

Integrated Report

2016

SMELTING & REFINING

MINERAL RESOURCES

MATERIALS



SUMITOMO METAL MINING CO., LTD.

Article 1

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

Article 2

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

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

SMM Group Corporate Philosophy

Sumitomo Metal Mining Co., Ltd. (SMM), in accordance with the Sumitomo Business Spirit, shall, through the performance of sound corporate activities and the promotion of sustainable co-existence with the global environment, seek to make positive contributions to society and to fulfill its responsibilities to its stakeholders, in order to win ever greater trust.

SMM shall, based on respect for all individuals and recognizing each person's dignity and value, seek to be a forward-minded and vibrant company.

SMM Group Management Vision

By developing and employing innovative technology, we shall fulfill our social responsibilities as a manufacturing enterprise.

Based on the principles of compliance, environmental protection and operational safety, the Sumitomo Metal Mining Group shall pursue maximum corporate value through the provision, via its global network, of high-quality materials such as non-ferrous metals and electronics and advanced materials.

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Editorial Policy

We began publishing the integrated report this fiscal year so that all of our stakeholders, including customers, shareholders and investors, and local communities, can gain an even better understanding of our initiatives aimed at sustainable growth and maximization of corporate value, which is the goal of the SMM Group.

The editing of this Sumitomo Metal Mining Co., Ltd. Integrated Report 2016 has been conducted around the perspectives of the kind of value the SMM Group creates and how, what the Group's goals for the future are and how it is working toward them as well as the foundations that underpin our value creation.

Referenced Guidelines and Assurance

In editing this report, we referenced the International Integrated Reporting Framework of the International Integrated Reporting Council (IIRC). For information on sustainability, we have complied with the Core option of the Global Reporting Initiative's* G4 Sustainability Reporting Guidelines, and the Company's self-declaration and performance data have received independent assurance.

The Annual Report and the CSR Report, which we published up until last year, have been discontinued from this year as the information is contained within this report. Detailed financial information is summarized in the Financial Section and published on the Company's website.
<http://www.smm.co.jp/E/ir/library/>

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

Boundary of the Report

Sumitomo Metal Mining Co., Ltd. (SMM)
The Sumitomo Metal Mining Group
(SMM and consolidated subsidiaries)

Economic Aspects SMM, consolidated subsidiaries and equity-method affiliates

Environmental Aspects SMM and consolidated subsidiaries
(32 companies)

• From the perspective of materiality, we included equity method affiliate Nippon Ketjen Co., Ltd., but excluded consolidated subsidiaries with a low environmental impact. The boundary of the report is stated on p. 40-41. Companies marked with an asterisk (*) and Sumiko Advanced Materials (Suzhou) Co., Ltd. are included in the boundary of the report.

Social Aspects SMM and consolidated subsidiaries

Publication Date

November 2016

Next scheduled publication: November 2017

Period Covered

Japan: April 1, 2015–March 31, 2016

Overseas: January 1, 2015–December 31, 2015

(Some activities before or after the above periods have also been included)

Referenced Guidelines

GRI's G4 Sustainability Reporting Guidelines

IIRC's International Integrated Reporting Framework

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

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Disclaimer

The forward-looking statements in this integrated report, including business result forecasts, are based on information available to the Company and on certain assumptions deemed to be reasonable as of the date of release of this report. Actual business results may differ substantially due to a number of factors.

420 years of business transitions in response to changes in the surrounding environment

1600

1700

1800

1900

1910

Mineral Resources Business

1917 Gold mines

Start the gold mine business

With the start of operation at the Besshi Copper Mine, noted at the time as one of the world's largest copper mines, Sumitomo's business expands greatly from a focus on the copper smelting and refining business to newly adding the mineral resources business. Over the following 283 years, until 1973, the mining technologies nurtured at Besshi are continually handed down within SMM's globally expanding resource business.



1691 Copper mines

Open the Besshi Copper Mine

Smelting & Refining Business

1590

Start of copper smelting and refining

1905

Relocation of copper smelting and refining to the Shisakajima Islands

The increase in production volume attributable to technological innovation in the Meiji period had the result of magnifying what had until then been a modest environmental impact. Sumitomo relocates its smelter to the Shisakajima Islands, situated 20 km from the nearest coast. This alone, however, does not completely resolve the problem, and the battle with environmental issues continues until the company is able to develop new smelting technology and fully constrain impacts.

Monjuin Shiigaki

The wellspring of SMM Group's strength

● Employees who share our Business Spirit and goals

Sumitomo Masatomo (1585-1652), the founder of the Sumitomo family, wrote *Monjuin Shiigaki* in his late years. In it he describes how a merchant should conduct business. The opening and five articles cover guidelines for business and also call for hard work and sincerity. This is the wellspring of the Sumitomo Business Spirit.

The opening says "in business, do not do things poorly, put your heart into everything you do, do it carefully and thoroughly, improve yourself as a person and become a fine person." The last article is about dealing with people; the attitude one

should have and that one has the responsibility to explain sincerely (accountability), stating "no matter what someone says to you, do not be short-tempered and argue, instead, repeatedly explain in detail."

Succeeding to the history and tradition that began with this *Monjuin Shiigaki*, Saihei Hirose, the first Director General of Sumitomo, became the driving force, with the basic Sumitomo doctrine he put forth becoming rules governing the house of Sumitomo. Moreover, the central part stating the essentials of business, is the Sumitomo Business Spirit.

At the SMM Group, the Sumitomo Business Spirit is the common spirit among employees and we work to inculcate common goals and standards of action as guideposts for carrying out duties through various educational opportunities.



Nanban-buki

As peace returned to Japan at the close of the Sengoku period, the country sees strong demand for copper for uses such as Buddhist altar fittings. Riemon Soga, who started dealing in copper in Kyoto at this time, develops Japan's first smelting and refining technology for separating copper and silver, known as *Nanban-buki*. Until then, there had been no technology in Japan to remove the silver from copper ore so copper was sold, and exported, at copper prices while it still included silver. With Soga's technology, it was now possible to sell the copper after separating out the silver. In 1623 he establishes a refinery in Osaka, which has a port. However, Soga doesn't monopolize the smelting



Major events

1602 Establishment of the Dutch East India Company

1760s Industrial Revolution

1867 Nobel invents dynamite

1914 Start of WWI

1603 Establishment of the Edo Shogunate

1775 American War of Independence

1868 Meiji Restoration

1869 Opening of the Suez Canal

As the corporation inheriting the original business of the Sumitomo Group, not only have we responded flexibly to the changes in the surrounding environment based on the Sumitomo Business Spirit, we have also driven the business with a progressive stance. The current strengths of our Group have been formed by the various management decisions and solutions to problems which occurred in that process. We will continue to reinforce our strengths and bring about new strengths through our business activities.

1920 1930 1940 1950 1960

Sumitomo, whose resource business had centered on copper mines, acquires management rights for the newly discovered Kounomai Mine in Hokkaido at a time of growing importance of gold as a resource. This northern mine, known as "the biggest gold mine in the Orient," enhances the resource business portfolio with gold as a new metal.

After WWII, Japan ceases domestic mining operations in the non-ferrous metals industry and switches to smelting and refining with resources completely procured from overseas. In 1961, SMM signs an investment and financing contract with Bethlehem Mine (Canada), which is the start of the company's involvement with overseas mines. Continuing to today, SMM is gaining footholds in mines throughout the world.

1960- Overseas copper mines
Participation in overseas copper mine development

1939

Nickel smelting and refining Start of nickel smelting and refining

SM M launches a nickel smelting and refining business in 1939, a time when new demand is appearing (nickel's discovery was relatively recent, in the 1700s). Subsequently, SMM has come to lead the world in nickel technologies, including the development of the MCLE method and other nickel refining technologies, and in the new millennium, diversifying raw material procurement with the practical implementation of HPAL technology.



While the mining business in Japan was undergoing contraction at this time, the electronic materials business comes under attention as a new market. In 1960, SMM begins production of germanium dioxide for use in transistors. Since then, we have provided the market with paste, lead frames, and other electronic materials that leverage metal technologies. At present, we are increasing our production of battery materials using nickel.

1960
Entry into the materials business

The wellspring of SMM Group's strength
Continually honed technology

and refining technology, he discloses it broadly to others in the same business leading to many copper-related businesses gathering in Osaka. Osaka becomes one of the world's top copper towns. Around this time, the amount of copper unearthed in Japan is extremely large compared to the rest of the world, and because of the beauty of its rose-red appearance, Japanese copper is cherished and exported around the world by the Dutch East India Company.

In 1697, Japan produces approximately 6,000 tons of copper, making it the largest producer in the world. Copper from the Besshi Copper Mine accounts for approximately one quarter of that amount.

The SMM Group is comprised of *monozukuri* — manufacturing—companies and as such, we continue to polish our technology, working for sustainable growth and maximization of corporate value.

1923 The Great Kanto Earthquake

1929 The Great Depression

1939 Start of WWII

1951 Signing of The Treaty of San Francisco

1955 Japan joins GATT (General Agreement on Tariffs and Trade)

1961 Free trade of electrolytic nickel

SMM HISTORY

1965 1970 1975 1980 1985 1990 1995

Mineral Resources Business

Gold mines

1973

Closure of the Kounomai Mine

1985

Open the Hishikari Mine

1986

Investment in the Morenci Copper Mine

Overseas copper mines

Copper mines

1973

Closure of the Besshi Copper Mine

1979

Closure of the Sazare Mine

Facing a decline in ore grade after 283 years of operation, the Besshi Copper Mine is closed. With the closure of the Sazare Mine (Ehime Prefecture; copper) in 1979, the curtain closes for a time on SMM's heritage of mining technology. In 1985, however, operation of the Hishikari Mine begins (Kagoshima Prefecture; gold). SMM's technology has begun to chart a new history in a new area.

Smelting & Refining Business

Copper smelting and refining

1971

Start of production at the Toyo Smelter & Refinery

Nickel smelting and refining

1992

Conversion of nickel refining process to MCLE technology

Materials Business

1970

Start overseas expansion of the materials business

Reforestation business

The wellspring of SMM Group's strength
Global environmental preservation

In order to secure the charcoal and wood necessary to operate the Besshi Copper Mine, clear-cutting of the forests on Besshi Mountain continued for many years, leading to deforestation over wide areas. When Teigo Iba, later to become the second Director-General, saw this devastated state he felt that leaving Besshi Copper Mine desolate was going against the law of heaven and earth and set up a major policy to return it to a state of nature, putting it in its original green state. He called in experts and made plans and proceeded with reforestation. With the implementation of these plans, the annual average for the previous 15 years of 60,000 trees planted doubled to 120,000 in just 1894, the year Iba

became manager of the Besshi Copper Mine, and three years later, in 1897, broke 1 million, and continued to increase every year after that, hitting a peak of over two million. This business continued even after Iba retired and today, the Besshi Copper Mine that was denuded more than one hundred years ago, is again lush with forests and has abundant ecosystems.

SMM Group works at co-existence and co-prosperity with local societies by working on environmental preservation in its development of mines in the mineral resources business, which has a large impact on the environment, and also in its smelting and refining and materials businesses.

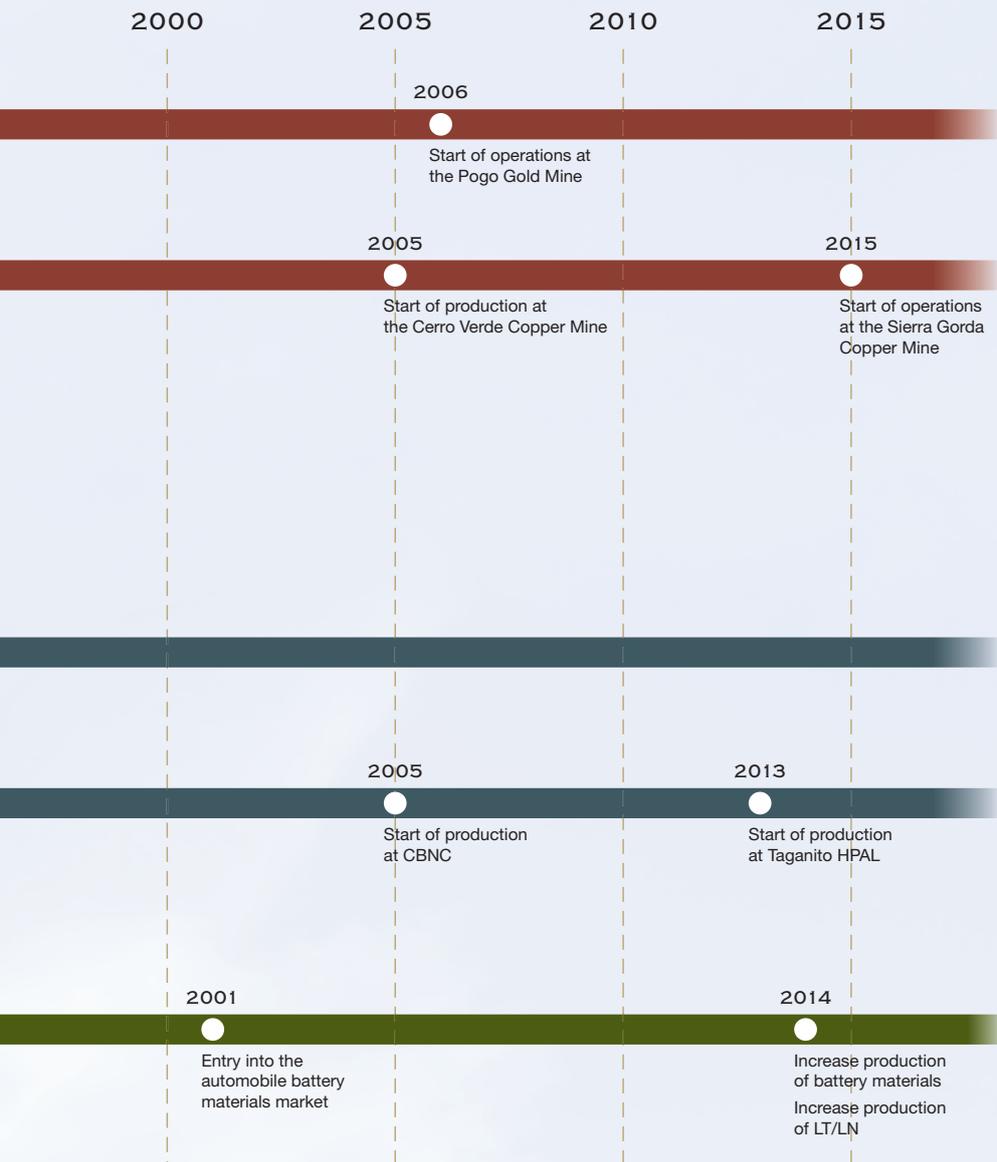
Besshi Copper Mine in the past



Besshi Copper Mine today

Major events

1963 Free trade of electrolytic copper	1971 Nixon Shock Implementation of restrictions on the floating exchange rate of the yen	1973 First Oil Shock	1978 Free export of gold	1985 Plaza Accords	1989 Fall of the Berlin Wall	1991 Start of the Gulf War
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Overcoming smoke damage

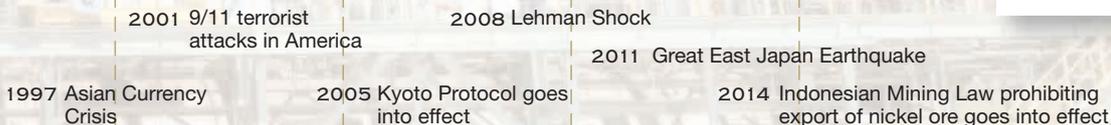
With the modernization of the Besshi Copper Mine, increases in the amount of ore extracted were planned, and the smelter was relocated to the coastal area of Niihama. As a result, the damage to agricultural crops in the surrounding area due to the sulfur dioxide gas produced by the smelting operations became severe by 1893. Because of this, Iba, the second Director-General, purchased uninhabited islands which didn't even have water, and are located about 20 kilometers north of Niihama City, and moved the smelter there in 1905. These were later called the Shisakajima Islands.

However, things didn't go as expected and smoke damage

Relationships of trust with local communities

from the Shisakajima Islands spread over a wide area. In addition to paying damages, Sumitomo took the unusual measure at the time of adjusting production in order to reduce damage to crops. Sumitomo wasn't alone in facing this problem of smoke damage; all copper smelters and refineries around the world faced the same problem. But after many years and spending huge sums on research, in 1939 Sumitomo became the first smelter in the world to bring about zero emissions of sulfur dioxide gas, which was a root cause of the smoke damage, finally solving the problem of smoke damage after 47 years.

In overseas operations, too, such as in the Philippines, SMM Group works to not only preserve the environment but also aims for co-existence and co-prosperity with local societies by providing support for regional promotion policies which build and preserve a trusting relationship.



Seven strengths nurtured over 420 years

Continually honed technology

Employees who share our Business Spirit and goals

Solid relationships with business partners

Good relationships with customers

Relationships of trust with local communities

Safe labor environment

A sound financial standing



Created value

Sustainable growth through the securing of mineral resources and the stable supply of basic materials and high-functionality materials

Contribution to sustainable society through global environmental preservation, development of products with low environmental impact, and co-existence with local communities

The SMM Group's Value Creation Process

The SMM Group will continuously grow by stably supplying basic materials and high-quality products through collaboration by its mineral resources business, smelting and refining business, and materials business.

At the same time, these businesses can have a considerable impact on the environment. Accordingly, we contribute to a sustainable society by working toward global environmental preservation, development of products with low environmental impact, and co-existence with local communities.

Through this creation of value, the SMM Group aims for sustainable growth and the maximization of our corporate value.

Seven strengths nurtured over 420 years

Continually honed technology

Our technology, accumulated and honed over many years, enables the stable supply of high-quality materials and products. Our HPAL technology, for example, marks the world's first success in commercialization of this technology, and is a major strength of our company.

Employees who share our Business Spirit and goals

Employees share our goals and corporate philosophy, which are based on the Sumitomo Business Spirit, and support the SMM Group's creation of value. Aiming to achieve our goals, employees respect human rights and put their capabilities to work in each of their fields.

Solid relationships with business partners

Strong relationships of trust with partners are vital in the stable operation and development of mines. The SMM Group builds solid relationships of trust through technical cooperation and other collaboration.

Good relationships with customers

Good relationships of trust born from careful attentiveness are a strength in our relationships with customers. A perfect example is seen in our highly regarded battery materials, products created through collaboration with market-leading customers from the research and development stage.

Relationships of trust with local communities

Holding up co-existence with local communities as part of our corporate philosophy, the SMM Group has built relationships of trust with these communities over many years through varied activities. These relationships support the long-term operation of our businesses.

Safe labor environment

While many major mineral resource companies have an occupational accident frequency rate of four or five, the SMM Group has maintained a rate of about one, with zero fatal accidents since 2004. Establishing and maintaining this safe labor environment enables stable work by employees and provides a foundation for the stable supply of products.

A sound financial standing

The acquisition of interests can at times require bold investment decisions accompanied by financial risk. A sound financial standing is indispensable in reducing such risk. The SMM Group maintains an equity ratio of about 60%, compared with around 30-40% for other major mineral resource companies. Our robust financial standing supports decision-making on large-scale investments.

2021

Long-Term Vision

Become a world leader in the non-ferrous metals industry and an excellent company of Japan

Nurtured strengths

Current

Spiraling up toward goals

Sustainable growth and maximization of corporate value



Created value

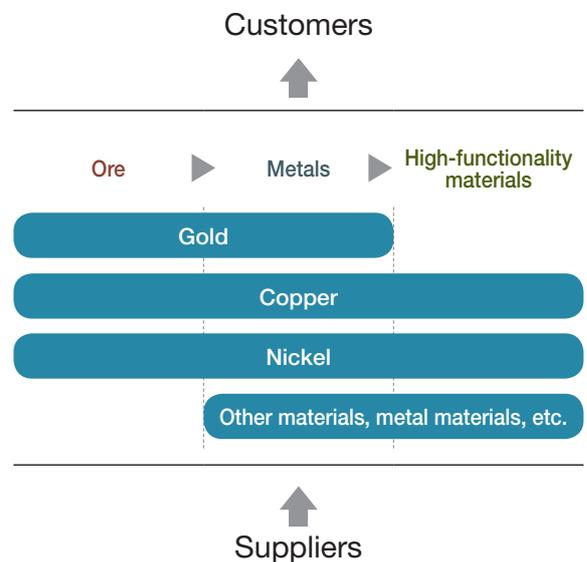
Sustainable growth through the securing of mineral resources and the stable supply of basic materials and high-functionality materials

Contribution to sustainable society through global environmental preservation, development of products with low environmental impact, and co-existence with local communities



Our three-business process

Through a unique business process created from the collaboration of our mineral resources business, smelting and refining business, and materials business, the SMM Group offers a stable supply of goods from basic materials to high-quality products.



Through the deployment of our three core businesses, we contribute to the stable supply of goods from basic materials to high-quality products

“Excavating ore, a natural resource, making it into metal materials by smelting and refining, and adding new value to those materials.”

The materials we handle and the value we add vary through the ages, but the essence of this business process remains unchanged over the years.

INPUTS

Earth resources
Seven nurtured strengths

SMM GROUP

Mineral Resources



Copper mines

Morenci, Cerro Verde, Sierra Gorda, Candelaria, Ojos del Salado, Northparkes



Gold mines

Hishikari, Pogo

Copper concentrates
Hishikari ore

Supply

BUSINESSES

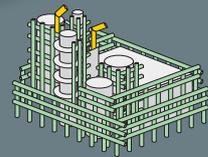
Smelting and Refining



Nickel mines

Rio Tuba Nickel Mining Corporation, Taganito Mining Corporation

Overseas HPAL plants



Supply

Nickel intermediate materials



CASE Putting our strengths into practice

1 Mineral Resources Business

The holding of competitive mining interests, based on solid relationships of trust with partners

For the SMM Group, the holding of mining interests involves more than making investments. We also contribute to the stable operation and the operational improvement of mines through means including the dispatch of personnel and technical cooperation, drawing on the mining technology we have enhanced and expanded since our development of the Besshi Copper Mine. In doing so, we contribute to strengthened competitiveness and earn the deep trust of our partners.

On the basis of the relationships of trust we have built through such activities, we have gained opportunities to participate in and acquire interests in new, excellent development projects, leading to further growth and enhancement of our corporate value.



CASE Putting our strengths into practice

2 Smelting & Refining Business

Utilizing low-grade nickel ore and recovery of rare metals through cost-competitive smelters and refineries and HPAL technology

The SMM Group led the industry globally in successfully commercializing HPAL* technology. Through this, we enable the production of nickel products from low-grade nickel oxide ore, an ore which had been difficult to refine. We have also set our sights on leveraging our HPAL plants and separation and refinement technology for commercial production of scandium, a metal made rare by the difficulty of its refining.

At the same time, with global top-class cost competitiveness in our main smelters and refineries (the Toyo Smelter & Refinery and the Niihama Nickel Refinery), we aim to maximize profit opportunities through stable operation. This high level of technology and high cost competitiveness form the foundation for our stable supply of basic materials.

* HPAL (High Pressure Acid Leach) method: A technology to extract nickel and cobalt from low-grade nickel oxide ores. CBNC was the first in the world to succeed at large-scale commercial production in 2005; Taganito HPAL began operations in 2013 as the second production facility.

3 Materials Business

Development and provision of high-quality battery materials through collaboration with customers

In the development of battery materials, we earn the solid trust of customers through close collaboration from the research and development stage through technological support in upstream smelting and refining.

With regard to natural resources, however, concern is growing over issues including the emergence of resource nationalism and the risk of complicity in human rights violations. Accordingly, stably

securing the raw materials for batteries, for which rapid market growth is expected, is becoming a serious issue in procurement.

The SMM Group conducts its business activities in an integrated flow that spans the excavation, smelting and refining, and processing of the nickel and cobalt that are the raw materials. Through the stable supply of conflict-free materials and products based on clear supply chains, we contribute to the avoidance of risk in customers' procurement.

Through strong relationships of trust built during development and procurement, we create a positive cycle that leads to the sharing of the latest information on products and markets, and cooperation on new product development.



OUTCOMES

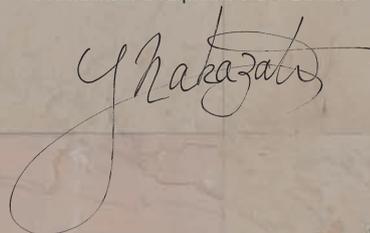
Continuous growth through the securing of mineral resources and the stable supply of basic materials and high-functionality materials

Contribution to sustainable society through global environmental preservation, development of products with low environmental impact, and co-existence with local communities

INTERVIEW WITH THE PRESIDENT

Going forward, we will further burnish our unique business model integrating operations in Mineral Resources, Smelting & Refining, and Materials, and pursue sustainable growth and enhanced corporate value.

Yoshiaki Nakazato
President and Representative Director



Q1 Please tell us how SMM performed in fiscal 2015.

Sales and income figures dropped substantially. Declines in metal prices were the main cause, but there were also many management issues we need to reflect on, such as the delay in achieving commercial production at the Sierra Gorda Copper Mine.

In fiscal 2015 our earnings deteriorated significantly. At the recurring income level, we booked a loss of 12.8 billion yen, down 187 billion yen from the previous fiscal year and the first recurring loss recorded since fiscal 2001. The principal cause was the declines seen in metal prices. Those declines, together with the year's forex movements, together accounted for a 116 billion yen drop in recurring income from fiscal 2014. At the same time, however, there are also many management aspects we need to reflect on: for example, the impairment loss booked as a result of delayed progress in the Sierra Gorda Copper Mine development project.

Fiscal 2015 was the final year of our 2012 3-Year Business Plan. The main issues we addressed under the plan were to move forward large-scale projects in the Mineral Resources and Smelting & Refining businesses, and to carry out structural reforms in our Materials business. With respect to the former businesses, while on the one hand we succeeded in starting up Taganito HPAL, we failed in our plan to achieve full-scale production at the Sierra Gorda Copper Mine. Concerning our Materials business, we carried out a reform whereby we shifted the focus of our investment of management resources: the former structure, under which resources were concentrated into semiconductor materials targeted at the general product markets, was superseded by a structure of resource investment heavily focused on advanced materials, a business conducted based on relationships of trust with market-driving customers. As a result of this structural reform, I believe we were able to take a first solid step toward building a stable, growth-oriented revenue base.

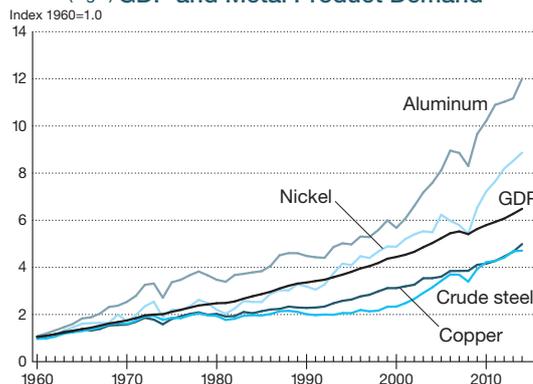
Q2 What is your view concerning the current environment surrounding non-ferrous metals?

Demand for non-ferrous metals is known to fluctuate in tandem with global economic trends (Fig.1). Looking beyond the near term, I believe demand will recover and non-ferrous metals will remain a growth industry.

Today, metal prices remain in a slump worldwide. The end of the supercycle in which China and other emerging economies were driving expansion in metal demand has exacted a heavy toll, and the current low-price trend is expected to continue for some time. Meanwhile the environment surrounding mineral resource development projects has also become increasingly harsh as a result of such factors as the emergence of resource nationalism, declining ore grades, and the location of mines at increasingly higher elevations. Based on these considerations, one might conclude that going forward non-ferrous metal prices will remain severe.

Personally, however, I don't agree with that view. It's a well-known fact that demand for non-ferrous metals, which are a basic material indispensable to modern society, tend to move in tandem with trends in the global economy. Globally speaking, GDP figures are projected to continue growing over the long term, and as such, in the longer-range view demand for non-ferrous metals can be expected to sustain stable growth. So even if their prices were to stagnate for a short period, ultimately they can be expected to return to appropriate levels.

(Fig.1) GDP and Metal Product Demand



Q3 In today's business environment, what kind of strategies will be important for the Company's future?

SMM pursues a business model unique in all the world, with integrated businesses in Mineral Resources, Smelting & Refining, and Materials. Going forward we will push strategies using this comprehensive capacity as a source of competitive strength.

Looking back on fiscal 2015, once again I am made aware of the tremendous volatility of the mineral resources and smelting & refining industries. Amid this environment, I believe we face two major challenges if we are to achieve sustainable growth.

The first is how to grow our current businesses going forward. The second is how, from a medium to long-term perspective, to nurture the fundamental strength to fully endure whatever changes, however large, the business environment might bring. I believe the key to overcoming both of these challenges rests in the Materials business.

Today we are taking steps to strengthen our Materials business as a segment on a par with our Mineral Resources and Smelting & Refining operations, and Materials is becoming a new growth driver. At the same time, in order to build up our basic strength, first we will continue to carry out measures

to extend the life and stabilize the earnings of our mining assets: the Hishikari Mine, for example, which provides high-grade ore with excellent cost competitiveness. In addition, I hope to form a solid earnings base able to withstand changes in our external environment by making our Materials business – an area into which we are now focusing strongly – into a new pillar of business strength.

SMM's business model – integrated businesses in Mineral Resources, Smelting & Refining, and Materials – is unique in all the world, and in the years ahead we will make this the source of the Company's competitive strength.

Above all, SMM has a social responsibility to stably provide the high-quality materials and products that society requires; and as a company engaged in the business of manufacturing – *monozukuri* – securing mineral ores, natural resources that are available in inherently limited quantities, is at all times an inevitable business challenge. In May 2016 we boosted our stake in the Morenci Copper Mine, from the 12% ownership share we already had, by an additional 13%, enabling us to have a 25% stake. This measure was a management decision taken with an eye on the future, maintaining a growth strategy focused on the next generation, built on securing mineral resources over the long term, a policy we have embraced through the years.



Morenci Copper Mine

Q4 Please tell us your views concerning the 2015 3-Year Business Plan.

Amid our changing business environment, we aim to steadily enhance our cost competitiveness in Mineral Resources and Smelting & Refining. And with Materials as the core of our growth strategies in our 2015 3-Year Business Plan, we will put in place a structure capable of supporting our earnings base.

Today our business environment is changing dramatically, with metal prices having fallen and mineral resource development projects now increasingly difficult to carry out; and how to cope with these and similar changes is the foremost challenge we confront in our 2015 3-Year Business Plan. Our aim is to swiftly carry out strategies addressing the changes in our business environment, steadily reap the results we seek, and share the benefits of our achievements with all our stakeholders.

In the area of Mineral Resources, to begin with, at the Sierra Gorda Copper Mine we will target the achievement of full-capacity production – which has been a major challenge so far – as well as cost reductions and stable operations. Today, we are on the verge of reaching one of the goals of our Long-Term Vision – to secure stakes in copper mines totaling the equivalent of 300,000 tons per year. Now, going forward we will focus efforts especially into acquiring interests in gold mines, an area where we are lagging behind our goal.

In the area of Smelting & Refining operations, under the 3-Year Business Plan we will pursue all-out strengthening of our cost competitiveness. With respect to copper, we aim to thoroughly trim costs and improve productivity at the Toyo Smelter & Refinery. In nickel-related business, we are looking to increase production at Taganito HPAL and to raise the cost competitiveness of SMM's HPAL operations through strengthening of HPAL technologies and scandium recovery. SMM possesses world-class technologies in copper smelting at the Toyo Smelter & Refinery and in processing of nickel by HPAL. By fully applying these technological strengths and on-site capabilities, we will proceed with



creating a resilient business structure to cope with the severe operating environment.

Turning to our Materials business, this is an area that will play a core role in our growth strategies incorporated into our 2015 3-Year Business Plan. We will strive to put together a structure enabling the acquisition of stable profits and capable of underpinning our earnings base, even amid an environment of sluggish metal prices.

Q5 What, specifically, are the strategies being embraced for the Materials business as the core of the 2015 3-Year Business Plan?

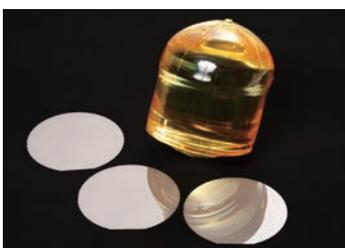
We aim to put in place a business model that will drive forward new products that will contribute to earnings and achieve a consistently well-balanced portfolio, to secure stable earnings into the future.

In our Materials business, we have been carrying out structural reform in the form of a shift away from our earlier structure focused on semiconductor materials for the general product markets, to a new structure centered



on advanced materials, an area where SMM's technological strengths can be applied more productively. As a result of this reform, today we are making steady progress in building a stable revenue base and simultaneously achieving a growth-oriented business structure.

Representative examples are the cathode materials used in the rechargeable batteries incorporated into eco-friendly cars, and the crystal materials used in the SAW (surface acoustic wave) filters featured in smartphones and other telecommunication devices. Today these vehicle components and electronic components for communication are industry growth drivers. SMM, with its business model that integrates Materials with Mineral Resources and Smelting & Refining businesses, is striving to stably provide materials of outstanding quality; and we are also building up close relationships of trust with the top-running corporations in these fields. Presently we continue to make prior investments to respond



LT substrates (crystal and wafer)
LT: lithium tantalite

to the demands of our identifiable customers; and aiming to tie those investment returns into earnings in 2017, we will bring our current initiatives to fruition and establish a structure able to produce stable earnings.

In March 2016 construction was completed at the Naraha Plant of Sumiko Energy Materials Co., Ltd. By conducting business over the long term at this new plant, which is located in Naraha Town in Fukushima Prefecture, we will contribute to supporting the recovery of this region from the Great East Japan Earthquake and tsunami disaster.

Q6 Please tell us your thinking with regard to CSR and human resources development.

I see CSR as an integral part of our business activities. I also consider development of human resources to be our foremost task, always. Today, we are strengthening our HR development structure with establishment of our new Human Resources Development Department.

At SMM, CSR equates to our main line of business: to stably provide the high-quality materials and products that society demands.

As such, in all our business operations – and especially in mine development, an area that has an extremely large impact on the surrounding regions – earning the trust of the local communities is of paramount importance to the continuation of our business operations. This is one more reason why, in carrying out our business activities, in many different areas we must respond sincerely to the social issues at hand.

Another equally important management task, always, is the development of human resources. Today, at a time when the business environment is in the throes of dramatic changes, human resources constitute the driving force that will enable our continuous growth into the future. In recognition of the great importance of HR development to our future business operations, in October 2015 we established a new Human Resources Development Department. I believe the new department's creation conveys, both within and outside the Company, a message of management's determination to further strengthen our human resources development structure.

Q7 What is your view concerning corporate governance?

To carry out corporate governance initiatives ever more thoroughly, we have drawn up new “Corporate Governance Guidelines” and are striving for highly transparent management, for example by increasing the number of outside directors.

Strengthening our corporate governance is a task of extremely great importance in order for us to simultaneously maximize our corporate value and achieve a high level of sound management.

In February 2016 we drew up new “Corporate Governance Guidelines” with the aim of implementing corporate governance ever more thoroughly. Also, in a quest for more transparent management, we increased the number of outside directors from two to three, while retaining a board of eight members.

Takeover defense measures are another important task that management must address. In order to develop our unique business model long into the future, we have

prepared measures in line with Japan's legal framework, with our main intent, in principle, to leave judgments to the discretion of our shareholders.

Q8 What message would you like to convey to your stakeholders?

I believe that in order to simultaneously pursue sustainable growth and maintain a sound financial standing, it's necessary to keep our equity ratio above 50%. Also, with respect to shareholder returns, starting from fiscal 2015 we have set our dividend payout ratio above 30%.

In the Mineral Resources and Smelting & Refining businesses, developing and operating projects require great spans of time, and the risks involved are by no means insignificant. This is why I believe it's important for us to always maintain a sound financial standing. For this reason I hold firmly to a policy of keeping our equity ratio above 50%.

The success we have achieved by our other initiatives to strengthen our financial standing is indicated by the two facts that, in the 15 years since 2000, we have increased our total assets some 3.1-fold and our net assets roughly 4-fold. Our acquisition of an additional stake in the Morenci Copper Mine was a decision I believe was enabled by this soundness of our financial standing. I wish to take this opportunity to express our sincere gratitude to all our stakeholders who so solidly support us.

SMM has a history in mineral resources and smelting and refining operations spanning more than 420 years, and these will continue to be growth areas long into the future. Under our 2015 3-Year Business Plan we will further burnish our unique business model integrating the Mineral Resources and Smelting & Refining businesses with the Materials business.

Although the current harsh business environment is expected to continue for some time, we believe that it is times precisely such as these that offer us the opportunity to build up a highly resilient structure. As we go forward, all employees will pool their optimal strengths and pursue the Company's sustainable growth, responding to the hopes and expectations of all our stakeholders.

Richard C. Adkerson

Vice Chairman of the Board,
President and Chief Executive Officer
Freeport-McMoRan Inc.

Long-Term Partners Creating Long-Term Value

Our partnership with Sumitomo began more than 30 years ago. Through the years, our two companies have continuously strengthened our ties. In 2005, Sumitomo invested in our Cerro Verde mine in Peru and now in 2016, Sumitomo has made an additional investment in our Morenci operations in Arizona.

The cyclical nature of the copper market requires strategic management to succeed. In 1986, the copper industry was suffering and Sumitomo made a wise investment in Morenci. In 2016, Sumitomo has made a wise investment, and helped Freeport-McMoRan in achieving its financial objectives.

Today's copper market is challenging, but I am confident the future of our industry's business is bright. The need for copper in the traditional economy and in high-end new technology for transportation, power generation and other applications remains strong and the prospects for future growth are positive. Meeting future demand will be challenged by difficulties in developing deposits in an economic and reasonable fashion.

Freeport-McMoRan and Sumitomo share a common culture focused on integrity, safe and responsible operations, sound management and long-term value creation. I value our partnership and look forward to working together for years to come.



Richard C. Adkerson



Akio Toyoda

Messages from Our Customers

Expecta Sumitomo

At SMM Group, we see a trusting relationship strength and we are deploying our business

We have received comments about management at four companies which are partners that we have the pleasure of

Akio Toyoda

President
Toyota Motor Corporation

Aiming for Mutual Benefits through Steady Growth Each Year

Toyota is attempting to mutually enhance corporate value with our suppliers and is looking for relationships that support each other to achieve steady growth each year.

Through the development and production of automobile battery materials, we have built a trusting relationship with Sumitomo Metal Mining as a partner who embodies our vision of Making Always Better Cars. The cross-holding of each other's shares is also a symbol of our resolution to come together and protect Japanese manufacturing.

The environmental problems surrounding automobiles are getting more serious, and the responsibility of the automotive industry for the future of the world is continually increasing. In this environment, we have great trust in the non-ferrous metal resource development and production capabilities that SMM, the origin of the Sumitomo Group, has built up over more than 420 years of experience.

Let's aim for Making Always Better Cars and providing mutual benefit through steady growth each year for our customers' permanent smiles.



Tsuneo Murata



Manuel B. Zamora, Jr.

and Business Partners Expectations for Metal Mining

with customers and business partners as a great aim for harmony and mutual benefit. “expectations for SMM” from the top representative of the customers and business maintaining good relationships with.

Tsuneo Murata

President

Murata Manufacturing Co., Ltd.

Gratitude for Great Support and Expectations for the New Possibilities of Metals

Thank you for this opportunity to contribute to SMM’s Integrated Report. Sumitomo Metal Mining and Murata Manufacturing have business for nickel materials and LT/LN substrates (lithium tantalite and lithium niobate) and these construct the basic functions of our company’s main products. SMM’s smelting and refining technology, crystal growth technology and processing technology are incorporated in these materials and greatly contribute to the miniaturization, increased capacity and performance of our products.

As a result, we have been able to comply with our customers’ demands and grab business opportunities as the number of smartphones in the market increased and with the growth of high-speed transmission protocols such as LTE. Also, when demand rapidly expanded, we were able to proceed with increased production thanks to SMM’s speedy and flexible supply.

Going forward, in addition to further expanding sales in the smartphone market, we will aim for expanding business in our focus markets (automotive, energy, healthcare) and start up many new products. Within this effort, SMM’s development of high-performance materials, detailed technical support, and increased production supported by a strong financial foundation are all essential to capturing business. Going forward, we ask for even greater cooperation from SMM as an important partner.

Manuel B. Zamora, Jr.

Chairman

Nickel Asia Corporation

An Ideal Partnership

I am proud that the partnership between Nickel Asia Corporation and Sumitomo Metal Mining Co., Ltd. remains strong today more than a decade after it was forged.

When a partnership such as ours is built on the foundations of trust and mutual respect, it can enjoy the best of times but also withstand the most challenging situations. This has been our story.

The collaboration between NAC and SMM in Rio Tuba came at a time when our stock of high grade ore was close to depletion and we were beginning to plan a shutdown of our operations.

Unknown to us, SMM was looking for a mine where it could test its improved version of the HPAL technology using lower grade ore.

Under the leadership of former President Mr. Fukushima our discussions with SMM swiftly led to the signing of a joint venture agreement between Rio Tuba and Japanese partners.

The partnership we forged in Rio Tuba was a gamble—but it was one that paid off handsomely and quickly, and soon we were planning—and then inaugurating—a second and even bigger HPAL plant.

While today’s global environment is not too favorable for our business,—and it may remain so for some time to come—ours is a partnership for the long term. We will remain strong while waiting for better times.

And so on behalf of Nickel Asia Corporation I extend our warmest greetings to SMM and its stakeholders.

Mabuhay!

Relationship between the Long-Term Vision and the Vision for 2020

The SMM Group has established the Long-Term Vision and the Vision for 2020 (which states “The Kind of Company that We Would Like to be in 2020”) to indicate our approach to creating value. The activities to attain these twin goals are inseparable for sustainable growth and maximization of corporate value, and we are proceeding on them as a single Vision.

Long-Term Vision

Our Long-Term Vision is a goal to execute a continuous growth strategy aimed at a stable supply of materials and products over the long term.

In order to attain the Long-Term Vision, which has a target year of 2021, we set out a medium-term business plan every three years as a mid-term strategic goal.

FY2015 was the final year for the 12 3-Yr Business Plan, so we formulated the 15 3-Yr Business Plan based on the results of the 12 3-Yr Business Plan.

Long-Term Vision

Become a World Leader in the Non-Ferrous Metals Industry & an Excellent Company of Japan

Long-Term Vision Targets

Become a World Leader in the Non-Ferrous Metals Industry

Copper

Annual production interest

300 kt

SMM is pursuing investment in overseas mining projects. In 2011, we acquired an interest in Chile's Sierra Gorda Project. We currently hold interests in copper mines located in the US, Chile, Peru, Australia and other countries. Going forward, we will seek to participate in new development projects, expand production at existing mines, and take other steps to raise our annual copper production interest to 300,000 tons.

Nickel

Annual production capacity

150 kt

Production at the Taganito Project started in the second half of 2013, broadening our annual nickel production structure to 100,000 tons. Our goal is to further expand our capacity to 150,000 tons, with a focus on development initiatives suitable for application of our HPAL technology.

Gold

Annual production interest

30 t

SMM owns the Hishikari Mine, the only commercially operated metal mine in Japan. We also operate the Pogo Gold Mine in Alaska, USA. Using our accumulated expertise in mine operation, we are seeking to raise our annual gold production interest to 30 tons, principally through new mine development.

New Materials

Recurring profit

¥5 billion

Through collaboration between the Materials Division and the Research Development Division, we aim to accelerate new materials development and raise profitability.

An Excellent Company of Japan

Net sales

¥1 trillion

Net income

¥100 billion

Sustainable Growth and Maximization of Corporate Value

Vision for 2020

— and the Six CSR Areas of High Priority —

The Vision for 2020 is our goal for the SMM Group's coexistence with the global environment and society aimed at sustainable growth. As the SMM Group's business activities involve large-scale developments, such as mining developments, there is a significant impact on the surrounding areas, the scope of which extends to the economy, the environment, human rights, and the local communities.

Therefore, the SMM Group believes that in running our business it is essential to obtain a Social License to Operate that cannot be achieved in the absence of trust-based relationships with the local communities, in addition to a legal operating permit.

In 2015, the SMM Group revised its Vision for 2020 as it applies to its Six CSR Areas of High Priority in view of business globalization and

other changes in social conditions. In tandem with this revision, we identified material issues that the Group needs to address from among a large number of sustainability issues with the primary focus on evaluating impacts on the Social License to Operate, opportunities for future earnings, and the sources of our competitiveness (see p. 59–61 for process to identify material issues).

Effective Use of Resources

A company that generates resources using innovative technology

KPI

- Develop and implement technologies to efficiently recover resources (low-grade/hard-to-process ores)
- Develop new and effective uses for by-products
- Promote recycling

Environmental Preservation

A company that uses advanced technologies to reduce environmental impacts and contributes to preserving the global environment

KPI

- Advance biodiversity preservation initiatives
- Maintain our record of zero significant environmental accidents

Contribution to Society and Local Communities

A company that earns trust and contributes to regional development through our business and social contribution activities rooted in each region

KPI

1. Communicate with local communities to recognize social issues in regions where we do business, and implement programs to support solutions to those issues.
 2. Provide support for the improvement of educational infrastructure and the maintenance and development of academic activities, culture, tradition, and art in countries where we do business.
 3. Provide support for recovery and reconstruction after large-scale disasters.
- Allocate financial resources for initiatives 1 to 3 above.

Respect for People and Human Rights

A company where diverse human resources exercise their ability sufficiently and take a vibrant and active part in each field

A company that works with its stakeholders to strive for a society that actively respects human rights

KPI

- A company where employees can take a vibrant and active part
- Respect diversity
- Develop human resources
- Prevent major human rights infringements

Occupational Health and Safety

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

KPI

- Ensure safety
- Provide comfortable working environments

Stakeholder Communication

A company that works to communicate transparently with all worldwide stakeholders to deepen mutual understanding

KPI

- Encourage deeper mutual understanding with employees
- Encourage mutual understanding with local communities and citizen groups
- Encourage mutual understanding with shareholders and investors
- Encourage mutual understanding with other stakeholders

CSR Policy

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

Review of the 2012 3-Year Business Plan

Setting “Become a World Leader in the Non-Ferrous Metals Industry and an Excellent Company of Japan” as our Long-Term Vision, SMM has engaged in growth strategies and is undertaking the reform of its business structure, targeted to be completed by FY2021. In our three core businesses of mineral resources, smelting and refining, and materials, we have separated every large-scale project into the stages of Sowing, Planting, Nurturing, and Harvesting, and have energetically developed these projects. In particular we have pursued strategies aimed at securing interests in metal resources, a goal noted in our Long-Term Vision. However, the results of these actions have revealed remaining issues.

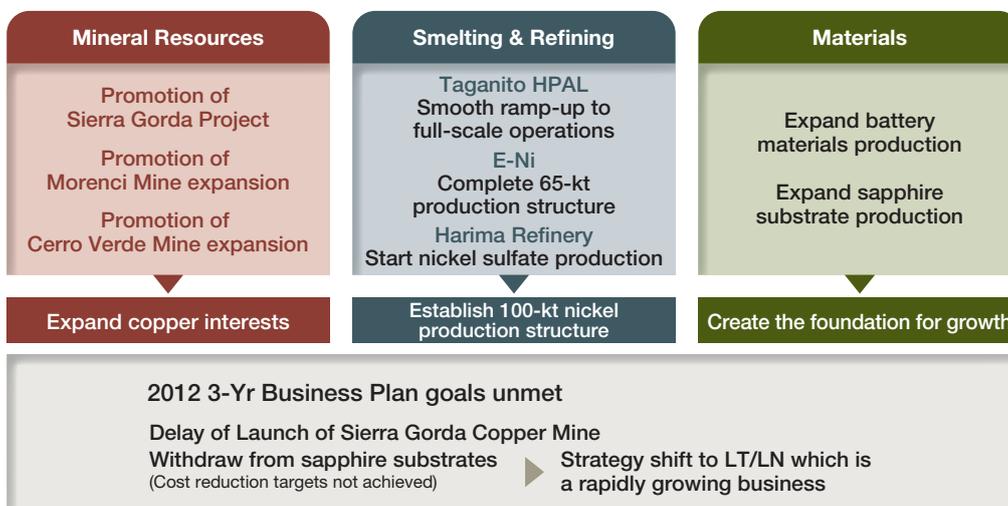
Our mineral resources business successfully launched the expansion projects at the Cerro Verde Copper Mine and the Morenci Copper Mine, while we have extended the life of the Pogo Gold Mine through greenfield exploration and development. However, the Sierra Gorda Copper Mine, in which we have newly taken part in developing, was considerably behind schedule in achieving the full-scale production targeted for the final fiscal year, 2015. At the same time, we reached an agreement on the acquisition of additional interest in the Morenci Copper Mine, and were

able to set a course for the 300-kiloton annual copper production interest structure stated in our Long-Term Vision.

