

# Sustainability Report 2007

Digest Edition



## Message from the Management

We are committed to assisting the sustainable development of society. Innovation in the productivity of resources and materials and a harmonious relationship with our stakeholders are our way of contributing to the achievement of this goal.

### A global player in resources and materials (from resource development, smelting/refining to metal manufacturing, electronic materials and recycling)

Nippon Mining & Metals Co., Ltd. is the core metal business corporation of Nippon Mining Holdings, Inc., which operates in the metals and petroleum sectors.

The Company began life at the Hitachi Mine, which used to be one of Japan's most important copper mines (Ibaraki Prefecture, operational since 1905) and is now a comprehensive nonferrous metal manufac-

turer, offering integrated upstream-to-downstream products and services in the fields of copper-related resources and materials. We are developing into a global player by following a policy of well-balanced and significant growth in upstream (resource development), midstream (smelting and refining) and downstream operations (metal manufacturing, electronics materials, and environmental and recycling businesses.)

In recent years, the business environment faced by the enterprise has changed greatly. With concerns over global warming mounting around the world, companies are expected now to function as global citizens for sustainable development of the society. The rapid disappearance of national borders in business activities and the raising of citizen awareness further require companies to take multifaceted approaches to ensure harmony with a wide and varied range of domestic and international stakeholders, to fulfill their social responsibilities.

Looking back at our own history, since our founding, the Nippon Mining & Metals Group (hereinafter, "the Group") has conducted business activities, always placing great value on a harmonious relationship with society through environmental conservation, as symbolized by our construction of the giant stack at the Hitachi Mine to clean the air at ground level and our planting of Oshimazakura cherry trees (described in Jiro Nitta's *Aru Machi no Takai Entotsu*, [A tall stack in a town] Bunshun Bunko pocket book series.)

At a time of rapid change in the business environment, we have been committed to group-wide socially responsible corporate activity since 2006, based on a shared perception of the need for growth in harmony with the global community.



## Innovation in Productivity of Resources and Materials, and Harmonious Relationship with Our Stakeholders

Raising the productivity of resources and materials, and ensuring a harmonious relationship with our stakeholders, are two core elements of our corporate philosophy.

Our mission is to ensure a stable supply of the basic resources and materials that are indispensable to our daily lives and industrial activities. In fulfilling this social mission, we believe it is important to aggressively take measures to reduce our environmental impact and encourage the formation of a recycling-oriented society, given that the resources we need come directly from the earth.

Putting it another way, we need to avoid wastage of limited natural resources and instead ensure efficient extraction, smelting and refining, manufacturing and recycling at all times. To this end, through innovation, we pursue improved productivity in all processes and aspects of our own business, resources and materials.

At the same time, it is essential that we, as a corporate citizen, pursue a wide and varied range of activities, including maintaining high standards of corporate ethics, making social contributions and disclosing information. We will make every effort to grow in harmony with all our stakeholders in Japan and overseas: our shareholders, customers, local communities and our employees.

We believe CSR commitments should be a matter of course in our daily business activities. In the shared common perception that CSR activities are indispensable to our corporate existence, the Group will contribute to sustainable development.

### Activity on the Environment: a Priority for Us

Based on the above thinking, I would like to discuss here what kind of measures we are taking as a Group with regard to the environment which has a direct influence on sustainable development.

- (1) In line with our Basic Environmental Policy covering every company within the Group, we have more or less completed the process, begun in fiscal 1998, of introducing the ISO14001 standard at all of our

business bases, including major affiliated companies, to create an environmental management system ensuring the same level of environmental conservation commitment across the Group.

- (2) In line with the Basic Environmental Policy, we drew up an autonomous action plan on environmental protection in October 2006. Under it, we have committed ourselves to numerical targets for reducing energy consumption, carbon dioxide emissions, and final disposal of waste, to be achieved by the end of fiscal 2010.
- (3) To encourage the formation of a recycling-oriented society, we are creating a nationwide resource-recycling network, based on our technological prowess and experience built up over the years in the mining and smelting/refining industries.
- (4) In pursuit of environmental protection, we are vigorously promoting the development of technologies to recover copper using bio-mining technology or hydro-metallurgical technology, which are environment-friendly process.

### Deepening Your Understanding, Welcoming Your Opinions

In the second half of fiscal 2006, we brought our overseas Group companies under the scope of our CSR activities, and some of these are now covered by this Sustainability Report. As we address the wide-ranging and multifaceted social responsibility that we bear as a corporation, we undertake our own assessments of our sustainability activities, proactively provide details of the activities to the public, and ask interested parties to contribute any opinions they may have. In taking this approach, we aim to further deepen and expand our CSR activities.

It is my wish that this Report helps deepen understanding of our activities and encourages readers at the same time to openly voice their opinions.



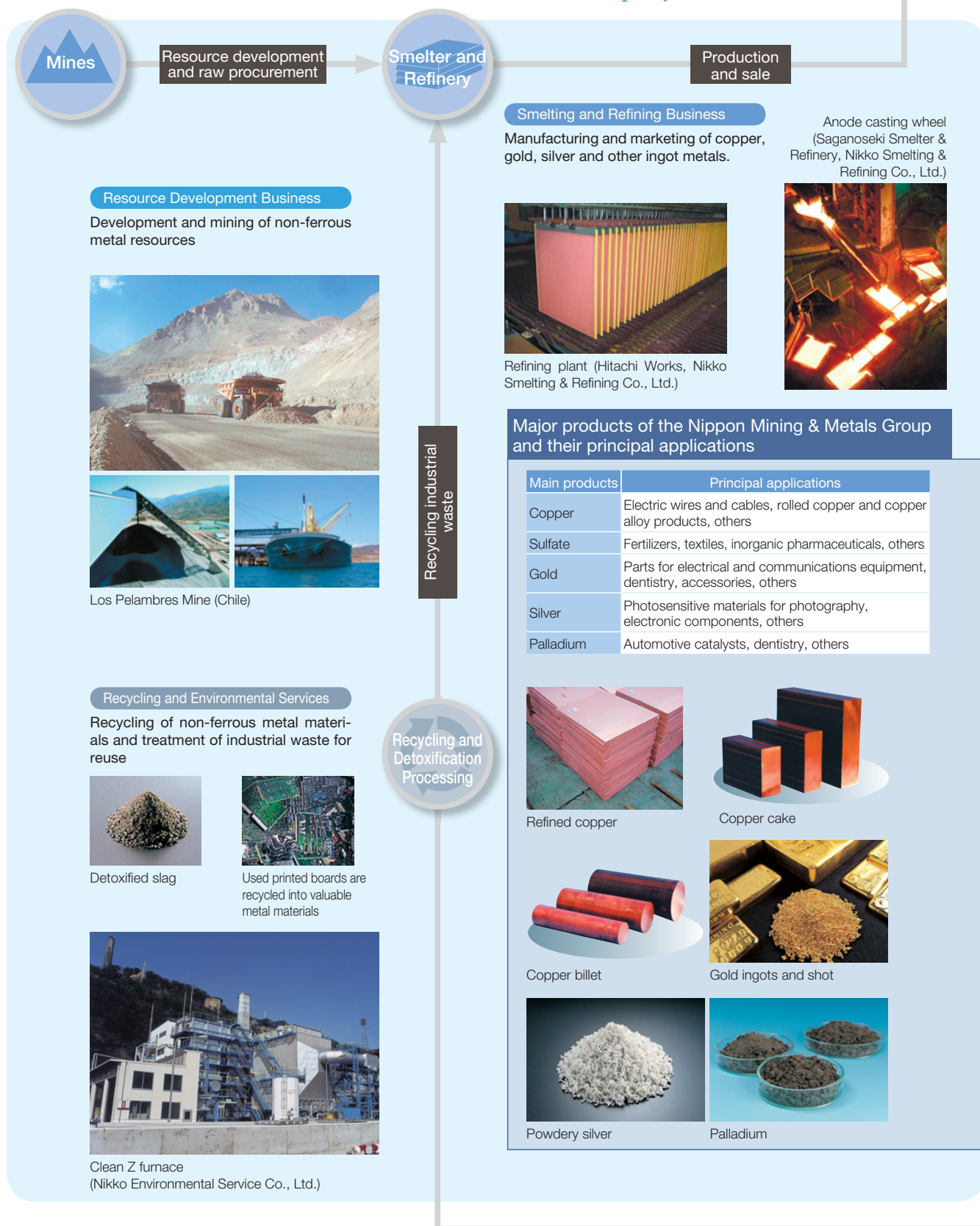
Masanori Okada  
President and Chief Executive Officer  
Nippon Mining & Metals Co., Ltd.



# Overview of the Company and its Business Activities

The Nippon Mining & Metals Group offers comprehensive products and services in the non-ferrous metal field from resource development and smelting/refining to materials manufacture, marketing and recycling. Pursuing technological rationality and efficiency, it ensures more efficient use of the valuable metal resources needed by people today and tomorrow in their daily lives.

## Resources and Metals Company



## Electronic Materials Company

Production  
and sale

Electronic  
Materials

### Electronic Materials Business

Manufacturing and marketing of thin film materials such as ITO targets for FPD, copper foil and compound semiconductor materials



Inspection process for ITO targets used for FPD (Isohara Works)

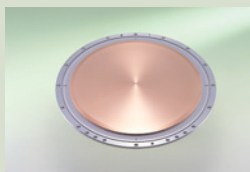


Slitting process for electro-deposited copper foil (Shirogane Works)

	Main products	Principal applications
Copper foil	Electro-deposited copper foil	Printed circuit boards
	Treated rolled copper foil	
Sputtering targets	For semiconductors	CPUs, memory chips, others
	For FPDs	Transparent conductive films
	For magnetic films	Hard disks, others
	For optical disks	CDs and DVDs media
Compound semiconductor materials	InP, InP epitaxial, GaAs epitaxial	Light receiving and emitting diodes for optical communications
	II-VI (CdTe, ZnTe)	Sensors



Electro-deposited copper foil



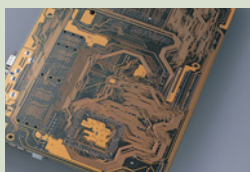
Sputtering target for semiconductors



Electronic parts using electro-deposited copper foil



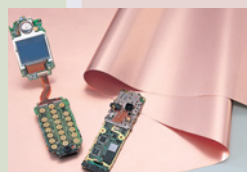
InP (Indium Phosphide)



Electronic parts using surface treatment agents



MAQINAS®



Rolled foil products



Special steel products (Stainless steel)

Market

## Metal Manufacturing Company

Production  
and sale

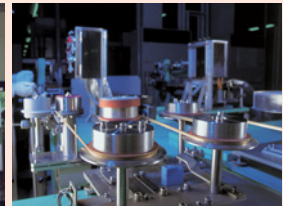
Metal Manu-  
facturing

### Metal Manufacturing Business

Precision processing such as precision metal rolling and gold-plating and-pressing



6-steps precision rolling mill (Kurami Works)



Production lines of high-precision gold-plated products (Hitachi Works, Nikko Fuji Electronics Co., Ltd.)

