable for SMM, which is aiming to become “A company in which employees are proud to work along with the company on social contribution activities rooted in the area,” as expressed in the CSR Vision for 2020.

Initiatives centering on the four areas below were implemented in each location during 2011:

1. Support for nature and the environment
2. Support for culture, education and welfare
3. Maintenance and development of harmonious relationships with local communities
4. Voluntary social contribution activities by employees

Main Organizations in Which SMM Has Membership

<table>
<thead>
<tr>
<th>Organization</th>
<th>Responsibilities of SMM officers and employees</th>
<th>Initiatives relating to public policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nippon Keidanren</td>
<td>Participation in committees on: industrial technology, risk management, Canada, economic policy, economic law, environment and safety, oceanic resources, international cooperation, China, and South Asia</td>
<td></td>
</tr>
<tr>
<td>Japan Mining Industry Association</td>
<td>Director; participation in committees relating to planning and coordination, energy, overseas development, environmental management, customs duties, funds, supply and demand, taxation, exploration and development, mining reserves (chairman and deputy chairman), and sulfide ore and sulfuric acid</td>
<td></td>
</tr>
<tr>
<td>The Sulphuric Acid Association of Japan</td>
<td>1 director; participation in Operations Committee and Technical Committee</td>
<td>Communicating policy and information from the Manufacturing Industries Bureau of the Ministry of Economy, Trade and Industry to member companies and compiling and presenting requests from member companies</td>
</tr>
</tbody>
</table>
Initiatives for biodiversity, global warming countermeasures and water management
• Health and safety
Enhanced performance through use of benchmarks and sharing of health and safety information
• Materials stewardship
Initiatives for science-based chemical substance management and supply chain management
• Society and economy
Promotion of EITI activities, preparation of various toolkits and guidelines, and promotion of best practice |
| Japan Society of Newer Metals | Director; participation in Target Group and Compound Semiconductor Group | Hearings with government in relation to policy (rare metal reserve issues, etc.) |
| Japan Electronics and Information Technology Industries Association (JEITA) | Participation in Electronic Components Board and Electronic Materials Committee | Studies on tasks and regulatory revisions required for Japan to make progress in electronic equipment and electronic components industries, and submission of written opinions to the government |
| Battery Association of Japan | Associate member | |
| Japan Powder Metallurgy Association (JPMA) | Participation in MIM Committee | |

Major Donations in FY2011

- Donations to the Zinc Saves Kids campaign
- Donations for the redevelopment of the Solomon Peace Memorial Park
- Support and donations for programs for the development of human resources in manufacturing
- Donations for damage sustained in the heavy rains in Fukushima and Niigata
- Donations for damage sustained in the Thailand floods
- Donation of food and supplies to victims of the Great East Japan Earthquake
- Donations for damage sustained in the Philippines from Typhoon Washi
- Donation to the International Institute for Mining Technology
Relations with Society

Employee’s Perspective

Support Initiatives for the Great East Japan Earthquake

On October 7, 2011, with the aim of feeding people in areas struck by the Great East Japan Earthquake, SMM donated 19 tons of potatoes to Miyagi Prefecture (Minamisanriku Town and Ishinomaki City) and Fukushima Prefecture (Iwaki City and Minamisoma City) which had been designated by our NPO partner, Second Harvest Japan. We added donations to the gifts of money donated from Kyowa Town in Hokkaido, where one of our workplaces is located, and used these funds to purchase farm produce grown in Kyowa Town. This is a new type of social contribution that benefits relief efforts in areas affected by disaster. Sumiko Kunitomi Denshi, the Kyowa Town Office and Japan Agricultural Cooperatives cooperated in selecting the relief supplies.

Early the following morning, I traveled to Ishinomaki to deliver the goods with the members of Second Harvest Japan. We loaded the trucks with potatoes and other provisions, and stopped at Nikkori Sun Park and a number of other places. We will continue these support activities, in the hope of the area’s speedy rehabilitation.

Employee’s Perspective

Presentation of President’s Letter of Thanks for CSR Endeavors

In April 2011, a program was established to present a Letter of Thanks from the President to employees who have raised the social credibility of the SMM Group through social contribution activities. The awards are determined after a review by the CSR Committee based on recommendations received from each branch office.

During 2012, the second year of the program, Mr. Kenichi Noguchi from SMM Precision was selected, and presented with a Letter of Thanks from the President on June 20. In 2010, Mr. Noguchi obtained certification as an instructor from the Japan Junior Sports Clubs Association (JJSA), and later that year he began coaching kendo around four times a month to 20 local children. His contribution to the healthy development of children through his chosen sport was recognized for having raised the social credibility of the SMM Group.

After presenting the Letter of Thanks, the President congratulated Mr. Noguchi, commenting, “Raising children is an important issue for Japan. Unlike the old days, in these modern times when communities and administrations do not have clear roles to play, Mr. Noguchi’s endeavors are of great significance, and have been highly regarded both for self-realization and for contributing to the solution of social issues.”

SMM is promoting the development of internal systems which help employees to participate in social contribution activities, and as part of that initiative, I hope to further increase the significance of this program.

Kenichi Noguchi
Recipient of a President’s Letters of Thanks

Prepared to load trucks

Masayuki Mura
Deputy General Manager of the Legal & General Affairs Dept.

Shinichiro Imai
Manager of General Affairs Sect., Legal & General Affairs Dept. (now General Manager, General Affairs Dept., SMM Precision Co., Ltd.)

Shinichiro Imai
Manager of General Affairs Sect., Legal & General Affairs Dept. (now General Manager, General Affairs Dept., SMM Precision Co., Ltd.)

Presentation of President’s Letter of Thanks for CSR Endeavors

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Manager of General Affairs Sect., Legal & General Affairs Dept. (now General Manager, General Affairs Dept., SMM Precision Co., Ltd.)

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Manager of General Affairs Sect., Legal & General Affairs Dept. (now General Manager, General Affairs Dept., SMM Precision Co., Ltd.)

Presentation of President’s Letter of Thanks for CSR Endeavors
SMM is looking to integrate social contribution activities into its business activities worldwide.

**Employee’s Perspective**

**Initiatives at CBNC**

GK stands for Gawad Kalinga, which means to “give care” in Filipino. The Gawad Kalinga Foundation is a Philippine-based poverty alleviation and nation-building movement. As I grew up, I saw a lot of families who had no proper shelter. This observation motivated me and I promised myself that if I was ever given a chance to help them, I would surely do it. So, when I started working at Coral Bay Nickel Corporation (CBNC) and learned that the company is supporting GK and that its employees regularly participate in volunteer activities at different GK sites, I decided to join them without a moment’s hesitation. I became a regular volunteer of this noble activity. For me, to be a GK volunteer is a dream come true—a way to realize my dream to help my fellow Filipinos, even in my own little way, in eradicating poverty and restoring human dignity. GK could be seen as an embodiment of the spirit of Bayanihan (working together and becoming heroes to one another) and the desire to work selflessly for the public good that the Filipino people hold in their hearts. So, I encourage everyone to show our care to those people who need us by joining and volunteering for GK activities. For me, as a GK volunteer, I build not just homes, but also genuine relationships with my fellow Filipinos.

*Gawad Kalinga (GK):* An activity supporting the construction and supply of permanent housing, aimed at improving living conditions for the indigenous people. In collaboration with the Rio Tuba Nickel Mining Corporation, CBNC has expanded this activity in the Rio Tuba district. Besides the supply of land and construction materials for housing, employees from both companies have volunteered their labor. Their specific efforts have included transporting materials, cement rendering and painting.

**Taganito Project**

The Philippine Mining Act requires mining operators to conduct Social Development Management Programs (SDMPs) in which they contribute the equivalent of 1.5% of their annual direct operating expenses to the development of the surrounding area, starting from the year after they commence operations. With the Taganito Project, we have voluntarily initiated this program two years ahead of schedule, starting in January 2012. In formulating the program, we have held a series of full discussions, both with local resident representatives and relevant organizations, such as the Mines and Geosciences Bureau. We have also systematically promoted the repair of schools and churches, the establishment of a scholarship program and the construction of new agricultural facilities, with a focus on the public nature, fairness and urgency of projects. In addition to the SDMPs, we have also implemented a number of our own support measures, such as the establishment of a clinic for use by local residents and the installation of footpaths to surrounding roads. We are committed to contributing to the development of local communities and improving their quality of life.

**Social Contribution Linked to the Effective Use of Resources**

As the General Manager of the Affairs Department, in my work I am strongly aware of the “effective use of resources,” which is one of SMM’s key managerial challenges. As a result of having been mindful of avoiding needless purchases and disposing of waste on a day-to-day basis, when we relocated our plant last summer, we were able to withdraw from our former plant, where we had operated for the 16 years since the founding of our company, without leaving any waste matter behind. With the new plant as well, we have taken care so that all the workers can feel a satisfying sense of cleanliness, free from any excessive embellishments.

When dining out in China, people are encouraged to take home any leftover food. At social events at SEP as well, employees will say “Da bao,” to get the leftovers packed up in a doggie bag to take home. I think this is a great custom linked to preservation of the environment. Another endeavor that SEP employees do of their own accord is that, several times a year, they bring their old clothes and unwanted goods in to the company, and donate them to the local Red Cross, thereby linking social contribution to the effective use of resources.
Relations with Society

ICMM Membership
The International Council on Mining and Metals (ICMM) aims to provide leadership on sustainable development initiatives for the mining and metal refining industries.

The SMM Group reflects the ICMM’s 10 Principles in its CSR Policy and issues reports in line with the GRI guidelines, as is required of all member companies. As a corporate member, we also carry out a variety of initiatives, including ensuring conformance with position statements adopted for the 10 Principles. SMM’s three core businesses are mineral resources, smelting and refining, and materials. In the mineral resources and smelting and refining businesses, our aim is to stand on an equal footing with non-ferrous metals industry majors (large mining and metal refining companies), and so we are pushing ahead with mineral exploration activities overseas and bolstering investment in existing mines. Seeking greater opportunities for operating on the global stage, SMM hopes to contribute to the development of the mining and metal refining industries in harmony with society.

Declaration of Support for the EITI
The Extractive Industries Transparency Initiative (EITI)* is an organization aiming to promote social and economic development in countries which produce mineral resources by ensuring that money, such as taxes paid to governments from corporations that extract mineral resources, flows back into those countries or regions.

It is sometimes the case in resource-rich countries, where societal and economic development is often stagnant, that revenues generated by resources are not invested effectively in the country’s development, leading instead to problems such as poverty, conflict and corruption.

These are global issues, and advanced nations and corporations are being called upon to play a part in resolving them. SMM agrees with the objectives of the EITI and supports its activities.

ICMM Position Statements
ICMM has adopted the following position statements to complement the 10 Principles. SMM follows through on these position statements.

Note: The position statements below are summarized versions of statements issued by ICMM.

1. Transparency of Mineral Revenues
   - Support for the Extractive Industries Transparency Initiative (EITI)
2. Policy on Climate Change
   - Work to reduce greenhouse gas emissions
3. Mercury Risk Management
   - Carry out responsible management of mercury
4. Mineral Resources and Economic Development
   - Contribute to economic development and poverty reduction in resource-rich countries
5. Mining and Protected Areas
   - Undertake not to explore or mine in World Heritage properties
6. Mining and Indigenous Peoples
   - Respect indigenous peoples and their rights
7. Mining Partnerships for Development
   - Enhance mining’s social and economic contribution

The 10 Principles of the ICMM

Principle 1: Implement and maintain ethical business practices and sound systems of corporate governance.

Principle 2: Integrate sustainable development considerations within the corporate decision-making process.

Principle 3: Uphold fundamental human rights and respect cultures, customs and values in dealings with employees and others who are affected by our activities.

Principle 4: Implement risk management strategies based on valid data and sound science.

Principle 5: Seek continual improvement of our health and safety performance.

Principle 6: Seek continual improvement of our environmental performance.

Principle 7: Contribute to conservation of biodiversity and integrated approaches to land use planning.

Principle 8: Facilitate and encourage responsible product design, use, re-use, recycling and disposal of our products.

Principle 9: Contribute to the social, economic and institutional development of the communities in which we operate.

Principle 10: Implement effective and transparent engagement, communication and independently verified reporting arrangements with our stakeholders.

* Extractive Industries Transparency Initiative homepage: http://eiti.org/
The EITI Principles

1. We share a belief that the prudent use of natural resource wealth should be an important engine for sustainable economic growth that contributes to sustainable development and poverty reduction, but if not managed properly, can create negative economic and social impacts.

2. We affirm that management of natural resource wealth for the benefit of a country’s citizens is in the domain of sovereign governments to be exercised in the interests of their national development.

3. We recognise that the benefits of resource extraction occur as revenue streams over many years and can be highly price dependent.

4. We recognise that a public understanding of government revenues and expenditure over time could help public debate and inform choice of appropriate and realistic options for sustainable development.

5. We underline the importance of transparency by governments and companies in the extractive industries and the need to enhance public financial management and accountability.

6. We recognise that achievement of greater transparency must be set in the context of respect for contracts and laws.

7. We recognise the enhanced environment for domestic and foreign direct investment that financial transparency may bring.

8. We believe in the principle and practice of accountability by government to all citizens for the stewardship of revenue streams and public expenditure.

9. We are committed to encouraging high standards of transparency and accountability in public life, government operations and in business.

10. We believe that a broadly consistent and workable approach to the disclosure of payments and revenues is required, which is simple to undertake and to use.

11. We believe that payments’ disclosure in a given country should involve all extractive industry companies operating in that country.

12. In seeking solutions, we believe that all stakeholders have important and relevant contributions to make— including governments and their agencies, extractive industry companies, service companies, multilateral organisations, financial organisations, investors, and non-governmental organisations.
Initiatives in the Six Key CSR Areas

Respect for People and Human Rights

CSR Vision for 2020

A company that respects human rights and diversity of employees, develops employees with high awareness of human rights, and gives equal opportunities depending on motivations to work and abilities of employees

A company that respects human rights of people who are affected by business activities of the SMM Group

A company that does not get involved in complicity with an entity that causes violations of human rights at areas with undeveloped social infrastructure and at troubled areas

*Revisions to the CSR Vision for 2020:
Clarified that the SMM Group respects the human rights of employees, people in local communities, and everyone influenced by company activities.

FY2011 Targets and Achievements

<table>
<thead>
<tr>
<th>Target</th>
<th>FY2011 Achievements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establish a human rights policy for SMM</td>
<td>Started preparation of educational tools relating to the SMM Policy on Human Rights, but training did not begin</td>
</tr>
<tr>
<td>Training related to overseas operations</td>
<td>Overseas management training: Implemented twice during FY2011</td>
</tr>
<tr>
<td></td>
<td>Programs/initiatives for improving adaptability to overseas circumstances: Dispatched two employees to overseas mines with the aim of improving adaptability to overseas circumstances</td>
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<td></td>
<td>Sent 28 new graduate employees for 2011 to three countries (10 schools) for short-term overseas training. Introduced new curricula, including the Action Learning Project* whereby trainees initiate their own local surveys. Programs for ensuring the continuation of English language learning and cross-cultural understanding are being established</td>
</tr>
<tr>
<td>Review and implement HR development programs</td>
<td>Commenced “private” hazard simulation and equipment skills training courses tailored to the needs of individual departments at the Oji-kan facility. Courses are being enhanced</td>
</tr>
<tr>
<td>Make use of the JCO Study Center</td>
<td>Establishment of training assuming JCO criticality accident scenarios at individual workplaces: Implemented training using the JCO Study Center. More than 1,000 employees underwent the training. The aim is for all employees to receive this training</td>
</tr>
<tr>
<td>Achieve a new disabled employee ratio target of 1.90% following revision of the calculation method for the statutory ratio</td>
<td>Targeted attainment within individual divisions and branch offices through hiring plans which took into account expected retirees. SMM attained the statutory ratio (1.8%) and its target ratio (1.9%) for the first time, but was unable to make up for employees retiring for personal reasons and the ratio fell to 1.88% by the end of the year</td>
</tr>
<tr>
<td>Increase hiring of female management track employees</td>
<td>The percentage of new female management track employees hired in April 2012 was 13% and therefore the target was unattained</td>
</tr>
<tr>
<td>Achieve a 20% female ratio for management track employees</td>
<td>Targeted attainment within individual divisions and branch offices through hiring plans which took into account expected retirees. SMM attained the statutory ratio (1.8%) and its target ratio (1.9%) for the first time, but was unable to make up for employees retiring for personal reasons and the ratio fell to 1.88% by the end of the year</td>
</tr>
<tr>
<td>Review the re-employment system</td>
<td>Ongoing deliberation of an optimal system incorporating a raised age for receiving pension payments: Conducted a review of the system to enable implementation of changes for both managers and regular employees on April 1, 2013. Currently considering changes which will enable re-employment of all managers who apply in light of the possibility of some retirees from 2013 being subjected to periods without pension payments</td>
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</table>

FY2012 Plan

<table>
<thead>
<tr>
<th>Target</th>
<th>FY2012 Plan</th>
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<tbody>
<tr>
<td>Implement human rights education throughout the entire SMM Group and make progress on establishing workplaces free of human rights infringements and fostering employees with strong human rights awareness</td>
<td>Prepare educational tools relating to the SMM Group Policy on Human Rights, and implement training within SMM using those tools</td>
</tr>
<tr>
<td>Create workplaces which allow motivated employees to work in diverse ways suited to the needs of the workplace</td>
<td>Implement human rights education through rank-based training programs (e.g., training for newly promoted employees)</td>
</tr>
<tr>
<td>Learn about and understand human rights issues worldwide and how corporations impact human rights, and implement necessary measures like awareness activities on an ongoing basis</td>
<td>Establish a committee for promoting respect for human rights</td>
</tr>
<tr>
<td>Refuse to be complicit in human rights infringements while appealing to parties within the supply chain over which the SMM Group has influence to prevent human rights infringements</td>
<td>Find new places where disabled employees can work at group companies in Japan</td>
</tr>
<tr>
<td></td>
<td>Provide support for work environments favorable to women</td>
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<tr>
<td></td>
<td>Review the re-employment system to promote utilization of elderly human resources</td>
</tr>
<tr>
<td></td>
<td>Actively utilize employees hired locally at overseas facilities</td>
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<tr>
<td></td>
<td>Implement and enhance regular compliance training and overseas management training</td>
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<tr>
<td></td>
<td>Prepare auditing parameters and check lists relating to human rights</td>
</tr>
<tr>
<td></td>
<td>Identify suppliers of major raw and processed materials and examine survey methods</td>
</tr>
</tbody>
</table>
Roadmap Revisions

**POINT 01**
Added initiatives under the following four themes as specific activities for ensuring respect for human rights.