In our smelting and refining business, we launched Taganito, our second HPAL refinery for nickel, and began full-scale operation of a 65-kiloton electrolytic nickel annual production structure. At the same time, we withdrew from the Goro Project due to an inability to establish stable operation, and were forced to reduce production of ferro-nickel due to the embargo of Indonesian ore. At our Harima Refinery, we ended manufacture of prime western grade zinc and have shifted the business to producing nickel sulfate.

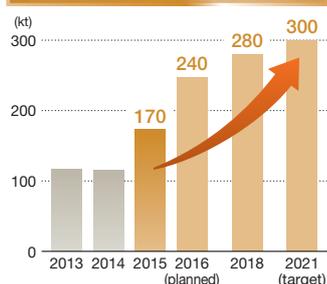
In our materials business, we undertook a thorough reform of our mindset to pursue selection and concentration of projects, and have transitioned its core products from semiconductor materials aimed primarily at commodities markets to advanced materials. Although we withdrew from sapphire substrates, we have also moved forward by investing in increasing production in the growing fields of battery materials and crystal materials (lithium tantalate (LT) and lithium niobate (LN) substrates).

2012 3-Yr Business Plan Priorities and Status



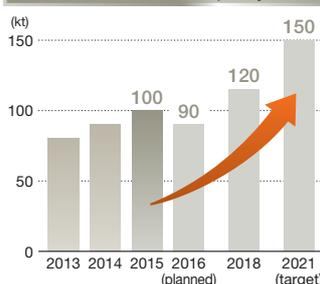
Targets of and Initiatives toward Our Long-Term Vision

Cu Annual Production Interest



SMM is moving ahead with investments in overseas mine projects. At present, we hold mine interests in countries including the U.S., Chile, Peru, and Australia. The Sierra Gorda Copper Mine began commercial production in July 2015, and we acquired an additional interest in the Morenci Copper Mine in May 2016.

Ni Annual Production Capacity



We began production at Taganito in 2013, and have begun a 100-kiloton nickel annual production structure. As we continue working to achieve our aim, a 150-kiloton production structure, we are working on new development projects centered around HPAL technology. During the 2015 3-Year Business Plan, we will also begin operation of a commercial plant to recover scandium.

Changes in the Business Environment Surrounding SMM

Looking at the global economy in 2013 and 2014, although the U.S. economy remained strong, Europe experienced deflation, while in China, domestic demand slumped and the conditions of the real estate market deteriorated. Despite this, overall economic growth continued, mostly led by emerging countries. In 2015, the Chinese economy continued to slow down and the economic growth of other emerging countries also slowed down. While in the U.S., the economy continued its recovery trend and, despite uncertainty in the outlook, modest growth is continuing.

At the same time, non-ferrous metal prices have fallen sharply and remain at a low level, however, improvement of supply and demand balance is expected. In addition, the circumstances surrounding mineral resource development and operations are becoming increasingly difficult due to causes including the advancement of resource nationalism, increasing remoteness of mines, declining ore grade, and increasing investment and operations costs.

The electronics parts industry is expected to be livelier in new technological fields such as energy, IoT, autonomous driving technology, and robotics, with the competition expected to continue being on a global-scale. The business environment surrounding our company is increasing in severity, and we must engage more than ever in growth initiatives by making use of our knowledge.

Slowing growth rate in emerging countries

Social landscape regarding metal resources

- Metal prices dropping
- Acquisition of resources by China
- Progression of resource nationalism

Landscape regarding resource development/mining operations

- Operations becoming more difficult due to location (higher, more remote locations)
- Worsening ore grade of operating & new mines



Investment costs increasing;
greater initial CAPEX
Operating costs increasing

Fierce global competition continues in the electrical/electronic parts industries

- Smartphones requiring more parts to accommodate more advanced functions and faster communication speeds
- Energy, IoT, and communications infrastructure greatly influencing next-generation tech trends

Future Issues

Worsening conditions for mineral resource development

Lengthening development periods, rising development expenses

Worsening return on investment due to low prices

End of supercycle due to slowdown in China

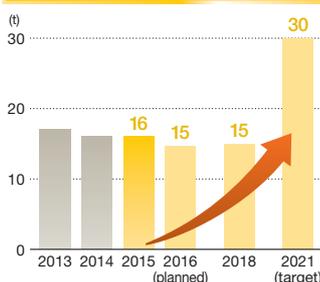
Difficulty of conventional-style growth through entering into mineral resource development projects

Prolongation of high-profitability, large-scale investment projects and HPAL development schedule

Broadening of business, development of cross-business projects, strategy for growth of materials

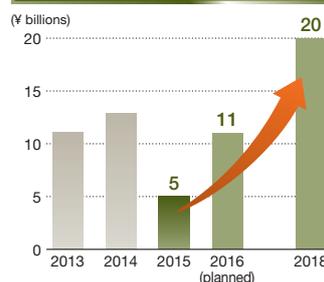
Necessity of unearthing new growth projects by making use of our knowledge

AU Annual Production Interest



SMM owns the Hishikari Mine, the only gold mine in Japan engaged in commercial production today. The development of lower ore bodies is underway, with the aim of starting ore shipment in FY2019. At the Pogo Gold Mine in Alaska, we continue exploring surrounding areas to extend the life of the mine. In other regions worldwide, we are conducting activities for the purpose of exploration and interest acquisition.

Materials Business Recurring Profit



SMM is reforming both the business structure and mindset concerning its materials business. As a part of the reform, we made the decision to withdraw from the sapphire substrate business. At the same time, we made large-scale investments, such as constructing a new plant in the town of Naraha in Futaba County, Fukushima Prefecture, to increase production volume of battery materials, the demand of which is expected to increase for automotive use and crystal materials (LT/LN substrates), which enjoy strong demand as smartphone materials.

We will aim for even greater profit growth as we head toward achieving ¥5 billion/year profit with new materials by FY2021.

Overview of the 2015 3-Year Business Plan

Although the external environment of our business is changing dramatically, it is expected that demand for non-ferrous metals will expand over the medium- to long-term, and prices will recover to appropriate levels.

Therefore, we continue to have the goal of “Become a World Leader in the Non-Ferrous Metals Industry and an Excellent Company of Japan” as stated in our Long-Term Vision. We will promote growth strategies in each of our core businesses of mineral resources, smelting and refining, and materials, and will aim to secure a 150,000-ton annual nickel production structure, an annual copper production interest of 300,000 tons, an annual gold production interest of 30 tons, annual recurring profit of ¥5 billion with new materials,

consolidated annual net sales of ¥1 trillion, and net profit of ¥100 billion.

During the 2015 3-Year Business Plan, we will particularly focus on the stages of Sowing and Planting of our basic growth model of Sowing, Planting, Nurturing, and Harvesting. However, while enhancing our ability to respond to changes in the external environment, we will not only aim for conventional growth strategies of acquiring mineral resource interests, but will also work toward our next leap forward through broadening the bases of our three core businesses and developing cross-business projects that extend across the boundaries of business divisions.

Positioning of the 15 3-Yr Business Plan towards Long-Term Vision Achievement

Large scale mineral resources and smelting and refining projects mostly completed during the 2012 3-Yr Business Plan

► **Sowing seeds and planting towards further growth in the 15 3-Yr Business Plan**

Long-Term Vision

Become a World Leader in the Non-Ferrous Metals Industry and an Excellent Company of Japan

More issues in achieving the Long-Term Vision

- ✓ 3rd HPAL
- ✓ Sierra Gorda Phase 2/oxide ore development
- ✓ New gold mine development
- ✓ Exploration activities
- ✓ Expansion of production of battery materials
- ✓ New materials products



Top Priorities in the 2015 3-Year Business Plan

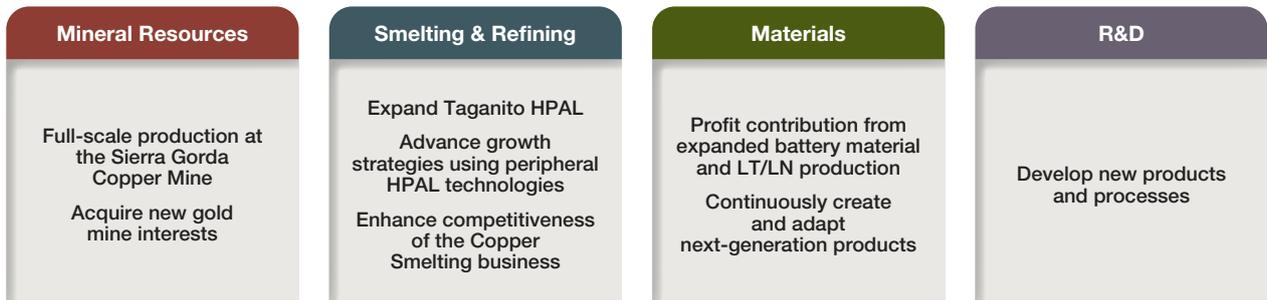
In the mineral resources business, we aim to achieve full-scale production at the Sierra Gorda Copper Mine as soon as possible and expand our interests through exploration for gold, including the possibility of acquiring existing gold mines.

In the smelting and refining business, we will begin the expansion of nickel production at Taganito and initiatives to both recover new metals from the HPAL process and construct a third HPAL plant. We will strengthen our cost competitiveness in copper production through improving our ability to handle impurities.

In the materials business, we will work toward profitability in both battery and crystal materials, and will advance growth

strategies through the launching of new products. In all of our core businesses, we will work to maintain and/or improve productivity in order to leverage the effects of the strategies and investments that we have made, as we aim to secure increased profits with greater certainty.

Our research and development division will focus on developing new products in the materials business and new processes in the mineral resources, smelting and refining business. In the Head Office, we will work to further strengthen our management platform by responding to the globalization of business operations, such as with the adoption of IFRS.



Platform Reinforcement



Corporate governance is a framework for regulating corporate activity in order to both maximize our Group's corporate value and secure its soundness

- Set forth the Group Corporate Philosophy based on The Sumitomo Business Spirit, and establish the SMM Group Code of Conduct
- Adopt a Board of Directors, Executive Officer system, and Audit & Supervisory Board system as our governance system
- Increase the number of Outside Directors at the June 2016 General Meeting of Shareholders, to 3 out of 8 Directors



Enhancing abilities to respond to the globalizing business environment, and catching up with global standards

- Establish a Human Resources Development Department
- Establish a support structure for legal risks in Japan and overseas
- Introduce a cash management system that also covers overseas subsidiaries
- Strengthen expertise in international taxation
- Prepare an environment for M&A through the implementation of IFRS
- Diversify human resources through training activities and proactive employment of people with impairment

Financial and Non-Financial Summary

Results for the Year (Millions of yen)

FY	2015	2014	2013	2012	2011	2010	2009	2008
Net sales	855,407	921,334	830,546	808,540	847,897	864,077	725,827	793,797
Operating income	59,720	125,779	75,418	95,785	88,577	96,038	66,265	10,534
Recurring profit (loss)	(12,764)	174,226	114,352	115,034	108,829	123,701	87,791	32,572
Income before taxes	559	123,261	111,006	122,455	87,962	123,394	82,776	22,942
Net income (loss)	(309)	91,113	80,258	86,640	65,286	83,962	53,952	21,974

Financial Position at Year-End (Millions of yen)

FY	2015	2014	2013	2012	2011	2010	2009	2008
Total assets	1,630,800	1,740,246	1,572,367	1,351,153	1,146,759	1,052,353	981,458	880,001
Net assets	1,075,995	1,158,945	1,019,053	844,547	726,039	684,103	629,684	547,251
Long-term debt due after one year	248,036	245,000	243,130	212,323	157,119	135,128	132,311	141,716
Interest-bearing debt	400,599	394,094	383,580	330,073	265,951	210,969	200,939	218,534

Amounts per Share (Yen)

FY	2015	2014	2013	2012	2011	2010	2009	2008
Net income (loss)	(0.56)	165.11	145.35	155.58	116.17	149.38	96.26	38.87
Net assets	1,781.91	1,906.50	1,653.83	1,393.02	1,173.97	1,121.19	1,043.50	913.92
Cash dividends	31.0	48.0	37.0	34.0	28.0	32.0	20.0	13.0

Key Ratios (%)

FY	2015	2014	2013	2012	2011	2010	2009	2008
ROA	(0.02)	5.50	5.49	6.94	5.94	8.26	5.80	2.23
ROE*	(0.03)	9.28	9.54	12.13	10.12	13.80	9.89	4.02
Equity ratio*	60.3	60.4	58.1	56.9	57.5	59.9	59.8	57.3
Interest-bearing debt to total assets ratio	24.6	22.6	24.4	24.4	23.2	20.0	20.5	24.8
Debt-to-equity ratio* (times)	0.41	0.37	0.42	0.43	0.40	0.33	0.34	0.43

* Shareholders' equity is defined as follows: Total shareholders' equity + Accumulated other comprehensive income

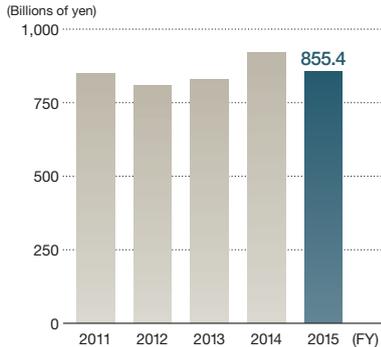
Number of Employees & Officers Worldwide (Consolidated) (March 31, 2016)

	No. of employees at year-end				Employee gender breakdown		Average number of non-regular/limited-term employees during the year	Total	Temporary employees
	Officers	Managers	Regular employees	Total	Male	Female			
SMM non-consolidated	21	472	1,795	2,288	2,027	261	232	2,520	81
Consolidated subsidiaries in Japan	62	358	2,689	3,109	2,621	488	410	3,519	224
Consolidated subsidiaries overseas	43	479	2,836	3,358	2,430	928	132	3,490	667
Total	126	1,309	7,320	8,755	7,078	1,677	774	9,529	972

Number of Employees & Officers by Region (Consolidated) (March 31, 2016)

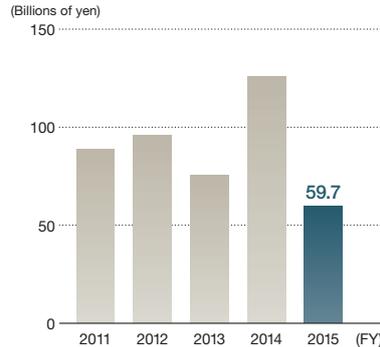
Japan	U.S.A.	South Korea	Peru	Chile	China	Philippines	Taiwan	Singapore	Malaysia	Australia	Solomon Islands	Brazil	Total
6,048	346	4	16	35	775	1,166	461	40	564	8	53	13	9,529

Net Sales



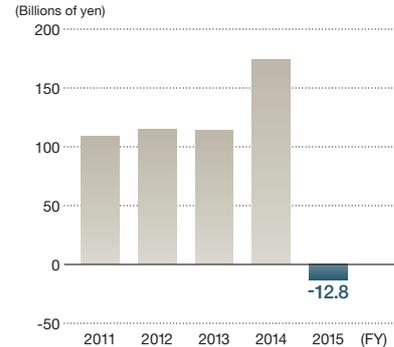
Net sales were ¥855.4 billion, a decrease of 7% compared to the previous year due to the fall of metal prices, etc.

Operating Income



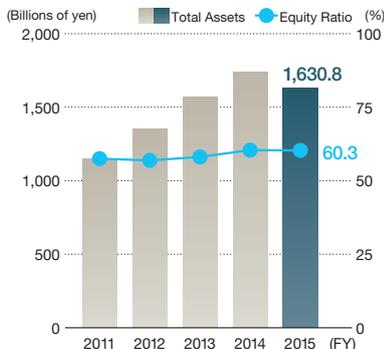
Operating income was ¥59.7 billion, a decrease of 53% compared to the previous year due to the fall of metal prices and the corresponding calculation of inventory valuation loss, etc.

Recurring Profit (Loss)

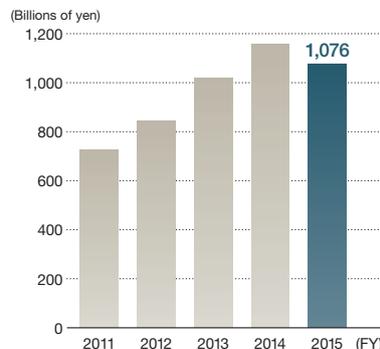


Recurring loss was ¥12.8 billion due to the Sierra Gorda Mine loss on impairment of fixed assets and losses due to foreign exchange losses, in addition to the fall of metal prices and the calculation of inventory valuation loss.

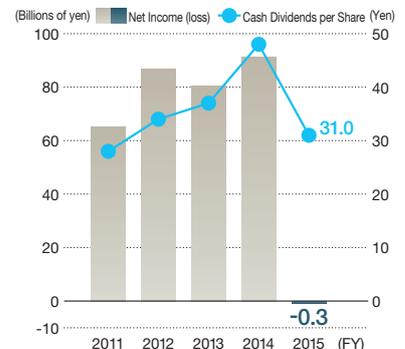
Total Assets / Equity Ratio



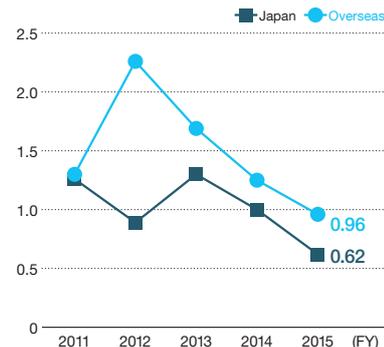
Net Assets



Net Income (Loss) / Cash Dividends per Share



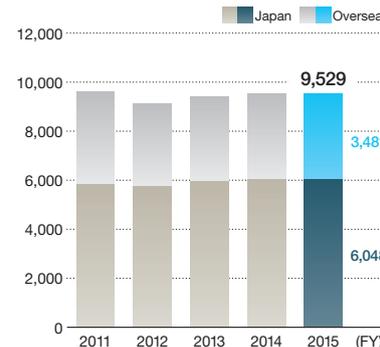
Occupational Accident Frequency Rate



The total number of occupational injury accidents occurring at workplaces in Japan was eight (frequency rate of 0.62), the best yet, and there were two lost-time accidents, a decrease from the previous year.

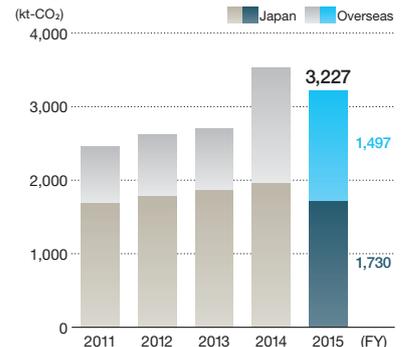
Frequency rate = number of fatalities and injuries due to industrial accidents ÷ cumulative hours worked x 1,000,000

Number of Employees & Officers Worldwide (Consolidated) (Excluding temporary employees)



By region, the increases and decreases in the number of employees at the end of March 2015 were: Philippines, increase of 28; Malaysia, increase of 26; China, decrease of 69.

CO₂ Emissions



The end of production of prime western grade zinc, etc. at the Harima Refinery contributed to a reduction of 199 kilotons in CO₂ emissions at workplaces in Japan and, with energy conservation activities, the total amount of CO₂ emissions was reduced by 305 kilotons from the previous year.

Distribution of Economic Value to Stakeholders

Stakeholder	Suppliers	Employees	Shareholders/Creditors	Government	Society*
Amount (billions of yen)	729.5	41.2	29.7	19.3	1.8
Details	Payments for purchase of merchandise, etc.	Payments to employees	Payments of dividends/interest	Taxes paid	Donations, etc.

* There is no retained value other than the above. Rent for use of land is minimal and therefore included in "Payments for purchase of merchandise, etc."
 * In the Philippines (CBNC, THPAL), the ¥1.3 billion expended through the social development management program (SDMP) and other contributions in the same country is included.
 • CBNC and THPAL have changed their closing dates to March 31, which is the consolidated closing date, by preparing provisional financial statements as of March 31 for the consolidation purpose for the fiscal year under review. As a result, the accounting period of these two companies for the fiscal year under review covers the period from January 1, 2015 to March 31, 2016.

Financial Assistance from the Government

Stakeholder	Government
Amount (billions of yen)	0.6
Details	Subsidies, grants, etc.

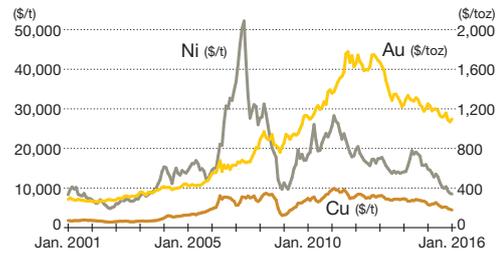
• No governments have an equity stake in SMM

Review of FY2015 Results

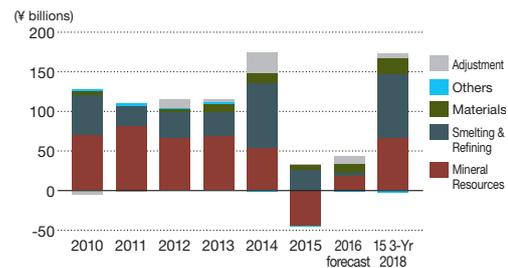
The global economy in FY2015 was highlighted by a deceleration of China's growth and economic deterioration in resource-producing countries. As for non-ferrous metal prices, copper and nickel prices fell sharply due to concerns over the economic slowdown in China and uncertainty in the economic outlook. The prices of copper and nickel hit considerably low levels compared to FY2014, declining 20% and 38%, respectively. In addition, while the yen continued weakening from FY2014 for a while, it strengthened rapidly toward the end of FY2015. In the industries related to our materials business, demand increased for automobile battery materials, and materials for smartphones maintained a generally robust sales environment. However, manufacturers of computers and tablet devices adjusted their inventories in response to sluggish demand.

With this background, FY2015 net sales declined 7% from FY2014 to ¥855.4 billion due to factors including lower metal prices. Operating income also declined 53% to ¥59.7 billion due to the fall in metal prices and the accompanying recording of inventory valuation losses. Recurring profit recorded a ¥12.8 billion loss due to the same causes, as well as the recording of an impairment loss on the Sierra Gorda Copper Mine and the occurrence of exchange rate losses resulting from the sudden appreciation

Metal Prices



Segment Profits (Loss)



of the yen against the US dollar toward the end of the term. Net income attributable to owners of the parent company yielded a ¥0.3 billion loss, which was the first loss recorded in 13 years.

Recurring Profit Analysis (FY2014 vs. FY2015)



Mineral Resources Segment

While operations at the Hishikari Mine remained steady, production and sales volumes at the Pogo Gold Mine declined from the previous term due to a decline in the grade of gold ore. At the Morenci Copper Mine, production and sales volumes exceeded those of FY2014 due to the expansion. At the Sierra Gorda Copper Mine, we recognized a loss on investment under the equity method due to the application of impairment accounting. In addition, declines of copper and gold prices contributed to a loss in the segment.

Smelting & Refining Segment

Production and sales volumes of nickel increased from FY2014 under a 65-kt electrolytic nickel annual production structure. Operations at Coral Bay continued steadily. Water shortages had a temporary impact on operations at Taganito, but production and sales volumes exceeded those of FY2014. However, segment profit declined from FY2014 due to causes including the decline of nickel prices.

Materials Segment

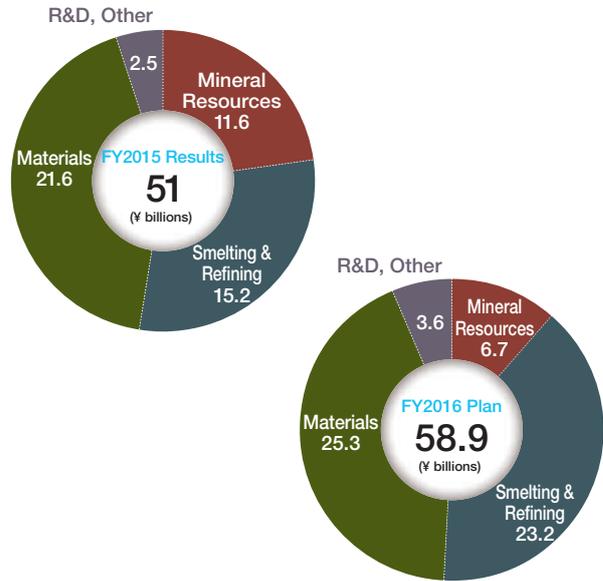
While we increased sales of battery and crystal materials in response to the increase in demand, there was also the increase in expenses to construct an expanded production system to meet the demand. Moreover, inventory adjustments among our customers became prominent for other products and their sales declined. As a result, segment profit declined from FY2014.

Fiscal 2016 Plan

Within the business environment surrounding our Group, supply and demand in the non-ferrous metals industry are forecast to remain nearly balanced for copper. However, producers of nickel are earnestly considering decreasing their production volumes in response to the sharp drop in prices, and supply shortages are expected to result. Restoration to normal price levels for non-ferrous metals is expected in the medium- to long-term as the supply and demand come into balance. However, with the 10-year supercycle driven by Chinese demand having come to an end, a significant increase is not foreseen. In industries related to our materials business, favorable conditions are expected to continue overall even if there is a temporary adjustment phase in the automotive and communications fields.

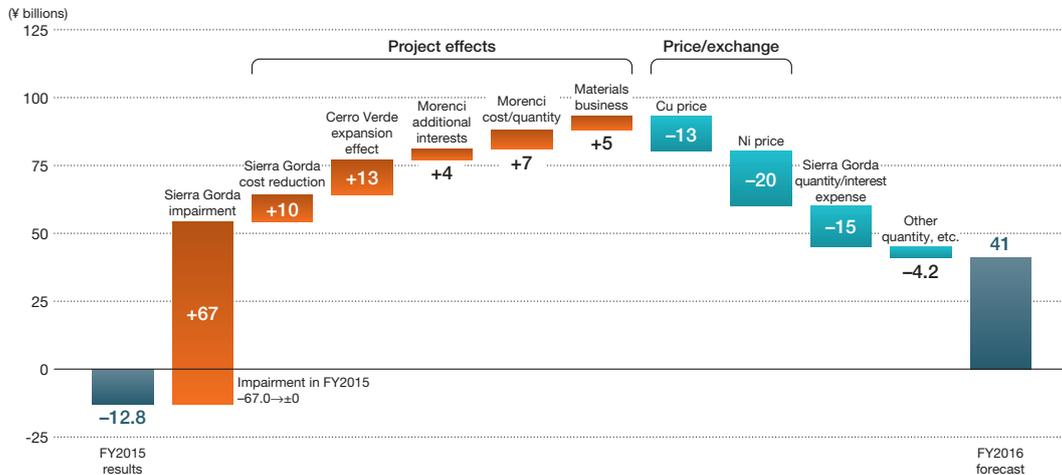
In the outlook for overall performance in FY2016, net sales are expected to decline from FY2015 despite increasing sales volumes, due to continued weakness in non-ferrous metal prices. Operating income is also expected to decline due to the same cause. We forecast a rise in recurring profit due to factors including an upturn in the mineral resources segment.

Capital Expenditure (FY2015 Results and FY2016 Plan)



For FY2016, we plan capital expenditures of ¥58.9 billion, an increase from ¥51.0 billion in FY2015. We forecast ¥23.2 billion in the smelting and refining segment, and will develop peripheral HPAL technologies and strengthen the competitiveness of our copper smelting and refining business. In the materials segment, we forecast allocating ¥25.3 billion of our management resources to quickly reinforce our position in the industries of battery and crystal materials, areas in which particularly strong growth is expected.

Recurring Profit Analysis (FY2015 Results vs. FY2016 Forecast)



Mineral Resources Segment

We forecast increased profits compared to the previous term, due to an upturn in investment gains under the equity method as a result of the contribution of investment on expansion and other factors, in addition to the effect of acquiring additional interests in overseas copper mines.

With regard to gold, we will steadily move forward with development of lower ore bodies at the Hishikari Mine. At the Pogo Gold Mine, we will engage in exploration of surrounding areas and cost cutting to extend the life of the mine. In other overseas exploration and activities to acquire interests, we will gain footholds to achieve our Long-Term Vision, with gold as the target.

Smelting & Refining Segment

We forecast a decline in profits from the previous term due to the effects of the strong yen, as well as the weakness in nickel prices.

With regard to copper, we have been able to secure a stable smelting and refining margin, and will strengthen competitiveness through cost reductions and the maintenance of operating rates. With regard to nickel, we will solidly reduce costs and secure profits through stable operations of the Taganito and Coral Bay HPAL plants. In addition, we will steadily move forward with both sales and production initiatives for the recovery of scandium from the HPAL plants.

Materials Segment

We forecast an increase in profits from the previous term due to increased income, especially in the automotive and communications fields.

In the materials business, we will carefully watch changes in the external environment and promptly take any necessary countermeasures in order to accomplish our goals, while further promoting selection and concentration in order to establish this segment as a core business. With regard to battery and crystal materials in particular, we will launch large-scale investments as planned in order to respond to customers' demands, and will make the segment contribute to profits. Through cooperation with the Research & Development Division we also aim to bring new products to market that will support our future growth by making closer relationships with our customers.

Maintaining a Sound Financial Standing in Preparation for Risk and Medium- to Long-Term Investments

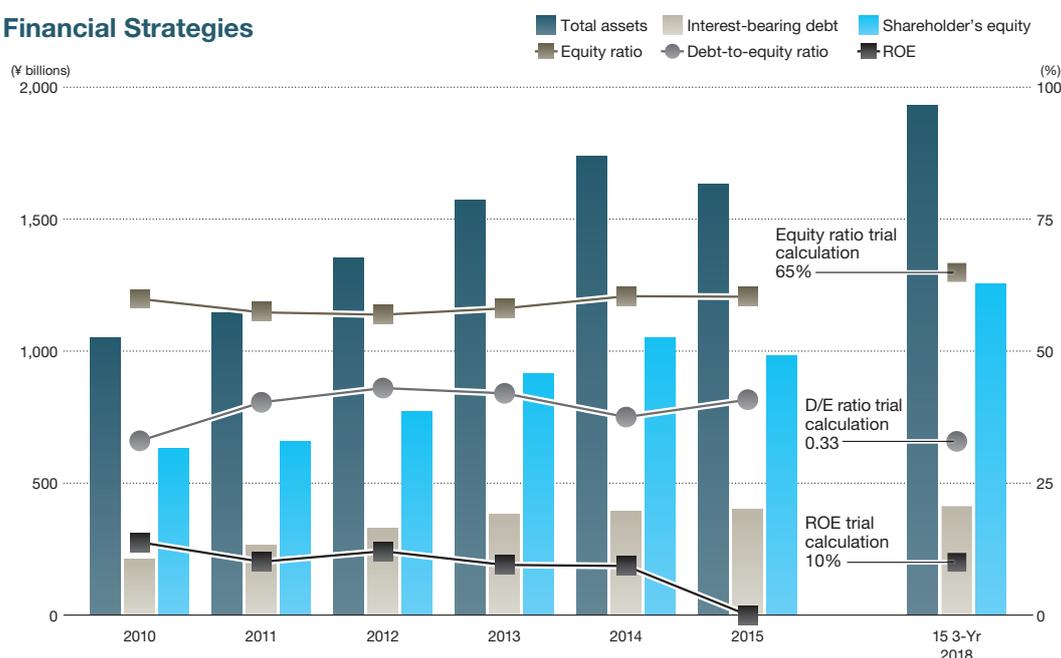
The short-term performance of SMM's core businesses, mineral resources and smelting and refining, is greatly affected by factors including the volatility of non-ferrous metal prices and foreign exchange rates.

To prepare for risks and medium- to long-term investments, the SMM Group has always strived to maintain the soundness of its financial standing, and has maintained a consolidated equity ratio of at least 50% since FY2006. Under our 2015 3-Yr Business Plan, which covers FY2016 to 2018, we will continue to leverage this strong financial base and concentrate management resources into priority fields, while undertaking active investment aimed at the acquisition and operation of overseas mine interests, the

enhancement of smelting and refining facilities, and the establishment of an expanded production system for battery and crystal materials. We will continue to adhere to policies for financial soundness, including a consolidated equity ratio of at least 50%.

The SMM Group also makes improving ROA a standard for management. However, in mining or smelting and refining projects, it usually takes about five years before starting to recover the investment. By the nature of our business, it is difficult to engage in such projects while simultaneously taking measures aimed simply at improving ROA or ROE for a certain year. Accordingly, we make it a medium- to long-term goal.

Financial Strategies

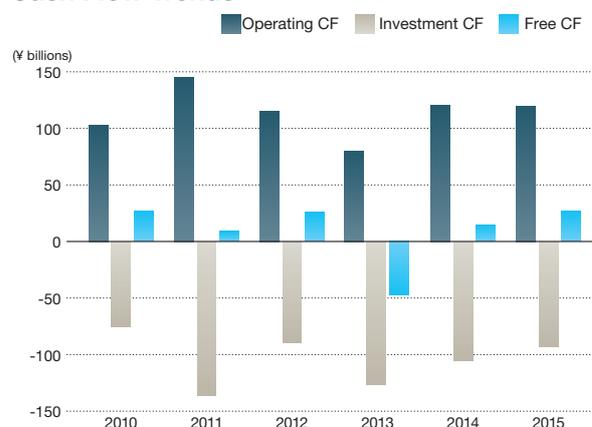


Approach to Funding

Taking into account the overall demand for funds, including funds for large-scale overseas projects in the mineral resources and smelting and refining businesses, strategic strengthening of the materials business, and other future investment plans, and from the standpoint of the stabilization of management, we believe it is necessary to maintain a degree of liquidity on hand.

Under that premise, we will procure funding in accordance with the use of the funds, assuming favorable fund procurement, and also comprehensively taking into account factors including the outlook for metal prices and foreign currency exchange markets as well as conditions in interest rate markets.

Cash Flow Trends



Approach to Investment

Cautiously Assessing Profitability and Executing Carefully Selected Investments

The SMM Group is pursuing measures to enhance our competitiveness in both raw materials procurement and manufacturing, and to overcome a worsening business environment. In terms of cost competitiveness in particular, we have set a target to become world-class, or at least ranking in the top one-third.

Due to factors such as supply and demand and natural disasters, the ore that forms the raw material for non-ferrous metals cannot always be purchased in necessary quantities at economical prices. In response, the SMM Group has a policy to secure stable raw material sources through developing and acquiring interests in overseas mines, as well as increasing the ratio of our ownership of these sources. With respect to the development and acquisition of interests in mines, we select investments carefully, with cautious assessments of profitability, drawing on extensive experience in mining exploration and knowledge of mine valuation, and fully taking country risk into account in order to avoid any extra investment and increase of mining costs arising from any uncertainty.

In FY2016, we increased SMM's existing 12% interest in the Morenci Copper Mine with the additional acquisition of 13% from Freeport-McMoRan Copper & Gold Inc. The Morenci Copper Mine boasts world-class copper production

and a long history of operation in the U.S. We believe that this mine, which continues to operate stably, will play a vital role in SMM's mineral resources business.

In markets that the materials business targets, needs and demands change rapidly and yet could require high-level product development capabilities and the input of considerable management resources. The SMM Group will build close, trusting relationships with leading companies and will grow together with these by working to stably supply high-quality materials and by undertaking ceaseless cost reduction efforts.

Total Investment on Major Projects (Planned)

Acquisition of additional interest in the Morenci Copper Mine	Total ¥110,000 million
LT/LN substrate production increase	Total ¥13,500 million
NCA production increase	Total ¥15,000 million
Nickel sulfate production increase	Total ¥5,000 million
Scandium recovery	Total ¥4,000 million
Development of lower ore bodies at Hishikari Mine	Total ¥3,200 million

Major Projects

Project name	FY2013	FY2014	FY2015	15 3-Yr Business Plan	18 3-Yr Business Plan and later	
Mineral Resources	Cu Sierra Gorda Copper Mine		● Start commercial production	● 110-kt production structure	● Phase 2 project to increase production	
	Cu Morenci Copper Mine		● Start expanded full-scale production	● Additional interest acquired		
	Cu Cerro Verde Copper Mine			● 2016 Start full-scale operations of expansion project		
Smelting & Refining	Ni Solomon				● 2018 Start operation	
	Ni Taganito HPAL	● Opening ceremony	● Start full-capacity operation		● 2018 36-kt production structure	
	Ni Pomalaa Project			● Conduct FS	● Decision on investment	
Materials	Ni Harima Refinery nickel sulfate		● Start first line production	● 2016 Second line launch		
	Battery materials		● Completion of NCA 850-t structure	● NCA 1,850-t structure	● 2017 NCA 2,550-t structure	● 2018 Ternary type increase production structure
	Crystal materials (LT/LN)		● Decision on production increase	● 2016 300-k piece production structure	● 2017 400-k piece production structure	

Approach to Dividends

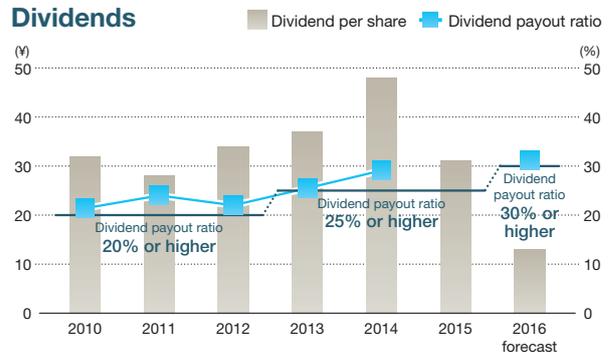
Dividend Policy

SMM views dividends as the core of its return to shareholders.

Given the high business risks involved in SMM's core mineral resources and smelting and refining businesses, and given the need to prepare for future large-scale investments in overseas mineral resources and smelting and refining projects, we believe that we must prioritize financial soundness and maintain a certain level of capital. Under that belief, we consider future business development, current performance, the soundness of our financial standing, and other factors in a comprehensive manner in order to determine the balance between return to shareholders and internal reserves.

To enhance our return to shareholders, we will raise our consolidated dividend payout ratio from 25% to 30% or higher in FY2016.

Dividends



Directors



Nobumasa Kemori

Chairman of the Board

September 1980	Joined the Company
July 1998	General Manager of Nickel Refinery, Besshi-Niihama District Div.
July 2002	General Manager of Nickel Business Unit, Non-Ferrous Metals Div.
June 2004	Executive Officer Senior Deputy General Manager of Non-Ferrous Metals Div.
June 2006	Director Managing Executive Officer General Manager of Non-Ferrous Metals Div.
June 2007	President and Representative Director
June 2013	Chairman of the Board and Representative Director
June 2016	Chairman of the Board (Present Position)

Yoshiaki Nakazato

President and Representative Director

April 1976	Joined the Company
December 1997	General Manager of Administration Dept., Electronics Div.
June 2004	General Manager of Corporate Planning Dept.
June 2005	Executive Officer
June 2006	Director
June 2007	General Manager of Affiliated Business Administration Dept.
June 2008	Managing Executive Officer General Manager of Advanced Materials Div.
October 2008	General Manager of Semiconductor Materials Div.
June 2009	Executive Officer General Manager of Advanced Materials Div.
June 2010	Managing Executive Officer
June 2012	Representative Director Senior Managing Executive Officer
June 2013	President and Representative Director (Present Position)



- | | |
|--------------------|---------------------|
| 1 Nobumasa Kemori | 2 Yoshiaki Nakazato |
| 3 Naoyuki Tsuchida | 4 Mikinobu Ogata |
| 5 Akira Nozaki | 6 Tsutomu Ushijima |
| 7 Hitoshi Taimatsu | 8 Kazuhisa Nakano |

Naoyuki Tsuchida

Director, Senior Managing Executive Officer, General Manager of Mineral Resources Div.

August 1985	Joined the Company
April 2004	Director and Executive Vice-President of Coral Bay Nickel Corporation
June 2006	General Manager of Overseas Projects Dept., Non-Ferrous Metals Div.
June 2007	Executive Officer Senior Deputy General Manager of Non-Ferrous Metals Div.
October 2009	Senior Deputy General Manager of Taganito Project Div.
June 2010	Managing Executive Officer General Manager of Taganito Project Div.
June 2012	Director (Present Position)
April 2013	General Manager of Sierra Gorda Project Div.
June 2013	Senior Managing Executive Officer (Present Position)
June 2014	General Manager of Engineering Div.
March 2016	General Manager of Mineral Resources Div. (Present Position)

Mikinobu Ogata

Director, Senior Managing Executive Officer

April 1978	Joined the Company
October 2005	General Manager of Copper Sales & Raw Materials Dept., Non-Ferrous Metals Div.
April 2006	General Manager of Copper & Precious Metals Sales Dept., Non-Ferrous Metals Div.
June 2008	Executive Officer Senior Deputy General Manager of Non-Ferrous Metals Div.
June 2012	Director (Present Position) Managing Executive Officer General Manager of Non-Ferrous Metals Div.
June 2015	Senior Managing Executive Officer (Present Position)

Akira Nozaki

Director, Managing Executive Officer, General Manager of Non-Ferrous Metals Div.

April 1984	Joined the Company
July 2010	Corporate Planning Dept.
May 2012	Administration Dept., Sierra Gorda Project Dept.
June 2013	Executive Officer Senior Deputy General Manager of Non-Ferrous Metals Div.
June 2014	Director (Present Position) General Manager of Corporate Planning Dept. General Manager of Non-Ferrous Metals Div. (Present Position)
June 2015	Managing Executive Officer (Present Position)
June 2016	Managing Executive Officer (Present Position)

Tsutomu Ushijima

Outside Director

April 1976	Registered as a lawyer
April 1982	Established Ushijima Law and Tax Accountant Firm
June 1982	Registered as a certified public tax accountant
January 1994	Established Ushijima Teramae Law Firm (current Ushijima, Teramae & Wada Law Firm)
June 2003	Audit & Supervisory Board Member of the Company
June 2007	Director of the Company (Present Position)

Hitoshi Taimatsu

Outside Director

April 1979	Research Associate of the Mining College of Akita University
October 1988	Lecturer of the Mining College of Akita University
April 1990	Associate Professor of the Mining College of Akita University
April 1994	Professor of the Mining College of Akita University
April 1998	Professor of the Faculty of Engineering and Resource Science of Akita University
April 2006	Director of the Radioisotope Research Center of Akita University
April 2008	Member of the Education and Research Council of Akita University Vice Dean of the Faculty of Engineering and Resource Science of Akita University
April 2010	Professor of the Graduate School of Engineering and Resource Science of Akita University Vice Dean of the Graduate School of Engineering and Resource Science of Akita University
June 2015	Director of the Company (Present Position)
April 2016	Professor of the Graduate School of Engineering Science of Akita University (Present Position)

Kazuhisa Nakano

Outside Director

April 1971	Joined Idemitsu Kosan Co., Ltd.
April 2003	Executive Officer and General Manager of Personnel Department of Idemitsu Kosan Co., Ltd.
June 2004	Director of Idemitsu Kosan Co., Ltd.
June 2005	Managing Director of Idemitsu Kosan Co., Ltd.
June 2007	Executive Vice President and Representative Director of Idemitsu Kosan Co., Ltd.
June 2009	President and Representative Director of Idemitsu Kosan Co., Ltd.
June 2013	Chairman and Representative Director of Idemitsu Kosan Co., Ltd.
June 2015	Executive Advisor of Idemitsu Kosan Co., Ltd. (Present Position)
June 2016	Director of the Company (Present Position)

Audit & Supervisory Board Members



- 1 Hajime Sato
- 2 Yasuyuki Nakayama
- 3 Hikoyuki Miwa
- 4 Junichi Kondo

Hajime Sato

Senior Audit & Supervisory Board Member (Standing)

April 1979	Joined the Company
August 2008	Corporate Planning Dept.
June 2010	General Manager of Public Relations & Investor Relations Dept.
June 2012	Director Executive Officer General Manager of Corporate Planning Dept.
June 2014	Audit & Supervisory Board Member (Standing)
June 2016	Senior Audit & Supervisory Board Member (Standing) (Present Position)

Yasuyuki Nakayama

Audit & Supervisory Board Member (Standing)

April 1982	Joined the Company
June 2001	Finance & Accounting Dept.
July 2011	Administration Dept., Semiconductor Materials Div.
April 2012	General Manager of Administration Dept., Semiconductor Materials Div.
July 2012	General Manager of Semiconductor Materials Business Unit, Materials Div.
October 2014	President and Representative Director of Shinko Co., Ltd.
June 2016	Audit & Supervisory Board Member (Standing) (Present Position)

Hikoyuki Miwa

Outside Audit & Supervisory Board Member

November 1975	Registered as a certified public accountant
August 1996	Partner of ASAHI & Co. (current KPMG AZSA LLC)
June 2001	Board Member of ASAHI & Co.
June 2003	Senior Executive Partner of ASAHI & Co.
June 2006	Deputy Managing Partner of KPMG AZSA & Co. (current KPMG AZSA LLC)
July 2009	Established Miwa Certified Public Accountant Firm
June 2011	Audit & Supervisory Board Member of the Company (Present Position)

Junichi Kondo

Outside Audit & Supervisory Board Member

April 1973	Joined Export-Import Bank of Japan
April 1999	Director of General, Administration and General Services Department of Export-Import Bank of Japan
October 1999	Director of Corporate Finance Department of Japan Bank for International Cooperation (JBIC) (which was formed as a result of integration between the former Export-Import Bank of Japan and the former Overseas Economic Cooperation Fund)
April 2001	Director of Personnel Department of JBIC
November 2002	Executive Director of JBIC
October 2003	Resident Executive Director, Osaka Branch of JBIC
October 2005	Senior Executive Director of JBIC
September 2007	Resigned from Senior Executive Director of JBIC
January 2008	Corporate Advisor of Tokyo Electric Power Company, Incorporated
February 2012	Corporate Advisor of ITOCHU Corporation
January 2015	President and Representative Director of Japan Institute for Overseas Investment (Present Position)
June 2016	Audit & Supervisory Board Member of the Company (Present Position)

Executive Officers

An asterisk indicates the officer is also serving concurrently as a director.

President

* **Yoshiaki Nakazato** In charge of Corporate Planning Dept.

Senior Managing Executive Officers

* **Naoyuki Tsuchida** General Manager of Mineral Resources Div.

* **Mikinobu Ogata** In charge of Legal & General Affairs Dept., Secretarial Dept., Internal Audit Dept., Osaka Branch

Managing Executive Officers

Toru Iijima General Manager of Materials Div.

Norifumi Ushirono Posted in Sierra Gorda

Harumasa Kurokawa General Manager of Technology Div.
In charge of Information Systems Dept.

Takashi Sugiura General Manager of Safety & Environment Control Dept.
In charge of Quality Assurance Dept.

* **Akira Nozaki** General Manager of Non-Ferrous Metals Div.

Executive Officers

Isao Okada Senior Deputy General Manager of Mineral Resources Div.

Hirohisa Oda Senior Deputy General Manager of Mineral Resources Div. (Posted in Chile)

Hiroki Kadoya Senior Deputy General Manager of Materials Div.

Hiroyuki Asai General Manager of Public Relations & Investor Relations Dept.
In charge of Purchasing Dept.

Masahiro Morimoto General Manager of Finance & Accounting Dept.

Masaki Imamura Senior Deputy General Manager of Technology Div.

Hiroshi Asahi Senior Deputy General Manager of Mineral Resources Div.

Atsushi Idegami Senior Deputy General Manager of Materials Div.

Kazushi Ino Senior Deputy General Manager of Materials Div.

Shuichi Yasukawa General Manager of Human Resources Development Dept.
In charge of Personnel Dept.

Fumio Mizuno General Manager of Engineering Div.

Atsushi Kaikake General Manager of Besshi-Niihama District Div.

Nobuhiro Matsumoto Senior Deputy General Manager of Non-Ferrous Metals Div.



DISCUSSION

Aiming for a Form of Governance Suitable for Sumitomo Metal Mining

Since adopting an executive officer system in 2001, the Company has worked to enhance the framework of its corporate governance through a focus on the supervision of execution by the Board of Directors and thorough improvement of compliance. Specifically, the Company has enhanced the functions of the Management Committee, that is held prior to Board of Directors meetings to perform fast decision-making, while the Board of Directors performs checks focused on whether that process was carried out from an objective standpoint. Effort is also made to confirm reported items, including behaviors not in line with compliance, through the eyes of outside directors. In addition, the Company is working toward full provision of information that goes beyond formalities because outside directors and outside Audit & Supervisory Board members can participate in nearly all conferences, including those of the Management Committee.