### Precision Rolling Business

Manufacturing and marketing of copper and copper alloy, special steel, and foil products with high-quality and high-value-added features.

	Main products	Principal applications
Rolled copper and copper alloy products	Phosphor bronze*	Connectors, switch contacts, springs for electronic components, others
	Corson alloy	Semiconductor lead frames, connectors, sockets
	Titanium copper*	High-class connectors, others
	Nickel silver	Quartz oscillator casings, springs for electronic components, shield covers, others
	Brass	Terminals, connectors, others
Special steel products	Stainless steel*	Connector shells, metal masks, electron guns for displays, others
	High nickel alloy	Shield cases, electron guns for displays, others
Rolled foil products	Copper foil	Flexible printed circuit boards, others
	Copper alloy foil	Flexible printed circuit boards, hard disk drive suspensions, others
	Stainless steel foil	Metal dome switches, LCD backlight reflectors, others
	High nickel alloy foil	Organic EL metal masks, others
	Nickel foil	Sensor parts, others
	Titanium foil	Lithium ion batteries, others

Products marked with \* offer high performance with improved functions.

### Precision Fabrication Business

Manufacturing and marketing of a wide range of electronic components, integrating highly sophisticated precision fabrication technologies.

	Main products	Principal applications
Plating products	Gold plating	High-grade connectors, others
	Tin plating	Automotive-use terminals, connectors, others
Press products	Stainless steel, rolled copper products	Parts for displays, vehicle-use terminals, others



# Fiscal 2006: Business Highlights

## Launch of the Hitachi Area Redevelopment Plan

Having marked our 100th anniversary in 2005, we have launched the Hitachi Area Redevelopment Plan for our business base as we look ahead to the next 100 years.

The Hitachi area is the location for a wide range of our business activities such as electrolytic copper refining, environmental recycling, copper foil manufacturing, and precision plating, as well as research at the Technology Development Center. With the integration of three metal-related companies of the Nippon Mining Holdings Group in April 2006, we aim to streamline and reinforce operations and logistics at each business, creating platforms for responding not only to business needs of the moment but also future growth requirements, by upgrading layouts and facilities in the Hitachi area to ensure optimal infrastructure.

\* HMC: Hitachi Metal Recycling Complex plan, a new business to be developed by the Recycling and Environmental Services of Nippon Mining & Metals. We plan to build an HMC plant — including a copper recovery furnace and hydro-metallurgical plant — within the Hitachi Works, to handle recycling materials generated mainly in the greater Tokyo area. In addition, intermediate products generated by the Saganoseki Smelter & Refinery of Nikko Smelting & Refining Co., Ltd. will be efficiently processed at the HMC plant and Nikko Environmental Service Co., Ltd., and valuable metals including rare and platinum group metals will be recovered.

## Hitachi Area Redevelopment Plan

### ● Overview:

#### (1) Facilities in the area

- The Hitachi area will be divided into three zones, with buildings and facilities clustered within each zone enabling efficient and flexible management of each business in each zone (please see figure below)

#### (2) Functional enhancement by expansion of production capacity

- Launch of the HMC\* plan in environmental recycling business
- Construction of new plating lines in the precision plating business
- Expansion of research areas under the Technology Development Center

#### (3) Infrastructure upgrading

- Total investment: ¥11 billion (excluding investment for expansion of production facilities)
- Duration of works: commencement in the second half of fiscal 2006, and completion at end of fiscal 2009 (3.5 years)

### Shirogane area

#### High-tech / Technology Development area

Productions of circuit materials such as copper foil and MAQINAS® (Shirogane Works)



### Shibauchi Eastern area

#### High-tech / Technology Development area

Technology Development Center



## Hitachi Works was named as a Sakura (cherry tree) Partner in fiscal 2006 by Hitachi City

Planted over a long period of time by local business and government representatives and ordinary citizens as a means of combating smoke from the Hitachi Mine, the Oshimazakura cherry tree, the emblem of Hitachi City, has also become a symbol of environmental action.

In the Sakura Partner project, decayed half-century-old cherry trees in Heiwa Dori are being replaced for the next generation by replanting undertaken by Sakura Partners chosen by public voting

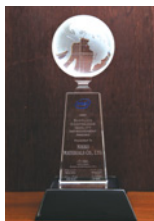
and Hitachi city government. Five groups including representation from the Hitachi Works have been selected as first-round partners. At an official certification ceremony in March 2007 they planted 10-year-old cherry trees along Heiwa Dori.

"May the cherry trees and Hitachi City flourish for ever," says the message etched on the copper plaque made by Nippon Mining & Metals and positioned in front of the newly planted trees.



## Nippon Mining & Metals wins Intel's SCQI Award

For the second year running, Nippon Mining & Metals was awarded Intel's Supplier Continuous Quality Improvement (SCQI) award in 2006, in recognition of its achievements as a supplier of sputtering targets to the US chipmaker.



## Increasing output capacity for targets (thin-film materials) at the Isohara Works

Nippon Mining & Metals has decided to invest some ¥10 billion in new facilities — mainly at the Isohara Works — to increase production capacity for targets used in the manufacture of semiconductors, hard disks, and flat panel displays (FPDs), all of which are enjoying rapidly rising demand. Through this investment, we aim to increase our market share and ensure stable supply capability, meeting our obligations as vendor of choice.

## Creation of integrated rolling, plating and pressing system in eastern China

To respond to demand for information technology and automotive products within China, the Nippon Mining & Metals Group began full operation of pressing and rolling processes at Nikko Woojin Precision Manufacturing (Suzhou) Co., Ltd., incorporated in January 2006, and completed construction in January 2007



at Nikko Fuji Precision (Wuxi) Co., Ltd. (both in Jiangsu Province.)

## Caserones Copper Deposit (Chile) development project

In overseas resource developments, Pan Pacific Copper Co., Ltd. (PPC), a copper business company of the Nippon Mining & Metals Group, in May 2006 launched a project to develop the Caserones Copper Deposit in Chile, having acquired Regalito Copper Corp. of Canada, which owns the rights to Caserones. Through the Caserones Copper Deposit development project, we aim to aggressively consolidate our copper business base in resource-deposit areas, centered on Chile.

## Energy saving

We consumed a total of 14,444 terajoules of energy in fiscal 2006, a reduction of 13% compared with 16,651 terajoules in fiscal 1990. We are pursuing further energy-saving measures through reduction targets established in our medium-term management plan.

## Reduction of carbon dioxide

Our emissions of carbon dioxide in fiscal 2006 totaled 884,000 tons. This is a reduction of 19% compared with emissions in fiscal 1990. We are pursuing further CO<sub>2</sub> reduction measures through targets established in our medium-term management plan.

## Compliance commitment

The Nippon Mining & Metals Group does not regard compliance simply as a matter of observing laws and regulations, but takes a broader view in which it incorporates a high standard of corporate ethics. The Group is creating mechanisms for better legal compliance and adherence to social norms, while strengthening its internal assessment systems.

We have also compiled compliance guidelines, and through a compliance program aim to raise employees' awareness of the need to observe compliance standards in daily business operations.

## Stakeholder meetings

Nippon Mining & Metals and all companies within the Group are committed to creating opportunities for customers, business partners, members of the local community and other stakeholders to voice their opinions and aspirations, through a wide range of dialogue channels. In addition to conventional channels, we held a stakeholder meeting with four invited experts in 2007, and solicited frank opinions about our Sustainability Report 2006, which we published in January 2007, as well as the measures we need to take in the area of corporate social responsibility.





## Stakeholder Meeting

This stakeholder meeting has been convened by Nippon Mining & Metals in an effort to improve the focus of its CSR activities. The corporation has brought together four experts on CSR and environmental issues, and has asked for their comments and contributions with regard to our CSR activities. We addressed the issues of our Sustainability Report and our CSR requirements.

Date and Time of Meeting: 3pm to 5pm, July 3, 2007  
Location: Nippon Mining Group Roppongi Club

### Upon reviewing the 2006 Sustainability Report

#### Mitsuko Horiuchi

The 2006 Sustainability Report gives a good picture of the Company and its operations. It is easily understandable even by those who have no familiarity of the Company. I very much appreciate the tremendous efforts that have gone into preparing such an excellent report. I am also deeply appreciative of the Company's ambitious goals. I feel, however, it would be even better if the report would highlight more effectively the Company's activities in line with the principles set out by the International Council on Mining and Metals (ICMM). Furthermore social matters, as distinct from environmental issues, deserve an equal share of attention. In addition the report needs to include more information and statistical data with regard to employee management, including the status of female employees, their progress and any details of positive action taken on their behalf.

#### Masahiko Kawamura

My impression of this report is that it is easy to read and understand. I like how it has been put together. On the other hand, it comes across as a little inadequate, lacking impact throughout. The Company aims to be an international developer of natural resources on a global scale. Such companies should be required to define their CSR policy. Regrettably, I was not able to fully understand your goals, as it is difficult to evaluate the overall CSR approach. This is why the description of the PDCA strategy seems to be incorporated in an inappropriate manner. Moreover, regarding the scope of reporting, inclusion of overseas activities on a consolidated basis is common practice these days. In this case, however, the overseas affiliates are outside the scope of reporting. I do understand that this publication was the first after the integration of the three metals companies, and as a result the scope of reporting was limited to domestic operations for the 2006 version.

#### Chie Nakaniwa

Overall, the report is easy to read. In terms of material flow, the data presented here is effective and useful from a researcher's point of view. However, my impression is that in this report, the environmental, economic and social issues have all been treated separately. According to the report, environmental preservation activities have also contributed to increased benefits in economic terms. If so, it would be much more interesting to place more focus on the connections between these aspects. Regarding social issues, we have a lot of information here about internal activities; in fact this section is perhaps too narrowly focused. In other words, the report does not reflect the full scope of the Company's activities. External activities also need to be emphasized. It is important that the corporation, rather than tending towards humility, boldly publicizes all of the areas where it is active.

#### Yuko Sakita

This report is very easy to read, but despite the fact that the environmental burden caused by certain operations has increased, there is no acknowledgement of the dangers that this increase poses, nor any statement of regret. You would increase readers' trust in the corporation by saying something like: "We are trying our hardest in these areas, but are confronted with difficulties in reducing the environmental burden." The report fails to communicate the fact that this is a corporate group where the employees are active and lively. I think the document should incorporate the daily activities of the staff, showing them hard at work in each front-line business unit. I understand your basic stance of keeping in close touch with your stakeholders, but how are you trying to communicate with them? No clear-cut policy is evident from this report, unfortunately.