1. Human resources development;
2. Examination of procedures for group company human rights surveys and audits;
3. Implementation of human rights surveys in regions where the SMM Group operates;
4. Examination of methods for, and implementation of, human rights surveys of suppliers over which the SMM Group has influence.

**POINT 02**
- Added the development of managers possessing strong human rights awareness.

Stakeholder Comment

Everyone seems to be rushing to grab a seat aboard the “global” train. Globalization entails overseas operations and the hiring of foreign personnel, which narrows down opportunities for employment and makes it harder than it is already for women to advance in society. It’s only recently that society has started crying out for equal employment opportunities for men and women. If globalization continues, it will merely highlight the factors that make it difficult for women to work in Japan today and corporations will hold back from hiring female students out of the fear that they will resign at some point. This will make it even harder for female students to find a job. After graduation, 60% of our students go on to work for Japanese manufacturers. Their ambition is to succeed internationally and to create an affluent Japan. SMM currently employs six graduates from our university, including three women. As a corporation assuming a heavy responsibility in resource-poor Japan, SMM is very popular among students. In recruitment, I was worried that female students might be shunned, but you carefully convey your recruitment policy to students and have again picked an ambitious female student to join your workforce in 2013. I hope you will stick to your current stance and continue hiring many students willing to work for the nation.

Subcommittee Chairman’s Comment

SMM is advancing operations overseas as we develop our global business. This means we need to expand the internal focus of our current human rights and human resources development activities to acknowledge a broader sphere of influence that encompasses residents of neighboring communities and local government through to the distributors of our products and the materials we procure. We have therefore completely overhauled our existing roadmap of activities.

Internally, we intend to make further progress on fostering employees with strong human rights awareness, starting with informing and educating employees about the SMM Group Policy on Human Rights established by SMM in 2010, as well as increasing opportunities for active utilization of diverse human resources.

With regard to regions where we operate and the international community, we need to ascertain how SMM’s business activities affect the human rights of stakeholders such as local residents and customers and develop a rigid framework for ensuring that negative impacts are avoided. To do that, we will advance new activities in human resources development, involving further enhancement of training for senior management at facilities in Japan and overseas, and “human rights audits” of overseas facilities.

Through these efforts, SMM aims to fulfill the revised CSR Policy: “To continue sound business activities, SMM shall respect human rights and shall try to be a company in which diverse human resources take active parts.” I sincerely hope everyone in the SMM Group will get fully involved in this important area.
Initiatives Relating to Employee Diversity

**Basic Approach**

Given our aims to raise corporate competitiveness and achieve sustainable growth, we are making efforts to acquire and develop a diverse workforce comprising human resources who stand out as individuals and who can make a contribution toward attaining those aims.

**Work Environments Favorable to Women**

SMM implements measures for expanding the employment of and opportunities for women so that they need not quit their jobs due to marriage or childbirth and to allow them to stay with the company for the long term.

In FY2012, four of the company’s 32 new management track employees were women (2 administrative, 2 technical/engineering positions).

After hiring, we try to get a grasp of employment and working conditions, for example by analyzing indices such as employee turnover and numbers of employees taking advantage of child-care leave provisions. The information is used to determine what measures to implement next.

The development and administration of a fair human resources system means there is no gender disparity in terms of base salaries, for example, in the SMM Group.

**Employee’s Perspective**

**Diversity and Work-life Balance**

With Japan’s birthrate plummeting and society aging quickly, the working population is declining at an accelerating pace. From the perspective of raising corporate value, employee diversity is also desired, in terms of gender, age, disabilities, and race, for example. But one requisite to accommodating diversity is that efforts are made to promote a work-life balance so that employees in various circumstances can keep working at the company with peace of mind.

At SMM, we have provisions in place to support the careers of women, including the reduced working hours system available during child care and the child-care leave system. But current use of these systems and the current employment of women are far from sufficient.

To address this situation, a team of eight female employees from various backgrounds was formed in October 2011 to investigate ways to make better use of female human resources. It held meetings regularly over a period of about six months before submitting a recommendation to the general manager of the Personnel Department.

By nature, the SMM Group has many predominantly male workplaces engaging in mining and metal refining and so I was aware that women had to face many obstacles, but through this activity I managed to get a good grasp of what female employees struggle with. Based on the team’s recommendation, we now intend to establish infrastructure and review systems, aiming to create even better workplaces for a diverse range of employees.

**Working with the Disabled**

SMM has been implementing an action plan with the aim of reaching the statutory disabled employee ratio target.

We currently carry out ongoing initiatives within regular recruitment activity, including company presentations and Web-based recruitment.

As a result of these continual efforts, SMM’s average disabled employee ratio for FY2011 was 1.88%, remaining above the statutory requirement in Japan.

We will press ahead with activities assisting the creation of environments where disabled employees can work alongside other employees. These include expanding the scope of placement, establishing infrastructure, and finding new places where disabled people can work.
SMM has overhauled its re-employment system in response to revisions (effective April 2006) to Japan’s Act on Stabilization of Employment of Elderly Persons. Nearly 70% of SMM and affiliated company employees in Japan are rehired after reaching the mandatory retirement age due to the introduction of the re-employment system and other methods for utilizing elderly human resources. SMM’s efforts regarding the utilization of elderly human resources will be continued.

The SMM Group clarifies recruitment processes for each overseas facility while adhering strictly to laws and ordinances of the respective regions. Fairness in job appraisal, including promotions, is also ensured. Actual conditions are periodically confirmed through the implementation of Group-wide questionnaires.

Employee’s Perspective

Respect for Diversity

When I first joined the company, I felt very uneasy being the only deaf person. No one could use sign language and so writing was the only way to communicate, even when I was being taught what to do. It must have been quite a burden for my instructors. I thought a number of times about resigning because of that, but as time went by my colleagues learned sign language and we became able to communicate, making my job more enjoyable. I lost all intention of quitting.

In my private life, I’m married to a very understanding wife and we have three children. I get my greatest motivation from watching my children grow up without any fuss. Because my colleagues made an effort to communicate with me by learning sign language, I started to enjoy both my job and my private life. I’ve told my wife that it has made me want to get involved in the sign language campaigns run by the local government and help spread its use and understanding. I’m very grateful to be in long-term employment thanks to the support of so many people and I intend to carry on being cheerful and positive.

Zhu Bo
Information Systems Dept.

Support for Veteran Employees

SMM has overhauled its re-employment system in response to revisions (effective April 2006) to Japan’s Act on Stabilization of Employment of Elderly Persons. Nearly 70% of SMM and affiliated company employees in Japan are rehired after reaching the mandatory retirement age due to the introduction of the re-employment system and other methods for utilizing elderly human resources. SMM’s efforts regarding the utilization of elderly human resources will be continued.

Initiatives Relating to Locally-hired Employees at Overseas Affiliates

The SMM Group clarifies recruitment processes for each overseas facility while adhering strictly to laws and ordinances of the respective regions. Fairness in job appraisal, including promotions, is also ensured. Actual conditions are periodically confirmed through the implementation of Group-wide questionnaires.

Employee’s Perspective

Respect for Diversity

I came to Japan after high school and studied at a language school and university before joining SMM in 2011. I currently work for the Information Systems Department helping to set up the company’s in-house systems. The job comes with a lot of responsibility since we support the work of other departments and because it’s tied up with company management and strategy, so I get great satisfaction from being put in charge of certain areas.

In the future, I want to be someone who works globally, doing a job that contributes to society in places around the world.

Before joining SMM, I was anxious about working as a foreigner, but my boss and department colleagues were very welcoming and treated me just like everyone else, so it’s a very easy environment to work in. I can concentrate on my job and communicate effectively with the others. I’m learning every day and I intend to apply what I learn to contributions both to the company and to society.

Zhu Bo
Information Systems Dept.

Initiatives for Enhancing Work-life Balance

A satisfying lifestyle leads to satisfaction at work, too. Based on this belief, SMM is making efforts to enhance the work-life balance of employees.

Efforts include strengthening, and promoting the use of, various systems. In addition to restricting long working hours and encouraging employees to take paid leave, we have enhanced the reduced working hour system available during child care and established a new return-to-work system.

We are also directing energy into enhancing the child-care leave system, the reduced working hour system, elderly and nursing care systems, and our response to the Japanese Law for Measures to Support the Development of the Next Generation. In advancing these efforts, we make full use of labor-management councils for surveying current conditions and drafting specific provisions.
### Initiatives Relating to Employee Diversity

<table>
<thead>
<tr>
<th>Company</th>
<th>No. of employees at year-end</th>
<th>Full-time officers</th>
<th>Managers</th>
<th>Regular employees</th>
<th>Subtotal</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMM</td>
<td>20</td>
<td>695</td>
<td>2,184</td>
<td>1,961</td>
<td>2,412</td>
<td>102</td>
<td></td>
</tr>
<tr>
<td>Consolidated subsidiaries in Japan</td>
<td>57</td>
<td>354</td>
<td>3,069</td>
<td>2,608</td>
<td>3,453</td>
<td>99</td>
<td></td>
</tr>
<tr>
<td>Consolidated subsidiaries overseas</td>
<td>33</td>
<td>406</td>
<td>3,425</td>
<td>2,315</td>
<td>3,734</td>
<td>107</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>110</td>
<td>1,229</td>
<td>7,339</td>
<td>6,884</td>
<td>9,599</td>
<td>308</td>
<td></td>
</tr>
</tbody>
</table>

* The 20 full-time officers of Sumitomo Metal Mining Co., Ltd. and 921 non-regular/limited-term employees are not included in the figure presented in the Corporate Data on page 8 of this report, hence the different totals here.

### Number of Employees/Officers Worldwide (Consolidated) (March 31, 2012)

<table>
<thead>
<tr>
<th>Country</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>5,865</td>
<td>332</td>
</tr>
<tr>
<td>U.S.A.</td>
<td>332</td>
<td>8</td>
</tr>
<tr>
<td>South Korea</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Peru</td>
<td>8</td>
<td>34</td>
</tr>
<tr>
<td>Chile</td>
<td>34</td>
<td>882</td>
</tr>
<tr>
<td>China</td>
<td>882</td>
<td>649</td>
</tr>
<tr>
<td>Philippines</td>
<td>649</td>
<td>1,050</td>
</tr>
<tr>
<td>Taiwan</td>
<td>1,050</td>
<td>1,050</td>
</tr>
</tbody>
</table>

### Consolidated Employee Breakdown (March 31, 2012)

<table>
<thead>
<tr>
<th>Aged 30-49</th>
<th>Aged 50 and over</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>Managers</td>
<td>31</td>
<td>9</td>
</tr>
<tr>
<td>Regular employees</td>
<td>1,405</td>
<td>665</td>
</tr>
<tr>
<td>Subtotal</td>
<td>1,436</td>
<td>674</td>
</tr>
</tbody>
</table>

* Full-time officers of Sumitomo Metal Mining Co., Ltd.: All male, aged 50 and over.
* The 110 full-time officers and 921 non-regular/limited-term employees of the SMM Group are not included in this table, hence the different totals under “Numbers of employees/officers (consolidated)” and “Number of employees/officers in each region (consolidated)” on this page.

### Number of Locally-hired Senior Managers (General Managers and Above) at Overseas Affiliates

<table>
<thead>
<tr>
<th>Company</th>
<th>No.</th>
<th></th>
<th>Company</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sumitomo Metal Mining Pogo LLC (U.S.A.)</td>
<td>1</td>
<td>0</td>
<td>Sumitomo Electronics Taiwan Co., Ltd. (Taiwan)</td>
<td>2</td>
</tr>
<tr>
<td>Sumitomo Metal Mining Chile Ltda. (Chile)</td>
<td>1</td>
<td>0</td>
<td>Sumiko Leadframe Chengdu Co., Ltd. (China)</td>
<td>1</td>
</tr>
<tr>
<td>Coral Bay Nickel Corporation (Philippines)</td>
<td>4</td>
<td>1</td>
<td>Sumiko Precision Chengdu Co., Ltd. (China)</td>
<td>2</td>
</tr>
<tr>
<td>Sumitomo Metal Mining Philippine Holdings Corporation (Philippines)</td>
<td>2</td>
<td>1</td>
<td>Sumiko Electronics Suzhou Co., Ltd. (China)</td>
<td>1</td>
</tr>
<tr>
<td>Taganito HAPL Nickel Corporation (Philippines)</td>
<td>1</td>
<td>0</td>
<td>Sumitomo Metal Mining Electronics Materials (Shanghai) Co., Ltd. (China)</td>
<td>3</td>
</tr>
<tr>
<td>Sumitomo Metal Mining Asia Pacific Pte. Ltd. (Singapore)</td>
<td>3</td>
<td>0</td>
<td>SMM KOREA Co., Ltd. (South Korea)</td>
<td>1</td>
</tr>
<tr>
<td>M-SMM Electronics Sdn. Bhd. (Malaysia)</td>
<td>3</td>
<td>3</td>
<td>Shanghai Sumiko Electronic Paste Co., Ltd. (China)</td>
<td>1</td>
</tr>
<tr>
<td>Malaysian Electronics Materials Sdn. Bhd. (Malaysia)</td>
<td>3</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(March 31, 2012)
### Employee Turnover Number and Percentage (FY2011)

<table>
<thead>
<tr>
<th>Location</th>
<th>Aged under 30</th>
<th>Aged 30-49</th>
<th>Aged 50 and over</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Japan</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departures</td>
<td>13</td>
<td>12</td>
<td>29</td>
<td>13</td>
</tr>
<tr>
<td>Total employees</td>
<td>686</td>
<td>211</td>
<td>2,792</td>
<td>408</td>
</tr>
<tr>
<td>Turnover (%)</td>
<td>1.9</td>
<td>5.7</td>
<td>1.0</td>
<td>3.2</td>
</tr>
<tr>
<td>U.S.A.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departures</td>
<td>11</td>
<td>1</td>
<td>28</td>
<td>4</td>
</tr>
<tr>
<td>Total employees</td>
<td>53</td>
<td>2</td>
<td>161</td>
<td>13</td>
</tr>
<tr>
<td>Turnover (%)</td>
<td>20.8</td>
<td>50.0</td>
<td>17.4</td>
<td>30.8</td>
</tr>
<tr>
<td>South Korea</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departures</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Total employees</td>
<td>0</td>
<td>100.0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Turnover (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peru</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departures</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total employees</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Turnover (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chile</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departures</td>
<td>0</td>
<td>0</td>
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<td>0</td>
</tr>
<tr>
<td>Total employees</td>
<td>0</td>
<td>1</td>
<td>25</td>
<td>3</td>
</tr>
<tr>
<td>Turnover (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departures</td>
<td>189</td>
<td>140</td>
<td>32</td>
<td>46</td>
</tr>
<tr>
<td>Total employees</td>
<td>277</td>
<td>209</td>
<td>201</td>
<td>174</td>
</tr>
<tr>
<td>Turnover (%)</td>
<td>68.2</td>
<td>67.0</td>
<td>15.9</td>
<td>26.4</td>
</tr>
<tr>
<td>Philippines</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departures</td>
<td>13</td>
<td>1</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>Total employees</td>
<td>187</td>
<td>71</td>
<td>327</td>
<td>34</td>
</tr>
<tr>
<td>Turnover (%)</td>
<td>7.0</td>
<td>1.4</td>
<td>51.5</td>
<td>0</td>
</tr>
<tr>
<td>Taiwan</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departures</td>
<td>43</td>
<td>37</td>
<td>81</td>
<td>47</td>
</tr>
<tr>
<td>Total employees</td>
<td>110</td>
<td>92</td>
<td>462</td>
<td>251</td>
</tr>
<tr>
<td>Turnover (%)</td>
<td>39.1</td>
<td>40.2</td>
<td>17.5</td>
<td>18.7</td>
</tr>
<tr>
<td>Singapore</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departures</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total employees</td>
<td>1</td>
<td>1</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Turnover (%)</td>
<td>100</td>
<td>100</td>
<td>0</td>
<td>7.7</td>
</tr>
<tr>
<td>Malaysia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departures</td>
<td>99</td>
<td>54</td>
<td>26</td>
<td>20</td>
</tr>
<tr>
<td>Total employees</td>
<td>122</td>
<td>83</td>
<td>171</td>
<td>135</td>
</tr>
<tr>
<td>Turnover (%)</td>
<td>81.1</td>
<td>65.1</td>
<td>15.2</td>
<td>14.8</td>
</tr>
<tr>
<td>Indonesia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departures</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total employees</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Turnover (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thailand*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departures</td>
<td>104</td>
<td>122</td>
<td>97</td>
<td>82</td>
</tr>
<tr>
<td>Total employees</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Turnover (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departures</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total employees</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Turnover (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solomon Islands</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departures</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total employees</td>
<td>0</td>
<td>1</td>
<td>34</td>
<td>2</td>
</tr>
<tr>
<td>Turnover (%)</td>
<td>0</td>
<td>0</td>
<td>2.9</td>
<td>50.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departures</td>
<td>473</td>
<td>369</td>
<td>312</td>
<td>214</td>
</tr>
<tr>
<td>Total employees</td>
<td>1,436</td>
<td>675</td>
<td>4,193</td>
<td>1,037</td>
</tr>
<tr>
<td>Turnover (%)</td>
<td>32.9</td>
<td>54.7</td>
<td>7.4</td>
<td>20.6</td>
</tr>
</tbody>
</table>

* Thailand figures affected by withdrawal from operations after 2011 Thailand Floods. Figures exclude officers and temporary employees.
The SMM Group undertakes human resources development in line with the following basic approach, as stipulated in our human resources development regulations.