How is this governance framework viewed by outside directors? Dr. Kemori, Chairman of the Company, and three outside directors of the Company held a dialog on the form the Company's governance framework should take.

The Company's corporate culture and its connection to strengthening governance

Outside Director, Mr. Ushijima (hereinafter "Ushijima")

Nearly all behaviors not in line with compliance, even slight ones, are reported to the Board of Directors. This is one of the characteristics of Sumitomo Metal Mining's governance.

Chairman of the Board, Dr. Kemori (hereinafter "Kemori")

If the decision on whether or not to report is left to the discretion of a person in charge inside the company, essential information might not be reported. On that premise, we had cases of behaviors not in line with compliance viewed by outside directors and received opinions that differed from those inside the company. There was a case where proposed countermeasures were returned for re-consideration after the Board of Directors

questioned whether they were truly effective.

Outside Director, Mr. Nakano (hereinafter "Nakano")

Even when something doesn't appear significant out in the field, a different conclusion can be reached when outside directors look at it from a variety of perspectives. For that reason, I see the decision to report things without exception as a good method for reducing latent risks.

Ushijima

Even a risk that looks small at first can become an unexpectedly serious situation if ignored. That's why we check on reported items while considering what the items could lead to, and resolve them while they are still small. We also check whether anything else similar exists. I think these are meaningful steps in reducing management risk.

Outside Director, Dr. Taimatsu (hereinafter "Taimatsu")

Soon after I was appointed as outside director, I was surprised at the number of reported items concerning compliance and safety. But now, after a year, I've come to

think that this company culture, in which everything gets reported, is what leads to the strengthening of governance.

Placing importance on the Company's quality, rather than just following formalities

Ushijima

Another characteristic of the Company's governance is that outside directors and outside Audit & Supervisory Board members can participate in nearly all meetings, including those of the Management Committee. Minutes of Management Committee meetings, which record in detail not only results but also what sort of deliberations took place, are shared with us. As such, even when we're not able to attend a Management Committee meeting, at Board of Directors meetings, we're able to see whether anything other than what was debated internally should be brought up as an issue. In addition, because the Audit & Supervisory Board confirms the agendas of Board of Directors meetings in advance, outside Audit & Supervisory Board members have sufficient understanding of the points of discussions.

Taimatsu

I make every effort to attend Executive Officers' Meetings. The detailed minutes of Management Committee meetings are clear on what the points at issue were and who was in charge, which is a good



thing. When something is unclear, it's always possible to directly ask someone in an expert department and receive a candid answer. Now, a year after being appointed, I have a good understanding of this, so I will attend Board of Directors meetings this year with the necessary information in advance.

Kemori

With the recent addition of Mr. Nakano, the Board of Directors maintains an eight-member structure but now with three outside directors. I think that there can be no complaints regarding the diversity of the Board of Directors, and so would like to create an opportunity for discussing the ideal for the Company's Board of Directors. Actually, the Board used an outside law firm to perform a self-evaluation of the Board of Directors in 2015. However, I believe that an evaluation has meaning when we start by creating a vision for the Company's Board of Directors ourselves and then evaluate our current state with respect to that.

Nakano

At the Company, important topics for the Board of Directors are fully deliberated in advance by the Management Committee. If that's the case, then what functions should the Board of Directors hold in the future? The functions of and the ideal for the Board of Directors will change with the mind-set of top management, the company's history, and more. It's important that we always think about what this ideal should be.

Taimatsu

With regard to the evaluation of the Board of Directors, I myself saw the results of the questionnaire and felt that everyone expressed frank opinions, despite the fact that this was the first time an evaluation was held. With such a good start to Board of Director evaluations, and if we proceed with initiatives of the sort that the Chairman talks about, I think things will move ahead in a good direction regarding Board of Director evaluations.

Aiming for and further developing a framework of governance suitable for the Company

Kemori

We consider methods of utilizing the Board of Directors, including outside directors. Last year, with the addition of Dr. Taimatsu, which increased our outside directors to two, we set up a Governance Committee composed of the outside directors and myself. There is also an Independent Committee composed of only outside directors.



Ushijima

In the Governance Committee, the President explains to the Committee members his policy regarding matters of corporate governance, such as the nomination and compensation of directors and executive officers, while we provide advice. This is a completely new endeavor for the Company. It is often said that it is difficult for outside directors to give opinions regarding nominations and compensation, but it is meaningful that the president himself makes explanations because such explanations will indicate the judgment criteria that lies behind his thoughts.

Kemori

Going forward, how outside Audit & Supervisory Board members and outside directors collaborate is also important to make governance be even more effective. So far, exchanges of information have taken place among members of the Independent Committee, but it is not yet

DISCUSSION

clear how the five outside directors, including outside Audit & Supervisory Board members, should cooperate and contribute to the governance of the Company. I'd like to see this properly addressed.

Ushijima

I think that's a good idea. I think a meeting for the exchange of opinions and information among outside directors would energize the Audit & Supervisory Board and the Board of Directors, so I'd definitely like to see it happen.

Nakano

One company where I serve as an advisor holds an executive session, in which outside Audit & Supervisory



Board members, outside directors, and the representative director exchange ideas, once every two months. At that time, the participants exchange a variety of thoughts and ideas that they cannot communicate within official events. Because of this, communication among outside directors or between

outside directors and the representative director has become smooth, so I think the kind of endeavor you speak of would be effective.

Kemori

With three outside directors, the framework of governance has become appropriate for the Company. It's my hope to make the Board of Directors even more active, and I ask for your cooperation in doing so.

Our inheritance of the Sumitomo Business Spirit leads to the pursuit of social responsibility

Taimatsu

My background in university was in metallurgy, so I've heard about the history of the Company, going back to its Izumiya* era, and I visited the Besshi Copper Mine Site and Besshi Copper Mine Memorial Museum last year when I was appointed as outside director. What impressed me strongly at that time was how the 400-year history of the Company has been one of continual practice of "corporate social responsibility," even from a time before that term existed. Both governance and CSR are widely spread ideas today, but I think companies that embody those over such a long time are rare. Although our history has included pollution and other regretful incidents, I think the presence of the Sumitomo Business Spirit has been at the root of the company overcoming those and continuing for 400 years.

* Izumiya: The name of the copper smelting and decorative copper work shop established by Riemon Soga in 1590. This marked the beginning of the Company's copper business.

Nakano

I agree. Without a solid philosophy and the presence of employees who work with a solid understanding of that philosophy, a company wouldn't be able to continue for 400 years. However, with the change of generations the number of young people in the company who cannot digest the philosophy has increased, which is something I have experienced myself as a managing officer. How can we instill that philosophy in young employees through our work and support the Company in the future? I have a strong interest in that question.

Kemori

Thank you for your comment. Within the Sumitomo Business Spirit, there is the teaching "no pursuit of easy gains." This directs us to increase profits through business that is trusted by the public, without condoning business that pursues immediate profits or violates morality. I believe that this is the reason that we have placed importance on our core business while handing down our technology as a manufacturing company.

Ushijima

"No pursuit of easy gains" is a good viewpoint from which to check our everyday actions. Rather than just seeking profit, we will engage in legitimate business without violating morality. That way of thinking is visible in a variety of scenarios.

Through my work as an attorney, I have seen what sort of deliberation takes place internally when problems occur, or how information is reported, inside a variety of companies. I have also been involved in the Company as an outside Audit & Supervisory Board member and an outside director.



What I feel is positive about the Company compared to other companies is the openness from top to bottom when a problem occurs, and a company culture in which problems are not denied when pointed out. I do not feel that this is a company where no one says anything once the top has decided on a course of action, rather, it is one where it's easy for employees to express opinions, and that Sumitomo's Business Spirit lies behind this.

Kemori

Governance is becoming more appropriate for the Company. Looking ahead, I hope to cooperate with the outside officers, and manage the Board of Directors in a way that boosts the motivation of everyone from the president on down.

CORPORATE GOVERNANCE

Corporate Governance

Basic Approach

SMM views corporate governance as a disciplinary framework both for maximizing the corporate value of the SMM Group and for ensuring sound management practices. As such, it is one of the most important management issues.

SMM has instituted the SMM Group Corporate Philosophy based on the Sumitomo Business Spirit and will seek to (1) make positive contributions to society and fulfill our responsibilities to our stakeholders through the performance of sound corporate activities and the promotion of sustainable co-existence with society and the global environment in order to win ever greater trust from our stakeholders and (2) be a forward-minded and vibrant company based on respect for all individuals and recognizing each person's dignity and value.

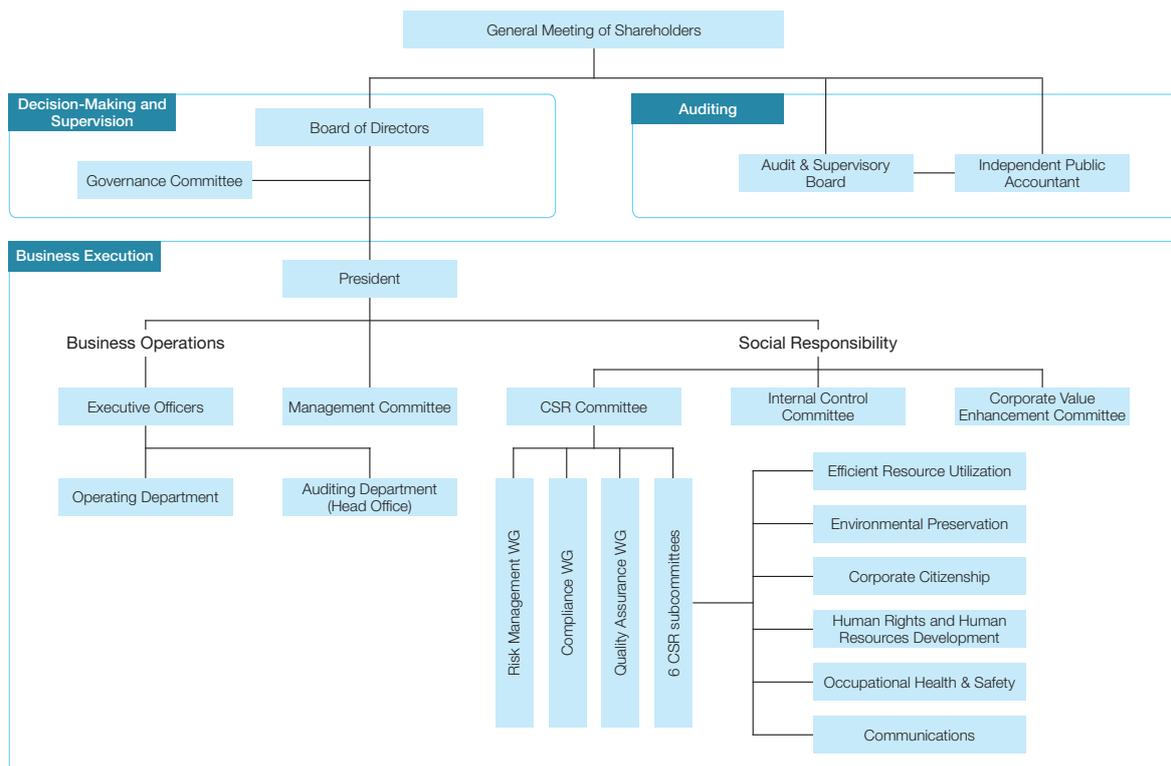
Through striving to enhance our corporate governance,

SMM will conduct efficient and sound business activities, make positive contributions to society, and fulfill our responsibilities to our shareholders and all other stakeholders in order to realize the SMM Group Corporate Philosophy.

Governance Framework

SMM has adopted Audit & Supervisory Board and executive officer systems to ensure effective execution, monitoring, and supervisory functions within management. The Company is managed by three systems, namely (i) the Board of Directors, in charge of major decisions and supervision, (ii) representative director and executive officers, in charge of the execution of business, and (iii) the Audit & Supervisory Board members and independent public accountant, in charge of auditing.

Corporate Governance Framework



Decision-Making and Business Execution Structures and Systems

Directors and the Board of Directors

SMM's Articles of Incorporation provide for a Board of Directors of up to ten members, each appointed for one year. Furthermore, our policies stipulate that one-third or more of directors be independent outside directors. Based on these policies, SMM has three outside directors among our current eight directors. With regard to our directors being eight in number, we have determined that this is an appropriate number for ensuring agility and active discussion by the Board.

Every year, the Board should be evaluated for its efficacy in the execution of business decisions and supervisory functions, which we endeavor to continually improve. Based on evaluations of directors and Audit & Supervisory Board members, both self-evaluations and those done by a law firm, the Board of Directors carried out analyses and assessments in FY2015 and concluded that there were no major issues with the Board's effectiveness.

System of Internal Memorandums for Approval and the Management Committee

The basic method for making decisions on business execution is to examine and approve such matters through the system of internal memorandums. The Management Committee holds meetings for important management matters that require deliberation, thereby conducting careful decision-making and rational business judgment based on diverse perspectives.

The Management Committee is composed of the president, vice president, senior managing executive officers, and other executive officers. The chairman, outside directors, and Audit & Supervisory Board members are also allowed to attend Management Committee meetings. Among matters to be resolved by the Board of Directors and matters to be approved by the president, the Management Committee will deliberate from a broad perspective on matters determined to require deliberation and then will determine whether those matters will be referred to the Board of Directors. The Committee also fulfills the function of supporting approval granted by the president.

Executive Officer System

Substantial authority has been delegated to executive officers whose authority and responsibilities have been clearly defined to reinforce their executive function. Appointed by the Board of Directors, executive officers are entrusted with important positions (such as heading an operational division, a department or an office at SMM's headquarters) and are expected to perform their duties with the specific authority assigned to each position.

Auditing System

Audit & Supervisory Board

At least half of the Audit & Supervisory Board members will be outside Audit & Supervisory Board members with a variety of expertise and diverse perspectives. Audit & Supervisory Board members from within SMM will conduct audits based on the particular characteristics of full-time members, such as by collecting information within the Company, and outside Audit & Supervisory Board members will conduct audits that make use of their areas of expertise.

In order to ensure managerial soundness and increase the corporate value of SMM, and in accordance with the audit policies, audit plans, and other such matters prescribed by the Audit & Supervisory Board, each Audit & Supervisory Board member will attend meetings of the Board of Directors, the Management Committee, and other important meetings, receive reports and, when necessary, request explanations from directors, executive officers, and employees regarding the status of the performance of their duties, inspect important approval and other such documents, and examine the status of operations and assets at the head office and other major business sites. At meetings of the Audit & Supervisory Board, standing Audit & Supervisory Board members shall report the details of onsite audits that have been conducted solely by standing Audit & Supervisory Board members as well as of meetings that were not attended by outside members.

Collaboration between the Internal Audit Department, Independent Public Accountant and Audit & Supervisory Board Members

The Internal Audit Department regularly undertakes internal audits on the status of business execution across the SMM Group. The Department provides an explanation of its audit plans to Audit & Supervisory Board members while passing on all relevant information. At the same time, Audit & Supervisory Board members provide details of audit plans determined at meetings of the Audit & Supervisory Board to the Internal Audit Department, attend meetings when reports on the results of internal audits are delivered to executive officers and the heads of operational divisions and, when required, accompany staff of the Internal Audit Department when conducting internal audits. KPMG AZSA LLC, an independent registered public accounting firm, audits the consolidated financial statements and the effectiveness of the internal control over financial reporting. Audit & Supervisory Board members provide details of audit plans to the independent public accountant. Audit & Supervisory Board members in turn receive explanations regarding audit plans and reports on audit results from the independent public accountant. In this manner, close collaboration is maintained between the independent public accountant and Audit & Supervisory Board members.

Outside Directors and Outside Audit & Supervisory Board Members

At important meetings such as those of the Board of Directors, outside directors are expected to express their views from a broad perspective based on their knowledge, experience, abilities, and insight and are expected to fulfill the function of providing objective supervision from a standpoint independent from the

representative director and the executive directors. Outside directors use their specialized expertise and diverse perspectives to offer supervision, provide valuable comments at Board of Directors and other meetings, and exercise oversight.

Director and Audit & Supervisory Board Member Compensation

Maximum limits on the total amounts of compensation for directors and compensation for Audit & Supervisory Board members will be determined by resolution of the General Meeting of Shareholders. If bonuses are paid to directors, then the total amount of bonuses to directors, excluding outside directors, will be determined in the same way.

The president & representative director, with the authorization of the Board of Directors, will determine the amount of director compensation. The specific amount of compensation other than bonuses for each director will be calculated by reflecting the individual performance of the director (calculated with position-specific evaluation items such as division performance, the degree to which individual targets set in accordance with mid- to long-term business strategies are being achieved, and safety results (number of labor accidents), etc. as standards) on a base compensation amount determined in consideration of the consolidated performance of the SMM Group; the compensation amount will then be determined after receiving the advice of the Governance Committee. The specific amount of each director's bonus will be calculated by reflecting the individual performance of each director, which is calculated with the same position-specific evaluation items as the above standards, on a base bonus amount determined in consideration of the consolidated performance of the SMM Group; the bonus amount will then be determined after receiving the advice of the Governance Committee. However, because of the importance placed on the outside directors fulfilling a supervisory function from a standpoint independent from business execution, individual performance will

not be reflected and only the base compensation amount with no bonuses will be paid to outside directors.

The amount of compensation for each individual Audit & Supervisory Board member will be determined by consultation among the Audit & Supervisory Board members at the Audit & Supervisory Board within the total compensation amount approved by the General Meeting of Shareholders.

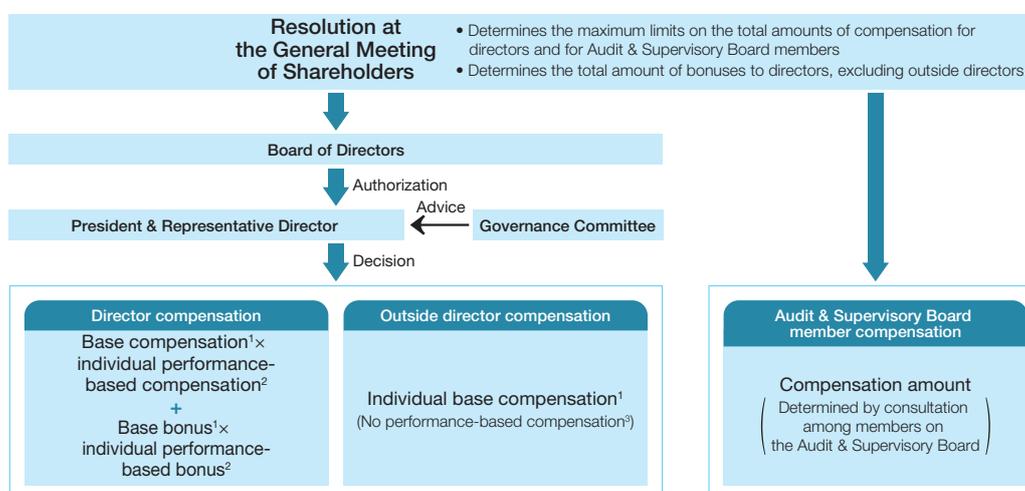
FY2015 Director and Audit & Supervisory Board Member Compensation

Officer Classification	Number of Officers	Total Compensation	Total Compensation by Type	
			Basic Compensation	Bonus
Directors (excluding outside directors)	8	¥245 million	¥245 million	—
Audit & Supervisory Board members (excluding outside Audit & Supervisory Board members)	2	¥64 million	¥64 million	—
Outside directors (Outside Audit & Supervisory Board members)	4	¥47 million	¥47 million	—

Note 1: In addition to the aforementioned, an employee salary portion totaling ¥51 million was paid to two persons who serve concurrently as directors and employees.

Note 2: In order to demonstrate managerial responsibility for the impairment loss incurred at Sierra Gorda S.C.M., for three months starting February 2016, the Chairman of the Board and the president & representative director each voluntarily returned 30% of their base monthly compensation, while one director concurrently serving as a director and employee returned 10% of his base monthly compensation and employee monthly compensation. The applicable two months of voluntarily returned compensation are not included in the above amounts of total compensation, base compensation, and employee compensation.

Method for Calculating Compensation for Directors and Audit & Supervisory Board Members



1. Takes into consideration the consolidated performance of the Group.

2. Calculated reflecting the following position-specific evaluation items:

Division performance, the degree to which individual targets set in accordance with mid- to long-term business strategies are being achieved, safety results (number of labor accidents), etc., and other individual items for evaluating each position.

3. Stipulated due to SMM's emphasis on oversight functions from a standpoint independent of business execution.

Takeover Defense Measures

At the 91st Ordinary General Meeting of Shareholders in June 2016, SMM received approval for the partial renewal of “takeover defense measures.” The period of validity of the revised takeover defense measures will last for three years until the conclusion of the 94th Ordinary General Meeting of Shareholders in June 2019.

The Company believes that the persons who control decisions on the Company’s financial and business policies need to be persons who understand the sources of the Company’s corporate value and who will make it possible to continually and steadily ensure and enhance the Company’s corporate value and, in turn, the common interests of its shareholders. Hence, the Company has adopted takeover defense measures to protect its corporate value and the common interests of shareholders against an aggressive acquisition that would harm that corporate value and those common interests of shareholders.

The takeover defense measures set out procedures that acquirers must adhere to in advance and include requirements

for acquirers to furnish information. Under the Japanese legal system, a party making an acquisition proposal does not have a duty to furnish information. Having takeover defense measures in place guarantees that a party making an acquisition proposal will furnish information and allows shareholders to compare statements by the acquirer and SMM management before deciding which course of action is preferable.

Additionally, if certain conditions specified in the takeover defense measures are met, such as the acquisition having the potential to harm the Company’s corporate value or the common interests of shareholders, the gratis allotment of Stock Acquisition Rights will be exercised and the ratio of voting rights in the Company held by the acquirer will be diluted. Exercise of this measure requires the decision by an Independent Committee comprised of outside directors (independent officers), etc. in order to guarantee fairness and objectivity.

Formulating Corporate Governance Guidelines

SMM formulated Corporate Governance Guidelines on February 15, 2016.

The Guidelines, which cover the main provisions of the Corporate Governance Code formulated by the Tokyo Stock Exchange, are intended to convey our basic philosophy on corporate governance and our corporate governance framework, including our relationship with stakeholders.

Main Initiatives to Strengthen our Corporate Governance Framework

June 2001	Adopted an executive officer system and reduced the required number of directors
June 2007	Appointed an outside director
June 2015	Appointed multiple outside directors
November 2015	Established a Governance Committee Began implementing efficacy evaluations for the Board of Directors
February 2016	Formulated guidelines for corporate governance
June 2016	Stipulated that the proportion of directors who are outside directors should be one third or greater

[WEB](#) Corporate Governance Guidelines / [WEB](#) Corporate Governance Report

<http://www.smm.co.jp/E/ir/management/governance/>

Outside Directors and Outside Audit & Supervisory Board Members

	Outside Director Tutomu Ushijima	Outside Director Hitoshi Taimatsu	Outside Director Kazuhiisa Nakano	Outside Audit & Supervisory Board Member Hikoyuki Miwa	Outside Audit & Supervisory Board Member Junichi Kondo
Reason for Appointment	Based on his specialist knowledge and wealth of experience as a lawyer and a licensed tax accountant, he was appointed as an outside director to provide advice to SMM on business matters, particularly from a compliance perspective.	He was appointed as an outside director with the expectation of leveraging both his specialized knowledge as a researcher in materials engineering and his organizational management experience at his university.	He was appointed as an outside director with the expectation of leveraging his wealth of knowledge and experience in company management and natural resources business in order to offer suitable oversight of SMM operations.	Based on his auditing experience accumulated over many years at audit firms as well as his extensive knowledge in accounting, he was appointed an outside Audit & Supervisory Board member	Based on his wealth of financial institution experience, he was appointed as an outside Audit & Supervisory Board member.
Attendance at Meetings	During the term, the Board of Directors convened 16 times (12 regular meetings and 4 extraordinary sessions). He attended all meetings.	After his appointment as outside director, the Board of Directors convened 12 times (9 regular meetings and 3 extraordinary sessions). He attended all meetings.	He is a new outside director appointed at the Ordinary General Meeting of Shareholders in June 2016.	During the term, the Board of Directors convened 16 times (12 regular meetings and 4 extraordinary sessions). He attended all meetings.	He is a new Audit & Supervisory Board member appointed at the Ordinary General Meeting of Shareholders in June 2016.

AT A GLANCE

SMM Group Overview

(As of July 1, 2016)

Corporate Data

Company name	Sumitomo Metal Mining Co., Ltd.	Listings	Tokyo Stock Exchange
President	Yoshiaki Nakazato	No. of subsidiaries (consolidated)	68
Founded	1590	No. of equity-method affiliates	16
Incorporated	1950	Net sales (consolidated)	¥855.4 billion (for the year ended March 31, 2016)
Capital	¥93.2 billion	Recurring profit (consolidated)	¥-12.8 billion (for the year ended March 31, 2016)

Looking at the SMM Group by the Numbers

No. of countries and regions where business is conducted

18

No. of employees, consolidated

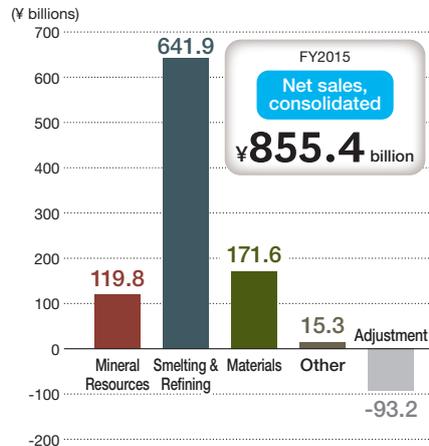
9,529
(972)

(as of March 31, 2016)

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

No. of subsidiaries, consolidated

68

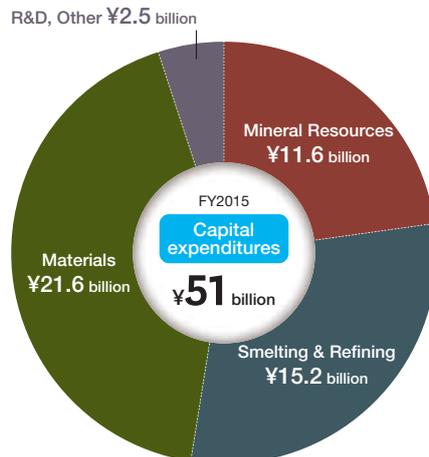


Mines, directly controlled and with an interest

8

Major sites of Materials Business

30



Smelting and refining sites, directly controlled and with an investment

10

SMM Group Business Locations

(As of July 1, 2016)

Japan

Sumitomo Metal Mining Co., Ltd.*

Mineral Resources

- Sumiko Resources Exploration & Development Co., Ltd.
- Sumiko Solomon Exploration Co., Ltd.

Smelting & Refining

- Acids Co., Ltd.
- MS Zinc Co., Ltd.
- Shisaka Smelting Co., Ltd.*
- Sumiko Logistics Co., Ltd.*
- Taihei Metal Industry Co., Ltd.*
- Hyuga Smelting Co., Ltd.*
- Mitsui Sumitomo Metal Mining Brass & Copper Co., Ltd.

Materials

- SH Copper Products Co., Ltd.
- SH Precision Co., Ltd.*
- SH Materials Co., Ltd.
- SMM Precision Co., Ltd.*
- Ohkuchi Electronics Co., Ltd.*
- Ohkuchi Materials Co., Ltd.*
- Granopt Co., Ltd.
- Shinko Co., Ltd.*
- Sumiko Energy Materials Co., Ltd.
- Sumiko Kunitomi Denshi Co., Ltd.*
- Sumico Lubricant Co., Ltd.*
- Niihama Electronics Co., Ltd.*
- Niihama Materials Co., Ltd.*
- Nittosha Co., Ltd.*

Other

- Igeta Heim Co., Ltd.*
- N.E. Chemcat Corporation
- JCO Co., Ltd.*
- Sumiko Technical Service Co., Ltd.
- Sumiko Tec Co., Ltd.*
- Sumiko Techno-Research Co., Ltd.
- Sumiko Plantech Co., Ltd.
- Sumitomo Metal Mining Engineering Co., Ltd.*
- Sumitomo Metal Mining Siporex Co., Ltd.*
- Nippon Ketjen Co., Ltd.*
- Japan Irradiation Service Co., Ltd.*

Asia

Mineral Resources

- Cordillera Exploration Co., Inc. (Philippines)

Smelting & Refining

- Jinlong Copper Co., Ltd. (China)
- Sumitomo Metal Mining Management (Shanghai) Co., Ltd. (China)
- Sumitomo Metal Mining (Hong Kong) Co., Ltd. (China)
- Coral Bay Nickel Corporation (Philippines)*
- Nickel Asia Corporation (Philippines)
- Taganito HPAL Nickel Corporation (Philippines)*
- Sumitomo Metal Mining Philippine Holdings Corporation (Philippines)
- PT Vale Indonesia Tbk. (Indonesia)

Materials

- Dongguan Sumiko Electronic Paste Co., Ltd. (China)
- Shanghai Sumiko Electronic Paste Co., Ltd. (China)
- SH Electronics Suzhou Co., Ltd. (China)*
- Suzhou SH Precision Co., Ltd. (China)*
- SH Electronics Chengdu Co., Ltd. (China)*
- SH Precision Chengdu Co., Ltd. (China)
- Sumico Lubricant Trading (Shanghai) Co., Ltd. (China)
- Taiwan Sumiko Materials Co., Ltd. (Taiwan)
- SH Electronics Taiwan Co., Ltd. (Taiwan)*
- SMM KOREA Co., Ltd. (South Korea)
- Malaysian Electronics Materials Sdn. Bhd. (Malaysia)
- Malaysian SH Electronics Sdn. Bhd. (Malaysia)*
- Malaysian SH Precision Sdn. Bhd. (Malaysia)*
- SH Asia Pacific Pte. Ltd. (Singapore)
- Sumiko Tape Materials Singapore Pte. Ltd. (Singapore)
- Sumiko Leadframe (Thailand) Co., Ltd. (Thailand)

■ Consolidated subsidiaries ● Equity-method affiliates
* Included in the boundary of the performance data of Environmental Aspects

North America

Mineral Resources

- SMMA Candelaria Inc. (U.S.)
- SMM Exploration Corporation (U.S.)
- Sumitomo Metal Mining America Inc. (U.S.)
- Sumitomo Metal Mining Arizona Inc. (U.S.)
- Sumitomo Metal Mining Pogo LLC (U.S.)*
- Stone Boy Inc. (U.S.)
- Sumitomo Metal Mining Canada Ltd. (Canada)
- SMM Resources Inc. (Canada)
- Sumac Mines Ltd. (Canada)
- SMM Morenci Inc. (U.S.)

▲ Pogo (85.0%)

▲ Morenci (25.0%)

Main Facilities

Head Office
11-3, Shimbashi 5-chome, Minato-ku, Tokyo
(Shimbashi Sumitomo Building)

Main branch
Osaka Branch

Branches
Nagoya Branch (Aichi Prefecture)
Besshi-Niihama District Division
(Ehime Prefecture)

Plants
Toyo Smelter & Refinery (Ehime Prefecture)
Niihama Nickel Refinery (Ehime Prefecture)
Harima Refinery (Hyogo Prefecture)
Ome District Division (Tokyo)
Isoura Plant (Ehime Prefecture)

Mine
Hishikari Mine (Kagoshima Prefecture)

Research centers
Niihama Research Laboratories (Ehime Prefecture)
Battery Research Laboratories (Ehime Prefecture)
Materials Laboratories (Tokyo)
Ichikawa Research Center (Chiba Prefecture)

Main Products

1. Mineral resources segment

Gold and silver ore, copper concentrates, copper, gold

2. Smelting and refining segment
Copper, gold, silver, electrolytic nickel, ferro-nickel, zinc, chemical products

3. Materials segment

Semiconductor materials, thick film materials, thin film materials, battery materials, crystal materials, magnetic materials, oil refining catalysts, automotive catalysts, autoclaved lightweight concrete, lubricants

No. of countries and regions where business is conducted
18

▲ Cerro Verde (16.8%)

▲ Sierra Gorda (31.5%)

▲ Ojos del Salado (16.0%)

▲ Candelaria (16.0%)

- Besshi-Niihama District Division
- ▲ Toyo Smelter & Refinery
- ▲ Niihama Nickel Refinery
- ▲ Shisaka Smelting Co., Ltd.
- ◆ Isoura Plant
- ◆ Niihama Electronics Co., Ltd.
- ◆ Niihama Materials Co., Ltd.

Shinko Co., Ltd. (97%)

◆ SMM Precision Co., Ltd.
Granopt Co., Ltd.

◆ SH Precision Co., Ltd.

Ome District Division

◆ SH Copper Products Co., Ltd.

Harima Refinery

◆ Nittosha Co., Ltd.
◆ Sumiko Tec Co., Ltd.

▲ Hyuga Smelting Co., Ltd. (60%)

▲ Hishikari

◆ Ohkuchi Electronics Co., Ltd.
◆ Ohkuchi Materials Co., Ltd.

● Head Office

◆ SH Materials Co., Ltd. (51%)

◆ Sumico Lubricant Co., Ltd.

◆ Sumiko Energy Materials Co., Ltd.

● N.E. Chemcat Corporation

● Nippon Ketjen Co., Ltd.

● Sumitomo Metal Mining Siporex Co., Ltd.

The location of the head office is shown for each group company in Japan.

Other Regions

Mineral Resources

- Compania Contractual Minera Candelaria (Chile)
- Compania Contractual Minera Ojos Del Salado (Chile)
- Sumitomo Metal Mining Chile Ltda. (Chile)
- SMM Sierra Gorda Inversiones Ltda.(Chile)
- Sierra Gorda S.C.M. (Chile)
- SMM-SG Holding Inversiones LTDA. (Chile)
- Sumitomo Metal Mining Peru S.A. (Peru)
- Sociedad Minera Cerro Verde S.A.A. (Peru)
- Sumitomo Metal Mining do Brasil Ltda. (Brazil)
- Sumitomo Metal Mining Oceania Pty. Ltd. (Australia)

- SMM Cerro Verde Netherlands B.V. (Netherlands)
- SMM Solomon Ltd. (Solomon Islands)

Smelting & Refining

- Figesbal SA (New Caledonia)
- Sumic Nickel Netherlands B.V. (Netherlands)

Other

- SMM Holland B.V. (Netherlands)

Mineral Resources Segment

▲ Copper ▲ Gold

Smelting & Refining Segment

▲ Copper ▲ Nickel ▲ Other

Materials Segment

◆ Major Sites of Materials Business

● Other Major Site / Group Company

Figures in parentheses indicate percentage interest. Companies with no percentage written are 100% owned.

Mineral Resources Business

SMM uses the technology accumulated from operating Besshi Copper Mine (opened in 1691) and incorporates it in operations of Hishikari Mine (opened in 1985) and Pogo Gold Mine (opened in 2006). Additionally, SMM acts as a professional mine developer and operator seeking out superior resources in regions around the world, while participating in mining operations, pursuing myriad exploration projects, and proceeding with surveys to develop new mines.

Reflecting on the 2012 3-Year Business Plan

Sierra Gorda Copper Mine development project

- We were able to start commercial production in July 2015, though delays in launching operations meant that full production was not reached.
- Surging capital expenditures, delays in launching operations, and weak copper prices led to impairment losses booked in FY2015.

Increased production and stable operations at current operating mines

● Cerro Verde Copper Mine expansion project

The expansion project proceeded according to plan and full production was started in March 2016.

● Morenci Copper Mine expansion project

The expansion project proceeded according to plan and full production was started in May 2015.

● Hishikari Mine lower ore body development project

Construction of a new dewatering facility is proceeding in order to develop lower ore bodies present below the current depth of the hot spring water level. We expect approximately 30 tons of gold from this project.

● Pogo Gold Mine East Deep

We proceeded with development of the East Deep deposit and began full-fledged production from the first quarter of FY2014.

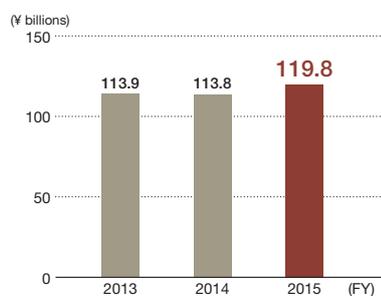
Acquiring interests in new projects

- With Morenci Copper Mine, we acquired an additional 13% interest in this, one of the world's largest copper mines, from our partner Freeport McMoRan, boosting our interest to 25%.
- Though exploration activities focusing on the Pacific Rim have been carried out, no promising discoveries leading to mine development were made.
- Though a large number of projects have been studied to evaluate the acquisition of interests, no acquisitions leading to mine development were made.

FY2015 review

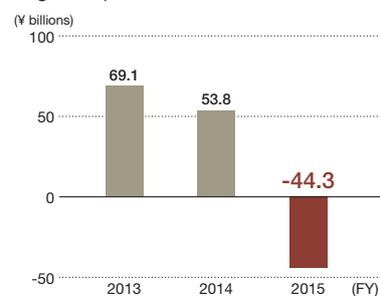
- Operations at Hishikari Mine proceeded on a stable basis, producing 6.9 tons of gold.
- Operations at Pogo Gold Mine produced 8.8 tons of gold due to a decline in the ore grade.
- A verdict was handed down on the appeal over our international tender for mining zones in the Solomon project.

Net sales



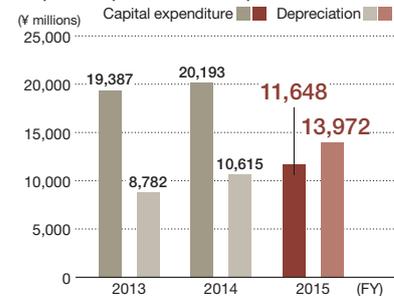
Launching our expansion projects boosted production and sales volumes above the previous fiscal year.

Segment profit



The fall in metal prices and the impairment losses booked at Sierra Gorda Copper Mine led to ¥44.3 billion in losses.

Capital expenditure / depreciation



Capital expenditure, including large-scale projects, proceeded basically as planned.



Naoyuki Tsuchida

Senior Managing Executive Officer
General Manager,
Mineral Resources Div.

Corporate strategies in the 2015 3-Year Business Plan

Sierra Gorda Copper Mine development project

- While promoting mutual understanding among shareholders and taking direct involvement with on-site management, we will put full effort into securing stable operations and broad cost reductions.
- We will proceed with reviews of the oxide ores project and 2nd Phase expansion project in order to raise future business prospects.

Acquiring interests in new projects

- With the aim of achieving the attributable annual production targets of 300,000 tons of copper and 30 tons of gold by FY2021, we will be engaged in both explorations of various stage projects and acquisitions of advanced stage projects.
- With respect to gold in particular, which is significantly deviating from our long-term target level, both independent explorations and acquisitions will be priority issues to gain the additional gold reserves.

Stable operations at current operating mines

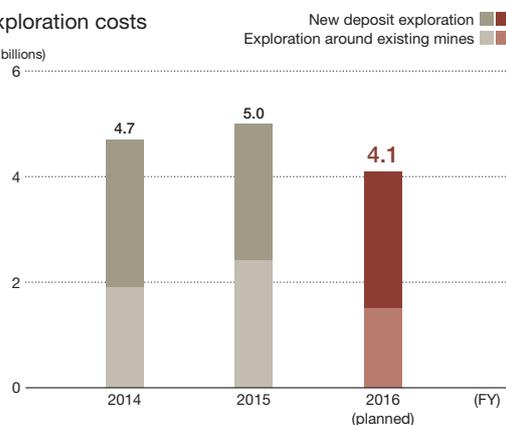
- Along with achieving stable operations at current operating mines while moving forward with cost reductions, we will strive to secure financial profits.
- We will continue with peripheral exploration of Hishikari Mine and Pogo Gold Mine, striving to extend the lives of both mines.
- We will proceed with constructing a new dewatering facility in order to continue developing lower ore bodies at Hishikari Mine.

FY2016 outlook

- We will continue dedicating maximum effort toward achieving full operation at Sierra Gorda Copper Mine as soon as possible.
- FY2016 production at Hishikari Mine is scheduled for 6 tons.
- FY2016 production at Pogo Gold Mine is scheduled for 9 tons.

Exploration costs

(¥ billions)

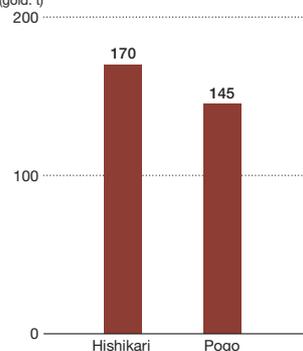


In 2016, we will proceed with exploration focused on gold and will dedicate further effort to exploration around mines already in operation.

SMM's metal interests by mine

(gold: t)

(as of December 31, 2015)



(Notes)
Hishikari Mine
Content of gold in minable ore according to JIS standards
Pogo Gold Mine
Reserve: 62 t
Resource: 83 t
(Canadian standard)

Metal reserves by mine, calculated as of December 31, 2015, are 170 tons (no change from last fiscal year) at Hishikari Mine and 145 tons (down 19 tons from last fiscal year) at Pogo Gold Mine.

External environmental factors with a significant impact on SMM's mineral resources business

- Declining profitability due to weak metal prices
- Financial damage or movements toward asset restructuring/reorganizing at major resource companies
- Increased and accelerated resource monopolization by certain countries
- Increased risks of higher taxation, etc. from a rise in resource nationalism
- Increased development and operation costs from a decline in deposit ore grade, or from deposits being increasingly located in high-lying, remote, or deep locations
- Increased development and operation costs from more serious environmental problems and more stringent regulations

Core advantages of SMM's mineral resources business

Accumulated mining and exploration technology

The level of engineers' technical skill and expertise impacts the stability and improvement of mine operations. While the SMM Group utilizes its domestic mine, Hishikari Mine, as a base for nurturing mining engineers, we also dispatch engineers to the Pogo Gold Mine that we operate, in addition to overseas mines where we have minor interests. This allows us to foster human resources with expertise in mine exploration, development, and operation.



Daily operation and management at Hishikari Mine

Robust relationships of trust with our partners

In preserving our mine interests, the SMM Group goes beyond mere investment and leverages the technical expertise honed and developed since building out the Besshi Copper Mine to contribute to stable and improving operations. This includes dispatching employees and forming cooperative technology relationships, all of which allows us to earn a high degree of trust from our partners. The bedrock of reliability created through these and other activities provides opportunities to participate in new, high-quality development projects and to acquire new



interests. This progress leads to further growth and improvement in our corporate value.

Freeport McMoRan President Adkerson and SMM President Nakazato at the ceremony celebrating the acquisition of additional interest in Morenci Copper Mine (June 3, 2016)

Co-existing with local communities

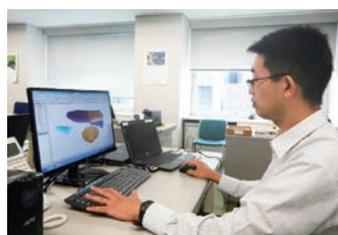
While carrying out dialogue with stakeholders, we strive to listen to the needs and concerns of local communities so that we can develop and operate mines in harmony with these groups. By avoiding conflicts with the needs of local communities regarding, for instance, water resources, and by processing mine wastewater, reducing dust, and safely managing deposition fields for tailings, we strive for responsible environmental management that contributes to environmental preservation.



Daily environmental surveys around Hishikari Mine

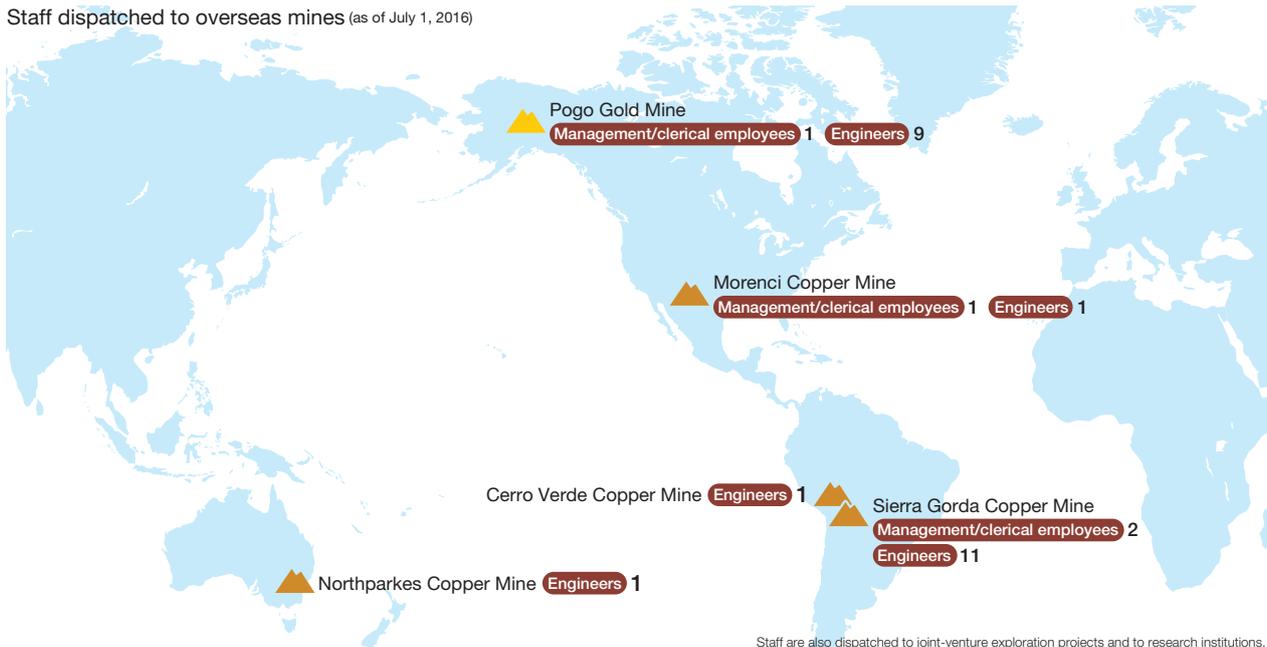
High-precision techniques for evaluating profitability

In order to ensure profit even in the face of fluctuating metal prices, we set stringent investment criteria and strictly evaluate profitability when acquiring mine interests. Leveraging massive amounts of mine-related information accumulated over many years allows us to exercise a high level of precision in these calculations of reserves, investment amounts, and other risks, which are the foundational techniques for profitability evaluations. Profitability assessments based on results of these highly precise evaluations contribute to minimizing financial risks accompanying interest acquisition and are fundamental to a stable supply of basic, raw materials.



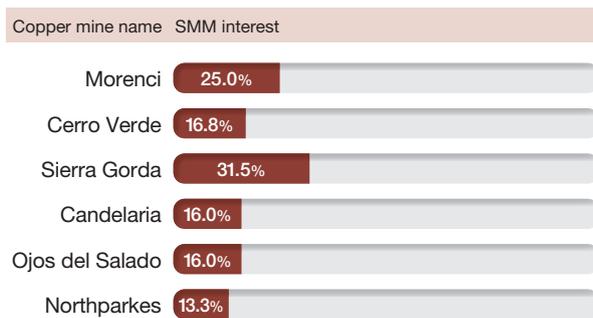
Project evaluation by engineers with highly specialized knowledge

Staff dispatched to overseas mines (as of July 1, 2016)

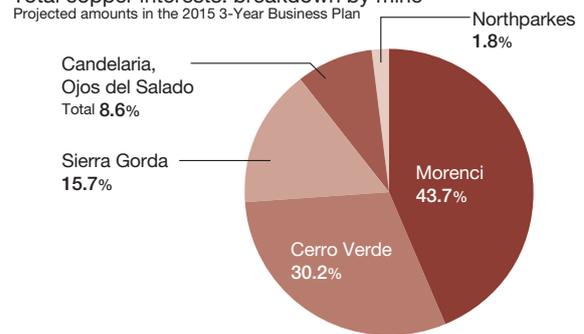


Staff are also dispatched to joint-venture exploration projects and to research institutions.