## Introduction of Attendees

(Positions and job titles correct as of the meeting date)



**Masahiko Kawamura**

Chief Senior Researcher  
Insurance Research Group  
NLI Research Institute



**Yuko Sakita**

Journalist, Environment  
Counselor



**Chie Nakaniwa**

Assistant Manager, LCA  
Development Office  
Center of Product and  
Environmental Aspects  
Department of Environmental  
Technologies  
Japan Environmental Management  
Association for Industry



**Mitsuko Horiuchi**

Visiting Professor, Bunkyo  
Gakuin University  
Former Director, International  
Labour Organization (ILO)  
Office in Japan  
Chairperson, Child Labour  
Network Japan

## What kind of CSR activities are required of the Nippon Mining and Metals Group?

### Yuko Sakita

This industrial sector is not too familiar to the general public. As a result, few people are interested in the Company. Now that I have read the report, I understand that the Company is very serious about its CSR commitments. In particular, the corporation's efforts reflect the importance it places on the local community, and this is to be applauded. Our world as a whole and our local societies are linked. It would be good to see a game plan for creating a sustainable society included as part of the corporation's fundamental stance on according importance to the local community. The ability to secure natural resources internationally will become an important issue in the future. Your corporate mission will become more and more vital.

### Chie Nakaniwa

You come across as a corporation that really cares about its connections with the local community. As an upstream industry, it may not always be easy to perceive or accommodate stakeholder needs when putting CSR policies in place. That being the case, it would be best to focus mainly on your primary trading partners in your core businesses, as well as local community residents, while bearing in mind the needs of your wide range of stakeholders. Then it should become abundantly clear where you need to focus your efforts in terms of the metals industry and also in terms of the message that you convey to your stakeholders. It would be better to emphasize the unique nature of the metals industry in your discussion of your CSR policies.

### Masahiko Kawamura

Before you look at developing the world's natural resources, your report needs to clearly state how you believe we can make the world economy sustainable. How you intend to make this come about – in concrete terms – will lead to clarifying your stand on social issues. As a corporation, your problems thus far have been those of a large smelter in Japan, with all of its attendant issues. However, as a global corporation the issues involved are different. Your proclamations in terms of your global stance and CSR policy need to be along the lines of: "This is the direction in which the world needs to go to achieve sustainability." As a private-sector enterprise, it may be difficult to do this perfectly right now, but this is the time to cast your net far and wide.

### Mitsuko Horiuchi

In the field of social cooperate responsibility (CSR) Japanese business, by and large, addresses environmental preservation issues quite seriously, but they do not necessarily demonstrate their interests in fundamental human rights and the dignity of their employees. It is, therefore, quite commendable that your corporate mission statement explicitly includes the principle of respect for human rights. But I suspect that a major challenge ahead will be to translate these principles into practice. Another point worth stressing: since your company is a multinational corporation, it is expected to establish and promote effective procurement policies targeting supply chains that help eliminate child labour in developing countries. Also in the context of global issues, I am pleased to see that your company is addressing the serious problem of HIV/AIDS. In Japan, despite a growing number of young people infected with HIV/AIDS virus, little concern has been shown by Japanese business toward this issue. In conclusion, it is my sincerest hope that your company will take up — at home and overseas — a wide range of social and environmental issues with regard to its implementation of CSR.

## Closing remarks



We have heard a variety of valuable opinions covering a wide range of issues — environmental, social, and economic — from a global perspective. Our CSR activities were first initiated across all departments in 2005 prior to the integration of the three metal companies. Our initiatives are still in the early stages of development. We will bear in mind all of the valuable opinions that you have kindly shared with us today, not only regarding the preparation of CSR reports, but also the promotion of CSR activities. As a corporation directly involved in the use of the Earth's finite resources of raw materials, we must constantly consider how to develop and improve our work processes and recycling in terms of our innovation in the productivity of resources and materials. This is how we aim to contribute to sustainable economic growth on a global scale. We greatly appreciate your advice and guidance, and will keep it in mind in our future endeavors.



**Kazuo Kagami**

Executive Officer  
Nippon Mining & Metals  
Co., Ltd.

# Corporate Governance and Management

## Corporate Philosophy

**We are committed to assisting the sustainable development of society. Innovation in the productivity of resources and materials and a harmonious relationship with our stakeholders are our way of contributing to the achievement of this goal.**

Ensuring a stable supply of non-ferrous resources and materials is our social mission. We are engaged in a wide range of operations from exploration, mining, smelting and refining to metal fabrication and electronic materials production. In all aspects of our operations from development, production and marketing, we will continue to pursue technical rationality and efficiency and make improvements in quality, product properties and other matters. We will continue to promote recycling of resources and materials to achieve zero emission. This is our way of achieving continuous innovation in the productivity of resources and materials.

In the conduct of our business, we are committed to maintaining and enhancing a harmonious relationship with a wide range of stakeholders, including our customers and the communities in which we operate.

We are committed to contributing to the sustainable development of society on a global scale.

## Group Management Structure

In April 2006, the Nippon Mining Holdings Group integrated its three core metals-related companies, Nippon Mining & Metals Co., Ltd., Nikko Materials Co., Ltd., and Nikko Metal Manufacturing Co., Ltd., into the new company Nippon Mining & Metals Co., Ltd. The new company is engaged in a wide range of businesses, including resource development, metal smelting and refining, metal processing, electronic materials and environmental/recycling businesses.

With Nippon Mining Holdings, Inc., as the listed holding company, the Nippon Mining Holdings Group engages in two core businesses: metals, through Nippon Mining & Metals Co., Ltd., and petroleum, through Japan Energy Corporation, both of

which are wholly owned subsidiaries of Nippon Mining Holdings, Inc.

Based on the basic rules laid down by Nippon Mining Holdings, Inc. and its core business companies, Nippon Mining Holdings, Inc. handles planning and drafting of management and financial strategy and shareholder/investor and public relations activities on a Group-wide basis. With day-to-day business management, including strategic planning in their respective business fields, remaining in the hands of each of the core companies, Nippon Mining Holdings, Inc. oversees overall Group management, with powers to demand regular business reporting, and to approve budgetary and other important matters.

## Management Organizations at a Glance

Given the supervisory function of Nippon Mining Holdings, Inc., Nippon Mining & Metals Co., Ltd. does not have a board of directors in the interests of faster decision-making and greater organizational simplicity, but follows a management model in which Executive Officers take responsibility for conduct of operations at each business division, under the direction of the president. Important management matters are discussed and decided by the Executive Committee comprising the president and other directors (all of whom serve concurrently as Executive Officers) and Executive Officers. For discussion of basic Corporate Social Responsibility (CSR) policies, a CSR Committee and other deliberative bodies have been set up, according to function.

We ensure appropriate conduct of operations at business divisions including subsidiaries of Nippon Mining & Metals Co., Ltd. through independent auditing undertaken jointly by corporate

auditors and the Internal Auditing Office of Nippon Mining & Metals Co., Ltd. and Nippon Mining Holdings, Inc.

### ■ Our corporate governance system



#### Directors (2 of whom two serve simultaneously as Executive Officers):

In addition to approving appointments of representative directors and other matters laid down in the Articles of Incorporation, they participate as members of the Executive Committee in decision-making relating to management policy and major issues in the conduct of operations.

#### Executive Officers (17):

In addition to participating in decision-making with regard to management policy and major matters affecting conduct of business as members of the Executive Committee, they have specific areas of duty to be discharged based on the basic policies decided by the Executive Committee.

#### Corporate Auditors (4):

They attend executive meetings, carry out regular audits, and independently audit the conduct of operations by operational divisions.

## Code of Corporate Conduct

As a comprehensive nonferrous resources and materials manufacturer that carries out integrated production in a range of fields from nonferrous resource development and smelting/refining to metal processing, electronic materials production and environmental/recycling activities, we adhere to the following Code of

Corporate Conduct as we pursue our business activities, with the aim of deepening the satisfaction and trust of customers and the broader community, and becoming an internationally preeminent company committed to sustainable development for all.

### Nippon Mining & Metals Co., Ltd. Code of Conduct

#### 1. Our social mission

Based on continuous technological development and full awareness of our responsibilities in designing products, we will develop and produce a variety of products efficiently while minimizing waste. At the same time, we will promote recycling and reduce the impact of our operations on the environment. By doing so, we hope to obtain the satisfaction and trust of our customers and of society as a whole.

#### 2. Compliance with laws and regulations and engagement in fair trade

We will comply with domestic and/or overseas laws and regulations, and will engage in fair, transparent and free competition and trade based on the fulfillment of our social responsibilities.

#### 3. Disclosure of corporate information and protection of personal information

We will communicate not only with our shareholders, but also with the public at large, and will disclose corporate information in an active and equitable manner while focusing on the protection of personal information.

#### 4. Creation of an optimum working environment

We will respect employees' personality, human rights and individuality and will ensure a comfortable working environment that places top priority on safety and disaster prevention.

#### 5. Environmental conservation

Based on the awareness that tackling environmental issues is an essential requirement for corporate existence, we will engage in activities aimed at conserving the global environment, including biodiversity, in a voluntary, active and continuous manner.

#### 6. Enhancement and strengthening of risk management

We will establish a risk management system based on scientific data to enhance and strengthen risk management.

#### 7. Harmonious relationship with society

We will commit ourselves to social contribution activities and work as a good corporate citizen to achieve a harmonious relationship with the rest of the society of which we are a part.

#### 8. International business operations

In international business operations, we aim to contribute to sustainable development by protecting the fundamental human rights of people in countries and areas where we operate, and by respecting their cultures and customs.

#### 9. Elimination of antisocial activities

We stand firm against all antisocial forces and groups that threaten social order and safety.

#### 10. Management responsibilities

Management executives will take the lead in implementing this code of conduct and ensure it is thoroughly implemented across the Group. In the event of any non-compliance with the code of conduct, the management executives will investigate the causes, work to prevent reoccurrence, disclose information to the public promptly and accurately, and be held accountable for the event.



## Basic Approaches to Corporate Social Responsibility

To achieve its Corporate Social Responsibility (CSR) goals, the Group has long shown commitment to compliance, the environment and workplace health and safety in each of its field of operations, acting mainly through each operating unit under its control. Based on the Group's Corporate Philosophy of making the most effective possible use of precious and limited global resources,

we will take further steps to review the Group's activities in light of economic, environmental and societal considerations, and where necessary take improvement action, so as to develop our CSR initiatives in harmony with our stakeholders and work to foster sustainable development for all.

## CSR Organizations

On April 1, 2006, Nippon Mining & Metals launched a CSR Committee for our new corporate organization after integration of three metals companies, with a view towards systematizing the CSR activities of each of our divisions and thereby further strengthen those activities as part of our corporate strategy.

The CSR Committee is an advisory body to the President, responsible for determination of basic policies and action plans for promotion of CSR and assessment of progress in target achievement. We have also established compliance and risk management subcommittees under the CSR Committee.

