

The background features a series of thin, curved lines in orange and pink that sweep across the page. Several circular inset images are arranged along these lines: a globe, a cityscape, a close-up of a person's face, a close-up of a circuit board, a desert landscape with mountains, and a small green plant growing from a rock. At the bottom, there is a large, dynamic splash of blue water with many small bubbles rising from it.

Sustainability Report 2009

To Our Readers

Editorial Policy

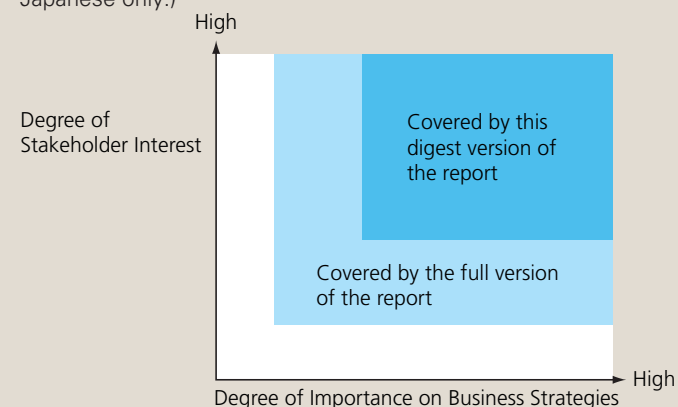
The Nippon Mining & Metals Group is engaged in corporate social responsibility (CSR) activities and committed to assisting the sustainable development of society through its business activities.

We issue a sustainability report each year in order to disclose appropriate corporate information to a broad range of our stakeholders such as our customers, suppliers, employees, shareholders and investors, industry–government–academia groups, local communities, and other interested parties as a communication tool to enhance stakeholder understanding of our CSR activities.

We prepared the Sustainability Report 2009 in accordance with the G3 Guidelines of the Global Reporting Initiative (GRI). The report also complies with the GRI Mining and Metals Sector Supplement.

In light of our corporate philosophy, as well as our initiatives in accordance with the 10 sustainable development principles of the International Council on Mining and Metals (ICMM), the report details our activities from the perspectives of management, economic activities, environmental activities, and social activities.

This report is the digest version, featuring those topics that we believe are of the utmost interest to our stakeholders and important to the Group’s business strategies, which are comprehensively discussed in the full version of the report. (The full report is available in PDF format from our website in Japanese only.)



Boundary of the Report

The report covers Nippon Mining & Metals Co., Ltd. and its 38 domestic or overseas subsidiary and affiliated companies.

Subject Reporting Period

The report primarily covers our CSR activities conducted between April 2008 and March 2009 (fiscal 2008), but it also includes information regarding events that occurred either before or after this period.

Date of Issue

October 2009

Flow of Our Business

The Nippon Mining & Metals Group is engaged in the integrated operation of non-ferrous metals from mining, smelting and refining, and electronic materials manufacturing, and the sale and marketing of these products to recycling for environmental care and preservation. Simultaneously, while in pursuit of these operations, the Group constantly strives for the

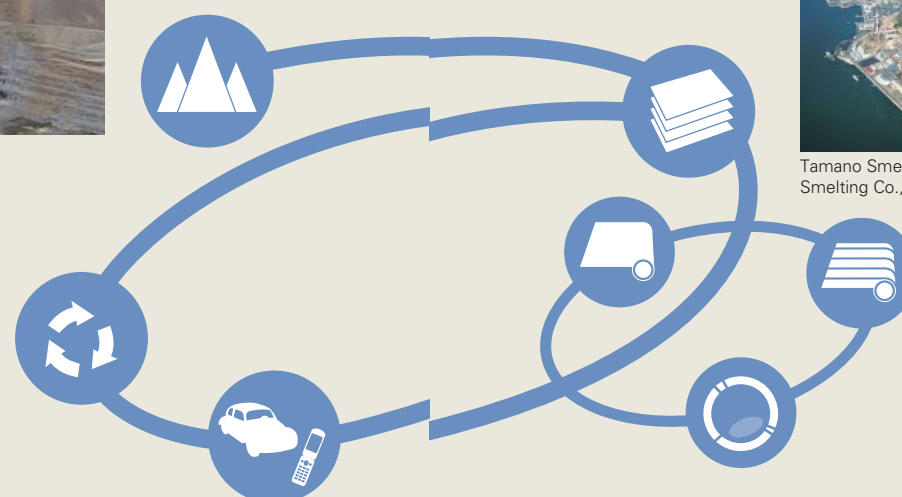
Resources Development

The Group aims for high equity ratio in its mines.

The Group has been active in participating in high-quality mine development projects from their planning stage. We are also promoting the development of our own mines, and presently conducting a feasibility study for the Caserones copper mine development in Chile.



Los Pelambres Mine (Chile)



Recycling and Environmental Services

The Group is contributing to the establishment of a recycling-oriented society through recycling non-ferrous metal resources.

This business is comprised of (1) recycling, in which value-bearing metals, such as copper and precious metals, are recovered from recycled raw materials; and (2) environmental services, in which industrial waste materials are detoxified without generating any secondary waste.

With the start of operations at the HMC Works in Hitachi City, Ibaraki Prefecture, we are forging ahead with the development of urban mines.



HMC Works

Activities

materials stewardship as it carries out the corporate social responsibilities.

By pursuing technological rationality and efficiency, the Group strives to ensure the more effective use of the value-bearing metal resources that support present and future societies.

Smelting and Refining

Manufacturing capabilities and cost competitiveness in the top tier worldwide.

Through a collaborative relationship with top-class global copper producers, in both quality and quantity, including domestic and overseas companies, we have established a world-class copper producer alliance for producing and marketing non-ferrous metals such as copper, gold, and silver.



Saganoseki Smelter & Refinery, Nikko Smelting & Refining Co., Ltd.



Tamano Smelter, Hibi Kyodo Smelting Co., Ltd.

Electronic Materials

The Group enjoys the world’s top market share in a broad range of electronic materials thanks to its advanced technologies.

This business comprises three pillars: (1) copper foil business, in which we manufacture and market electro-deposited copper foil, treated rolled copper foil, and other related products; (2) thin-film materials business, in which we handle sputtering targets, compound semiconductor materials, and other related products; and (3) metal manufacturing business, in which we conduct precision rolling and precision fabrication, including gold plating and press processing.

Furthermore, we will focus on new businesses such as environment-friendly materials, including cathode materials for automotive lithium-ion batteries.



Sputtering target for semiconductors



Phosphor bronze strip

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Message from the President

We are committed to contributing to the sustainable development of resources and materials, and a harmonious relationship with contributing to the achievement of this goal.



A Global Corporate Citizen Engaged in the Business of Resources and Materials

Nippon Mining & Metals Co., Ltd. is the core company in the non-ferrous metals business under Nippon Mining Holdings, Inc., a holding company having both metals and petroleum as its major fields of business.

Founded at the Hitachi Mines (commenced operation 1905), at the time when it was one of the largest copper mines in Japan, the Company has since been active in businesses covering upstream resources development, mid-stream metals smelting and refining, and the downstream areas of electronic materials, metal fabrication, and recycling and environmental services with copper at its core. The Company is forging ahead with a global mindset under its basic policy not only to grow each field of its business in a steady and solid way but also to maintain a well-balanced approach.

As it is said that “There is no business to be done on a dead planet,” we as a private company, while also being a global corporate citizen, are strongly encouraged to take measures toward realizing the sustainable development of society at a time when the alarm bells of concerns such as for climate change are ringing.

As we take a look back at our corporate history, the Company has since its founding been operating with the philosophy in mind that we maintain a harmonious relationship with local communities by exerting the utmost care and attention to a range of items such as environmental issues. This is symbolized by the construction of the Giant Smokestack and the planting of Oshimazakura Cherry trees at the Hitachi Mine. (The author Jiro Nitta’s novel “Aru Machi no Takai Entotsu” / “A Tall Stack in a Town” was written on these themes.)

Standing solid on such a business philosophy—a philosophy by which we may even be considered a “pioneer of CSR activities”—while also as a global player in the field of resources and materials, the Nippon Mining & Metals Group is conducting CSR activities with full recognition of the value of pursuing harmony with society with a global mindset.

Our CSR Activities are Nothing More or Less than Our Business Activities

The features of our business in terms of CSR are:

1. We supply society with the basic metal resources and materials that support daily life and industry activities in a broad sense.

of society. Innovations in the productivity of our stakeholders, are our way of

2. Our business activities—ranging from the exploration of resources and the manufacturing and fabrication of the most up-to-date materials to materials recycling—are consistently geared to a recycling-oriented business structure that uses the limited resources from the earth as its direct raw materials.
3. Our business activities are developing globally, widely, and diversely.

Reflecting on these features, the Group will further pursue “innovation in productivity” by way of tenacious development of technologies in all of our fields of business while engaging in recycling and eliminating unsustainable practices and waste. Simultaneously, the Group will continue to contribute to the development of a sustainable recycling-oriented society while exerting every effort to maintain a harmonious relationship with a diverse range of stakeholders including the global environment and future generations. We consequently established a corporate philosophy incorporating our will, as presented in the outset of my message.

In order to successfully carry out our CSR activities for the purpose of fulfilling our corporate philosophy, it is imperative that each individual employee conducts CSR activities as a matter of course in their daily life. For this reason, as we recognize that our CSR activities are nothing more or less than our business activities, the Company has established medium-term plans for its CSR activities, which are progressing in their development every year.

During fiscal 2008, we formulated the CSR Action Policy in order to ensure that our approach to CSR has both reached and been internalized at all levels by the individual employees who play the leading roles in our CSR activities. The policy spells out in concrete terms how we should implement the pillars of our corporate philosophy in each business field—“innovation in the productivity of resources and materials” and “a harmonious relationship with stakeholders.”

Toward the Stable Supply of Resources and Materials

The 21st century is said to be a period when resources will be increasingly scarce. By this token, the social mission the Group shoulders to stably supply resources and materials becomes heavier. As noted in this Sustainability Report 2009, the Group is determined to realize this mission from various angles by way of fully applying our own technologies toward a broad range of efforts such as the development of new overseas mines; recovery of rare and other metals from

used mobile phones and others, otherwise called “urban mines;” and development of the materials for use in lithium-ion batteries used as the power source for electric vehicles as well as other uses.

Deepening Your Understanding, Welcoming Your Opinions

The Group has endorsed the sustainable development principles of the ICM (International Council on Mining and Metals) and supported those of the EITI (Extractive Industries Transparency Initiative) with the goal of developing a sustainable society. This year’s Sustainability Report 2009 has been compiled in accordance with the GRI (Global Reporting Initiative) G3 Guidelines as was the case for the previous year’s report. In this report, we feature among other items special features such as “Urban Mine Development” in response to the keen interest of our stakeholders in these areas. We believe improving the contents of our sustainability reports directly reflects improvements in our own CSR activities. Recognizing that “CSR activities are nothing more or less than our business activities,” we are determined to further deepen and advance our CSR activities. I hope that this year’s sustainability report will help readers deepen their understanding of our CSR activities while, at the same time, encourage them to candidly voice their opinions.

On June 13, 2009, an accident took place that took the lives of three employees belonging to Nissho Koun Co., Ltd., the Group member company engaged mainly in stevedoring of metal concentrates. As the top management executive of the Nippon Mining & Metals Group, I take seriously the occurrence of this tragic accident, and I am consequently determined to once again exert my utmost efforts to materialize thorough safety and disaster-prevention measures that are the prerequisite to the continuation of our business.

A handwritten signature in black ink, reading "M. Okada".

Masanori Okada
President and Chief Executive Officer
Chairman of CSR Committee
Nippon Mining & Metals Co., Ltd.

Corporate Philosophy and Code of Conduct

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 is 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 & 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.

Code of Conduct

As an integrated developer of nonferrous resources and materials covering all areas ranging from resource development and smelting & refining of nonferrous metals to electronic materials business, and environmental and recycling services, we will conduct our business operations in accordance with the following code of conduct. By doing so, we aim to obtain the satisfaction and trust of our customers and of society as a whole, and to become a respected corporation operating on a global scale that helps create a sustainable society.

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 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

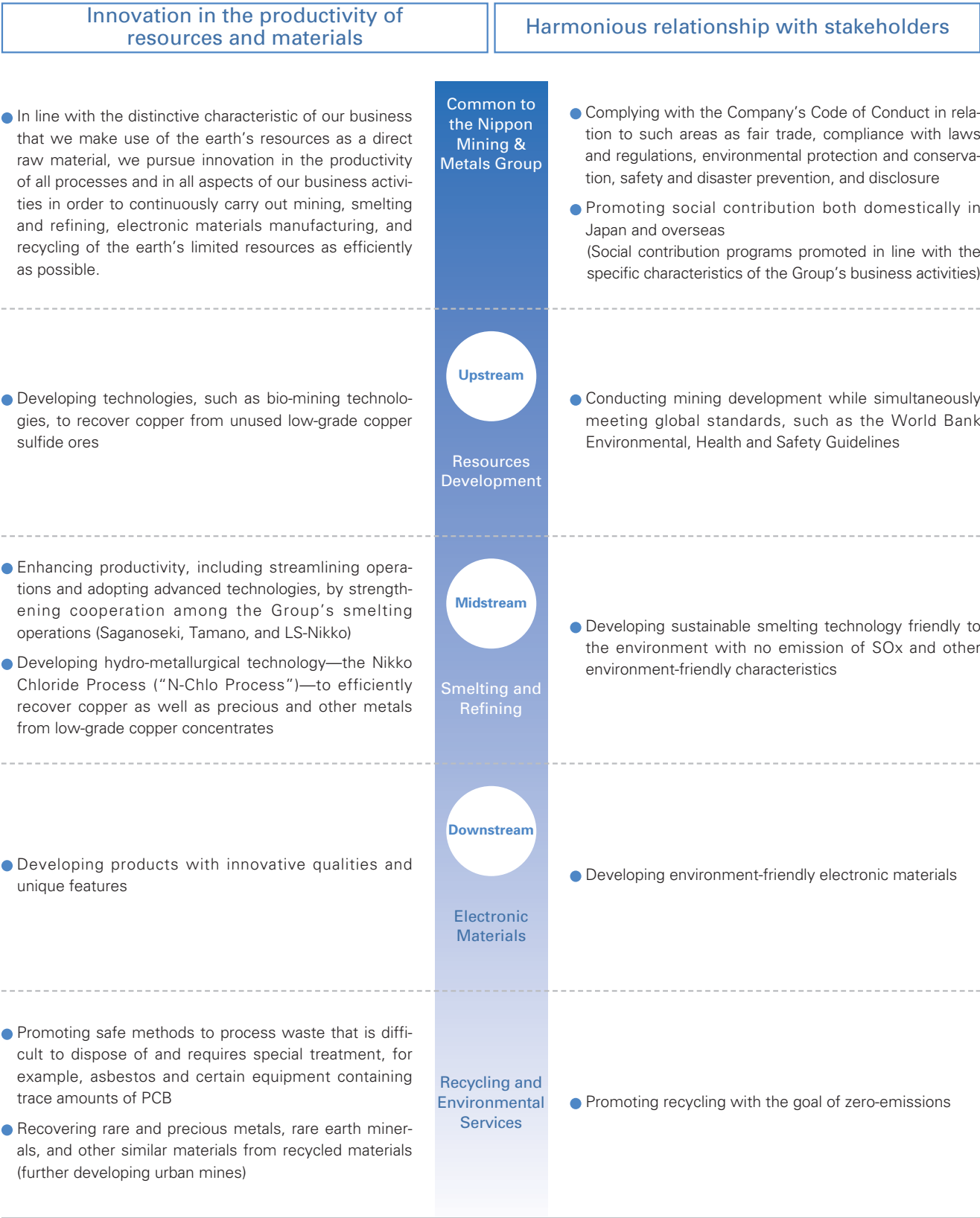
We stand firm against all antisocial forces and groups that threaten social order and safety.
10. Management responsibilities

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.

CSR Action Policy

The belief that “CSR activities are nothing more or less than our business activities” clarifies how we should incorporate our corporate philosophy into the day-to-day activities of the Group.

In line with this CSR Action Policy, the Nippon Mining & Metals Group is exerting efforts to smoothly carry out CSR activities that reflect the detailed annual plans set forth each fiscal year as well as undertake the strict implementation of the PDCA (Plan, Do, Check, and Act) cycle.



Goals, Performance, and Evaluations for Fiscal 2008 and Plans for Fiscal 2009

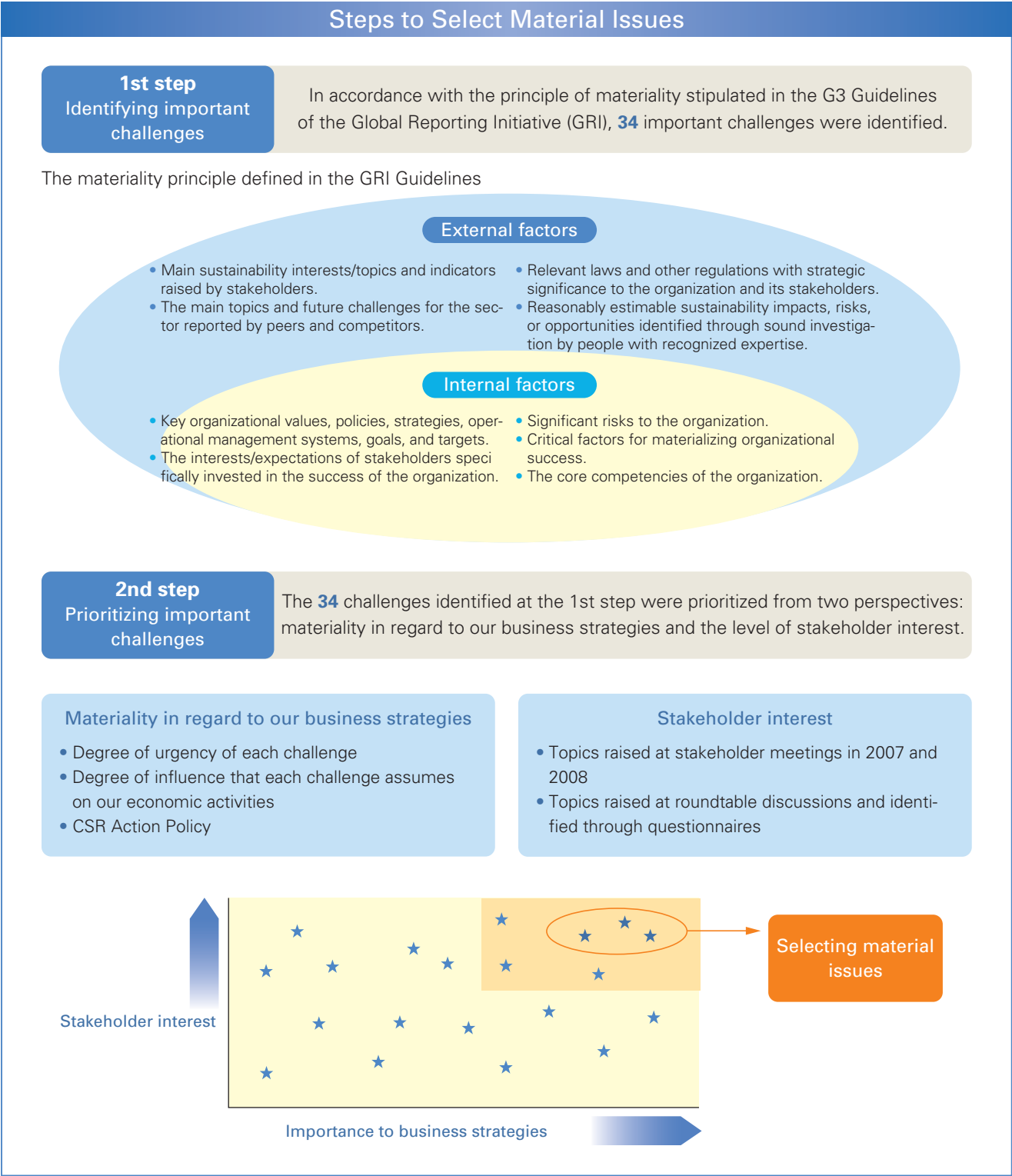
The Nippon Mining & Metals Group set goals for each issue identified in its CSR Action Policy and implemented the PDCA cycle to evaluate goal attainment levels.