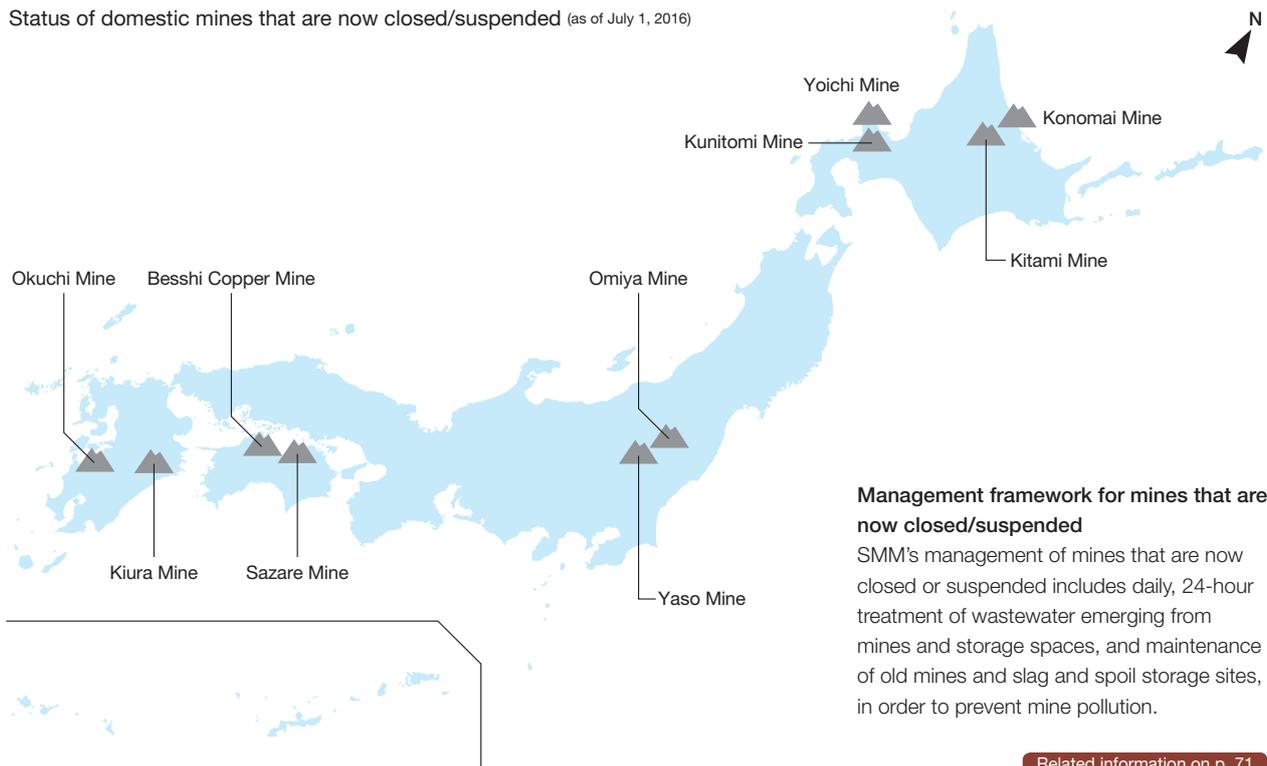
Copper mines and interests in which SMM has ownership



Total copper interests: breakdown by mine



Status of domestic mines that are now closed/suspended (as of July 1, 2016)



Management framework for mines that are now closed/suspended

SMM's management of mines that are now closed or suspended includes daily, 24-hour treatment of wastewater emerging from mines and storage spaces, and maintenance of old mines and slag and spoil storage sites, in order to prevent mine pollution.

Related information on p. 71

Smelting & Refining Business

SMM smelts and refines raw materials procured from a variety of sources, mainly from mines where we have an interest, into such metals as copper, nickel, and gold. SMM possesses world-class smelting and refining technology and has forged a solid position within its industry. As an example, SMM became the first in the world to successfully commercialize HPAL technology for the recovery of nickel from low-grade ore, which had been difficult with conventional technologies.

Reflecting on the 2012 3-Year Business Plan

Establishment of a 100,000-ton Nickel Production Structure

● Taganito Project

We moved forward with construction on Mindanao Island (Philippines) of Taganito HPAL Nickel Corporation as our second production base that uses high-pressure acid leach (HPAL)¹ process to produce nickel-cobalt mixed sulfide (MS), a type of nickel intermediate. Production began in FY2013 and reached a stable level in FY2014, contributing to our establishment of a 100,000-ton nickel production structure.

● Strengthening HPAL competitiveness

We investigated using the HPAL process to recover scandium, chromite, and hematite, which had been difficult to recover, built a pilot plant, and carried out assessments for some users.

● Establishment of a 65,000-ton electrolytic nickel production structure

We expanded production capacity at the Niihama Nickel Refinery (Ehime Prefecture), establishing a 65,000-ton/year production structure in FY2014.

● Expanding nickel sulfate production

We built nickel sulfate production facilities at Harima Refinery and began production from FY2014. Along with the Niihama Nickel Refinery, this gives SMM two production bases for responding to the increasing demand for use in battery materials, etc.

Strengthening the competitiveness of the Toyo Smelter & Refinery (copper smelting and refining)

- We expanded capacity for handling secondary raw materials.
- We proceeded with initiatives to strengthen our ability to handle impurities.
- We proceeded with initiatives for stable operations and further cost reductions.

FY2015 review and FY2016 outlook

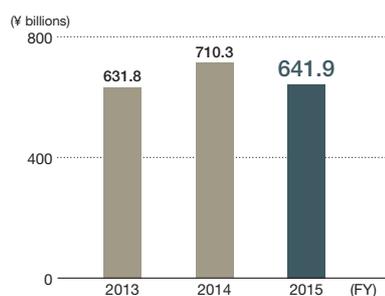
FY2015 review

- With the transition to nickel sulfate production, we stopped production of prime western grade zinc at the Harima Refinery in September 2015.
- Production of electrolytic nickel proceeded smoothly and amounted to 66,000 tons.
- We carried out regular maintenance at the Toyo Smelter & Refinery, with electrolytic copper production coming to 420,000 tons as planned.

FY2016 outlook

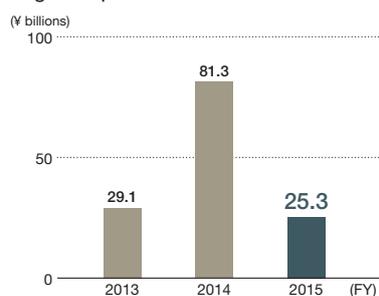
- Electrolytic nickel production is scheduled for 65,000 tons.
- Electrolytic copper production is scheduled for 445,000 tons.

Net sales



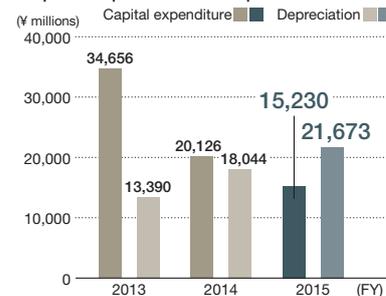
Both nickel production and sales volumes exceeded the previous fiscal year. Due to regular maintenance at the Toyo Smelter & Refinery, copper sales volume fell compared to the previous fiscal year.

Segment profit



Due to the drop in nickel prices from the last fiscal year, profit fell to ¥25.3 billion.

Capital expenditure / depreciation



Capital expenditures proceeded basically as planned.



Akira Nozaki
 Managing Executive Officer
 General Manager,
 Non-Ferrous Metals Div.

Corporate strategies in the 2015 3-Year Business Plan

Stable nickel production of 100,000 tons and promotion of a 150,000-ton production structure

● Increasing production capacity at Taganito HPAL

We plan to increase production capacity 20% at Taganito HPAL and begin production on the scale of 36,000 tons in the second half of 2018.

● Strengthening HPAL competitiveness

We plan to build a scandium production plant at Taganito HPAL and begin commercial production from 2018. With regard to chromite and hematite, we are continuing tests and considering commercialization.

● Pomalaa Project

We are moving forward with reviews of the area around Pomalaa, Indonesia as a candidate for our third MS production base using the HPAL process. By processing nickel ore to a higher degree on site, we are working to respond to the requirement to create high value-added minerals, which is one of the major policies of the new Indonesian law on resource extraction (Law on Mineral and Coal Mining).

● Expanding nickel sulfate production

At Harima Refinery, we plan to take production capacity of nickel sulfate, earmarked for battery materials, and expand from the current 20,000-ton/year structure to a 45,000-ton/year structure in FY2016, then a 49,000-ton/year structure in FY2018.

● Building a production structure optimized for ferro-nickel

At Hyuga Smelting Co., Ltd., we have set in place a 14,000-ton/year production structure optimized for ferro-nickel production. By transitioning from a 2 kiln, 2 electric furnace operation to a 2 kiln, 1 electric furnace operation, we aim to secure profitability from cost reductions and efficient operations.

Strengthening the competitiveness of the Toyo Smelter & Refinery

(copper smelting and refining)

- We will strive to lift profitability by achieving full operation at a capacity of 450,000 tons, a historical high for the Company. Additionally, we will work to maximize production volume in order to take the greatest advantage of the positive external factor of rising TC/RC² rates.
- We are moving forward on improving profitability by further upgrading production technology, strengthening our ability to handle impurities, enhancing our ability to pick up secondary raw materials, and reducing costs.

1. HPAL (High Pressure Acid Leach) method

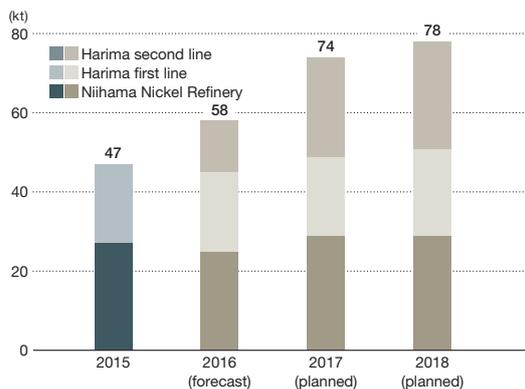
A technology to extract nickel and cobalt from low-grade nickel oxide ores. CBNC was the first in the world to succeed at large-scale commercial production in 2005; Taganito HPAL began operations in 2013 as the second production facility.

2. TC/RC

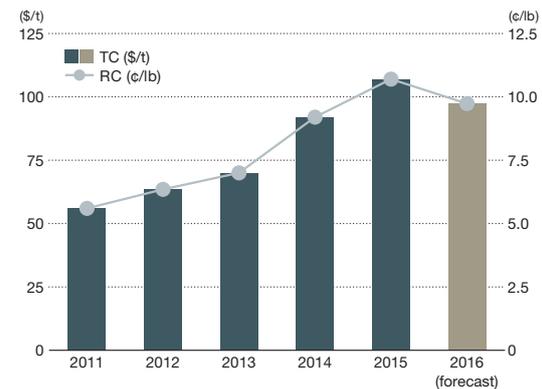
TC: Treatment Charge RC: Refining Charge

TC/RC refers to a company's margin on smelting and refining and is used for calculating the cost to smelting and refining companies when purchasing ore from mining companies. In the case of copper, for example, the fee paid to mining companies to purchase ore is the price of copper metal on the London Metal Exchange (LME) minus TC/RC (the smelting and refining margin). TC/RC are normally determined through negotiations between mining companies and smelting/refining companies, though they are also influenced by external factors such as changes in metal prices and the balance of supply and demand. Higher TC/RC rates mean lower raw material payments to mining companies, which is a favorable business environment for smelting and refining companies.

Production volume of nickel sulfate



TC/RC (benchmark)



External environmental factors with a significant impact on SMM's smelting and refining business

- Increased raw ore procurement risks from a rise in resource nationalism
- More difficulty in securing raw materials due to a decline in copper ore grade and increase in processing difficulty
- A decline in profitability due to weak metal prices
- Increased demand for nickel as a material in batteries

Core advantages of SMM's smelting and refining business

Use of low-grade nickel ore with HPAL technology

At CBNC in the Philippines, SMM has moved ahead of its global peers by succeeding in the commercial production of nickel intermediates from low-grade nickel oxide ore using HPAL technology. Converting low-grade nickel oxide ore into a resource allows for the efficient use of limited nickel resources and the stable supply of cost-competitive nickel raw material.

The HPAL technology successfully commercialized at CBNC in 2005 was refined through more than 10 years of operating experience and has been used in the second HPAL facility at Taganito. Furthermore, experience and know-how related to HPAL techniques are communicated to the R&D Division, which allows for multi-faceted approaches to technological development as each relevant division puts the accumulated data and knowledge to use. This process helps SMM be a front-runner in achieving advanced nickel production technology and cost competitiveness.



View of the Taganito HPAL Plant

Refineries with robust cost competitiveness

We have achieved world class cost competitiveness (in copper smelting and refining) at our Toyo Smelter & Refinery, our flagship smelter and refinery, through policies to improve production efficiency over more than 40 years of operations, and also in nickel smelting and refining by combining HPAL technology and the MCLE process of the Niihama Nickel Refinery. In addition, we are also striving to maximize income opportunities through stable operations.

At the same time, we are utilizing the smelting and refining technology we have built up over many years to move forward with facility automation, while also using interaction between



engineers within the Group to share advanced operation technology accumulated at each business site. This allows us to maintain and elevate our technical expertise.

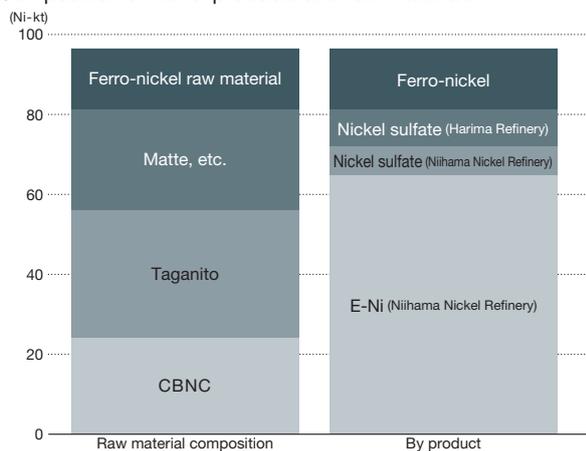
View of the Toyo Smelter & Refinery

MCLE: Matte Chlorine Leach Electrowinning

Matte Chlorine Leach Electrowinning (MCLE) is the technology used in the manufacturing process at SMM's nickel refinery. The nickel matte and MS are dissolved in chlorine to produce high-grade nickel from the nickel chloride solution using direct electrolysis of the metal. MCLE is competitive in cost terms, but poses significant operational challenges, and only two producers in the world besides SMM have commercialized it, using similar technology.

2015 3-Yr Business Plan

Composition of nickel products and raw materials



Co-existence with local communities

While carrying out dialogue with stakeholders, we listen to the needs and concerns of local communities, and work in harmony with these groups as we strive to operate our smelters and refineries and stably supply our products.

By processing mine wastewater, reducing dust, and safely storing residues generated in various processes, we are striving for environmental preservation through responsible environmental management.



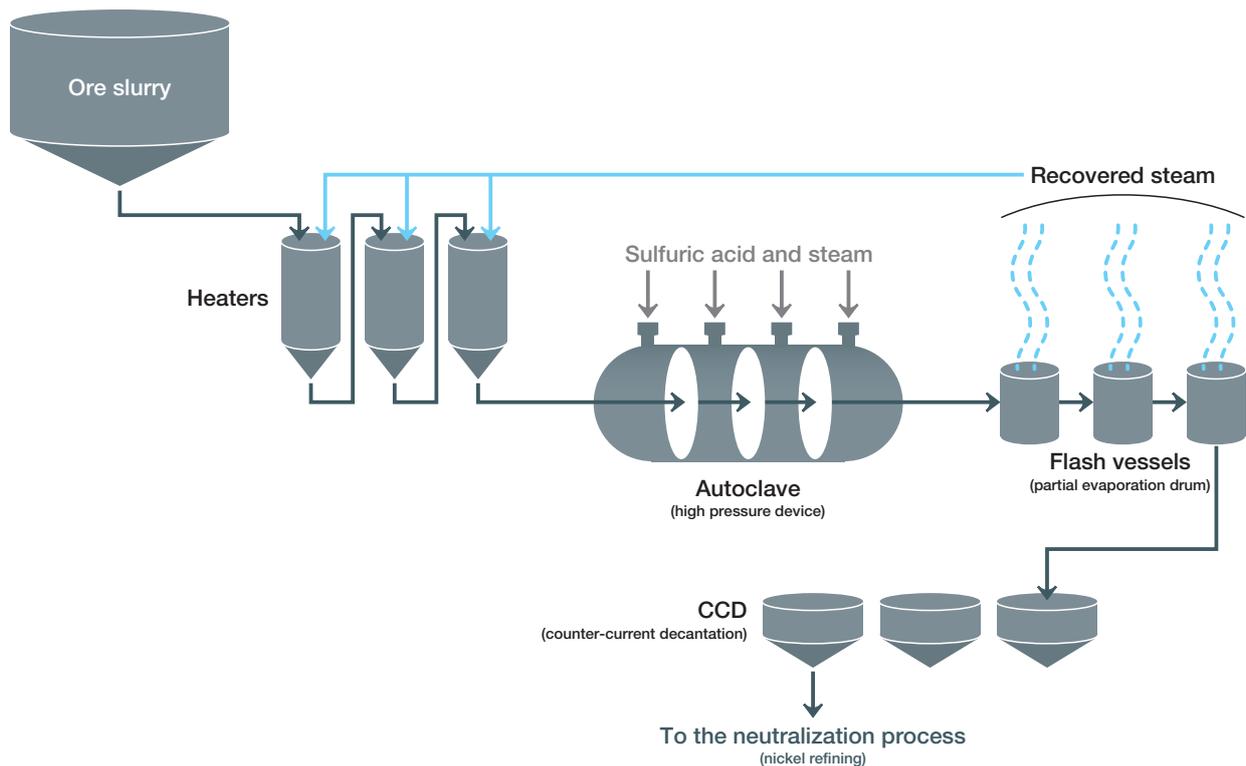
Free health exams for local communities carried out through collaboration between NAC and CBNC

SMM Group refineries and their main products

Refinery name	Products
Toyo Smelter & Refinery	Electrolytic copper
	Copper sulfate
	Slag sand
	Gold ingot, gold shot
	Silver shot
Niihama Nickel Refinery	Electrolytic nickel
	Electrolytic cobalt
	Nickel sulfate
	Nickel chloride
Harima Refinery	Nickel sulfate
Hyuga Smelting Co., Ltd.	Ferronickel shot
	Green sand
Shisaka Smelting Co., Ltd.	Zinc oxide pellet
	Iron containing pellet
CBNC	MS (mixed nickel-cobalt sulfides)
THPAL	MS (mixed nickel-cobalt sulfides)
Jinlong Copper Co., Ltd.	Electrolytic copper



HPAL process



Materials Business

A wide range of metals is used in the manufacture of electronic devices. Copper, for example, is a critical input for electric circuitry manufacture, while nickel is used in the production of battery materials and capacitors.

SMM has been engaged in the materials business since the 1960s and is supplying metals as advanced materials by leveraging its accumulated technologies.

Review of the 2012 3-Year Business Plan

Continuous restructuring

● Making selections with the objective of bringing all businesses into the black

SMM withdrew from businesses and products for which it is difficult to envision clear prospects for future development. The main businesses and products that we withdrew from during the 2012 3-Yr Business Plan were sapphire substrates, COF, ITO, metal injection molding, and GaP.

● Clarifying and strengthening areas of concentration

After specifying energy/environment, information communications, and electronics/automotive as areas of concentration, we undertook fortification, including large-scale investment.

In particular, we positioned battery materials and crystal materials as areas for focused growth, and therefore actively channeled investment into them.

◆ Battery materials (energy/environment)

In 2014, we established an 850-ton/month production framework for lithium nickel oxide (NCA) and by launching Sumiko Energy Materials Co., Ltd. (SEM) and the Naraha Plant in Fukushima Prefecture we are moving forward with expanding production with a goal of 1,850 tons/month.

We also partially started mass production of ternary cathode materials (NMC).

◆ Crystal materials (information communications)

Sapphire substrates had been a focus product in our 2012 3-Year Business Plan; however, we decided to withdraw from the business due to reasons including delays in reducing costs. After withdrawing, we began capital investment in LT/LN crystal substrate production in the growing field of information communications. The investment is aimed at expanding production from 120,000 substrates/month to 400,000 substrates/month.

FY2015 review and FY2016 outlook

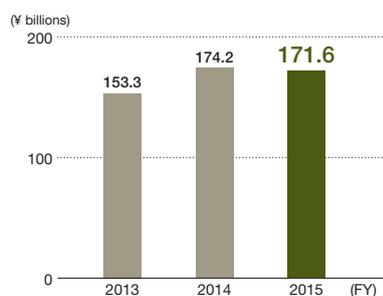
FY2015 review

- We continued to produce nickel hydroxide at full capacity.
- We established Sumiko Energy Materials Co., Ltd. to accommodate greater production of NCA and built a new production site in Naraha Town in Fukushima Prefecture.
- We carried out capital investment toward expanding LT/LN production by 300,000 substrates/month.

FY2016 outlook

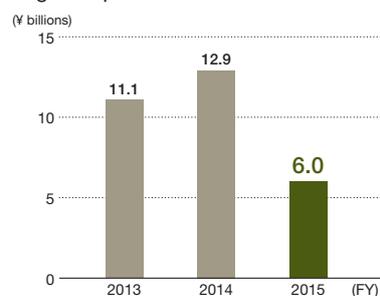
- We will move ahead toward establishing a 1,850-ton/month production capacity for NCA.
- We will move ahead toward establishing a 400,000-substrate/month production capacity for LT/LN.

Net sales



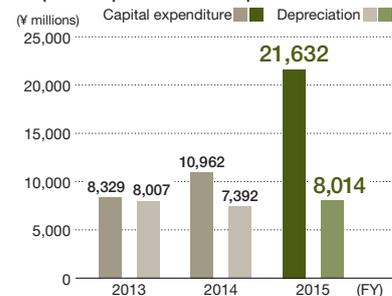
Demand for materials used in automobile batteries and smartphones was robust; however, customers increasingly adjusted inventory levels for other products, which brought a slight year-on-year reduction in net sales.

Segment profit



Increased expenses and other charges related to expanding our production framework for materials used in automobile batteries and smartphones led to a reduction in segment profit.

Capital expenditure / depreciation



Capital expenditure increased due to investment in building out our production framework for materials for automobile batteries and smartphones.



Toru Iijima
 Managing Executive Officer
 General Manager,
 Materials Div.

Business strategy in the 2015 3-Year Business Plan

Achieving our segment profit target of ¥20 billion

Through restructuring, including organizational changes, and by concentrating resources in strategic growth areas, we are proceeding with a host of policies to achieve ¥20 billion in segment profit in FY2018.

Further growth in areas selected for concentration

● Battery materials

We will establish a 2,550-ton/month production framework for NCA.

We will move forward with expanding production of NMC, which is forecast to see rapid growth in demand.

● Crystal materials

We will establish a 400,000-substrate/month production framework for LT/LN crystal substrates.

● Strengthening capability to develop new business

We will proceed with building a structure for continually generating new business and a flow of new products through an integrated management process extending from searching for new products to mass production and product lifecycle management, taking into consideration a business environment with product lifecycles that are comparatively shorter than in the mineral resources and smelting and refining businesses.

Pivotal products for growing our materials business

Cathode materials for vehicle batteries

NCA is used for cathodes in electric vehicle batteries, because its characteristics contribute to increased battery capacity and greater driving range on a single charge.

We are also producing nickel hydroxide and NMC for cathodes in hybrid vehicle batteries.



NCA

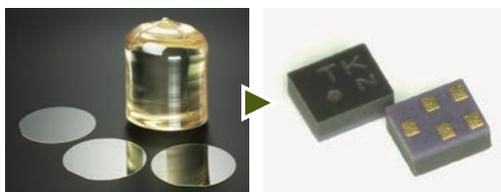


Nickel Hydroxide

LT/LN substrates for SAW (Surface Acoustic Wave) filters

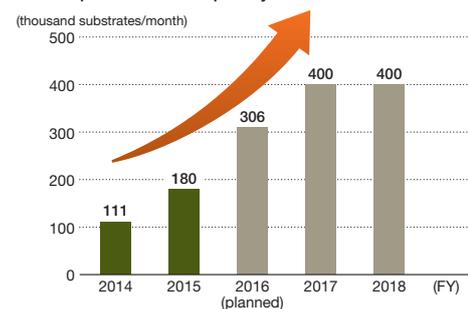
The greatest use for lithium tantalate (LT) and lithium niobate (LN) substrates is in SAW devices. SAW devices help prevent noise and interference for smartphones and other mobile communication devices.

SMM products are recognized for the superiority of their crystal technology and processing technology.



SAW filter
 (photo courtesy of Murata Manufacturing Co., Ltd.)

LT/LN production capacity (planned)



External environmental factors with a significant impact on SMM's materials business

- Short product lifecycles compared to the mineral resources and smelting and refining businesses
- Growing interest in where raw materials originate
- Market expansion in the fields of environment, energy, and information communications

Core advantages of SMM's materials business

Rolling out products leveraging core technologies

SMM is building a profitable product portfolio leveraging its core technologies, while dedicating effort to products in fields with growing demand—fields related to the environment and energy, as well as information communications.

Since products in the materials business are comparatively diverse in relation to those in the mineral resources and smelting and refining businesses, and since they also have shorter product lifecycles, we are constantly called upon to select and concentrate our business areas. As a result, the SMM Group does not formulate strategies on a product-by-product basis, but rather considers how each product fits into the overarching strategy for the materials business. We then carry out decision-making by business domain.

This system for decision-making allows us to select and finalize projects and scales that correspond to market movements, thereby achieving growth for the materials business overall.

Relationships with market-leading customers

We take information provided by customers and reflect it in quality improvements of products in order to help produce even better products.

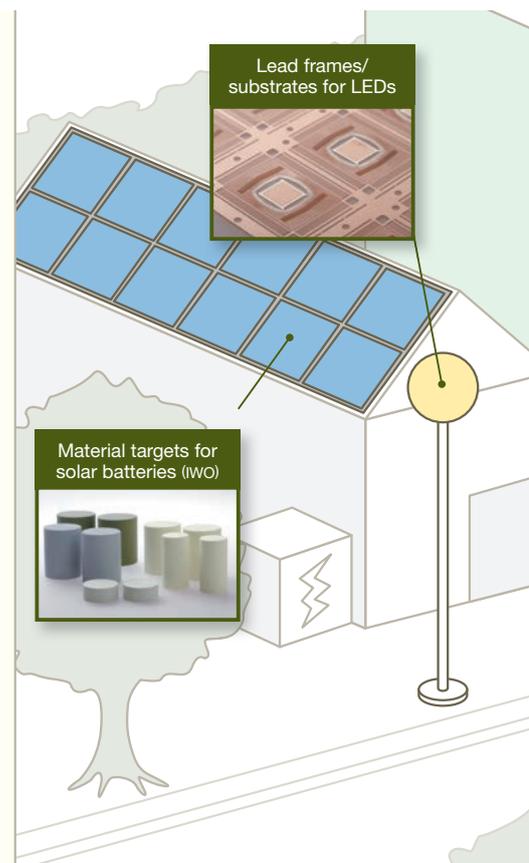
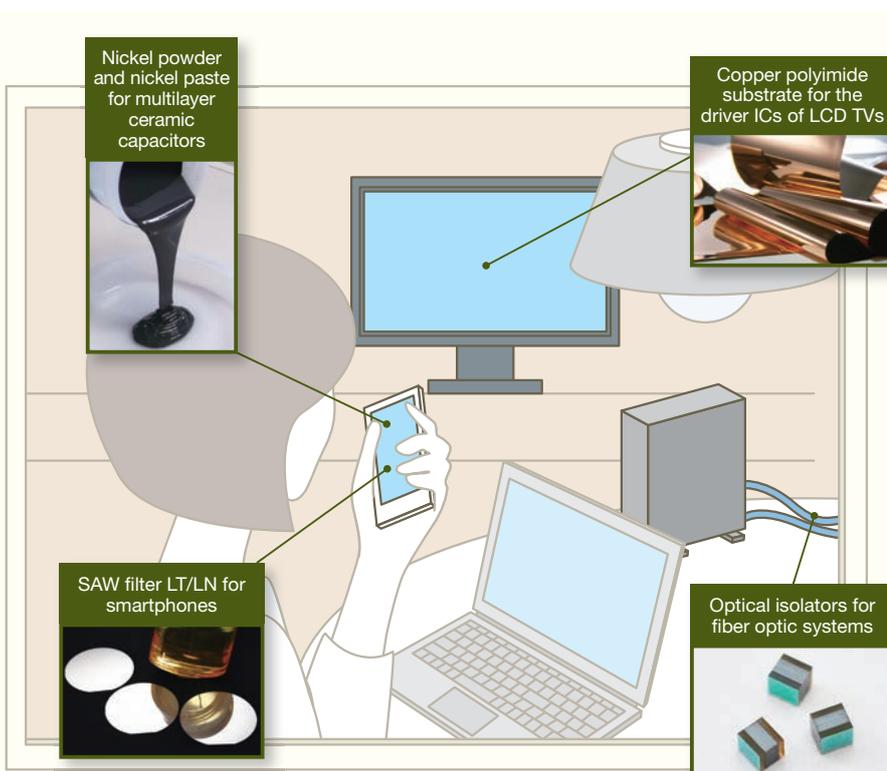
Since we develop products in collaboration with customer R&D teams from the R&D stage, we are able to supply products that meet customer needs and offer a high level of reliability.

Additionally, close ties with the smelting and refining business allow us to secure a stable supply of products suited to customer needs, which is something we leverage to differentiate SMM from other companies.

Co-existence with local communities

Working from the SMM Group Corporate Philosophy of co-existence with local communities, we have maintained a high level of local hiring and employment. We are moving forward with restructuring and striving to maintain employment levels by striking a balance between how we secure profitability for the materials business, and how we shift to growth products inside our production bases while adopting new business projects.

SMM products in daily life



Transitioning from semiconductor materials to advanced materials

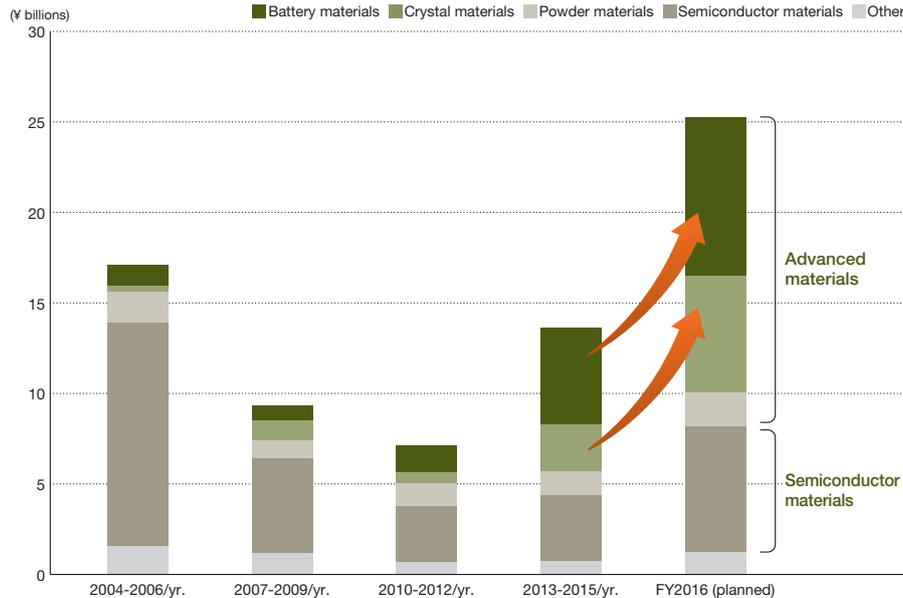
From the 2003 3-Yr Business Plan to the 2006 3-Yr Business Plan (FY2004-2009), we sought to grow business and boost our market share for individual products, while channeling capital expenditures mainly into the semiconductor materials business, which included, for example, lead frames for the general use market and copper-clad polyimide film substrates.

From the 2009 3-Yr Business Plan (FY2010), however, we carried out active and concentrated investment in cathode materials used in secondary batteries in automobiles, and crystal

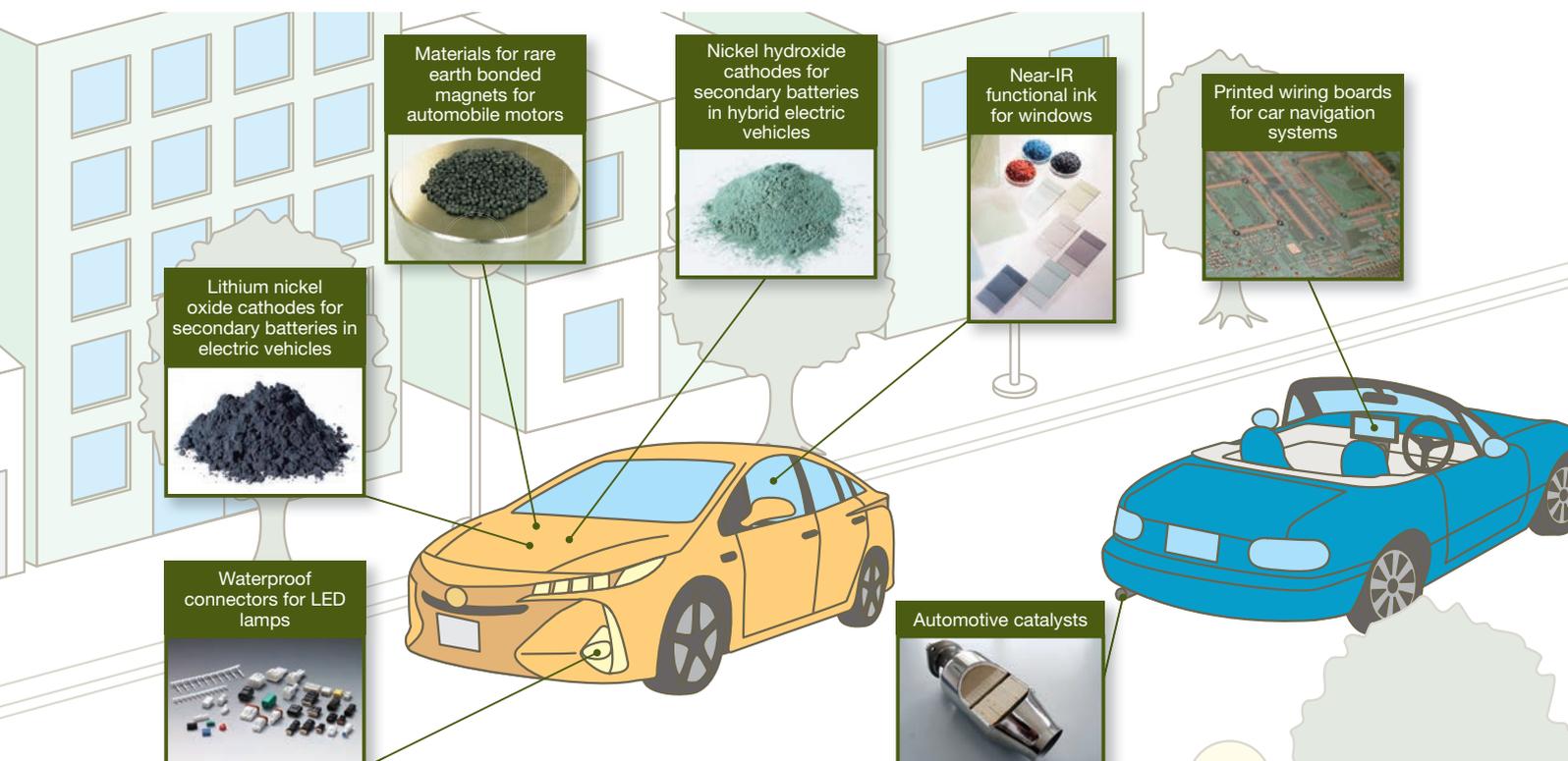
materials for SAW filters used in smartphones, which are well positioned in the advanced materials business.

The result has been a transition in our business mix as we have endeavored to build solid relationships of trust with our customers, whom we treat as partners. We will continue developing next-generation products and strategically deploying capital expenditures by further strengthening these customer relationships and by utilizing management systems that generate and enhance our new products.

Changes in capital expenditures related to the materials business



* Investment amounts are calculated as single-fiscal year averages from the three-year totals of actual materials-related investments in each 3-Yr Business Plan. FY2016 investment is a projected amount.



Nickel-related supply chain

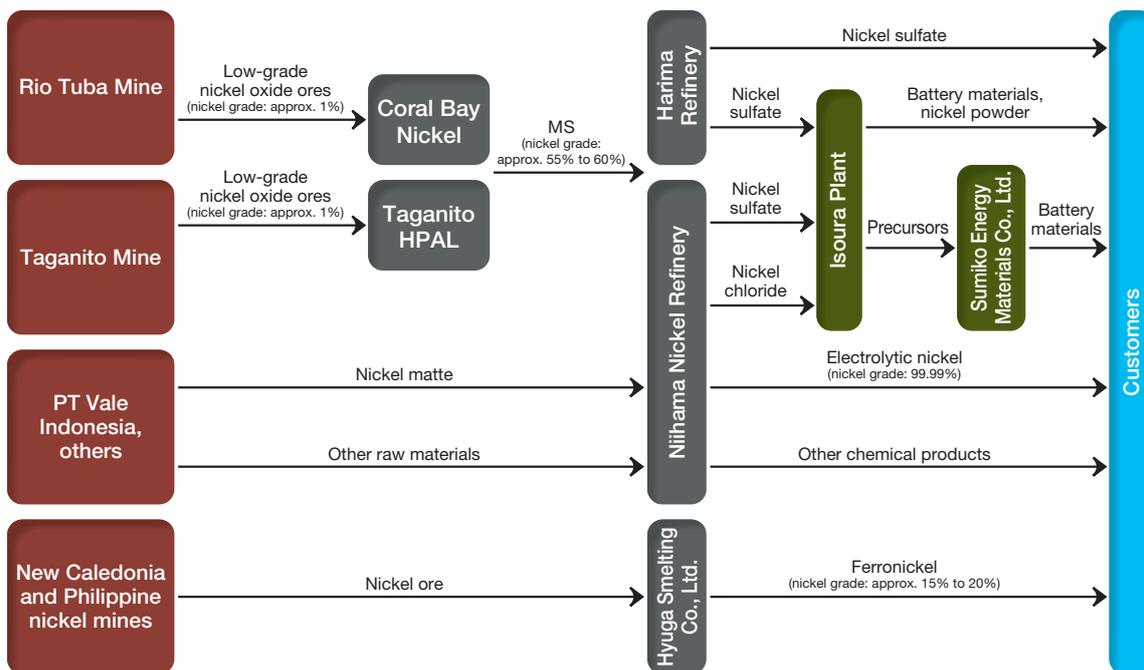
SMM produces electrolytic nickel, nickel chemical products, and ferronickel. Electrolytic nickel, nickel sulfate, nickel chloride, and other products are produced at our Niihama Nickel Refinery. Nickel sulfate is also produced at the Harima Refinery, while ferronickel is produced by Hyuga Smelting Co., Ltd.

The principal raw material for electrolytic nickel and nickel chemical products is MS (nickel-cobalt mixed sulfide) produced by Coral Bay Nickel Corporation and Taganito HPAL Nickel Corporation. The Niihama Nickel Refinery uses MS, which has an

ore grade of 55% to 60%, as well as nickel matte and other raw materials to produce 99.99% grade electrolytic nickel and other chemical products. In addition, the Harima Refinery produces nickel sulfate from MS.

At the Isoura Plant, nickel sulfate produced at the Harima Refinery and the Niihama Nickel Refinery is used as raw material for producing battery materials. Additionally, precursors (nickel compounds) made at the Isoura Plant are used to produce battery materials at Sumiko Energy Materials Co., Ltd. as well.

The nickel supply chain



Topics Responding to the growth of the secondary battery market

Launching operations at Sumiko Energy Materials Co., Ltd.'s Naraha Plant

In 2014, having adopted plans to boost NCA production capacity, we were exploring ways to quickly establish a production framework to fulfill our directive to address the rapid growth in the secondary battery market.

Our solution was to lease a building from Nihon Kagaku Sangyo Co., Ltd., our partner in the town of Naraha (Futaba County, Fukushima Prefecture), to expedite the typical 20 months it takes to start up new operations to a bit more than a year, with Sumiko Energy Materials Co., Ltd.'s Naraha Plant getting off the ground in April 2016. At present, the plant's 64 employees are hard at work building a framework for full operation.

Naraha was one of the towns where the entire population was forced to evacuate due to the Great

East Japan Earthquake and the subsequent accident at the Fukushima Daiichi Nuclear Power Plant. Evacuation orders were lifted in September 2015, though many challenges still remain for residents to be able to come home. One of those challenges is employment. Since many companies withdrew from the area after the earthquake, the SMM Group hopes to use Sumiko Energy Materials to provide employment opportunities for local residents, while also doing business with local companies for materials procurement and the like. Though the scale is small, we hope that this will serve as a contribution toward solving the area's challenges.

A product briefing held during Prime Minister Shinzo Abe's visit to Sumiko Energy Materials Co., Ltd. (March 5, 2016)

Inside the Naraha Plant





Harumasa Kurokawa
 Managing Executive Officer
 General Manager,
 Technology Div.

Research & Development

Research & development strategy

Within the selection and concentration that we perform in our core businesses of mineral resources, smelting and refining, and materials, we carry out priority allocation of research and development costs, and position smelting and refining process technology, powder synthesis and surface treatment technology, crystal growth and processing technology, and exploration, mining, and mineral processing technologies as core technologies. We also consider organic resin technology, analysis technology, and computer aided engineering and analysis technology as fundamental technologies, and are carrying out focused development on clearly defined technology

domains. Specifically, we are undertaking mineral resource development and further process/technology development in the field of non-ferrous metals smelting and refining, and, in the materials field, are focusing on materials and new technology development in the environment/energy fields and the information and communications fields, where great societal need exists. We perform research and development after clearly defining the scale of our sales targets for new products, an approach that is generating results. We are also undertaking basic research on powder materials in order to acquire new technologies in this area with an eye toward the future.

Research and development by the SMM Group

Fundamental technology

Organic resin technology

Synthesis technology and selection of optimal resins for the coating, adhering, surface treatment, etc. of the various advanced materials

Fundamental technology

Analysis technology

Technology to elucidate the mechanisms behind the manifestation of performance, occurrence of faults, etc.

Fundamental technology

Computer aided engineering and analysis technology

Facility design based on fluid analysis, thermodynamic analysis, and other simulations, and material design technology based on first-principles calculations

Core technology

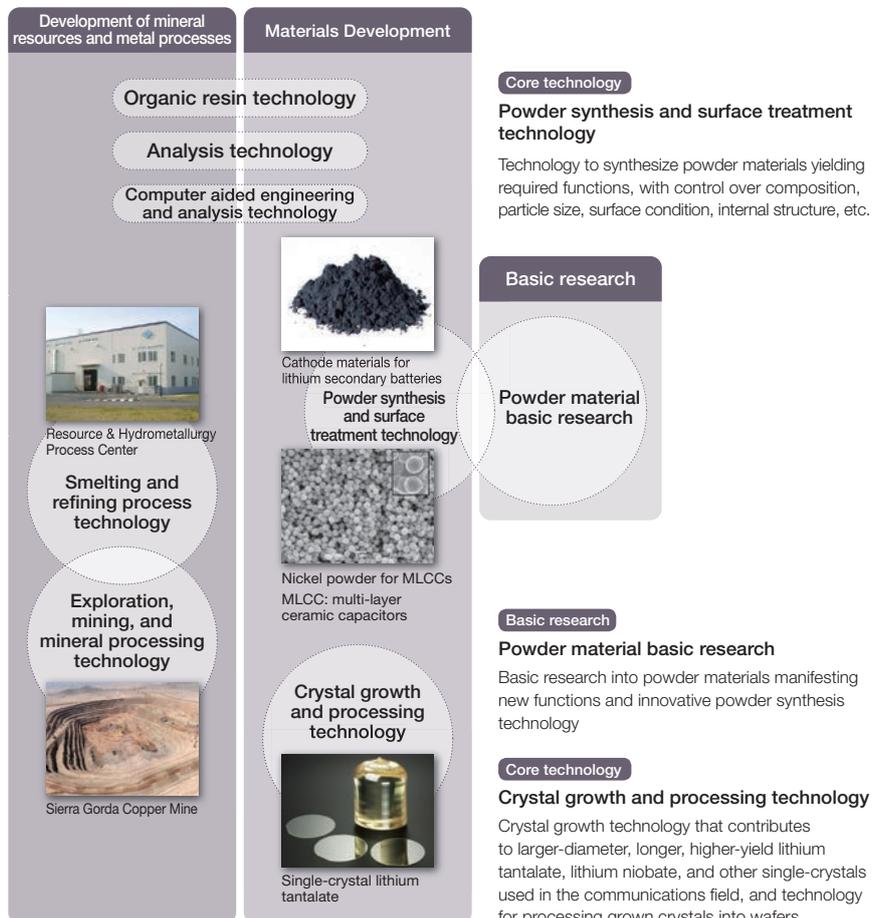
Smelting and refining process technology

Technology to separate and refine copper, precious metals, nickel and other valuable metals from ore and recycled raw materials

Core technology

Exploration, mining, and mineral processing technology

Exploration technology and mineral processing technology for separating and concentrating valuable metals in ores at mine sites



Strengthening of new product development capabilities

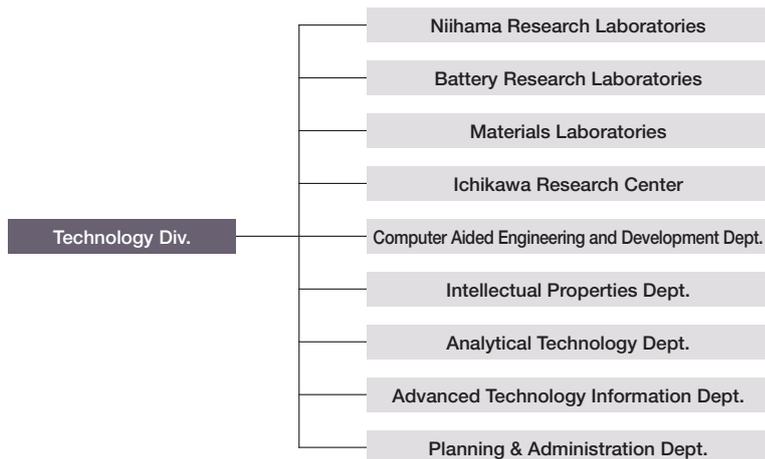
Sustainable growth of our business requires the strengthening of our new product development capabilities. Particularly in the materials business field, where short product life cycles prevail, we must continuously bring compelling new products to the market.

We carefully watch market and technology trends, draft research and development strategies from a long-term

perspective that takes product life cycles and the emergence of innovative technologies into account, and engage in selection and concentration of research and development themes. We will focus our efforts on not only the development themes that lie before us but also on basic research in the powder materials field.

Research & Development

Research and development structure



The Technology Div., which is the SMM Group's R&D organization, has five departments, three laboratories, and a research center. The departments support the activities of the research center and laboratories making R&D activities for new products and technologies more efficient.

Research and development sites and functions of each of the departments

Niihama Research Laboratories

The Niihama Research Laboratories aims to further raise the level of smelting and refining technologies, which are the foundation of our technology, working to further develop the potential abilities of non-ferrous metals. Specifically, the site is engaged in the development of new smelting processes and ore dressing technologies based on smelting technologies, as well as the development of powder materials and other metallic materials. In addition, the Resource & Hydrometallurgy Process Center is undertaking pilot-scale demonstration testing of a new nickel refining process.

**Computer Aided Engineering and Development Dept.**

- Engineering based on computer simulation
- Material design based on first-principles calculation

Intellectual Properties Dept.

- Construction of a patent network for development results
- Monitoring of patents related to company-wide research and development themes, and support for development through analysis of patent information

Battery Research Laboratories

In order to accelerate the expansion of our secondary battery business, which is expected to grow substantially, the Battery Research Laboratories work toward commercializing nickel-based and ternary lithium-ion battery cathode materials, which are core products, while also working on basic research based on our long-term vision for next-generation battery materials and the establishment of battery assessment technologies. At the same time, the Laboratories also proceed with research and development of fundamental technologies for battery materials.

**Analytical Technology Dept.**

- Situational observation and elucidation of mechanisms using the latest analytical instruments
- Development of new analytical methods

Advanced Technology Information Dept.

- Discovery and planning of new research themes

Materials Laboratories

The Materials Laboratories brings together engineers and works to accelerate the speed of research and development, in order to advance research and development into both crystal materials, which are related to products of the Materials Division, and into organic resins, a fundamental technology.