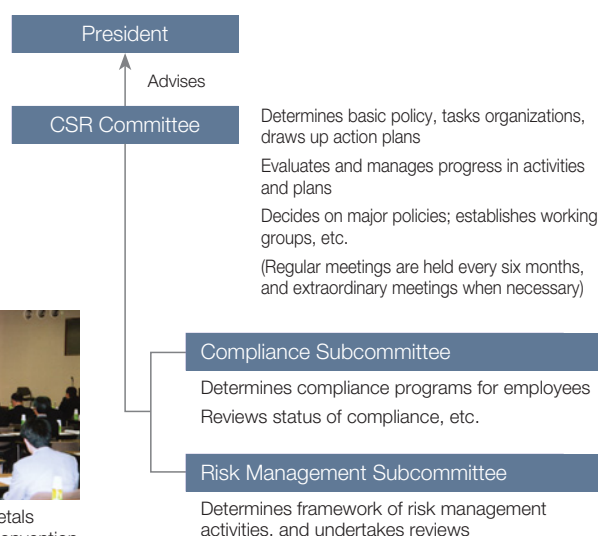
In CSR activities in fiscal 2006, we held the Nippon Mining & Metals Group CSR "Kick-Off" convention in May, marking the full-scale launch of our CSR activities. Then we compiled documentation that will form the basis of our CSR activities: Corporate Philosophy, Code of Conduct, Basic Environmental Policy, and Basic Health and Safety Policy. We also compiled and published our Sustainability Report 2006. At the same time, we arranged a CSR course for employees at each of our business locations and affiliates to foster full understanding of CSR activities throughout the Group.



The Nippon Mining & Metals Group CSR "Kick-Off" convention

Various activities were also carried out, mainly through the two above-mentioned subcommittees, to ensure more rigorous compliance and to improve risk management, in cooperation with relevant divisions of Nippon Mining Holdings, Inc.

### ■ CSR organizations



## Management of CSR Organizations

In the basic belief that CSR forms an integral part of our corporate activities, the Group, under the leadership of the president, assesses whether business activities have fully conformed with our Code of Corporate Conduct, discusses future policies including issues raised during the drafting of the Sustainability Report, and further develops and strengthens CSR measures using the PDCA cycle (please see diagram at right.)

### ■ CSR promotion: PDCA cycle



### Compliance

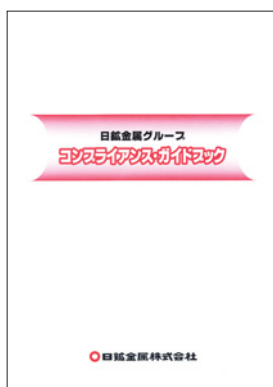
In addition to observance of laws and regulations, the Group interprets compliance broadly to include corporate ethics, and works to ensure that the highest standards of compliance are kept as part of its CSR activities. The Environment & Safety Department handles all matters relating to the environment and workplace safety and hygiene. Any other matters are handled by the Administration Department in partnership with the Internal Control Promotion Department and the legal affairs office of Nippon Mining Holdings, Inc. These departments provide compliance programs for employees, review the present situations, and advise all businesses and Group companies on issues relating to compliance.

Basic policies, plans, important matters regarding compliance, including outlines of compliance program for employees are discussed and decided by the Compliance Subcommittee of the CSR Committee, which meets twice a year regularly and whenever necessary. Reviews are conducted by the subcommittee with regard to progress in meeting compliance goals at each Group company, and if necessary corrective or improvement measures to be taken are decided. Compliance status reports are also made to the Nippon Mining Holdings Group Compliance Committee (chaired by the president of Nippon Mining Holdings, Inc.), a compliance organ for the whole Group.

### Compliance Program

To ensure full compliance with all applicable laws and regulations and proper business conduct we organize compliance programs every year for new recruits, managers and assistant managers, and provide information on the relevant laws and rules through our intranet.

In May 2007, we issued the Nippon Mining & Metals Group Compliance Guidebook, which was distributed to executives and employees of all Group companies in Japan as a compliance manual in the practice of our Code of Corporate Conduct. With these guidelines as a text, we plan to hold compliance workshops during fiscal 2007 at major business locations of all Group companies.



Studying compliance

Compliance Guidebook

### Risk Management

Risk management issues are handled primarily by the Risk Management Subcommittee of the CSR Committee. Based on an annual plan decided by this subcommittee, risk is identified and evaluated at all business locations of Nippon Mining & Metals Co., Ltd., Pan Pacific Copper Co., Ltd., and other major subsidiaries, and countermeasures are being planned and carried out.

We intend to set up a system for continuous improvement of risk management based on the PDCA approach, with self-assessment of progress and risk identification undertaken at each business unit once a year. The progress and the entire process will be reviewed regularly by the Risk Management Subcommittee.

# Stakeholders of Nippon Mining & Metals

## Basic Stance

The Group aims to grow in ever closer harmony with its various stakeholders, the bedrock supporting its operations. Looking ahead, we will use various communication tools to forge still firmer bonds of trust, in the belief that our stakeholders comprise our customers and suppliers, shareholders and investors, employees,

industry associations (non-ferrous metals), government and academia, local and global communities, global environment [activists], non-profit organizations (NPOs) and non-government organizations (NGOs), as well as future generations.

## ■ Our stance toward, and communication with, stakeholder groups

### Future Generations

By arranging for members of the public to visit our business locations, we are raising awareness of a broad range of environmental issues, highlighting the importance of manufacturing in contributing to the community, and encouraging people to show greater understanding for environmental preservation.

### NPOs and NGOs

We are strengthening our links with non-profit and non-government organizations involved in poverty prevention, environmental protection and other community contribution activities, and will discuss and carry out measures and policies to help them find ways to overcome current problems.

### Global Environment (activists)

To serve the cause of global environmental conservation, we will explain our position and role through exchange of information and opinions at international conferences and similar events, and adhere to them in our business activities.

### Local and Global Communities

We work for harmony with local communities by listening closely to a wide range of opinions canvassed through regular community events and exchange forums that we arrange. On the overseas front, in addition to attending international conferences and similar functions, we are always mindful of the need to protect the basic human rights of people in the countries where we operate, and respect their cultures and customs.

•Visit to our business bases

Future generations

•Cooperation and partnerships in environmental protection activities  
•Exchange of opinions through participation in international conferences, etc.

NPOs and NGOs

•Exchange of opinion on issues through participation in ICMM (climate change, etc.)  
•Consider legal and regulatory measures to deal with global environmental issues

Global environment

Local and global communities

**Local initiatives**

- Partnerships with regional government (establishment of firefighting squads, cleaning activities around plants, organization of summer evening festivals, etc.)
- Compilation and presentation of various regulatory reports (regional government)
- Arrange visits to our business locations

**International initiatives**

- Exchange of opinions on environmental issues through participation in ICMM (International Council on Mining and Metals)
- Investment and financing for promising overseas ore deposits

The Nippon Mining & Metals Group



Customers and suppliers

- Exchange of opinions and information through interviews with individuals (establish degree of customer satisfaction)
- Participate in exhibits, events, seminars, etc.
- Arrange safety briefings on handling sulfuric acid

## Customers and Suppliers

We consider it crucial to respond to our customers' and suppliers' opinions and wishes. By improving our products and services, with due account given to the environment, we will further build enterprise value.

Shareholders and investors  
(Nippon Mining Holdings)

- Explain business plans and policies
- Report on progress in operations
- Present environmental and safety-related materials
- End-of-year financial reporting

## Shareholders and Investors (Nippon Mining Holdings)

Through our partnership with Nippon Mining Holdings, Inc., we undertake full and prompt disclosure and make every effort to ensure shareholders and investors fully understand the Group's measures to increase enterprise value.

Employees

- Training by grade (training for new employees, leaders and managers, telecommunications training), etc.
- On-the-job (dialogue-based) training, exchange of opinions through performance evaluation

## Employees

For staff, who play a central role in the Group's CSR activities, we are creating frameworks for personnel training, so as to effectively harness the capabilities of every individual employee.

Industry, government and academia  
(including industry groups)

Industry group

- Participation in industry groups, by product (ICA, ICMM, Japan Mining Industry Association, Japan Society of Newer Metals, Japan Copper and Brass Association), etc.

Government

- Participation in national projects
- Collect information and exchange opinions on regulatory and legal amendments, etc.
- Legal notifications and applications

## Industry, Government and Academia (including industry groups)

Through participation in various organizations and international projects, as well as joint research and development with universities and research institutions, we monitor trends in our sector, and offer suggestions in a wide range of fields.

# Corporate Social Responsibility Activities: Goals, Performance and Topics

## Activities and Performance in Fiscal 2006

In April 2006, after the integration of three Group companies, we reviewed medium-term CSR goals for the Nippon Mining & Metals Group, and compiled the following new set of goals.

After April 2007, we aim to further develop CSR activities by monitoring the results of our activities fiscal year by year, identifying issues, and adjusting goals accordingly.

### ■ Medium-term goals for the Nippon Mining & Metals Group, and evaluation of performance in fiscal 2006

Items		Goal achievement	Performance in fiscal 2006
<b>Corporate governance system</b>			
Audits, inspections	Internal audits at all companies and business locations	Annual	Internal audits at all companies and business locations
Acquisition/renewal of official certifications	ISO14001 acquisition or application for acquisition or renewal (all companies and business locations)	Annual	(New certification: not applicable)
Improvement activities	All companies and business locations	Annual	NPM activities at Hitachi Works, Kurami Works, Saganoseki Smelter & Refinery of Nikko Smelting & Refining, and affiliates
Harmony with local communities	Creation of forums for exchange	Annual	Exchange through festivals, etc., at all companies and business locations
<b>Health and safety</b>			
Elimination of accidents	Zero incidence with or without lost work days		Japan: 37 incidents with or without lost work days
Elimination of occupational illness	Zero incidence		Japan: No incidents
<b>Stakeholders</b>			
Communication	Dialogue with stakeholders	Annual	Dialogue through CSR office (suppliers: 1 case; local community: 2 cases; joint research partners: 1 case)
<b>Environment</b>			

Following the integration of Nippon Mining & Metals in October 2006, we set the following medium-term goals.