Attained goals = A Partially attained goals = B Did not attain goals = C

PLAN		DO		CHECK	ACT
Issues and goals	Targets for fiscal 2008	Initiatives	Performance during fiscal 2008	Evaluations	Goals and challenges for fiscal 2009
CSR Action Policy of the entire Group					
■ Innovation in the productivity of resources and materials					
Innovation in the productivity of each operation and throughout every aspect of our business activities	Promoting innovation in productivity	Cases of commendations for innovation in productivity <ul style="list-style-type: none">• Saganoseki Smelter & Refinery, Nikko Smelting & Refining Co., Ltd.: 1 encouraging prize• Isohara Works: 1 encouraging prize• Nikko Fuji Electronics Dongguan Co., Ltd.: 1 special award• Tamano Smelter, Hibi Kyodo Smelting Co., Ltd.: 1 special encouragement award	Total 4 awardees	A	To continue implementation
		Cases of commendations for innovation in the productivity through improving activities <ul style="list-style-type: none">• NPM activities conducted in the Saganoseki region: 2 yearly-performance awardees	Total 2 awardees	A	To continue implementation
	Innovation in the productivity regarding environmental issues				
	Reducing energy consumption intensity by 3% from the average of the period between fiscal 2003 and 2005	Cases of promoting energy conservation activities <ul style="list-style-type: none">• Promoting the Loss-Zero activity at Nikko Environmental Services Co., Ltd.• Improving recovery of waste heat—improving the recovery rate by 9% at the Shirogane Works	Reducing by 2.7% from the average of the period between fiscal 2003 and 2005	B	Reducing by 4.0% from the average of the period between fiscal 2003 and 2005
	Reducing CO ₂ emission intensity by 4.5% from the average of the period between fiscal 2003 and 2005	Cases of reducing CO₂ emissions <ul style="list-style-type: none">• Improving DEG operation, introducing high-powered chillers and lighting equipment, and streamlining operation of compressors at the Shirogane Works	Reducing by 5.4% from the average of the period between fiscal 2003 and 2005	A	Reducing by 6% from the average of the period between fiscal 2003 and 2005
	Reducing final waste disposal intensity by 18% from the average of the period between fiscal 2003 and 2005	Cases of reducing volume of waste and making effective use of valuable resources <ul style="list-style-type: none">• Recovering valuable metals from recycled sputtering targets for optical disks at the Isohara Works and reusing woody debris at the Shirogane Works	Reducing by 60% from the average of the period between fiscal 2003 and 2005	A	<ul style="list-style-type: none">• Reducing by 60% from the average of the period between fiscal 2003 and 2005• Goals to be attained from fiscal 2009 onward have been revised.
■ Harmonious relationship with our stakeholders					
Complying with the Code of Conduct (Fair trade, compliance with laws and regulations, environmental conservation, safety and disaster prevention, disclosure of corporate information, and other related issues)	Eradicating misconduct	Responding to misconduct <ul style="list-style-type: none">• Responding to the inspection conducted in November 2007 regarding molten metals—metals generated by garbage incineration	In October 2008, a Cease and Desist Order was issued to Nikko Environmental Services Co., Ltd. by the Japan Fair Trade Commission. *No occurrence of misconduct in fiscal 2008 has been reported.	A	
	Strictly securing safety and preventing disaster	Strictly securing safety and preventing disaster <ul style="list-style-type: none">• Creating an optimum working environment• Eradicating occupational diseases	<ul style="list-style-type: none">• Accidents with and without lost working days: 31 cases• Fires, explosions: zero• Occupational diseases: zero *Performance from January to December 2008	C	<ul style="list-style-type: none">• Continuing activities to attain zero occurrences of accidents. The Management Policy on Health and Safety announced in fiscal 2009 stated that safety education and training programs for part-time employees and less-experienced operators are to be reinforced since accidents involving them have increased.• Continuing activities to attain zero occupational diseases.
	Organizing educational programs to promote the integration of CSR	Organizing educational programs for employees <ul style="list-style-type: none">• Conducting briefing sessions and roundtable discussions with CSR-related agendas, and carrying out a questionnaire regarding CSR• Organizing compliance-related education programs• Organizing training workshops to deepen understanding of the Antimonopoly Act	Implemented as planned	A	To continue implementation
	Complying with laws and regulations	Complying with laws and regulations <ul style="list-style-type: none">• Pre-registering those substances that are subject to REACH• Systematic disposal of asbestos and PCB	Eight substances that are subject to REACH have been pre-registered. In fiscal 2008, asbestos and PCB were disposed of as planned.	A	To continue implementation
	Engaging in communication with local communities	Promoting communication with local communities <ul style="list-style-type: none">• Participating in cleanup activities• Engaging in communication through summer festivals and other events	Annual events including cleanup activities and summer festivals were conducted at operating sites.	A	To continue implementation
	Promoting social-action programs	Promoting social-action programs <ul style="list-style-type: none">• Initiative to grow forests at the site of a former mine—the Oe Mine• Supporting the “ASEAN Workshop on CSR in Mining Industry”• Supporting the activities of NPO 2050• Supporting “Saganoseki Machizukuri Kyogikai” (“Council for the Revitalization of Saganoseki City”) and other groups	Initiatives stipulated in the left column were implemented in fiscal 2008.	A	To continue implementation
	Obtaining certifications	Obtaining OHSAS and ISO certification <ul style="list-style-type: none">• OHSAS18001 certification is to be obtained by operating sites located in the Hitachi, the Isohara, the Toda, the Kurami, and the Saganoseki districts, as well as the Bade Works of Nikko Metals Taiwan Co., Ltd.• ISO14001 certification is to be obtained by Nikko Metals Philippines, Inc.• Operating sites located in the Hitachi, the Isohara, the Toda, the Kurami, and the Saganoseki districts, and the Bade Works of Nikko Metals Taiwan Co., Ltd. have obtained OHSAS18001.• Nikko Metals Philippines, Inc. has obtained ISO14001.	<ul style="list-style-type: none">• Operating sites located in the Hitachi, the Isohara, the Toda, the Kurami, and the Saganoseki districts, and the Bade Works of Nikko Metals Taiwan Co. Ltd. have obtained OHSAS18001.• Nikko Metals Philippines, Inc. has obtained ISO14001.	A	Continuing endeavors to obtain OHSAS and ISO certifications. <ul style="list-style-type: none">• ISO/TS16949 certification is to be obtained by the Isohara Works.• ISO14001 certification is to be obtained by the HMC Works.• OHSAS18001 certification is to be obtained by the HMC Works, Tomakomai Chemical Co., Ltd., Nikko Mikkaichi Recycle Co., Ltd., Nikko Tsuruga Recycle Co., Ltd., the Isohara Worls of Nikko Fuji Electronics Co., Ltd., and Gould Electronics GmbH.

Material Issues for the Nippon Mining & Metals Group

The Nippon Mining & Metals Group addresses various challenges with regard to the economy, the environment, and society. From these challenges, three material issues that should be given priority in reporting to stakeholders were selected, and are consequently introduced in our Sustainability Report 2009. As the first step, important challenges were identified in accordance with the principle of materiality stipulated in the G3 Guidelines of the Global Reporting Initiative (GRI). Then, the identified challenges were prioritized as the second step. Finally, the material issues were selected as a conclusion of discussions by the CSR Committee. The three issues that were selected by this process are presented as special features of this Sustainability Report 2009 from p.11 onward.



Special Feature —The Three Issues the Nippon

1. Establishing a Recycling-Oriented Society



Greater Care of the Earth's Resources —The Necessity to Establish a Recycling-Oriented Society

Modern society heavily relies on fossil fuel such as petroleum and coal as well as mineral resources including ferrous and non-ferrous metals. The Nippon Mining & Metals Group believes that the effective utilization of the earth's resources is essential to the sustainable development of society for future generations.

In certain respects, the lifestyle that humankind developed in the 20th century—namely mass production, mass consumption, and mass disposal that we have come to rely on—brought forth great abundance and convenience. On the other hand, it is undoubtable that the ensuing consumption of huge amounts of energy and enormous volume of CO₂ emissions caused climate change including global warming and created a large impact on the earth's environment.

In the 21st century, it is said to be imperative to establish a recycling-oriented society where the wasting of resources is controlled and the load on the environment is mitigated by way of efficiently utilizing the earth's resources, while at the same time properly recycling the products that are no longer used.

Various Current Issues Surrounding the Environment

[Waste]

- Continuous mass generation of waste
- Capacity limitation of final disposal sites
- Increased risks of environmental deterioration and health damage

[Resources and Products]

- Concern about depletion of natural resources
- Increased amount of CO₂ emissions posed by expanded industrial activities
- Possible limitation of new resource development posed by environmental laws and other regulations

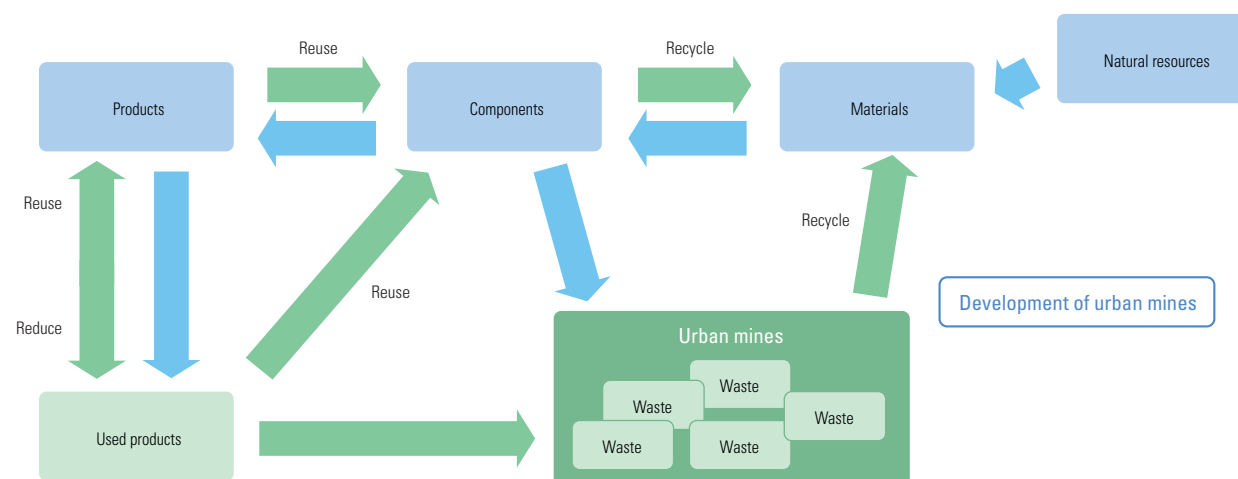
Structure of a Recycling-Oriented Society

In Japan, the 3R Concept was adopted in the Basic Law for Establishing the Recycling-Based Society enacted in 2000 that sets forth to (1) minimize the generation of waste, (2) reuse repeatedly, (3) recycle as resources, (4) incinerate and recover heat (thermal recycling), and (5) properly dispose of with no contamination to the environment.

In order to realize this recycling-oriented society, it is necessary to change our mind-set as well as our daily lifestyles to create a society that effectively utilizes its resources. In particular,

the rare and other metals that are used in various electronic devices and automotive components. And it is drawing attention to the notion that these resources are recoverable from urban mines.

Making full use of the metal refining technologies that Group companies accumulated over the years in the field of copper smelting and refining, we will actively pursue the recovery of metals from urban mines, thereby contributing to the building of a recycling-oriented society.



Mining & Metals Group Considers Material

Concept of Urban Mines—What are Urban Mines?

Useful metals are contained in the immense volume of waste generated from our daily lifestyles. Particularly, in densely populated urban areas, large quantities of metals together with waste tend to pile up.

The term "urban mines" collectively denotes all the metals able to be recycled and classified from among the non-ferrous metals that were originally extracted from natural ores and made into various forms after going through smelting and refining processes and that were once used in human economic activities.

Advantages that the Development of Urban Mines Provides

When recovering non-ferrous metals from scraps, less energy is consumed and less CO₂ is emitted than the case with a series of processes involving mining, transporting, and smelting and refining. It also does not pose the potential hazards to the

environment that are normally caused by mining processes.

Other advantages in the development of urban mines are listed below:

• Reducing in CO₂ Emissions—Mitigating Global Warming

The current data and existing literature show that recovering copper metal from recycled raw materials derived from urban mines emits only approximately one quarter of the CO₂ that is generated in producing it from natural resources.

• Saving Untapped Underground Natural Resources

There is a limit to the volume of deposited resources in the earth, which means developing urban mines will lead to a cutback in the amount of natural ore to be mined.

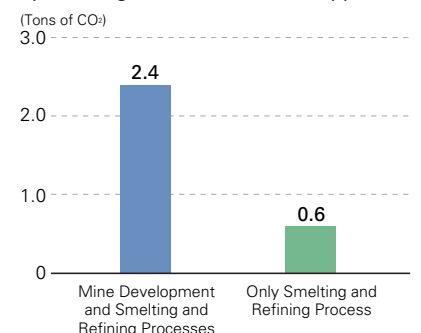
• Extending the Life of Final Disposal Sites

Developing urban mines involves transforming waste, which we have until now thrown away, to resources. Implementing 3R initiatives will result in extending the life of final disposal sites.

• Reducing the Impact on the Environment

The production of metals from natural resources necessitates ores from natural mines. Copper content in the ore is about one percent. Since the weight of a 10-yen coin is about 4.5 grams, it will require mining about 1 kilogram of ore to produce two 10-yen coins. Developing urban mines will reduce the amount of ore mined, and consequently it will decrease the cost of resources development.

Approximate amount of CO₂ emissions when producing one ton of refined copper



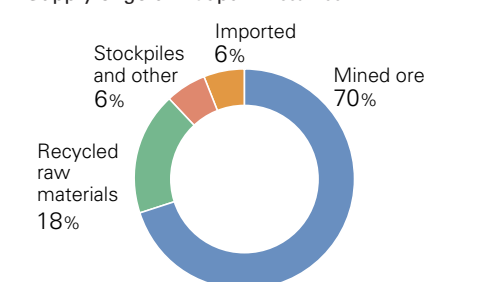
Reference: "Summary of LCI Data of Non-ferrous Metals," the Japan Mining Industry Association, published January 2003; "The Journal of Life Cycle Assessment, Japan," Takeshi Adachi and Gento Mogi, published in July 2006

The Reality of Urban Mines Development

While various advantages are available from urban mines, in fiscal 2007, quantities of gold, silver, and copper metals recovered from recycled products accounted for only 18%, 6%, and 6% of the total domestic consumption of these three metals, respectively.

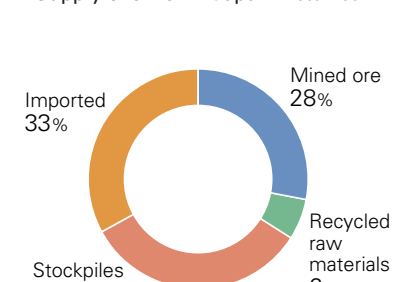
The majority of these metals consumed in Japan are still produced from mined copper ore. However, in order to utilize the earth's resources more effectively, the urgent and proactive development of urban mines is a social imperative.

Supply of gold in Japan—fiscal 2007



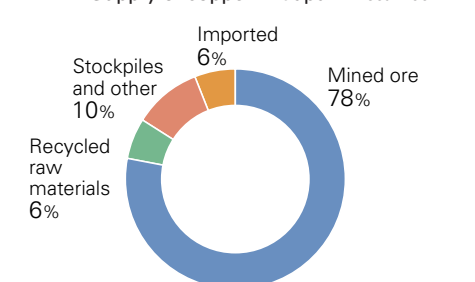
Reference: the website of the Japan Gold Metal Association

Supply of silver in Japan—fiscal 2007



Reference: "Kozan" published in November 2008 by the Japan Mining Industry Association

Supply of copper in Japan—fiscal 2007



Nippon Mining & Metals Co., Ltd. Sustainability Report 2009



Challenges for the Development of Urban Mines

Although people's interest in and expectations toward urban mines are rising, it is not an easy, simple process to recover metals from urban mines. Natural mines bear mineral lodes, the geological layers containing high metal content ore deposits. In the development of natural resources, we must first find these mineral lodes, and then we can extract ore by mining the deposits. How we can find mineral lodes in urban mines more efficiently still remains to be solved.

In terms of urban mines, the ore is the used product, industrial waste, and other related sources. Therefore, if there exists a system to recycle these materials, we can say that the lode has already been discovered. However, a large amount of "ore" from urban mines is currently not recycled but rather discarded.

Today's urban mines are still in an underdeveloped state, where only a part of the mineral lodes is mined.

The Current State and Issues Regarding the Development of Urban Mines

Issues in Collecting Used Mobile Phones

Mobile phones contain in their memory chips a large amount of personal information and data, such as e-mail addresses, incoming and outgoing messages, as well as photos. Therefore, more people have decided to retain their used mobile phones rather than disposing of them. As a result, the number of mobile phones being recycled remains low.