**Basic Approach to Human Resources Development**

1. Actively support the motivation and ambitions of employees
2. Tailor activity to match the advancement of each individual employee
3. Carry out activity in a systematic and organized manner on an ongoing basis with a view to the long term
4. Organically link activity to human resources management systems
5. Adapt flexibly to diverse management needs

**Human Resources Development Program**

In order to realize the growth strategy put forward in its three-year business plan, the SMM Group has defined the human resources it is looking for—people who see opportunity in change, perceive issues correctly, and push forward with determination toward finding solutions.

**Total Annual Hours of Education**

<table>
<thead>
<tr>
<th></th>
<th>Officers</th>
<th>General managers</th>
<th>Section managers</th>
<th>Regular employees</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMM (non-consolidated)</td>
<td>148</td>
<td>1,250</td>
<td>7,897</td>
<td>27,263</td>
<td>108</td>
<td>36,666</td>
</tr>
<tr>
<td>Consolidated subsidiaries in Japan</td>
<td>286</td>
<td>336</td>
<td>2,350</td>
<td>13,676</td>
<td>1,649</td>
<td>18,297</td>
</tr>
<tr>
<td>Consolidated subsidiaries overseas</td>
<td>249</td>
<td>211</td>
<td>3,373</td>
<td>93,855</td>
<td>17,167</td>
<td>114,855</td>
</tr>
<tr>
<td>Annual hours of education per employee</td>
<td>6.2</td>
<td>12.5</td>
<td>18.4</td>
<td>15.4</td>
<td>17.1</td>
<td></td>
</tr>
</tbody>
</table>

* Figures are limited to education/training organized by personnel and general affairs divisions

**Human Resources Development Program (SMM Employees)**

- **OJT**
  - General managers: 2-year professional program
  - Officers: General manager second-year training
  - Section managers: Newly promoted section manager training
  - E-class: Newly promoted E-class employee training

- **Self-development assistance**
  - Officers: Executive management program
  - General managers: Middle management program
  - Section managers: Supervisor/line leader training
  - E-class: Language training prior to overseas assignment

- **Management training**
  - Officers: Executive management program
  - General managers: Middle management program
  - Section managers: Supervisor/line leader training
  - E-class: Language training prior to overseas assignment
  - F-class: Language training

- **1-year new employee training program**
  - E-class: Newly promoted E-class employee training
  - Section managers: Newly promoted section manager training
  - Officers: General manager second-year training

- **Compliance seminars**
  - Officers: General manager second-year training
  - General managers: Middle management program
  - Section managers: Supervisor/line leader training
  - E-class: Language training prior to overseas assignment

- **Overseas management training**
  - Officers: Executive management program
  - General managers: Middle management program
  - Section managers: Supervisor/line leader training
  - E-class: Language training prior to overseas assignment

- **Outside seminars/workshops**
  - Officers: Executive management program
  - General managers: Middle management program
  - Section managers: Supervisor/line leader training
  - E-class: Language training prior to overseas assignment

- **Overseas management training**
  - Officers: Executive management program
  - General managers: Middle management program
  - Section managers: Supervisor/line leader training
  - E-class: Language training prior to overseas assignment

- **Human rights seminars**
  - Officers: Executive management program
  - General managers: Middle management program
  - Section managers: Supervisor/line leader training
  - E-class: Language training prior to overseas assignment

- **Fee assistance for language proficiency tests**
  - Officers: Executive management program
  - General managers: Middle management program
  - Section managers: Supervisor/line leader training
  - E-class: Language training prior to overseas assignment

- **Hazard simulation training**
  - Officers: Executive management program
  - General managers: Middle management program
  - Section managers: Supervisor/line leader training
  - E-class: Language training prior to overseas assignment

- **Equipment skills training**
  - Officers: Executive management program
  - General managers: Middle management program
  - Section managers: Supervisor/line leader training
  - E-class: Language training prior to overseas assignment
A framework structured around three components—on-the-job training (OJT), which is the primary component, self-development, and off-the-job training (OFF-JT)—has been put in place to develop such human resources. We also systematically carry out more specialized education through human resources development programs created for different job types.

In particular, we focus on these human resources development initiatives:

1. International employee development
2. Next-generation senior management development

We also intend to introduce new programs and review existing training programs as required.

International employee development
The globalization of business has created a need for human resources who can actively pursue SMM’s business strategy at overseas facilities and within markets for each of our main businesses.

Acknowledging that the development of such human resources needs to start as early as possible, SMM implements a short-term overseas training program whereby all new management track employees are seconded overseas for a two-month period. More than just an opportunity to polish up language skills, the program is designed to bring about general improvements to the employees’ ability to accommodate other cultures and their ability to act under their own initiative in an overseas setting.

Training in business skills, which are perhaps one common language within a global business, is also readily incorporated into the different types of management training and training for employees promoted to new positions. International employee development is thus approached from a number of angles, not simply from the language aspect.

Next-generation senior management development
Bottom-up training of the entire workforce used to be the main objective, but in FY2008 we also launched a specialized program for training the next generation of senior managers. Section manager-level personnel with the potential for a future senior management role at the company are selected for the program, which is carried out over about six months and is designed to help them develop a senior manager’s perspective. Another program was launched in FY2011 for newly promoted general manager-level personnel. This involves current officers in charge at each workplace providing guidance and advice to participants on a one-on-one basis to let them develop a sense for management, and participants themselves playing a leading role in actually addressing managerial issues faced by the company and observing the results.
Human Rights Initiatives

Basic Approach

The SMM Group has set forth a policy on human rights aligned with the SMM Group Corporate Philosophy and the SMM Group Code of Conduct. In determining the policy, opinions were sought both from within the Group, as well as from outside experts.

The policy prescribes compliance not only with domestic laws and ordinances relating to human rights, but also with various international standards. Furthermore, we plan to appeal to outside parties with whom the SMM Group has a relationship to prevent human rights problems arising. There were no reports of discrimination encroaching on human rights during FY2011.

We are pushing ahead with the education of employees on human rights issues throughout the entire SMM Group.

Human Rights Seminars

Human rights seminars are held regularly, the primary objectives being to deepen awareness of potential human rights issues in the workplace and to prevent them from occurring. These seminars are held mainly for officers and managers at Head Office divisions, while seminars at business divisions and district divisions target a broader range of employees.

Having established the SMM Group Policy on Human Rights, we intend to enhance human rights education further.

Prevention of Child Labor and Forced Labor

We gain knowledge of current conditions through questionnaires sent out to group companies in Japan and overseas. No reports of child labor or forced labor were received during FY2011.

Employee’s Perspective

Survey of Human Rights Initiatives in the Supply Chain

The Purchasing Department, in line with the SMM Group Policy on Human Rights established in August 2010, surveys human rights initiatives carried out by manufacturers of parts and ancillary materials contained in SMM products which impact our customers and the end consumer.

The survey takes the form of a human rights questionnaire.

We follow up on results of the questionnaire with visits to manufacturers in order to conduct hearings. From these, we get an idea of the environment and mood inside manufacturers’ plants and workplaces, which can’t be done just through the questionnaire. We use a check list to confirm that the manufacturer doesn’t engage in unfair employment practices such as child labor or forced labor involving foreigners.

We have surveyed 16 suppliers. Since 2010, hearings have been conducted for four manufacturers of copper anode balls, quicklime, cement, and silica rock, and it was confirmed there were no problems with their initiatives relating to human rights. Hearings for the remaining 12 suppliers will be conducted during FY2012. We also plan to expand the coverage of the questionnaire within the SMM Group.

SMM Group Policy on Human Rights

The SMM Group’s policy on human rights, in accordance with the SMM Group Corporate Philosophy and the SMM Group Code of Conduct, has been established as follows.

1. The SMM Group will comply with domestic laws and international standards relating to human rights and encourage persons within the Group, as well as outside parties over which the Group has influence, to work toward the realization of a society without human rights infringements.

2. The SMM Group will not allow harassment or other incidents of a discriminatory nature within the Group and will make efforts to prevent such incidents from occurring among outside parties over which the Group has influence.

3. The SMM Group will not engage in child labor or forced labor and will make efforts to prevent child labor or forced labor from occurring among outside parties over which the Group has influence.

4. The SMM Group will show other considerations to human rights in addition to items 1-3 above within the Group and in relationships with outside parties over which the Group has influence.

5. The SMM Group will establish appropriate measures and procedures for responding to human rights problems if they should occur.

6. The SMM Group will identify and stay aware of the current and changing state of human rights in the world, as well as the impact of corporations in the area of human rights, and carry out awareness-raising activities and other necessary measures on an ongoing basis.
Preventing Sexual Harassment

To prevent sexual harassment, each business facility has a dedicated consultation office and a designated sexual harassment prevention promotion officer. No incidents falling under the category of sexual harassment were reported during FY2011.

Human Rights Considerations When Making Investments

When making investments or equity contributions, the SMM Group confirms the absence of intrinsic issues relating to human rights such as discrimination, forced labor or child labor. Projects are also screened for risks during the decision-making process using check sheets. Continued monitoring is conducted after the investment or equity contribution, for example through board meetings of the company invested in. If an issue arises, we will demand its resolution.

It was confirmed that no human rights issues existed in relation to investments made during FY2011 which required decisions by management.

Artisanal and Small-Scale Mining

As of September 2012, there were no cases of work environment issues relating to artisanal and small-scale mining (ASM) in regions where SMM operates. Nor did SMM have any programs for involvement in ASM.

Relocation of Local Citizens for Development

Hishikari Mine and Pogo Mine are excavated using underground mining techniques involving the digging of drifts in the ground, which means the impact on the surface is relatively low. Even so, there are occasions when we inevitably have to ask local citizens to relocate to make way for development of the mine or the construction of associated facilities. On such occasions, we seek the approval and understanding of local citizens and offer alternative land. At the Hishikari Mine, we requested and carried out relocation of three households. No citizens had to be relocated for development of the Pogo Mine.

Under the Taganito Project being advanced in the Taganito district of northeastern Mindanao Island in the Philippines, aiming for a start of operations in 2013, we asked 41 households in areas to be affected by operations to relocate to make way for construction of a plant. A relocation plan was formulated and implemented in line with the World Bank’s Operational Directive on Involuntary Resettlement. Relocation of all citizens was completed by November 2010 after they agreed to the terms. We are implementing ongoing measures to support the sustainability of the relocated citizens’ lifestyles, for example through technical assistance for crop cultivation in their new places of settlement.

Support for NGOs

On June 18, 2012, SMM invited Mr. and Mrs. Salamon, representatives of the Kaibigan Ermita Outreach Foundation, Inc. (Kaibigan*), an NGO in Manila, to attend a ceremony for the signing of a memorandum on donations from SMM to Kaibigan. SMM has agreed to make donations over the next three years to Kaibigan for the support of street children as well as other impoverished children and mothers living in the Philippine capital.

In addition to support for about 400 children, our donations will also be used to fund scholarships for students going on to university. Being able to contribute even a little to resolving some of the social problems faced by the Philippines is of great significance for SMM. At the signing ceremony, we were presented with a collaborative piece painted by the ten students selected for SMM scholarships. It depicts their dreams and ambitions. This work is on display at the SMM Strategy Planning Training Center, along with a number of other pictures painted by children.

* “Kaibigan” means “friend” in Tagalog.

Ceremony for signing the memorandum with Kaibigan
Initiatives in the Six Key CSR Areas

Occupational Health and Safety

CSR Vision for 2020

A company that accords safety the highest priority and provides comfortable working environments

- No occupational accidents throughout the SMM Group (including business partners)
- Create workplaces where protective equipment (earplugs/masks) is unnecessary
- Zero incidence of occupational disease
- A vibrant company whose workforce is physically and mentally healthy

Key Measures for Achieving the CSR Vision for 2020

Safety

Facilities: Minimize risks for existing equipment based on risk assessments. Ensure the inherent safety of new equipment.

People: Implement rank-based safety education (SMM Anzen Dojyou, hazard simulation training, group education, and education by outside instructors) to ensure that each worker accords safety the highest priority, and enhance the safety mentality and skills.

Management: Implement the PDCA cycle for safety activity (work observations, risk assessments, safety audits, etc.) with general managers of workplaces leading efforts to ensure safety within the organization.

Physical Health

- Strengthen work environment improvements and maintenance with a priority on Control Class 3 workplaces.
- Gather information on chemical substance regulations and legal revisions and carry out appropriate action at related workplaces.

Mental Health

- Continue current activities and enhance mental health initiatives.

CY2011 Achievements

<table>
<thead>
<tr>
<th>Target</th>
<th>CY2011 Achievements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of accidents in CY2011 SMM Group employees: 5 lost time; 15 in total Manufacturing partners: 3 lost time; 6 in total</td>
<td>Number of accidents SMM Group employees: 5 lost time; 16 in total Manufacturing partners: 1 death; 3 lost time; 8 in total</td>
</tr>
<tr>
<td>No new cases of occupational disease No Control Class 3 workplaces</td>
<td>There were no new cases of occupational disease Number of Control Class 3 workplaces (as of March 2012) Dust: 3; lead: 5; nickel compounds: 4; arsenic and its compounds: 1; chlorine: 2</td>
</tr>
<tr>
<td>Promote the four cares (self-care, outside care, care by the organization, care by health staff)</td>
<td>Meetings with industrial physicians were held for employees who worked long hours Mental health checks were implemented through employee assistance programs (EAP) (2,754 employees). Mental health care training was implemented (17 times, for 389 participants). Industrial counselors were trained (3 counselors).</td>
</tr>
</tbody>
</table>

CY2012 Plan

<table>
<thead>
<tr>
<th>Target</th>
<th>CY2012 Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of accidents in CY2012 Employees (SMM-controlled workplaces and group companies): 5 lost time; 15 in total Manufacturing partners: 3 lost time; 6 in total</td>
<td>Entrench implementation of work observations Carry out accident prevention measures in priority areas Implement employee education for individual workplaces Enhance education for less-experienced employees Prepare to open the SMM Anzen Dojyou</td>
</tr>
<tr>
<td>No new cases of occupational disease No Control Class 3 workplaces</td>
<td>Steadily implement and continue work environment improvements Manage use and maintenance of protective equipment Comply with new regulations and legal revisions relating to chemical substances</td>
</tr>
<tr>
<td>Promote the four cares (self-care, outside care, care by the organization, care by health staff)</td>
<td>Implement the following on an ongoing basis: Counseling for employees who work long hours Mental health checks Mental health care training (managers, supervisors and regular employees) Industrial counselor training</td>
</tr>
</tbody>
</table>
Incorporated the stimulation of safety education at individual workplaces led by safety leaders as a key measure.

Health patrols will be implemented by the Safety & Environment Control Department, and support and guidance relating to improvements to Control Class 3 workplaces will be strengthened.

Providing even greater safety and security

I have been providing SMM with education for managers and supervisors, as well as services to business sites, such as observation of operations, guidance, and lectures, since 2009. Safety performance and issues differ from site to site, but I am convinced of the determination of everyone, from general managers all the way through to the front-line operators, to make progress on realizing the CSR Vision for 2020. SMM is advancing some superb activities, which include improving employees’ sensitivity to dangers through company-wide implementation of hazard simulation training at the Oji-kan facility, and using the JCO Study Center to communicate lessons learned from past accidents to make sure they stay in the memory.

From what I have seen of front-line operations so far, I would suggest the following activities need to be advanced from the point of view of those departments in order to improve safety performance further.

- When an accident or a serious close call occurs, pursue the real reasons that led to human error and put in place real countermeasures. And to that end, build upon the use of risk assessments as an accident prevention measure.
- Identify all non-routine tasks, and all tasks and rules that workers find hard to perform or observe, and aim to achieve a proven record of zero accidents by cutting down the number of negative elements.
- Achieve company-wide uniformity of safety specifications for equipment, for example in regard to simpler, smaller and more maintainable machinery and equipment.

Implementing these activities will definitely make front-line operations more resilient and will also lead to enhanced problem-solving capability, allowing SMM to grow and evolve into a company that can provide even greater safety and security. I say this both out of expectation and with knowledge of SMM’s potential.

Subcommittee Chairman’s Comment

The Occupational Health & Safety Subcommittee has modified its roadmap for realizing our CSR Vision for 2020 of “no occupational accidents throughout the SMM Group.” In the next phase of the three-year business plan, we have set a target of 10 or fewer employee accidents, and as part of our efforts to achieve that target, we will be opening the SMM Anzen Dojyou within the Oji-kan facility early in 2013.

The SMM Anzen Dojyou will be used to develop human resources who play a central role in ensuring workplace safety. Those who train there will then return to their workplaces, where they will foster a safety culture by providing education and guidance on the 3Ss, hazard prediction, risk assessments, work observations, and other activities. Hazard simulation training is already underway with around 3,000 SMM Group employees and 1,700 employees of manufacturing partners having participated as of the end of June 2012. I believe the addition of the SMM Anzen Dojyou will allow an improved standard of safety within the SMM Group with a shift from employee-dependent safety to safety preserved by the workplace (organization).

In the area of health, we are looking to reduce the number of Control Class 3 workplaces, with divisions setting reduction targets.