Energy saving	Reduce intensity of energy consumption by at least 5.4% compared with fiscal 2003-2005 average level	2010	Recovery of waste heat at Saganoseki Smelter & Refinery (Nikko Smelting & Refining), reduction of fuel consumption (volume) at Tomakomai Chemical
Prevention of global warming	Reduce intensity of CO <sub>2</sub> emission by at least 6.9% compared with fiscal 2003-2005 average level	2010	
Reduction of waste materials	Reduce intensity of final disposal volumes by at least 29% compared with fiscal 2003-2005 average level	2010	
<b>Personnel training and fostering talent</b>			
Training/drills	Emergency (accident) drills	Annual	Emergency (accident) drills at each company and business location
	Training by employee grade	Annual	Training for new employees and key executives, CSR training, and other training

- ◎ Improvement from previous year
- No change from previous year
- △ Almost no change from previous year (some goals missed)
- × Deterioration from previous year

#### Year-on-year comparison, and plans after 2007

○ (Measures to be continued from fiscal 2007)

— (Measures to be continued from fiscal 2007)

○ (Measures to be continued from fiscal 2007)

○ (Measures to be continued from fiscal 2007)

× Increase of 15 cases compared with fiscal 2005

× Increase of 1 case compared with fiscal 2005

◎ Increase in dialogue (cases) compared with fiscal 2005

◎ 0.9% reduction  
(Measures to be continued in and after fiscal 2007)

◎ 3.2% reduction  
(Measures to be continued in and after fiscal 2007)

◎ 28.5% reduction  
(Measures to be continued in and after fiscal 2007)

○ (Measures to be continued in and after fiscal 2007)

○ (Measures to be continued in and after fiscal 2007)

## We are undertaking various improvement activities through our program of NPM activities

### What are NPM activities?

Based as they are on the Total Productive Maintenance (TPM) concept developed by the Japan Institute of Plant Maintenance in 1971, we have developed our NPM activities, in our own definition, as “production methods that seek to maximize overall production system efficiency by improving personnel and facility quality.”

In joining this movement, we decided to take it beyond conventional frameworks and transformed it into the “Nippon Mining & Metals TPM” (NPM) concept for continuous innovation through a dynamic approach. We now proactively apply NPM not only at our major business locations, but also at many affiliates.

The NPM method seeks to minimize economic losses through a zero-accident, zero-defect (product quality) and zero-failure (equipment) approach. We see NPM as a core element of the Group’s CSR activities.



NPM activities at the Kurami Works  
(Kanagawa Prefecture)

### Site Report

#### Improvement activities at the Electronic Materials Company’s Isohara Works

The productivity-raising efforts at the Isohara Works, which was retooled in fiscal 2006, were the fruit of a focus on financial benefits, from rigorous selection at management level of measures needing to be taken, and the setting of clear and specific goals. Action is being taken under our policy of further developing employees’ problem-solving skills, and formalizing and communalizing problem-solving methods developed privately by individuals.

In fiscal 2006, the first fiscal year for these activities, the focus was on three major product groups. We were able to surpass our initial goals. In fiscal 2007, we have already broadened the scope of the productivity-raising activities, and are addressing more challenging issues. We have also launched and developed fully-fledged measures to enhance workplace skills.

Through these activities, we aim to ensure ongoing operational improvement and fostering of talent, creating greater satisfaction for our customers and a stronger financial position for us.



Isohara Works (Ibaraki Prefecture)



# Economic Activities Report

Report on the business performance of the Nippon Mining & Metals Group,  
including details of operations

## Business Performance in Fiscal 2006

(April 1, 2006 to March 31, 2007)

Sales at Nippon Mining & Metals rose 68.7% year-on-year to ¥1,024.1 billion, and income before special items increased 61.8% to ¥134.1 billion, lifted by buoyant demand and soaring metal prices.

Copper prices on the London Metal Exchange averaged approximately 316 cents per pound over the term, significantly higher than the average of 186 cents in the previous term. Prices kept a high level overall, rising from 252 cents at the beginning of the term to a record high of 399 cents in May, before falling back somewhat.

### Resources and Metals

In the mainstay copper business, sustained strong demand in both markets for the wire rods and rolled copper and copper alloy products resulted in volume increase. Product prices were significantly higher reflecting the sharp price rise in international markets. Copper smelting and refining margins during the year improved over the previous fiscal year as the bulk of price and volume conditions concluded in the previous fiscal year had been applied. Sales in the Recycling and Environmental Services business were also higher supported by rising metals prices.

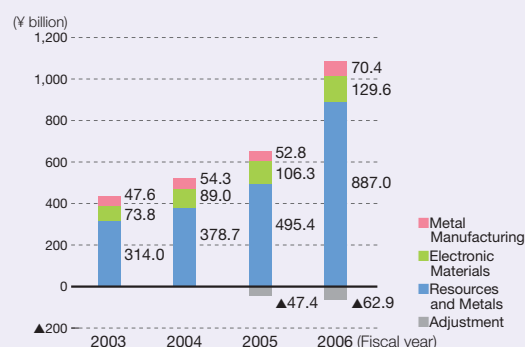
Given the above factors, net sales for Resources and Metals grew 79.1% to ¥887.0 billion, while income before special items surged 87.3% to ¥127.8 billion reflecting rising metals prices, increasing in sales volume of refined copper, and a significantly higher contribution from the equity in the investment in the Chilean copper mining companies and the copper smelting company in South Korea.

### Electronic Materials

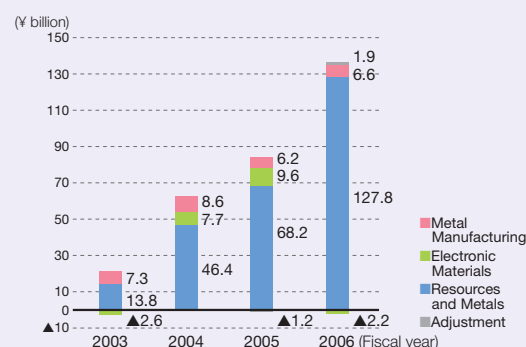
Thin-film forming materials (sputtering targets for LSIs and flat panel displays (FPDs) and others) saw increased sales volumes. Sales volumes for both treated rolled copper foil and electro-deposited copper foil declined for the fiscal year, reflecting the impact of mobile phone and other end equipment production adjustments on treated rolled copper foil, and the closure of a plant for electro-deposited copper foil in the United States. Product prices for sputtering targets for FPDs declined reflecting the price decline in indium, which is a raw material, while prices of electro-deposited copper foil rose sharply due to the recent copper price hike. Prices of other products trended basically flat for the fiscal year.

In these business conditions, net sales for Electronic Materials increased 21.8% year-on-year to ¥129.6 billion, while a loss before special items of ¥2.2 billion was recorded compared to income of ¥9.6 billion in the previous fiscal year due to the major negative impact of inventory valuations accrued from a decline in the indium price.

■ Sales by segment (consolidated)



■ Income before special items by segment (consolidated)



In fiscal 2006, we changed the segmentation of certain of our business operations. Figures for consolidated sales and income before special items for fiscal years after fiscal 2005 and 2006 are based on the new segmentation, and are presented duly adjusted.

## Metal Manufacturing

In the precision rolling business, sales of main products such as phosphor bronze, and titanium copper products for high quality connectors recorded good growth. Special steel products used for CRT components for TVs and PC monitors remained weak due to the spread of LCDs.

The precision fabrication business posted sales volume

growth in the surface treatment business (gold plating used in connectors and automobile components), but volumes in precision press processing were lower.

As a result, net sales for Metal Manufacturing increased by 33.4% to ¥70.4 billion, while income before special items increased 7.7% to ¥6.6 billion, mainly owing to strong sales of phosphor bronze and titanium copper products.

## Economic Impact on Stakeholders

We conduct our business in association with various stakeholders. The economic impact of our business activities on them is shown below in table form, with details of how much of our revenues and profits deriving from our customers and other sources is paid out to specific stakeholder groups (distribution.) Precise figures for economic impact on stakeholders are given in the tables below.

A total of ¥922 billion was paid to suppliers for procurement of materials and services.

Personnel expenses including statutory welfare benefits

totalled ¥37 billion.

A total of ¥7.9 billion was paid to shareholders and creditors in the form of shareholder dividends and interest on borrowing for funding purposes.

We paid a total of ¥21.2 billion in income taxes for financial accounting purposes, and this total, after addition of ¥2.3 billion in public taxes and dues recorded as expenses, rose to ¥23.5 billion allocated to the government and administrative organizations.

¥40 million was disbursed on community contribution activities.

### ■ Financial flows, by stakeholder group

IN			OUT		
Stakeholders	Total (¥ billion)	Basis of calculation	Stakeholders	Total (¥ billion)	Basis of calculation
Customers	1,016.8	Sales	Suppliers	922.0	Cost of sales and Selling, General and Administrative Expenses excluding personnel costs, taxes and dues and charitable donations
By geographical area as above	664.9		Personnel	37.0	Personnel costs
Japan			Shareholders and creditors	7.9	Dividends and interest paid
Asia	330.7	Including Oceania	Government and administrative bodies	23.5	Income taxes in the statement of income, and public taxes and dues recorded as expenses
North America	13.5		Community contributions	0.04	Charitable donations
Europe	6.4				
Central and Southern America	1.4				
Government and administrative bodies	0.52	Subsidies, etc.			

(Note) Because figures refer only to consolidated subsidiaries among all Nippon Mining & Metals companies covered by our CSR activities, they may differ from figures presented for consolidated sales by segment on the previous page.

For detailed financial statements of the Nippon Mining & Metals Group, please refer to the website of Nippon Mining Holdings, Inc. (<http://www.shinnikko-hd.co.jp/english/>) for "Investor Relations."

# Environmental Activities Report

## Research and Development of Eco-Friendly Technologies and Manufacturing Processes

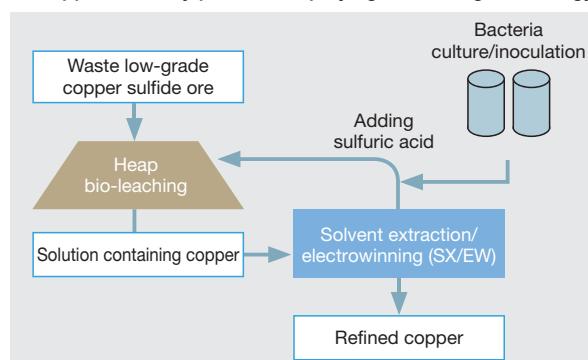
Under the principal management concept of innovation in the productivity of resources and materials, the Nippon Mining & Metals Group is pursuing the technology developments outlined below in order to develop eco-friendly materials and products and to reduce the impact of its operations on the environment by using resources more effectively and helping prevent global warming.

### Resources and Metals Company

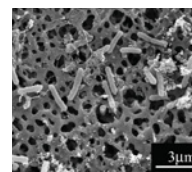
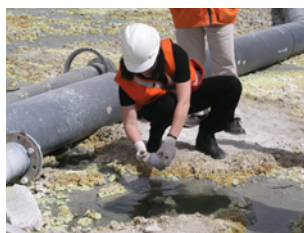
## Recovering Copper through the Use of Advanced Bio-Mining Technology

Using the potential of bacteria found in the natural world, we are collaborating with the Chilean national copper company, Codelco, to develop a technology to efficiently leach and refine copper from primary copper sulfide ore, long thought to be a difficult process. In terms of developing this bio-mining technology, we are also cooperating with external research institutes to introduce bacteria which have been improved by genetic engineering in order to develop technologies that increase the speed and rates of leaching copper from ore. When the technology is perfected, it will be possible to recover copper directly from waste low-grade copper sulfide ore (See diagram on the right).