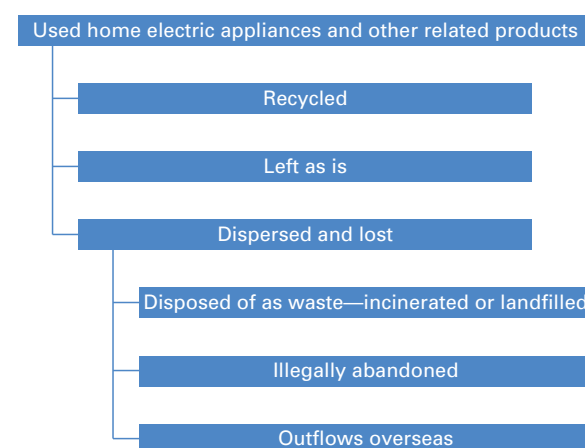
A survey conducted by the Telecommunications Carriers Association indicated that the number of mobile phones and PHS devices collected in fiscal 2007 decreased by 180 thousand, to 6,440 thousand, and it has been continuously decreasing from the peak of 13,620 thousand in fiscal 2000.

Dispersed and Lost "Ores" from Urban Mines

Most of the "ores" contained in urban mines are not economically utilized but are rather disposed of as waste—incinerated or landfilled—or illegally abandoned.

There are various economical and technological issues to make these "ores" recoverable from urban mines rather than being thrown away or lost.

- As it is costly to sort and disassemble electronic devices, it does not at present economically meet the business goals.
- It is technologically difficult to efficiently recover various metals contained in urban mines.
- In particular, the rare metals content is low, and it is difficult to efficiently recover them. Also, it is reported some of the "ore" from urban mines that is considered as outflows overseas is dumped after value-bearing metals are extracted by the use of harmful substances that damage the environment.



Recovered "Ores" from Urban Mines



Our Approach to Establishing a Recycling-Oriented Society

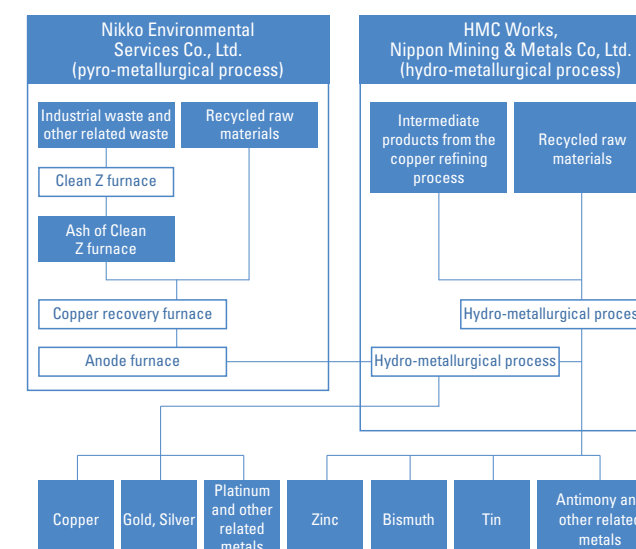
In order to develop urban mines, it is imperative to build a social and economic system where resources are circulated to maximize the value of the resources while protecting the environment. Therefore, the problems particular to urban mines cannot necessarily be solved soon.

The Nippon Mining & Metals Group is actively engaged in business activities ranging from resources development, smelting and refining, the manufacturing and marketing of non-ferrous metal materials, and the secondary processing of materials to the recycling of metal resources derived from sources such as waste. The Group in its entirety is forging ahead with the efficient utilization of resources as a company that bears a responsibility to establish a recycling-oriented society.

Start of the Operation of a Plant to Dispose of Recycled Raw Materials, with Expectation to Bring Desired Outcomes

Recovering Various Value-Bearing Metals

In May 2009, the Hitachi Metal Recycling Complex (HMC) Works started operations. The Group has developed a proprietary, complex process by combining pyro-metallurgical and hydro-metallurgical processes, cultivated in smelting and refining operations, and recycling and environmental services. This unique process enables the Group to recover various value-bearing metals from recycled raw materials mainly generated from the Tokyo metropolitan area.



Disposition of Recycled Raw Materials Generated Abroad

The Group also collects raw materials generated abroad and processes them at the HMC Works and other plants.

Group company Nikko Metals Taiwan Co., Ltd. is scheduled to start operation of its Chionpin Recycling Center in September 2009, to conduct pre-treatment activities—crushing and sampling of recycled raw materials—and then to ship to Japan. (Please see p. 32 for details.)

Promoting Recycling with the Goal of Zero-Emissions

At the recycling-related affiliated and subsidiary Group companies—Nikko Environmental Services, Tomakomai Chemical, Nikko Mikkaichi Recycle, and Nikko Tsuruga Recycle—pre-treatment activities are being conducted, including melting, incinerating, drying, crushing, disassembling and sorting, in order to efficiently recover value-bearing metals. The Group does not generate secondary wastes.



Developing Technologies to Recover Value-Bearing Metals More Efficiently

The Technology Development Center is promoting technology development for the deposition of recycled raw materials, by the combination of pyro-metallurgical and hydro-metallurgical processes, as well as a physical separation process, which employs a mineral dressing technique practiced at the mines.

Also, the Group is engaged in technology development to isolate and recover nickel, cobalt, manganese, and lithium from used lithium-ion batteries, by applying a cutting-edge technology to isolate and recover nickel and cobalt through the use of a sulfuric acid bath, which we successfully developed for the first time in the world in 1978.

2. Developing Environment-Friendly Technologies



Necessity of the Development of Environment-Friendly Technologies

The Nippon Mining & Metals Group believes environmental consciousness plays an important role in the sustainable development of both society and companies. In line with this belief, we are striving to reduce the environmental impact of our manufacturing activities. In addition, we are also striving to develop products that reduce the environmental impact when used by customers and end users.

We are promoting technology development focusing on the themes of (1) developing products that help realize resource conservation, (2) improving the recycling properties, and (3) reducing the environmental impact as our basic policy in relation to developing environment-friendly products.

Laws and regulations domestically and overseas have been revised with an emphasis on environmental protection. In view of that, the development of environment-friendly products is essential for the sustainable development of society to be realized.

Development of Technologies for Environment-Friendly Products of the Nippon Mining & Metals Group

In the business fields of resources development and smelting and refining metals, the development of technologies to deal with both resource depletion and ores with deteriorating metal grades is required. In addition, developing electronic materials containing less hazardous substances and promoting energy conservation is strongly encouraged. Furthermore, technologies that are also environment-friendly when our products are used by customers and end users are also strongly required.

The Group is promoting the development of environment-friendly products utilizing technologies accumulated over our long and consistent businesses in the non-ferrous metals field, from resources development and smelting and refining to manufacturing and marketing of electronic materials as well as recycling and environmental services.

The table below shows examples of our technologies in relation to electronic materials.

Classification by Degree of Environmental Friendliness and Major Technologies Relating to Electronic Materials

Broad classification	Narrow classification	Major technology developments for electronic materials	Location for onset of effects
Resource recycling / Resource conservation	Miniaturizing Downsizing Weight saving	High-performance copper alloys Under bump metallurgical treatment Nano plating	Customers End users
	Reduction in the number of components	Copper foil with integrated thin film resistor / TCR®	Customers
	Replacement of precious metals	High-purity metals	End users
Resource recycling / Product lifecycles	Extending product life	Highly functional foil	End users
Preventing global warming and reducing CO ₂ emissions	Reduction in power consumption	Gallium Nitride (GaN) thick-layer substrates Transparent semiconductors	Customers End users
		Cathode materials for lithium-ion batteries	End users
Environmental risks	Reducing substances that increase the environmental impact	Lead-free surface-mounted chemicals Cyanide-free electro-less gold plating Arsenicum-free copper foil	Customers

Reinforcing Function for Technology Development

In order to better understand the needs of customers and to effectively promote our environment-friendly technologies, we have reinforced the technology development function by placing branches of the Technology Development Center in each of our Works, which are conveniently located nearby customers.

We have also further enhanced our technology development function for environment-friendly products by establishing the Technology Development Group in fiscal 2008, which not only improves existing technologies cultivated in a variety of our business fields but also advances technology development by combining technologies from various business fields.

Introduction of the Development of Environment-Friendly Technologies

Examples of initiatives in relation to the development of environment-friendly technologies are as follows:

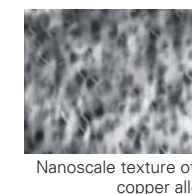
Development of High-Performance Copper Alloys



Some copper alloys precipitate micron-sized particles contained in the alloys by aging treatment—low-temperature heat treatment conducted after high-temperature heat treatment. The fine-tuning of heat treatment temperature conditions can control precipitation of particles, thereby enhancing the mechanical strength of the copper alloys. Stronger mechanical properties of the alloys make connectors and terminals thinner and smaller. This allows electronic devices including mobile phones to also be thinner and smaller, consequently contributing to resource conservation.

As a research engineer for newly designed, highly functional alloys, I feel excited when I can improve the performance of a product that also contributes to addressing an important social issue like resource conservation. In order to both satisfy customer needs and respond to the needs of society, I would like to design and develop alloys with stronger mechanical properties and higher electrical conductivity by advancing technologies for heat treatment and in relation to rolling capabilities.

Toshiyuki Ono, Senior Engineer, Kurami Branch, Technology Development Center



Nanoscale texture of a copper alloy

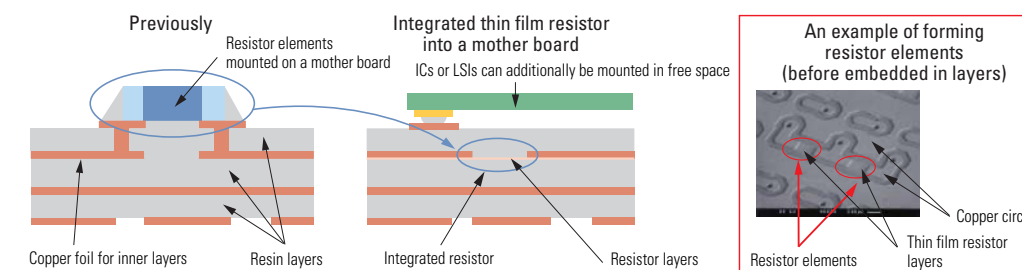
Development of TCR®—Copper Foil with an Integrated Thin Film Resistor



I am sure that everybody knows that personal computers contain green-colored mother boards with solder-mounted ICs, resistor elements, and capacitors. With the high technology that we currently possess, we can reduce the size of the resistor elements mounted on mother boards. This technology, which involves integrating resistor elements directly into mother boards, does not require any soldering, thereby contributing to resource conservation. In the future, I would like to advance the technology to also integrate capacitors into mother boards.

Toshio Kurosawa, Engineer, Shirogane Branch, Technology Development Center

Structure of TCR®



Development of Gallium Nitride (GaN) Thick-Layer Substrates



We have developed proprietary technologies to manufacture high-quality GaN substrates. Light-emitting diodes (LEDs) can be produced using a simpler process on GaN substrates in comparison with diodes on sapphire or SiC substrates. In addition, using GaN substrates enhances the functionality of diodes. Diodes on GaN substrates can make white light source with much less power consumption than white light bulbs consume. As a result, the diodes reduce the amount of CO₂ emissions, thereby making a significant contribution to global warming countermeasures.

Misao Takakusaki,
Senior Engineer, Toda Branch, Technology Development Center



GaN substrate

3. Implementing Initiatives Regarding Climate Change Problems including Global Warming



Progress and Influence of Climate Change Problems including Global Warming

Climate change problems including global warming is one of the most important issues that human beings currently face. In 2008, during the first five-year commitment period stipulated in the Kyoto Protocol, this issue was discussed at both the G8 Hokkaido Toyako Summit and the 14th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP 14).

Global warming does not only cause a rise in the sea level and abnormal weather, but it also significantly affects the ecosystem. With this in mind, the implementation of regulations to reduce greenhouse gas emissions has become an important issue in the prevention of global warming.

Climate change has brought about new environment-friendly products including fuel cell hybrid cars and subsequently also created new markets. As a result, climate change will affect the financial performance of our business in addition to our business activities themselves.

Initiatives of the Nippon Mining & Metals Group

The Nippon Mining & Metals Group has been promoting energy conservation programs including improving flash furnace operations and recovering the waste heat produced at its smelters.

The Group has also been working to develop technologies to streamline manufacturing processes, utilize renewable energy generated at small-scale hydropower plants, and deal with modal shift.

Additionally, in order to advance the Group's activities for energy conservation and reduction in CO₂ emissions, we established on October 1, 2008, the Energy Conservation Subcommittee as a working group under the CSR Committee.

Our History of Utilizing Renewable Energy

The Group secured electric power generated from the First Ishioka Electric Power Plant to support the stable operation of smelting and refining facilities located in the Hitachi area.

In 1955, the Kakinosawa Electric Power Plant started operation in Iwaki City, Fukushima Prefecture, and has subsequently been continuously generating 2,300kWh electric power, with a maximum power output of 4,800kWh.



First Ishioka Electric Power Plant



Kakinosawa Electric Power Plant

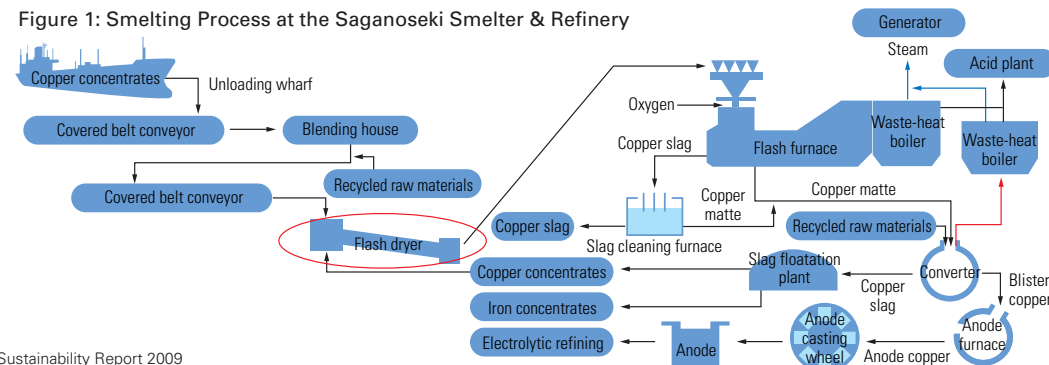
Reports of Our Activities for Energy Conservation

As examples of our activities for energy conservation, installation of a steam heat exchanger for preheating and the review of the use of lighting facilities, both conducted at the Saganoseki Smelter & Refinery, Nikko Smelting & Refining Co., Ltd. in 2007 and 2008, are described below.



Steam heat exchanger for preheating (diluted air of dryer)

Figure 1: Smelting Process at the Saganoseki Smelter & Refinery



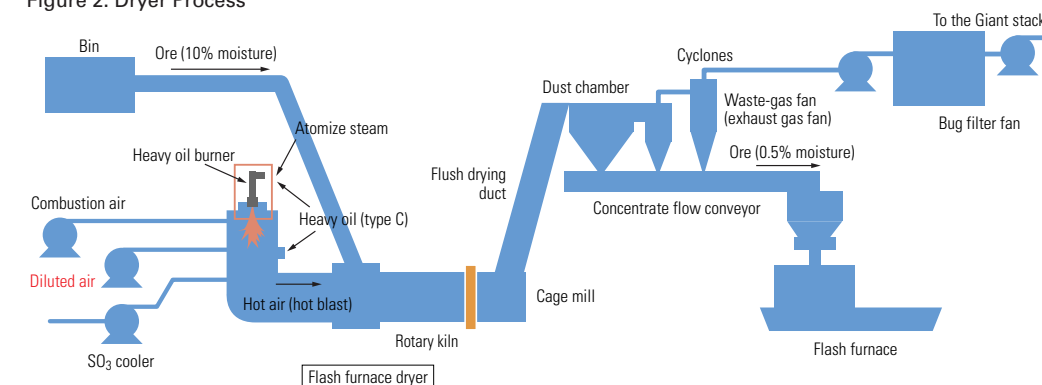
The use of waste heat generated by the flash furnace in the same smelting process has achieved certain energy conservation effects.

Steam recovered from the waste gas generated by the flash furnace raises the temperature of diluted air (written in red in

figure 2) to 200 degrees Celsius. Supply of the hot air generated to the flash dryer has consequently reduced consumption of heavy oil (type C).

This initiative has reduced CO₂ emissions by 2,000 tons per year, equivalent to economic benefit of ¥57 million per year.

Figure 2: Dryer Process



This energy conservation initiative was born from the words of my superior: "I guess you think using surplus steam for power generation as a matter of course. But, I wonder if utilizing steam to reduce the consumption of heavy oil could be even more profitable." My initial research indicated reducing heavy oil consumption is far more effective than reducing the volume of purchased electric power by generating our own power.

Also, I recognized that a heat exchanger could recover heat energy more efficiently than a steam turbine generator.

Up until the time that the redesigned process was complete, my superior kept on saying, "You must hurry to complete the new design so that we can see if the process will be effective." or "When can we see it?" Finally, I was reprimanded because completion fell behind schedule. I had been working on the water hammer until I could achieve stable operations. Fluctuations in air volume caused a large sound and jolted the equipment. I really felt a great sense of accomplishment when I launched the new process, all thanks to the support of my colleagues working on smelter floors.

Shuji Okubo, Manager, Equipment Technology Department for Smelting Equipment, Saganoseki Smelter & Refinery

Energy Conservation by Revising Use of Lighting Equipment

The Saganoseki Smelter & Refinery has 3,771 lights. A survey indicated that 2,386 lights were left on even when nobody was working under them or lighting was unnecessary in daylight hours. The following three initiatives were implemented to improve this situation.

(1) Setting sun switches with 130 lights



The belief that lights left on even during daylight hours was a waste started this initiative.

First, all lights throughout the Smelter were surveyed. A result of undertaking the survey required us to check the usage conditions of 3,800 lights throughout the Smelter, even during late night hours.

Also, it was harder than we originally thought to confirm the locations of switches or whether lights had sun switches. As a result, it took three months to complete this survey.

Then, we discussed how we should use each light to identify problems such as (1) light switches that are far from the light,

(2) Delinking 887 lights with other lights

(3) Improving use of 1,369 lights by providing the users with opportunities to learn the right way to use the lights

These initiatives have realized the effect of reducing CO₂ emissions by 600 tons per year, equivalent to economic benefit of ¥7.8 million per year.

(2) work areas that are too dark to work safely when the lights are switched off, and (3) the time delay on mercury lamps, as well as other issues related to the lighting. In order to solve these problems, we modified some lighting circuits as well as increased the number of switches and relocated some of them.

The survey, action plan to cope with the problems, and patrols were implemented across the entire Smelter. As a result, consciousness toward energy conservation has been raised and promoted among all staff at the Smelter.

Under the slogan "It may be just lighting. But it's lighting," we are working for energy conservation together.