The assurance of safety, as well as physical and mental health, brings happiness to employees and their families. They should all therefore get involved in realizing “no occupational accidents,” “zero incidence of occupational disease,” and “workplaces where protective equipment is unnecessary.”
Occupational Health and Safety

Basic Approach

SMM engages in a wide range of activities in line with the CSR Policy, which states, “According safety the highest priority, SMM shall provide safe, comfortable working environments and seek to eliminate occupational accidents.”

The CSR Vision for 2020 includes, “A company that accords safety the highest priority and provides comfortable working environments,” stipulating the following four specific targets.

<table>
<thead>
<tr>
<th>Safety</th>
<th>Physical Health</th>
<th>Mental Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. No occupational accidents throughout the SMM Group (including manufacturing partners)</td>
<td>2. Zero incidence of occupational disease</td>
<td>4. A vibrant company whose workforce is physically and mentally healthy</td>
</tr>
<tr>
<td>2. Zero incidence of occupational disease</td>
<td>3. Create workplaces where protective equipment (earplugs/masks) is unnecessary</td>
<td></td>
</tr>
<tr>
<td>3. Create workplaces where protective equipment (earplugs/masks) is unnecessary</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Safety-related activities are advanced under a basic policy to “nurture a safety culture and ensure thorough safety management at all business sites and Group companies” in order to provide safety assurance and to realize the CSR Policy and CSR Vision for 2020.

To raise the effectiveness of these measures, we are working to strengthen safety management at the divisional level, focusing particularly on specified “top-priority workplaces,” where statistically many accidents occur.

Activities related to occupational health include ascertaining levels of dust, lead, noise, specified chemicals, and other parameters within work environments, making improvements to those environments where necessary, and enhancing occupational health management.

Constructive discussion on ways to improve health and safety in the workplace takes place during meetings of the occupational health and safety committees comprising representatives from both labor and management.

Health and Safety Activities in the Workplace

Each workplace carries out initiatives relating to health and safety based on annual targets for the SMM Group set for each of those areas.

The following are safety-related measures given priority during 2011.

1. Implementation of work observations
2. Ensuring establishment of recurrence prevention measures when accidents occur
3. Implementation of hazard simulation training at the Oji-kan facility
4. Strengthening of education for less-experienced employees
5. Minimizing risk through risk assessments

Other priority safety initiatives implemented by individual workplaces, with top management leading by example, include safety evaluations by top management, learning from close-call events, and hazard prediction training. Safety activities are advanced by employees of the SMM Group together with manufacturing partners.

Health-related activities during 2011 were pursued under the following themes.

1. Steady implementation and continuation of work environment improvements
2. Protective equipment usage management and upkeep
3. Enhancing awareness of, and communication about, the dangers and hazards of chemical substances
4. Compliance with stricter work environment regulations relating to chemical substances
5. Care as part of health management (e.g. health guidance for employees showing signs of conditions)

As an initiative relating to occupational diseases, levels of dust, lead, noise, specified chemicals and other parameters within work environments are measured on a regular basis each year and controls are in place for each parameter.

A labor-management agreement pertaining to dust, computer-related illness, lead, and noise sets forth procedures for preventing disease and taking action when diseases occur.

And in December 2010, stricter regulations were placed on indium tin oxides (ITO) after a revision to guidelines. Work environments are being improved and health examinations implemented in accordance with the new guidelines.

Mental Health Care

Initiatives related to mental health care for employees include mental health care training by specialized institutions and health level self-checks. We have also enabled health consultations at any time via telephone or website to provide mental health care for employees and their families.

Mental health care initiatives were continued in FY2011. Specific initiatives included practical training, mainly involving...
role playing, implemented for managers and supervisors to enhance care of employees within the organization, and basic courses for regular employees. A “return to work trial” system was also implemented to help employees who have been on long-term leave due to a mental disorder settle back into work life. We are also nurturing in-house mental health care specialists by having labor affairs personnel obtain industrial counselor qualifications.

In FY2012, we will continue to improve upon the four cares—care provided by the organization, self-care, care provided by health staff, and care provided by outside institutions.

### Incidence of Occupational Accidents

The total number of accidents at workplaces in Japan during 2011 was 16, the second best safety performance ever after 2009, when the figure was 14. There were 10 accidents at overseas workplaces. No fatal accidents occurred at workplaces in Japan or overseas. No occupational illnesses occurred at workplaces in Japan or overseas. Note that this data is based on the calendar year, January to December 2011.

#### Data on Occupational Accidents in Japan

<table>
<thead>
<tr>
<th>Year</th>
<th>SMM (directly controlled)</th>
<th>Group companies</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>All accidents 5</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Deaths 0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Lost time accidents 1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Working days lost 313</td>
<td>60</td>
<td>373</td>
</tr>
<tr>
<td>2010</td>
<td>All accidents 8</td>
<td>11</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Deaths 0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Lost time accidents 2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Working days lost 98</td>
<td>27</td>
<td>125</td>
</tr>
<tr>
<td>2009</td>
<td>All accidents 5</td>
<td>9</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Deaths 0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Lost time accidents 3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Working days lost 453</td>
<td>1</td>
<td>454</td>
</tr>
<tr>
<td>2008</td>
<td>All accidents 12</td>
<td>16</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Deaths 0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Lost time accidents 2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Working days lost 12</td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td>2007</td>
<td>All accidents 11</td>
<td>17</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Deaths 0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Lost time accidents 2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Working days lost 183</td>
<td>104</td>
<td>287</td>
</tr>
</tbody>
</table>

* Boundary: SMM, subsidiaries in Japan, Nippon Keten Co., Ltd., N.E. Chemcat Corporation, and the Mie District Div. of Mitsui Sumitomo Metal Mining Brass & Copper Co., Ltd.
* No fatal accidents have occurred at SMM or a group company since 2004.

#### Issues and Targets

Outstanding safety issues are the involvement of less-experienced employees in around 60% of all accidents occurring during 2011, and the fact that around 80% of accidents in 2011 occurred at top-priority workplaces. Many accidents were the result of unsafe activities which have become difficult to prevent through existing 3Ss-oriented patrols.

In 2012, we will advance key initiatives to address these issues, namely entrenching implementation of work observations; accident prevention measures in priority areas; employee education for individual workplaces; and enhancement of education for less-experienced employees. At top-priority workplaces, we will strengthen guidance with division general managers and the Safety & Environment Control Department conducting routine patrols to check that instructions from top management at each workplace have reached the front line of operations and identify areas where safety activities are insufficient.

In the area of health, the Safety & Environment Control Department will implement health patrols at Control Class 3 workplaces and provide guidance on improvements. Compliance with chemical substance controls will be ensured by identifying, and taking necessary action on, the dangers and hazards of chemicals and other substances while following legislative developments. In terms of mental health, we will enhance mental health education for regular employees, managers and supervisors. Health management will continue to be advanced through implementation of health guidance, consultation and education by industrial physicians based on health examination results.

#### Activities at the Oji-kan Facility

The SMM Group’s experience-based training facility, the Oji-kan, commenced hazard simulation courses in January 2010. By March 31, 2012, a period of roughly two years, a total of 2,874 Japan-based SMM Group employees and 1,445 manufacturing partner employees had undergone training there. Some workplaces in the Niihama district even use the Oji-kan’s facilities for their own independent safety activities.

Overseas workplaces also make good use of the Oji-kan. Employees from Coral Bay Nickel Corporation in the Philippines take part in hazard simulation programs each year. Executives from the Pogo Mine have observed the facility and are applying what they have learned to safety activities at the mine.

Tours of the Oji-kan facility are also provided to other corporations and outside organizations. So far, we have interacted with over 500 people from more than 60 such corporations and organizations at the facility. Some corporations even have plans to establish their own hazard simulation facilities based on what they saw at the Oji-kan.

Workplace-specific hazard simulation training (Nippon Keten) at the Oji-kan facility—forklift hazard simulation

3Ss: Seiri (sorting), Seiton (setting in order) and Seiso (sweeping and scrubbing)
**Initiatives in the Six Key CSR Areas**

**Stakeholder Communication**

**CSR Vision for 2020**

A company that is open to communication with stakeholder groups worldwide

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**FY2011 Targets and Achievements**

<table>
<thead>
<tr>
<th>Target</th>
<th>FY2011 Achievement</th>
</tr>
</thead>
</table>
| Create opportunities for face-to-face dialogue with stakeholders | • Surveyed consolidated subsidiaries’ efforts to communicate with employees and local communities  
• Implemented the PDCA cycle based on employee awareness survey findings  
• Held a discussion between the president and female employees as part of an in-house bulletin feature  
• Began issuing English versions of in-house bulletins for employees at overseas facilities  
• Held an in-house seminar on cooperation with NGOs and CSR procurement  
• Continued communication with reliable NGOs |
| Create better CSR reports  
• Inform stakeholders and exchange opinions with a selection of stakeholders | • Conducted a review after distribution of CSR Report 2011  
• Held a stakeholder dialogue and had experts evaluate our roadmap |

**FY2012 Plan**

<table>
<thead>
<tr>
<th>Target</th>
<th>FY2012 Plan</th>
</tr>
</thead>
</table>
| Achieve the following situations where communication is pursued | • Implement a second employee awareness survey  
• Carry out in-house initiatives to foster a CSR mentality, for example the creation of a video on CSR activities  
• Formulate education programs relating, for example, to the Sumitomo Business Spirit and the SMM Group Corporate Philosophy  
• Organize and implement plant tours  
• Share information on community contribution activities at each facility through in-house bulletins  
• Strengthen communication with the SRI1 and ESG2 personnel of institutional investors  
• Hold lectures and workshops on cooperation with NGOs as part of in-house awareness activities  
• Hold regular meetings and build collaborative ties with environmental NGOs |
| Create opportunities for face-to-face dialogue with stakeholders | • Review CSR Report 2012 and incorporate findings into next year’s report  
• Communicate the advice received through the stakeholder dialogue in 2012 to employees  
• Continue dialogue with outside experts |
| Create better CSR reports  
• Inform stakeholders and exchange opinions with a selection of stakeholders | |

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1. SRI: Socially Responsible Investment  
2. ESG: Environmental, Social and Corporate Governance
Roadmap Revisions

**POINT 01**
Restructured initiatives and introduced quantitative indices to ensure implementation of the PDCA (Plan–Do–Check–Act) cycle for each initiative, being more specific at the execution level.

**POINT 02**
Identified key themes common to initiatives for realizing the CSR Vision for 2020: transparency, accountability, attentiveness, and dialogue.

**POINT 03**
Clarified key initiatives for each three-year business plan period.

Stakeholder Comment

I believe Sumitomo Metal Mining is genuinely trying to raise stakeholders’ understanding of its activities by disclosing information. The company has also been recognized for its investor relations activities, winning a Best IR Award in 2011. One of the reasons SMM won this award is that the top management publicly states the targets to be attained under three-year business plans and regularly reports on progress. The company’s stance of responding swiftly to accidents and disasters and disclosing information on an ongoing basis also gives stakeholders peace of mind. I personally learned about the history of the Besshi Copper Mine and overseas projects through the company’s Business Strategy Progress Briefing Session and the Annual Report. I realized that the stance of overcoming difficulties through dialogue with the parties concerned is fundamental to CSR activity.

I think the challenge now will be adapting to globalization. Risks which previously went unnoticed by the Japanese sensibility will emerge. Diverse values, including those of foreigners and women, for example, have to be understood. Consideration for our planet’s precious environment is essential. But SMM has built up a CSR mentality which will enable further advancement. I look forward to more activities which earn SMM the trust of stakeholders.

Yoshiko Sato
Secretary General / Chief Research Fellow and Program Director
Japan Investor Relations Association (JIRA)

Subcommittee Chairman’s Comment

Activities implemented in FY2011 include the use of in-house bulletins to introduce and share social contribution activities and efforts to communicate with local communities, ongoing meetings with trustworthy citizen groups, and workshops stressing the importance of CSR communication with NGOs and business partners. The ability to engage in smooth communication with both NGOs and our business partners will be particularly essential as globalization of our business continues and we will therefore persist with awareness activities and advance sharing of leading examples among overseas facilities.

Our new roadmap for realizing the CSR Vision for 2020 addresses communication with stakeholders by laying down specific initiatives for communicating with each stakeholder category, identifying four common themes—transparency, accountability, attentiveness, and dialogue. Activities targeting employees will aim for two-way communication across the entire SMM Group, including overseas facilities. Frameworks will be established for providing facilities with company-level support for communication with local communities. And efforts will be made to build collaborative ties with business partners and citizen groups. To keep initiatives aligned with these goals, we will apply the PDCA (Plan–Do–Check–Act) cycle.

Takashi Ito
Chairman, Communication Subcommittee
Managing Executive Officer
General Manager, PR and IR Dept.
Relations with Employees

**Basic Approach**

The SMM Group aims to create work environments that allow employees to remain proud of where they work and what they do. We are putting systems in place for tapping the opinions of employees and applying them to management.

**Employee Awareness Survey**

In FY2011, divisions started formulating and implementing action plans based on the findings of the employee awareness survey conducted in March 2010. Specific initiatives being advanced to address workplace issues identified through the survey include training for managers and supervisors and measures for increasing opportunities for communication inside the company.

In the next employee awareness survey, scheduled for March 2013, we will evaluate the effects of these efforts and ascertain employees’ views on their workplace and job, and then proceed to develop further initiatives that will make SMM an even better company to work for.

**Labor-Management Relations**

Workers’ unions formed at SMM branch offices and facilities of SMM Group companies in Japan carry out activity under the umbrella of the Federation of Sumitomo Metal Mining Workers Union (Sumikoren). In principle, all regular employees join workers’ unions in accordance with union shop agreements. Overseas, six consolidated subsidiaries have workers’ unions. As of March 31, 2012, around 32% of employees belonged to workers’ unions at overseas consolidated subsidiaries. In order to build up healthy labor-management relations based on mutual trust, in which company and union mutually respect the other party’s position, labor-management council meetings, or labor-management discussions, are held at least once a month with unions at each branch or group company. The Central Labor-Management Conference, a meeting between SMM management and executives of Sumikoren unions, is held once a year around March.

We also implement questionnaires to ascertain conditions relating to the establishment of workers’ unions overseas and actually visit overseas business facilities in order to observe the labor-management situation in those locations and to exchange information.

Various committees comprising members from labor and management are set up to tackle matters deemed important to both sides so that the views of both labor and management can be reflected in revisions to, or the additional formulation of, a wide range of measures. In the case of business reforms expected to have a significant impact on employees, considerations include providing sufficient advance notice. As a result of these efforts, no plant closures of a week or more due to strikes or other action were reported during FY2011 within the entire SMM Group, both in Japan and overseas, and there were no serious infringements upon freedom of association.

**Matters discussed with unions (FY2011) included:**

- Business conditions overview
- Monthly performance figures
- Plans relating to business restructuring
Relations with Shareholders and Investors

Basic Approach

SMM makes an effort to carry out fair and understandable disclosure of information required by shareholders and parties thinking about investing in SMM shares. Information necessary for investment, covering business activities, earnings, financial matters, medium-to-long term visions, growth strategies, important facts, future activities, and risk, is made available on the company website. Printed documents are also sent out to shareholders on a regular basis. To serve as a set of guidelines for adequate engagement in IR activity, we have formulated an IR policy, setting down standards of information disclosure and disclosure methods. The policy is available for public viewing on the company website.

Corporate governance refers to the frameworks in place which give order to corporate activity for the purpose of maximizing the value of the corporation and ensuring sound business. SMM views corporate governance as one of the most important management themes. We work to build and maintain an optimal system of business administration, pursuing transparency and efficiency of management in order to continue being a company that earns the trust of shareholders and all other stakeholders, and meets their expectations.

Investor Relations

IR activities routinely implemented by SMM include, for the benefit of institutional investors and securities analysts, the Business Strategy Progress Briefing Session—held twice yearly, after full-year and second quarter settlement of accounts, for the president to explain business strategies—and earnings briefings—held by the PR and IR Dept. via teleconference four times a year, for each quarterly settlement.

In addition, around 400 individual meetings with institutional investors and securities analysts were held in FY2011. We also pay visits to institutional investors to gain feedback from personnel responsible for governance and exercising of voting rights.

Communication with Individual Investors

SMM focuses on use of the company website as a method for communicating with individual investors and endeavors to disclose IR information in a prompt and accessible manner. We want the website to be a place where investors can come to obtain documents giving them insight into the company, including materials used for briefings to institutional investors, CSR Reports, and Annual Reports.

We also respond to a variety of telephone and email inquiries from individual investors, which is a valuable opportunity for communication. In the twice-yearly Report for Shareholders (Japanese only), our goal is to provide straightforward, reader-friendly content to promote understanding of SMM business conditions among individual investors.

Feedback from Shareholders and Investors to Management

Opinion and requests received through communication with institutional and individual investors in Japan and overseas are regularly reported to management and applied to administration of the company.

General Meeting of Shareholders

The General Meeting of Shareholders is an opportunity to engage in communication with shareholders. Efforts are being made to invigorate the meeting, for example by providing early notice of meetings and through the use of electronic voting.

SMM aims for a general meeting that shareholders can follow easily, using methods such as incorporation of video into presentations on business performance. Notices of meetings and reports are available on the SMM website.

Our IR activities were recognized in FY2011 with SMM winning a Best IR Award from the Japan Investor Relations Association and being selected by the Securities Analysts Association of Japan for an Award for Excellence in Corporate Disclosure.