### ● Copper recovery process employing bio-mining technology



Heap leaching



Electron micrograph of bacteria

## Developing Environment-Friendly Smelting Technologies

At present, pyro-metallurgical smelting represents the mainstream in copper smelting. The process is energy-intensive due to the high temperatures used to melt the copper concentrate and need to recover the SO<sub>x</sub> as sulfuric acid that comes from the sulfur in the concentrate. Thus, this process is suited to large-scale production.

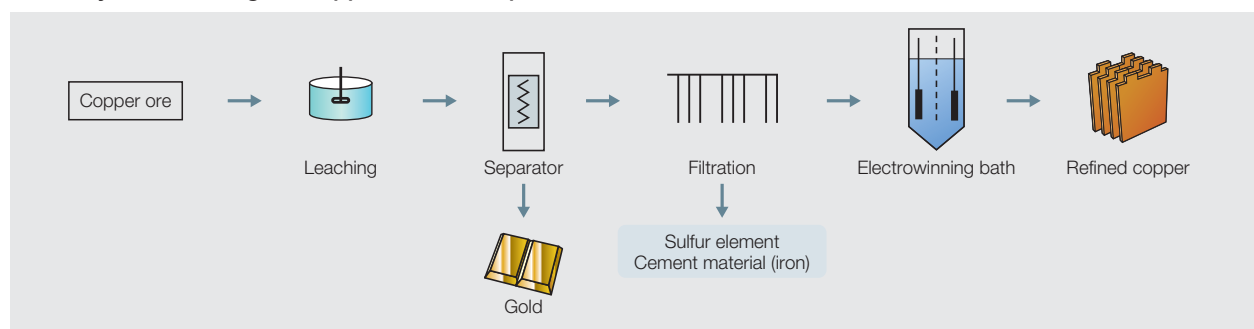
Nippon Mining & Metals is pursuing the development of a next-generation hydro-metallurgical technology that does not release SO<sub>x</sub> and conserves energy. At present, we are perform-

ing continuous testing on a quasi-verification scale to confirm control methods and results. We are also engaged in functional verification of the impact of copper grade, impurities and metal grade on many different types of ore, and we are investigating the next step, which is the construction of a test plant.



Pilot testing facility for hydro-metallurgical copper refining

### ● The hydro-metallurgical copper extraction process





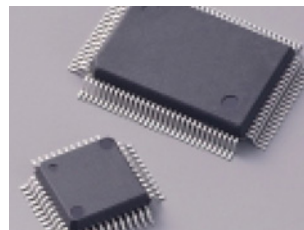
## Electronic Materials Company

### Lead-Free Surface-Mounted Chemicals

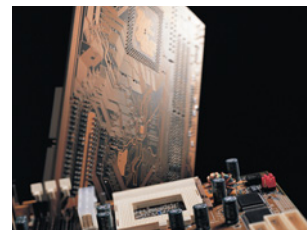
As a link in EU regulations regarding hazardous substances, the RoHS directive took effect in July 2006 with the objective of reducing the impact on the environment and the use of six substances (lead, mercury, cadmium, hexavalent chromium, PBB and PBDE), as a rule, was prohibited in electric and electronic equipment. Among these regulated substances, lead, in particular, has long been regarded as an indispensable substance for soldering joints in the electronic materials field, so the race to develop a lead-free substitute is at a fever pitch. Taking this situation into account, the Group is working on developing lead-free soldering powder and plating antioxidants; e-less plating solutions as a substitute for the leveler used to solder the surfaces of printed circuit boards; and additives for encapsulation resins that can be used in higher reflow temperatures caused by lead-free processes.



Printed circuit board



IC packages



Surface-mounted components

### Cyanide-Free E-Less Gold Plating

Corrosion-resistant metal coatings are widely used in order to improve the reliability of electronic components. The three most common methods for forming the metal coating are (1) plating, (2) the PVD method and (3) the CVD method, but plating is the most common method because of its cost advantages. To further categorize plating methods, there are electroplating and e-less plating but both gold plating solutions contain toxic cyanide compounds. Cyanide is toxic to the human body and also has a serious impact on the environment, but since it is unsurpassed for improving the stability of plating solutions and coating properties, it continues to be widely used. In light of this situation, the Group applied itself to developing a cyanide-free electroplating method, and has succeeded in the practical realization of cyanide-free e-less plating solution that offers superior stability and coating properties. At present, we are investigating its practical applications in semiconductors and printed circuit boards.

## Metal Manufacturing Company

### Collaboration in the Development of Alloys and Processes, Realizing High Strength and High Conductivity

The Metal Manufacturing Company responds quickly to the rapidly changing demand in the market for electronic products with programs for improvement of existing materials (process development and improvement), and to technology trends in markets and applications with a program for development of new materials (comprehensive development of new alloys and alloy processing methods).

The high performance series is the result of precise process control technology.

By precisely controlling the manufacturing process, we have created a high performance metal material showing marked improvements in material properties compared to conventional alloys using the same components. The extensive lineup corresponds to the trend towards compact, lightweight, highly precise electronic components. From a recycling perspective, the products are superior because they are made of the same alloys as conventional products but without using any toxic materials.

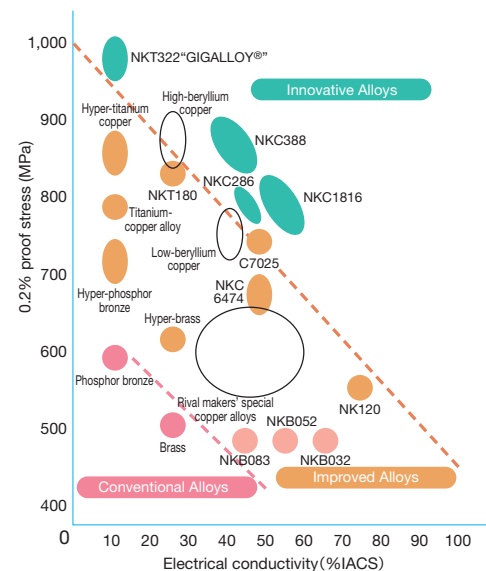
- High strength and bend formability → Hyper phosphor bronze  
Compared to conventional phosphor bronze, there is more freedom to design products which feature high-density packaging
- High durability → Hyper stainless steel, Hyper phosphor bronze, Hyper titanium copper  
Stainless steel dome switches for products with a long life span
- High strength, High bend formability, Durable → Hyper titanium copper  
Compact connectors for mobile phones

#### Developing ultra-high functional copper alloys

Through collaboration in the development of alloys and processes, we have realized properties that could not be achieved in conventional copper alloys.

- High strength, High conductivity → NKC388, NKC286, NKC1816  
A new Corson alloy that combines high conductivity to suppress heat generation in connectors, with high strength.
- Ultra-high strength → NKT322 "GIGALLOY®"  
We have developed an alloy that combines excellent bend formability with strength at one gigapascal level.

#### Comparison chart of strength versus conductivity in high performance copper alloys



# Environmental Accounting

## Goals

In the Group's activities, smelting operations at the Resources and Metals Company carry a heavy environmental burden. On the one hand, the environmental and recycling operations at the company recycle valuable global resources, reducing the volume of waste material and rendering it harmless, thus contributing to the conservation of the global environment.

The Electronic Materials and Metal Manufacturing Company use virgin raw materials supplied by the Resources and Metals Company as well as recycled materials such as metal scrap.

To provide quantitative disclosure of these business activities and the points of contact between them from an environmental point of view, environmental accounting was introduced at the Resources and Metals Company and the Metal Manufacturing Company in 2002, and at the Electronic Materials Company in 2003, in order to gain understanding among stakeholders inside and outside the Group and to contribute to rational decision-making at the Group.

## Environmental Spending and Investment

[Target] Resources and Metals Company: Pan Pacific Copper, Nikko Smelting & Refining, Hibi Kyodo Smelting, Japan Copper Casting, Nikko Environmental Services, Tomakomai Chemical, Nikko Mikkaichi Recycle, Nikko Tsuruga Recycle, Technology Development Center (related to Resources and Metals Company)

Electronic Materials Company: Isohara Works, Shirogane Works, Toda Works

Metal Manufacturing Company: Kurami Works, Technology Development Center (related to Metal Manufacturing Company)

(¥ billion)

Environmental protection activity			Expenses in fiscal 2006							
			Environmental expenses				Investment			
			Total	Resources and Metals	Electronic Materials	Metal Manufacturing	Total	Resources and Metals	Electronic Materials	Metal Manufacturing
Pollution prevention expenses	Prevent air pollution	Prevent air pollution and dust, reduce SOx industrial levies, sale of sulfuric acid and gypsum	66.8	66.5	0.3	0.0	31.5	30.0	0.1	1.4
	Prevent water pollution and soil contamination	Prevent water pollution and soil contamination	16.0	12.3	2.4	1.2	14.2	8.2	1.6	4.3
	Noise abatement, odor control, prevent land subsidence	Reduce noise levels	0.5	0.4	0.0	0.1	0.8	0.3	—	0.5
	Total		83.3	79.3	2.7	1.3	46.4	38.5	1.7	6.3
Global environment protection expenses	Prevent global warming and conserve energy	Produce steam and electric power, reduce CO <sub>2</sub> emissions	14.7	10.9	3.8	—	8.4	8.3	—	0.1
Resources recycling expenses	Recycle waste materials	Improve yield rates/recover valuable resources, conserve resources by recycling, sales of copper slag and refined iron concentrate	107.5	104.6	—	2.9	20.9	19.7	1.0	0.2
	Industrial waste processing and disposal		8.0	5.9	1.3	0.7	0.1	—	0.1	—
	Total		115.5	110.5	1.3	3.6	21.0	19.7	1.1	0.2
Upstream/downstream distribution expenses	Reduce impact of packaging materials on the environment	Conserve resources through recycling	0.6	—	—	0.6	0.0	—	—	—
Management expenses	Set up, operate and monitor environmental systems, preserve and landscape the natural environment	Improve environmental preservation, improve community trust, improve the working environment	5.1	4.5	0.2	0.3	0.9	0.9	0.0	—
R&D expenses	Research and develop products that safeguard the environment	Reduce environmental impact through high functionality and conserving resources	5.2	—	—	5.2	0.0	—	—	—
	Control environmental burden of the manufacturing process	Reduce environmental burden and use resources effectively, recover valuable materials	5.4	5.4	—	—	0.8	—	0.8	—
	Total		10.7	5.4	—	5.2	0.8	—	0.8	—
Community activities expenses	Support local community activities	Improve local environment, support environmental protection activities by external organization and local community	0.3	0.1	0.0	0.2	0.0	—	—	—
Expenses to counter environmental degradation	Natural restoration	Natural restoration	4.2	4.1	—	0.0	0.0	—	—	—
Grand total			234.2	214.9	8.1	11.2	77.5	67.3	3.6	6.6

## Special Features of the Nippon Mining & Metals Group

For a long time now, the Group has actively worked to help preserve the global environment. The high performance level of our environmental protection systems to prevent pollution, recycle resources and help prevent global warming is a special feature of the Group.