**Ichikawa Research Center**

The Ichikawa Research Center performs the function of sowing the seeds for future materials development. It is specialized in basic research, with a focus on functional powders.





Effective Use of Resources



Environmental Preservation



Contribution to Society and Local Communities



Respect for People and Human Rights



Occupational Health and Safety



Stakeholder Communication

CSR Activity Report

CSR Management Framework

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The Six CSR Areas of High Priority

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CSR Management Framework

SMM Group's CSR

The circumstances of the society around us and its demands on our Group are constantly changing. In the promotion of CSR activities, appropriately grasping these changes and reflecting them in our objectives are of paramount importance in efforts to continuously increase the Group's corporate value while earning the trust of society. Based on this concept, we released a comprehensively revised version of our Vision for 2020 in FY2015 and also formulated our 2015 3-Year Business Plan. We have established key performance indicators (KPI) to enable a clear understanding of achievement evaluations of the activities performed for meeting the revised goals.

CSR Promotion Framework

SMM's CSR activities are promoted by the CSR Committee, which convenes at least once a year and comprises the President, as chairman, and the heads of the businesses and Head Office. Attached to the CSR Committee are three working groups—the Compliance, Risk Management, and Quality Assurance Working Groups—and six subcommittees overseeing the following areas: efficient resource utilization, environmental preservation, corporate citizenship, human rights and human resources development, occupational health and safety, and communications.

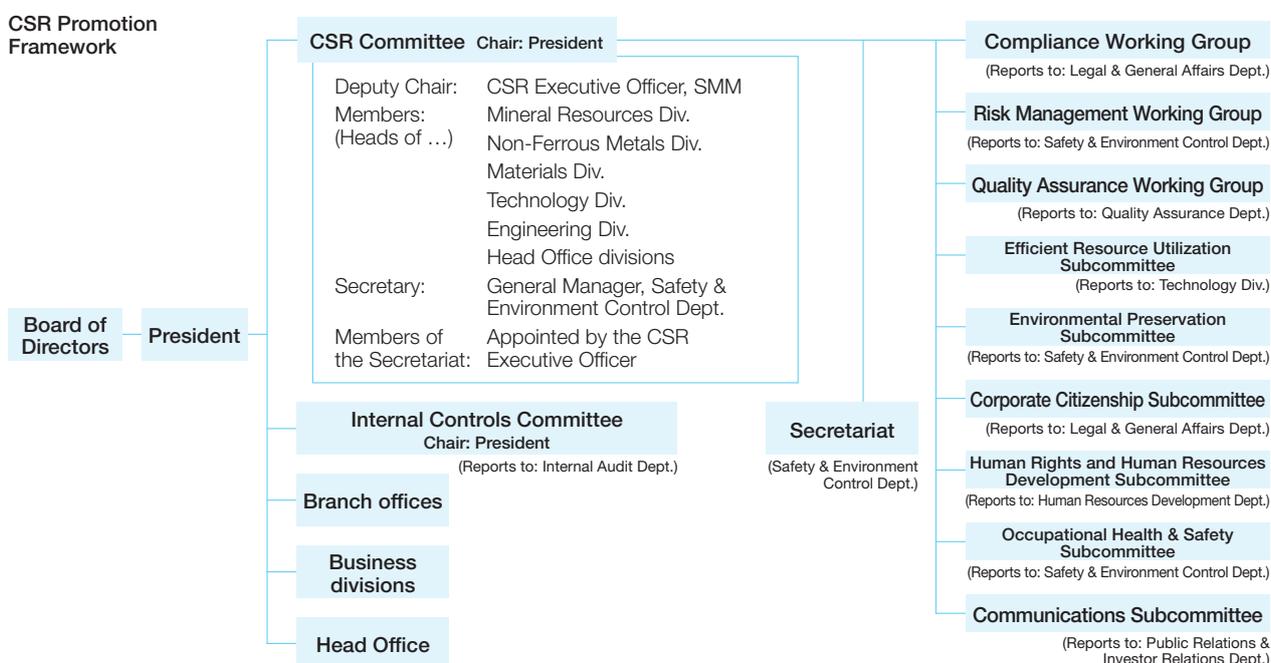
Each of these six subcommittees, which correspond to the SMM Group's Six CSR Areas of High Priority, works toward annual plans and targets in the quest to realize our Vision for

2020 across the entire Group.

CSR activities consistent with these annual plans and targets are advanced principally through initiatives at business sites and group companies. Actual implementation is carried out by all officers and employees according to their individual roles. The CSR Committee reviews the activities of each area based on reports from working groups and subcommittees.

Reviews include activity progress reports and activity plans for the next fiscal year, evaluations of the company's environmental, social, and economic performance, the execution of corrective measures where necessary, and the implementation of our PDCA (Plan-Do-Check-Act) cycle.

CSR Promotion Framework



• Directors who are also members of the CSR Committee are the President, the General Manager of the Mineral Resources Division, and the General Manager of the Non-Ferrous Metals Division.

Our Stakeholders

At the SMM Group, the following entities with an interest in the Group's activities were identified as stakeholders: Customers, Shareholders, Employees, Regional Communities, Creditors, Business Partners,

Citizens Groups, and Government Agencies. The SMM Group aims to maximize its corporate value with a specific target established as the SMM Group's proper objective for each stakeholder.

The SMM Group's Stakeholders and Proper Objectives for Each Stakeholder

To Customers	Be a company that accurately understands customer needs and has comprehensive competitiveness with an edge over other firms with respect to technology, quality, delivery and costs.
To Shareholders	Be an excellent entity in which to invest: one that pursues maximum corporate value through efficient management and sound governance, disburses dividends matching its business performance, and discloses information as appropriate.
To Employees	Be a company that provides a favorable work environment, clearly defines the roles of all individuals within the organization, and makes employees proud to work for it.
To Regional Communities	Be a company that coexists well with its regional communities and that makes positive contributions to those regions' development.
To Creditors	Be a company that has earning capacity, outstanding financial strength, and trustworthiness.
To Business Partners	Be a company that possesses outstanding technological strength, places importance on integrity and trust, and is capable of co-prosperity.
To Citizens Groups	Be a company that is keenly alert to its social responsibilities and undertakes appropriate communication.
To Government Agencies	Be a company that implements compliance fully and makes positive contributions for the benefit of the countries and regional communities where it is undertaking its projects.

Identification of Material Issues for the SMM Group

We comprehensively revised our Vision for 2020 in 2015 with regards to the key issues for the SMM Group through the process described below. We were guided by the International

Integrated Reporting Framework (IIRC Guidelines) and GRI Sustainability Reporting Guidelines Version 4 (G4) on the specific procedures for revision.

Step 1 June 2014

Identification of sustainability issues

As sustainability issues, we identified a variety of issues that positively or negatively impact the formation of a sustainable society. In doing so, we focused on the guidelines at right, with the result that we identified 102 issues. We further consolidated the issues according to their shared qualities, in the end identifying 58 sustainability issues.

Guidelines referenced

- Aspects of the GRI Sustainability Reporting Guidelines Version 4 (G4)
- Issues in ISO 26000
- Principles and position statements of the ICMM
- The Ten Principles of the United Nations Global Compact
- Items noted in the DJSI and other corporate assessments

Step 2 July 2014–August 2014

Assessment of materiality and identification of material issues

We evaluated these issues on the two axes of materiality for stakeholders and materiality for the business of the SMM Group. We identified 26 material issues for which importance is high on both axes and for which our current initiatives should be strengthened.



Main perspectives in evaluation of materiality

Materiality for stakeholders

- Degree of impact on stakeholders' immediate rights
- Opinions of stakeholders
- Requests directed at the SMM Group, organizations to which we belong, and our industry
- Social issues in areas where we operate, and the scale of these social issues
- Scale of the potential negative or positive impacts of our business

Materiality for the business of the SMM Group

- Degree of impact on our social license to operate
- Degree of relationship with our business policy and business strategy
- International social norms and industry rules
- Opportunities for income and sources of competitiveness in the future

Step 3 September 2014–November 2014

Consideration of draft revisions to the Vision for 2020 and KPIs

We categorized the identified material issues into our Six CSR Areas of High Priority and formulated draft revisions to the Vision for 2020, in line with our targets and our approaches for addressing the organized material issues as a Group.

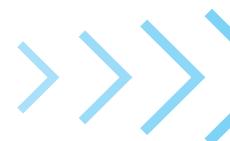
We also identified specific targets and KPIs for assessing our degree of achievement toward the Vision for 2020. (Specific targets and KPIs correspond to the targets of the relevant subcommittee. See CSR Achievements and Plans (p. 60–67) for details)



Step 4 December 2014–March 2015

Validation

The Chairman, President, and all 24 executive officers took part in 15 hours of deliberations on the considered material issues, the Vision for 2020, the specific targets, and the KPIs, with a focus on verifying consistency with our business policy and business strategy. Validation of the final draft was carried out through confirmation by the CSR Committee and decision by the Board of Directors.



CSR Achievements and Plans

Effective Use of Resources

Goals and KPIs		FY2015 Achievements
1. Develop and implement technologies to efficiently recover resources (low-grade/hard-to-process ores) 🔍 1, 3	1) Promote rational use of low-grade nickel ore (make nickel produced from low-grade ores 2/3 of nickel production overall) 2) Achieve profitability in our copper business by developing processing technologies for low-grade/hard-to-process ores 3) Develop efficient gold mining technologies 4) Be active in marine resource development projects (contribute to the development of mining technologies and processing solutions)	<ul style="list-style-type: none"> ● Raised processing rate for large residual volume lateritic ore with high carbon content through operational improvements aiming for a mine life as planned ● Discovered potential for copper/arsenic magnetic separation through pyrometallurgical processing using outside knowledge ● Conducted evaluation of shape and rock mass of undeveloped ore body at Pogo Gold Mine and proceeded with designing efficient mining methods ● Continued to participate in hydrothermal deposit development project and cobalt rich crust development project, and evaluated the promising processes (ore dressing and smelting and refining processes) plans for recovering valuable metals through small-scale basic studies at the cobalt rich crust development project
2. Develop new and effective uses for by-products 🔍 2	1) Recover and market scandium from nickel oxide ore 2) Recover raw material for iron and steel manufacturing from nickel oxide ore (commercialize chromite and hematite)	<ul style="list-style-type: none"> ● Satisfied quality ratings of potential customers and decided to commence construction of a commercial plant in 2016 ● Received pass rating for chromite quality from potential customers and started preparation for construction of a commercial plant
3. Promote recycling 🔍 1	Improve our effective use of recycled resources	<ul style="list-style-type: none"> ● Achieved all-time high recycling of secondary copper materials and established method for secondary battery recycling using existing facilities ● Promoted compliance with new Japan Industrial Standard (JIS) and the guidelines for non-ferrous slag of the Japan Mining Industry Association (JMIA) and developed system to promote use of copper slag

Numbers next to 🔍 indicate the corresponding Material Issues from p. 61

Material Issues Identified by the SMM Group

Effective Use of Resources

- 1 Utilizing unused resources (low-grade/hard-to-process ores)
- 2 Development of new applications and effective use of by-products
- 3 Exploration and development of new resources

Environmental Preservation

- 4 Energy conservation at SMM business sites
- 5 Development of products and technologies that contribute to reducing environmental impact
- 6 Respect for nature preservation areas
- 7 Preservation and restoration of ecosystems in areas where we do business
- 8 Minimizing chemical substance emissions into the air, water, and soil (including in our portfolio companies and supply chain)
- 9 Reduction of release and transfer volume of chemical substances
- 10 Waste management

Contribution to Society and Local Communities

- 11 Community investments
- 12 Local hiring
- 13 Local procurement
- 14 Utilization of partnerships
- 15 Management of closed mines
- 16 Recovery support for areas affected by devastating disasters

Respect for People and Human Rights

- 17 Human resources development
- 18 Diversity and equal opportunity
- 19 Protection of employees' human rights
- 20 Avoidance of contributing to human rights infringements with our supply chain
- 21 Respect for the rights of indigenous populations

Occupational Health and Safety

- 22 Ensure safety
- 23 Secure occupational health

Stakeholder Communication

- 24 Engagement with local communities
- 25 Engagement with employees
- 26 Communication with shareholders and investors

Regarding Boundaries

In the process to identify material issues, the boundaries were established as follows. Any other boundaries apply to the SMM Group (see p. 1 for the Group's scope).

SMM Group & Suppliers

Aspect: **(Environmental)** Emissions (Material issue 8)

Aspect: **(Environmental)** Effluents and Waste (Material issue 8)

Suppliers

Aspect: **(Human Rights)** Supplier Human Rights Assessment (Material issue 20)

Issues and Targets	FY2016 Plans
<ul style="list-style-type: none"> ● Address negative impact on operations due to fluctuations in ore composition 	<ul style="list-style-type: none"> ● Strengthen ore management and establish methods for stable supply of ore
<ul style="list-style-type: none"> ● Assess separation technology and its practicality 	<ul style="list-style-type: none"> ● Pursue potential of magnetic separation using pyrometallurgical processing
<ul style="list-style-type: none"> ● Introduce appropriate mining methods based on rock mass evaluation 	<ul style="list-style-type: none"> ● Consider the application of lower cost mining methods than the current method for narrower vein, lower-grade undeveloped ore body
<ul style="list-style-type: none"> ● Improve the processes for recovering valuable metals from cobalt rich crust 	<ul style="list-style-type: none"> ● Study the detailed process performance of promising cobalt rich crust process plans
<ul style="list-style-type: none"> ● Promote commercial operation in line with plans 	<ul style="list-style-type: none"> ● Proceed with construction of a commercial plant and development of new markets
<ul style="list-style-type: none"> ● Achieve smooth operation of hematite pilot plant 	<ul style="list-style-type: none"> ● Proceed with establishment of hematite user work and processes
<ul style="list-style-type: none"> ● Support recycling that exceeds the secondary battery processing limit of existing facilities 	<ul style="list-style-type: none"> ● Promote study on copper scrap and development of new processes for secondary battery recycling with aim of developing new business model

Environmental Preservation

Goals and KPIs		FY2015 Achievements		
1. Advance biodiversity preservation initiatives 4, 5, 6, 7, 8, 9	1) Implement global warming countermeasures	(1) Expand materials business for products (creating, storing, and saving energy) with low CO ₂ emissions	Achieve a 5-fold expansion of revenue (measured against FY2011) from materials for products with low CO ₂ emissions	<ul style="list-style-type: none"> Increased production at Isoura Plant and established Naraha Plant, Sumiko Energy Materials Co., Ltd. to create framework for production of 1,850 t/month for cathode materials for secondary batteries (lithium nickel oxide) in line with plans
		(2) Reduce CO ₂ emissions from operations	Continue to reduce CO ₂ emissions by approximately 1% annually Contribute to CO ₂ emission reductions by constructing a plant using HPAL, etc., which has significant energy saving advantages over other technologies such as NPI	<ul style="list-style-type: none"> Formulated a new internal scheme for promoting effective energy-saving and CO₂ reduction (management of capital expenditure program to reduce CO₂ by 20 kilotons by 2020) Reduced CO₂ by 120 kilotons compared to FY2014 by transitioning Harima Refinery operations (zinc to nickel sulfate) Collected data from basic testing for the HPAL plant construction being considered at Pomalaa, Indonesia
		(3) Develop and use renewable energy to contribute to CO ₂ emission reductions		<ul style="list-style-type: none"> Purchased and started using steam from biomass fuel at Sumitomo Metal Mining Siporex Co., Ltd., Tochigi Plant
	2) Steadily develop and adopt technologies for reducing environmental impacts	(1) Implement a planned approach for minimizing the emission of chemical substances		<ul style="list-style-type: none"> Formulated plans to reduce emissions of chemical substances (very small amounts of organic matter and heavy metals) into the atmosphere and water and worked to conduct studies and make reductions Established target for reduction of our disposal of industrial waste into landfills by converting operations at Harima Refinery, and will make it an item to maintain going forward
		(2) Contribute to environmental preservation through forestation, etc.		<ul style="list-style-type: none"> Carried out rehabilitation of 11 hectares at CBNC and THPAL combined Continued with composting tests, etc. at Solomon Project with support of Sumitomo Forestry Co., Ltd.
		(3) Verify the environmental impacts of our portfolio companies and supply chain, and implement measures to reduce risks		<ul style="list-style-type: none"> Met periodically with mine owners, our suppliers, at CBNC and THPAL to share issues. Performed dredging of Taganito River in dry season
2. Maintain our record of zero significant environmental accidents 8, 10	1) Improve strength against earthquake and severe weather at closed mine sites		<ul style="list-style-type: none"> Completed earthquake strengthening measures for 5 facilities (dams and dumps) of abandoned mines meeting specific conditions planned in 2013 	
	2) Prevent significant environmental accidents by strengthening environmental risk management		<ul style="list-style-type: none"> Conducted comprehensive inspection of aging equipment at Hishikari Mine and abandoned mines and planned and budgeted for measures Revised the content and frequency of inspections for aging equipment at Japanese sites in the materials business 	

Contribution to Society and Local Communities

Goals and KPIs		FY2015 Achievements		
1. Communicate with local communities to recognize social issues in regions where we do business, and implement programs to support solutions to those issues 11, 12, 13, 14, 15			<ul style="list-style-type: none"> Continued implementing support for infrastructure at CBNC, THPAL and Solomon Islands, which are our main overseas bases Set up Sumiko Energy Materials Co., Ltd., Naraha Plant in Naraha Town, Fukushima Prefecture to play a role in creating employment in the area affected by the Great East Japan Earthquake Continued maintenance of the remains of Sumitomo buildings in the Besshi district Bestowed the President's CSR Award on 2 individuals Held a Philippines-themed CSR Forum (discourse and spot sale of fair trade goods) to promote understanding of the current situation in the Philippines 	
			<ul style="list-style-type: none"> Provided scholarships in areas near overseas mine development sites Renewed our agreement to provide support for NPO Kaibigan, which helps the poor to attend school in the Philippines Supported the exhibition The Golden Legend Hosted plant tours for local senior high school students and others in the Niihama district and sent instructors to the Niihama Manufacturing Human Resources Development Association 	
	3. Provide support for recovery and reconstruction after large-scale disasters 16	1) Provide support taking into consideration the relationship between the affected area and SMM group's business		<ul style="list-style-type: none"> Donated for storm damage from Typhoon No. 18 As Chair of the Council for Promotion of Measures for Stranded Commuters around Shimbashi Station, collaborated with Minato-ku to decide on the location of headquarters in the case of a disaster and began formulating rules for evacuation of stranded commuters
		2) Provide continuous support for the people and areas affected by the Great East Japan Earthquake		<ul style="list-style-type: none"> Continued to provide donations to scholarship funds in the three disaster-affected prefectures (Iwate, Miyagi, and Fukushima), which we have been doing since FY2012 Continued to donate rice produced in Kyowa-cho, Hokkaido through a food bank Held a CSR Forum (discourse on affected areas and the sale of local products) based around the theme of Naraha Town, Fukushima Prefecture to promote understanding of the status of affected areas
4. Allocate financial resources for initiatives 1 to 3 above			<ul style="list-style-type: none"> Appropriately budget for necessary activities 	

Issues and Targets	FY2016 Plans
<ul style="list-style-type: none"> ● Achieve full operation of lithium nickel oxide production at both the Isoura and the Sumiko Energy Materials Co., Ltd., Naraha Plants 	<ul style="list-style-type: none"> ● Stable operation for lithium nickel oxide production of 1,850 t/month
<ul style="list-style-type: none"> ● Promote plans ● Deploy globally ● Find even more effective measures 	<ul style="list-style-type: none"> ● Be sure to implement FY2016 investments in CO₂ reductions ● Develop CO₂ reduction (energy-saving) programs at overseas business sites ● Continue survey of information on new energy-saving technologies
<ul style="list-style-type: none"> ● Confirm potential for commercialization 	<ul style="list-style-type: none"> ● Implement feasibility study for HPAL plant being considered at Pomalaa
<ul style="list-style-type: none"> ● Further expand utilization of renewable energy 	<ul style="list-style-type: none"> ● Continue examining the introduction of renewable energy in Japan and overseas
<ul style="list-style-type: none"> ● Promote development of proprietary technology for reduction of boron compounds 	<ul style="list-style-type: none"> ● Continue reduction of chemical substance emissions
<ul style="list-style-type: none"> ● Further expand rehabilitation ● Consider effective methods for rehabilitation 	<ul style="list-style-type: none"> ● Continue rehabilitation at CBNC and THPAL ● Implement basal material studies and improvement tests on soil and vegetation at the Solomon Project
<ul style="list-style-type: none"> ● Continue to implement measures to reduce environmental risk 	<ul style="list-style-type: none"> ● Periodically meet with mine owners, our suppliers, at CBNC and THPAL to share issues
<ul style="list-style-type: none"> ● Further reduce risk of others 	<ul style="list-style-type: none"> ● Successively implement measures for another 5 facilities
<ul style="list-style-type: none"> ● Implement plans and continue inspections 	<ul style="list-style-type: none"> ● Upgrade equipment and strengthen inspections of aging equipment based on budget for Hishikari Mine and abandoned mines
Issues and Targets	FY2016 Plans
<ul style="list-style-type: none"> ● For infrastructure development at THPAL, create mechanisms to quantitatively ascertain the level of contribution to the community and not only build facilities in local areas but also provide support to operate those facilities ● There are delays in progress of projects at CBNC. Communicate and coordinate with local government 	<ul style="list-style-type: none"> ● Continue SDMP (Social Development Management Projects) and contributions to the local community by CBNC and THPAL ● Work to reduce waste from the market in waste composting in the Solomon Islands ● Promote relocation of Higurashi Villa* in Besshi district * Higurashi Villa: historical residence built by the 15th head of the Sumitomo family
<ul style="list-style-type: none"> ● Consider changing the scholarship program in the Solomon Islands from the traditional method of equal apportionment between tribes to a system based on selection of high-performers 	<ul style="list-style-type: none"> ● Basically continue support for scholarships and overseas NPOs ● Continue support for education for the society in Niihama District
<ul style="list-style-type: none"> ● There is no mechanism to facilitate the periodic change of the company chairing the Council for Promotion of Measures for Stranded Commuters around Shimbashi Station 	<ul style="list-style-type: none"> ● Provide appropriate support for major disasters inside and outside Japan based on the level of damage and the relationship with SMM's business operations
<ul style="list-style-type: none"> ● Cease food aid to victims this year due to decline in demand ● Ascertain future support needs 	<ul style="list-style-type: none"> ● Continue to provide support to earthquake orphans
<ul style="list-style-type: none"> ● None 	<ul style="list-style-type: none"> ● Budget for ongoing projects

Respect for People and Human Rights

Goals and KPIs		FY2015 Achievements	
1. A company where employees can take a vibrant and active part 19	1) Work satisfaction	Make continual improvements based on the results of employee satisfaction surveys	● Considered measures to increase employee satisfaction
	2) Mental health	(1) Optimize the work environment through training and the reduction of overly long working hours (2) Reduce mental health afflictions in employees	● Identified track record and brought up problems at labor-management council ● Reduction goals could not be set without fully organizing the approach to form the basis such as definition of leave and calculation method for periods of leave
2. Respect diversity 18	1) Support the active contribution of women at SMM (domestically)	(1) Target number of female managers: 10 or more (2) Target proportion of female employees in the recruitment of management track employees: 1/3	● As of April 1, 2015, there are 3 female managers. Conducted training for female employees and their supervisors ● Results for new employees in FY2015: 23% ● FY2016: 15%
	2) Promote non-Japanese employees as key personnel		● Held a globalization taskforce at Head Office for discussions
	3) Employ people with disabilities	Establish and achieve an internal target for the number of employees with disabilities in the Group domestically	● Achieved above the statutory employment rate on a non-consolidated basis (2.2%)
	4) Establish a strategy and supportive framework as a means to facilitate initiatives 1 to 3 above		● Established the Diversity Promotion Section on October 1, 2015
3. Develop human resources 17	1) Continue the program for select employees after confirming the effectiveness of selective training initiatives		● Conducted a training inventory based on evaluations, etc. to date. Formulated a new program based on reorganization and in-house provision of training
	2) Develop broad-based training to boost the level of our workforce	Provide training opportunities to all employees: 100% participation in training courses	● Began operation of Careership (the new e-learning system) in August 2015
	3) Enhance training for locally hired executive managers overseas		● Once again ensured awareness of ideal SMM. Ten trainees from overseas sites came for overseas executive manager training held in November 2015
	4) Conduct training for further support for the active contribution of female employees		● Held seminars relating to women's career support for female employees and their superiors. Attended by 396 employees
4. Human rights 19, 20, 21	Prevent major human rights infringements	(1) Hold regular training on the SMM Group Human Rights Policy: applicable to all workplaces	● Held human rights training at all workplaces in December 2015
		(2) Establish human rights hotlines (offering multiple means for reporting): applicable to all workplaces	● In November 2015, instructed all workplaces to establish a number of hotlines to handle inquiries from employees
		(3) Make employees aware of the SMM direct hotline: applicable to all workplaces	● In November 2015, made employees at all workplaces aware of the group hotline at SMM Head Office, separate from their own company's (department's) hotline
		(4) Implement regular human rights due diligence (in three categories): once every 3 years	<ul style="list-style-type: none"> ● Employees Checked questionnaire results and revised content, but were not able to conduct onsite studies ● Supply chain Conducted questionnaire and onsite studies ● Regional inhabitants Collaborated with other subcommittees to consider implementation

Issues and Targets	FY2016 Plans
<ul style="list-style-type: none"> ● Not only the attractiveness of the work itself, but aspects such as support and appreciation from superiors and colleagues 	<ul style="list-style-type: none"> ● Prepare an OJT guidebook for superiors, incorporating "Increasing employee satisfaction." Hold a briefing on this within the fiscal year
<ul style="list-style-type: none"> ● In addressing long working hours, a fundamental shift in awareness about workstyles is required rather than simply reducing hours 	<ul style="list-style-type: none"> ● Implement study and research into working hour systems (workstyles) ● Implement training for management employees on workstyle change
<ul style="list-style-type: none"> ● It is difficult to ascertain whether the reason for use of annual paid leave is due to mental health afflictions 	<ul style="list-style-type: none"> ● Promote establishment of targeted response system through development of personalized medical record database
<ul style="list-style-type: none"> ● Number of candidates for promotion is still low 	<ul style="list-style-type: none"> ● Provide training to foster a culture that facilitates the creation of individualized career development plans that include life events
<ul style="list-style-type: none"> ● The appeal of SMM is not yet sufficiently recognized by female students 	<ul style="list-style-type: none"> ● Actively showcase female employees working at SMM to appeal to female students in recruitment publicity activities
<ul style="list-style-type: none"> ● The needs of mineral resources, non-ferrous metals, materials and corporate departments relating to use of non-Japanese employees do not match 	<ul style="list-style-type: none"> ● Hold a Globalization Meeting to proactively discuss the various challenges for globalization
<ul style="list-style-type: none"> ● Some affiliates (4 companies) have not achieved the employment rate yet 	<ul style="list-style-type: none"> ● Appoint a promotion officer for employment of people with disabilities at each site (including Head Office) to promote such employment
	<ul style="list-style-type: none"> ● Complete development of framework to promote diversity at each site and continue to address the challenges in line with plans
<ul style="list-style-type: none"> ● Fully implement the new program and establish methods for confirming its effectiveness 	<ul style="list-style-type: none"> ● Steadily implement the FY2016 program ● Establish methods for confirming its effectiveness
<ul style="list-style-type: none"> ● Enhance educational materials for self-development and specifically promote roll-out to group companies 	<ul style="list-style-type: none"> ● Enhance and effectively utilize educational materials for self-development. Roll-out smoothly to group companies
<ul style="list-style-type: none"> ● Continue holding training for executive managers of overseas sites 	<ul style="list-style-type: none"> ● Secure trainees ● Enhance content
<ul style="list-style-type: none"> ● Scope of training was limited and there is also a need to enhance the environment and culture that surrounds female employees 	<ul style="list-style-type: none"> ● Create individualized career development plans for management track employees and normal track employees and continue training in order to foster the culture for their implementation
<ul style="list-style-type: none"> ● There is a need to consider more effective training content 	<ul style="list-style-type: none"> ● Continue training on human rights in conjunction with diversity awareness training
<ul style="list-style-type: none"> ● As hotline training has not been implemented, it is not known whether inquiries can be handled appropriately and there is a need to strengthen the service skills of hotline staff 	<ul style="list-style-type: none"> ● Clearly specify staff for promoting human rights, and provide hotline training
<ul style="list-style-type: none"> ● There is a need to confirm whether the SMM direct hotline functions appropriately overseas 	<ul style="list-style-type: none"> ● Consult with the people concerned to determine methods of responding to non-Japanese inquiries on the SMM direct hotline
<p>Employees No issues serious enough to necessitate onsite studies were found in the content of the basic questionnaire, but there is a need to continue to review whether the content of the questionnaire itself is appropriate or not</p> <p>Regional inhabitants There is a need for a comprehensive review taking in not only the Human Rights and Human Resources Development Subcommittee but other subcommittees as well</p>	<p>Employees Revise questionnaire items and repeat from basic human rights questionnaire. Determine necessity for onsite studies based on results</p> <p>Supply chain Continue to implement onsite studies based on questionnaire results</p>

Occupational Health and Safety

Goals and KPIs	CY2015 Achievements	
1. Ensure safety 🔍 22	1) Make our final target zero occupational accidents overall	Number of injury accidents in CY2015 Japan Employees: 2 lost time; 8 in total Contractors: 2 lost time; 7 in total ● Accidents concentrated in Besshi district (employees: 6, contractors: 5) (1) Accidents occurred frequently in on-site service operations (2) Similar accidents occurred frequently due to the same unsafe act and causal objects
	2) Reduce occupational accidents to three or fewer per year by 2020 and establish frameworks for achieving this target (Applicable to all domestic Group employees)	
	3) Halve the frequency rate of occupational accidents by 2020 (Applicable to all domestic and overseas Group employees) Reduce the frequency rate from 1.28 (CY2011) to 0.60 (CY2020)	Overseas Employees: 7 in total Frequency rate for occupational accidents in 2015 in Japan and overseas: 0.74 (Japan: 0.62, overseas: 0.96)
2. Provide comfortable working environments 🔍 23	1) Provide healthy working environments (1) Achieve zero new cases of occupational disease (requiring treatment) (Applicable to all domestic and overseas Group employees) (2) Achieve zero Control Class 3 workplaces (excluding locations stipulated in guidelines, etc.) and reduce Control Class 2 workplaces* (Applicable to all domestic business sites)	● No new cases of occupational disease ● Number of Control Class 3 workplaces in 2015 (figures in parentheses are 2014 results) Dust 2 (2), lead 0 (0), nickel compound 0 (1), arsenic, etc. 1 (1), cobalt, etc. 2 (7), chlorine 3 (5), manganese 0 (1), IPA 0 (1), noise 1 (8)
	2) Implement other working environment improvements	● Continued meetings with industrial physicians for employees who worked long hours ● Periodic mental health checks were implemented through employee assistance programs (EAP) (2,934 employees) ● Mental health care training was implemented (7 times) ● Industrial counselor training (4 counselors)

* Changed from "Achieve zero Control Class 3 workplaces (excluding locations stipulated in guidelines, etc.) (Applicable to all domestic business sites)" in 2016

Stakeholder Communication

Goals and KPIs	FY2015 Achievements	
1. Encourage deeper mutual understanding with employees 🔍 25	1) Continue conducting employee awareness surveys	● Examined implementation methods for surveys
	2) Hold regular dialogues with workers' unions or representatives from employees	● Conducted a survey on implementation status of communication with employees at directly controlled workplaces/group companies
2. Encourage mutual understanding with local communities and citizen groups 🔍 24	1) Continue regular meetings with local communities and participate in community activities	● Conducted a survey on cases of each facilities' community activities and shared details throughout SMM
	2) Carry out cooperative activities with NGOs/NPOs	● Held regular meetings with related NGOs to exchange opinions and information
3. Encourage mutual understanding with shareholders and investors 🔍 26	1) Publish integrated reports and improve their content	● Published content that incorporated some aspects of an integrated report in the FY2015 CSR Report
	2) Promote dialogue with investors	● Held meetings with investors systematically and continuously ● Participated in an explanatory meeting for individual investors held by the Niihama Chamber of Commerce and Industry
4. Encourage mutual understanding with other stakeholders		● Conducted a review of website content

Issues and Targets	CY2016 Plans
<ul style="list-style-type: none"> ● Increase awareness of safety first by both the management at the client and at the contractor ● Sustain and improve risk sensitivity <ul style="list-style-type: none"> (1) Improve risk prediction skills (2) Sustain and improve the effect of learning from hazard simulation ● Establish best management framework for overseas sites 	<p>In addition to conventional measures, implement the following:</p> <ul style="list-style-type: none"> ● Deploy risk management in each grade based on leadership by workplace management ● Systematize hazard simulation to increase and maintain effect ● Systematize safety management at overseas sites
<ul style="list-style-type: none"> ● Do not worsen work environment when raising capacity utilization ● Upgrade technical capabilities for improvements ● Speed up creation of concrete program ● Conduct adequate technical review of improvement measures 	<p>In addition to conventional measures, implement the following:</p> <ul style="list-style-type: none"> ● Create rules for verification of plant capacity when changing operating conditions ● Utilize in-house and external experts
<ul style="list-style-type: none"> ● Stimulate communication to create a comfortable work environment 	<ul style="list-style-type: none"> ● Create framework for mental health checks
Issues and Targets	FY2016 Plans
<ul style="list-style-type: none"> ● Examine scope and feedback methods, etc. 	<ul style="list-style-type: none"> ● Conduct the 3rd employee awareness survey and provide feedback based on the results
<ul style="list-style-type: none"> ● Continue dialogue with employees at each workplace 	<ul style="list-style-type: none"> ● Take measures for workplaces where regular dialogue is not conducted while consulting with relevant departments
<ul style="list-style-type: none"> ● Consider the necessity for guidelines on the ideal for communication with the community 	<ul style="list-style-type: none"> ● Conduct studies into whether a speedy response to materialization of risk events, such as an environmental accident, is possible and whether initiatives have been established that can adequately ascertain the demands and complaints of the community and nearby residents, etc.
<ul style="list-style-type: none"> ● Consider methods for information exchange between related in-house departments 	<ul style="list-style-type: none"> ● Continue holding regular meetings with relevant NGOs ● Study best practices at other companies for collaboration with NGOs/NPOs
<ul style="list-style-type: none"> ● Deploy results of review by in-house working group appropriately to an Integrated Report 	<ul style="list-style-type: none"> ● Publish an Integrated Report
<ul style="list-style-type: none"> ● Conduct dialogue systematically and continuously 	<ul style="list-style-type: none"> ● Review and improve methods of dialogue in line with changes in manner of dialogue with investors
<ul style="list-style-type: none"> ● Optimize website design compatible with smartphones 	<ul style="list-style-type: none"> ● Thoroughly update, including enhancement of website content, design changes, and optimization of website design for smartphones

Effective Use of Resources

Basic Approach

The SMM Group's business centers on the utilization of the earth's limited and valuable resources. The effective use of resources is therefore considered an important managerial issue as we seek sustainable business development. Based on this understanding, the SMM Group has included "effective use of resources" as one of its Six CSR Areas of High Priority. We are working on a range of activities with the aim of being "a company that generates resources using innovative

technology" as stated in our Vision for 2020. We are developing technologies to effectively utilize minerals which have not previously been converted into resources, such as low-grade and hard-to-process ores. We are also endeavoring to develop technologies for recycling resources, including the effective recovery of copper and precious metals contained in items such as used home appliances and electronic devices and valuable metals, such as nickel, from used batteries.

Making Effective Use of Low-Grade Ores

The plant of CBNC¹ commenced full-scale operations in April 2005. Nickel oxide ore has been excavated from the adjacent Rio Tuba Nickel Mining Corporation's mine since before that time. However, while high-grade oxide ore with high nickel content buried deep in the earth was being mined, low grade oxide ore with low nickel content existing close to the surface was not extracted. Because this low-grade oxide ore is said to make up around 70% of all nickel oxide ore resources worldwide, there was global demand for the development of technology that would allow it to be processed.

Recovering nickel from this low-grade oxide ore requires a hydrometallurgical technique called High-Pressure Acid Leach (HPAL). Large-scale production using this process requires a high degree of equipment engineering and operational skill. Industry players the world over have been struggling with the application of HPAL technology, but SMM overcame many technical hurdles to become the first company in the world to successfully apply HPAL technology to commercial production. Turning previously unusable low-grade ore into resources also has tremendous significance in terms of effective resource utilization.

In order to make full use of this HPAL technology, SMM embarked on its Taganito Project in 2009. The project entailed the construction of a large HPAL process plant with an annual

production of 30 kilotons of nickel in the Taganito District on Mindanao Island in the Philippines. The project progressed well, and operations at THPAL² got underway in autumn 2013, and in August 2014, achieved production of over 3 kilotons.



Low-grade nickel ore for THPAL

¹ Coral Bay Nickel Corporation (CBNC)
Shareholders: Sumitomo Metal Mining Co., Ltd. (54%), Mitsui & Co., Ltd. (18%), Sojitz Corp. (18%), Rio Tuba Nickel Mining Corp. (10%)
Head Office: Rio Tuba, Bataraza, Palawan Province, Philippines

² Taganito HPAL Nickel Corporation (THPAL)
Shareholders: Sumitomo Metal Mining Co., Ltd. (62.5%), Mitsui & Co., Ltd. (15%), Nickel Asia Corporation (22.5%)
Head Office: Taganito, Surigao del Norte Province, Philippines

Using Resources Effectively through Recycling

Recovery and recycling of copper and copper alloys were readily pursued because of their high scrap value even before the 3Rs (reduction, reuse and recycling) were advocated as a catch-

phrase by society. Almost all the copper shavings generated by manufacturers of electric cables and wrought copper and copper alloy products are reused as raw material.

The SMM Group procures copper and precious metal scrap from the market and recovers valuable and precious metals from electric arc furnace dust and used printed circuit boards, among other sources.

In FY2015, the proportion of recycled materials such as copper alloy secondary materials and electric arc furnace dust was about the same level as in FY2014. Meanwhile, the ratio of recycled materials was practically unchanged at 18.1% (18.3% in FY2014) as production of electrolytic copper from recycled copper materials was approximately 76 kilotons in FY2015.

Ratio of Recycled Materials Used

FY	2013	2014	2015
Total volume of materials used (kt)	7,850	12,055	11,795
Recycled materials (kt)	271	264	233
Recycled materials ratio (%)	3.5	2.2	2.0

Slag as a Recycled Material

Copper slag is a by-product produced during smelting at the Toyo Smelter & Refinery, which manufactures electrolytic copper. The main use for copper slag (almost one-half of the total volume) is cement production in Japan and overseas. With an iron content of around 40%, copper slag is widely used as a source of iron for cement. Copper slag output in FY2015 was approximately 893 kilotons, with a sales volume of approximately 977 kilotons.

Hyuga Smelting manufactures ferro-nickel, a material used in stainless steel. It generated around 707 kilotons of ferronickel slag. Approximately 704 kilotons of ferro-nickel slag was sold as a recycled material, mainly to blast furnaces for steelmaking. With a magnesia content of around 30%, ferro-nickel slag is used as a source of magnesia for blast furnace flux. By taking advantage of their respective features, both copper slag and ferro-nickel slag are also used as substitutes for natural sand in fine concrete aggregate and harbor and civil engineering construction. In April 2016, Japan Industrial Standards (JIS) for fine concrete aggregate was revised and an environmentally safe quality was added. Demand is also increasing for tougher environmental standards for slag, and ours comfortably meets this demand.

Recycling Nickel Metal Hydride Batteries

SMM manufactures and sells materials used in the cathodes of nickel-metal hydride (Ni-MH) batteries for hybrid vehicles (HV). Demand for Ni-MH batteries is surging as more fuel efficient HVs become more common.

This sharp increase in demand will ultimately lead to massive end-of-life Ni-MH battery disposals in a dozen years or so. Ni-MH batteries contain a substantial amount of useful metals and advancing the recycling of end-of-life units is extremely important not merely in terms of reducing waste but also for effective

resource utilization.

SMM, which focuses on the effective resource utilization aspect of recycling, has been researching ways to recycle Ni-MH batteries since FY2000. In FY2010, in collaboration with Toyota Motor Corporation, SMM collected used Ni-MH batteries from end-of-life HVs and recycled their components for use in cathode materials on new Ni-MH batteries, thus enabling the world's first "battery-to-battery" resource cycle. We established facilities at Niihama Nickel Refinery, and are promoting recycling operations.

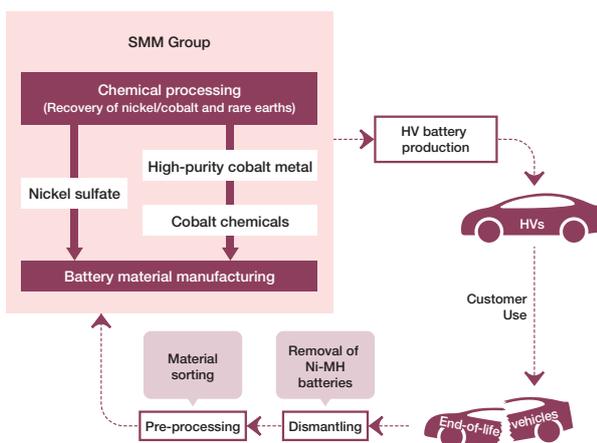
Recycling Precious Metal

SMM smelts non-ferrous metals using raw material ores extracted from mines both inside and outside Japan. Meanwhile, with the recycling of non-renewable resources³ as our social commitment, we apply proprietary smelting technologies in the separation and recovery of precious metals from end-of-life home appliances and electronic components.

Japan, while poor in natural resources, is one of the few urban mine countries in the world. The Precious Metals Recycling Division of Ohkuchi Electronics Co., Ltd., a SMM Group company, collects, separates and mills urban mine raw materials including precious metals, then roasts and dissolves them using acids and alkali to effectively recover and concentrate precious metals for reuse as alloys in other metals at our Toyo Plant.

In recent years, the amount of precious metals used in making home appliances has fallen due to cost reductions and technological innovations, and the form of collected raw materials and their suppliers are diversifying. The SMM Group will flexibly adapt to these market conditions and contribute to society while collaborating in all directions in hopes of fulfilling our mission as a non-ferrous smelter.

Ni-MH Battery Recycling: Flow Diagram



Some recycled materials

³ Non-renewable resource: A resource that decreases the more it is used; that is, a resource that decreases by the rate it is used and whose growth is slow.

Global Environmental Considerations

Environmental Management

Basic Approach

Many chemical substances are handled by SMM Group businesses during mineral resource processing and manufacturing. If an accident should occur, there is the risk of seriously affecting the local environment. The SMM Group emphasizes the need to prevent environmental contamination by supplying equipment and strengthening management, and

by providing training for relevant staff members. Every year, drills are held in order to help minimize the effects and prevent external impacts in the unlikely event an incident does occur. We have also worked to improve facilities, and we installed a system that automatically shuts off the discharge if any abnormalities are detected just before the wastewater port.

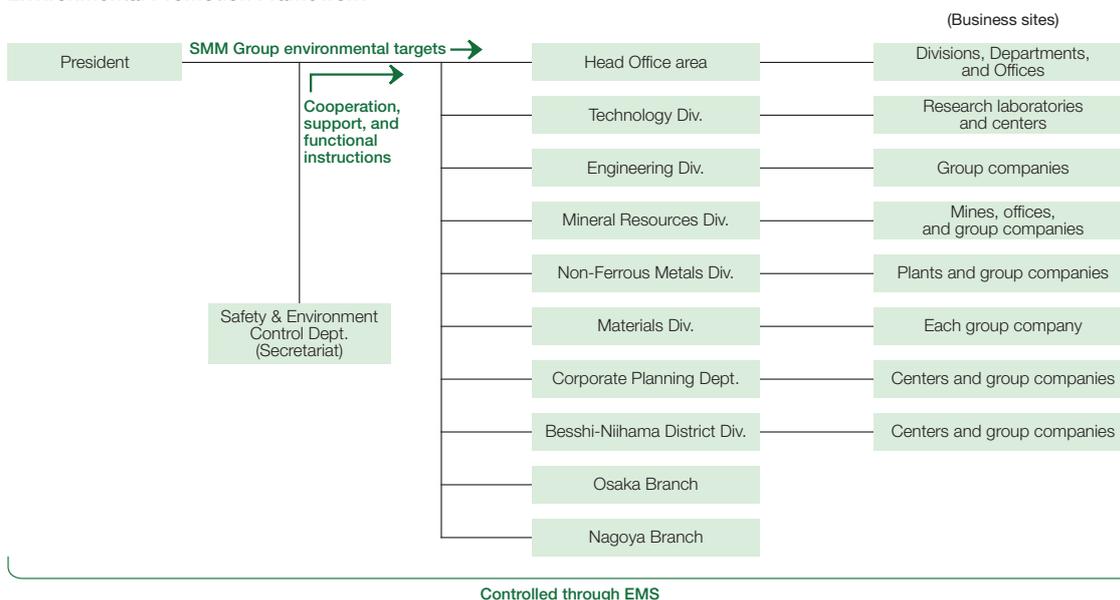
Environmental Management System and Education

Environmental Management Initiatives

Every year, the President sets targets (SMM Group environmental targets) in consideration of the environmental risks faced by the SMM Group. In response, business sites and group companies of each business division integrate these targets into their environmental management systems, established according to the ISO 14001 standard. As for environmental management systems which serve as the basis for environmental preservation activities, the Head Office, branches and all production bases and

sites responsible for closed and suspended mines in the SMM Group have acquired ISO 14001 certification. In addition, any new production bases are also required to acquire certification as quickly as possible. Furthermore, since the occurrence of accidents at any time during the development of a mine creates the risk of significant environmental impacts, SMM works with our partners to mitigate environmental risks even at mines we do not operate, such as mines in which we hold an interest.

Environmental Promotion Framework



Internal Environmental Audit Seminars

The SMM Group has adopted an in-house qualification system for internal environmental auditors, the key people in workplace environmental management, and completion of a training course is a requirement for obtaining the qualification. The Safety & Environment Control Department implements training for all internal environmental auditor instructors at business sites in Japan, and for new environmental auditors as well. Because of the 2015 revisions to the ISO 14001 standard, we carried out educational seminars for moving to the new standard. There were three seminars in the area around our Head Office, and

one seminar for the Besshi area, which provided training to 169 participants. Additionally, training seminars for new environmental auditors were held in the Head Office area, the Besshi area, and at Hyuga Smelting and 58 participants completed these seminars.

Response to Environmental Risks

The SMM Group handles large amounts of chemical substances during the manufacturing of products, particularly in smelting and refining operations, and for that reason some business sites bear considerable environmental risk. Each site continuously performs environmental management and runs accident response drills

corresponding to the magnitude of risk. In addition, every year, the heads of every division that exercises control over business sites, inspect those business sites (including group companies) to check whether environmental management is being implemented appropriately. Moreover, in the Niihama District, where the SMM Group's largest smelter and refining facilities are located, the Safety & Environment Control Center (Besshi-Niihama District Division) provides guidance to business sites located within the district on their initiatives for environmental management. The center also provides support for group business sites located within the local region, such as by regularly holding meetings for the exchange of information. In the Materials Division, a Safety & Environment Control Department was established to provide the business sites under its control with support and guidance on environmental management.

Since FY2008, the Safety & Environmental Control Department has continued its environmental care activities, visiting these business sites to check on the status of activities to reduce the risk of environmental accidents. The department prepares reports on the results of checks and shares any issues with the head of the business site and the head of the department responsible for the site. Countermeasures are considered at the business site, leading to improvements in the level of environmental management. In FY2015, environmental care activities were held for 17 business sites, including overseas sites.

In addition, close-call events are reported to the Safety & Environment Control Department when they exceed voluntary standards and/or have an effect on operations. In the event of an incident, the Safety & Environment Control Department will provide advice after checking the causes and the response taken. In addition, the department also makes efforts to prevent similar close-call events from occurring elsewhere, such as by alerting each business site in the SMM Group, where necessary, and requiring them to check and report back on their control status, and by encouraging preventive action to be taken if factors were present similar to those that caused the incident. There was one major leak in FY2015. A procedural mistake at THPAL (Philippines) led to a hydrogen sulfide discharge that could not be completely absorbed by facilities for removing hazardous substances and resulted in 155 residents of the surrounding area feeling unwell. After the incident, health exams and consultations were provided to area residents, in addition to providing apologies and briefings on both the cause of the incident and measures to prevent recurrence. We are re-emphasizing thorough compliance with procedures, etc. in order to ensure that this incident does not happen again. Finally, no local residents or employees suffered ill effects to their health from this accident.