Issues and Targets

By continuing to enhance IR activities, we aim to promote greater understanding of SMM’s business approach among more people. For communicating information, we will enhance the “Investor Relations” section on the company website further and make it more accessible.
Relations with Customers

**Basic Approach**

The SMM Group’s core businesses are mineral resources, smelting and refining, and materials. In addition to ore refining and the manufacture and sale of metal ingots for use as a raw material, we manufacture and sell products such as semiconductor materials and advanced materials, drawing out the potential of each metal through our own processes. The customers of our raw materials and processed materials businesses may differ, but we strive to fulfill the needs of each and every one, by introducing world-class, cutting-edge technologies to ensure high levels of performance and quality. The whole SMM Group pursues superior product creation, incorporating quality, safety and environmental considerations, through compliance with product safety and other product-related laws and regulations. This is something that only we can do as a company carrying out manufacturing from the raw materials stage.

**Company-wide Quality Policy**

Provide quality to satisfy our customers through continual improvements of quality assurance and control systems.

1. Pursue quality levels that stand out from the trends of the time
2. Abide by laws and rules and strive to create products incorporating safety and environmental considerations

**Quality Management Frameworks**

At SMM, based on the company-wide quality policy, personnel with responsibility over each business site set policies and plans tailored to their particular circumstances and issues and put in place management systems centered on the policies and plans tailored to their particular circumstances and issues and put in place management systems centered on the ISO 9001 standard. Furthermore, we pursue effective activities through proper system operation, and those activities are audited under an internal quality audit system.

**Cycle for Instilling Our Products with “Total Quality”**

“Total quality” improvement for the entire product life cycle

- **Product concept development**
  Create a product concept based on “total quality”

- **Marketing**
  Work with the customer to achieve “total quality”

- **Authentication**
  Make sure to perform the necessary customer authentication, including in relation to legal compliance and public benefit

- **Procurement/Production**
  Perform Assessment to Improvement for various aspects of manufacturing/production processes

- **Design/Development**
  Incorporate quality into product design, factoring in manufacturing and post-use, and perform Assessment to Improvement

- **Use/Customer service**
  Perform maintenance, referring to considerations during product concept development

- **Storage/Distribution/Supply**
  Include health and safety aspects of each stage of distribution in “total quality” and perform Assessment to Improvement

- **Disposal, reuse or recycling**
  Perform maintenance, referring to considerations during R&D

**Employee Growth through “Quality Training”**

To maintain consistent customer satisfaction in quality, it is necessary to nurture employees who can respond to ever-changing demands and circumstances. To that end, we have begun systematic quality training for administrators and manufacturing sites. Moreover, we are conducting skill improvement programs for internal quality auditors to ensure the integrity of all processes and implementation of continual improvements.

**Raising the Standard of “Total Quality”**

At SMM, we accurately determine the effects of products and services on health and safety so that we can seek improvements through organized implementation and linking of management systems covering the environment (considerations toward and improvements to local and global environments), occupational safety (safety of business processes) and quality (satisfaction from product use). For that purpose, we work to raise the level of “total quality” through current assessments, the setting of improvement targets, the execution of improvements and verification for each process. Almost all our products are subjected to this kind of “Assessment to Improvement” cycle.

1. Around 80% of business sites in Japan have acquired ISO 9001 certification. All locations which have not been certified operate their own quality management systems.
Disclosure of Information on Products and Services

Most items in the SMM Group product lineup are supplied as raw or processed materials for use by customers in the manufacture of their products. Information customers require in order to handle our products properly from safety and environmental perspectives, as well as information enabling them to supply the final product, is generally communicated in product specifications at the time of contract, during technical discussions, and via inspection certificates and SDS, based on a database of information ranging from the past to the most recently acquired knowledge, and necessary surveys.

SMM products supplied as final products to customers are carefully designed, incorporating considerations toward safety and environmental compatibility, and are only delivered after thorough trials and inspections carried out during their manufacture.

We make sure that information utilized for the above is always appropriate through operation of a management system, reviewing the information based upon the latest technology, recent laws and regulations, and requests from customers.

2. Inspection certificate: Product composition and performance documentation issued for each batch.

Important Information on Products and Services

- Does the product or service contain or involve materials that are potentially harmful, particularly to the environment or society?
- What information is available regarding how to use the product or service safely?
- Will recycling or disposal of the product harm the environment or society?

We also conduct surveys linked to life cycle assessments (LCA) for copper, nickel and zinc through associations related to individual products.

Methods for Providing Information

Provision of information relating to specifications

Information regarding product specifications requested by the customer on their order placement sheet is provided by showing specifications of the product delivered by SMM on the order received sheet.

Provision of information relating to chemicals

Customers have a major interest in companies’ response to regulations on health and safety relating to product handling and chemical substance regulations. The SMM Group provides information on chemical substances contained in products using SDS and other methods.

Other methods

The SMM Group also engages in transactions such as sales of different types of lubricants and ingots of gold, where the customers are general consumers. In line with related laws and regulations, we provide information on products and services in this area through labeling, advertisements and explanations to ensure correct understanding among consumers.

There were no violations of laws or regulations relating to products and services during FY2011.

Information on SMM Products Requiring Disclosure by Labeling and Applicable Products/Services

<table>
<thead>
<tr>
<th>Information requiring disclosure</th>
<th>Applicable products/services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are any parts of the product or service outsourced?</td>
<td>Applicable to all products/services containing substances controlled or requiring management under legislation. Not applicable to main products (raw and internally-processed materials).</td>
</tr>
<tr>
<td>Does the product or service contain or involve materials that are potentially harmful, particularly to the environment or society?</td>
<td>All products/services containing substances requiring management under legislation</td>
</tr>
<tr>
<td>What information is available regarding how to use the product or service safely?</td>
<td>All products/services containing substances requiring management under legislation</td>
</tr>
<tr>
<td>Will disposal of the product harm the environment or society?</td>
<td>All products/services containing substances requiring management under legislation</td>
</tr>
</tbody>
</table>

Communication with Customers

As mentioned earlier, most SMM Group products are raw or processed materials and they have a major influence on the performance and quality of the products manufactured by customers. It is therefore vital that we engage in apt and adequate communication with customers all the way from the order through to delivery and follow-up confirmation that our products performed according to specifications after passing into the hands of customers. We also implement other initiatives required for some products, including routine questionnaires, and use information such as complaint trends and customer feedback to evaluate the satisfaction of individual customers on a five-tiered scale. The findings are incorporated into action and measures at the management level through the frameworks in place.

Issues and Targets: Creating Quality through Employee Involvement

After re-acknowledging that quality is all about striving to fulfill the requirements of the customer, with everyone involved making an effort to find out what those requirements really are, information sharing activities were commenced in FY2011. These activities require dynamic efforts based on timely and accurate communication. Ongoing improvements are being made to management systems to be utilized for the activities. In terms of product safety and information disclosure, we will bolster frameworks for disclosing all the information customers require, including information on substances in our products, and further ensure frameworks allowing a swift and appropriate response to customer needs. As for raising the level of customer satisfaction, first we will improve methods of measuring and evaluating customer satisfaction and then work to increase customer satisfaction through effective measures after accurately identifying the issues at hand.
Relations with Suppliers

Basic Approach

A large number of suppliers support the operations of the SMM Group. They include: suppliers of various ores and intermediate materials; suppliers of ancillary materials, fuel and other materials used for operations; manufacturers of machinery, equipment and plant facilities; and contractors. In the SMM Group, we believe it’s important to build relationships with these suppliers based on fairness and mutual trust, enabling mutual prosperity over the long term.

The SMM Group Code of Conduct calls for group companies to fulfill their collective responsibility toward business partners by striving to be “a company demonstrating enormous technological capability and integrity while placing value on trust and with which mutual prosperity can be gained” and stipulates engagement in “free and fair transactions carried out under conditions of propriety” as the Group’s stance on purchasing activities.

1. At SMM, raw materials procurement is performed by individual business divisions while procurement of equipment and materials for operations (including ancillary materials) is performed by the Purchasing Dept.

Supplier Selection

Suppliers are selected in line with our regulations on materials. The following criteria are taken into account.

(1) Credit rating
(2) Level of technology
(3) Condition and capacity of equipment
(4) Delivery date certainty and flexibility in abnormal circumstances
(5) Willingness to cooperate with SMM

When engaging in business for the first time, a materials transaction notice is sent to the supplier, who submits a letter of intent after confirming SMM’s policy and approach.

The Purchasing Department is in contact with around 4,000 suppliers. Basic transaction agreements are entered into with suppliers with whom transactions of a certain size are expected on an ongoing basis (396 companies as of March 2012).

Suppliers who enter a basic transaction agreement are asked to respond to a supplier survey once every three years.

Although agreements and supplier surveys do not touch upon human rights, SMM does recognize observance of human rights by suppliers as an important criterion. The Purchasing Department conducts a human rights questionnaire every three years in line with the SMM Group Policy on Human Rights established in August 2010, focusing on findings from the FY2010 questionnaire (targeting 16 suppliers of parts and ancillary materials contained in SMM products that could potentially impact the supply chain—SMM, customers and consumers. Hearings based on the findings are conducted during follow-up visits to suppliers.

FY2010 to four. SMM managed to confirm there were no problems with the three suppliers’ efforts to observe human rights, including in relation to child and forced labor, and to convey the aims behind its own initiatives.

Communication with Suppliers

Smooth and regular communication with suppliers is vital for gaining an accurate grasp of suppliers’ opinions and requests, and trends within particular industries, as well as for exchanging information relating to process improvements and new technologies. Divisions in charge of procurement engage in this kind of dialogue daily based on friendly relationships the SMM Group has built up over the years with suppliers.

Employee’s Perspective

Siporex, a producer of panels used in construction, has many business partners, including suppliers of raw materials, on-site manufacturing partners, companies that ship Siporex products, retailers and builders. Shipping companies in particular are important partners that, from a customer perspective, represent the face of Siporex. We hold regular monthly meetings with our shipping companies to candidly discuss such topics as in-transit safety, causes and countermeasures for complaints received from customers, as well as complaints and requests from the shipping companies themselves. Sometimes the discussion is painfully frank. Given the characteristics of Siporex products and the construction industry, there are also some difficult challenges. However, through this kind of communication, I am confident that we will build strong relationships of trust with each other and develop expertise on the safer and better transport of products, and I believe this will result in providing customers with satisfying merchandise.

Consideration for Local Communities

Procurement is one aspect of the SMM Group’s business operations which benefits local economies. We undertake procurement in local communities according to the company’s purchasing classifications.

The Niihama district, as our main business center, has always supported our business and we have developed in tandem with the community. We contribute to local development through procurement wherever the Group operates.

The proportion of payments made to local suppliers in FY2011 was 48% (¥8.9 billion) for the Niihama district.
The Materials Division views maintenance and operation of a system for supply chain management as its corporate responsibility and an important part of business administration.

Society’s needs change with the times, and suppliers’ technical expertise and facilities may not always fit the division’s requirements. And, needless to say, industry trends and the opinions of suppliers must be taken into account when we engage in transactions.

The Materials Division maintains ties with suppliers through ongoing, two-way communication. In regard to environmental preservation in particular, the division asks suppliers to complete surveys about chemical substance management, acquisition of environmental certification, progress on energy and resource savings, and waste reduction. It also shares environmental preservation initiatives in which it is involved.

The Democratic Republic of the Congo and surrounding countries produce large amounts of minerals such as gold, tin and tantalum. Rebel forces and other armed groups use these resources as a major source of funds, thereby expanding and prolonging conflicts.

Besides requesting nations to ban arms exports to countries involved in conflicts, the international community is trying to stem conflict with ever stricter demands, such as asking the mineral resources industry to boycott minerals sold by armed groups.

Laws and other regulations are also being put in place. In the United States, the Dodd-Frank Wall Street Reform and Consumer Protection Act became law in July 2010. The act defined specific minerals produced in applicable countries or regions as “conflict minerals” and obligated corporations listed on American stock exchanges to report to the Securities and Exchange Commission (SEC) on the use of conflict minerals.

In the electronics industry, which uses large amounts of elements like tantalum and gold for mobile phones and PCs, major corporations have led formulation of the Electronic Industry Code of Conduct (EICC). The code asks companies, when procuring raw materials, to go beyond legal compliance and promote compliance with global standards on social responsibility relating to such areas as labor conditions and employment practices, health and safety, ethical employment practices, and environmental protection.

Given the above circumstances, the SMM Group agrees with and declares support for the principles of the Extractive Industries Transparency Initiative (EITI)\(^2\). Based on the SMM Group Policy on Human Rights, it is working to improve transparency among raw materials suppliers to avoid contributing to human rights violations related to conflict minerals.

\(^2\) Extractive Industries Transparency Initiative homepage: http://eiti.org/
Examples of Communication with Other Stakeholders

The SMM Group engages in regular communication with stakeholders. During FY2011, we continued to exchange views with Friends of the Earth Japan (FoEJ), the international environmental NGO, about water quality in the rivers surrounding Coral Bay Nickel Corporation (CBNC) in the Philippines. CBNC has been committed to improving the surrounding environment since construction of its plant, and it has sought to gain understanding for its environmental initiatives, such as by disclosing its wastewater data to FoEJ. We will listen to the opinions voiced by FoEJ, and continue our communication with them.

Examples of Communication

Employee’s Perspective

Initiatives by SMM Solomon

We started nickel explorations in the Solomon Islands in 2005. Since 2010 we have conducted environmental and social baseline study, environmental and social impact assessments, resource modeling, mine planning, facilities design and pre-feasibility study for premised mine development. In our business it is important to maintain transparency in order to gain the support and trust from stakeholders through active information disclosure. Stakeholders vary widely. Besides national and provincial governments, there are also local residents, women’s groups, NGOs, church groups and so on. We have worked to make contact with these groups and explain about our projects and environmental surveys. There is also a variety of NGOs from local organizations to international organizations such as The Nature Conservancy, with which we have signed a data sharing agreement. Memorandum of understanding with local landowner organizations are also under discussion, illustrating the great importance we place on exchanging information and opinions with stakeholders including non-NGO groups.

Toshiaki Maeda
Director, General Manager
Technical
SMM Solomon Limited

Employee’s Perspective

Initiatives by the Besshi-Niihama District Division

At the Safety & Environment Control Center, we are responsible for making applications to administrative agencies (prefectural and municipal governments, labor standards inspection offices, fire and police authorities, etc.) for permits and licenses, as well as making notifications and reports, and conducting inspections. I am in charge of matters relating to firefighting. At first, I didn’t know how best to deal with the government firefighting authorities, so I collected information from the people responsible for performing the same duties in the Sumitomo Group, and made it a policy to visit the relevant government office at least twice a week, even if I had no applications or reports to make. Furthermore, when making notifications, etc., I was able to provide detailed descriptions of the relevant materials, products and equipment by drawing on my past practical experience in the field. So now it’s easy for us to consult with each other, and I feel that the relationships of trust have deepened.

I believe that routine communication is important for building and maintaining relationships of trust with the firefighting authorities and other government agencies. The same could be said for any working adults. This routine communication includes: (1) Submitting reports and arriving for meetings before the agreed time on the appointed day; (2) Treating others with courtesy and respect; (3) Seeking advice immediately on any points in question, and not missing any regular visits; (4) Checking any documents in detail with site supervisors before making notifications or applications; and (5) Conducting preliminary examinations before an inspection, and checking that specifications are as per the application or notification. I believe that the most important thing in maintaining a good relationship with an administrative agency, though, is to behave faithfully, conscious of being a representative of your workplace, with pride in your work and a sense of responsibility.

Atsushi Goda
Manager of Safety and Disaster Prevention
Safety & Environment Control Center, Besshi-Niihama District Div.

Project briefing given at a meeting in which we participated at the invitation of The Nature Conservancy

Following a community meeting at Koghe
In FY2011, the world economy achieved a moderate recovery as concerns about sovereign risk in Europe were alleviated and the United States economy picked up. The Japanese economy was generally flat due to the effects of the Great East Japan Earthquake and the flooding in Thailand.

In the non-ferrous metals industry, prices were high overall due to an accelerating flow of funds into the market. On the foreign exchange market, the yen continued to appreciate, strengthening in relative terms as a result of economic uncertainty overseas, particularly in Europe. Excessive yen appreciation was corrected by the end of the fiscal year.

Against this backdrop, the SMM Group is working to strengthen competitiveness in the three core businesses—mineral resources, smelting and refining, and materials—and channel resources into growth businesses in line with the 3-Year Business Plan for FY2010-2012.

Consolidated net sales for FY2011 were ¥847.9 billion, decreasing ¥16.2 billion from FY2010 due to factors including declining sales for the entire material business, and for electrolytic copper in the smelting and refining business due to full furnace maintenance work at the Toyo Smelter & Refinery.

Consolidated operating income decreased ¥7.5 billion from FY2010 to ¥88.5 billion as nickel prices were lower compared to the same period in the previous year. Consolidated recurring profit decreased ¥14.9 billion to ¥108.8 billion, while consolidated net income decreased ¥18.8 billion to ¥65.2 billion.

Consolidated total capital was ¥1,146.0 billion, composed of ¥420.4 billion in liabilities and ¥725.6 billion in net assets.

Distribution of Value to Stakeholders

Economic value was distributed to stakeholders during FY2011 as follows.

- Payments made to suppliers to purchase merchandise necessary for business, for example, were ¥692.6 billion.
- Employee salaries and welfare expenses were ¥94.6 billion.
- To shareholders and creditors, SMM paid a total of ¥26.8 billion in dividends and interest on debt.
- To the government, we paid ¥16.2 billion in taxes.
- To society, we contributed ¥0.4 billion, including donations for social contribution activities.
- Financial assistance from the government totaled ¥0.1 billion and included cash subsidies and grants.
Projected Benefit Obligation
SMM has the following defined-benefit systems in place, principally in Japan: a lump-sum retirement payment plan; a defined-benefit corporate pension plan (in some cases, a qualified retirement pension plan); and an employees’ pension fund. The projected benefit obligation is ¥53.2 billion. The portion of the projected benefit obligation to be funded by pension assets is ¥49.3 billion. Pension assets available for allocation to that portion are ¥41.9 billion.