In the reporting fiscal year we have continued to develop far-sighted technologies and products that are ecologically sound,

while at the same time smoothly conducting our business operations, doing no harm to the environment and devising new ways to prevent pollution.

Additionally, we have added approximately 15.2 billion yen to our coffers by recovering valuable materials through recycling and by selling sulfuric acid and other byproducts from smelting operations.

# Social Activities Report

## Relationship with Employees

### Relationship between Management and Employees

#### Progress in Job Creation

##### Employees with disabilities

As of June 1, 2007, persons with disabilities accounted for 1.8% of the total workforce of Nippon Mining & Metals, fulfilling the legal requirement in Japan. Our policy is to maintain this ratio at a minimum, and, if possible, to raise it.

##### Women in the workforce

As of March 31, 2007, female employees of the Group numbered 586, of whom approximately 8.5% were in managerial posts. Employees are given leave for looking after small children and for the care of sick or elderly relatives, in accordance with the applicable laws in Japan and in-house regulations based upon them. The Group does its best to answer these care-related needs.

Committees composed of representatives of the managements of the Group companies and of their labor unions have been set up to handle sexual harassment issues, and provisions for disciplinary action against employees responsible for sexual harassment are written into the companies' rules of employment.

We intend to continue our efforts to create working environments in which female employees can pursue their careers with confidence and without hindrance.

#### Training to Produce a Small but Highly-Qualified Staff

Nippon Mining & Metals follows a basic policy of running its business operations with a small workforce of talented and highly trained staff. To translate this policy into reality, it is essential for us to provide training that will develop the individual skills of each employee.

Our training system centers on a system of on-the-job training, and programs are tailored for each division, job category, and rank. We also provide support to help employees fully develop their individual potential. Our aim is to develop a workforce composed of individuals with a widely differing range of abilities and fields of expertise.

#### ● Training records of Nippon Mining & Metals and Nikko Smelting & Refining for fiscal 2006

	Total number of man-hours
Total time spent by employees on training courses	28,978 hours
Average time	14.3 hours

Total time = Time spent by staff of head office and other business facilities in "off-the-job" training.

Average time = Average time spent per employee

#### Job Ability Evaluation

To maintain the Group's policy of operating with a small number of highly skilled staff, one of the keys is to create a system that allows individual employees to fully realize their potential and make the best use of their unique abilities. To make this possible, we need to accurately evaluate their abilities.

In April 2007, Nippon Mining & Metals introduced a new employee ability evaluation system based on a "competency model." We also have revised our existing system of target-based job-performance evaluation, and have extended its application to cover all employees. All employee evaluation processes include an interview with the employee's superior. This is intended not only to enhance the employee's satisfaction, but also to offer an opportunity for the employee and his/her superior to frankly discuss aspects of his/her performance evaluation and measures needed to improve it.

#### Mental Health Support

At Nippon Mining & Metals, we take measures to support the mental health of our staff, such as arranging talks by specialists at each of our business facilities (offices and plants). In addition, the Nippon Mining Holdings Group Health Insurance Association (under the National Health Insurance System) provides advice to employees and their family members through a health problems helpline.



A specialist gives a talk on mental health issues

## Relations with the Labor Union

Almost all the companies in the Group have labor unions. To maintain a sound relationship between management and employees based on mutual trust, regular meetings are held between representatives of management of each company and the labor union. The managements disclose details of the business conditions of the companies to the unions, and their joint committees on health and safety issues at each company thoroughly discuss causes and other factors involved in any accidents that may have occurred at the company and any necessary remedial measures. The unions thus act in partnership with the managements to ensure that important information is communicated to all employees, and also play a part in ascertaining employees' views on issues concerning them.

# Relationship with Local Communities

## Communication with Local Communities

The Group operates a wide range of businesses both domestically and internationally, and each company and facility strives to engage in regular communication with local governments, residents associations and chambers of commerce to establish

a relationship of trust. Each facility and each company within the group engages active communication with local communities by hosting factory tours and summer festivals, etc.

### Sample Cases of Communication with Local Society

#### ● Hosting factory tours

Saganoseki Smelter & Refinery of Nikko Smelting & Refining	· Hosts a tour every year for local elementary students. (Once every year, with about 30 participants each time)
Isohara Works	· Hosts a company tour for local high school students (tenth Grade) once every year since FY2002.
Kurobe Nikko Galva	· Hosts a factory tour for residents. (August, about 20 participants)
Nikko Tsuruga Recycle	· Hosts tours for the benefit of people in the five surrounding areas and the Tsuruga River Fishing Cooperatives. Three times total for FY2006. (20 to 30 participants per tour)
Nikko Materials Philippines	· Hosts factory tours for families, in which employees and their families participate. Plant operates on three shifts, offering three tours per year. (May to June) About 700 participants in total.



Brief explanation of factory tourists  
(Kurobe Nikko Galva)



Scene of factory tour  
(Nikko Tsuruga Recycle)



Factory tour for families  
(Nikko Materials Philippines)

#### ● Advance explanation of major deconstruction facility

Nikko Mikkaichi Recycle	· Provided prior explanations of deconstruction of our electric furnace at city hall to the head of the town council and members of the city council. · Also responds to any requests from local residents after browsing the data of environmental measurements.
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#### ● Summer festivals

Hibi Kyodo Smelting	· Hosts a local <i>bon-odori</i> and festival. (Once a year, about 300 participants in <i>bon-odori</i> , 130 in the festival)
Saganoseki Smelter & Refinery of Nikko Smelting & Refining	· Hosts a summer festival in an open area within the company's housing complex. (Once a year in August, about 1,500 participants)
Isohara Works	· Hosts a summer festival within its premises. (Once a year in early August, about 400 participants)
Hitachi Works, Shirogane Works	· Hosts a summer festival, <i>Sanjin-Sai</i> , on its company field. (Once a year in late July, about 2,000 participants)
Kurami Works	· Hosts a summer festival, <i>Hazuki-Sai</i> , on its company field. (Once a year in early August, 5,000 to 6,000 participants) · Participates in an autumn festival <i>Shinko-Sai</i> . (Every September, 300 to 500 participants) · Opens an area of the factory as a stopover-point for the <i>o-mikoshi</i> (portable shrine) during a festival in which the <i>o-mikoshi</i> is carried to a local Shinto shrine. Company employees also participate in carrying the <i>o-mikoshi</i> .
Nikko Materials Philippines	· Hosts a family picnic for employees and their families. (Plant operates on three shifts, providing three events a year in April, about 800 participants in total)



Summer festival  
(Isohara Works)



Summer festival  
(Saganoseki Smelter & Refinery of  
Nikko Smelting & Refining)



*Sanjin-Sai*  
(Hitachi Works, Shirogane Works)



*Hazuki-Sai*  
(Kurami Works)



### Local fire/disaster prevention

Toda Works	· Conducts an emergency drill on the premises of the plant, working with Warabi Police, Toda Fire Department and Japan Energy Toda Management Center. (Once a year)
Nissho Kou-un	· Contributes to crime prevention in the Saganoseki area through Umineko-Tai, a local patrol team. (Led by a representative of Nissho Kou-un)
Gould Electronics (Germany)	· Conducts a fire drill on the company's premises performed by the local fire brigade of Eichstetten. (Once a year, about 60 participants)
Nikko Materials Philippines	· Participates in a fire contest hosted by the industrial park in which the company is located. (Once a year)



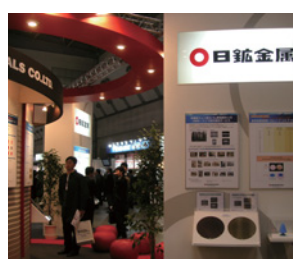
Emergency drill (Toda Works)



Fire drill (Gould Electronics, Germany)

### Exhibitions

Nippon Mining & Metals	<ul style="list-style-type: none"> <li>· Exhibited ED copper foil, treated rolled copper foil, MAQINAS and various surface treatment chemicals at JPCA 2006. (June)</li> <li>· Exhibited ITO Sputtering Target for Eighth Generation Panels at FPD International 2006. (October)</li> <li>· Exhibited products at the TPCA Show 2006, an exhibition hosted by the Taiwan Printed Circuit Association. (October)</li> <li>· Exhibited various sputtering targets and compound semiconductor materials at Semicon Japan 2006. (November to December)</li> <li>· Exhibited surface treatment processes at the Eighth IC Packaging Technology Expo. (January)</li> <li>· Exhibited various sputtering targets and indium materials at Semicon Korea 2007. (January to February)</li> <li>· Exhibited various sputtering targets and indium materials at Semicon China 2007. (March)</li> </ul>
Kurobe Nikko Galva Nikko Mikkaichi Recycle	· Participated in exhibiting products at the "Kurobe Fair," hosted by the local Chamber of Commerce and Industry. (October)
Nikko Art & Craft	<ul style="list-style-type: none"> <li>· Exhibited and sells jewelry, precious metals, arts and crafts at the Industrial Culture Festival (October) of Saganoseki, Oita City.</li> <li>· Exhibited and sells jewelry, precious metals, arts and crafts at the "Toho Dai-Noryo-Sai." (July, hosted by Toho Titanium)</li> </ul>



Exhibition booth at the IC Packaging Technology Expo



Product exhibits at the Kurobe Fair

### Nippon Mining Museum opens to the public

The Nippon Mining Museum is a corporate museum constructed in 1985 on the site of Hitachi Mines where the predecessor of Nippon Mining Holdings Group was founded. The museum presents the founding and history of the mine, and the spirit of co-existence with local societies and of labor-management relations based on mutual dependence and trust. The museum is open to the general public, including local residents, as well as to our Group employees.

The number of visitors to the museum over the past twenty years has reached a total of 216,000, an annual figure of just over 10,000, which includes local elementary, junior high and high school students, and officials from universities, corporations and government institutions.



Nippon Mining Museum

# Relationship with External Organizations

## Domestic and Overseas Activities

### Participating in the Development of Vaccines to Treat HIV/AIDS, and Conducting Education on AIDS

HIV/AIDS is a world threat, and as a group that operates on an international level, we have supported the Theravax Project, a project to conduct clinical tests on an HIV/AIDS vaccine developed for use in the southern regions of Africa. We provided

funding of 150,000 dollars (approx. 18 million yen) in June 2006 to promote the project. We also conducted educational seminars on AIDS within our company.