Parties lodged four complaints related to environmental matters, all of which were handled appropriately. Going forward, we will work to continually raise the level of our operations.

Risk Management for Mining Waste

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

Spoil and tailings containing sulfide minerals can oxidize and generate sulfuric acid, which can easily become a source of acidic water that contains heavy metal ions; therefore wastewater from mines is properly processed in water treatment

facilities before release.

The Pogo Gold Mine further alleviates risk by surrounding all mineralized spoil with dehydrated flotation tailings so as to isolate it from the outside environment. Tailings containing cyanogen are stabilized by mixing them with cement for use as backfill in the mine, while all other tailings are stored outside the mine after undergoing dehydration to reduce volume. Lowering the volume of the tailings reduces the area required for accumulation sites and alleviates risk related to the structural stability of sites.

Seismic Retrofit Work at Mining Waste Accumulation Sites in Japan

In the 2011 Great East Japan Earthquake, there were accidents that involved the outflow of sediments at three accumulation sites belonging to other companies in the Tohoku region. Japan's Ministry of Economy, Trade and Industry reviewed the technical guidelines related to accumulation sites and required assessments of resistance to large seismic vibrations for sites that are subject to "special conditions." SMM has been implementing assessments of earthquake resistance at accumulation sites since 2012. As it was determined that countermeasures are required for five out of ten accumulation sites subject to "special conditions," seismic retrofit work was conducted from FY2014 through FY2015. We are also gradually assessing earthquake resistance at accumulation sites not subject to "special conditions," and plan to take countermeasures where necessary.

Environmental e-learning

The SMM Group has established two e-learning courses on environmental laws with the objective of raising levels of compliance, and employees, especially managers and supervisors involved in environmental management and internal environmental auditors, are taking part in the courses. Moreover, course content, which is updated in line with legal amendments, is also used after learning to check legal requirements and for education on environmental laws in the workplace. The e-learning course on Japan's main environmental laws introduced in the second half of FY2008 covers ten laws that are deeply related to the business of SMM and provides explanations of mandatory standards and notification procedures. As failing to comply with these requirements constitutes a violation of the law, employees must be certain to keep them in mind when conducting business. In the second half of FY2013, a new e-learning course entitled Basic Environmental Laws was released in order to deepen understanding about the underlying spirit of the law and to encourage employees to execute their duties to the best of their ability. Given not only compliance with regulations and obligations, but also the voluntary risk management and information disclosure demanded of businesses today, the course provides a stepping stone for properly conducting business. This course covers 12 laws, including the Basic Environment Act, the Basic Act on Biodiversity, and the Basic Act on Establishing a Sound Material-Cycle Society.

Approach to Biodiversity

Basic Approach

SMM has declared that “advancing biodiversity preservation initiatives” is one of the concrete measures for bringing about our Vision for 2020. In addition, our approach to biodiversity adopts the three perspectives of pursuing global warming countermeasures, reducing environmental impacts, and preserving ecosystems.

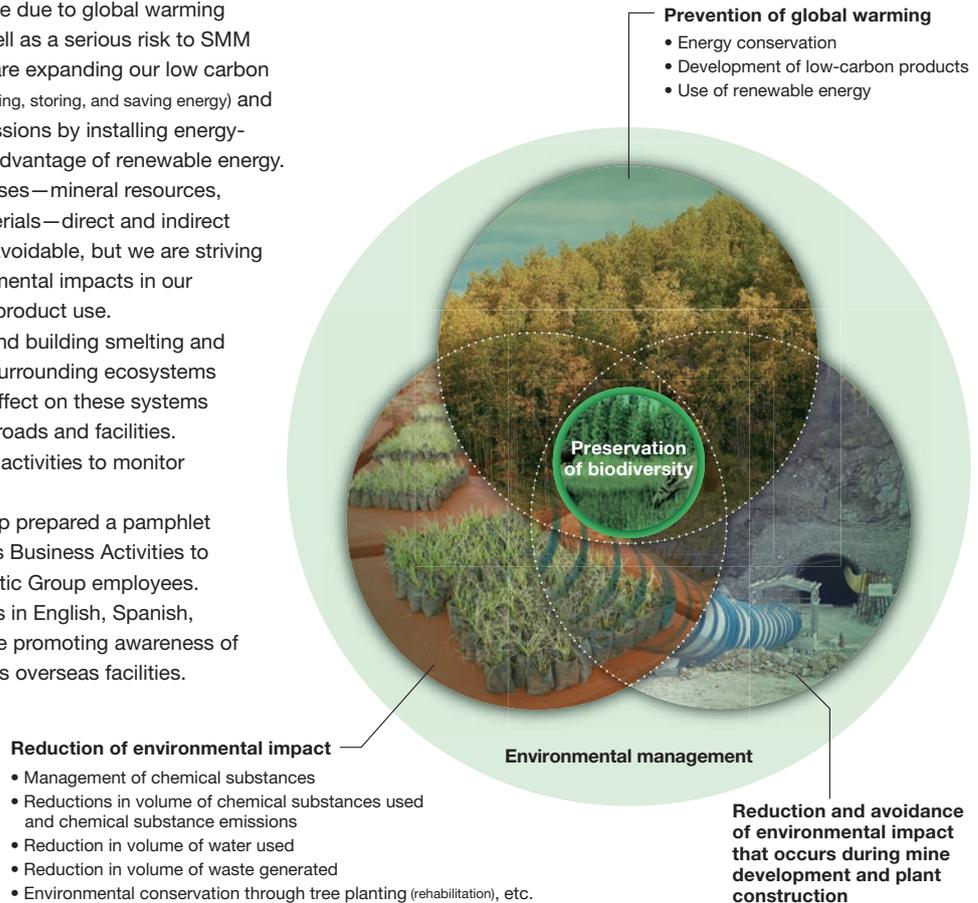
SMM views climate change due to global warming as a threat to biodiversity as well as a serious risk to SMM Group business activities. We are expanding our low carbon impact products business (creating, storing, and saving energy) and proceeding to reduce CO₂ emissions by installing energy-saving technology and taking advantage of renewable energy.

For all of our core businesses—mineral resources, smelting and refining, and materials—direct and indirect impacts on biodiversity are unavoidable, but we are striving to decrease and avoid environmental impacts in our development, operations, and product use.

When developing mines and building smelting and refining plants, we survey the surrounding ecosystems and give consideration to the effect on these systems when choosing the location of roads and facilities. Furthermore, we also carry out activities to monitor ecosystems and plant trees.

In FY2013, the SMM Group prepared a pamphlet entitled Biodiversity and SMM’s Business Activities to raise awareness among domestic Group employees. In FY2015, we made pamphlets in English, Spanish, Chinese and Malaysian, and are promoting awareness of biodiversity at the SMM Group’s overseas facilities.

SMM Group’s Approach to Biodiversity



Prevention of Global Warming

Development of Products and Technologies that Contribute to Reducing Environmental Impact

The SMM Group sees its supplying of specialty materials for products with a low environmental impact to be one of its contributions to a more sustainable society.

By focusing on energy-related materials, the SMM Group aims to expand its business in domains related to the creating, storing, and saving of energy.

Demand is expected to continue growing for environmentally friendly vehicles such as hybrid and electric cars. The CO₂ emitted when producing the electricity for an electric vehicle to run 1 km is less than the CO₂ emitted by a gasoline-engine vehicle over the same distance, making the environmental impact from the

use of electric vehicles lower. In our Materials Division’s Battery Materials Business Unit, we are producing cathode materials for nickel metal hydride batteries mainly going into hybrid vehicles, and cathode materials for lithium ion batteries going into electric vehicles and other consumer products. We are achieving lower environmental impacts through an integrated battery materials production process extending from extracting nickel and cobalt from mines, to refining them in smelting processes, and then synthesizing battery materials. This last step utilizes technology for synthesizing inorganic materials, which itself applies the smelting and refining technology we have amassed to date. SMM believes that leveraging high productivity to supply battery materials for environmentally friendly vehicles can contribute to reducing the

overall environmental impact of vehicles.

Additionally, in our Materials Division's Applied Powder Materials Business Unit, we are manufacturing lanthanum hexaboride (LaB6) and cesium tungsten oxide (CWO) inks as new near-infrared shielding materials. Using these inks in applications such as window glass cuts near-infrared rays contained in sunlight, which greatly reduces temperatures. Use of these inks, mainly in automotive glass and building windows, boosts air conditioner efficiency contributing to saving energy.

Energy Conservation at SMM Business Sites

● Domestic Group CO₂ Emissions

The Group's FY2015 volume of energy-derived CO₂ emissions inside Japan decreased approximately 199 kilotons due to the end of production of prime western grade zinc. Energy saving activities contributed some 16 kilotons in reductions, and moreover, the effect of improved emissions factors of electric power suppliers brought approximately 22 kilotons in reductions. Total emissions were about 1,705 kilotons, which was a nearly 236-kiloton decrease compared to FY2014.

● Smelting and Refining Business in Japan

Unit energy consumption in the domestic smelting and refining business improved by approximately 5.4% in FY2015 compared with FY2014. The main reason for the improvement was our achievement of planned production volumes of copper and nickel, thanks to stable operations. Meanwhile, unit CO₂ emissions improved some 8.0% due to lower production of high-energy products (prime western grade zinc and ferro-nickel) and lower emissions factors of electric power suppliers.

For FY2016 we are forecasting a drop in CO₂ emissions of approximately 190 kilotons in our domestic smelting and refining business, as well as our other businesses, from continued and increased energy-saving activities.

● Overseas Business

In our overseas business, energy-derived CO₂ emissions decreased approximately 10 kilotons, to approximately 1,056 kilotons.

● Domestic Transportation

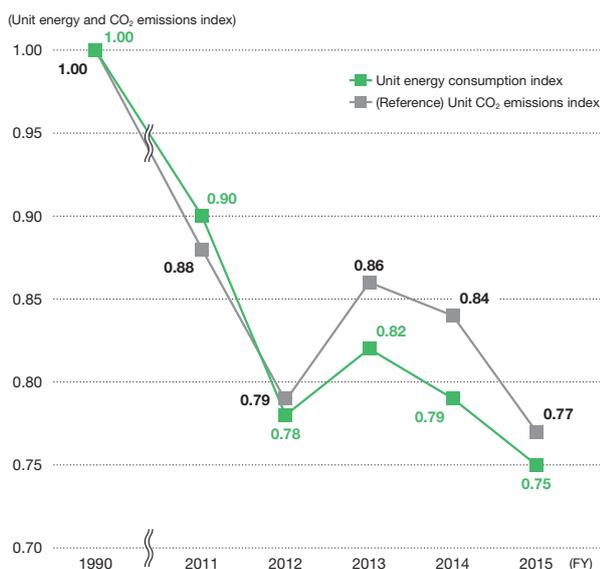
In order to reduce indirect CO₂ emissions in domestic transportation, efforts are being made to increase the use of ship transportation and improve load efficiency. In FY2015, CO₂ emissions decreased by about 1 kiloton, to 25 kilotons, compared with FY2014, due to an increase in truck load efficiency by Siporex and increased ship transportation by Hyuga Smelting.

● Initiatives as a Member of The Japan Mining Industry Association

The Japan Mining Industry Association, a non-ferrous metals industrial organization, took part in the planning of a "Commitment to a Low Carbon Society" led by Keidanren (the Japan Business Federation) as the basis for announcing the industry target of a "15% reduction in unit CO₂ emissions by FY2020 in comparison to FY1990." SMM has already achieved this target in the Japanese smelting and refining business, and we are working towards the goal of further reducing CO₂ emissions by continuing to lower overall CO₂ emissions by 1% each year and by adopting renewable energy.

Unit Energy and CO₂ Emissions Index¹

Scope: Smelting/Refining Business in Japan

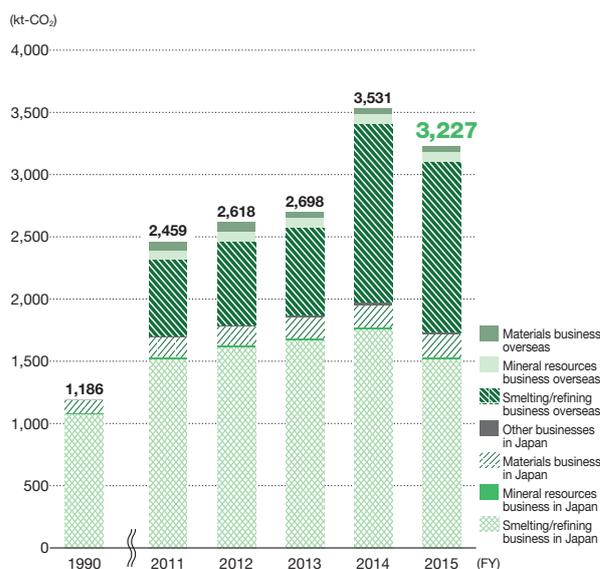


1. Unit energy and CO₂ emissions index: The amount of energy consumed and CO₂ emitted during the production of 1 ton of product, assuming the FY1990 value to be 1 (including fuels used as reducing agents).

CO₂ Emissions

FY1990 Scope: Business in Japan

FY2011-2015 Scope: All businesses in Japan and Overseas



• Emissions in Japan and overseas which do not relate to electric power are calculated using emission factors conforming to the Japanese Act on Promotion of Global Warming Countermeasures. These include non-energy-derived CO₂ emissions (454 kt-CO₂) that are outside the scope of the above act. CO₂ emissions derived from purchased electricity in Japan are calculated using the emission factors of the electric power suppliers. Emission factors for overseas are based on International Energy Agency (IEA) data.

Reduction of Environmental Impact

Management of Chemical Substances

Given that many of the SMM Group's products are chemicals and that many diverse chemical substances are also used in the manufacturing processes for these products, all business sites have their own system for managing chemical substances within their environmental management system, which is operated under the direction of the relevant division. For example, when a business site intends to use a new chemical, it conducts a preliminary study including hazard statements, laws and regulations and other applicable information, and deliberates on safety for people and the environment in a meeting at the business site before deciding whether to adopt the chemical.

Furthermore, regardless of whether there are legal obligations, an SDS¹ is issued for all chemicals that are transferred or provided to customers or to other business sites within the SMM Group.

Semiconductor materials and advanced materials produced by the SMM Group are incorporated by our customers into

electrical and electronic products and circulated widely to domestic and foreign markets. Therefore, with an eye on the value chain, information on the chemical substance content of SMM's chemicals is assessed across the supply chain to provide customers with information on SMM's products. Screening of development themes for new products also puts an emphasis on products with low environmental impact that can be used more safely by customers.

Overseas regulations such as the RoHS Directive² and REACH Regulation³ are also taken into account. The development of products that eliminate substances prohibited under RoHS and registration of chemical substances exported to the EU with REACH are being progressively promoted.

1. SDS (Safety Data Sheet): A document listing information on a chemical, including the chemical substance, the product name, the supplier, hazards, safety precautions and emergency procedures.
 2. RoHS Directive: The Restriction of Hazardous Substances Directive.
 3. REACH Regulation: The Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals.

Reduction in Volume of Chemical Substance Emissions, etc.

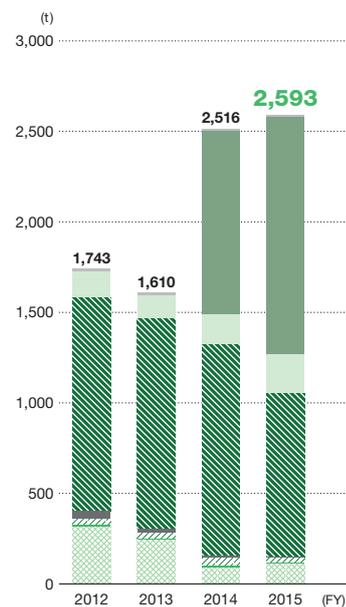
● Soot and Smoke Emissions

The volume of FY2015 SOx emissions increased 3% year on year. While THPAL increased 29% and CBNC was up 31%, Hyuga Smelting saw a decrease of 22% due to new dryer bag filters and the installation of electric dust collectors. NOx emissions increased by about 6% from FY2014. The volume of soot and dust emissions decreased 29% year on year. The decrease was 53% at Hyuga Smelting Co., Ltd. due to higher collection

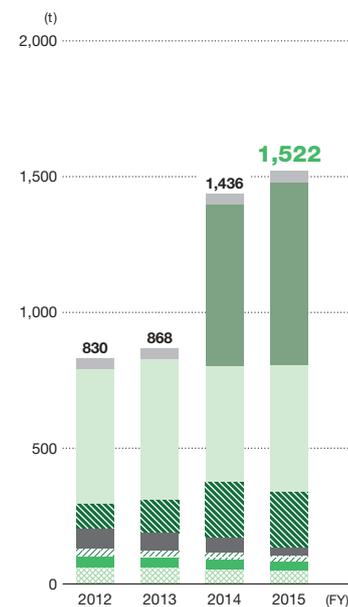
efficiency for electric dust collectors resulting from controlling exhaust gas temperatures in kilns, in addition to suppressed dust generation thanks to the removal of lifters (scoops) for mixing feed inside the kilns. Ending zinc production at Harima Refinery in September 2015 brought a 47% emissions decrease.

Emissions excluding THPAL showed a 14% year-on-year decrease for SOx, an approximate 1% year-on-year increase for NOx, and a 30% decrease for soot and dust.

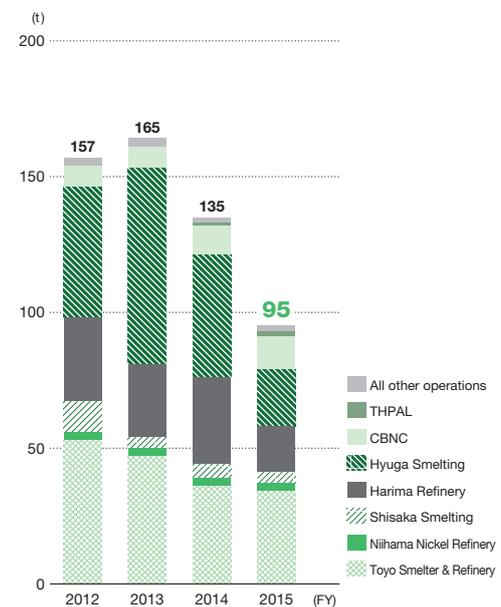
Volume of SOx Emissions



Volume of NOx Emissions



Volume of Soot and Dust Emissions



● Chemical Substance Releases and Transfers

The following is an overview of FY2015 releases and transfers of chemical substances in Japan managed in line with the Pollutant Release and Transfer Register (PRTR) system. The SMM Group had 27 data-submitting sites (28 in FY2014) and 41 substances requiring registration (38 in FY2014).

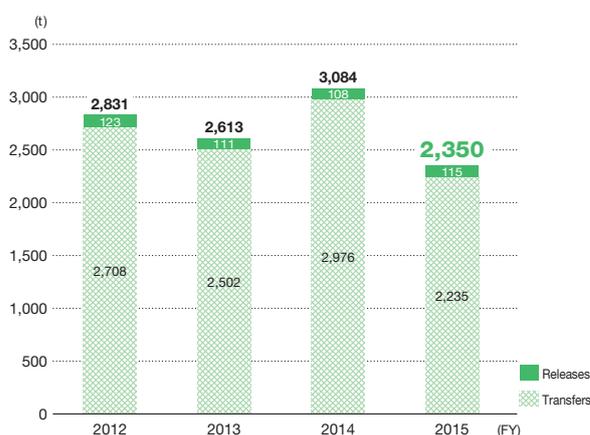
The total release and transfer volume (releases + transfers) decreased by about 24% from FY2014 to 2,350 tons due to a decrease in transfers. The decrease in transfers was due to a decrease in manganese in iron clinkers,¹ which undergo final disposal as an industrial waste, at Shisaka Smelting Co., Ltd.

In terms of release volumes, discharges into water and soil increased. This was mainly caused by an increase in boron released in wastewater at the Hishikari Mine and an increase in arsenic in wastewater treatment precipitate taking the form of mining waste. The volume of releases into the atmosphere was basically unchanged.

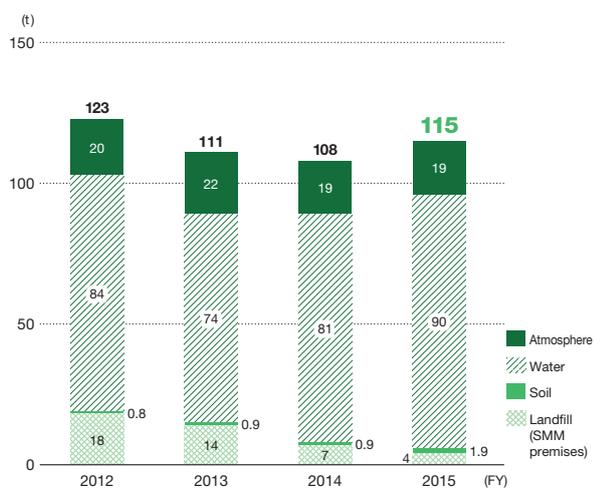
The SMM Group's production processes released no ozone depleting substances.

1. Iron clinker: The residue remaining during the processing of electric arc furnace dust after recovering zinc. The residue able to be sold is called "iron pellets," and the residue included in final disposal is called "iron clinkers."

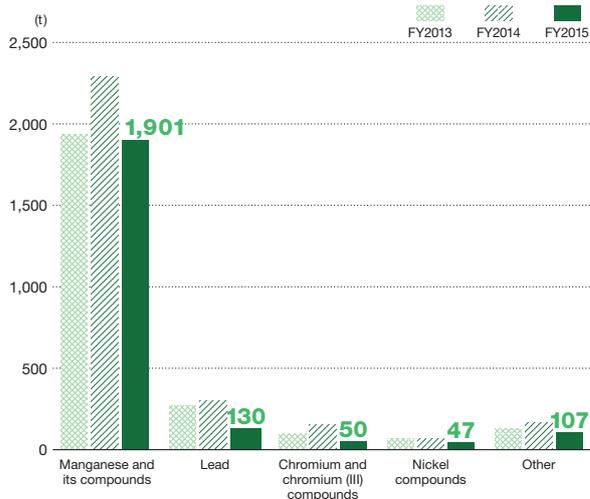
Release and Transfer Volume of PRTR Substances



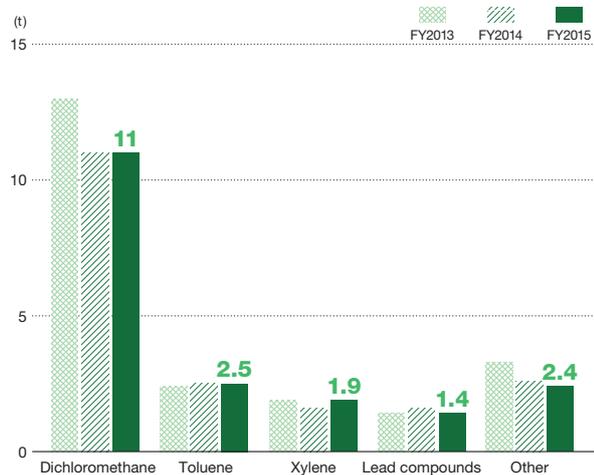
Breakdown of Releases



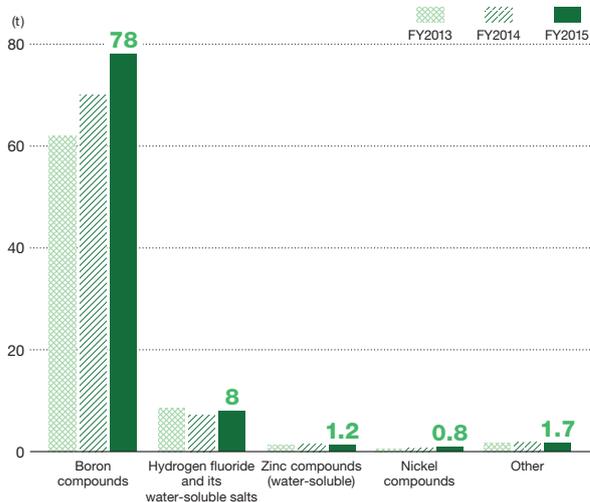
Breakdown of Transfers



Breakdown of Releases into the Atmosphere



Breakdown of Releases into Water



Global Environmental Considerations

● COD and BOD Pollutant Loads

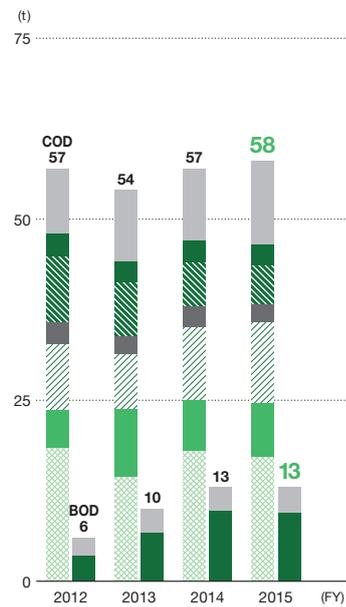
The COD¹ pollutant load in FY2015 increased by about 2% from FY2014, while the BOD² pollutant load was unchanged. Many SMM Group business sites face onto Japan's Seto Inland Sea and are subject to controls on the total amounts of COD, nitrogen and phosphorous emissions under the Act on Special Measures Concerning Conservation of the Environment of the Seto Inland Sea.

1. COD (Chemical Oxygen Demand): Measured for emissions into seas, including emissions into rivers flowing into enclosed seas.
 2. BOD (Biochemical Oxygen Demand): Measured for emissions into rivers, excluding emissions flowing into enclosed seas.

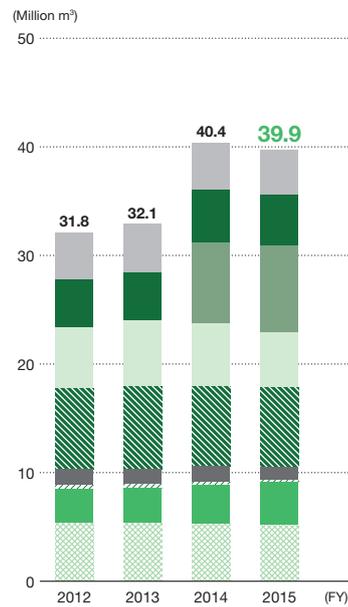
● Water Usage

At 40 million m³, freshwater used by the Group was nearly unchanged year on year. Seawater usage was 91% of the amount from the previous fiscal year. The reason was lower usage at Toyo Smelter & Refinery due to large scale, planned construction, and the transition in September 2015 from smelting zinc to producing nickel sulfate at Harima Refinery.

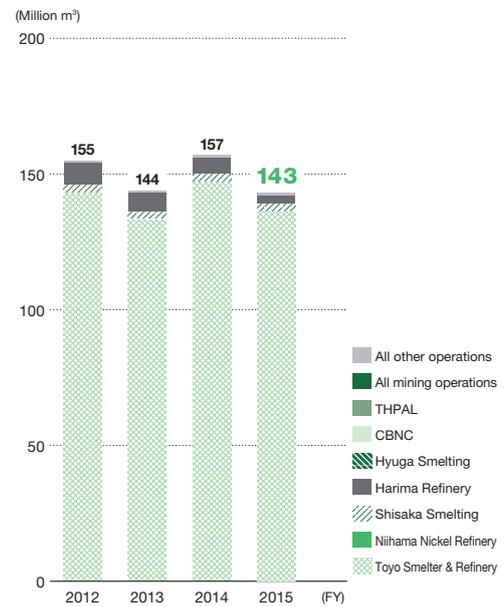
COD and BOD Pollutant Loads



Water Usage (Freshwater)



Water Usage (Seawater)



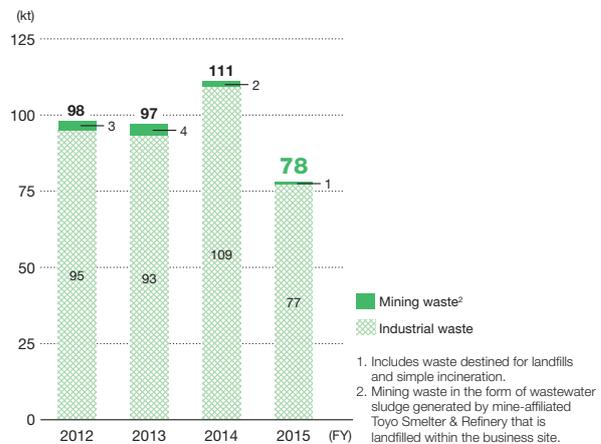
● Final Disposal Volumes of Industrial and Mining Waste

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

The total final disposal volume in FY2015 was 78 kilotons, which was a decrease of about 33 kilotons from FY2014. The main contributing factor was a decrease in slag from ending zinc production at Harima Refinery and an increase in shipments of iron clinkers for recycling at Shisaka Smelting Co., Ltd.

The total volume of waste generated from all sites, classified according to processing method, direct or contracted disposal, and hazardous or non-hazardous, is shown on page 77.

Final Disposal Volumes¹ of Industrial and Mining Waste in Japan

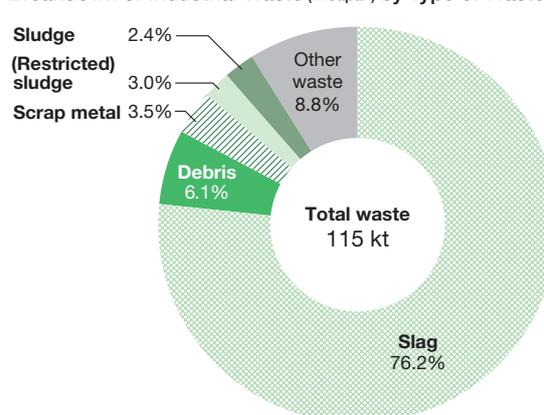


Volume of Waste (Hazardous³/Non-hazardous^{4,5})

		(kt)		
		Total	Hazardous	Non-hazardous
Processing method	Recycling	47	11	36
	Landfill	8,536	72	8,464
	Incineration	2	1	1
	Volume reduction, etc.	2	1	1
Total		8,587	85	8,502
Direct/contracted	Direct disposal	8,461		
	Contracted disposal	126		

3. In general, this depends upon definitions in the countries concerned. Since Japan does not have such laws or regulations, SMM applies the following definition: "Specially controlled industrial waste and waste delivered to controlled landfill sites (excluding designated inert waste that should have been delivered to landfill sites for inert industrial waste, but was disposed of at controlled landfill sites due to the distance limitation)."
 4. Waste other than hazardous waste.
 5. We re-thought the method to calculate the weight of the CBNC tailing slurry to be buried in a landfill.

Breakdown of Industrial Waste (in Japan) by Type of Waste



Reduction and Avoidance of Environmental Impact that Occurs during Mine Development and Plant Construction

Example of Biodiversity Considerations in the Mineral Resources Business

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

SMM undertook exhaustive environmental considerations right from the design stage, seeking to preserve ecosystems as well as infrastructure sustaining indigenous communities in the mine vicinity. Particularly important issues were protection of rivers where salmon return to spawn and prevention of adverse effects on moose habitats. Groundwater from the mine is purified by a treatment plant and partially reused in production processes. In gold extraction, water used during the extraction process is isolated within a closed system to make sure it is not released. The impact of mine operations is confirmed through annual monitoring of the salmon run, as well as by catching and analyzing fish to check for abnormal levels of heavy metals.

We have also tried to minimize the impact of mine access



road construction on moose habitats by circumventing breeding grounds and not allowing traffic other than mine-related vehicles.

Fish are caught in a river near the Pogo Gold Mine for monitoring

Example of Biodiversity Considerations in the Smelting and Refining Business

CBNC and THPAL in the Philippines produce electrolytic nickel intermediates.

To construct a refinery in the Philippines, we first had to obtain an Environmental Compliance Certificate (ECC) from the Department of Environment and Natural Resources (DENR). This required submitting an Environmental Impact Assessment (EIA).

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

CBNC began operations of the refinery in April 2005 based on a certified environmentally responsible design and was followed by THPAL in October 2013. The refineries have set up Environmental Management Offices (EMO) as bodies to promote environmental initiatives in operations. Besides environmental surveys by the EMO, the environment is monitored by a team of representatives from organizations such as the DENR, local authorities and NGOs which carry out regular sampling of the air, water, flora and fauna.

We check that the construction and operation of plants do not have serious impacts on the ecosystem, while keeping environmental impacts from wastewater and other factors to a minimum.



Water quality monitoring in rivers around CNBC

Contribution to Society and Local Communities

Basic Approach

The SMM Group has long been providing a secure foundation for living for its employees and their families as part of its business, and building a social infrastructure open to the public in many fields including culture, education and medicine. For our businesses, we have established the SMM Group

Corporate Philosophy and CSR Policy. Based on these, we execute business after ample deliberation at meetings at all levels and after taking into consideration the regional environment and society.

Impact on Local Economies

Local Procurement

Procurement from the vicinity of our operating areas is one aspect of the SMM Group's business operations that can contribute to the local economy. Our procurement in these areas complies with legal regulations and follows fair competition practices in full recognition of the importance of mutual development.

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

The proportion of payments made to local suppliers in FY2015 was 57% (¥15.4 billion) for the Niihama District. The Pogo Gold Mine procures materials and equipment from some 256 suppliers in Alaska, accounting for 44% (approximately US\$95 million) of payments.

Local Hiring

The SMM Group's employment of individuals in the vicinity of operating areas not only directly contributes to the economy of the local society, but also helps to revitalize the region through human resource development and the provision of stable job opportunities. Since we believe that local residents' understanding of our business activities, paired with our understanding of local issues, is effective for deepening mutual concern, we continue to actively promote local hiring.

With regards to hiring, we have a clear recruitment process for each overseas facility and adhere strictly to laws and ordinances of the respective regions. Fairness in job appraisal, including promotions, is also ensured.

Actual conditions are periodically confirmed through the implementation of Group-wide questionnaires.

At the Pogo Gold Mine, we strive to hire people locally and 67% of the approx. 300 employees are Alaska residents. At Coral Bay Nickel Corporation (CBNC) in the Philippines, efforts have been made to employ locals from Bataraza, achieving a ratio of 59%. At Taganito HPAL Nickel Corporation (THPAL), also in the Philippines, 45% are from Claver.

Number of Locally-Hired Senior Managers

(General Managers and above) at Overseas Affiliates (March 31, 2016)

Company (Country/Region)	No.	
	Male	Female
Sumitomo Metal Mining Pogo LLC (USA)	1	1
Sumitomo Metal Mining Chile Ltda. (Chile)	2	0
Sumitomo Metal Mining do Brasil Ltda. (Brazil)	1	1
Sumitomo Metal Mining Peru S.A. (Peru)	2	1
Sumitomo Metal Mining Philippine Holdings Corporation (Philippines)	5	1
Sumitomo Metal Mining Management (Shanghai) Co., Ltd. (China)	1	0
SH Asia Pacific Pte. Ltd. (Singapore)	3	0
Malaysian SH Electronics Sdn. Bhd. (Malaysia)	2	0
Malaysian SH Precision Sdn. Bhd. (Malaysia)	3	2
SH Electronics Taiwan Co., Ltd. (Taiwan)	1	2
Dongguan Sumiko Electronic Paste Co., Ltd. (China)	0	1
SH Electronics Chengdu Co., Ltd. (China)	1	1
SH Electronics Suzhou Co., Ltd. (China)	1	3
Suzhou SH Precision Co., Ltd. (China)	1	1
SH Precision Chengdu Co., Ltd. (China)	1	0
SMM KOREA Co., Ltd. (South Korea)	1	0
Shanghai Sumiko Electronic Paste Co., Ltd. (China)	3	0
Total	29	14

Mine Closure Plans

During the development of a mine, the SMM Group takes into consideration the treatment procedures that must be carried out when closing it, making efforts to minimize the environmental impact after mining is completed. Mine closures are carried out according to the SMM Group Corporate Philosophy and in accordance with laws and regulations. At mines in which SMM has more than a 50% interest, we draw up suitable plans once closure of the mine is foreseeable. Closure formalities and management are carried out according to the laws of the country in question.

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

Reserves for Mine Closures

Mine	Reserve name	Reserves (2015)
Hishikari Mine	Mine pollution control reserve	¥21.54 million
Pogo Gold Mine	Reclamation Bond	US\$57.10 million*

* Total reserves for the entire project. The burden of costs, when they actually incur, will be divided among companies according to their participating interest.

parameters to be monitored, and the costs required for remedial work and revegetation.

SMM Group employees who worked at the Besshi Copper Mine and other Japanese mines that are now closed have been transferred to other workplaces or given assistance in finding new jobs.

Closure Plan for Smelting Plants

In the Philippines, we are required to submit a closure and cleanup plan, not only for closure of the mine, but also for the refinery and mineral processing plant at CBNC. We are also required to put aside funds needed for the closure of any related workplaces. The total cost according to the closure plan submitted by CBNC to the Department of Environmental and Natural Resources (DENR) is 110 million pesos, and funds are being set aside every year for an eight-year period that started in 2012.

We are also providing assistance via SDMP* to help local residents make a living (such as in the farming and fishing industries) even after closure of a facility. For THPAL, a total of approx. 120 million pesos will be necessary for the closure plan, and funds will be set aside each month for an eleven-year period starting in 2016.

* SDMP: Social Development Management Program, conducted by a company for the welfare of residents living in the vicinity of its operating area.

Social Contribution Activities

The SMM Group identifies social issues through dialogue with local communities in the vicinity of our business operations and implements social contribution activities to solve those issues with the aim of becoming "a company that earns trust and

contributes to regional development through our business and social contribution activities rooted in each region," which is our Vision for 2020.

Major Social Contribution Activities in FY2015

Social infrastructure building activities at operating areas

- Infrastructure building and construction of schools, hospitals, etc. with operational support in the Philippines
- Scholarships bestowed at overseas operating areas
- Support for hospital construction in Niihama City, Ehime Prefecture

Cultural and academic support

- Special supporter of The Golden Legend organized by The National Museum of Western Art
- Support and contributions for healthcare groups, sports organizations and other groups, support for conservation of world heritage sites, etc.

Nature conservation

- Contribution to the Keidanren Nature Conservation Fund

Disaster area support

- Contribution to storm damage relief for Typhoon No. 18
- Continuous food aid for victims of the Great East Japan Earthquake (Purchase and donation of specialty rice produced in operating areas)
- Donations to scholarship foundation for children orphaned by the Great East Japan Earthquake
- Creation of employment and setting up of a new production site for battery materials in Naraha Town, Fukushima Prefecture

Respect for People and Human Rights

Human Resources Development

Basic Approach

The basis of human resources development in the SMM Group is on-the-job training (OJT) in which supervisors and senior colleagues carefully train individual employees through duties in the workplace. SMM has also prepared programs that include a range of training and seminars, e-learning, and correspondence education to complement OJT.

In recent years, developing global human resources, training the next generation of managers, and providing

support for female employees to play active roles have been promoted as priority areas. Moreover, Vision for 2020 mentions providing opportunities every year for all employees to increase their skills and motivation, and we created the Human Resources Development Department in October 2015 to further strengthen our human resource development capability and are energetically working on it.

Human Resources Development Program

SMM Group has a framework for human resources development that is composed of three components—on-the-job training (OJT) is the base, with self-development, and off-the-job training (OFF-JT)—and works to develop the human resources required to achieve our growth strategies by utilizing a training cycle that involves selection → training → assignment → practical application → evaluation.



Introductory training for new employees (former Besshi Copper Mine climbing tour)

Specific Human Resources Development Initiatives

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

(1) Global human resources development

(2) Development of the next generation of management

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

(1) Global human resources development

The globalization of business has created a need for human resources who can actively pursue SMM's business strategy at overseas facilities and within markets for each business division in mineral resources, smelting and refining, and materials, and in corporate divisions. Acknowledging that the development of globally-minded human resources needs to start as early as possible, SMM implements a short-term overseas training program whereby all new management track employees are seconded overseas for a two-month period.

More than just an opportunity to polish language skills, the

program is designed to bring about general improvements to the employees' ability to accommodate other cultures and their ability to act under their own initiative in an overseas setting.

In order to improve various business skills, which can be considered a common language in global business, we have introduced opportunities for employees to take e-learning and also actively incorporate it into the different types of management training and training for employees who have been promoted. Global human resource development is thus approached from a number of angles, not simply from the language aspect.

(2) Development of the next generation of management

In addition to bottom-up training of the entire workforce, since FY2008 we have implemented a specialized program for training the next generation of management. Section manager-level and general manager-level personnel with the potential for a future senior management role at the company are selected for the program, which is designed to help them develop a senior manager's perspective. Moreover, practical training has been carried out since FY2011 for newly promoted general manager-level personnel which involves current officers in charge at each workplace providing guidance and advice to participants on a one-on-one basis to let them develop a sense for management. The training also involves participants themselves playing a leading role in actually addressing managerial issues faced by the company and observing the results. Furthermore, we started an Officers' coaching school in FY2014 to show that officers themselves are studying as well as cultivating an atmosphere more conducive to human resources development.



Middle Management Program (MMP)

Diversity and Equal Opportunity

Basic Approach

Since the Female Activation Support Group was established within the Personnel Department in July 2012, the Group has developed initiatives with the aim of establishing environments favorable to women based on the policy of making SMM a company where ambitious female employees feel motivated, are able to work dynamically, and gain a sense of personal growth through their jobs while demonstrating their full potential.

Moreover, in October 2015, we set up a Diversity Promotion Section within the Human Resources Development Department. This section is implementing initiatives aimed at reforming work styles and creating workplace environments favorable to diversity. These initiatives are aimed at all employees, but with a focus on providing support for participation by women and promoting employment of people with disabilities.

Establishment of Workplace Environments Favorable to Diverse Human Resources

Working Environments Favorable to Diverse Human Resources including Women

1) Promotion of awareness

Based on the training we provided up until FY2014, in FY2015 we held training for female employees and their managers and supervisors. Our objective in this training was to make female employees think of their careers with an eye to the future and have them learn about the importance of expressing themselves and the communication skills required to convey their thoughts.

In FY2016, we are rolling out new training drawing on the insights gained from this training.

2) Review of systems

As a result of reviews of systems conducted from 2013, it is now possible to choose a variety of working styles. These systems are being disseminated via the office organization, the in-house magazine and bulletin boards and utilization of them is being tracked. As a result, it has been confirmed that the use of systems needed in order to create a good balance between home and work have progressed.

3) Infrastructure placement

Infrastructure placement is also advancing because the working areas of women are being extended and women are being assigned to previously male-only workplaces. Consequently, even more in-depth developments in the environment are beginning to come about in the respective workplaces.

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



Women's career support seminar

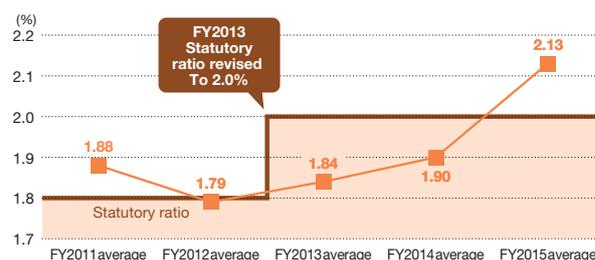
Working with the Disabled

Recognizing that human rights issues are a common global challenge, and that their resolution and improvement is a corporate social responsibility, SMM has operated the Committee for the Promotion of Respect for Human Rights to promote SMM Group-wide activities aimed at resolving human rights issues. In July 2014, the organization and functions of the committee were revamped to include promoting employment of people with disabilities and improving the disabled employee ratio. This was done through such means as developing new workplaces for people with disabilities, expanding the scope of the degree of disability eligible for employment, and collaborating with special schools aimed at regular hiring of new graduates. As a result, we

met the statutory ratio for disabled employees (2.0%) at the end of FY2014, and we further improved this in FY2015.

Furthermore, the Head Office area, which is leading the employment of people with intellectual disabilities, is also striving to ensure that there are projects to capitalize on the individuality and skills of people with disabilities, as well as offering training aimed at protecting the human rights of people with disabilities.

Disabled Employee Ratio (SMM non-consolidated)



Support for Elderly Employees

Since revisions were made to SMM's manager re-employment system in FY2013, we have rehired all employees over the age of 60 who wished to remain employed. With an increasing number of people making use of the system, we are reviewing suitable levels of treatment and systems that can contribute to raising their motivation.

Initiatives for Enhancing Work-Life Balance

A satisfying lifestyle leads to satisfaction at work, too. Based on this belief, SMM is making efforts to improve the work-life balance of employees. Efforts include strengthening, and promoting the use of, various systems. In addition to restricting long working hours and encouraging employees to take paid leave, we have expanded the short-time work system available during child care, and established a job return system, which is applied in case of resignation because of marriage, child care, etc.

We are also directing energy into enhancing the childcare leave system, elderly and nursing care systems, and our response to the Japanese Law for Measures to Support the Development of the Next Generation. In advancing these efforts, we make full use of labor-management councils for surveying current conditions and drafting specific provisions, and we incorporate council results in system revisions.

Respect for Human Rights

Basic Approach

As well as being a corporate social responsibility, respect for human rights is something that should be valued for every single individual as a human being. The human rights of not only SMM employees but also stakeholders must be protected equally. In order to achieve this, SMM provides the

necessary awareness training to all employees, in addition to implementing proper monitoring through the establishment of human rights hotlines, the conduct of human rights due diligence, and by taking prompt and appropriate action when a human rights problem is confirmed.

SMM Group Policy on Human Rights

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

1. The SMM Group will comply with domestic laws and international standards relating to human rights and encourage persons within the Group, as well as outside parties over which the Group has influence, to work toward the realization of a society without human rights infringements.
2. The SMM Group will not allow harassment or other incidents of a discriminatory nature within the Group and will make efforts to prevent such incidents from occurring among outside parties over which the Group has influence.
3. The SMM Group will not engage in child labor or forced labor and will make efforts to prevent child labor or forced labor from occurring among outside parties over which the Group has influence.
4. The SMM Group will show other considerations to human rights in addition to items 1-3 above within the Group and in relationships with outside parties over which the Group has influence.
5. The SMM Group will establish appropriate measures and procedures for responding to human rights problems should they occur.
6. The SMM Group will identify and stay aware of the current and changing state of human rights in the world, as well as the impact of corporations in the area of human rights, and carry out awareness-raising activities and other necessary measures on an ongoing basis.

Enhancing Management of Human Rights

The SMM Group is constructing a Group-wide human rights management program that incorporates a human rights due diligence framework based on the UN's Guiding Principles on Business and Human Rights. We aim to build a structured system to prevent and avoid complicity in either direct or indirect violations of human rights, and to make possible more appropriate responses, including relief, to concerns that arise. The system will apply to Group employees both inside and outside Japan, persons in the supply chain who may be affected by the Group's activities, and local residents in the areas in which the Group conducts its business activities.

A human rights management program for employees began full-scale operation in FY2014, and a simultaneous survey was conducted at all facilities including group companies. The results of the survey were deliberated on by the Committee for the Promotion of Respect for Human Rights, which includes the General Managers of the Personnel Department, the Legal & General Affairs Department, the Safety & Environmental Control Department, and the Internal Audit Department as well as an outside attorney-at-law in an advisory capacity. As a result of these deliberations, improvements have been promoted at sites where problems with activities were identified. In addition, the human rights management program will continue to be promoted Group-wide. With regard to the human rights management program for the supply chain, we carried out questionnaires for suppliers in Japan and overseas and conducted on-site

inspections at four suppliers.

In FY2015, there were no human rights-related discrimination incidents and no human rights-related complaints.

Human Rights Seminars

Human rights seminars are held regularly and include lectures, education on human rights risks for employees scheduled to be posted overseas, and education as part of promotion training. The primary objectives are to deepen awareness of potential human rights issues in the workplace and to prevent them from occurring. These seminars are held not only for officers and managers, but also for a broader range of employees. In addition to these seminars, we hold training on human rights, including the SMM Group Policy on Human Rights, for all employees—including those at group companies—every December during Japan's Human Rights Week. Going forward, we intend to further enhance human rights education.

Preventing Harassment

In order to prevent every kind of harassment, each workplace runs human rights training. Each business facility has established a contact person for sexual harassment and other incidents concerning human rights as well as appointing a harassment prevention officer. In FY2015, there was one incident of sexual harassment and three incidents of workplace bullying, and appropriate actions were taken.

Mental Health Care

Initiatives related to mental health care for employees include mental health care training by specialized institutions and health level self-checks. We have also established a health consultation system, which can be accessed at any time by employees and their families via interviews with specialists, telephone or our website. In addition, based on these systems, we are now able to comply with the implementation of stress checks and other measures, which became mandatory under the December 2015 amendment to the Industrial Safety and Health Act.