* Amounts are rounded to one decimal place.
Detailed financial information can be viewed in the "IR Information" section of the SMM website.
http://www.smm.co.jp/E/ir/

Distribution of Economic Value to Stakeholders

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Amount</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suppliers</td>
<td>¥692.6 billion</td>
<td>Payments for purchase of merchandise, etc.</td>
</tr>
<tr>
<td>Employees</td>
<td>¥94.6 billion</td>
<td>Payments to employees</td>
</tr>
<tr>
<td>Shareholders/Creditors</td>
<td>¥26.8 billion</td>
<td>Payments of dividends/interest</td>
</tr>
<tr>
<td>Government</td>
<td>¥16.2 billion</td>
<td>Taxes paid</td>
</tr>
<tr>
<td>Society</td>
<td>¥0.4 billion</td>
<td>Donations, etc.</td>
</tr>
</tbody>
</table>

* A retained value of ¥45.0 billion is not included in the above. Rent for use of land is minimal and therefore included in “Payments for purchase of merchandise, etc.”

Financial Assistance from the Government

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Amount</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>¥0.1 billion</td>
<td>Subsidies, grants, etc.</td>
</tr>
</tbody>
</table>

* No governments have an equity stake in SMM.
Corporate Governance

Basic Approach

Corporate governance refers to the framework set up to govern corporate activity for the purpose of maximizing the value of the corporation and ensuring the strength of the business. SMM views corporate governance as one of the most important management themes.

SMM has adopted corporate auditor and executive officer systems, thereby clarifying authority and responsibilities within executive functions and enabling the Board of Directors to concentrate on supervision and swift decision-making.

The company has also set out the SMM Group Corporate Philosophy based upon the Sumitomo Business Spirit. Furthermore, the SMM Group Code of Conduct was formulated as a set of behavioral guidelines for officers and company employees to follow when putting this philosophy into practice.

Through persistent efforts to practice the Corporate Philosophy, and sound and efficient corporate activity, we will contribute to society and fulfill our responsibilities toward all our stakeholders.

Corporate Governance Framework

Our company’s corporate governance framework is shown in Figure 1.

1. SMM’s organizational structure is divided into three areas: “decision-making and supervision,” performed by the Board of Directors; “execution of business affairs,” with the president taking overall responsibility; and “audits.”

2. “Business activity” and fulfillment of “social responsibility” (CSR activity/ internal controls) are viewed together as “execution of business affairs.”

3. The Management Committee discusses important matters relating to the management of the company. It aims to promote rational business judgment and decision-making by deliberating issues in advance of meetings of the Board of Directors, as well as efficient management and appropriate internal controls.

4. The CSR Committee, chaired by the president, comprises the heads of business divisions and corporate staff divisions. The committee was formed with two working groups and six subcommittees, when existing activities were restructured under the new program of CSR activities on October 1, 2008.

5. The Internal Controls Committee, chaired by the president, advances internal controls in line with the Japanese Financial Instruments and Exchange Act of June 2006. In compliance with the act, a report on the effectiveness of internal controls was submitted in June 2012, together with the company’s securities report for the year ended March 2012, to the Director-General of the Kanto Local Finance Bureau after first obtaining an internal controls audit report recognizing its appropriateness from an auditing firm.

In establishing and upholding internal controls, we will work to clarify the roles and duties of SMM Group officers, executive officers and employees and ensure that continual improvements are made.

Roles of Divisions and Bodies

- Directors/Board of Directors
  As of August 2012, SMM has eight directors, including one outside director. The term of a director is one year. Remuneration for all directors except outside directors is determined according to a performance-based remuneration system. Ordinary meetings of the Board of Directors are convened once a month and extraordinary meetings are held as required. This structure allows for quick and flexible decision-making. The Board of Directors discusses and passes resolutions on important matters relating to the execution of business matters of the company, including issues relating to conflicts of interest, in line with provisions such as those stipulated in laws and ordinances, articles of incorporation and regulations pertaining to the Board of Directors. Details are disseminated through reporting to the Executive Officers’ Meeting. SMM’s president chairs the Board of Directors.

- Management Committee
  Management Committee meetings are convened by the president, executive vice president, senior managing executive officers and other related executive officers and personnel. SMM’s outside directors and corporate auditors may also attend.

- Executive Officers
  SMM adopted an executive officer system in June 2001. A provision was included in the articles of incorporation in June 2004 to clarify the status of executive officers.

  Executive officers are entrusted with important positions such as that of general manager of a business or corporate staff division and are conferred inherent authority for executing business affairs. The progress in execution of business affairs is reported to the Executive Officers’ Meeting once a month. Like for directors, remuneration for executive officers is determined according to a performance-based remuneration system.
Corporate Auditors/Board of Corporate Auditors

As of August 2012, SMM had four corporate auditors, two of whom were outside auditors. Corporate auditors attend and express opinions at important meetings, including meetings of the Board of Directors and the Management Committee. Corporate auditors from SMM, while taking care to remain independent, provide audit-based opinions as full-time auditors. Outside auditors offer independent opinions based on specialized experience and knowledge.

Corporate auditors carry out audits, such as audits of the execution of duties by directors, according to auditing plans approved by the Board of Corporate Auditors.

The Board of Corporate Auditors convenes once a month immediately prior to ordinary meetings of the Board of Directors and as otherwise required.

Internal Audit Department

The Internal Audit Dept. was established for the purpose of undertaking routine internal audits used to monitor and supervise the execution of business matters. The department carries out internal audits of the entire SMM Group. The department supplies information to the corporate auditors on a timely basis, providing, for example, explanations of auditing plans. The corporate auditors also attend the department’s internal audit briefings for executive officers and other personnel.

1. Candidates for director, possessing the character and abilities required to implement the SMM Group Corporate Philosophy and fulfill the group’s social responsibility, are nominated by the Board of Directors and approved by a resolution passed at the General Meeting of Shareholders.
2. Directors (excluding outside directors), executive officers and senior managers are evaluated on various criteria, chiefly quantitative results, safety, business strategy and human resources development.
3. Seven executive officers also serve as directors (as of August 2012).

Fig. 1 Corporate Governance Framework
Regulatory Compliance

Basic Approach

The corporate activities of the SMM Group are founded upon principles of compliance. Though compliance is usually construed as applying to laws and regulations, the SMM Group goes further, viewing compliance as the fulfillment of social and moral duties as a member of society through sound corporate activities.

In 2000, the year after the JCO criticality accident1 of September 1999, the SMM Group formulated a “Corporate Reform Plan” and embarked on a new beginning with three initial priorities:

1. Reconfirm and disseminate corporate philosophy;
2. Strengthen the condition of the corporation;
3. Reform corporate culture.

The corporate philosophy and SMM Group Code of Conduct2 were consequently revised in 2004. Compliance: Abidance by Laws and Rules, the first of 17 items included in the Code of Conduct, calls for conduct complying not only with laws and rules, but also with social norms, as follows:

- Officers and employees will comply with foreign and domestic laws and rules, and conform with social norms.
- No officer or employee will under any circumstances commit an infraction of the law or act counter to social norms, even if doing so would seem to be in the interests of the company.

1. JCO criticality accident: On September 30, 1999, criticality occurred as uranium was being handled at an SMM subsidiary, JCO Co., Ltd. Two workers died from radiation injuries as a result. The radiation accident caused immeasurable suffering to the local community, with citizens living close to the facility forced to evacuate.

2. The SMM Group Code of Conduct can be viewed in the “Corporate Philosophy” section of the SMM website: http://www.smm.co.jp/E/corp_info

Compliance Management and Strengthening

Compliance management is performed according to our basic compliance regulations. The Compliance Working Group of the CSR Committee plays a central role in compliance improvements and strengthening with represented divisions taking charge of the following main measures.

1. Draft revisions to the SMM Group Code of Conduct
2. Establish and revise compliance-related regulations
   - Basic compliance regulations
   - Regulations on insider trading prevention and information management
   - Regulations on the safeguarding of personal information
   - Export administration regulations
   - Regulations for managing the legal process database
   - Regulations on the management of confidential information, etc.
3. Implement compliance education

A range of different training programs draw upon principles within the Sumitomo Business Spirit, SMM Group Corporate Philosophy and CSR Policy to ensure awareness among employees that compliance within the SMM Group calls for ethics-based conduct and decision-making, going beyond conformance with laws and regulations.

4. Convene the Compliance Working Group

Confirmation of the compliance status in FY2011 by the Compliance Working Group indicated that there were no major violations of laws or regulations relating to the environment and products and services, including antitrust legislation.

Speak Up System

In situations where problems or doubts remain after referring to the SMM Group Code of Conduct, and consultation with a superior fails to bring forth an appropriate response, employees are able to report the matter directly through several channels. In-house liaison is with the general managers of the Legal & General Affairs Dept., the Safety & Environmental Control Dept., and the Internal Audit Dept. Outside liaison is with the designated legal attorney. The source of the information is always kept secret and if, for any reason, the informant is unfairly treated, the person responsible will be punished appropriately.

Compliance Seminars

The SMM Group commenced annual “compliance conferences” in 2001, giving employees an opportunity to reaffirm their knowledge of compliance basics and learn about the latest legislative changes. After deliberation on the objectives and structure of these conferences, the Group now implements compliance seminars in order to educate senior management of SMM and group companies about the Code of Conduct and to ensure compliance with work-related laws and ordinances. These seminars include education for personnel in charge of legal processes at each workplace involving introduction of specific case examples.

In addition to seminars, guidance provided in the workplace on an ongoing basis integrates Code of Conduct dissemination, compliance with laws and rules, and CSR awareness.

<table>
<thead>
<tr>
<th>Type of seminar</th>
<th>Scope</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance seminar (Basic course)</td>
<td>Newly-appointed division general managers and group company officers</td>
<td>64</td>
</tr>
<tr>
<td>Compliance seminar (Advanced course)</td>
<td>General managers of business divisions, Head Office divisions and branch offices, presidents of group companies in Japan, etc.</td>
<td>78</td>
</tr>
<tr>
<td>Group seminar for new employees</td>
<td>Newly graduated employees and clerks in the Head Office zone</td>
<td>31</td>
</tr>
<tr>
<td>Seminar for newly promoted E-class employees</td>
<td>Employees newly promoted to E-class</td>
<td>29</td>
</tr>
<tr>
<td>Seminar for newly promoted section managers</td>
<td>Employees newly promoted to section manager</td>
<td>22</td>
</tr>
<tr>
<td>Education for mid-career employees</td>
<td>New mid-career employees</td>
<td>12</td>
</tr>
<tr>
<td>Legal procedures training</td>
<td>Employees who carry out legal procedures</td>
<td>40</td>
</tr>
</tbody>
</table>
Risk Management

Basic Approach

The Corporate Reform Plan, formulated by SMM in April 2000 based on reflections from the JCO criticality accident of 1999, acknowledged the importance of risk management improvements for strengthening the company's condition. The Code of Conduct, too, stipulates that "all officers and employees will incorporate risk management principles into the performance of their business operations or related work."

In August 2001, a Group-wide risk management system was established, structured upon features such as total compliance. The purpose was to ensure SMM will never again cause a major incident. Regulations pertaining to risk management systems were also established. Energy has been channeled into risk management initiatives ever since as they are essential for business continuity. With the launch of CSR activities in the autumn of 2008, the Risk Management Working Group set up under the CSR Committee was charged with promoting initiatives, in the same way that compliance initiatives, occupational health and safety activities and environmental management activities were to be promoted. In addition to efficiency, we have also been working to raise the effectiveness of activities, such as reviewing activities of focus to make them suited to the characteristics of each facility.

Since 2002, SMM has established regulations pertaining to the inherent safety of equipment and has been implementing initiatives aimed at realizing safer equipment and preventing occupational accidents throughout the SMM Group. Furthermore, to prevent more serious industrial accidents, we conduct risk assessments employing HAZOP (hazard and operability studies) and other methods as part of our systematic safety evaluations and measures at plants. Always leaning toward the side of safety, SMM has been actively incorporating preventive approaches to risk management.

Climate Change Risk

Potential risks for SMM in relation to climate change include a raw materials shortage, which may occur if source mine operations are disrupted due, for example, to abnormal weather, and flooding of plants located in waterfront areas as a result of rising sea levels. In recent years, SMM has been strengthening day-to-day energy conservation efforts in order to combat global warming, which is believed to be a cause of abnormal weather. The company is also directing efforts into the development of energy-saving refining processes in readiness for further climate change.

Frameworks and Initiatives

Risk management in the SMM Group is generally advanced through the efforts of individual business divisions. Business divisions seek to accurately identify the risks involved in managerial decision-making and within each business process and to determine courses of action, bearing in mind their specific economic, environmental and social circumstances.

SMM has put together a framework for risk management based on these efforts, establishing risk identification guidelines along with various systems, including a risk registry, an in-house risk management auditing system and risk management patrols.

The Risk Management Working Group of the CSR Committee, with close affiliation to the Compliance Working Group, coordinates risk management matters for the Group as a whole and directs energy into preventing the actualization of risks.

Risk management systems have been introduced for each business unit at business divisions throughout the Group, including overseas subsidiaries. At least once a year, or whenever the need arises, divisions identify and assess the various types of unsafe behavior and other risks and take action to control them, registering or reviewing them as necessary and implementing countermeasures.

Self-checks by individual business divisions and various audits are performed to ascertain whether risk management PDCA (Plan-Do-Check-Act) cycles are operating smoothly and according to the rules and regulations and to determine revisions. Findings are reflected in plans for the following fiscal year.

In FY2011, our approach involved top management leading efforts to alleviate major risks. Each division took action against factors which contribute to increasing risks and implemented measures to strengthen readiness for crises, including earthquake preparedness measures and countermeasures against pandemics of virulent new influenza viruses. In June 2012, Group-wide crisis management regulations were established, strengthening the SMM Group’s frameworks for responding to crisis situations.

At overseas workplaces, in FY2011 M-SMM Electronics Sdn. Bhd. (Malaysia) of the Semiconductor Materials Division (now Materials Division) and Shanghai Sumiko Electronic Paste Co., Ltd. (China) of the Advanced Materials Division (now Materials Division) were designated “model plants.” We are advancing efforts to introduce and entrench SMM’s original risk management system.

1. The Finance & Accounting Dept., for example, uses various methods to check accounting processes of the entire Group, which are performed according to uniform standards and procedures. Effort also goes into actually lowering risk through procedural improvements such as centralizing processes for payments to outside parties at Head Office.

2. Audits include risk management internal audits/inspections, audits by the Internal Audit Dept, investigation by the senior management of group divisions and audits by the Safety & Environment Control Dept.
SMM will make intense efforts to eliminate contributors to risk actualization and ensure readiness, particularly with regard to large-scale earthquakes, pandemics of virulent new influenza viruses, and “SMM Group-wide serious risks”, and will focus on lowering incidence and minimizing damage in the case of a risk being actualized.

At overseas facilities, we will make efforts to establish more effective operation of risk management systems. Specifically, more model plants will be created for business divisions other than the Materials Division and best practices at those plants will be pursued elsewhere.

3. Risks which, if realized, are expected to have a major influence on or cause significant damage to the SMM Group as a whole and cause irreparable damage (as influence or physical damage) to SMM if swift and appropriate action is not taken. The Group must unite in determining action to take in the case of these risks being realized.

Establishment of SMM Group Crisis Management Regulations

Following the Great East Japan Earthquake of March 2011, each facility within the SMM Group reviewed its earthquake preparedness. The process highlighted concerns that problems would occur during the initial response to a crisis since systems were not consistent: different regulations were in place for responding to each type of crisis, including earthquakes, pandemics of virulent new influenza viruses, SMM Group-wide serious risks, and kidnappings or terrorist activities overseas. And the response headquarters included different leaders and personnel. Under the new crisis management regulations, we have installed an executive officer with jurisdiction over the Safety & Environment Control Department as the head of the response headquarters and introduced a single contact point for when crises occur. A swift initial response to crises is also ensured by having Head Office divisions recognize response headquarters functions as part of their own duties in addition to their original functions, and routinely prepare to perform them.
Independent Assurance Report

To the President & Representative Director of Sumitomo Metal Mining Co., Ltd.

Purpose and Scope
We were engaged by Sumitomo Metal Mining Co., Ltd. (the “Company”) to provide limited assurance on its CSR Report 2012 (the “Report”) for the fiscal year ended March 31, 2012. The purpose of our assurance engagement was to express our conclusion, based on our assurance procedures, on whether:

- the environmental, social and economic performance indicators listed in the table below (the “Indicators”) for the period from April 1, 2011 to March 31, 2012 included in the Report are prepared, in all material respects, in accordance with the Company’s reporting criteria;
- the Company’s self-declaration on the Global Reporting Initiative (“GRI”) application level (A+) conforms to the application level criteria stipulated by the GRI;
- the Company’s policies are aligned 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 as described on page 48;
- the Company has identified and prioritized its material issues as described on page 1;
- the Company has approached and managed its material issues as described on pages 18, 24, 40, 50, 60 and 64; and
- all the material sustainability information defined by the Japanese Association of Assurance Organizations for Sustainability Information (“J-SUS”) is included in the Report.

The content of the Report is the responsibility of the Company’s management. Our responsibility is to carry out a limited assurance engagement and to express our conclusion based on the work performed.