Takahiro Tsuchiya, Engineer, Power Control Dept., Saganoseki Smelter & Refinery

Stakeholders of the Nippon Mining & Metals Group

The business activities of the Group are supported by many stakeholders—individuals, organizations, and communities who have a vested interest in the Group. Stakeholders that we have close and regular ties with and with whom our major responsibilities lay are listed in the table below. We aim to establish and maintain strong relationships of trust with our various stakeholders through close communications.

Stakeholders		Major responsibilities of the Nippon Mining & Metals Group	Major communication tools
Customers	We consider it crucial to respond to the opinions and wishes of our customers, with whom we have frequent contact through our business activities.	<ul style="list-style-type: none">• Supplying value-bearing products• Providing accurate information regarding product safety and the environment• Further improving the quality of our products• Enhancing services	<ul style="list-style-type: none">• Introducing and supplying products and services of the Group• Consulting about newly developed products and other related matters• Providing accurate information regarding product safety and the environment• Exchanging information at exhibitions and other trade-related shows
Suppliers	We strive to enhance the value of our products in cooperation with suppliers—one of our key business partners. In line with the Green Procurement Guideline, we have developed a framework for procurement to foster relations of mutual trust with suppliers.	<ul style="list-style-type: none">• Carrying out open and fair trade transactions• Promoting environmental protection based on the Basic Environmental Policy and the Green Procurement Guideline• Collaborating for more efficient logistics and recycling	<ul style="list-style-type: none">• Carrying out trade transactions through the daily transactions of Nippon Mining Procurement, Inc.
Shareholders and investors	We recognize that establishing highly transparent corporate management is a requirement of us as a core operating company in the Nippon Mining Holdings Group, and also acknowledge the importance of being accountable to shareholders and investors.	<ul style="list-style-type: none">• Undertaking proper and prompt disclosure through the activities of Nippon Mining Holdings, Inc.• Increasing corporate value while considering the economy, the environment, and society	<ul style="list-style-type: none">• Conducting shareholder meetings• Undertaking investor meetings through Nippon Mining Holdings, Inc.
Employees	Employees play a central role in the Group's CSR activities. We are creating frameworks for personnel training in order to effectively harness the capabilities of each employee.	<ul style="list-style-type: none">• Ensuring a safe work environment• Providing equal opportunities and securing diversity• Improving the Group's educational program• Conducting roundtable discussions with CSR-related agendas, and carrying out a questionnaire regarding CSR issues	<ul style="list-style-type: none">• Implementing the Self-Statement System• Holding the Labor-Management Council• Holding the Health and Safety Committee• Carrying out a questionnaire regarding CSR issues• Conducting roundtable discussions with CSR-related agendas
Industry-government-academia groups	We believe that these groups are good partners for discovering future technologies and developing future generations of human resources.	<ul style="list-style-type: none">• Making proposals in a wide range of areas• Promoting the advancement of science and technology	<ul style="list-style-type: none">• Joining various organizations and attending their regular conferences• Implementing joint research and development with universities and research institutions• Participating in national projects and other related events
Global environment	In view of our role as a good corporate citizen and to maximize our possible contribution, we have clarified our basic policies and stance for dealing with global issues—including environmental problems. These policies are reflected in our business activities.	<ul style="list-style-type: none">• Complying with environmental legislation and regulations• Implementing initiatives to conserve the global environment and assisting the sustainable development of society, as a corporate member of the International Council on Mining and Metals (ICMM)	<ul style="list-style-type: none">• Participating in various projects proposed by the ICMM• Exchanging information and opinions at international conferences and other events
Local and global communities	The development of our various business activities requires the understanding of local and global communities. We are working to obtain a wide range of opinions by creating opportunities for periodic exchange of opinions.	<ul style="list-style-type: none">• Preserving the local environment by complying with environmental regulations• Preventing accidents and disasters at our domestic and overseas operating sites• Respecting cultures and customs in overseas countries	<ul style="list-style-type: none">• Contributing to local communities through cleanup, disaster-prevention, and other activities• Regularly conducting summer festivals or opinion-exchange meetings• Participating in international conferences, exhibitions, and other trade-related events• Implementing international cooperation
Non-profit organizations (NPOs) and non-governmental organizations (NGOs)	We believe that cooperative relationships with NPOs and NGOs, which undertake distinctive activities, improve and enhance the content of our CSR activities.	<ul style="list-style-type: none">• Collaborating with NPOs and NGOs for social-action programs such as poverty alleviation and environmental protection• Considering and implementing measures to overcome current issues	<ul style="list-style-type: none">• Supporting the activities of NGOs and exchanging opinions with them• Engaging in dialogue with NPOs and NGOs
Future generations	We consider future generations to be another important stakeholder. We are engaged in dialogue with the young people who will inherit our planet in order to clarify our social role.	<ul style="list-style-type: none">• Heightening awareness about environmental protection• Enlightening future generations about the importance of social-action programs by "Monozukuri"—manufacturing products	<ul style="list-style-type: none">• Conducting plant tours and other events as necessary

Making Dialogue with Stakeholders

The Nippon Mining & Metals Group does its best effort in making dialogue with various stakeholders through a wide range of opportunities in order to reflect the “voices” of stakeholders in its CSR activities.

In fiscal 2008, we carried out a questionnaire regarding CSR, conducted roundtable discussions with employees based on CSR-related agendas, and held a stakeholder meeting. We hope these initiatives enable stakeholders to deepen their understanding about our CSR activities, and through stakeholders’ voices we are able to further improve our CSR activities.

Carrying out a Questionnaire of Employees

In November 2008, we carried out a questionnaire of all full-time employees of Nippon Mining & Metals Co., Ltd. with a response rate of 90.2%.

The questionnaire asked questions about our CSR activities and Sustainability Report 2008.

Positive responses from about 80% of respondents to the questions “Do you understand our Corporate Philosophy?” and “Do you always or sometimes keep our Code of Conduct in mind?” indicated increased awareness of our CSR activities.

Meanwhile, some employees said in responding to the questionnaire that “I recognized we must be more conscious about our CSR activities through our ordinary course of business.” or “The activities should be enhanced in order to ensure CSR is an integral part of each employee, whether working at domestic or overseas operating sites.”

These opinions indicated that we should continue to make endeavors to ensure each employee works with awareness and appreciation of our CSR activities.

Also, we learned that employees are interested in management policy and the strategic direction of the Company (15%

of respondents), through responses to the question “What topic in the Report are you most interested in?” that was included in the “Material Issues for the Nippon Mining & Metals Group” special feature section.

Select topics in the Report you are interested in

Topics	%
Material Issues for the Nippon Mining & Metals Group (Special Feature)	14.7
Our Business Activities and the Environment	12.0
Message from the President	9.4
Corporate Philosophy, Code of Conduct, and CSR Action Policy	7.3
Development of Environment-Friendly Technologies	6.5



The questionnaire



Sustainability Report 2008

Conducting Roundtable Discussions with Employees at 12 Domestic and 11 Overseas Operating Sites

Building on the annual briefing sessions held to date, we also conducted roundtable discussions with about 150 employees at 23 operating sites

These roundtable discussions allowed us to hear opinions regarding our CSR activities directly from employees as well as

frank comments about Sustainability Report 2008. The discussions also helped the dissemination of shared understanding about our CSR activities among the employees of the Group.



Stakeholder Meeting 2009



Date and time: February 24, 2009, 1:30 – 4:30 pm Place: the Nippon Mining Holdings Group, Roppongi Club

The Nippon Mining & Metals Group believes that it is essential to implement more meaningful CSR activities through hearing the opinions of the stakeholders and incorporating diverse points of view. For this year's Stakeholder Meeting, we invited a panel of four experts who are actively involved in the fields of the environment and CSR. The panelists expressed their opinions on our Sustainability Report 2008 and discussed the desirable future direction of our CSR activities.

*Official titles of the panelists are as of this meeting.

Q1: Please give us your opinions on and impressions of our "Sustainability Report 2008."

● Mr. Yasushi Hibi

Director, Japan Program, Conservation International

This report conveys the company's sincere attitude towards CSR activities. Future task is describing the effects and impacts of the CSR activities.



This report contains all the information that seems necessary in such reports, and conveys the company's sincere attitude towards CSR activities. For example, it is commendable that the recommendations of last year's stakeholder meeting are duly reflected, such as the reference to emission intensity indicators in the environmental report. However,

while environmental data is provided in detail, it is not clear how such environmental efforts taken by the company are impacting the society. Showing emission intensity together with total emission, for example, may help present an overall picture of the environmental impact by the company more clearly. I also would like a more in-depth description of the significance of your CSR activities within the context of the global society.

● Ms. Wakako Shibata

General Manager (CSR Promotion), CSR Division
Oki Electric Industry Co., Ltd.

Attention to details in the societal data is highly commended. Goal setting in societal elements can be improved.



In CSR reports of most companies, disclosure of quantitative data related to societal elements is not as advanced as disclosure of environmental data. Under such circumstances, quantitative data on societal elements is disclosed in detail in the Sustainability Report 2008, revealing the company's sincere attitude towards disclosure of information. On the other hand, I feel that goal setting in human resources development, which usually tends to be qualitative, would have been even better if more specific contents were presented, including quantitative goals. Moreover, I think that the Sustainability Report would be easier to read as a booklet by making changes such as concentrating all the needed information in the

pages of "Three material issues for the Nippon Mining & Metals Group."

● Prof. Hidefumi Kurasaka

Professor, Department of Policy Studies
Faculty of Law and Economics, Chiba University

It is a top-level CSR report that complies with GRI. More specific and comprehensible explanation would be desirable.



The Sustainability Report of Nippon Mining & Metals Group is compiled with a lot of detailed information and I think it is a top-level CSR report that complies with GRI. The report is especially commendable in that its credibility is enhanced by honestly disclosing information that may be disadvantageous to the company. On the other hand, I would

have liked a more comprehensible explanation of the impact of mine development, metal smelting and waste recycling businesses on the local communities where actual operations are conducted. Also, I am sorry to say that specific contents were not described for the environmental and safety activities in overseas operations, which is an area of high public concern.

● Ms. Hiroko Enomoto

Deputy Chief Secretariat, Global Compact Japan Network

I have a good impression on the 2008 Report, as it gives consideration to promoting readers' understanding.



The Report is of top quality, as it contains high volume of information and specialized data. I could also read in the President's message a sincere belief that "CSR activities are nothing more or less than our business activities." I think that the effect of this message can be further enhanced by adopting a format in which corporate officers explain how

the corporate philosophy and basic approach to business are reflected in CSR activities. In addition, I feel that the Group's commitment to CSR activities can be conveyed more clearly by, for example, increasing quantitative data in the description of employee-related activities and presenting the company's views on such data.

Q2: Please give us your opinions on and impressions of the material issues selected by Nippon Mining and the selection process.

● Mr. Yasushi Hibi

The three material issues selected are reasonable. I would like to see a more proactive approach to biodiversity issue next.

The fact that the Stakeholder Meeting itself is integrated into the process of selecting the material issues should be highly regarded. I think the three material issues selected in the Report are reasonable. It is regrettable, however, that biodiversity is not included among the material issues, considering the nature of the business of the Nippon Mining & Metals Group. Today, biodiversity conservation efforts are actively pursued internationally, especially in the mining industry. Companies will be held accountable for their approach on how to reduce the impact on the environment and the ecological system, and the process of achieving it.

● Ms. Wakako Shibata

Disclosure of the selection process is highly evaluated. The Report lacks in setting issues related to societal elements.

Disclosure of information related to the selection process of material issues can be highly evaluated. On the other hand, I regret to say that the Report is not clear on how the levels of stakeholder concerns were prioritized. I also wonder why a theme related to societal elements was not selected among the material issues.

● Prof. Hidefumi Kurasaka

Biodiversity should be promoted from the perspective of resources recycling with consideration to the ecosystem.

In the process of prioritizing the material issues, it would have been better to use tools such as a matrix in explaining what kind of criteria was used in the Second Step. I was also concerned that biodiversity was not among the material issues. Today, building a resources recycling society is becoming an important issue, including the issue of minimizing the impact on the ecological cycle. I would suggest that consideration for the ecological system and biodiversity may be better explained by focusing on your efforts in areas such as bio-mining and zero-emission of waste disposal.

● Ms. Hiroko Enomoto

I would like more focus on the efforts for improving the supply chain.

I would like to know what kind of consideration was given to "human rights" in the selection process of the material issues. In foreign countries, the working environment of a business partner is one of the concerns of the stakeholders. Companies are expected to improve the supply chain with consideration to human rights, by checking the method of managing the working environment. In the future, I would like the Nippon Mining & Metals Group to consider selecting human rights as one of the material issues.

Q3: Please share with us your expectations on the future direction of CSR activities at Nippon Mining & Metals Group.

● Mr. Yasushi Hibi

I would like to see your CSR activities continued, with consideration given to social missions.

I would like the Nippon Mining & Metals Group to continue with meaningful CSR activities by taking up cutting edge issues such as reducing its overall environmental load through urban mine development. Social contribution efforts can also enhance corporate values of the Group further by proactively addressing the potential needs of the society and implementing valid activities that can effectively contribute to the society, while taking into account the nature of its own businesses.

● Ms. Wakako Shibata

I would like Nippon Mining & Metals Group to implement more essential CSR activities that are in line with the corporate philosophy.

The interests of stakeholders are increasingly diversifying, such as CSR procurement which has been quickly adopted by the electronic industry. While it is important to respond to such trends, it would be to mistake the means for the end if only such trends are prioritized and divert the CSR activities away from the corporate philosophy. I would like the company to implement more essential CSR activities that are in line with the corporate philosophy. I would also suggest including in the Report, if available, the results of employee survey on CSR activities conducted during FY2008. Showing the voices and faces of the employees in the Sustainability Report should help promote interest in and understanding of CSR activities.

● Prof. Hidefumi Kurasaka

It is important to show the company's commitment to planning its business operations with consideration given up to the very end of long business cycles.

I would like to see a more substantial explanation on your efforts related to biodiversity. Afforestation activities at the closed mines, for example, will show the company's commitment to planning its business operations with consideration given up to the very end of long business cycles, beyond the scope of social contribution activities. As I believe that the advantages and assets of the Nippon Mining & Metals Group is that it possesses all phases of a recycling society, my advice is to publicize and advertise those advantages and assets by all means.

● Ms. Hiroko Enomoto

"Aggressive CSR activities" will lead to strengthening the corporate structure. I would like Nippon Mining & Metals Group to continue with aggressive activities.

I want the Report to focus more on what kind of CSR activities are actually carried out in overseas countries, and what kind of activities are being planned as new challenges. As dissemination of "aggressive CSR activities" will lead to strengthening the corporate structure, I expect the company to continue with aggressive activities in the future.

Closing Remarks



I would like to thank all the panelists for sharing their valuable views with us today. Everyone has positively expressed opinions from the perspective of how the CSR activities of the Nippon Mining & Metals Group should be and how they can be better reported. As a company directly engaged in the utilization of limited natural resources, we would like to send out a message that only we can, through unbiased and more comprehensible reporting. The Nippon Mining & Metals Group will continue to sincerely address the challenges towards the sustainable development of society.

Kazuo Kagami, Senior Executive Officer
Nippon Mining & Metals Co., Ltd.

Improvement Activities in Fiscal 2008

Improvement Activities at Domestic and Overseas Operating Sites

The Nippon Mining & Metals Group is conducting the NPM, the IS2, and other improvement activities in order to increase productivity, improve quality, and reduce production costs at domestic and overseas operating sites. The accumulation of daily ambitious efforts has resulted in robust achievements. Examples of activities playing a part in “innovation in productivity”—a motto identified in our corporate philosophy—are shown below.

What are the NPM Activities?

The Total Productive Maintenance (TPM) method was developed by the Japan Institute of Plant Maintenance in 1971, as “production methods that seek to maximize overall production system efficiency by improving personnel and facility quality.”

In joining this movement, the Group decided to take the TPM method beyond its conventional framework and transformed it into the “Nippon Mining & Metals TPM” (NPM) method by taking a dynamic approach to continuous innovation. The NPM method seeks to minimize economic losses through a zero-accident, zero-defect (product quality), and zero-failure (equipment) approach.

We now proactively apply the NPM method at all major operating sites.

Domestic

Saganoseki Smelter & Refinery, Nikko Smelting & Refining Co., Ltd.



The Saganoseki Smelter & Refinery began implementing NPM activities in 1995. After completing requirements, the Smelter & Refinery won the Award for Excellence in Consistent TPM Commitment of TPM

Part III in December 2007. Furthermore, the Part IV activities have been conducted since March 2008. Under the slogan “Providing workplace safety and protecting the environment, we will become a copper smelter and refinery that is ranked No. 1 in the world in terms of production quality and cost competitiveness,” seven working groups are playing a central role in NPM activities, which are implemented throughout the Saganoseki Smelter & Refinery.

In fiscal 2008, two briefing sessions were conducted in order to promote improvement activities across the whole Saganoseki district, including at the Smelter & Refinery. In addition, we have striven to strengthen our “genba-ryoku”—the skills and expertise used on the shop floor—by encouraging all employees working at the Smelter & Refinery to suggest improvement proposals. These initiatives have vitalized improvement activities for reducing workloads, repairing and maintaining equipment and facilities, and “mieruka”—initiatives to clarify and visualize ambiguous parts in business activities by using tangible numerical indicators.

Furthermore, in order to expand our improvement activities outside the Group, we plan to participate in the 10th Karakuri-

Kaizen Expo & Competition “Karakuri-kaizen ten”—an exhibition featuring improvements by ingenuity that will be conducted by the Japan Institute of Plant Maintenance in October 2009.

Isohara Works

Since 2006, the Isohara Works has been advancing IS2 Activities with the aim of realizing the management principle of “Dual Wheels”—the simultaneous implementation of development and manufacturing activities. These activities include project-based process improvements (Six Sigma method) as well as improvements on the shop floor (Toyota Kaizen method). One of the major Six Sigma programs conducted in fiscal 2008 was the development of a high-profit structure through both quality improvement and cost reduction. Enhancing productivity and shortening the production lead time for two principle products were focused on using the Toyota Kaizen activities. In particular, the lead time was cut to a half of what it used to be—an achievement exceeding our original goal.

The IS2 Promotion Office, newly established in fiscal 2009, has been playing a central role in improvement activities. Through the establishment of the Office, the Works implements the PDCA cycle more efficiently by eliminating waste and establishing a system to promote “mieruka” in the course of daily operations.



Overseas

Nikko Fuji Electronics Dongguan Co., Ltd.