In FY2015, we implemented guidance to workplaces and

provided training on mental health for managers and supervisors as well as regular employees based on the results of self-checks. A "trial return to work" system and other measures were implemented to help employees who have been on long-term leave due to a mental disorder settle back into work.

We have also focused efforts on training in-house mental health care specialists, and 28 people had obtained industrial counselor qualifications as of March 31, 2015.

In FY2016, we will continue to enhance mental health care initiatives and strive to maintain and improve the mental health of employees.

Respect for the Human Rights of Indigenous People and Local Citizens

Starting/Ceasing Operations

When making investments or equity contributions, the SMM Group uses a project risk check sheet for committees, primarily the Management Committee, to investigate risks that include not only human rights issues such as discrimination, forced labor, and child labor, but also the political system, economy, law and order, locally-specific diseases, labor issues, religious restrictions, and the impact on the local community. In FY2015, seven investment projects were proposed to the Management Committee, none of them fell under the scope of human rights issues. Continued monitoring of human rights issues is conducted after the investment or equity contribution, for example through board meetings of the company invested in. If any issues should arise, prompt action is taken after clarification of the cause.

Relocation of Local Citizens for Development

There are occasions when we inevitably have to ask local citizens to relocate to make way for development of the mine or the construction of associated facilities. On such occasions, we seek the approval and understanding of local citizens and

offer alternative land. For the Hishikari Mine, three households in total relocated from 1983 to 1989. No relocations took place for development of the Pogo Gold Mine. For THPAL, we asked 41 households in areas to be affected by the plant's construction to relocate. A relocation plan was formulated in line with the World Bank's Operational Directive on Involuntary Resettlement. With the agreement of all citizens, the relocation was completed by December 2010.

Prevention of Child Labor and Forced Labor

We gain knowledge of current conditions through questionnaires sent out to group companies in Japan and overseas. No reports of child labor or forced labor were received during FY2015.

Artisanal and Small-Scale Mining

As of July 2016, there were no cases of work environment issues relating to artisanal and small-scale mining (ASM) in regions where SMM operates, nor did SMM have any programs for involvement in ASM.

Initiatives Relating to Conflict Minerals

Resources that are mined in the Democratic Republic of the Congo and surrounding countries lead to human rights abuses such as forced labor and child labor, and armed groups use such resources as a source of funds, thereby expanding and prolonging conflicts. The Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act), which includes provisions on conflict minerals disclosure with the aim of cutting off the source of funds for armed groups in the Democratic Republic of the Congo, became law in the United States in July 2010. Under this Act, corporations listed on American stock exchanges are obligated to report to the Securities and Exchange Commission (SEC) on their use of "conflict minerals" (gold, tin, tantalum and tungsten) originating in the Democratic Republic of the

Congo or any of nine surrounding countries.

The SMM Group clearly states in the SMM Group Policy on Human Rights that it works to prevent human rights violations such as child labor and forced labor. To give assurance that the SMM Group's gold smelting and refining business does not make use of conflict minerals that may lead to human rights violations or aggravation of conflicts, we began implementing the LBMA Responsible Gold Guidance* issued by the London Bullion Market Association (LBMA) in FY2012, and undergo an annual audit by a third party organization.

* LBMA Responsible Gold Guidance: Guidance issued by the London Bullion Market Association which sets strict standards to prevent widespread organizational violation of human rights, ensure transactions are not used to fund conflicts or terrorism, and prevent money laundering.

Occupational Health and Safety

Basic Approach

In its CSR Policy, SMM states “According safety the highest priority, SMM shall provide safe, comfortable working environments and seek to eliminate occupational accidents,” and we are aiming to achieve this.

Therefore, the Vision for 2020 depicts “a company that accords safety the highest priority and provides comfortable working environments,” stipulating concrete targets.

We promote safety-related activities under a basic policy to nurture a safety culture and ensure thorough safety management through the line of command.

Moreover, providing comfortable working environments includes ascertaining levels of dust, noise, specified chemicals and organic solvents, making necessary improvements to those environments, and enhancing occupational health management.

Ensure safety

- Make our final target zero occupational accidents overall
- Reduce occupational accidents to three or fewer per year by 2020 and establish frameworks for achieving this target (Japan)
- Halve the frequency rate of occupational accidents by 2020 (Worldwide)
Reduce the frequency rate from 1.28 (CY2011) to 0.60 (CY2020)

Provide comfortable working environments

- Provide healthy working environments
 - (1) Achieve zero new cases of employees with occupational disease (requiring treatment) (Worldwide)
 - (2) Achieve zero Control Class 3 workplaces (excluding locations stipulated in guidelines, etc.) and reduce Control Class 2 workplaces (Japan)¹
- Implement other working environment improvements

1. Changed in 2016 from “Achieve zero Control Class 3 workplaces (excluding locations stipulated in guidelines, etc.) (Japan)”

Occupational Health and Safety Management Framework

The executive officer supervising the Safety & Environment Control Department is responsible for matters relating to health, safety and the environment, and coordinates health and safety management for the SMM Group. Also, each sector of our Head Office organization and each workplace will have assigned a health and safety officer in charge of functional coordination relating to health and safety issues.

The general manager of each workplace is appointed health and safety manager for that workplace, as provided for by the Japanese Industrial Safety and Health Act. Health and safety management is advanced within the organization according to instructions given by the health and safety manager of each workplace.

Constructive discussions on ways to improve health and safety in the workplace take place during meetings of the Occupational Health and Safety Committee comprising representatives from both labor and management.



One of the annual Occupational Health and Safety Committee meetings



Holding improvement case study presentations, lectures, and training intended to be implemented at each workplace

Assuring Health and Safety

Health and Safety Activities in Business Sites

Safety-related activities in CY2015 were conducted with a focus on the following measures:

- (1) Priority-oriented accident risk identification
- (2) Strengthening residual risk² management
- (3) Strengthening education for less-experienced employees³
- (4) Further strengthening and enhancement of group education
- (5) Enhancement of safety management of contractors

To raise the effectiveness of measures, we implement safety activities in conjunction with education through group activities with content from the *Anzen Dojo*. Safety activities are also advanced by employees of the SMM Group together with contractors.

Health-related activities during 2015 were pursued under the following themes:

- (1) Steady implementation and continuation of work environment improvements
- (2) Protective equipment usage management and maintenance
- (3) Enhancing awareness of, and communication about, the dangers and hazards of chemical substances
- (4) Compliance with stricter work environment regulations relating to chemical substances
- (5) Providing care as part of health management (e.g. health guidance for employees diagnosed with an illness)

Under a labor-management agreement concerning dust, visual display terminals (VDT), lead and noise, procedures for preventing illness and taking action when illnesses occur are set forth.

Chemical substance regulations have been strengthened, and refractory ceramic fibers were designated as Specified Chemical Substances in 2015. We held briefings about these fibers for engineering sections on legal compliance and informed departments involved. Going forward, we will obtain information on revisions of laws and regulations that will continue to toughen, including adding risk assessment obligations and expansion of chemicals subject to the risk assessment.

2. Residual risks: Risks remaining after measures are implemented

3. Less-experienced employees: Employees with less than five years' experience

Hazard Simulation Courses (Activities at the Oji-kan Facility)

The SMM Group's practical training facility, the Oji-kan, commenced a range of hazard simulation courses in January 2010. By December 30, 2015, a period of roughly six years, a total of 7,000 Japan-based SMM Group employees and 3,600 contractor employees had undergone training there.

To make it possible for all employees at each of our business sites, including top management, to take part in training at the same time, the facility has been conducting on-site practical hazard simulations since July 2013. In 2015, 1,200 people took part in on-site courses. Workplaces also use the Oji-kan's facilities for their own independent safety training courses.

Even overseas workplaces make good use of the Oji-kan. Every year, around 15 employees from Coral Bay Nickel Corporation (CBNC) and THPAL in the Philippines visit the facility to take part in hazard simulation courses. The Pogo Gold Mine in Alaska, the United States also sends a number of officers each year to tour the facility and apply what they learn to safety activities at the mine.

Tours of the Oji-kan facility are also actively provided to other companies and organizations. Every year, a large number of them come to visit the facility to exchange information.



On-site hazard simulation—
Chain entanglement hazard simulation

SMM Anzen Dojo

Our Safety & Environment Control Department has held the SMM *Anzen Dojo* (lit. safety training center) since 2013 to enhance the risk sensibility of all SMM Group employees, provide hazard simulations, and to bring up the level of safety activities at each workplace. The *Anzen Dojo* trains personnel to become safety experts and leaders at their respective workplaces. These safety leaders, with knowledge and sensibility, return to their workplaces to take part in planning, and running education and activities about safety for all workers, in small groups. This makes it possible for workplace safety activities to be implemented more effectively and efficiently.

In 2015, the *Anzen Dojo* was held twice, and safety leaders learned about intrinsic safety for equipment, how to prepare an Ikisatsu Diagram,⁴ basic communication skills, and decline in physical functions due to aging and countermeasures. This completed the six-session *Anzen Dojo* program, and 60 safety leaders from 49 workplaces completed the whole course.

In 2016, we will run seven-hour courses in spring and fall to upgrade and maintain the level of current safety leaders in addition to holding a short *Anzen Dojo* program with three sessions aimed at supplementing and increasing the number of safety leaders.



Anzen Dojo training (seven-hour
spring course)

4. Ikisatsu Diagram: A technique for investigating the underlying causes of an accident

Incidence of Occupational Accidents

The total number of occupational injury accidents occurring at workplaces in Japan was an all-time best of eight (frequency rate: 0.62) in 2015, and there two lost-time accidents, which was also lower than in 2014.

There were seven injury accidents (frequency rate: 0.96) at overseas workplaces. The frequency rate for Japan and overseas was 0.74, and no fatal accidents occurred. There were no new instances of occupational illnesses at workplaces either in Japan or overseas. Note that this data was collected during the calendar year, January to December 2015.

Data on Occupational Accidents in Japan

Year	Item	SMM non-consolidated	Group companies	Total
2015	All accidents	3	5	8
	Fatalities	0	0	0
	Lost time accidents	1	1	2
	Working days lost	2	76	78
2014	All accidents	5	8	13
	Fatalities	0	0	0
	Lost time accidents	1	3	4
	Working days lost	50	118	168
2013	All accidents	5	11	16
	Fatalities	0	0	0
	Lost time accidents	0	1	1
	Working days lost	204	97	301
2012	All accidents	3	8	11
	Fatalities	0	0	0
	Lost time accidents	0	3	3
	Working days lost	9	172	181
2011	All accidents	5	11	16
	Fatalities	0	0	0
	Lost time accidents	1	4	5
	Working days lost	313	60	373

- Scope: SMM, subsidiaries in Japan, Nippon Ketjen Co., Ltd., N.E. Chemcat Corporation, and the Mine District Div. of Mitsui Sumitomo Metal Mining Brass & Copper Co., Ltd.
- No fatal accidents have occurred at SMM or any group companies since 2004.
- Working days lost: The number of working days lost from the day after the occurrence of an accident. However, for accidents resulting in physical disability, the working days lost are considered labor days lost.

Initiatives to Fortify Accident Countermeasures

Although the number of accidents in the SMM Group has been falling over the long term as a result of various safety-related activities, accidents are being repeated due to similar unsafe activities and unsafe situations, thus requiring initiatives to be improved if we are to achieve our goal of halving the 2015 number.

In 2016, in addition to taking even stronger leadership on safety and health by the general manager of each workplace and effective utilization of safety leaders, we will continue to implement safety-related activities in line with the role of each level of our organization to nurture a culture of safety.

Stakeholder Communication

Engagement with Employees

Basic Approach

The basis of employee engagement is that all employees can be proud to work at Sumitomo Metal Mining Group. In order to achieve this, SMM implements a variety of efforts including social contribution through its core business, providing a workplace environment where each individual can work dynamically, establishing human resources development

programs, and ensuring respect for diversity and human rights. The top executives of each division have the fundamental responsibility for promoting activities to identify and enhance employee engagement. However, SMM as a whole conducts regular employee awareness surveys to assess the situation as well as pave the way to improving activities.

Establishment of a Workplace Environment to Enable Working Dynamically

Employee Awareness Survey

To promote communication with employees, who are important stakeholders, and create a better company and workplaces, SMM carries out employee awareness surveys through a specialized outside organization.

Following on from the first survey in 2010, a second survey was conducted in March 2013. The aims of the survey were to quantitatively determine how employee awareness had changed over the three years since the last survey and what kind of awareness employees possessed as they went about their jobs, and then to apply that knowledge to the development of measures for creating a better company and workplaces.

As with the previous survey, all of the roughly 3,000 employees of business locations directly controlled by SMM were surveyed. There were a total of 118 questions, comprising the same 113 questions asked in the previous survey, and five additional questions relating to women's careers, which we are currently focusing on. The response rate was 97.0%, higher than the previous survey, which suggests a high level of interest in the survey among employees.

Survey results were reported to top management, general managers of Head Office divisions, general managers of business divisions, and workers' unions over eight feedback briefing sessions. Additionally, feedback seminars were held at seven directly-controlled business locations. Targeting management at each facility, these seminars were used to disclose data for each location, ascertain outstanding issues for the location, and think about measures for creating better workplaces. For employees, survey results and an explanatory article appeared in the in-house bulletin, *Ibuki*, in November 2013.

Measures are being implemented at each location based on survey results and while engaging in communication with employees. The results of the latest survey are also being used as a reference in considering measures for promoting CSR in-house.

Labor-Management Relations

Workers' unions formed at SMM branch offices and facilities of SMM Group companies in Japan carry out activity under the umbrella of the Federation of Sumitomo Metal Mining Workers Union (Sumikoren). All regular employees join workers' unions in accordance with union shop agreements. Overseas, three consolidated subsidiaries have workers' unions (excluding Chinese labor unions). As of March 31, 2016, around 23% of employees belonged to workers' unions at overseas consolidated subsidiaries. In order to build up healthy labor-management relations based on mutual trust, in which the company and workers' union mutually respect the other party's position, labor-management council meetings, or labor-management discussions, are held at least once a month with workers' unions at each branch office or group company. The Central Labor-Management Conference, a meeting between SMM management and executives of Sumikoren workers' unions, is held once a year around March.

We also implement questionnaires to ascertain conditions relating to the establishment of workers' unions overseas and actually visit overseas business facilities in order to observe the labor-management situation in those locations and to exchange information. Various committees comprising members from labor and management are set up to tackle matters deemed important to both sides so that the views of both labor and management can be reflected in revisions, or the formulation of new systems. In the case of business reforms expected to have a significant impact on employees, considerations include providing sufficient advance notice. As a result of these efforts, no plant closures due to strikes or other action were reported during FY2015 within the entire SMM Group—both in Japan and overseas—and there were no serious infringements upon freedom of association.

Matters discussed with Sumikoren* (during FY2015) include:

- Discussions relating to human resources system
- Discussions relating to welfare programs

* Sumikoren: The SMM workers' union

Engagement with Local Communities

Basic Approach

When commencing and continuing operations in a certain area, the SMM Group seeks to coexist with the local community and to make a contribution to community development. Therefore, in addition to establishing

opportunities for regular communication with the local community and creating an environment that promotes mutual understanding, SMM actively implements a variety of efforts to integrate with the community.

Promotion of Mutual Understanding and Contribution to Local Development

Involvement with Local Communities

Agreements are entered into with communities in line with the law at the mines, smelters and refineries in which the SMM Group has more than a 50% interest.

At the Hishikari Mine, the Pollution Prevention Council meets twice a year. In FY2015, budget briefings were held in April and September.

At CBNC, a Community Relations Section (COMREL) has been established. This section works to stimulate and strengthen management of SDMP activities. By means of Information Education and Communication (IEC) activities, the section is regularly sharing information with 22 barangays, or villages, in the Rio Tuba area, including the 11 impact barangays. Through this activity, it obtains understanding for the SMM Group's activities, paving the way to stable operations.

CBNC also set up the COMREL Information Center within the town site in August 2014. By having COMREL for both CBNC and RTN in the same building, access for local residents was made easier, making interchange with them, such as dialog and explanatory meetings, more efficient.

Similarly, THPAL communicates with 14 barangays, including impact barangays in four nearby locations, as part of IEC activities. In addition to this, it also carries out diverse activities such as the construction of local healthcare, school and other facilities and activities for children through SDMP and CSR. It also provides support for and builds positive relations with indigenous people through focused efforts. In 2014, a project to provide indigenous people with a supply of potable water was launched.

During the approval process for operations at the Pogo Gold Mine, the Alaskan government provided explanations about the project to 13 villages inhabited by indigenous people in an area with a radius of more than 200 kilometers around the Pogo Gold Mine, particularly in the Tanana River basin, and G2G Consultation was held to collect opinions. In addition, since operations began, there has been regular communication with local people. In 2015, four sessions were held to disclose information to stakeholders,

including local residents, and the status of operations was explained. There have been no pending issues resulting from complaints from indigenous people in the areas surrounding the mines, smelters and refineries in which SMM has more than a 50% interest.

There was one complaint ongoing from FY2014 and two new complaints, making a total of three complaints² to the SMM Group about community impacts, and appropriate actions were taken.



Distribution of emergency packs to local children for use in the event of accidents



Project to supply potable water to an elementary school

1. RTN (Rio Tuba Nickel Mining Corp.): A CBNC supplier mining company that mines nickel oxide ore that is a raw material in refining.
2. Three complaints: The number of complaints received by the SMM Group, regardless of which party was responsible.

Communication with Shareholders and Investors

Basic Approach

SMM strives to carry out fair and understandable disclosure of information required by shareholders and parties thinking about purchasing SMM shares. Information is made available on the SMM website, including business activities, earnings, financial data, and outlines and progress updates of the 3-Year Business Plan and other growth strategies. The Report for Shareholders is also sent out to shareholders twice a year to report on

financial results and the progress of business strategies. We have also formulated an IR policy to serve as a set of guidelines for adequate engagement in IR activity and have published it on the SMM website. We will continue working to build and maintain a system of business administration so as to remain a company that has the trust and meets the expectations of its stakeholders, including shareholders.

Ongoing Dialogue with Shareholders and Investors

Investor Relations

SMM holds twice yearly Business Strategy Progress Briefing Sessions in which the president provides explanations to institutional investors and securities analysts in person following the announcement of full-year and second quarter results. In February 2016, we also held a briefing session to coincide with the release of our 3-Year Business Plan. The PR and IR Department also holds earnings briefings via teleconference four times a year on days that quarterly results are announced. Documents for these briefings are made available on the same day via the SMM website.

In addition, a total of around 390 individual meetings with institutional investors and securities analysts were held in Japan and overseas in FY2015 to provide a direct communication channel.

SMM participated in a conference organized by Japanese securities firms, and the president explained the 3-Year Business Plan and SMM's strategy to approximately 80 institutional investors from Japan and overseas. The president also pays visits to overseas institutional investors to explain the management policies and governance of SMM and receive feedback.

Communication with Individual Investors

SMM has established a section for individual investors in the company website and works to disclose IR information. The website provides data that provides a better understanding of our business, and also includes information such as materials aimed at institutional investors and Annual Reports.

We also respond to a variety of telephone and email inquiries from individual shareholders, which is a valuable opportunity for communication. In addition, we asked individual investors to complete a questionnaire in *The Report for Shareholders* issued in December 2015 and received a large number of responses. The opinions received will serve as a reference for SMM's future IR activities.

Framework to Utilize Feedback from Shareholders and Investors

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



Business Strategy Progress Briefing Session

General Meeting of Shareholders

The General Meeting of Shareholders is an opportunity to engage in communication with shareholders. SMM aims for a general meeting that shareholders can follow easily, using methods such as incorporation of video into presentations on business performance. Notices of meetings and reports are available on the SMM website.



SMM IR website <http://www.smm.co.jp/E/ir/>

Communication with Other Stakeholders

Basic Approach

SMM believes that the transparent, timely and appropriate disclosure of information is a corporate responsibility, and we try to disclose information impartially to all stakeholders. SMM actively publishes current activities and plans and

policies for the future via the SMM website. The aim is mutual understanding through communication so that business is promoted in a shared direction with all of our stakeholders.

Promotion of Mutual Understanding with Other Stakeholders

Communication with NGOs

SMM exchanges views with international environmental NGO Friends of the Earth Japan (FoE Japan) on a regular, ongoing basis about the quality of water in rivers in the area of the plants of Coral Bay Nickel Corporation (CBNC) on Palawan Island and Taganito HPAL Nickel Corporation (THPAL) on Mindanao Island in the Philippines.

By minimizing the impact of plant construction and operation on the surrounding environment, with the understanding and support of local residents, CBNC and THPAL are working to coexist with the natural environment. CBNC has also been promoting rehabilitation efforts that will turn its Tailings Storage Facility No. 1, a tailings dam no longer in use, back into a natural state.

SMM explains these local activities in detail and continues to

advance necessary improvements while listening to opinions and arguments put forward by FoE Japan.



Revegetation at CBNC tailings dam

Involvement with the International Community

ICMM Membership

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

The SMM Group reflects the ICMM's 10 Principles in its CSR Policy and issues reports in line with the GRI guidelines, as is required of all member companies. As a corporate member, we also carry out a variety of initiatives, including ensuring conformance with position statements adopted for the 10 Principles.

SMM's three core businesses are mineral resources, smelting and refining, and materials. In the mineral resources and smelting and refining businesses, our aim is to become a world leader in the non-ferrous metals industry, and so we are pushing ahead with mineral exploration activities overseas and bolstering investment in existing mines. Seeking greater opportunities for operating on the global stage, SMM hopes to contribute to the development of the mining and metal refining industries in harmony with society.

Declaration of Support for the EITI

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

It is sometimes the case in resource-rich countries, where societal and economic development is often stagnant, that revenues generated by resources are not invested effectively in the country's development, leading instead to problems such as poverty, conflict and corruption. These are global issues, and advanced nations and corporations are being called upon to play a part in resolving them.

SMM agrees with the objectives of the EITI and supports its activities. As of May 2015, among countries in which SMM conducts business, Indonesia and Peru were compliant, and the United States, the Philippines and the Solomon Islands are EITI candidate countries.

* Extractive Industries Transparency Initiative <http://eiti.org/>

Compliance

Basic Approach

The corporate activities of the SMM Group are founded upon principles of compliance. Though compliance is usually construed as applying to only laws and regulations, the SMM Group goes further, viewing compliance as the fulfillment of social and moral duties as a member of society through sound corporate activities. In 2000, the year after the JCO criticality accident¹ of September 1999, the SMM Group formulated a Corporate Reform Plan and embarked on a new beginning with three initial priorities:

1. **Reconfirmation and Thorough Execution of the Corporate Philosophy;**
2. **Reinforcement of Corporate Organization;**
3. **Reform of Corporate Culture.**

Based on the above, in 2004, we established the SMM Group Corporate Philosophy and the SMM Group Code of Conduct to be applied throughout the SMM Group. The Code

of Conduct² was revised in 2008 in line with the full-scale launch of our CSR activities and revised again in 2015 for responding to globalization and strengthening of CSR activities to further advance initiatives steadily put in place based on our long-term vision articulated in the 2012 3-Year Business Plan.

We put compliance at the top of 17 items in the Code of Conduct, and set forth, not only as abidance by laws and regulations, but also by social norms, the following:

- We will comply with foreign and domestic laws and rules, and conform to social norms.
- We will never under any circumstances commit an infraction of the law or act counter to social norms, even if doing so would seem to be in the company's interest.

Compliance Management and Improvement

Compliance management is performed according to our basic compliance regulations. We have established the Compliance Working Group under the CSR Committee to promote and improve compliance management. The Compliance Working Group provides and exchanges information, discusses policy and key measures concerning the promotion of compliance to the SMM Group.

In FY2015, the Compliance Working Group convened and confirmed the following.

1. Compliance monitoring

In FY2015, Taganito HPAL Nickel Corporation (THPAL) was issued with a notice of violation of the Philippine Clean Air Act (PCAA) Enforcement Ordinance by the Environmental Management Bureau (EMB) of the Philippines and fined based on a Presidential decree due to a hydrogen sulfide leak. In addition, Peru's Ministry of Environment disclosed the name of Sumitomo Metal Mining Peru S.A. for failing to restore exploratory drilling sites within the license deadline. Restoration of sites has already been completed. Aside from these cases, there were no major violations of laws or regulations relating to products and services, including competition laws.

2. Review of compliance training

The Compliance Working Group confirmed that key matters related to compliance were made known to employees through a range of various training programs, including the fact that the Sumitomo Business Spirit, SMM Group Corporate Philosophy, and Code of Conduct require ethics-based conduct and decision-making that go beyond abidance by the laws and regulations.

Also, in order to prevent serious violation of the law from occurring, we instituted the following company regulations, promoting compliance.

- Regulations on insider trading prevention and information management
- Regulations on the safeguarding of personal information
- Export administration regulations
- Regulations on the management of confidential information, etc.

Speak Up System

In situations where problems or doubts under the SMM Group Code of Conduct occur, and consultation with superiors fails to bring forth an appropriate response, employees are able to use the Speak Up System to directly report the matter to: (i) in-house liaisons which are the general managers of the Legal & General Affairs Department, the Safety & Environmental Control Department, and the Internal Audit Department; or (ii) outside liaisons which are designated attorneys. The source of the information is always kept secret and if, for any reason, the informant is unfairly treated, the person who initiated the unfair treatment will be punished appropriately.

In FY2015, there were 10 cases in which the Speak Up System was used. These comprised: five cases regarding employment management, salaries, and recruitment, three cases regarding the work attitude of supervisors, one case regarding safety management, and one case regarding worksite management. These cases were all handled properly.

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

2. The SMM Group Code of Conduct can be viewed on p. 91. In the 2015 revision, we clarified the need to comply with competition laws and laws against bribery.

Compliance Seminars

The SMM Group has been holding annual “compliance conferences” every year since 2001, which give employees an opportunity to reaffirm their basic knowledge of compliance and learn about the latest legislative changes. After deliberation on the objectives and structure of these conferences, the Group now also implements “compliance seminars” for the senior management of SMM and group companies to ensure the implementation of the Code of Conduct and compliance with related laws and regulations.

In compliance seminars, participants not only acquire knowledge of laws and regulations but also carry out group work on their own initiative to share issues for ensuring compliance as an organization and the ideals for senior management with the primary aim of putting the knowledge acquired through the seminars into practice in their own workplaces.

In addition to seminars, we repeatedly provide guidance on the implementation of the Code of Conduct and compliance with laws and regulations, and CSR awareness in a combined manner through everyday work.

Participants of Compliance Education (FY2015)

	Type of seminar	Target	Participants
Compliance education	Compliance seminar (Basic course)	Newly-appointed general managers of divisions and group company officers, general managers of head office divisions, heads of branches and general managers of district divisions and plants, and managers of general affairs sections	41
	Compliance seminar (Advanced course)	General managers of business divisions and administration departments, general managers of head office divisions, and heads of branches and general managers of district divisions, and presidents of subsidiaries in Japan, etc.	66
	Special seminar for group company presidents	Group company presidents (35)	79
	Seminar for group company officers	Group company officers (44)	
	Group seminar for new employees	New management track employees and normal track employees in the Head Office area	33
	Seminar for newly promoted S-class employees	Employees newly promoted to S-class	30
	Seminar for newly promoted E-class employees	Employees newly promoted to E-class	57
	Seminar for newly promoted section managers	Employees newly promoted to section manager	19
	Secondary training for mid-career employees	New mid-career employees	2
	JCO Study Center training	All SMM Group employees	713
	Compliance seminar for section managers/senior staff at sites	Personnel at section manager/senior staff level providing guidance on compliance at each division/group company	33

• Seminar attendees also included those from our equity-method affiliates.

SMM Group Code of Conduct

All officers (including executive officers) and staff (including fixed-term and temporary employees) shall, in accordance with the corporate philosophy of the SMM Group, comply with the following Code of Conduct. Officers in particular shall, in reflection of their position and responsibilities, exercise strict self-discipline, set an example in carrying out the Code, and educate employees to honor and strictly obey the Code in full.

1. Compliance: Abidance by Laws and Rules

- We will comply with foreign and domestic laws and rules, and conform to social norms.
- We will never under any circumstances commit an infraction of the law or act counter to social norms, even if doing so would seem to be in the company's interests.

2. Respect for Individuals

- We will accept diversity and respect the individuality and rights of people.
- We will never violate human rights, engage in discriminatory conduct, or contribute to such conduct.

3. Assurance of Health and Safety

- We will give highest priority to ensuring the physical health and safety of all persons affected by our operations.

4. Development of Human Resources

- We will strive not only for personal self-improvement, but also to nurture successors through systematic training and by providing various opportunities in the course of work.

5. Risk Management

- We will strive to identify risks, prevent their occurrence, and if risks occur, minimize the effects.

6. Adherence to a Progressive Stance

- We will approach our jobs with a positive and progressive attitude suitable to the creation of technologies and systems in the vanguard of changing times.

7. Respect for Teamwork, Promotion of Good Communication

- We will place high value on teamwork, in the form of cooperation both with other organizations and with fellow workers.
- We will strive to create a cheerful and broad-minded corporate atmosphere conducive to the smooth transfer of required information and the timely performance of reporting, liaison and consultation.

8. In Harmony with Society and Local Communities

- As members of society, we will participate in social contribution activities in accordance with our personal beliefs.
- We will strive toward a harmonious and mutually beneficial relationship with local communities.

9. Separation of Corporate Business and Personal Affairs

- We will at all times conduct ourselves based on sound judgment, and make a clear distinction between corporate business and our personal affairs.

10. Collection, Management and Usage of Information

- We will collect information swiftly, properly and lawfully, manage it appropriately, and use it effectively.
- We will utilize information acquired in conjunction with corporate business expressly for that purpose only, and will not leak such information to any third party.

11. Handling of Intellectual Property

- We will nurture and maintain conscious recognition of the importance of intellectual property as a vital asset of the Group, and strive toward the creation of such property.
- We will strive to properly protect and effectively use all corporate intellectual properties; we will also respect intellectual properties of other parties.

12. Assurance of Quality

- We will continuously improve quality management systems and provide products and services that satisfy customers.
- We will enhance technologies and seek to engage in manufacturing that takes into account customers' safety and their environment.

13. Stance toward Performance of Sales and Purchasing

- We will comply with competition laws and conduct sales and purchasing activities based on fair competition.

14. Stance toward Entertainment and Gifts

- We will entertain and present gifts to others, and accept entertainment and gifts, within the proper limits of both the law and social acceptability.
- We will comply with laws against bribery and will maintain healthy and proper relationships with government and political organizations.

15. Severance of Relationships with Socially Disruptive Forces

- We will staunchly eliminate socially disruptive forces and have no relations whatsoever with them.

16. Concern for the Global Environment

- Taking into consideration climate change and biodiversity, we will act in a manner enabling us to contribute to the resolution and/or improvement of resource, energy and environmental problems of global scale.

17. Attitude in the Performance of Global Business Activities

- We will strive to interact with people in the countries or regions where we undertake business and engage in conduct that respects local culture and practices as well as globally accepted norms and their spirit.

Risk Management

Basic Approach

After seriously reflecting on the JCO criticality accident in 1999, with risk management (RM) as a crucial part of efforts to strengthen corporate structure, SMM established an integrated risk management system (RMS) for the entire SMM Group in order to prevent another major accident.

The RMS is comprised of the Six Principles,* including, for example, thorough compliance. We are convinced that cementing the RMS in place and that ensuring initiatives continue are mandatory for business continuity. Furthermore, RM itself is positioned as an activity that all employees

are to pursue daily, following the lead of top management. Subsequently, we added the provision “We will strive to identify risks, prevent their occurrence, and if risks occur, minimize the effects” in the SMM Group Code of Conduct applicable to officers and staff, in order to ensure that RM initiatives are a guide for the actions of our employees.

* Six Principles: (1) Compliance is the foundation, (2) The organizational leader confronting the risk is the responsible party, (3) Awareness of risk must be shared among all parties involved, (4) Adopt an RM approach in daily work, (5) Recognize that risks can occur, and (6) Coordinate risk responses with other management systems

Risk Management Framework

The risk management framework and responses to risk occurrence are stipulated in the Risk Management System Regulations and the Crisis Management Regulations, and are to be employed on a daily basis.

RM is supervised by the SMM president, who formulates RM policies each fiscal year. Promotion and monitoring of the risk management matters of the SMM Group overall are coordinated by the Risk Management Working Group under the CSR Committee. Specifically, the WG carries out reviews, etc. of risk responses that require Company-wide action. These include reviews related to fundamental RMS initiatives, reviews of annual RM policies, management of the progress of RM activity plans, and efforts to boost awareness of RM.

RM is pursued while taking into account the status quo in each division and at each work site, with respective general managers formulating RM activity plans or RM execution outlines. Moreover, an RM Promotion Officer is designated in each division.

This officer promotes RM in the division or work site under his or her jurisdiction. RMS activities include risk assessments, identifying and registering major risks, RM internal audits, RM patrols, revising approaches during Risk Awareness Month, and promoting the PDCA cycle to prevent the occurrence of risks and mitigate them if they do occur. With regard to major risks that must be acted upon by the entire SMM Group (such as earthquakes and overseas terror attacks with massive projected damage should they occur), we have established a Crisis Management Framework.

The SMM Safety & Environment Control Department acts as a supervisory body for RM in the SMM Group and assesses and supports use of the RMS in divisions, at work sites, and at group companies. We are also making efforts on RM internal audit seminars and guidance for various forms of training, in addition to managing meetings of the RM Working Group and RM Promotion Officers, to ensure that RM activities are effective.

Principal Assumed Risks

At each work site, we revise the content of risk registries and identify new risks either at each inflection point in the course of business or during the annual Risk Awareness Month in September. This has brought to light the following principal risks to which we are paying attention.

Environmental destruction

Environmental risks comprise the largest proportion of the overall risks facing the SMM Group. In addition to the mining and non-ferrous smelting and refining businesses, any type of plant must recognize that atmospheric, water and soil contamination, among other types of pollution, can be expected due to equipment breakdowns, human error in operation, natural disasters, or other causes of hazardous substance leaks. We must take sufficient measures to prevent human and environmental exposure to toxic chemicals and other substances.

Occupational accidents

Safety mechanism deficiencies, unsafe behavior, operating errors, equipment defects, etc. can directly or indirectly cause employees to have accidents. Disasters can be particularly severe when explosions and fires occur.

Legal violations

Ignorance of legal requirements, insufficient awareness of compliance duties, etc. can cause legal violations. Violations that lead to the loss of certifications, as well as malicious violations, not only endanger the existence of the business itself, but also invite damage to the social credibility of the SMM Group.

Poor quality

Managerial errors and other factors during the product development process, manufacturing process, or before and after delivery can lead to supplying products that do not meet customer specifications, thereby causing considerable problems for customers and society. In particular, product incidents jeopardizing personal safety and quality incidents leading to recalls must be carefully avoided.

Natural disasters

Measures must be put in place in preparation for large-scale earthquakes, the tsunamis they spark, torrential rains or heavy snowfalls, or pandemics, among other risks based on the type of work, geography, and climate of each worksite. In recent years in particular, we have seen abnormal weather to an unprecedented degree, indicating that the effects of climate change must be taken into consideration.

Deteriorating security

Depending on the region in the world, we must consider the possibility of rioting and terrorism. Protecting the lives of employees is paramount and recognition of personal safety, preparations for worksite security, evacuation drills, requests for government assistance, etc. must be done on a daily basis.

Others

Other risks include those originating from moral misconduct, fraudulent accounting, information leaks, human rights issues, and malpractice.

Principal Initiatives

The FY2016 RM policy specified the objectives of “ensuring thorough, constant RM implementation by the entire organization, led by the top management of each business site and division, while further enhancing the RMS, reaffirming the Six RM Principles, and promoting individual work site initiatives.”

Responses to major risks and risks that confront all business sites cannot be advanced without the leadership of top management. Consequently, we resolved to further promote management driven by the organization’s top leaders in FY2016. Additionally, we moved forward with preparing the release of RM Guidelines clarifying ideal standards for business site general managers.

Responding to natural disaster risks

At each worksite, we put in place measures to respond to damage caused by torrential rains or heavy snow, landslides, earthquakes, and pandemics. We also carried forward previous initiatives, such as building revetments, strengthening buildings against earthquakes, stocking emergency food and water, and implementing response drills for the cases when risks arise. Furthermore, in recent years, we have worked to increase wastewater treatment volumes, install water storage tanks, and re-examine the emergency equipment kept on hand.

Implementing drills

Since it is meaningless if responses cannot be executed when risks occur, we are dedicated to training at each work site following the crisis management framework and emergency response guidelines. In FY2015, we offered workshop-based training where participants contributed ideas for the issues to discuss. The 48 workshops held across the SMM Group doubled the number of the previous fiscal year. Furthermore, we held 30 sessions combining workshops and hands-on, in-service training in order to add a “multiplier effect” to training. We are also starting to incorporate “blind scenario” training that fosters the

capacity for instantaneous judgment by varying the types of situations participants tackle. In order to elevate the level of training, the SMM Safety & Environment Control Department holds drill planning skills development courses and provides guidance that allows each worksite to select and execute drills based on their own objectives.

Revising fire and explosion risks

In light of the fires and explosions that have occurred in regions around the world, we inspected fire and explosion risk assessment conditions at every SMM Group work site in April 2015, while also revising the content of risk registries. By the end of October 2015, 41 fire risks and 35 explosion risks were added or updated. Going forward, we are dedicated to implementing emergency response training for these risks, while enhancing prevention, avoidance, and pre-mitigation measures.

Risk communication training

From these RM evaluations, we inferred that daily communication between general managers for each business site and subordinates is crucial for assessing risks, responding to risks, and responding in emergencies, that is to say, when risks occur. Thusly, we are holding training twice a year from March 2015, in order to provide opportunities to think carefully on ways to effectively gather information on potential problems and reflect on the roles of top management. Through these risk communication training seminars, we are laying the groundwork for the general managers of each work site to be able to create better workplaces.

RMS adoption at overseas business sites

Regarding overseas business sites, the SMM Group has promoted adoption of RMS with the help of overseas group companies that have RMS and with the business divisions having responsibility taking a leadership role. At worksites that have adopted RMS, we are using reference material from internal audit seminars in order to promote thorough awareness.



Risk communication training



Disaster drill at overseas business site (fire rescue training at THPAL)



Participation of the Pogo Gold Mine team in a rescue competition



A drill at CBNC for handling sulfuric acid leaks

Issues and Targets

The SMM Group’s RM is based on each business division and business site taking action independently. With regard to assessed and registered risks, we are continually working to mitigate risks, based on the PDCA cycle, following the RM activity plans formulated each fiscal year, and to make improvements by evaluating our actions and implementing further efforts. We are also working to bolster our emergency response capabilities by including drills in RM activity plans for cases assuming risks occur, and by evaluating the results of drills.

In recent years in Japan, the increase in damage by natural disasters has been striking. While recovery from disasters is expected, we understand that companies have a social responsibility to quickly restart interrupted business because of the urgent need for products and services by those who receive them even at the time of disaster. Consequently, we will continue to refine our business continuity plan (BCP) to ensure that it is formulated for swift, effective results. For instance, one of SMM’s mainstay products is cathode materials for secondary batteries. Since these materials are used in electric vehicles, it is extremely vital for our customers and for ourselves to continue stable

supply. To date, the Isoura Plant has been the only production base for cathode materials for secondary batteries. The Sumiko Energy Materials Naraha Plant (Fukushima Prefecture, Futaba County, Naraha Town) completed on March 24, 2016 allowed us to diversify the risk of interrupted supply.

At overseas facilities, the RMS is progressing to implementation following introduction, however, there are significant unabated risks of terrorism and employee kidnapping, among others. Consequently, it is paramount to strive for safe daily conduct and to take preventative measures, while not being negligent in continuing to conduct drills for when risks occur.



Isoura Plant



Sumiko Energy Materials Co., Ltd. Naraha Plant

Quality Control

Basic Approach

The SMM Group's core business consists of mineral resources, smelting and refining, and materials. In addition to manufacturing and selling metal ingots made from excavated and refined ore, we process metal ingots and other incidental substances, drawing out the potential of each individual material, and sell them as semiconductor material and advanced material. To improve the quality of such materials,

we established quality policies for each business division based on our company-wide quality policy. Further, through product safety and compliance with product-related laws and regulations, we manufacture products with superior safety, environment and quality levels that only our Group can provide thanks to an integrated production process from upstream ore excavation to downstream raw materials and products.

Company-Wide Quality Policy

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

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

SMM Quality Standards

SMM is committed to creating and operating quality management systems at each business site to reflect quality policies established by our business divisions.

In order to utilize the quality management systems at each business site even more effectively, the Quality Assurance Department compiled and issued the SMM Quality Standards in January 2016 as the SMM Group-wide ideal for quality control.

Going forward, based on the SMM Quality Standards, each business site will establish targets to be achieved each fiscal year in line with the circumstances to raise the quality control level. The Quality Assurance Department will also provide support by implementing twice yearly training for quality control officers at business sites so that they understand the background to the content of the SMM Quality Standards and take what they learned in training back to their business sites to raise the quality

control level independently. In addition, achievement of quality control levels will be confirmed through second-party audits.



SMM Quality Standards briefing session

Human Resource Development

To maintain consistent customer satisfaction in quality, it is necessary to nurture employees who can respond to ever changing demands and circumstances. Therefore, we are stepping up "minipro" improvement activities and small-group activities to firmly establish a culture in which employees identify and improve on-site issues independently, paving the way to organizational growth.



Small-group activities training

Raising the Standard of Total Quality

At the SMM Group, we accurately determine the effects of products and services on health and safety so that we can seek improvements through organized implementation and link management systems covering the environment (considerations

toward and improvements to local and global environments), occupational safety (safety of business processes) and quality (satisfaction from product use). Almost all our products are subjected to this integrated cycle to ensure the improvement of total quality.

Disclosure of Information on Products and Services

Most items in the SMM Group product lineup are supplied as raw or processed materials for use by customers for manufacturing. Information customers require in order to handle our products properly from safety and environmental perspectives, as well as information needed to enable them to supply final products, is basically communicated in product specifications at the time of contracting, during technical discussions and via product inspection certificates and SDS, based on prior and the latest information, proprietary knowledge and necessary studies.

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

We make sure that information utilized for the above is always appropriate through management systems, reviewing it based upon the latest technology, laws and regulations and demands from customers. In FY2015, there were no violations to laws or regulations regarding our products and services.

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

Information requiring disclosure	Applicable products/services
The sourcing of components of the product or service	All products/services containing substances requiring management under legislation while no such information requirement is addressed to our main products (raw materials and internally-processed materials).
Content, particularly with regard to substances that might produce environmental or social harm	All products/services containing substances requiring management under legislation
Safe use of the product or service	All products/services containing substances requiring management under legislation
Environmental/social harm from disposal of the products	All products/services containing substances requiring management under legislation

Communication with Customers

As for raising the level of customer satisfaction, first we will improve methods of measuring and evaluating customer satisfaction and then work to increase customer satisfaction through effective measures after accurately identifying the issues

Issues and Targets

All employees are aligned toward the objectives and future direction, and actively take part in reaching targets, so we are able to achieve quality that customers trust completely. This requires decisions and implementation based on facts obtained through external and internal communication. To ensure this is done, we will continue to implement initiatives to effectively utilize the quality management system through various activities based

Information Provided on Important Products and Services

- Content, particularly with regard to substances that might produce an environmental or social impact
- Safe use of the product or service
- Recycling and disposal of the product and environmental/social impacts

We also conduct surveys linked to life cycle assessments (LCA) for copper, nickel and zinc through substance-specific associations.

Methods for Providing Information

Provision of Information Relating to Specifications

We indicate product specifications requested by the customer on the order received sheet to provide necessary information to them.

Provision of Information Relating to Chemicals

The SMM Group uses SDS, etc. to provide information on chemical substances contained in products, complying with regulations for chemical substances and usage, regarding health and safety.

Other Initiatives

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

at hand. To that end, accurate and ample communication with customers is crucial. By keeping stakeholders in mind, we build products with quality, improving the yield of our products and contributing to resource and energy reduction efforts.

on the SMM Quality Standards, including quality management education for the manager of each site.

Further, regarding product safety and information disclosure, we are providing information on substances contained in our products and materials and we will work to strengthen systems for accurate and rapid responses to customer requests.

CSR Data Environmental Preservation

Material Flows within Business Activity

INPUT (Resources & Energy)

Raw Materials ¹		Recycled Materials ²		Materials	
Gold and silver ore	1,063 kt	Copper scrap	97 kt	Silica sand (for copper smelting)	125 kt
Copper concentrates	1,350 kt	Secondary zinc	27 kt	Chemicals (lime-based)	1,389 kt
Nickel oxide ore	8,844 kt	Secondary precious metals	2 kt	Chemicals (sodium-based)	73 kt
Nickel matte, etc.	37 kt	Electric arc furnace dust	105 kt	Chemicals (magnesium-based)	11 kt
Raw material for batteries	12 kt	ALC waste	437 t	Sulfuric acid	710 kt
ALC raw material, incl. silica rock	205 kt			Cement, etc.	112 kt
Raw material for metalworking	1 kt				
Hydrotreating catalyst raw material	50 kt				

Energy ³	Consumption	Energy value
Heavy oil	54,198 kL	2,229 TJ
Coal/coke	569,092 t	14,812 TJ
Wood pellets	3,187 t	58 TJ
Diesel/gasoline/kerosene	21,842 kL	819 TJ
LPG/LNG	8,591 t	436 TJ
City gas/natural gas	5,635 km ³	256 TJ
Purchased electricity	1,801,976 MWh	17,540 TJ
Purchased steam	19,716 GJ	20,110 GJ

Water	
Freshwater total	39,873 km ³
Industrial water	13,361 km ³
Groundwater	11,711 km ³
Tap water	1,334 km ³
Surface water	13,468 km ³
Seawater	142,855 km ³

Business Activities in Areas of High Biodiversity Value¹

Area	Size of production site (hectares)	Details
Seto Inland Sea	62 (Minoshima & Ienoshima islands)	Shisaka Smelting operates on Minoshima and Ienoshima islands, neighboring Setonaikai National Park (IUCN Category 2)
The Philippines	428	Coral Bay Nickel Corporation operates on Palawan Island (in hunting-prohibited and bird protection areas (IUCN Category 4))

1. Protected areas classified as Category 4 and above by the International Union for Conservation of Nature (IUCN) and neighboring areas (SMM research). Areas classified as Category 1 are of highest priority.
 • Currently, there are no projects in any regions requiring the preparation of a management plan.

Amount of Land Developed or Rehabilitated

(hectares)

	A: Total area of land not rehabilitated (as of the end of FY2014)	B: Area of land newly developed in FY2015	C: Area of land newly rehabilitated in FY2015	D: Total area of land developed but not rehabilitated (A+B-C)
Hishikari Mine	21	0	0	21
Pogo Gold Mine	167	5	2	170
CBNC	288 ¹	0	6	282
THPAL	191	6	5 ²	192

1. We restated the numbers as a result of reviewing the total area of land as of the end of FY2014.

2. At THPAL, we rehabilitated 146 ha of land other than developed land in FY2015 together with TMC (Tanganito Mining Corporation).

OUTPUT (Products & Emissions)

Products ¹	
Electrolytic copper	420 kt
Gold	22 t
Dore	9 t
Silver	206 t
Electrolytic nickel	66 kt
Nickel sulfate	13 kt
Electrolytic cobalt	5 kt
Prime western grade zinc	25 kt
Crude zinc oxide	20 kt
Ferro-nickel	105 kt
Battery materials	19 kt
Sulfuric acid	579 kt
Slag	1,600 kt
Processed metal products	1 kt
Hydrotreating catalyst	11 kt
ALC (Siporex)	425 km ³

Recycling-derived products ratio
3.75%

Emissions into the Atmosphere	
CO ₂	3,251 kt
Direct emissions ⁴	2,085 kt
Indirect emissions ⁵	1,142 kt
Emissions during transportation (Japan) ⁶	25 kt
SO _x	2,593 t
NO _x	1,522 t
Soot and dust	95 t
PRTR substances	19 t

Waste (including Items of Value)	
Total waste	8,587 kt
Breakdown of total waste	
Spoil	558 kt
Flotation tailings	732 kt
Wastewater sludge from CBNC, THPAL, etc.	7,169 kt
Industrial waste (Japan)	115 kt
Other	12 kt
Landfill on premises	8,461 kt
PRTR substances ⁸	2,350 t

Emissions into Water	
Total wastewater	196,278 km ³
Discharges into seas ⁷	188,112 km ³
Discharges into rivers	7,247 km ³
Underground seepage	69 km ³
Sewerage, etc.	850 km ³
COD (chemical oxygen demand)	58 t
BOD (biochemical oxygen demand)	13 t
Total phosphorus	1 t
Total nitrogen	79 t
PRTR substances (discharged into public water areas)	90 t
PRTR substances (discharged into the soil or in landfills within business premises)	6 t

- The switch to oxide ore only operations for zinc production has eliminated the use of zinc and lead concentrates and production of electrolytic lead. (Zinc smelting stopped in September 2015.)
- Does not include materials recycled within plants.
- Calorific values for both Japan and overseas are calculated using coefficients conforming to the Japanese Act on the Rational Use, etc. of Energy. Fuels used as reducing agents are also included. Energy value indicates the energy input in the case of purchased electricity and purchased steam, and calorific value for all others.
- Direct emissions for both Japan and overseas are calculated using emission factors conforming to the Japanese Act on Promotion of Global Warming Countermeasures. This includes non-energy-derived CO₂ emissions (454 kt-CO₂) that are outside the scope of the law.
- CO₂ emissions derived from purchased electricity in Japan are calculated using the emission factors of the electric power suppliers. Emission factors for overseas are based on International Energy Agency (IEA) data.
- Emissions during transportation in Japan are calculated in line with the Act on the Rational Use, etc. of Energy and the Act on Promotion of Global Warming Countermeasures.
- Discharges into rivers flowing into enclosed seas are included as "discharges into seas."
- Total transfers to sewerage and off-site transfers.