<table>
<thead>
<tr>
<th>Items</th>
<th>Pages</th>
<th>Indicators assured</th>
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<tbody>
<tr>
<td>Initiatives for Effective Use of Resources</td>
<td>22-23</td>
<td>Recycled materials (in weight and ratio), Final disposal volume of industrial and mining waste, Water usage (Freshwater/seawater), Volume of waste (hazardous/non-hazardous)</td>
</tr>
<tr>
<td>Initiatives for Reducing Environmental Impact</td>
<td>30</td>
<td>Volume of SOx emissions, Volume of NOx emissions, Volume of soil and dust emissions, COD and BOD, Total PRTR substance release and transfer volume, Breakdown of PRTR Substance Releases</td>
</tr>
<tr>
<td>Initiatives in Global Warming Control</td>
<td>33-34</td>
<td>Unit energy consumption index and CO2 emissions</td>
</tr>
<tr>
<td>Biodiversity Considerations</td>
<td>35</td>
<td>Site of production site in areas of high biodiversity value, Area of land developed and revegetated</td>
</tr>
<tr>
<td>Initiatives Relating to Employee Diversity</td>
<td>53</td>
<td>Disabled employee ratio (SMM non-consolidated)</td>
</tr>
<tr>
<td>Relations with Suppliers</td>
<td>54</td>
<td>Numbers of employees/officers, Number of employees/officers worldwide, Consolidated employee breakdown, Numbers of locally-hired senior managers, Employee turnover number and percentage</td>
</tr>
<tr>
<td>Human Resources Development Initiatives</td>
<td>56</td>
<td>Total annual hours of education</td>
</tr>
<tr>
<td>Human Rights initiatives</td>
<td>59</td>
<td>Number of investments which have undergone human rights screening, Names of sites requiring relocation of households and number of households relocated</td>
</tr>
<tr>
<td>Occupational Health and Safety</td>
<td>63</td>
<td>Number of occupational accidents (all accidents, lost time accidents and working days lost) in Japan</td>
</tr>
<tr>
<td>Relations with Employees</td>
<td>66</td>
<td>Number of companies with workers’ unions, Percentages of employees belonging to workers’ unions</td>
</tr>
<tr>
<td>Relations with Suppliers</td>
<td>70</td>
<td>Number of suppliers subjected to human rights questionnaire, Number of suppliers visited, Payments made to local suppliers</td>
</tr>
<tr>
<td>Strengthening Economic Ties with Stakeholders</td>
<td>74-75</td>
<td>Distributed economic value, Financial assistance from the government, Projected benefit obligation to be funded by pension assets and pension assets available for allocation to that obligation</td>
</tr>
<tr>
<td>Regulatory Compliance</td>
<td>78</td>
<td>Recipients of compliance education</td>
</tr>
</tbody>
</table>

Criteria
The Company applies its own reporting criteria as described in the Report. These 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. We used these criteria to evaluate the Indicators. For the completeness of material sustainability information, we used the ‘Criteria for Granting a Sustainability Report Assurance and Registration Symbol’ of J-SUS. For the GRI application level, we used the criteria stipulated by the GRI.

Procedures 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’ issued by the International Auditing and Assurance Standards Board, and the ‘Practical Guidelines of Sustainability Information Assurance’ of J-SUS. The limited assurance engagement on the Report consisted of making inquiries, primarily of persons responsible for the preparation of information presented in the Report, and applying analytical and other procedures. The level of assurance provided is thus not as high as that provided by a reasonable assurance engagement. Our assurance procedures included:

- Interviews with the Company’s responsible personnel to obtain an understanding of its policy for the preparation of the Report.
- With respect to the Indicators,
  ➢ Reviews of the Company’s reporting criteria.
  ➢ Inquiries about the design of the systems and methods used to collect and process the Indicators.
  ➢ 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 a recalculation of the Indicators.
  ➢ Visit to the Hishikari Mine 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.
- An assessment of 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.
- Interviews and documentation reviews of the Company’s process of identifying and prioritizing its material issues.
- Interviews and documentation reviews of the Company’s approach to and management of its material issues.
- Assessment of whether or not all the material sustainability information defined by J-SUS is included in the Report.

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 are not prepared, in all material respects, in accordance with the Company’s reporting criteria as described in the Report;
- 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 page 48;
- the Company has not identified and prioritized its material issues as described on page 1;
- the Company has not approached and managed its material issues as described on pages 18, 24, 40, 50, 60 and 64; and
- all the material sustainability information defined by J-SUS is not included in the Report.

We have no conflict of interest relationships with the Company that are specified in the Code of Ethics of J-SUS. We conducted our engagement with a team with expertise in environmental and social aspects as well as assurance engagements.

As a testament to the reliability of the sustainability information in this report SMM is authorized to attach the mark shown above, which indicates that the report meets the standards for sustainability report assurance and registration established by the Japanese Association of Assurance Organizations for Sustainability Information (http://js-sus.org/english.html).
Third-party Opinion

As with CSR Report 2011, this year’s report has been evaluated by Makoto Teranaka, a visiting professor at Tokyo Keizai University and expert on human rights issues who helped formulate the SMM Group Policy on Human Rights.

The United Nations Guiding Principles on Business and Human Rights has had an impact on many corporations operating outside their home country. ISO 26000 and OECD Guidelines have also evolved to assist implementation of the UN’s framework. In particular, the requirement that enterprises set up due diligence procedures for assessing circumstances for protection of human rights prior to an activity has forced corporations to review systems for managing value chains. The absence of such management systems is also likely to complicate disclosure about use of conflict minerals required by recent bylaws of the United States Securities and Exchange Commission (SEC). These are the same types of systems already prescribed, and put in place by many corporations, in response to environmental issues, and application is now being extended to human rights. For corporations with overseas operations, in particular, this goes beyond internal management. Many considerations need to be taken into account, such as suppliers’ circumstances and the lifestyles of residents in the local community. Corporations will need to act outside the former boundaries of common practice and so far few have been able to establish solid due diligence procedures. I would like to think SMM can respond quickly to these developments using the experience and information gained, for example, through the Extractive Industries Transparency Initiative (EITI), thereby enhancing your competitiveness and allowing you to set the global standard.

I read this year’s report with particular interest in how SMM was actually going to put such CSR management frameworks in place. The content is becoming richer with every issue and a joy to read through. The president’s definitive statement about the company’s stance on CSR is important. Key officers mention their perceptions on CSR on their respective pages, but there is great significance in having the top representative systematically lay out management’s approach to CSR as pervading through the whole company.

The report also explains that SMM has a CSR promotion framework headed by the president. It is clear SMM leaves no doubt that CSR is to be tackled as a company-wide issue. However, I do think that stating the respective Terms of Reference of the Board of Directors, the president and the subcommittees, which are core elements of the CSR promotion framework, would clarify the division of responsibilities within SMM to outside parties, leading to even greater trust.

Here I would also like to suggest that the SMM Group Policy on Human Rights, which is stated on pages concerning human resources, be included in the SMM Group CSR section given its substance and impact. Please consider this for future layouts.

Again in regard to the Executive Message, I have great praise for the way the Taganito attack was touched upon even though it must be a difficult topic to bring up. However, I think a more detailed explanation of the incident, including specific details and SMM’s response, should have been included in the report given its significance from a risk management standpoint. SMM has taken a progressive approach to this kind of problem, for example through the International Council on Mining and Metals (ICMM), and describing how you applied that experience to bring about a solution, through what kinds of policies and actions, would provide an example for other corporations. I hope you will think about this.

In closing, I note that SMM, like last year, has not attained its target for employment of female management track employees. The fact this situation persists suggests to me too much attention is given to numerical targets and you don’t have effective measures for achieving them. If that is the case, a more appropriate strategy might be to realign your target toward realizing systems and work environments favorable to women, ultimately leading to an increase in the number of female employees.

Business activities impact the lives of ordinary people. And the more global the corporation, the greater is the significance of this statement. I truly hope that SMM becomes a progressive global corporation which thinks about the human rights of ordinary people.

Reply to Third-party Opinion

Taking into account the results of the questionnaire relating to last year’s report, we sought to strengthen the following three areas for CSR Report 2012: (1) Explaining SMM’s basic CSR approach in a straightforward manner; (2) Showing how SMM’s business and our jobs are related to CSR; and (3) Explaining activities relating to the Six Key CSR Areas in more detail. In regard to (3), especially, we reviewed our roadmap of activities for achieving the CSR Vision for 2020 with more specific targets, as mentioned in the Executive Message, and reporting was divided into sections covering each of the six areas. In terms of human rights, in particular, we will add implementation of checks and surveys for ensuring observance of human rights to our key initiatives as you advise and will enhance this activity as we continue to expand business overseas. As you say, business certainly does impact the lives of ordinary people. Staying aware of this, we will press ahead with CSR activity, making sustainable co-existence with society and the global environment a key management goal.
## GRI Content Index

To show that reports are based upon the GRI Reporting Framework, SMM declares the reporting level using the GRI system of “application levels.” Application levels are classified as indicated in the diagram below.

This report is aligned with the GRI Sustainability Reporting Guidelines, Version 3.0, at an application level of A+. This declaration is covered in assurance provided by KPMG AZSA Sustainability Co., Ltd.

### Report Application Level

<table>
<thead>
<tr>
<th>Level</th>
<th>Standard Disclosures</th>
<th>G3 Profile Disclosures</th>
<th>G3 Management Approach Disclosures</th>
<th>G3 Performance Indicators &amp; Sector Supplement Disclosures</th>
<th>Management Approach Disclosures for each Indicator Category</th>
<th>Reporting on all criteria listed for Level C plus:</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>Report on:</td>
<td></td>
<td>Management Approach Disclosures</td>
<td>G3 Performance Indicators</td>
<td>Report on a minimum of 10 Performance Indicators, including at least one from each of: social, economic, and environment.</td>
<td>1.1 2.1 - 2.10 3.1 - 3.12 4.1 - 4.4 4.14 - 4.15</td>
</tr>
<tr>
<td>C+</td>
<td>Same as requirement for Level B</td>
<td>Same as requirement for Level C</td>
<td>Management Approach Disclosures for each Indicator Category</td>
<td>G3 Performance Indicators</td>
<td>Report on a minimum of 20 Performance Indicators, at least one from each of: economic, environment, human rights, labor, society, product responsibility.</td>
<td>1.2 3.9 3.13 4.5 - 4.13 4.16 - 4.17</td>
</tr>
<tr>
<td>B+</td>
<td>Report on all criteria listed for Level C plus:</td>
<td>Management Approach Disclosures for each Indicator Category</td>
<td>Same as requirement for Level B</td>
<td>Management Approach Disclosures for each Indicator Category</td>
<td>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.</td>
<td>1.2 3.9 3.13 4.5 - 4.13 4.16 - 4.17</td>
</tr>
<tr>
<td>A</td>
<td>Report on all criteria listed for Level C plus:</td>
<td>Management Approach Disclosures for each Indicator Category</td>
<td>Same as requirement for Level B</td>
<td>Management Approach Disclosures for each Indicator Category</td>
<td>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.</td>
<td>1.2 3.9 3.13 4.5 - 4.13 4.16 - 4.17</td>
</tr>
<tr>
<td>A+</td>
<td>Same as requirement for Level B</td>
<td>Management Approach Disclosures for each Indicator Category</td>
<td>Same as requirement for Level B</td>
<td>Management Approach Disclosures for each Indicator Category</td>
<td>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.</td>
<td>1.2 3.9 3.13 4.5 - 4.13 4.16 - 4.17</td>
</tr>
</tbody>
</table>

### 1. Strategy and Analysis

<table>
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<th>Profile</th>
<th>Indication</th>
<th>Relevant Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td></td>
<td>Statement from the most senior decision maker of the organization (e.g., CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and its strategy.</td>
<td>Interview with the President (2-3)</td>
</tr>
<tr>
<td>1.2</td>
<td></td>
<td>Description of key impacts, risks, and opportunities.</td>
<td>Interview with the President (2-3)</td>
</tr>
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</table>

### 2. Organizational Profile

<table>
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<tr>
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<th>Profile</th>
<th>Indication</th>
<th>Relevant Page(s)</th>
</tr>
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<tbody>
<tr>
<td>2.1</td>
<td></td>
<td>Name of the organization.</td>
<td>Overview of Business Operations (8-9)</td>
</tr>
<tr>
<td>2.2</td>
<td></td>
<td>Primary brands, products, and/or services.</td>
<td>Overview of Business Operations (8-9)</td>
</tr>
<tr>
<td>2.3</td>
<td></td>
<td>Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.</td>
<td>Overview of Business Operations (8-9)</td>
</tr>
<tr>
<td>2.4</td>
<td></td>
<td>Location of organization’s headquarters.</td>
<td>Overview of Business Operations (8-9)</td>
</tr>
<tr>
<td>2.5</td>
<td></td>
<td>Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.</td>
<td>Overview of Business Operations (8-9)</td>
</tr>
<tr>
<td>2.6</td>
<td></td>
<td>Nature of ownership and legal form.</td>
<td>Overview of Business Operations (8-9)</td>
</tr>
<tr>
<td>2.7</td>
<td></td>
<td>Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).</td>
<td>Overview of Business Operations (8-9)</td>
</tr>
<tr>
<td>2.8</td>
<td></td>
<td>Scale of the reporting organization, including:</td>
<td>Strengthening Economic Ties with Stakeholders (74-75)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Number of employees;</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Net sales (for private sector organizations) or net revenues (for public sector organizations);</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Total capitalization broken down in terms of debt and equity (for private sector organizations); and</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Quantity of products or services provided.</td>
<td></td>
</tr>
<tr>
<td>2.9</td>
<td></td>
<td>Significant changes during the reporting period regarding size, structure, or ownership including:</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The location of, or changes in operations, including facility openings, closings, and expansions, and</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Changes in the share capital structure and other capital formation, maintenance, and alteration</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>operations (for private sector organizations).</td>
<td></td>
</tr>
<tr>
<td>2.10</td>
<td></td>
<td>Awards received in the reporting period.</td>
<td>Examples of Social Recognition (6)</td>
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### 3. Report Parameters

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<th>Relevant Page(s)</th>
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<tbody>
<tr>
<td>3.1</td>
<td></td>
<td>Reporting period (e.g., fiscal/calendar year) for information provided.</td>
<td>Period Covered (1)</td>
</tr>
<tr>
<td>3.2</td>
<td></td>
<td>Date of most recent previous report (if any).</td>
<td>Publication Date (1)</td>
</tr>
<tr>
<td>3.3</td>
<td></td>
<td>Reporting cycle (annual, biennial, etc.)</td>
<td>Publication Date (1)</td>
</tr>
<tr>
<td>3.4</td>
<td></td>
<td>Contact point for questions regarding the report or its contents.</td>
<td>Enquiries (1)</td>
</tr>
</tbody>
</table>

* The Mining & Metals Sector Supplement of the GRI’s G3 Guidelines is used for this report.
<table>
<thead>
<tr>
<th>Item</th>
<th>Profile</th>
<th>Indication</th>
<th>Relevant Page(s)</th>
</tr>
</thead>
</table>
| 3.5  |  | Process for defining report content, including:  
|      |  | • Determining materiality;  
|      |  | • Prioritizing topics within the report; and  
|      |  | • Identifying stakeholders the organization expects to use the report. | Our Stakeholders (7) |
| 3.6  |  | Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers). | Boundary of the Report (1) |
| 3.7  |  | State any specific limitations on the scope or boundary of the report. | Boundary of the Report (1) |
| 3.8  |  | Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations. | Boundary of the Report (1) |
| 3.9  |  | Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the indicators and other information in the report. | Initiatives in Global Warming Control (33-34) |
| 3.10 |  | Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers/acquisitions, change of base years/periods, nature of business, measurement methods). | Initiatives in Global Warming Control (33-34) |
| 3.11 |  | Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report. | Boundary of the Report (1) |
| 3.12 |  | Table identifying the location of the Standard Disclosures in the report. | GRI Content Index |
| 3.13 |  | Policy and current practice with regard to seeking external assurance for the report. If not included in the assurance report accompanying the sustainability report, explain the scope and basis of any external assurance provided. Also explain the relationship between the reporting organization and the assurance provider(s). | Independent Assurance Report (82) |

### 4. Governance, Commitments, and Engagement

#### Governance

| 4.1 |  | Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight. | Corporate Governance (76-77) |
| 4.2 |  | Indicate whether the Chair of the highest governance body is also an executive officer (and, if so, their function within the organization’s management and the reasons for this arrangement). | Corporate Governance (76-77) |
| 4.3 |  | For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members. | Corporate Governance (76-77) |
| 4.4 |  | Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body. | Relations with Employees (66) Relations with Shareholders and Investors (67) Corporate Governance (76-77) |
| 4.5 |  | Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization’s performance (including social and environmental performance). | Corporate Governance (76-77) |
| 4.6 |  | Processes in place for the highest governance body to ensure conflicts of interest are avoided. | Corporate Governance (76-77) |
| 4.7 |  | Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization’s strategy on economic, environmental, and social topics. | Corporate Governance (77) |
| 4.8 |  | Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation. | Corporate Philosophy for a Sustainable Society (4) |
| 4.9 |  | Procedures of the highest governance body for overseeing the organization’s identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles. | CSR Activity Promotion Framework (6) Relations with Society (42-48) |
| 4.10 |  | Processes for evaluating the highest governance body’s own performance, particularly with respect to economic, environmental, and social performance. | CSR Activity Promotion Framework (6) |

#### Commitments to External Initiatives

| 4.11 |  | Explanation of whether and how the precautionary approach or principle is addressed by the organization. | Initiatives in Global Warming Control (32-34) Biodiversity Considerations (35-37) Risk Management (79-80) |
| 4.12 |  | Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses. | Relations with Society (45, 48-49) Human Rights Initiatives (59) Relations with Suppliers (71) |
| 4.13 |  | Memberships in associations (such as industry associations) and/or national/international advocacy organizations in which the organization:  
|      |  | • Has positions in governance bodies;  
|      |  | • Participates in projects or committees;  
|      |  | • Provides substantive funding beyond routine membership dues; or  
|      |  | • Views membership as strategic. | Relations with Society (45) |

#### Stakeholder Engagement

| 4.14 |  | List of stakeholder groups engaged by the organization. | Our Stakeholders (7) |
| 4.15 |  | Basis for identification and selection of stakeholders with whom to engage. | Our Stakeholders (7) |
4.16 Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.