In February 2009, Nikko Fuji Electronics Dongguan Co., Ltd. attended the TPM Exchange meeting of the Nippon Mining Holdings Group to present its TPM Kaizen report along with domestic operating sites. The report outlined the progression of its activities from implementation to their current status as well as the program details and accomplishments. (Presenters: Mr. Y. S. He, Manager, Manufacture Dept.; Mr. X. F. Ou, Manager, Quality Assurance Dept.; Mr. T. Nakashima, Deputy General (acted as interpreter))

The company has been conducting “Q-UP activities*” since August 2007. These activities have focused on the improvement

of quality, production efficiency, inspection efficiency, and human resources effectiveness, and have showed remarkable results in these fields in fiscal 2008.

The company will strive to enhance its activities by integrating them across the organization as well as introducing preventive maintenance programs.

* Quality and quantity up



Presentation at the TPM Exchange meeting

The Improvement Proposal Program

The improvement proposal program is one of the major initiatives for improvement activities implemented across the Group’s operating sites.

Many operating sites have systems to encourage employees to make improvement proposals.

■ Examples of improvement proposal items

Reducing production costs, improving quality, improving production efficiency, raising quality control, enhancing health and safety conditions, rationalizing administrative work, and other related items

■ Adopting proposals and their impact

Each operating site considers which proposals are adopted and how these are utilized. In order to make effective use of proposals, rewards and prizes are offered to employees who make outstanding suggestions, which are reported at workshops for encouraging further improvement proposals. We recognize these types of programs are important tools to maintain the Group’s efficient operations.

UPINORG Group, Manufacturing Section 2, Shirogane Works

■ Objective: Enhancing the productivity of the production process for UPINORG

The Shirogane Works produces UPINORG, which is a high-purity copper sulfate used for printed circuit boards and as a surface treatment agent. While we had been actively engaged in pursuing productivity enhancement of UPINORG for the past few years to meet increased demand, we were unable to realize positive results. Therefore, we focused on identifying bottlenecks in the production line, and consequently revising operations in such production lines. This initiative resulted in a tremendous improvement in yield, increasing output 23%. This improvement allowed us to ensure the stable supply of UPINORG to our customers without delays in delivery. The knowledge aggregated on the shop floor alone led to the realization of this improvement without the need for any capital investment.



Smelting Sect., Production Dept. Saganoseki Smelter & Refinery Nikko Smelting & Refining Co., Ltd.

■ Objective: Improving the transportation of precipitating chemicals used at the wastewater treatment facilities

The precipitating chemicals—used to precipitate and remove metals dissolved in wastewater—used at the wastewater treatment facilities are packed into packs and piled on pallets that are lifted by a hoist crane from the first to the second floor before being fed by operators into the powder feeder. Although the risk that loads could collapse or packs could fall from pallets used to be made, creating “boats” that are tailored to transport the chemical agent has eliminated this concern. Furthermore, we were also able to decrease the workload by creating conveyers between a stockyard for the chemical agent and the powder handling equipment.



ITO-Bonding Team, Manufacturing Dept., Bade Works Nikko Metals Taiwan Co., Ltd.

■ Objective: Improving ITO target bonding operations

In order to improve the production yield and working efficiency in ITO target bonding operations with indium, members of the improvement team on the shop floor exchanged their opinions to revise working methods by making better use of heat-resisting sheets. This improvement shortened working hours and improved working efficiency of ITO target bonding operations, and at the same time diminished risks of damage to the targets. Therefore, overall working efficiency has been tremendously improved.



The Nippon Mining & Metals Group strives to establish an appropriate corporate governance system in order to conduct sound business activities based on its Corporate Philosophy and increase its corporate value.

Corporate Governance and the Management Structure of the Nippon Mining Holdings Group

Nippon Mining & Metals Co., Ltd., as a core operational company of the Nippon Mining Holdings Group, is engaged in the non-ferrous metals business. On the other hand, Nippon Mining Holdings, Inc., the holding company of the Nippon Mining Holdings Group, has a responsibility for management on behalf of the entire Nippon Mining Holdings Group. This holding company system maintains efficient management control over the Nippon Mining Holdings Group and ensures management transparency by keeping operations separate from the Nippon Mining Holdings Group management.

The Board of Directors of Nippon Mining Holdings, Inc. is composed of a total of 10 directors, including:

- 6 full-time directors of Nippon Mining Holdings
- the presidents of core operating companies Nippon Mining & Metals and Japan Energy
- 2 external directors

Auditors of Nippon Mining Holdings, Inc.
There are 5 auditors, 3 of whom are outside auditors.

Nippon Mining Holdings Group's Councils
For the purpose of information sharing between the holding company and the core operating companies, as well as discussions and decision making on policies on behalf of the Nippon Mining Holdings Group as a whole, the Nippon Mining Holdings Group regularly convenes various committees including:

- the Compliance Committee to review compliance commitment
- the CSR Committee to review CSR activities
- the Internal Control Committee to establish advancement programs for its internal control systems regarding financial reporting

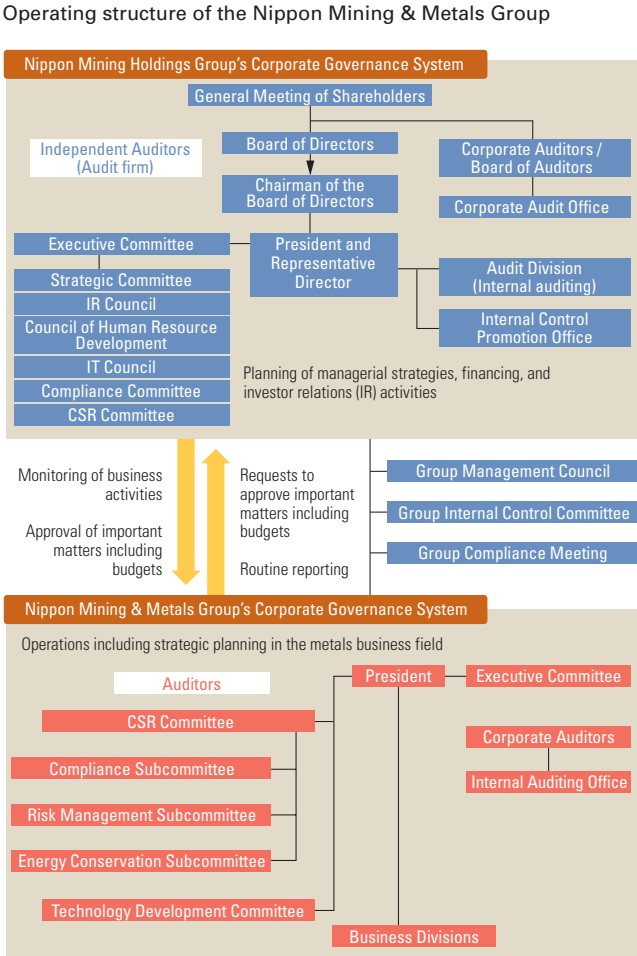
Participants at these meetings are selected from directors and executive officers of Nippon Mining Holdings, Nippon Mining & Metals Co., Ltd. and Japan Energy Corporation.

Outline of the Management Structure of the Nippon Mining & Metals Group

Given the supervisory oversight provided by Nippon Mining Holdings, Inc., Nippon Mining & Metals Co., Ltd. does not have its own board of directors in the interest of faster decision making and greater operational simplicity. However, the Nippon Mining & Metals Group follows a management model in which executive officers take responsibility for the conduct of operations in each business division under the direction of the president of Nippon Mining & Metals Co., Ltd.

Structure of the Executive Committee
Important management matters are discussed and decided on by the Executive Committee, comprising two directors (one concurrent executive officer and the president of the Company) and other executive officers. The Executive Committee also monitors the financial and operational performance throughout the Nippon Mining & Metals Group.

Auditing Structure
The Nippon Mining Holdings Group ensures the appropriate execution of operations of respective business divisions including subsidiary companies of Nippon Mining & Metals through independent auditing jointly undertaken by its corporate auditors and the internal auditing divisions of Nippon Mining & Metals and Nippon Mining Holdings. One of the four internal auditors of Nippon Mining & Metals also holds the position of internal auditor of Nippon Mining Holdings.



The CSR Committee, an advisory body to the president, is responsible for determining basic policies and action plans for the promotion of CSR activities, assessing progress toward CSR-related targets, and evaluating CSR performance from economic, environmental, and social perspectives. The entire Nippon Mining & Metals Group is committed to promoting and solidifying its CSR activities.

Key CSR Activity Initiatives

Fiscal 2006	■ Period for introducing CSR activities <ul style="list-style-type: none">• The new "Nippon Mining & Metals Co., Ltd." was incorporated by the management integration of three metals companies.• The CSR Kick-Off Convention was held.• The CSR Committee and two subcommittees (the Compliance Subcommittee and Risk Management Subcommittee) were newly established.• The Corporate Philosophy, Code of Conduct, Basic Environmental Policy, Basic Policy on Health and Safety, and Green Purchase Guideline were compiled.• CSR activities were implemented at 24 operating sites.
Fiscal 2007	■ Period for promoting CSR activities at overseas operating sites <ul style="list-style-type: none">• The Corporate Philosophy and Code of Conduct were translated into five languages (including English and Chinese), and distributed to and posted at each overseas affiliate company.• The boundary of CSR activities was expanded to 24 domestic and 4 overseas operating sites.
Fiscal 2008	■ Period for expanding and spreading CSR activities <ul style="list-style-type: none">• The CSR Office was newly established within the Administration Department.• The boundary of CSR activities was expanded to 24 domestic and 14 overseas operating sites.• The CSR Action Policy was compiled.• The Group began supporting the Extractive Industries Transparency Initiative (EITI) and participating in the United Nations Global Compact.• The Energy Conservation Subcommittee was established under the CSR Committee.
Fiscal 2009	■ Period for spreading and integrating CSR activities <ul style="list-style-type: none">• The CSR Office was separated from the Administration Department and became the CSR Department.

Spreading the CSR Activities in Fiscal 2008

Organizing educational programs for employees and carrying out a questionnaire regarding CSR

Educational programs for employees regarding CSR were organized at domestic and overseas operating sites of the Nippon Mining & Metals Group. To promote the disseminating and sharing of the importance of CSR awareness, we also carried out a questionnaire regarding CSR activities for employees at domestic and overseas operating sites and conducted roundtable discussions with CSR-related agendas for employees at domestic and key overseas operating sites.

Publishing the Sustainability Report 2008

The full version of the Sustainability Report 2008 was published and subsequently attained the Application Level A+ as defined in the G3 Guidelines of the Global Reporting Initiative (GRI).

Carrying out a questionnaire regarding CSR

A questionnaire regarding the Sustainability Report 2008 was carried out, targeting the officers and employees of the Group to

promote the disseminating and sharing of the importance of CSR awareness as well as to be used as a tool for identifying areas for the enhancement of future CSR activities.

Establishing the Energy Conservation Subcommittee

The Group established the Energy Conservation Subcommittee under the CSR Committee for the purpose of following up on and supporting the promotion of energy conservation activities within the Group by way of formulating goals and activity plans as well as monitoring the activities, progress, and data related to such factors as actual energy consumption. The statuses of these activities are reported to the CSR Committee, Board of Directors, and other relevant bodies.

Establishing the CSR Department

To enhance and promote CSR activities further, the CSR Office was separated from the Administration Department to become the CSR Department as of April 1, 2009.

The Nippon Mining & Metals Group complies with the Corporate Philosophy together with employees, and conducts its business activities in full compliance with all relevant laws and regulations.

The Compliance Subcommittee

The Compliance Subcommittee meets regularly twice a year and at other times as needed to discuss and decide upon basic policies regarding compliance, priority issues for each fiscal year, and action plans including for compliance programs.

In April, the subcommittee is convened to hear progress reports with regard to compliance-related matters from all operating sites and subsequently summarizes the results. At these meetings, the subcommittee also considers the effectiveness of remedial actions for each issue and establishes additional measures as necessary.

In addition, the subcommittee assesses the risks of such events as fraud and law violations in order to incorporate this information in identifying priority issues and formulating compliance programs. Reports of these priority issues and the overall compliance status are also made to the Nippon Mining Holdings Group Compliance Committee, chaired by the president of Nippon Mining Holdings, Inc., which acts as a compliance organ for the entire Group.

Risk Management Subcommittee

Risk management issues are handled primarily by the Risk Management Subcommittee. In line with a basic policy and an action plan decided by the subcommittee, risks are identified and evaluated at major operating sites, and appropriate countermeasures are subsequently developed and implemented.

In fiscal 2008, the subcommittee reviewed planning and performance measures in relation to 15 substantial risks identified from almost 500 issues recognized across the Group.

Also, each operating site undertakes self-assessments of its own progress in relation to risk management and identifies relevant risks once a year. The Group intends to continuously improve its risk management system by effectively implementing the PDCA cycle.

Cease and Desist Order Regarding Molten Metals and Other Related Products

In November 2007, inspections were conducted by the Japan Fair Trade Commission, on suspicion of violating antitrust laws by bid-rigging on purchases of molten metals—metals generated by garbage incineration—sold by local public entities and other bodies.

On October 17, 2008, as a result of the subsequent investigation, a Cease and Desist Order was issued to Nikko Environmental Services Co., Ltd., a subsidiary of Nippon Mining & Metals.

Compliance-Related Education Programs

With the aim of increasing awareness about compliance and improving the level of understanding about basic points of concern, the Group organizes and conducts compliance-related education programs in Japan as part of induction courses for new recruits as well as training programs for employees in their third year after joining the Company and both newly-promoted managers and assistant managers.

Systemizing Control of Compliance

Each operating site is operating in compliance with ISO14001 in order to deal with environmental issues. Meanwhile, the Group has been employing Occupational Health and Safety Management Systems (OHSMS) to move ahead with systemizing Groupwide compliance with relevant laws and regulations in the areas of labor, health, and safety.

Measures Related to New-Type Influenza

The Nippon Mining & Metals Group has prepared for the possibility of a major epidemic of new-type influenza. Particularly, we have developed an action plan at each overseas operating site to prepare for an epidemic in overseas countries where we operate.

In response to the outbreak of Swine Flu in April 2009, we established an emergency response center, thoroughly implemented infection control measures, made guidelines regarding overseas business trips, prepared nonwoven protective masks and other related items, and implemented other necessary measures.

Viewing this affair as an opportunity for reflection, the Group is improving and strengthening its compliance programs for employees to prevent a recurrence of such acts and establish a corporate culture where compliance is considered to be the top priority.

The Nippon Mining & Metals Group strives to establish a management control system based on factual data as well as to enhance and improve overall risk management.

History of Mutually Beneficial Ties with Local Communities

The history of the Nippon Mining & Metals Group extends back to 1905, when founder Fusanosuke Kuhara commenced mining operations at the Hitachi Mine. Against the backdrop of dramatic industrial growth in Japan at the time, the Hitachi Mine grew into one of the leading domestic producers of copper ores.

However, its rapid development also contributed to the emission of air pollution from smoke. Smoke generated by the copper refining process was laden with sulfur dioxide, which caused substantial damage to local crops, starting with the area directly around the mine and spreading to the surrounding region.

The mining company conducted compensation negotiations with local residents, while also actively collecting information about the damage caused by the smoke pollution and providing farmers with guidance on planting crops that were more resistant. The relationship that the mining company was able to forge with the local community during this period later proved to be an invaluable asset in achieving mutual prosperity and sustainability.

Eventually, Mr. Kuhara proposed the construction of a giant smokestack that would better disperse the smoke. Requiring what was at the time a massive investment and utilizing a total workforce of 36,800 people, the 155.7-meter smokestack was completed in December 1914. The tallest smokestack in the world at the time, the new structure dramatically reduced the smoke pollution. To repair the damage to the natural environment, the mining company also planted approximately 10 million saplings of tress resistant to smoke pollution, such as Oshimazakura cherry trees and black pines, on the affected countryside around the Hitachi Mine. The countryside sprang back to life, and to this day the Oshimazakura cherry trees still adorn the hills with their color during the cherry blossom season.

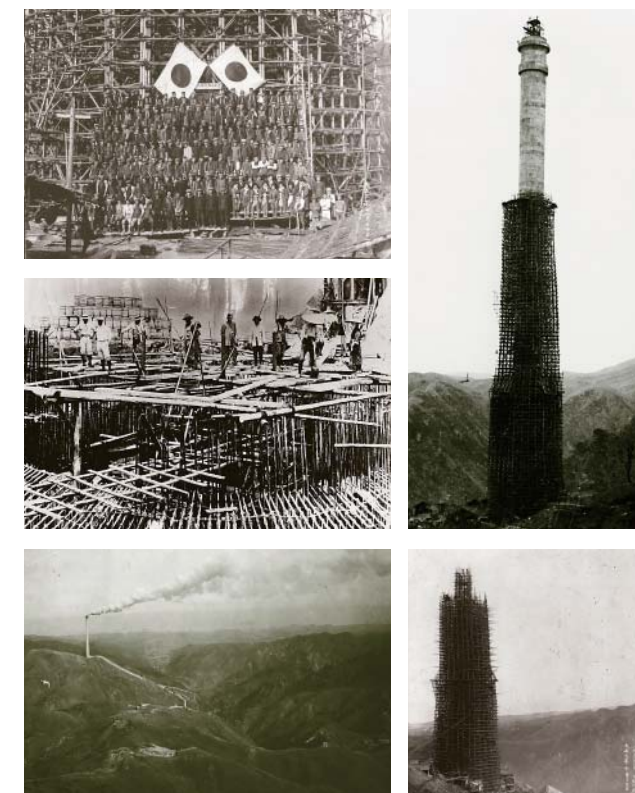
Before long, the giant smokestack became the symbol of the mutually beneficial ties between the mining company and the residents of the industrial city of Hitachi.

In 1993, the top two-thirds of the giant smokestack collapsed. It was later repaired to a height of 54 meters and still serves as the symbol of the mining company's mutually beneficial ties with the community.

The Current Hitachi District

The Hitachi District continues to be one of the operational centers for the Nippon Mining & Metals Group. The Group's operating sites located in this district are engaged in a broad range of operations, such as copper refining, recycling and environmental services, copper foil manufacturing, and precision plating. Also, technological development is carried out at the Technology Development Center.

The Daioin area within the Hitachi District is adjacent to Ibaraki Prefecture's Takasuzu Natural Park, which includes an approximately 120,000-square-meter area of forest land owned by Nippon Mining & Metals.



The giant smokestack in the Hitachi District, shortly after its completion



Heiwa-dori Avenue bordered by cherry trees in Hitachi City

The Oshimazakura cherry trees planted in Hitachi City, which have been selected in the Top 100 Cherry Blossom sights in Japan by the Japan Cherry Blossom Association, are a valuable tourism resource. They have been planted by various companies, the municipal government, and citizens for a long period to become the symbol of the preservation of the natural environment.

The Hitachi municipal government has become the center of activities concerned with taking care of and transplanting the trees in order to preserve them for future generations. The Group agrees with the aim of this initiative and supports the Hitachi municipal government.