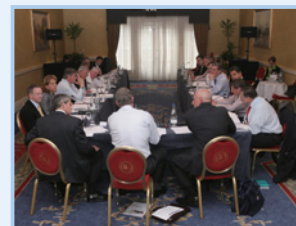
## Activities through ICMM

As a member company of ICMM (International Council on Mining & Metals with 16 member companies around the world as of April 2007), the Nippon Mining & Metals Group agrees to the ICMM basic principles (see below) in constantly improving corporate performance for sustainable development and leading the entire industry to ceaselessly contribute to the growth of a sustainable society.

ICMM also promotes various projects associated with sustainable growth, and Nippon Mining & Metals participates in these meetings as a member. The main themes of the projects, which are part of our CSR promotion, include "Considerations concerning local residents," "Extractive Industries Transparency Initiative (EITI)," "Safety and environmental factors in the workplace," and "Work concerning lifecycle analyses and management of materials as in Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)." The projects gather information on these global trends to share and exchange opinions amongst members. Some of the ICMM activities up to FY2006 include releasing announcements concerning climatic change, announcing support of the Extractive Industries Transparency Initiative (EITI: An activity proposed by former UK Prime Minister Tony Blair at the World Summit on Sustainable Development in Johannesburg in September 2002, requiring transparency of the flow of funds associated with resource development), and hosting the International Meeting on Health and Safety held in Johannesburg in November 2006.

### ICMM Principles

1. Implement and maintain ethical business practices and sound systems of corporate governance.
2. Integrate sustainable development considerations within the corporate decision-making process.
3. Uphold fundamental human rights and respect cultures, customs and values in dealings with employees and others who are affected by our activities.
4. Implement risk management strategies based on valid data and sound science.
5. Seek continual improvement of our health and safety performance.
6. Seek continual improvement of our environmental performance.
7. Contribute to conservation of biodiversity and integrated approaches to land use planning.
8. Facilitate and encourage responsible product design, use, re-use, recycling and disposal of our products.
9. Contribute to the social, economic and institutional development of the communities in which we operate.
10. Implement effective and transparent engagement, communication and independently verified reporting arrangements with our stakeholders.

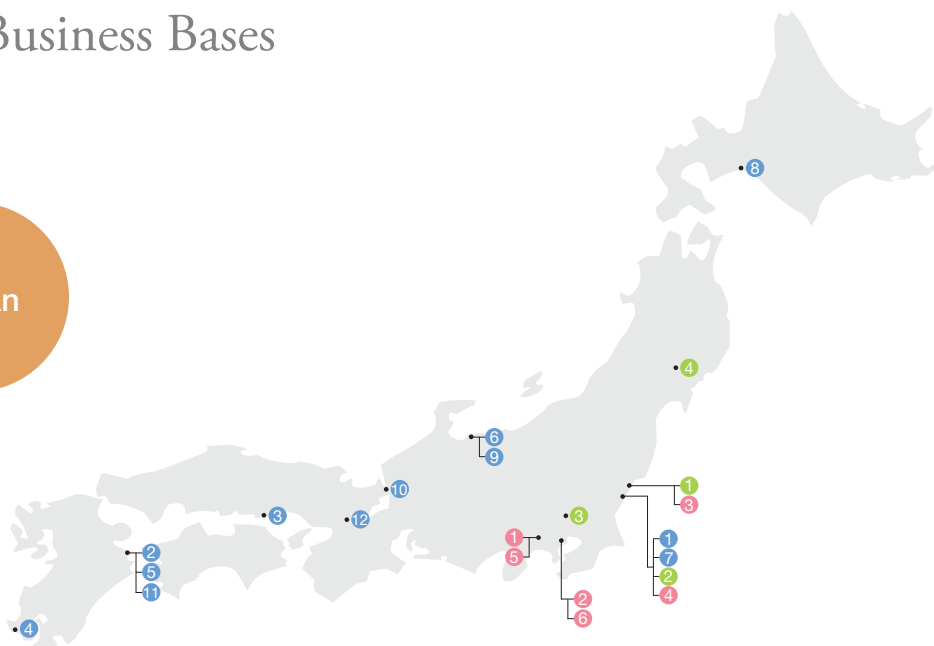
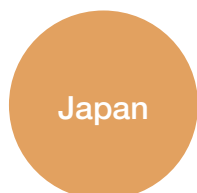


Council meeting



ICMM's International Meeting on Health and Safety

## Main Business Bases



## Resources and Metals Company\*

- ① Hitachi Works, Nikko Smelting & Refining Co., Ltd.
- ② Saganoseki Smelter & Refinery, Nikko Smelting & Refining Co., Ltd.
- ③ Tamano Smelter, Hibi Kyodo Smelting Co., Ltd.
- ④ Kasuga Mines Co., Ltd.
- ⑤ Japan Copper Casting Co., Ltd.
- ⑥ Kurobe Nikko Galva Co., Ltd.
- ⑦ Nikko Environmental Service Co., Ltd.
- ⑧ Tomakomai Chemical Co., Ltd.
- ⑨ Nikko Mikkaichi Recycle Co., Ltd.
- ⑩ Nikko Tsuruga Recycle Co., Ltd.
- ⑪ Nissho Kou-un Co., Ltd.
- ⑫ Takatsuki Plant, Nikko Shoji Co., Ltd.

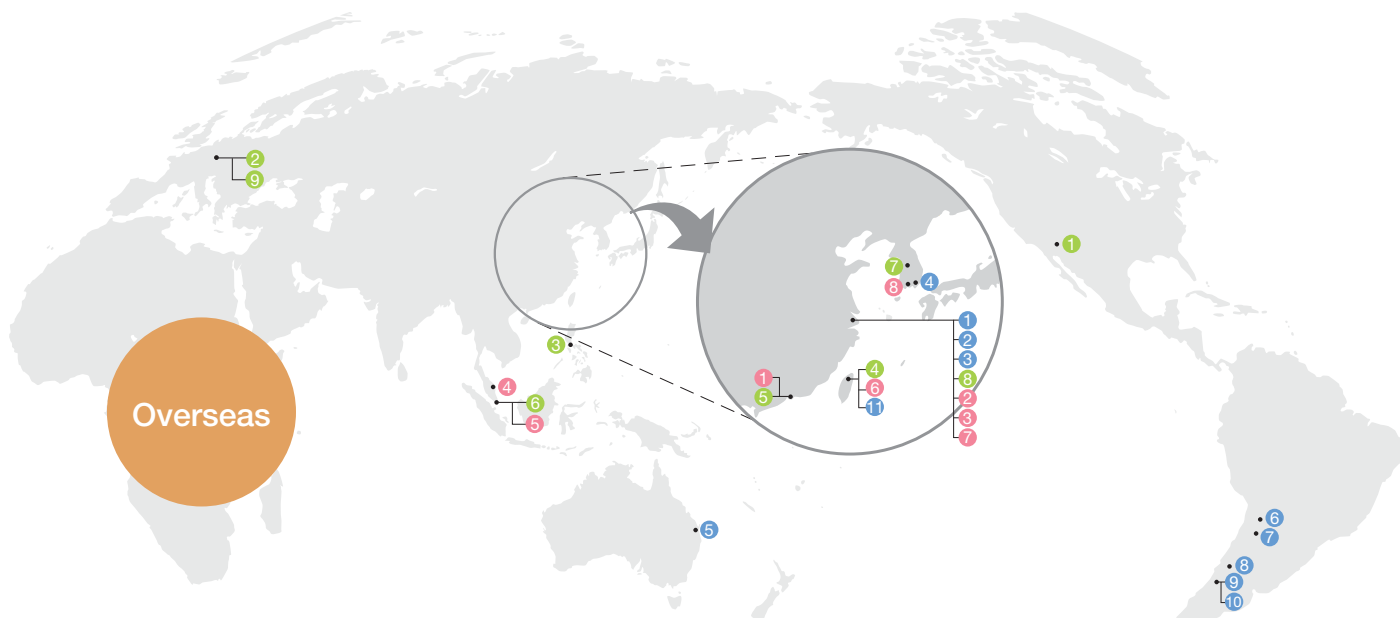
\* including subsidiaries under the direct control of headquarters.

## Electronic Materials Company

- ① Isohara Works
- ② Shirogane Works
- ③ Toda Works
- ④ Ichinoseki Foil Manufacturing Co., Ltd.

## Metal Manufacturing Company

- ① Kurami Works
- ② Kurami Works, Kawasaki Plant
- ③ Isohara Works, Nikko Fuji Electronics Co., Ltd.
- ④ Hitachi Works, Nikko Fuji Electronics Co., Ltd.
- ⑤ Kurami Office, Nikko Coil Center Co., Ltd.
- ⑥ Kawasaki Office, Nikko Coil Center Co., Ltd.



## Resources and Metals Company\*

- ① Changzhou Jinyuan Copper Co., Ltd.
- ② Shanghai Office
- ③ Pan Pacific Copper Shanghai Co., Ltd.
- ④ LS-Nikko Copper Co., Ltd.
- ⑤ Australia Office
- ⑥ Collahuasi Mine
- ⑦ Escondida Mine
- ⑧ Los Pelambres Mine
- ⑨ Chile Office
- ⑩ Pan Pacific Copper Chile Office
- ⑪ Nikko Shoji Taiwan Co., Ltd.

\* including subsidiaries under the direct control of headquarters.

## Electronic Materials Company

- ① Nikko Materials USA, Inc.
- ② Gould Electronics GmbH
- ③ Nikko Materials Philippines, Inc.
- ④ Nikko Materials Taiwan Co., Ltd.
- ⑤ Nikko Materials Hong Kong Ltd.
- ⑥ Nikko Materials Singapore Pte. Ltd.
- ⑦ Nikko Materials Korea Co., Ltd.
- ⑧ Suzhou Nikko Materials Co., Ltd.
- ⑨ Nikko Materials Europe GmbH

## Metal Manufacturing Company

- ① Fuji Electronics Dongguan Co., Ltd.
- ② Nikko Woojin Precision Manufacturing (Suzhou) Co., Ltd.
- ③ Nikko Fuji Precision (Wuxi) Co., Ltd.
- ④ Nippon Precision Technology (Malaysia) Sdn. Bhd.
- ⑤ Nippon Mining Singapore Pte. Ltd.
- ⑥ Nippon Mining Taiwan Co., Ltd.
- ⑦ Nippon Mining Shanghai Co., Ltd.
- ⑧ Poonsan-Nikko Tin Plating Corp.

This report is a digest edition.  
A full report is available in PDF format at the website.  
<http://www.nikko-metal.co.jp/e/environment/index.html>

Please give us your frank opinions about our 2007 Sustainability Report to help us make the next report even better. We welcome any suggestions for improving the report.

Send your views on this report to:

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