Our Stakeholders (7)
Relations with Employees (66)
Relations with Shareholders and Investors (67)
Relations with Customers (68-69)
Relations with Suppliers (70-71)
Examples of Communication with Other Stakeholders (72)

4.17 Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.

Our Stakeholders (7)
SMM’s Response to Stakeholder Opinion (17)
Initiatives in the Six Key CSR Areas: Contribution to Society and Local Communities (40-41)
Human Rights Initiatives (58-59)
Initiatives in the Six Key CSR Areas: Stakeholder Communication (64-65)
Relations with Employees (66)
Relations with Shareholders and Investors (67)
Relations with Customers (68-69)
Relations with Suppliers (70-71)

5. Management Approach and Performance Indicators

Economic

Disclosure on Management Approach

Relations with Society (42-48)
Strengthening Economic Ties with Stakeholders (74-75)

Aspect: Economic Performance

EC1 CORE Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.

Relations with Society (48)
Strengthening Economic Ties with Stakeholders (74-75)

EC2 CORE Financial implications and other risks and opportunities for the organization’s activities due to climate change.

Risk Management (79)

EC3 CORE Coverage of the organization’s defined benefit plan obligations.

Strengthening Economic Ties with Stakeholders (75)

EC4 CORE Significant financial assistance received from government.

Strengthening Economic Ties with Stakeholders (75)

Aspect: Market Presence

EC5 ADD Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation.

Relations with Suppliers (70)
Relations with Society (42)

EC6 CORE Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.

Initiatives Relating to Employee Diversity (54)

EC7 CORE Procedures for local hiring and proportion of senior management hired and workforce from the local community at locations of significant operation.

Initiatives Related to Employee Diversity (54)

Aspect: Indirect Economic Impacts

EC8 CORE Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.

Initiatives in the Six Key CSR Areas: Contribution to Society and Local Communities (40)
Relations with Society (42-43)

EC9 ADD Understanding and describing significant indirect economic impacts, including the extent of impacts.

Initiatives in the Six Key CSR Areas: Contribution to Society and Local Communities (40)
Relations with Society (42-43)

Environmental

Disclosure on Management Approach

Initiatives in the Six Key CSR Areas: Effective Use of Resources (18-19)
Initiatives in the Six Key CSR Areas: Environmental Preservation (24-25)
Initiatives in Creating Products with Low Environmental Impact (38)

Aspect: Materials

EN1 CORE Materials used by weight or volume.

Initiatives for Effective Use of Resources (22)
Material Flows within Business Activity (28)

EN2 CORE Percentage of materials used that are recycled input materials.

Initiatives for Effective Use of Resources (22)
Material Flows within Business Activity (28)

Aspect: Energy

EN3 CORE Direct energy consumption by primary energy source.

Material Flows within Business Activity (28)

EN4 CORE Indirect energy consumption by primary source.

Material Flows within Business Activity (28)

EN5 ADD Energy saved due to conservation and efficiency improvements.

Initiatives in Global Warming Control (32-34)

EN6 ADD Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.

Initiatives in the Six Key CSR Areas Environmental Preservation (24-25)
Initiatives in Creating Products with Low Environmental Impact (38)

EN7 ADD Initiatives to reduce indirect energy consumption and reductions achieved.
### Aspect: Water

<table>
<thead>
<tr>
<th>Item Profile</th>
<th>Indication</th>
<th>Relevant Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN8 CORE</td>
<td>Total water withdrawal by source.</td>
<td>Initiatives for Effective Use of Resources (23) Material Flows within Business Activity (28)</td>
</tr>
<tr>
<td>EN9 ADD</td>
<td>Water sources significantly affected by withdrawal of water.</td>
<td>—</td>
</tr>
<tr>
<td>EN10 ADD</td>
<td>Percentage and total volume of water recycled and reused.</td>
<td>—</td>
</tr>
</tbody>
</table>

### Aspect: Biodiversity

<table>
<thead>
<tr>
<th>Item Profile</th>
<th>Indication</th>
<th>Relevant Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN11 CORE</td>
<td>Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.</td>
<td>Biodiversity Considerations (35)</td>
</tr>
<tr>
<td>EN12 CORE</td>
<td>Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.</td>
<td>Biodiversity Considerations (35-37) Relations with Society (42)</td>
</tr>
<tr>
<td>EN13 ADD</td>
<td>Habitats protected or restored.</td>
<td>NA</td>
</tr>
<tr>
<td>EN14 ADD</td>
<td>Strategies, current actions, and future plans for managing impacts on biodiversity.</td>
<td>Biodiversity Considerations (35-37)</td>
</tr>
<tr>
<td>EN15 ADD</td>
<td>Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.</td>
<td>Biodiversity Considerations (37)</td>
</tr>
<tr>
<td>MM1</td>
<td>Amount of land (owned or leased, and managed for production activities or extractive use) disturbed or rehabilitated.</td>
<td>Biodiversity Considerations (35, 37)</td>
</tr>
<tr>
<td>MM2</td>
<td>The number and percentage of total sites identified as requiring biodiversity management plans according to stated criteria, and the number (percentage) of those sites with plans in place.</td>
<td>Biodiversity Considerations (35)</td>
</tr>
</tbody>
</table>

### Aspect: Emissions, Effluents, and Waste

<table>
<thead>
<tr>
<th>Item Profile</th>
<th>Indication</th>
<th>Relevant Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN16 CORE</td>
<td>Total direct and indirect greenhouse gas emissions by weight.</td>
<td>Material Flows within Business Activity (28) Initiatives in Global Warming Control (32-34)</td>
</tr>
<tr>
<td>EN17 CORE</td>
<td>Other relevant indirect greenhouse gas emissions by weight.</td>
<td>Material Flows within Business Activity (28) Initiatives in Global Warming Control (32-34)</td>
</tr>
<tr>
<td>EN18 ADD</td>
<td>Initiatives to reduce greenhouse gas emissions and reductions achieved.</td>
<td>Initiatives in Global Warming Control (32-34)</td>
</tr>
<tr>
<td>EN19 CORE</td>
<td>Emissions of ozone-depleting substances by weight.</td>
<td>Initiatives for Reducing Environmental Impact (30)</td>
</tr>
<tr>
<td>EN20 CORE</td>
<td>NO, SO, and other significant air emissions by type and weight.</td>
<td>Material Flows within Business Activity (28) Initiatives for Reducing Environmental Impact (29-31)</td>
</tr>
<tr>
<td>EN22 CORE</td>
<td>Total weight of waste by type and disposal method.</td>
<td>Material Flows within Business Activity (28)</td>
</tr>
<tr>
<td>EN23 CORE</td>
<td>Total number and volume of significant spills.</td>
<td>Initiatives for Reducing Environmental Impact (29)</td>
</tr>
<tr>
<td>EN24 ADD</td>
<td>Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.</td>
<td>—</td>
</tr>
<tr>
<td>EN25 ADD</td>
<td>Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization’s discharges of water and runoff.</td>
<td>—</td>
</tr>
</tbody>
</table>

### Aspect: Products and Services

<table>
<thead>
<tr>
<th>Item Profile</th>
<th>Indication</th>
<th>Relevant Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN26 CORE</td>
<td>Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.</td>
<td>Initiatives in the Six Key CSR Areas: Environmental Preservation (24-25) Initiatives in Creating Products with Low Environmental Impact (38-39)</td>
</tr>
<tr>
<td>EN27 CORE</td>
<td>Percentage of products sold and their packaging materials that are reclaimed by category.</td>
<td>Initiatives for Effective Use of Resources (22)</td>
</tr>
</tbody>
</table>

### Aspect: Compliance

<table>
<thead>
<tr>
<th>Item Profile</th>
<th>Indication</th>
<th>Relevant Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN28 CORE</td>
<td>Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.</td>
<td>Regulatory Compliance (78)</td>
</tr>
</tbody>
</table>

### Aspect: Transport

<table>
<thead>
<tr>
<th>Item Profile</th>
<th>Indication</th>
<th>Relevant Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN29 ADD</td>
<td>Significant environmental impacts of transporting products and other goods and materials used for the organization’s operations, and transporting members of the workforce.</td>
<td>—</td>
</tr>
</tbody>
</table>

### Aspect: Overall

<table>
<thead>
<tr>
<th>Item Profile</th>
<th>Indication</th>
<th>Relevant Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN30 ADD</td>
<td>Total environmental protection expenditures and investments by type.</td>
<td>—</td>
</tr>
</tbody>
</table>

### Labor Practices and Decent Work

<table>
<thead>
<tr>
<th>Item Profile</th>
<th>Indication</th>
<th>Relevant Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Disclosure on Management Approach</td>
<td>Initiatives in the Six Key CSR Areas: Respect for People and Human Rights (50-51) Initiatives in the Six Key CSR Areas: Occupational Health and Safety (60-61) Relations with Employees (66)</td>
</tr>
</tbody>
</table>

### Aspect: Employment

<table>
<thead>
<tr>
<th>Item Profile</th>
<th>Indication</th>
<th>Relevant Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA1 CORE</td>
<td>Total workforce by employment type, employment contract, and region.</td>
<td>Initiatives Relating to Employee Diversity (54)</td>
</tr>
<tr>
<td>LA2 CORE</td>
<td>Total number and rate of employee turnover by age group, gender, and region.</td>
<td>Initiatives Relating to Employee Diversity (55)</td>
</tr>
<tr>
<td>LA3 ADD</td>
<td>Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.</td>
<td>—</td>
</tr>
<tr>
<td>Item Profile</td>
<td>Indication</td>
<td>Relevant Page(s)</td>
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<tr>
<td>-------------</td>
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</tr>
<tr>
<td><strong>Aspect: Labor/Management Relations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LA4</td>
<td>CORE</td>
<td>Percentage of employees covered by collective bargaining agreements.</td>
</tr>
<tr>
<td>LA5</td>
<td>CORE</td>
<td>Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements.</td>
</tr>
<tr>
<td>MM4</td>
<td></td>
<td>Number of strikes and lock-outs exceeding one week’s duration, by country.</td>
</tr>
<tr>
<td><strong>Aspect: Occupational Health and Safety</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LA6</td>
<td>ADD</td>
<td>Percentage of total workforce represented in formal joint management–worker health and safety committees that help monitor and advise on occupational health and safety programs.</td>
</tr>
<tr>
<td>LA7</td>
<td>CORE</td>
<td>Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region.</td>
</tr>
<tr>
<td>LA8</td>
<td>CORE</td>
<td>Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.</td>
</tr>
<tr>
<td>LA9</td>
<td>ADD</td>
<td>Health and safety topics covered in formal agreements with trade unions.</td>
</tr>
<tr>
<td><strong>Aspect: Training and Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LA10</td>
<td>CORE</td>
<td>Average hours of training per year per employee by employee category.</td>
</tr>
<tr>
<td>LA11</td>
<td>ADD</td>
<td>Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.</td>
</tr>
<tr>
<td>LA12</td>
<td>ADD</td>
<td>Percentage of employees receiving regular performance and career development reviews.</td>
</tr>
<tr>
<td><strong>Aspect: Diversity and Equal Opportunity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LA13</td>
<td>CORE</td>
<td>Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.</td>
</tr>
<tr>
<td>LA14</td>
<td>CORE</td>
<td>Ratio of basic salary of men to women by employee category.</td>
</tr>
<tr>
<td><strong>Human Rights</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disclosure on Management Approach</td>
<td>Initiatives in the Six Key CSR Areas: Respect for People and Human Rights (50-51) Human Rights Initiatives (58-59) Relations with Suppliers (70-71)</td>
</tr>
<tr>
<td><strong>Aspect: Investment and Procurement Practices</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HR1</td>
<td>CORE</td>
<td>Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening.</td>
</tr>
<tr>
<td>HR2</td>
<td>CORE</td>
<td>Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken.</td>
</tr>
<tr>
<td>HR3</td>
<td>ADD</td>
<td>Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.</td>
</tr>
<tr>
<td><strong>Aspect: Non-discrimination</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HR4</td>
<td>CORE</td>
<td>Total number of incidents of discrimination and actions taken.</td>
</tr>
<tr>
<td><strong>Aspect: Freedom of Association and Collective Bargaining</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HR5</td>
<td>CORE</td>
<td>Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights.</td>
</tr>
<tr>
<td><strong>Aspect: Child Labor</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HR6</td>
<td>CORE</td>
<td>Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor.</td>
</tr>
<tr>
<td><strong>Aspect: Forced and Compulsory Labor</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HR7</td>
<td>CORE</td>
<td>Operations identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of forced or compulsory labor.</td>
</tr>
<tr>
<td><strong>Aspect: Security Practices</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HR8</td>
<td>ADD</td>
<td>Percentage of security personnel trained in the organization’s policies or procedures concerning aspects of human rights that are relevant to operations.</td>
</tr>
<tr>
<td><strong>Aspect: Indigenous Rights</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HR9</td>
<td>ADD</td>
<td>Total number of incidents of violations involving rights of indigenous people and actions taken.</td>
</tr>
<tr>
<td>MM5</td>
<td></td>
<td>Total number of operations taking place in or adjacent to Indigenous Peoples’ territories, and number and percentage of operations or sites where there are formal agreements with Indigenous Peoples’ communities.</td>
</tr>
<tr>
<td><strong>Society</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disclosure on Management Approach</td>
<td>Initiatives in the Six Key CSR Areas: Contribution to Society and Local Communities (40-41) Relations with Society (42) Regulatory Compliance (78)</td>
</tr>
<tr>
<td>Aspect: Community</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------</td>
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<td></td>
</tr>
<tr>
<td>SO1 CORE Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting.</td>
<td>Relations with Society (42)</td>
<td></td>
</tr>
<tr>
<td>MM6 Number and description of significant disputes relating to land use, customary rights of local communities and Indigenous Peoples.</td>
<td>Relations with Society (43)</td>
<td></td>
</tr>
<tr>
<td>MM7 The extent to which grievance mechanisms were used to resolve disputes relating to land use, customary rights of local communities and Indigenous Peoples, and the outcomes.</td>
<td>Relations with Society (43-44)</td>
<td></td>
</tr>
<tr>
<td>Aspect: Corruption</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SO2 CORE Percentage and total number of business units analyzed for risks related to corruption.</td>
<td>Risk Management (79)</td>
<td></td>
</tr>
<tr>
<td>SO3 CORE Percentage of employees trained in organization's anti-corruption policies and procedures.</td>
<td>Regulatory Compliance (78)</td>
<td></td>
</tr>
<tr>
<td>SO4 CORE Actions taken in response to incidents of corruption.</td>
<td>Regulatory Compliance (78)</td>
<td></td>
</tr>
<tr>
<td>Aspect: Public Policy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SO5 CORE Public policy positions and participation in public policy development and lobbying.</td>
<td>Relations with Society (45)</td>
<td></td>
</tr>
<tr>
<td>SO6 ADD Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aspect: Anti-Competitive Behavior</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SO7 ADD Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.</td>
<td>Regulatory Compliance (78)</td>
<td></td>
</tr>
<tr>
<td>Aspect: Compliance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SO8 CORE Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.</td>
<td>Regulatory Compliance (78)</td>
<td></td>
</tr>
<tr>
<td>Aspect: Resettlement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MM8 Number (and percentage) of company operating sites where artisanal and small-scale mining (ASM) takes place on, or adjacent to, the site; the associated risks and the actions taken to manage and mitigate these risks.</td>
<td>Human Rights Initiatives (59)</td>
<td></td>
</tr>
<tr>
<td>MM9 Sites where resettlements took place, the number of households resettled in each, and how their livelihoods were affected in the process.</td>
<td>Human Rights Initiatives (59)</td>
<td></td>
</tr>
<tr>
<td>Aspect: Closure Planning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MM10 Number and percentage of operations with closure plans.</td>
<td>Relations with Society (42-43)</td>
<td></td>
</tr>
<tr>
<td>Product Responsibility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disclosure on Management Approach</td>
<td>Relations with Customers (68-69)</td>
<td></td>
</tr>
<tr>
<td>Aspect: Customer Health and Safety</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PR1 CORE Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.</td>
<td>Relations with Customers (68-69)</td>
<td></td>
</tr>
<tr>
<td>PR2 ADD Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.</td>
<td>Relations with Customers (69) Regulatory Compliance (78)</td>
<td></td>
</tr>
<tr>
<td>Aspect: Product and Service Labeling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PR3 CORE Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.</td>
<td>Relations with Customers (69)</td>
<td></td>
</tr>
<tr>
<td>PR4 ADD Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.</td>
<td>Relations with Customers (69)</td>
<td></td>
</tr>
<tr>
<td>PR5 ADD Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aspect: Marketing Communications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PR6 CORE Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.</td>
<td>Relations with Customers (69)</td>
<td></td>
</tr>
<tr>
<td>PR7 ADD Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes.</td>
<td>Relations with Customers (69)</td>
<td></td>
</tr>
<tr>
<td>Aspect: Customer Privacy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PR8 ADD Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aspect: Compliance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PR9 CORE Monetary value of significant fines for noncompliance with laws and regulations concerning the provision and use of products and services.</td>
<td>Relations with Customers (69)</td>
<td></td>
</tr>
<tr>
<td>Aspect: Materials Stewardship</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MM11 Programs and progress relating to materials stewardship.</td>
<td>Initiatives in the Six Key CSR Areas: Effective Use of Resources (18-19) Initiatives in Creating Products with Low Environmental Impact (38-39) Relations with Customers (68)</td>
<td></td>
</tr>
</tbody>
</table>
The following environmental considerations were applied to the printing of this report:
- The report is printed on recycled paper.
- The report is printed using vegetable oil-based ink.