Introducing Our Business Activities: Upstream (Resources Development Business)



The Nippon Mining & Metals Group originally started as a mining company, but as copper resources in Japan were depleted, the Group had to look for overseas sources of raw materials. The Group began participating as a minor equity holder in promising resource development projects, but it realized that developing the mines and being the mine operator was extremely important to the Group's strategy to secure resources and stabilize smelting operations. Therefore, the Group is actively engaged in the feasibility studies on the development projects of new copper deposits, exploration activities, and acquisition of prospective deposits. Through these activities, we strive to contribute to the long-term, stable growth of the Japanese copper industry.

Keiichi Goto, Senior Executive Officer; Senior Staff Member, Copper Division, Metals Group

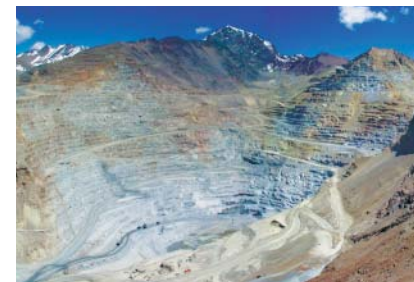
As demand for copper ores rises globally, the Nippon Mining & Metals Group is actively participating in promising overseas resource projects from the planning stage in order to secure high-quality ores on a long-term basis.



Escondida copper mine (Chile) [1985–]



Collahuasi copper mine (Chile) [1996–]



Los Pelambres copper mine (Chile) [1997–]

Stable Supply of Resources

The Nippon Mining & Metals Group is engaged in the two projects described below, in order to reinforce its copper business structure by integrating mining and smelting operations. When these development projects are extended and production starts successfully, the ratio of equity volume of copper concentrates is expected to increase from less than 20% to roughly 50%.

In moving ahead with these projects, on the basis of harmonious coexistence with stakeholders, the Group will place importance on meeting the global standard in environmental protection, biodiversity, enhancement and reinforcement of risk management, as well as mutual coexistence and coprosperity with local communities.



Caserones Copper Deposit Development Project in Chile



This project is being promoted by Pan Pacific Copper Co., Ltd. (PPC), of the Nippon Mining & Metals Group. Since acquiring the mining concession in May 2006, PPC has been conducting exploration boring, conceptual design of various development cases, and economic evaluations based on that data, as a "Pre-FS," which is a preliminary economic

evaluation preceding the Feasibility Study (FS). Based on the results of the Pre-FS, PPC decided to move the project into the FS phase in September 2008. PPC has also submitted the Environmental Impact Assessment (EIA) report to the environmental authorities of Region III, Chile, in October 2008. The EIA report, which is a compilation of planned measures for preventing and alleviating environmental impact, is currently under review by local authorities in accordance with the Chilean law.

Ken-ichi Murakami, Executive Officer; General Manager, Chile Office

Quechua Copper Deposit Development Project in Peru

The Quechua copper deposit is located in the district of Espinar in Cuzco Province, 700 km southeast of Lima, the capital of Peru. PPC acquired the mining concessions from Mitsui Mining &

Smelting Co., Ltd. in March 2008. If PPC decides to develop the mine, the project is estimated to have a mine life of 16 years with an average copper ore production of 60,000 tons per year.

Introducing Our Business Activities: Midstream (Smelting & Refining Business)



The copper smelting business of the Nippon Mining & Metals Group is principally managed by Pan Pacific Copper Co., Ltd. (PPC), which outsources copper smelting operations to three production sites: the Saganoseki Smelter & Refinery and the Hitachi Works of affiliate Nikko Smelting & Refining Co., Ltd. and the Tamano Smelter of Hibi Kyodo Smelting Co., Ltd. Combined with the production capacity of LS-Nikko Copper Co., Ltd., with which PPC has developed a comprehensive business alliance, PPC maintains a stable supply of roughly 1.2 million tons of copper ore each year. The Group is currently working toward "improvement of productivity through enhanced cooperation among the Group smelters" as one of its key CSR activities, and the Group will continue to pursue this endeavor going forward.

The Nippon Mining & Metals Group is also promoting the development of environment-friendly technologies. One example is the development of a hydro-metallurgical process (N-Chlo Process), which enables the effective recovery of copper and other precious metals from low-grade copper concentrates. Unlike pyro-metallurgical processes where copper ore is melted at a high temperature, the N-Chlo Process is an energy-efficient and environment-conscious next-generation smelting technology, minimizing SOx emissions that cause a high impact on the environment.

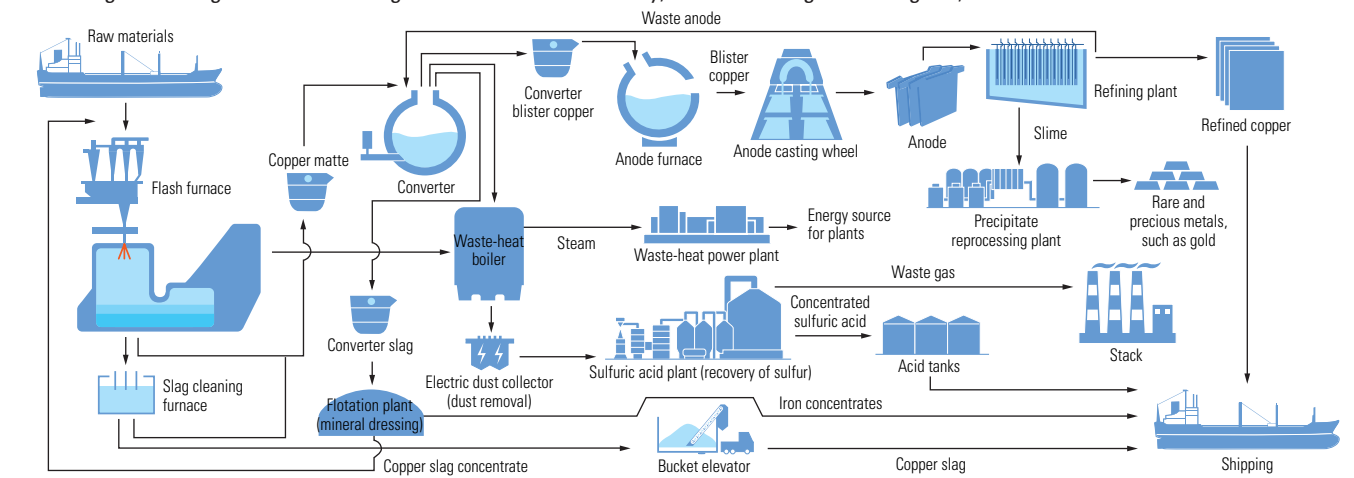
Keiichi Sato, Senior Executive Officer; Deputy General Manager, Copper Division, Metals Group

Production of High-Quality Copper through Outsourcing Production

PPC outsources a series of key production processes—ranging from the smelting of raw material copper concentrates to the production of refined copper—to affiliate Nikko Smelting & Refining and Hibi Kyodo Smelting. There are three production sites: Saganoseki, Hitachi, and Tamano. Each is a world-class smelter in technical capability and cost-competitiveness as well as being

highly proactive in complying with stringent environmental regulations. With a total production capacity of 710,000 tons per year of refined copper (450,000 tons from Saganoseki and Hitachi and 260,000 tons from Tamano), which is the largest for a metals company in Japan and is also one of the largest in the world. PPC stably supplies high-quality refined copper.

Smelting & Refining Process at the Saganoseki Smelter & Refinery, Nikko Smelting & Refining Co., Ltd.



About Pan Pacific Copper Co., Ltd. (PPC)



PPC is an integrated copper operating company based on alliances between Nippon Mining & Metals Co., Ltd. and Mitsui Mining & Smelting Co., Ltd. Operating since January 2001, the company vertically integrates resource development, raw material procurement, production, and sales. Having also developed a business alliance with LS-Nikko Copper Co., Ltd., which is a smelting company jointly owned with the LS Group of South Korea, PPC has established a solid position as a leading copper producer in Asia. PPC will make full use of these smelting sites in Japan and South Korea to maintain a stable supply of copper to the Asian market going forward.

Yoshimasa Adachi, President & Representative Director, Pan Pacific Copper Co., Ltd.

Introducing Our Business Activities: Downstream (Electronic Materials Business)



The Group's electronic materials business consists of the copper foil, thin film materials, and metal manufacturing businesses. This division of the Group develops, manufactures, and markets highly functional materials for electronic devices, including computers, LCD televisions, and mobile phones, as well as for automotive applications, fully utilizing the Group's unique, advanced technologies such as metal purification technology, surface treatment technology, crystal growth technology, and precision rolling technology.

In the market for materials for the IT, electric/electronic components, and automobile industries, there is always demand for highly integrated, more energy-saving, and better quality materials, driven by the constant downsizing of electronic devices. Our customers have also accelerated the speed of technology development, resulting in a shorter time to introduce new products. Therefore, it is critical for us to promptly respond to customer needs.

In order to meet these versatile needs, the Electronic Materials Group proactively communicates with customers. The Group is also implementing various improvement activities including TPM, with sales groups, factories, and research centers joining forces to build a more-efficient production system and reinforce product development capabilities. In addition, the Group is aggressively planning to venture into new fields such as cathode materials for lithium-ion batteries, materials for photovoltaic cells, and the development of an electro-less plating process for UBM (Under Bump Metallurgy) of semiconductor wafers.

On the other hand, as the production sites of our customers rapidly spread globally, especially throughout Southeast Asia, the Group is also expanding its overseas business operations in order to supply optimal materials to customers on a timely basis. We will strive to be an attractive "first vendor" to customers, with "challenge," "speed," and "communication" in mind.

Toshihiro Ota, Senior Executive Officer; General Manager, Electronic Materials Group

Introducing an Environment-Friendly Technological Development: Development of Cathode Materials for Automotive Lithium-Ion Batteries



Lithium-ion batteries are already widely used in electronic devices such as mobile phones and personal computers. Demand is expected to increase rapidly in the near future as an onboard power source for hybrid cars, plug-in hybrid cars, and electric cars. Cathode materials for automotive lithium-ion batteries consist of lithium-containing oxides. By changing the metallic composition and reducing the impurities, we have successfully established a production process that improves the length of battery life, safety, and other properties, over what is required. Taking advantage of the network and technologies of the Metals Recycling & Eco Business Division, we are also building a system in which used lithium-ion batteries are collected from the market through IT companies, who are our customers, and subsequently metals that are raw materials in the cathode are efficiently recovered for reuse. We will strive to secure a stable supply of cathode materials through the production of its raw materials and the construction of recovery system for used components.

Ryuichi Nagase, General Manager, Isohara Branch, Technology Development Center

Extending Battery Life



We have developed a proprietary hydro-metallurgical process that simultaneously precipitates all constituent elements of our materials and a technology to control homogeneous dispersal

of the elements at the nano-level. These realize higher homogeneity to extend the life of automotive lithium-ion batteries using our materials by 20–30 percent, in comparison with batteries using more conventional cathode materials.

Safety of Lithium-Ion Batteries Improved by Our Proprietary Integrated Production Process

Repeated dissolution and precipitation during charging or discharging, as a result of impurities in the cathode materials, may cause a short circuit in batteries. Our integrated production process prevents impurities from reaching the production line. Consequently, our production system reduces the concentration of impurities in our materials to approximately one-fifth of conventional materials, enabling us to make a major contribution to improving the safety of automotive lithium-ion batteries.

High-Quality Assurance

Our analytical skills, which were cultivated in the development and production of semiconductor materials, allow us to attain a high-quality assurance of the cathode materials.

Introducing Our Business Activities: Downstream (Recycling and Environmental Services Business)



The Nippon Mining & Metals Group has built a nationwide network of recycling and environmental services business, including in Hokkaido, Hokuriku, Kanto, and Kyushu, and has been highly regarded and trusted as an integrated recycling and environmental services operator. The recycling of valuable resources, including rare metals from the so-called urban mines, has become increasingly important from the perspective of the effective use of resources, especially in Japan, where mineral resources are scarce.

Nippon Mining & Metals Co., Ltd. disassembles, sorts, incinerates, and crushes disposed electronic components, mobile phones, and electric appliances to extract concentrated valuable metals through the copper smelting process. We have also built and begun operating an integrated recovery plant, the Hitachi Metal Recycling Complex (HMC), which recovers various valuable metals, such as nickel, tin, and bismuth, economically and efficiently from recycled raw materials containing small amounts of various metals, by employing hydro-metallurgical processes including solvent extraction.

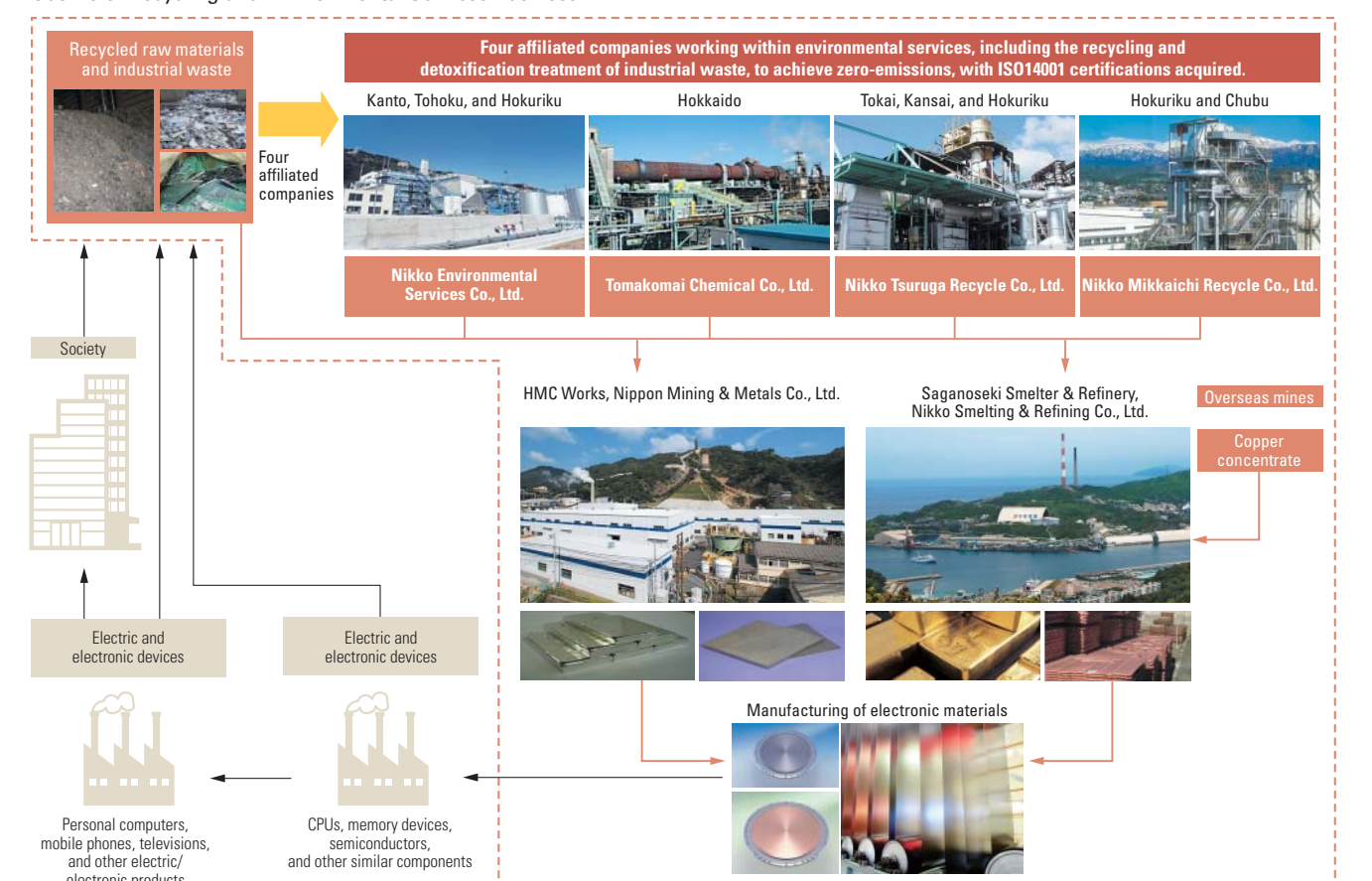
In addition, we have established a site in Taiwan for collecting materials for recycling, as a first step in making an international contribution to the environment and securing valuable resources. The recovery of valuable resources from the materials collected in Taiwan for recycling is scheduled to begin in September 2009 at our facilities in Japan.

In the environmental business, we are developing a disposal system for industrial waste that meets the needs of the local community, including waste that is difficult to dispose of and requires special treatment. On the other hand, we are making an all-out effort in terms of environmental measures, properly meeting the strict regulations of the government and municipalities on waste gas and water, and the four affiliated companies have collectively achieved zero-emissions without depending on disposal by landfill.

Leveraging our close-knit network in the Recycling and Environmental Services Business in Japan and abroad, we will actively pursue the realization of a recycling-oriented society and promote the environmental and the non-ferrous metals recycling businesses as well as the balance of both businesses in the future.

Shigeru Oi, Executive Officer; General Manager, Metals Recycling & Eco Business Division, Metals Group

Outline of Recycling and Environmental Services Business





Since the inception of the Hitachi Mine, the predecessor to Nippon Mining & Metals Co., Ltd., the Group's business fields grew from resources development, subsequently diversifying to smelting and refining, metal manufacturing, electronic materials, and recycling and environmental services. Technological fields corresponding to the business fields also range broadly. However, through these evolutions, the corporate culture that combines the spirit of challenge—symbolized by the giant smokestack of our early years—together with the spirit of social contribution has been passed down unchanged.

The Technology Development Group is aiming not only at the deepening of individual technologies in a broad range of the Group's technological field, but also developing optimal products and production processes that would satisfy our customers through combining and applying our proprietary technologies. Environmental impact is defined in the technology development phase, which is the starting point of commercialization in the development of all products and production processes, not to mention being incorporated into the environment-conscious products and technologies and environment conservation technologies. Conscious of these facts, we are striving to contribute to the sustainable development of society from a broad perspective and taking up the challenges to develop innovative technologies.

"Innovation" is highlighted in our Corporate Philosophy, and there will be no innovation without taking up the challenge—we vow to keep challenging the status quo.

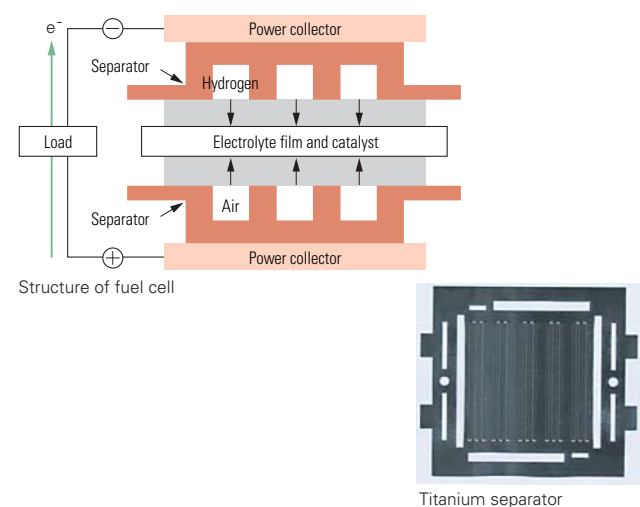
Hirofumi Nakata, Executive Officer; General Manager, Technology Development Group

Introducing a Case Example of Technology Development

Development of Titanium Separator Material for Fuel Cells

Demand for fuel cells is expected to grow for use in various applications such as household power generating systems, an automotive power source, and a power source for mobile devices. A part called a separator is used in fuel cells. The function of the separator is to supply fuel and air to the electrolyte film, collect the generated electric power from the film, and conduct the power to the power collector.

The key characteristics required of the separator are high-corrosion resistance and low-contact resistance. The Nippon Mining & Metals Group has confirmed that the required characteristics for fuel cells can be achieved by forming a thin film of precious metals, a few nanometers thick, on the surface of the titanium substrate. Since a titanium separator is lightweight, application in batteries for mobile phones is highly probable. We are currently developing this technology in coordination with customer needs.



Development of Technology for Recovering Valuable and Precious Metals

This division of the Group is developing processing technology applicable to recycling material, from urban mines, by combining mining and smelting technologies accumulated by the Nippon Mining & Metals Group over the years, such as physical concentration processes as well as hydro- and pyro-metallurgical technologies.

For example, we began operating a proprietary, integrated smelting/refining process that realized zero-emissions in the Hitachi District in May 2009. At this facility, recycling raw materials mainly that are generated in the Tokyo metropolitan area are efficiently processed to recover precious metals, including platinum group metals, as well as rare metals.

We have also started efforts to isolate and recover nickel, cobalt, manganese, and lithium from used batteries. This process utilizes a high-precision technology for isolation and recovery of

nickel and cobalt in a sulfate bath, a technology which was first realized in the world by the Group in 1978.

As these various recovered precious metals are used as raw materials for our electronic material products, these recovery technologies help to secure a stable supply of key raw materials for the electronic materials business of the Group.



Nikko Metals Philippines, Inc. ("NMPH") is strategically located in one of the most thriving, biggest economic zones south of Manila. The company was established in 1996, and over the years has successfully maintained commercial manufacturing operations of its electro-deposited copper foil, treated rolled copper foil, and copper sulfate crystals without reneging on its commitment of maintaining balance in work, family, community, and the environment.



Direction



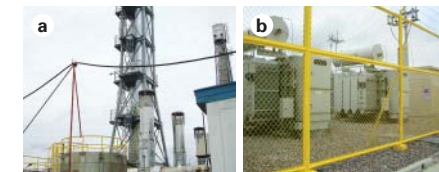
Ikuo Akoshima
President, Nikko Metals
Philippines, Inc.

Under the new leadership of Ikuo Akoshima, NMPH aims to excel in the highly competitive global marketplace by producing high-quality electro-deposited and treated rolled copper foil products intended for fine pattern and highly reliable circuit board application at very competitive prices. Research and development is in full swing to achieve commercial scale operations of high-end and environment-friendly products for application in computers, mobile phones, LCDs, automobiles, and other products.

After being awarded the "Award for TPM Excellence—First Category" on January 29, 2008, it signaled the start of taking on new challenges to

initiate innovations for more efficient operations, thereby leading to the launch of several sustainable projects such as GREEN TPM. This provided the opportunity to maximize the efficiency of our use of the earth's limited resources, while bearing in mind the balance between work, family, and community, as well as reassert our commitment to a clean and green environment. One of these projects relates to the use of hybrid power, combining self-generated power with the purchase of affordable electricity from the commercial grid, thereby resulting in an improved power quality and reduction of CO₂, NO_x, and particulate matter into the environment.

Additionally, NMPH promoted various energy conservation programs such as the use of a high-efficiency chiller, heat-recovery system and the commissioning of a water recycling facility, consequently reducing the plant's water consumption by 40%.



Baiden Project—combination of self-generated power (Power Plant^(a)) and commercial power supply (Meralco^(b))



Upgrade from an old chiller^(c) to a more efficient turbo-chiller^(d) for lower electricity usage



Rinse Recycling System^(e)—to reduce industrial water consumption

Highlights of CSR Programs and Activities



- (1) Due to the various projects implemented under Total Product Management (TPM) and Environmental Management System (EMS), NMPH received the Philippine Economic Zone Authority (PEZA) Environmental Performance Award on April 29, 2009, personally handed to Ikuo Akoshima by the Hon. Gloria Macapagal-Arroyo, President of the Republic of the Philippines. This award is given annually to selected PEZA locators and developer-operator companies for their sustained environmental compliance, innovative systems, and continued improvement in environmental management.
- (2) In April 2009, NMPH actively participated in the annual Earth Week Celebration of Sta. Rosa City through its lakeshore cleaning of Laguna Lake to raise awareness of the ecological crisis among lakeshore residents and industries located near the lake.
- (3) NMPH held its annual family outing in May 2009.
- (4) NMPH employees donated blood on a quarterly basis to the Philippine National Red Cross.

- (5) NMPH provided a plant tour to 38 chemical engineering students of De La Salle University in March 2009. Copper foil production is one of the topics discussed in class.
- (6) As part of the company's health awareness and disease prevention program, NMPH conducted an in-house flu vaccination program in April 2009, followed by lectures on dentistry for children, measles, and influenza to raise health awareness among employees and their dependents.
- (7) NMPH was this year's champion in the Fire Extinguisher Event at the LTAI Fire Brigade Fire Fighting Competition. This is an annual competition participated in by different locator companies in the Laguna Technopark.
- (8) NMPH and selected employees received the Sandugo Award / Galloneers Award as recognition from a government agency for their unwavering support and contribution in the promotion of voluntary blood donation.

Basic Environmental Policy, and Major Issues and Measures

As a global manufacturer of non-ferrous resources and materials, the Nippon Mining & Metals Group will drive forward the following activities based on the basic policy that we will contribute to environmental conservation on a global scale through innovation in the productivity of resources and materials.

1

Promotion of technology development that will improve productivity of resources and materials

We will work to utilize resources effectively by developing technologies that will enable higher yield and extraction percentage, quality improvement, shorter process steps, recycling and energy saving, as well as by developing environmentally-friendly materials and products.

2

Active engagement in environmental conservation

Not to mention compliance with environmental regulations, we will strive to further reduce impact of our operations on the environment. To this end, we will work to develop technologies for environmental conservation and work actively and continuously for environmental conservation.

3

Elimination of waste in operations

We will work to eliminate waste and save resources and energy at every stage of our operations.

4

Enhancement of employees' awareness of environmental conservation

We will work to raise each employee's awareness of environmental conservation through provision of environmental management education.

5

Disclosure of information

We will disclose the state of our environmental conservation-related operations in an active and fair manner in order to further enhance communication with stakeholders.

Major issues and measures

Environmental management system

- 1. Environmental management organization**
The General Manager of the Environment & Safety Department is responsible for coordinating environmental efforts. The top managers at operating sites and affiliate companies serve as supervisory environmental managers.
- 2. Environmental management system**
Through Groupwide commitment, from top management to employees, and through appropriate application of the ISO14001 framework, we will continuously strengthen environmental conservation measures and reduce environmental risks.
- 3. Environmental auditing**
Supervisory environmental managers at each operating site will carry out reviews of the results of internal audits conducted at each operating site to verify the status of environmental management and of compliance with environmental regulations. Additionally, the Environment & Safety Department's environmental safety audit team will carry out periodic environmental audits of each operating site, research and identify problems and areas requiring remediation from an environmental management perspective, and continually strive to improve accident prevention and environmental protection measures.

Measures to be taken

- We will undertake the following measures to minimize the environmental impact of the Group's business activities
- Action to help prevent global warming
 - Promotion of resource efficiency and recycling
 - Reduction of waste materials
 - Better management of chemical substances
 - Promotion of our recycling businesses
 - Promotion of technology and product development and introduction of new technologies
 - Promotion of green purchasing
 - Training, public relations, and community activities to communicate our Autonomous Action Plan and raise awareness of our environmental protection measures

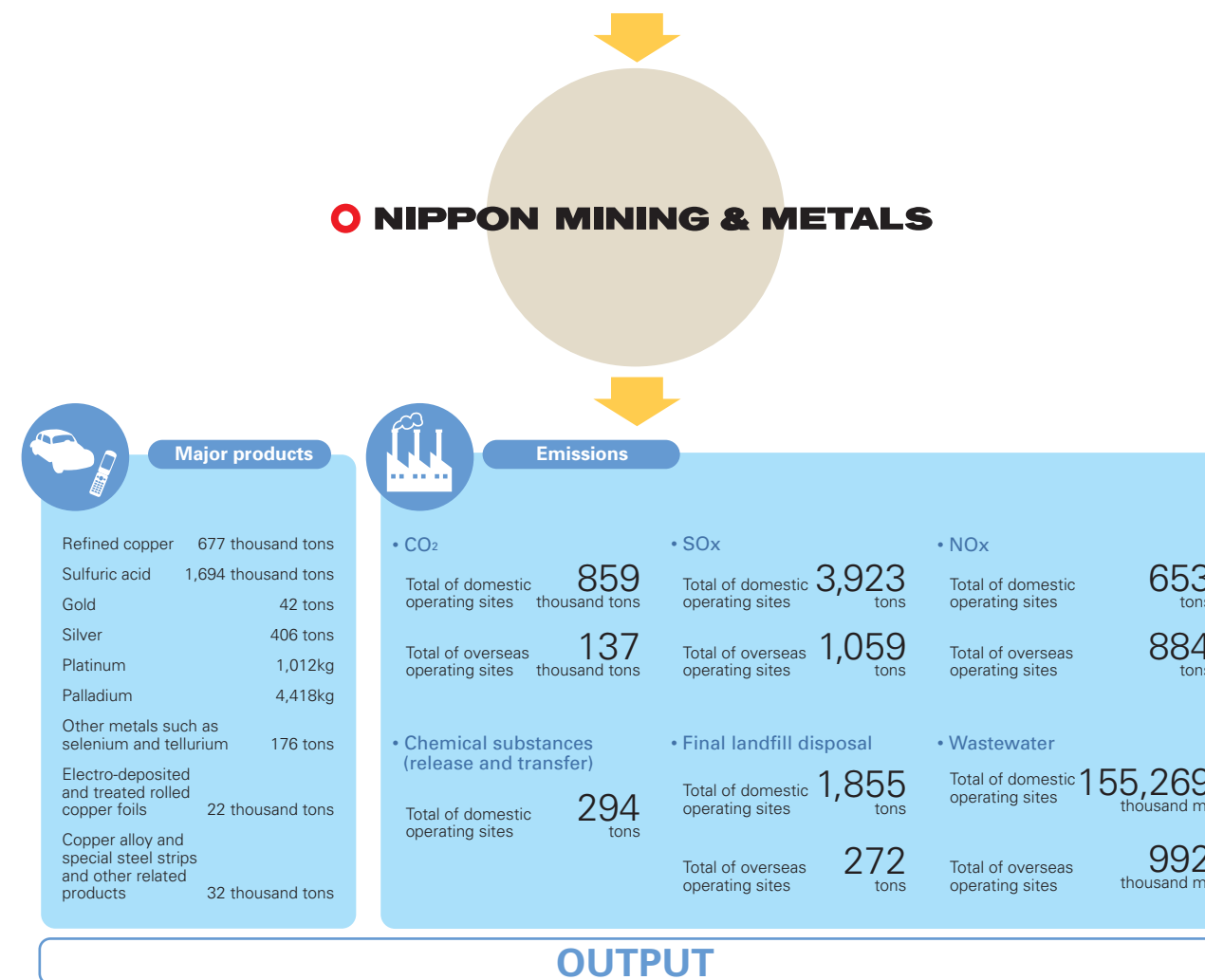
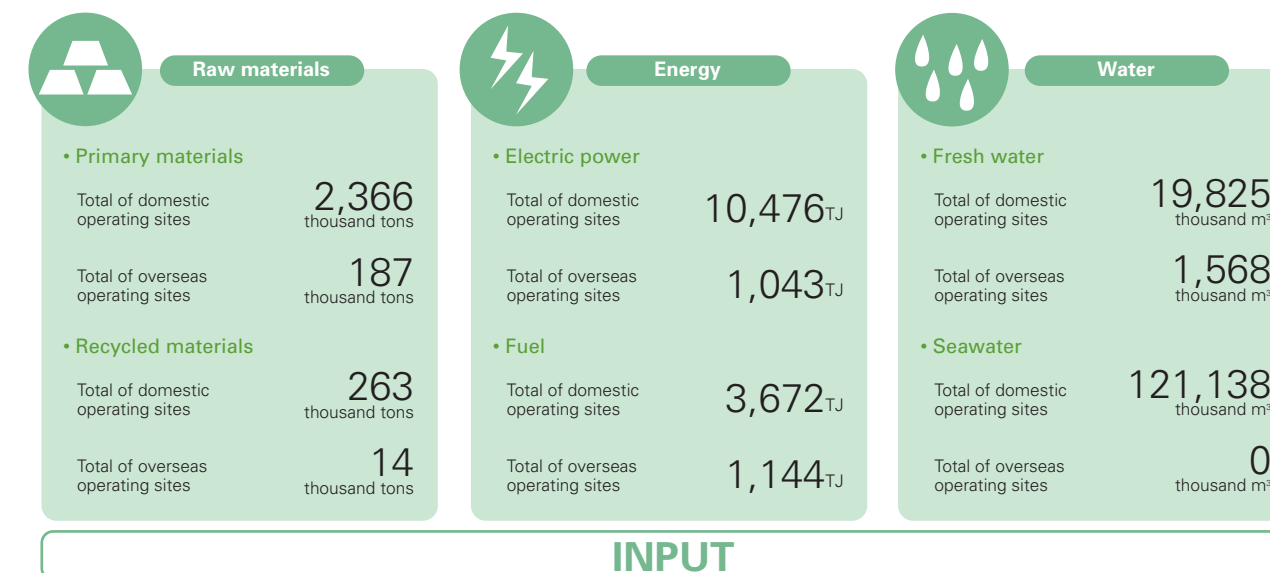
Environmental protection at our overseas businesses

- 1. Environment-friendly operations in our overseas business activities**
We will ensure an appropriate approach to environmental protection at overseas operating sites by promoting a thorough understanding of the need to take into account our environmental impact and of the need to strictly observe environmental regulations.
- 2. Environment-friendly importing and exporting activities**
In addition to adhering to the Basel Convention on waste materials, we will strive to ensure that our exporting and importing partners cause no harm in the area of environmental protection.

Our Business Activities and the Environment

The Nippon Mining & Metals Group strives to reduce the environmental impact arising from its business activities by precisely identifying and analyzing the impact.

Mass balance table of the Group

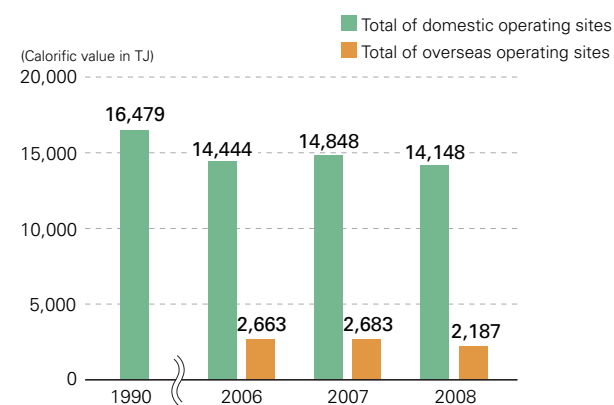


Energy conservation, energy consumption, and related issues

Since the Kyoto Protocol took effect, industrialized countries are responsible for reducing greenhouse gas emissions, such as CO₂, by 5% from 1990 levels in the five-year period from 2008 to 2012, with Japan being committed to reducing emissions to 6% below 1990 levels. From the point of view of preventing global warming, the promotion of energy conservation measures has become an urgent issue.

The Nippon Mining & Metals Group has already made more efficient use of energy in its manufacturing processes such as through rationalizing smelting methods and making effective use of hydroelectric power.

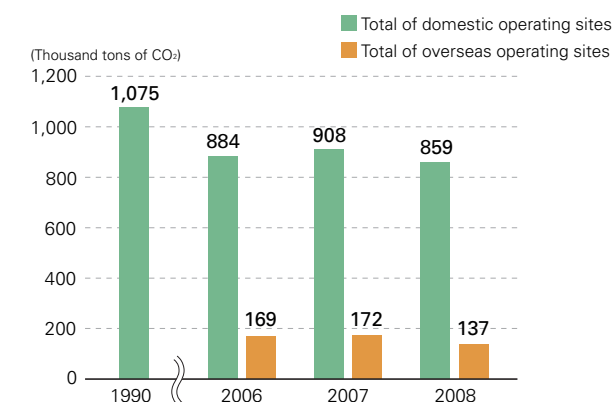
Energy consumption (fuel + electricity)



CO₂ emissions from energy consumption

In fiscal 2008, the Nippon Mining & Metals Group's CO₂ emissions from energy consumption were 996 thousand tons*. Smelting operations, which account for 54% of the entire Group's energy consumption, have reduced CO₂ emission intensity to 60% of fiscal 1990 levels by implementing energy conservation measures such as conducting smelting operations with a single flash furnace.

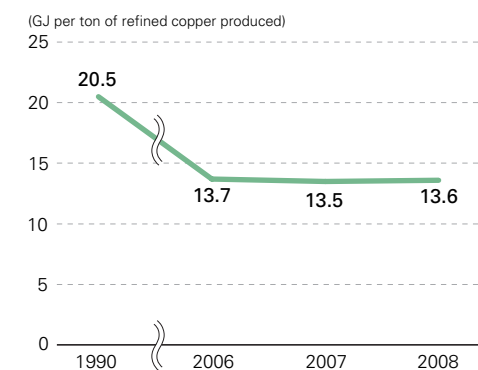
CO₂ emissions from energy consumption



Under the current medium-term plan, which was revised in fiscal 2008, the Group's fiscal 2010 reduction targets for energy consumption intensity and CO₂ emission intensity are 5% or more and 7.5% or more, respectively, as measured against the average of the results for the period from fiscal 2003 to fiscal 2005. The Group will continue to monitor progress each year and strive to achieve these targets.

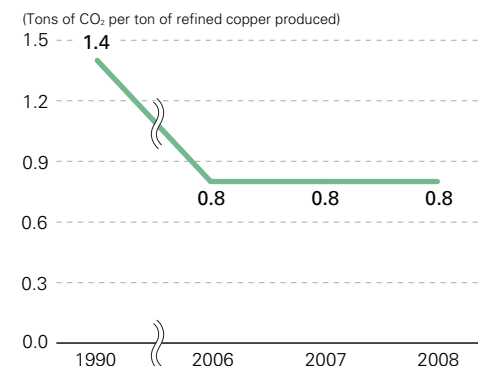
The Saganoseki Smelter & Refinery, Nikko Smelting & Refining Co., Ltd. has participated in the trial implementation of the CO₂ emission quota transactions in the Japanese market that was undertaken by the Japanese government.

Energy consumption intensity at smelters (fuel + electricity)



Due to unstable electric power supply conditions, some of our overseas operating sites have had to rely on in-house power generation. However, in view of the stability of the supply of purchased electricity and the reduced costs, these operating sites are promoting the shift to purchasing electric power from electric power companies and reducing CO₂ emissions.

CO₂ emission intensity at smelters



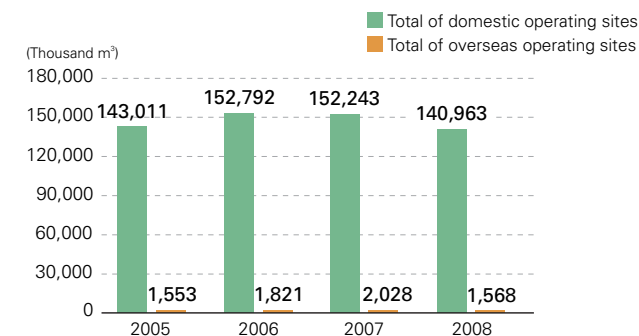
* Deducting 17 thousand tons of CO₂, equivalent to sales volume of electricity generated by the Group's electric power plant in fiscal 2008.

Conserving resources / Utilizing by-products / Recycling and reducing waste materials

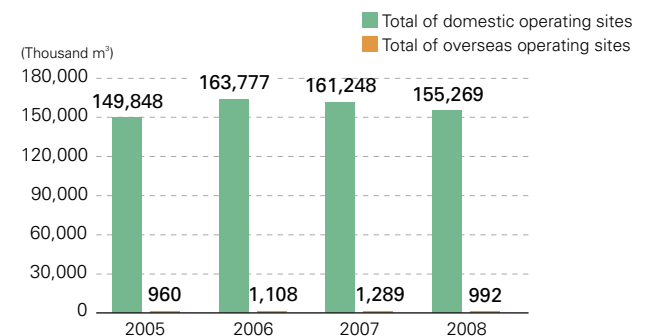
The Nippon Mining & Metals Group is working hard to reduce waste materials and prevent the depletion of natural resources by switching raw materials from natural to recycled resources, thereby making effective use of by-products and recycling waste materials. In addition, we are contributing to the creation of a resource-conservation oriented, zero-emission society by detoxifying, recycling, and correctly disposing of waste oil and waste liquid.

Regarding the reduction of waste materials sent for final disposal, the Group has reviewed its target and has subsequently decided to reduce final disposal intensity in fiscal 2010 by 70% in comparison to the average result for the period fiscal 2003 through fiscal 2005. (For details, see p.7 and 8.)

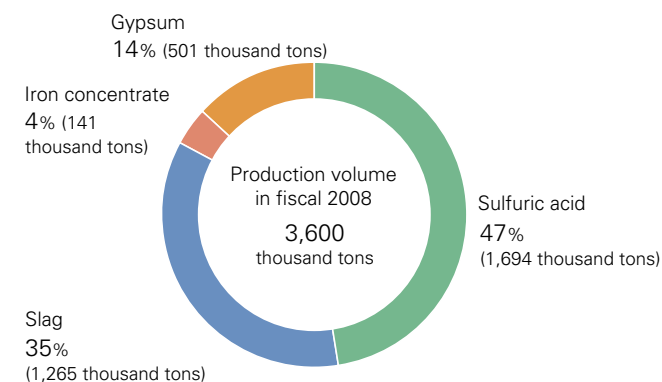
Water usage



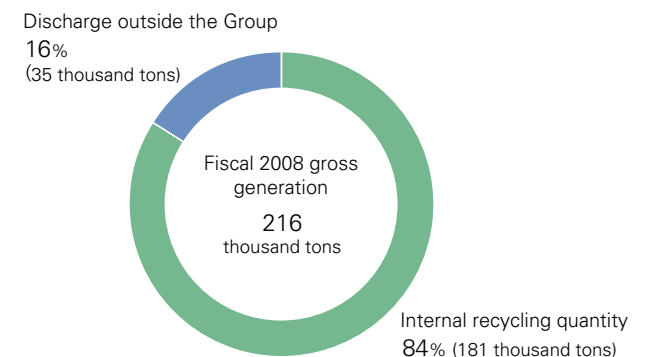
Discharge volumes



By-product production volume



Gross waste material generation and internal recycling quantity



Obtaining ISO14001 certification

Operating sites that obtained ISO14001 certification

Domestic	Operating sites, including the Shirogane Works, under the control of the Hitachi Area Coordination Center, Isohara Works, Toda Works, Kurami Works, Pan Pacific Copper Co., Ltd., Nikko Smelting & Refining Co., Ltd., Hibi Kyodo Smelting Co., Ltd., Nissho Ko-un Co., Ltd., Kurobe Nikko Galva Co., Ltd., Nikko Environmental Services Co., Ltd., Tomakomai Chemical Co., Ltd., Nikko Tsuruga Recycle Co., Ltd., Nikko Mikkaichi Recycle Co., Ltd., Nikko Fuji Electronics Co., Ltd., Nikko Coil Center Co., Ltd., Nikko Shoji Co., Ltd., and Nikko Logistics Partners Co., Ltd.
Overseas	Nikko Metals Korea Co., Ltd., Nikko Fuji Electronics Dongguan Co., Ltd., Nikko Fuji Precision (Wuxi) Co., Ltd., Nikko Metals Shanghai Co., Ltd., Nikko Metals Taiwan Co., Ltd. (Bade Works), Nikko Metals Philippines, Inc., Nippon Precision Technology (Malaysia) Sdn. Bhd., and Gould Electronics GmbH

In order to be the “best partner” to customers and suppliers, the Nippon Mining & Metals Group is dedicated to supplying high-quality, safe products. We place the greatest importance on building a trusting relationship with our customers and suppliers by listening to their opinions to improve the quality of our products and services.

Quality Assurance System

The Nippon Mining & Metals Group is implementing a quality management system, typified by obtaining ISO9001 certification, and various improvement activities such as “NPM” and “IS2” in order to achieve quality improvement in a broad sense, including the quality of operations and the quality of management rather than being limited to the quality of products and services.

Specifically, the Group sets various targets such as those relating to the reduction of product defect rates and the number of quality claims, and consequently the Group as a whole actively implements various improvement activities to achieve these

Overseas operating sites that have obtained ISO9001 certification

Nikko Metals Korea Co., Ltd., Changzhou Jinyuan Copper Co., Ltd., Nikko Fuji Electronics Dongguan Co., Ltd., Nippon Mining & Metals (Suzhou) Co., Ltd., Nikko Fuji Precision (Wuxi) Co., Ltd., Nikko Metals Shanghai Co., Ltd., Nikko Metals Taiwan Co., Ltd., Nikko Metals Philippines, Inc., Nippon Precision Technology (Malaysia) Sdn. Bhd., Nikko Metals USA, Inc., and Gould Electronics GmbH

Examples of Initiatives and Accomplishments

Gould Electronics GmbH



Our modified and enhanced monitoring system has further minimized process variations and resulted in improved quality and yield as well as minimized losses due to inefficient line balance such as idle time and waiting time. In addition, we are strengthening our capabilities to satisfy the “voices of customers” as an ongoing high priority. The internal specification database has also been upgraded to assure the distinct communication of customer requirements to all sections of the plant. Our reengineered ISO9001/14001 Management System works as an effective management tool, in which, reflecting our corporate philosophy, the occupational health and safety processes are also integrated. Gould Electronics GmbH received OHSAS18001 certification in February 2009.

Sabine Preuss, Quality & Process Leader, Gould Electronics GmbH

Nippon Precision Technology (Malaysia) Sdn. Bhd.



In order to fulfill our customers’ specific quality requirements, our QA Section continuously strengthens the quality management system based on ISO9001 by carrying out several related programs. The Weekly Quality Control Meeting is a key activity in taking immediate action against customer claims and internal non-conformities. The great efforts of all NPTM members who worked under the enthusiastic guidance of the QA Section were eventually rewarded by a 50% reduction in customer claims in the first half of 2009. We have recently launched a new project to obtain ISO/TS16949 certification by May 2010 in order to venture into the automotive market as a part of our efforts for business diversification. Our continuous improvements in quality assurance adapting with rapid changes in customer requirements is believed to substantially contribute to our growth and continuity.

Rusli bin Yusof,
QA Assistant Manager, Nippon Precision Technology (Malaysia) Sdn. Bhd.

targets. Tailored to the characteristics of each business, the Group has developed a quality assurance system that covers sales and marketing, manufacturing, production control, engineering, and product development departments. The quality assurance system is basically operated by implementing the PDCA cycle.

As for ISO9001 certification, an international standard for quality management systems, most domestic and overseas operating sites have obtained the certification. Nikko Smelting & Refining Co., Ltd. and Japan Copper Casting Co., Ltd. are currently working toward obtaining certification by the end of 2009.

Nikko Metals Philippines, Inc.



The utmost goal of quality assurance at Nikko Metals Philippines, Inc. (NMPH) is to achieve and maintain stable and controlled product properties and visual appearance. Our concept of quality transcended from mere defect detection to defect prevention. The sharing of technology and project-based technical assistance with our sister companies—the Shirogane Works in Japan and Gould Electronics in Germany—provides our technical staff with continuous training and the enhancement of technical knowledge and skills. This keeps us up-to-date with the latest trends in manufacturing technologies, and allows us to establish and implement preventive measures to avoid potential problems. Continual improvement activities in both quality and environmental aspects to conform to the product requirements set by our customers are implemented to achieve global competitiveness.

Mary Rose Lyn Carcasona,
Manager of Quality Assurance Section / QMR, Nikko Metals Philippines, Inc.

Nikko Metals USA, Inc.



Nikko Metals USA, Inc. (NMU), is a sales and marketing office for the sputtering targets business for LSIs and other materials in the U.S. and European markets, as well as the fabrication works to finish sputtering targets for LSIs, which are sent from the Isohara Works, our central works in Japan, as the semi-finished high-purity products. NMU and the sales office in Europe (Nikko Metals Europe GmbH) cooperate with the Isohara Works to continuously improve the quality management system to attain ISO/TS16949 certification in 2009, as requested by our customers manufacturing semiconductors for the automobile industry. As a result of our QA activities, we reduced the scrap ratio in 2008 to less than a half of that in 2007. We also won the Preferred Quality Supplier Award from Intel Corporation.

Kirk Culberson, Quality System Administrator, Nikko Metals USA, Inc.

The Nippon Mining & Metals Group values each and every employee and aims to create an open, optimal working environment.

Human Resources—Indispensable Management Resources

The Nippon Mining & Metals Group’s philosophy of respecting individual employees dates back to the foundation of the Group in 1905, when the Hitachi Mine was established in Ibaraki Prefecture. To develop the mine, the mining company had to create an environment where people could lead a communal life. In other words, the mining company had to build a whole town that included not only housing for employees but also schools, hospitals, and the like so that families could live together. The spirit of respect for employees was cultivated in this environment of the workplace being close to the home. Since the mine was the

foundation of the town’s livelihood with everyone sharing the good times and the bad times, the mining company naturally looked after its employees well. At the same time, reconciliation between existing local residents and new settlers was absolutely necessary, and creating harmony between the traditional culture of the area and other cultures was critical to the success of the business.

With roughly 5,600 employees, the Nippon Mining & Metals Group will continue to value and cultivate human resources as a precious asset.

Respect for Human Rights

The Nippon Mining & Metals Group aims to create an organization where employees’ personality, human rights, and individuality are respected. Since fiscal 2008, the Group has been participating in the United Nations “Global Compact,” an international principle mainly covering the protection of human rights and labor standards. In addition, Article 4 of the Group’s Code of Conduct states the “respect for employees’ personality, human rights and individuality,” and this attitude of respecting human rights is promulgated to all affiliated companies in Japan and overseas.

Initiatives toward Diversity

The Nippon Mining & Metals Group values diversity of human resources and working ways. In compliance with laws and other regulations in Japan and overseas, the Group is promoting the reemployment of retirees, the full utilization of the abilities of female employees, and the employment of the physically challenged.

Also, the Group is creating systems of taking holidays for employees raising children or providing nursing care as well as a community service leave to promote diverse ways of working.

The Workforce of Nippon Mining & Metals Group

The table below shows the breakdown of employees of the Group’s 38 domestic and overseas affiliated companies included in the boundary of this report. The average age of employees is 39, with an average years of service of 12 years.

Composition of Managerial Staff (as of March 31, 2009)

		Managerial Staff			Other Employees			Total		
		Male	Female	Sub-total	Male	Female	Sub-total	Male	Female	Sub-total
Total number of full-time employees working for 25 domestic companies	Japan	1,231	24	1,255	2,004	274	2,278	3,235	298	3,533
	North America	8	0	8	0	0	0	8	0	8
	South America	23	0	23	0	0	0	23	0	23
	Asia	51	0	51	4	0	4	55	0	55
	Europe	2	0	2	0	0	0	2	0	2
	Other	2	0	2	0	0	0	2	0	2
Subtotal		1,317	24	1,341	2,008	274	2,282	3,325	298	3,623
Total number of full-time employees working for 14 overseas affiliated companies	North America	20	5	25	37	9	46	57	14	71
	Asia	188	90	278	823	582	1,405	1,011	672	1,683
	Europe	28	5	33	108	6	114	136	11	147
Subtotal		236	100	336	968	597	1,565	1,204	697	1,901
Grand Total		1,553	124	1,677	2,976	871	3,847	4,529	995	5,524

Full-time employees: regular employees and employees on fixed-term contracts working equivalent hours to regular employees
Managerial staff: general managers, managers, assistant managers, and supervisory staff members

Involvement with Local Communities

At various operating sites of the Group inside and outside of Japan, efforts are being made to deepen mutual understanding and build trustful relationship with local governments and regional communities by maintaining regular communication. At the same time, the Group is promoting active mingling with the local residents by inviting them to events including summer festivals.

Examples of Communication Activities with Local Communities

Convivial Events with Local Residents



Summer Festival—Sanjin-Sai
(Hitachi Area Coordination Center)



Summer Festival—Hazuki-Sai
(Kurami Works)



Hibi District Autumnal Festival
(Hibi Kyodo Smelter, Pan Pacific Copper Co., Ltd.)



Summer Festival
(Saganoseki Smelter & Refinery, Nikko Smelting & Refining Co., Ltd.)



JOMO Basketball Clinic
(Nikko Metals Philippines, Inc.)



New Year's Party
(Japan Business Association of Arizona, Nikko Metals USA, Inc.)

Cleanup Activities



Cleanup activity in the area neighboring the factory
(Tomakomai Chemical Co., Ltd.)



Cleanup activity on the Kehi-No-Matsubara Beach
(Nikko Tsuruga Recycle Co., Ltd.)



Cleanup activity in the area neighboring the factory (Nippon Mining & Metals (Suzhou) Co., Ltd.)



Cleanup activity on the Laguna Lake Shore (Nikko Metals Philippines, Inc.)

Disaster Preparedness Drills



LTA Fire Fighting Olympics
(Nikko Metals Philippines, Inc.)



Rescue Drill
(Gould Electronics GmbH)



Disaster Preparedness Drill (Nippon Precision Technology (Malaysia) Sdn. Bhd.)



Disaster Preparedness Drill
(Tomakomai Chemical Co., Ltd.)

Contribution to Local Communities

Activities in Domestic and International Societies

The Nippon Mining & Metals Group is also engaged in the following activities through cooperation with outside organizations.

Supporting a CSR workshop organized by the Indonesian government

The "Workshop on Corporate Social Responsibility in Mining Industry and Seminar on Rules and Regulations for Minerals Resources Development in ASEAN," sponsored by the Indonesian government, was held in Bali, Indonesia, from July 21 to 24, 2008. The Nippon Mining & Metals Group supported the workshop through Japan Oil, Gas and Metals National Corporation (JOGMEC).



Conducting afforestation activity at the site of closed mines

From the viewpoint of environmental protection and biodiversity, the Nippon Mining & Metals Group is conducting afforestation activity at closed mines in cooperation with Japan Energy Corporation. In fiscal 2008, a five-year afforestation project was commenced at the closed Oe Mine site in Yoichi County, Hokkaido, in cooperation with the local forestry union. Roughly 5,500 Sakhalin spruce trees were planted in an area of roughly 2.6 ha in the first year of the plan.



ICMM Activities in the Last Year

For International Council on Mining & Metals (ICMM), 2008 was a year marked by events that have dramatically changed the operating environment for all of mining. Our task is to continue the improvement of practices and strengthen relationships with key stakeholders at a time when economic conditions are very tough.

In the midst of all the upheaval ICMM has not faltered: An upgraded procedure was published that sets out how member companies can assure both performances against ICMM's ten principles, as well as their reporting requirements for mining. ICMM published a Good Practice Guidance on HIV/AIDS, Tuberculosis and Malaria providing practical information for disease management; a spotlight publication on the topic of minerals taxation, and two guidance publications came out related to the European Community's REACH.

A Mine Closure Toolkit was published, as well as a position statement on mining and indigenous peoples, and pilot projects

demonstrating the nature and extent of mining's socio-economic contribution were completed in Peru and Ghana. Through all of this, the small team of ICMM staff continued to interact with members and stakeholders across the globe to learn and to share what ICMM and our members are doing.

It is now seven years since the Global Mining Initiative set the priorities that have since guided ICMM. Current times demand a fresh look at our direction. We have therefore initiated a strategic review of ICMM's vision, goals, priorities, key relationships and even structure. The process began with a series of conversations within and outside of the ICMM family and it will continue to be a key focus throughout 2009.



Our Endorsement and Support of the Extractive Industries Transparency Initiative (EITI)

The ICMM indicated in 2005 its continued support of EITI. The Nippon Mining and Metals Group also endorses the EITI principles and continues its support.

Our Participation in the United Nations Global Compact

In August 2008, the Nippon Mining & Metals Group joined the United Nations Global Compact. The Group supports and strives to materialize the "10 Principles" in the four fields of human rights, work standards, the environment, and anticorruption.



Please feel free to give us your frank opinions about Sustainability Report 2009 to help us make the next report even better. We welcome any suggestions for improving this report.

○ NIPPON MINING & METALS CO.,LTD.

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