Laws Covered in the Environmental e-learning Course Content

Environmental Laws	Environmental Laws Basic
Basic Environment Act	Basic Environment Act
—	Basic Act on Biodiversity
Basic Act on Establishing a Sound Material-Cycle Society	Basic Act on Establishing a Sound Material-Cycle Society
—	Act on the Promotion of Environmental Conservation Activities through Environmental Education
—	Law Concerning the Promotion of Business Activities with Environmental Consideration

Environmental Laws	Environmental Laws Basic
—	Act on Promotion of Global Warming Countermeasures
Act on the Rational Use, etc. of Energy	Act on the Rational Use, etc. of Energy
Air Pollution Control Act (including the content of the Act on Pollution Prevention Systems in Specified Factories)	Air Pollution Control Act
Water Pollution Control Act	Water Pollution Control Act
Soil Contamination Countermeasures Act	—

Environmental Laws	Environmental Laws Basic
PRTR Law	PRTR Law
Poisonous and Deleterious Substances Control Act	—
Waste Management and Public Cleansing Act	Waste Management and Public Cleansing Act
PCB Special Measures Law	—
—	Act on Promoting Green Purchasing

FY2015 Total Annual Hours of Education

(hours)

	Officers	General managers	Section managers	Regular employees	Other	Total
SMM non-consolidated	107	1,299	5,613	36,531	784	44,334
Consolidated subsidiaries in Japan	384	934	2,132	22,580	3,172	29,202
Consolidated subsidiaries overseas	2,139	722	3,575	60,943	1,508	68,885
Annual hours of education per employee	21.0	10.9		16.4	3.1	13.6
Number of officers and employees at the end of the fiscal year	125	1,309		7,320	1,746	10,500

Employee Turnover Number and Rate (FY2015)

Location		Younger than 30		30-49 years old		50 and older		Total
		Male	Female	Male	Female	Male	Female	
Japan	Departures	13	3	19	9	14	3	61
	Total employees	667	184	2,596	468	1,302	97	5,314
	Turnover (%)	1.9	1.6	0.7	1.9	1.1	3.1	1.1
U.S.A.	Departures	4	0	18	4	23	2	51
	Total employees	56	2	169	13	89	12	341
	Turnover (%)	7.1	0	10.7	30.8	25.8	16.7	15.0
South Korea	Departures	0	0	0	0	0	0	0
	Total employees	0	0	1	2	0	0	3
	Turnover (%)	0	0	0	0	0	0	0
Peru	Departures	0	0	0	0	0	0	0
	Total employees	0	0	6	2	1	1	10
	Turnover (%)	0	0	0	0	0	0	0
Chile	Departures	0	0	0	0	0	0	0
	Total employees	1	1	15	4	7	3	31
	Turnover (%)	0	0	0	0	0	0	0
China	Departures	131	96	29	8	0	0	264
	Total employees	148	98	280	184	10	2	722
	Turnover (%)	88.5	98.0	10.4	4.3	0	0	36.6
Philippines	Departures	93	44	78	4	16	1	236
	Total employees	360	122	512	102	22	4	1,122
	Turnover (%)	25.8	36.1	15.2	3.9	72.7	25	21.0
Taiwan	Departures	40	17	57	27	2	1	144
	Total employees	34	32	228	120	25	10	449
	Turnover (%)	117.6	53.1	25.0	22.5	8	10	32.1
Singapore	Departures	0	0	0	0	0	0	0
	Total employees	2	4	19	8	5	1	39
	Turnover (%)	0	0	0	0	0	0	0
Malaysia	Departures	68	18	21	11	1	0	119
	Total employees	140	81	203	108	22	5	559
	Turnover (%)	48.6	22.2	10.3	10.2	4.5	0	21.3
Thailand	Departures	0	0	0	0	0	0	0
	Total employees	0	0	0	0	0	0	0
	Turnover (%)	0	0	0	0	0	0	0
Australia	Departures	0	0	0	0	0	0	0
	Total employees	0	0	2	2	1	0	5
	Turnover (%)	0	0	0	0	0	0	0
Solomon Islands	Departures	0	0	0	0	0	0	0
	Total employees	1	1	16	2	2	0	22
	Turnover (%)	0	0	0	0	0	0	0
Brazil	Departures	0	0	0	0	0	0	0
	Total employees	2	1	6	1	2	0	12
	Turnover (%)	0	0	0	0	0	0	0
Netherlands	Departures	0	0	0	0	0	0	0
	Total employees	0	0	0	0	0	0	0
	Turnover (%)	0	0	0	0	0	0	0
Total	Departures	349	178	222	63	56	7	875
	Total employees	1,411	526	4,053	1,016	1,488	135	8,629
	Turnover (%)	24.7	33.8	5.5	6.2	3.8	5.2	10.1

• Figures exclude 126 officers, 972 temporary employees, 774 non-regular and limited-term employees.
 • Turnover rate (%) = number of departures ÷ number of employees at fiscal year end × 100

The 10 Principles of the ICMM¹

- Principle 1:** Apply ethical business practices and sound systems of corporate governance and transparency to support sustainable development
- Principle 2:** Integrate sustainable development in corporate strategy and decision-making processes
- Principle 3:** Respect human rights and the interests, cultures, customs and values of employees and communities affected by our activities
- Principle 4:** Implement effective risk-management strategies and systems based on sound science and which account for stakeholder perceptions of risks
- Principle 5:** Pursue continual improvement in health and safety performance with the ultimate goal of zero harm
- Principle 6:** Pursue continual improvement in environmental performance issues, such as water stewardship, energy use and climate change
- Principle 7:** Contribute to the conservation of biodiversity and integrated approaches to land-use planning
- Principle 8:** Facilitate and support the knowledge-base and systems for responsible design, use, re-use, recycling and disposal of products containing metals and minerals
- Principle 9:** Pursue continual improvement in social performance and contribute to the social, economic and institutional development of host countries and communities
- Principle 10:** Proactively engage key stakeholders on sustainable development challenges and opportunities in an open and transparent manner. Effectively report and independently verify progress and performance

1. ICMM: International Council on Mining and Metals <https://www.icmm.com/>

The EITI² Principles

1. We share a belief that the prudent use of natural resource wealth should be an important engine for sustainable economic growth that contributes to sustainable development and poverty reduction, but if not managed properly, can create negative economic and social impacts.
2. We affirm that management of natural resource wealth for the benefit of a country's citizens is in the domain of sovereign governments to be exercised in the interests of their national development.
3. We recognise that the benefits of resource extraction occur as revenue streams over many years and can be highly price dependent.
4. We recognise that a public understanding of government revenues and expenditure over time could help public debate and inform choice of appropriate and realistic options for sustainable development.
5. We underline the importance of transparency by governments and companies in the extractive industries and the need to enhance public financial management and accountability.
6. We recognise that achievement of greater transparency must be set in the context of respect for contracts and laws.
7. We recognise the enhanced environment for domestic and foreign direct investment that financial transparency may bring.
8. We believe in the principle and practice of accountability by government to all citizens for the stewardship of revenue streams and public expenditure.
9. We are committed to encouraging high standards of transparency and accountability in public life, government operations and in business.
10. We believe that a broadly consistent and workable approach to the disclosure of payments and revenues is required, which is simple to undertake and to use.
11. We believe that payments' disclosure in a given country should involve all extractive industry companies operating in that country.
12. In seeking solutions, we believe that all stakeholders have important and relevant contributions to make—including governments and their agencies, extractive industry companies, service companies, multilateral organisations, financial organisations, investors, and non-governmental organisations.

2 EITI: The Extractive Industries Transparency Initiative <http://eiti.org/>

ICMM Position Statements

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

- **Transparency of Mineral Revenues**
- **Principles for Climate Change Policy Design**
- **Mercury Risk Management**
- **Mining and Protected Areas**
- **Indigenous Peoples and Mining**
- **Mining: Partnerships for Development**

Main Organizations in Which SMM Has Membership

Organization	Responsibilities of SMM officers and employees	Initiatives relating to public policy
Nippon Keidanren	Executive member; participation in committees on: industrial technology, risk management, Canada, environment and safety, oceanic resources, international cooperation, China, South Asia, Japan-Myanmar economic relations and Japan-Brazil economic relations Committee on Gender Diversity; participation since July 2014	As a unified business organization with the goal of making improvements to the autonomous growth of the domestic economy and to public life, we act reliably and swiftly after gathering opinions from the business world with regards to various internal and external economic challenges
Japan Mining Industry Association	Director; participation in committees relating to planning and coordination, energy, overseas development, environmental management, customs duties, funds, supply and demand, taxation, exploration and development, mining reserves (chairman and deputy chairman), sulfide ore and sulfuric acid, and the special committee for depletion allowance measures	Submission of mining industry policy requests to relevant government agencies regarding electricity fee issues, taxation, resource development, smelting and recycling technology, mine safety, and development of employee training. Members to be sent to government sponsored investigative committees to present industry viewpoint.
The Sulphuric Acid Association of Japan	One director; participation in Business Editorial Committee and Technical Committee	Communicating policy and information from the Manufacturing Industries Bureau of the Ministry of Economy, Trade and Industry to member companies and compiling and presenting requests from member companies
International Council on Mining and Metals (ICMM)	Participation and promotion of activities in each of the following programme committees: Environment and Climate Change, Health and Safety, Materials Stewardship, Social and Economic Development In January 2016, the above four programme committees were reorganized into the following three programme committees: Environmental Stewardship and Social Progress, the Role of Mining and Metals in Society, and Health, Safety and Product Stewardship	<ul style="list-style-type: none"> • Environment Initiatives for biodiversity, climate change, and water management • Health and safety Initiatives for sharing information on health and safety, and risk management • Materials stewardship Initiatives for science-based chemical substance management and supply chain management • Society and economy Initiatives to contribute to the economic development of society by the mining industry
Japan Society of Newer Metals	Director	Hearings with government in relation to policy (rare metal reserve issues, etc.)
Japan Electronics and Information Technology Industries Association (JEITA)		Collection of various statistics, and participation in reviews of regulations, environmental measures and other issues
Battery Association of Japan	Associate member	

Communication with Stakeholders

Customers

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

Shareholders and Investors

In order to carry out appropriate IR activities, we established an IR Policy which specifies information disclosure standards and methods, and have made it available on our website. Institutional investors and analysts are kept informed about the progress of the business strategies under SMM's 3-Year Business Plan through Business Strategy Progress Briefing Sessions held twice a year. They are also updated on SMM's financial results through conference calls at the time of the quarterly result announcements. Meetings are also held on an individual basis to facilitate understanding of SMM's management.

Individual investors are briefed on business conditions via such means as the company website and the *Report for*

Shareholders, which is published twice a year.

All feedback from investors is regularly reported to the management and applied to the administration of the company.

Employees

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

Local Communities

The SMM Group seeks to communicate sufficiently with people in the community

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

Business Partners

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

Other

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

Distribution of Economic Value to Stakeholders

Stakeholder	Amount (billions of yen)	Details
Suppliers	729.5	Payments for purchase of merchandise, etc.
Employees	41.2	Payments to employees
Shareholders/Creditors	29.7	Payments of dividends/ interest
Government	19.3	Taxes paid
Society*	1.8	Donations, etc.

- There is no retained value other than the above. Rent for use of land is minimal and therefore included in "Payments for purchase of merchandise, etc."
- ★ In the Philippines (CBNC, THPAL), the ¥1.3 billion expended through the social development management program (SDMP) and other contributions in the same country is included.
- CBNC and THPAL have changed their closing dates to March 31, which is the consolidated closing date, by preparing provisional financial statements as of March 31 for the consolidation purpose from the fiscal year under review. As a result, the accounting period of these two companies for the fiscal year under review covers the period from January 1, 2015 to March 31, 2016.

Financial Assistance from the Government

Stakeholder	Amount (billions of yen)	Details
Government	0.6	Subsidies, grants, etc.

• No governments have an equity stake in SMM

Projected Benefit Obligation

SMM has the following defined-benefit systems in place, principally in Japan: a lump-sum retirement payment plan; a defined-benefit corporate pension plan; and an employees' pension fund. The projected benefit obligation is ¥68.5 billion. The portion of the projected benefit obligation to be funded by pension assets is ¥66.9 billion. Pension assets available for allocation to that portion are ¥54.6 billion.

List of Main External Awards (FY2015)

Recognition (awarding party)	Date	Recipients	Award received for
Environmental Conservation Award (Kanagawa Environmental Conservation Association)	May 22, 2015	TAIHEI METAL INDUSTRY Co., LTD.	Ranked as outstanding among the Association's member companies, particularly for dedication to and track record on environmental conservation
Engineering Commendation Award (Engineering Advancement Association of Japan)	July 21, 2015	Sumitomo Metal Mining Co., Ltd. JGC Corporation Chiyoda Corporation	Received an award in the International Contribution category in recognition of contribution by Taganito HPAL project team to economic development in the Taganito region and the stable supply of nickel
Award for Excellence in Corporate Disclosure (Securities Analysts Association of Japan)	October 9, 2015	Sumitomo Metal Mining Co., Ltd.	Ranked No. 1 in the Steel/Non-Ferrous Metal category as evaluated by securities analysts (five consecutive years)
Mine Safety Promotion Council Chairman's Award (Mine Safety Promotion Council)	October 13, 2015	Mr. Takada, General Manager, Yoichi Office	Praised for distinguished safety performance as a manager in charge of pollution control of closed mines
Hard Rock Mine of the Year (Australian Mining magazine)	October 30, 2015	Northparkes Mine	Recognized for achieving an all-time high processing volume (6,100 kt/year) and halving the number of industrial accidents since 2012
Presidential Mineral Industry Environmental Award Best Mining Forest Award Safest Mines Award (Philippines Department of Environment and Natural Resources)	November 20, 2015	Coral Bay Nickel Corporation	Received comprehensive recognition for being outstanding in terms of environmental management, safety management, and contributions to social development of the surrounding community as a metal smelting plant
Award for Excellence, Environmental Communications Awards (Japan's Ministry of the Environment and others)	February 24, 2016	Sumitomo Metal Mining Co., Ltd.	Content of CSR Report 2015 recognized as outstanding
Certificate of Appreciation for Aiding Children Orphaned by Traffic Accidents (Kagoshima Prefecture Traffic Accident Victim Aid Association)	March 31, 2016	Hishikari Mine	Praised for more than 20 years of continuous fund raising drives, called "Handoru Kenkin," which are donations for aiding children orphaned by traffic accidents

Independent Assurance Report (First half)



Independent Assurance Report

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

We were engaged by Sumitomo Metal Mining Co., Ltd. (the “Company”) to undertake a limited assurance engagement of the environmental, social and economic performance indicators listed in the table below (the “Indicators”) for the period from April 1, 2015 to March 31, 2016 included in its Integrated Report 2016 (the “Report”) for the fiscal year ended March 31, 2016; the Company’s self-declaration that the Report is prepared in accordance with the Global Reporting Initiative’s G4 Sustainability Reporting Guidelines (the “G4 Guidelines”) at a core level; the alignment of the Company’s policies to the International Council on Mining and Metals (“ICMM”)’s 10 Sustainable Development (“SD”) Principles and the applicable mandatory requirements set out in ICMM position statements; the Company’s identification and prioritization of material issues; and the Company’s approach and management of its material issues.

Items	Pages	Indicators assured
Financial and Non-Financial Summary	24~25	Number of Employees & Officers Worldwide (Consolidated), Number of Employees & Officers by Region (Consolidated), Number of Employees & Officers Worldwide (Consolidated) (Excluding temporary employees), CO ₂ Emissions, Distribution of Economic Value to Stakeholders and Financial Assistance from the Government
Using Resources Effectively through Recycling	68	Ratio of Recycled Materials Used
Prevention of Global Warming	73	Unit Energy and CO ₂ Emissions Index and CO ₂ Emissions
Reduction of Environmental Impact	74~77	Volume of SO _x Emissions, Volume of NO _x Emissions, Volume of Soot and Dust Emissions, Release and Transfer Volume of PRTR Substances, Breakdown of Releases, COD and BOD Pollutant Loads, Water Usage (Freshwater and Seawater), Final Disposal Volumes of Industrial and Mining Waste in Japan and Volume of Waste (Hazardous/Non-hazardous) by disposal or processing category
Impact on Local Economies	78	Payments made to local suppliers and Number of Locally-Hired Senior Managers (General Managers and Above) at Overseas Affiliates
Establishment of Workplace Environments Favorable to Diverse Human Resources	81	Disabled Employee Ratio (SMM non-consolidated)
Respect for the Human Rights of Indigenous People and Local Citizens	83	Number of investments which have undergone human rights screening
Assuring Health and Safety	85	Data on Occupational Accidents in Japan
Establishment of a Workplace Environment to Enable Working Dynamically	86	Number of companies with workers’ unions and Percentages of employees belonging to workers’ unions
Compliance	91	Participants of Compliance Education
CSR Data (Environmental Preservation)	96~97	INPUT (Raw Materials, Recycled Materials, Materials, Energy and Water) and OUTPUT (Products, Emissions into the Atmosphere, Emissions into Water and Waste including Items of Value), Size of production site in areas of high biodiversity value and Amount of Land Developed or Rehabilitated
CSR Data (Respect for People and Human Rights)	98~99	Number of Employees & Officers Worldwide (Consolidated), Number of Employees & Officers by Region (Consolidated), Consolidated Employee Breakdown, Total Annual Hours of Education and Employee Turnover Number and Rate
CSR Data (Other)	102	Distribution of Economic Value to Stakeholders, Financial Assistance from the Government and the portion of the projected benefit obligation to be funded by pension assets and pension assets available for allocation to that portion

The Company’s Responsibility

The Company is responsible for the preparation of the Indicators in accordance with its own reporting criteria (the “Company’s reporting criteria”), as described in the Report, which are derived, among others, from the G4 Guidelines and Environmental Reporting Guidelines of Japan’s Ministry of the Environment; self-declaring that the Report is prepared in accordance with the

Independent Assurance Report (Second half)



criteria stipulated in the G4 Guidelines; reporting on the alignment of the Company's policies to the ICMM's 10 SD Principles and the applicable mandatory requirements set out in ICMM position statements; reporting on the Company's identification and prioritization of material issues; and reporting on the Company's approach and management of its material issues.

Our Responsibility

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

- Interviewing with the Company's responsible personnel to obtain an understanding of its policy for the preparation of the Report and reviewing the Company's reporting criteria.
- Inquiring about the design of the systems and methods used to collect and process the Indicators.
- Performing analytical reviews of the Indicators.
- Examining, on a test basis, evidence supporting the generation, aggregation and reporting of the Indicators in conformity with the Company's reporting criteria, and also recalculating the Indicators.
- Visiting to the Company's Niihama Nickel Refinery selected on the basis of a risk analysis.
- Evaluating the overall statement in which the Indicators are expressed.
- Evaluating the Company's self-declaration that the Report is prepared in accordance with the G4 Guidelines at a core level against the criteria stipulated in the G4 Guidelines.
- Assessing the alignment of the Company's policies to the ICMM's 10 SD Principles and the applicable mandatory requirements set out in ICMM position statements through documentation reviews and interviews.
- Interviewing with the Company's responsible personnel and reviewing documents with respect to the Company's process of identifying and prioritizing its material issues and its approach to and management of its material issues.

Conclusion

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

- the Indicators in the Report are not prepared, in all material respects, in accordance with the Company's reporting criteria as described in the Report;
- the Company's self-declaration that the Report is prepared in accordance with the G4 Guidelines at a core level does not conform to the criteria stipulated in the G4 Guidelines;
- the Company's policies are not aligned to the ICMM's 10 SD Principles and the applicable mandatory requirements set out in ICMM position statements as described on pages 89 and 100;
- the Company has not identified and prioritized its material issues as described on pages 59 to 61; and
- the Company has not approached and managed its material issues as described on pages 60 to 67.

Our Independence and Quality Control

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

KPMG AZSA Sustainability Co., Ltd.

KPMG AZSA Sustainability Co., Ltd.
Tokyo, Japan
October 24, 2016

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Medium- to Long-Term Business Strategy and Financial Policies

The short-term performance of the SMM Group's three core businesses—Mineral Resources, Smelting & Refining, and Materials—is significantly affected by fluctuations in non-ferrous metals prices, demand for electronic and other related materials, and movements in foreign currency exchange rates. In addition, considerable time is required to generate returns from investments in development of non-ferrous metal resources. In view of these unique business factors, the SMM Group recognizes the vital importance of adopting business strategies that focus on the medium- to long-term, opportune investment timing, and securing sustainable growth.

SMM consistently maintains a sound financial standing to ensure that the Group is well positioned to undertake medium- to

long-term investments and address any and all risks. In particular, SMM has maintained a consolidated equity ratio in excess of 50% since FY2006. In order to concentrate management resources into priority fields leveraging its solid financial base, SMM plans to invest aggressively to acquire interests in overseas mines and strengthen the competitiveness of smelting and refinery facilities, and also to strengthen both the expanding automotive secondary battery materials and crystal materials for SAW filter businesses, under the 2015 3-Year Business Plan, which covers the period from FY2016 to FY2018. Moving forward, SMM will aim for stable and sustainable business growth by maintaining a strong financial standing with a consolidated equity ratio of at least 50% and a low level of gearing as measured by the debt-to-equity (D/E) ratio.

Eleven-Year Financial Summary

SUMITOMO METAL MINING CO., LTD. AND CONSOLIDATED SUBSIDIARIES

Years ended March 31	2016	2015	2014	2013
Results for the year:				
Net sales	¥ 855,407	¥ 921,334	¥ 830,546	¥ 808,540
Gross profit	113,862	174,257	124,822	140,650
Operating income	59,720	125,779	75,418	95,785
Other income (expenses)	(59,161)	(2,518)	35,588	26,670
Income before income taxes	559	123,261	111,006	122,455
Net income (loss) attributable to owners of the parent	(309)	91,113	80,258	86,640
Equity in earnings (losses) of affiliated companies	(73,223)	23,943	29,770	17,100
Capital expenditures	51,013	55,232	66,441	59,291
Depreciation	46,141	38,125	32,426	27,578
Net interest expenses	8,927	6,250	3,530	(144)
Net cash flows from operating activities	119,704	120,003	80,014	114,665
Net cash flows from investing activities	(92,876)	(105,024)	(126,937)	(88,745)
Net cash flows from financing activities	(4,003)	(39,047)	81	21,549
Free cash flows	26,828	14,979	(46,923)	25,920
Financial position at year-end:				
Total assets	¥ 1,630,800	¥ 1,740,246	¥ 1,572,367	¥ 1,351,153
Net assets	1,075,995	1,158,945	1,019,053	844,547
Shareholders' equity *1	—	—	—	—
Long-term loans due after one year	248,036	245,000	243,130	212,323
Interest-bearing debt	400,559	394,094	383,580	330,073
Working capital	313,812	307,436	314,198	338,866
Amounts per share:				
Net income (loss)				
—Basic	¥ (0.56)	¥ 165.11	¥ 145.35	¥ 155.58
—Diluted	—	149.44	129.71	142.40
Shareholders' equity	1,781.91	1,905.50	1,653.83	1,393.02
Cash dividends	31.0	48.0	37.0	34.0
Key ratios:				
ROA (%)	(0.02)	5.50	5.49	6.94
ROE (%) *1	(0.03)	9.28	9.54	12.13
Equity ratio (%) *1	60.3	60.4	58.1	56.9
Interest-bearing debt to total asset ratio (%)	24.6	22.6	24.4	24.4
Debt-to-equity ratio (times) *1	0.41	0.37	0.42	0.43
Current ratio (times)	2.39	2.29	2.40	2.60

*1 Shareholders' equity is defined by following equation.

Shareholders' equity = Total shareholders' equity + Accumulated other comprehensive income

*2 The Company applied the new accounting method retroactively and restated the consolidated financial statements for the year ended March 31, 2012.

Millions of yen (except per share amounts and key ratios)

	2012*2	2011	2010	2009	2008	2007	2006
¥	847,897	¥ 864,077	¥ 725,827	¥ 793,797	¥ 1,132,372	¥ 966,764	¥ 625,579
	132,421	138,810	105,956	56,887	198,147	203,180	120,137
	88,577	96,038	66,265	10,534	155,394	162,632	82,756
	(615)	27,356	16,511	12,408	61,110	42,985	10,218
	87,962	123,394	82,776	22,942	216,504	205,617	92,974
	65,286	83,962	53,952	21,974	137,808	126,054	62,800
	23,217	34,832	26,090	31,536	73,956	46,708	21,915
	73,143	53,105	26,414	47,723	65,145	51,567	50,568
	31,132	34,625	34,746	34,268	30,505	25,693	22,951
	663	257	(654)	(271)	(2,209)	(2,606)	(1,281)
	144,999	102,458	44,153	128,000	157,383	95,985	70,772
	(135,932)	(75,735)	(75,443)	(28,386)	(126,413)	(77,429)	(102,384)
	50,314	7,379	(19,322)	(74,086)	55,727	(10,073)	28,723
	9,067	26,723	(31,290)	99,614	30,970	18,556	(31,612)
¥	1,146,759	¥ 1,052,353	¥ 981,458	¥ 880,001	¥ 1,091,716	¥ 929,208	¥ 772,562
	726,039	684,103	629,684	547,251	640,345	528,921	394,899
	—	—	—	—	—	—	—
	157,119	135,128	132,311	141,716	169,394	93,800	114,405
	265,951	210,969	200,939	218,534	258,054	189,910	190,891
	312,542	267,072	229,259	206,123	266,250	103,791	72,228
¥	116.17	¥ 149.38	¥ 96.26	¥ 38.87	¥ 238.13	¥ 220.49	¥ 109.96
	106.84	136.98	88.75	36.18	231.50	213.67	108.87
	1,173.97	1,121.19	1,043.50	913.92	1,017.96	859.82	654.15
	28.0	32.0	20.0	13.0	30.0	27.0	14.0
	5.94	8.26	5.80	2.23	13.64	14.81	9.33
	10.12	13.80	9.89	4.02	25.39	28.99	19.10
	57.5	59.9	59.8	57.3	54.0	53.4	48.4
	23.2	20.0	20.5	24.8	23.6	20.4	24.7
	0.40	0.33	0.34	0.43	0.44	0.38	0.51
	2.67	2.30	2.19	2.17	2.04	1.39	1.33

Consolidated Balance Sheets

SUMITOMO METAL MINING CO., LTD. AND CONSOLIDATED SUBSIDIARIES

ASSETS

As of March 31, 2016 and 2015	Millions of yen		Thousands of U.S. dollars (Note1)
	2016	2015	2016
Current assets:			
Cash and cash equivalents (Notes 3 and 8)	¥ 197,825	¥ 177,720	\$ 1,756,571
Time deposits (Note 3)	5,049	4,944	44,832
Notes and accounts receivable (Note 3):			
Trade	94,101	110,287	835,562
Unconsolidated subsidiaries and affiliated companies	4,803	5,931	42,648
Allowance for doubtful accounts	(598)	(396)	(5,310)
Inventories (Note 6)	161,974	201,423	1,438,235
Deferred tax assets (Note 9)	1,455	3,765	12,920
Other current assets	74,470	42,187	661,250
Total current assets	539,079	545,861	4,786,708
Investments and long-term receivables:			
Investment securities (Notes 3, 4 and 8):			
Unconsolidated subsidiaries and affiliated companies	325,905	386,869	2,893,847
Others	132,602	205,622	1,177,429
Allowance for losses on investments	—	(50,683)	—
Long-term loans receivable (Notes 3 and 8)			
Unconsolidated subsidiaries and affiliated companies	122,236	106,111	1,085,384
Others	3,988	36,780	35,411
Other long-term receivables (Note 8)	40,626	26,593	360,735
Allowance for doubtful accounts	(200)	(201)	(1,776)
Total investments and long-term receivables	625,157	711,091	5,551,030
Property, plant and equipment (Note 8):			
Land	29,320	29,252	260,345
Buildings and structures	282,616	275,653	2,509,465
Machinery and equipment	596,369	589,168	5,295,409
Construction in progress	34,242	40,256	304,049
	942,547	934,329	8,369,268
Accumulated depreciation	(489,013)	(464,956)	(4,342,150)
Net property, plant and equipment	453,534	469,373	4,027,118
Deferred tax assets (Note 9)	3,648	3,156	32,392
Other assets	9,382	10,765	83,306
Total assets	¥ 1,630,800	¥ 1,740,246	\$ 14,480,554

The accompanying notes are an integral part of these financial statements.

LIABILITIES AND NET ASSETS

As of March 31, 2016 and 2015	Millions of yen		Thousands of U.S. dollars (Note1)
	2016	2015	2016
Current liabilities:			
Bank loans (Notes 3 and 8)	¥ 77,590	¥ 80,360	\$ 688,954
Long-term debt due within one year (Notes 3 and 8)	34,933	18,734	310,185
Notes and accounts payable:			
Trade (Note 3)	37,822	34,388	335,837
Unconsolidated subsidiaries and affiliated companies (Note 3)	7,611	2,379	67,581
Others	12,083	25,574	107,290
Accrued income taxes	3,840	30,729	34,097
Accrued expenses	3,791	4,806	33,662
Advances received	416	516	3,694
Accrued restructuring charges	417	1,236	3,703
Accrued environmental measures	338	4,243	3,001
Deferred tax liabilities (Note 9)	195	25	1,732
Other current liabilities	46,231	35,435	410,504
Total current liabilities	225,267	238,425	2,000,240
Long-term liabilities:			
Long-term debt (Notes 3 and 8)	288,036	295,000	2,557,592
Deferred tax liabilities (Note 9)	15,912	28,571	141,289
Accrued environmental measures	325	534	2,886
Accrued restructuring charges	904	1,220	8,027
Other accruals	257	251	2,282
Net defined benefit liability (Note 10)	14,128	7,763	125,448
Asset retirement obligations (Note 16)	7,831	7,525	69,535
Other long-term liabilities	2,145	2,012	19,046
Total long-term liabilities	329,538	342,876	2,926,105
Contingent liabilities (Note 13)			
Net assets (Note 12):			
Shareholders' equity:			
Common stock			
Authorized -1,000,000,000 shares			
Issued - 581,628,031 shares	93,242	93,242	827,935
Capital surplus	86,067	86,066	764,225
Retained earnings	744,886	770,020	6,614,154
Treasury stock, at cost	(32,827)	(32,753)	(291,485)
Total shareholders' equity	891,368	916,575	7,914,829
Accumulated other comprehensive income:			
Net unrealized holding gains on securities	20,225	46,679	179,586
Deferred gains or losses on hedges	(1,587)	247	(14,091)
Foreign currency translation adjustments	77,274	87,288	686,148
Remeasurements of defined benefit plans	(4,322)	435	(38,377)
Total accumulated other comprehensive income	91,590	134,649	813,266
Non-controlling interests	93,037	107,721	826,114
Total net assets	1,075,995	1,158,945	9,554,209
Total liabilities and net assets	¥ 1,630,800	¥ 1,740,246	\$ 14,480,554

Consolidated Statements of Operations

SUMITOMO METAL MINING CO., LTD. AND CONSOLIDATED SUBSIDIARIES

For the years ended March 31, 2016 and 2015	Millions of yen		Thousands of U.S. dollars (Note1)
	2016	2015	2016
Net sales (Note 15)	¥ 855,407	¥ 921,334	\$7,595,516
Costs and expenses:			
Cost of sales	741,545	747,077	6,584,488
Selling, general and administrative expenses (Note 11)	54,142	48,478	480,749
Total costs and expenses	795,687	795,555	7,065,237
Operating income	59,720	125,779	530,279
Other income (expenses):			
Interest and dividend income	13,800	10,218	122,536
Interest expenses	(4,873)	(3,968)	(43,269)
Loss on sale and disposal of property, plant and equipment	(380)	(577)	(3,374)
Loss on impairment of fixed assets (Note 7)	(813)	(614)	(7,219)
Exchange gain (loss)	(6,800)	19,977	(60,380)
Provision for environmental measures	(131)	(2,861)	(1,163)
Maintenance cost for ceased projects	(605)	(535)	(5,372)
Casualty loss	(100)	(168)	(888)
Equity in earnings (losses) of affiliated companies	(73,223)	23,943	(650,178)
Loss from valuation of derivative instruments	(194)	(130)	(1,723)
Reversal (Provision) for allowance for losses on investments	16,350	(44,474)	145,178
Provision for restructuring charges	(53)	(2,449)	(471)
Other, net	(2,139)	(880)	(18,992)
Total other income (expenses)	(59,161)	(2,518)	(525,315)
Income before income taxes	559	123,261	4,964
Income taxes (Note 9):			
Current	16,977	46,407	150,746
Deferred	3,379	(1,058)	30,004
Total income taxes	20,356	45,349	180,750
Net income (loss)	(19,797)	77,912	(175,786)
Net loss attributable to non-controlling interests	19,488	13,201	173,042
Net income (loss) attributable to owners of the parent	¥ (309)	¥ 91,113	\$ (2,744)

Amounts per share of common stock:	Yen		U.S. dollars (Note1)
	2016	2015	2016
Net income (loss) (Note 19)			
—Basic	¥ (0.56)	¥ 165.11	\$ (0.00)
—Diluted	—	149.44	—
Cash dividends applicable to the year	31.00	48.00	0.28

The accompanying notes are an integral part of these financial statements.

Consolidated Statements of Comprehensive Income

SUMITOMO METAL MINING CO., LTD. AND CONSOLIDATED SUBSIDIARIES

For the years ended March 31, 2016 and 2015	Millions of yen		Thousands of U.S. dollars (Note1)
	2016	2015	2016
Net income (loss)	¥ (19,797)	¥ 77,912	\$ (175,786)
Other comprehensive income			
Net unrealized holding gains (losses) on securities	(26,228)	15,277	(232,889)
Deferred gains (losses) on hedges	(1,783)	125	(15,832)
Foreign currency translation adjustments	(9,104)	27,975	(80,838)
Remeasurements of defined benefit plan	(4,289)	490	(38,084)
Share of other comprehensive income of affiliated companies accounted for using equity method	(3,834)	42,118	(34,044)
Total other comprehensive income	(45,238)	85,985	(401,687)
Comprehensive income (Note 14)	(65,035)	163,897	(577,473)
Comprehensive income attributable to:			
Owners of the parent	(43,369)	164,893	(385,091)
Non-controlling interests	(21,666)	(996)	(192,382)

The accompanying notes are an integral part of these financial statements.

Consolidated Statements of Changes in Net Assets

SUMITOMO METAL MINING CO., LTD. AND CONSOLIDATED SUBSIDIARIES

	Shareholders' Equity					
	Number of shares issued	Common stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity
For the years ended March 31, 2016 and 2015	(thousands)	Millions of yen				
Balance at April 1, 2014	581,628	¥ 93,242	¥ 86,062	¥ 704,824	¥ (31,978)	¥ 852,150
Cumulative effect of changes in accounting policies		—	—	(2,062)	—	(2,062)
Increase resulting from changes in accounting policies of affiliated companies		—	—	429	—	429
Restated balance at April 1, 2014	581,628	93,242	86,062	703,191	(31,978)	850,517
Cash dividends paid		—	—	(24,284)	—	(24,284)
Net income		—	—	91,113	—	91,113
Acquisition of treasury stock		—	—	—	(778)	(778)
Sale of treasury stock		—	4	—	3	7
Net changes of items other than shareholders' equity		—	—	—	—	—
Balance at April 1, 2015	581,628	¥ 93,242	¥ 86,066	¥ 770,020	¥ (32,753)	¥ 916,575
Cash dividends paid		—	—	(24,825)	—	(24,825)
Net loss		—	—	(309)	—	(309)
Acquisition of treasury stock		—	—	—	(79)	(79)
Sale of treasury stock		—	1	—	5	6
Net changes of items other than shareholders' equity		—	—	—	—	—
Balance at March 31, 2016	581,628	¥ 93,242	¥ 86,067	¥ 744,886	¥ (32,827)	¥ 891,368

	Shareholders' Equity				
	Common stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity
For the year ended March 31, 2016	Thousands of U.S. dollars (Note 1)				
Balance at April 1, 2015	\$ 827,935	\$ 764,216	\$ 6,837,329	\$ (290,828)	\$ 8,138,652
Cash dividends paid	—	—	(220,431)	—	(220,431)
Net loss	—	—	(2,744)	—	(2,744)
Acquisition of treasury stock	—	—	—	(701)	(701)
Sale of treasury stock	—	9	—	44	53
Net changes of items other than shareholders' equity	—	—	—	—	—
Balance at March 31, 2016	\$ 827,935	\$ 764,225	\$ 6,614,154	\$ (291,485)	\$ 7,914,829

The accompanying notes are an integral part of these financial statements.

Consolidated Statements of Changes in Net Assets (continued)

SUMITOMO METAL MINING CO., LTD. AND CONSOLIDATED SUBSIDIARIES

	Accumulated other comprehensive income						Total net assets
	Net unrealized holding gains on securities	Deferred gains on hedges	Foreign currency translation adjustments	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	Non-controlling interests	
For the years ended March 31, 2016 and 2015							Millions of yen
Balance at April 1, 2014	¥ 31,335	¥ 100	¥ 29,466	¥ 120	¥ 61,021	¥ 105,882	¥1,019,053
Cumulative effect of changes in accounting policies	—	—	—	—	—	—	(2,062)
Increase resulting from changes in accounting policies of affiliated companies	—	—	—	—	—	—	429
Restated balance at April 1, 2014	31,335	100	29,466	120	61,021	105,882	1,017,420
Cash dividends paid	—	—	—	—	—	—	(24,284)
Net income	—	—	—	—	—	—	91,113
Acquisition of treasury stock	—	—	—	—	—	—	(778)
Sale of treasury stock	—	—	—	—	—	—	7
Net changes of items other than shareholders' equity	15,344	147	57,822	315	73,628	1,839	75,467
Balance at April 1, 2015	¥ 46,679	¥ 247	¥ 87,288	¥ 435	¥ 134,649	¥ 107,721	¥1,158,945
Cash dividends paid	—	—	—	—	—	—	(24,825)
Net loss	—	—	—	—	—	—	(309)
Acquisition of treasury stock	—	—	—	—	—	—	(79)
Sale of treasury stock	—	—	—	—	—	—	6
Net changes of items other than shareholders' equity	(26,454)	(1,834)	(10,014)	(4,757)	(43,059)	(14,684)	(57,743)
Balance at March 31, 2016	¥ 20,225	¥ (1,587)	¥ 77,274	¥ (4,322)	¥ 91,590	¥ 93,037	¥1,075,995

	Accumulated other comprehensive income						Total net assets
	Net unrealized holding gains on securities	Deferred gains on hedges	Foreign currency translation adjustments	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	Non-controlling interests	
For the year ended March 31, 2016							Thousands of U.S. dollars (Note 1)
Balance at April 1, 2015	\$ 414,482	\$ 2,193	\$ 775,067	\$ 3,863	\$ 1,195,605	\$ 956,500	\$10,290,757
Cash dividends paid	—	—	—	—	—	—	(220,431)
Net loss	—	—	—	—	—	—	(2,744)
Acquisition of treasury stock	—	—	—	—	—	—	(701)
Sale of treasury stock	—	—	—	—	—	—	53
Net changes of items other than shareholders' equity	(234,896)	(16,284)	(88,919)	(42,240)	(382,339)	(130,386)	(512,725)
Balance at March 31, 2016	\$ 179,586	\$ (14,091)	\$ 686,148	\$ (38,377)	\$ 813,266	\$ 826,114	\$9,554,209

The accompanying notes are an integral part of these financial statements.

Consolidated Statements of Cash Flows

SUMITOMO METAL MINING CO., LTD. AND CONSOLIDATED SUBSIDIARIES

For the years ended March 31, 2016 and 2015	Millions of yen		Thousands of U.S. dollars (Note1)
	2016	2015	2016
Cash flows from operating activities:	¥ 559	¥ 123,261	\$ 4,964
Income before income taxes			
Adjustments to reconcile income before income taxes to net cash provided by operating activities:			
Depreciation	46,141	38,125	409,705
Loss on impairment of fixed assets	813	614	7,219
Loss on sale and disposal of property, plant and equipment	380	577	3,374
Loss from valuation of derivative instruments	194	130	1,723
Decrease (Increase) in allowance for losses on investments	(16,350)	50,683	(145,178)
Interest and dividend income	(13,800)	(10,218)	(122,536)
Interest expense	4,873	3,968	43,269
Equity in losses (earnings) of affiliated companies	73,223	(23,943)	650,178
Casualty loss	100	168	888
Decrease (Increase) in trade received	16,415	(11,417)	145,756
Decrease (Increase) in inventories	37,948	(40,833)	336,956
Increase (Decrease) in trade payables	18,128	(14,557)	160,966
Others	(7,982)	3,252	(70,877)
Sub-total	160,642	119,810	1,426,407
Interest and dividend received	10,647	29,984	94,539
Interest paid	(5,364)	(3,545)	(47,629)
Payments for maintenance costs for ceased projects	(605)	(535)	(5,372)
Payments for recovery costs	(100)	(168)	(888)
Payments for income taxes	(45,516)	(25,543)	(404,156)
Net cash provided by operating activities	119,704	120,003	1,062,901
Cash flows from investing activities:			
Payments for acquisition of property, plant and equipment	(42,880)	(58,614)	(380,750)
Proceeds from sale of property, plant and equipment	775	809	6,881
Payments for acquisition of intangible assets	(455)	(117)	(4,040)
Proceeds from sale of intangible assets	—	30	—
Payments for purchases of investment securities	(702)	(1,506)	(6,233)
Proceeds from sales of investment securities	2	5,016	18
Payments for purchase of securities of subsidiaries and affiliated companies	(25,523)	(13,556)	(226,629)
Payments into time deposits	(553)	(4,398)	(4,910)
Proceeds from withdrawal of time deposits	208	57	1,847
Payments for loans lent	(25,079)	(33,373)	(222,687)
Collection of loans repaid	394	403	3,498
Others	937	225	8,320
Net cash used in investing activities	(92,876)	(105,024)	(824,685)
Cash flows from financing activities:			
Net decrease (increase) in bank loans	(1,664)	928	(14,775)
Proceeds from long-term debt	37,299	747	331,193
Repayments of long-term debt	(21,035)	(19,281)	(186,779)
Contribution from non-controlling interests	10,507	5,386	93,296
Increase in treasury stocks	(73)	(771)	(648)
Cash dividends paid	(24,825)	(24,284)	(220,431)
Cash dividends paid to non-controlling interests	(4,212)	(1,772)	(37,400)
Net cash provided by (used in) financing activities	(4,003)	(39,047)	(35,544)
Effect of changes in exchange rate on cash and cash equivalents	(2,720)	(795)	(24,151)
Net increase (decrease) in cash and cash equivalents	20,105	(24,863)	178,521
Cash and cash equivalents at beginning of year	177,720	202,583	1,578,050
Cash and cash equivalents at end of year	¥ 197,825	¥ 177,720	\$ 1,756,571

The accompanying notes are an integral part of these financial statements.

Notes to Consolidated Financial Statements

SUMITOMO METAL MINING CO., LTD. AND CONSOLIDATED SUBSIDIARIES

1 Basis of presenting consolidated financial statements

The accompanying consolidated financial statements have been prepared in accordance with the provisions set forth in the Japanese Financial Instruments and Exchange Act, and in conformity with accounting principles generally accepted in Japan ("Japanese GAAP"), which are different in certain respects as to the application and disclosure requirements of International Financial Reporting Standards ("IFRSs").

The accounts of the Company's overseas subsidiaries and affiliated companies are based on their accounting records maintained in conformity with generally accepted accounting principles prevailing in the respective countries of domicile and make necessary amendments for consolidated financial statements required by Practical Issues Task Force No. 18 and No. 24 issued by ASBJ. The accompanying consolidated financial statements have been restructured and translated into English with some expanded descriptions from the consolidated financial statements of Sumitomo Metal Mining Co., Ltd. (the "Company") prepared in accordance with Japanese GAAP and filed with the appropriate Local Finance Bureau of the Ministry of Finance as required by the Japanese Financial Instruments and Exchange Act. Some supplementary information included in the statutory Japanese language consolidated financial statements, but not required for fair presentation, is not presented in the accompanying consolidated financial statements.

The translations of the Japanese yen amounts into U.S. dollars are included solely for the convenience of readers outside Japan, using the prevailing exchange rate at March 31, 2016, which was ¥112.62 to US\$1.00. The convenience translations should not be construed as representations that the Japanese yen amounts have been, could have been, or could in the future be, converted into U.S. dollars at this or any other rate of exchange.

2 Summary of significant accounting policies

Consolidation — The consolidated financial statements include the accounts of the Company and its significant subsidiaries (68 subsidiaries in 2016, 68 in 2015). All significant inter-company balances and transactions have been eliminated. Investments in affiliated companies of which the Company has the ability to exercise significant influence over financial and operating policies, are accounted for by the equity method (16 affiliated companies in 2016, 16 in 2015).

Investments in the remaining unconsolidated subsidiaries and affiliated companies are carried at cost because of their immaterial

effect on the consolidated financial statements.

In the elimination of investments in subsidiaries, the assets and liabilities of the subsidiaries, including the portion attributable to non-controlling interests, are recorded based on the fair value at the time the Company acquired control of the respective subsidiaries.

Goodwill (consolidation difference between the investment cost and the underlying equity in its net assets at the date of acquisition) is amortized over five years on a straight-line basis. With respect to subsidiaries in the United States, goodwill is amortized over twenty years on a straight-line basis.

Cash and cash equivalents and cash flow statements — Cash on hand, readily available bank deposits, negotiable certificates of deposits and short-term highly liquid investments with maturities not exceeding three months at the time of purchase are considered to be cash and cash equivalents.

Allowance for doubtful accounts — The allowance for doubtful accounts is provided at an amount determined based on the historical experience of bad debt with respect to ordinary accounts, plus an estimate of uncollectible amount determined by reference to specific doubtful accounts from customers who are experiencing financial difficulties.

Allowance for losses on investments — The allowance for losses on investments is provided for the loss on investments in affiliates and others based on the amount to be required considering the financial position of the affiliates.

Investment securities — Securities are classified into two categories based on the intent of holding: available-for-sale securities; and securities issued by unconsolidated subsidiaries and affiliated companies.

Available-for-sale securities with available fair values (marketable securities) are stated at fair values. Unrealized gains and losses on these securities are reported, net of applicable income taxes, as a separate component of net assets. The cost of securities sold is determined by the moving-average method. Other available-for-sale securities with no available fair values (non-marketable securities) are stated at moving-average cost. Securities issued by unconsolidated subsidiaries and affiliated companies other than those accounted for by the equity method are carried at cost.

Derivatives and hedge accounting — Derivative instruments are stated at fair value. Changes in the fair values are recognized as gains and losses unless derivative transactions are used for hedging purposes.

If derivative transactions are used as hedges and meet certain hedging criteria, the Company and its consolidated subsidiaries defer recognition of gains or losses resulting from changes in fair value of derivative transactions until the related losses or gains on the hedged items are recognized.

If interest rate swap contracts are used as hedges and meet certain hedging criteria, the net amount to be paid or received under the interest rate swap contract is added to or deducted from the interest on the assets or liabilities for which the swap contract was executed.

The Company evaluates hedge effectiveness monthly by comparing the cumulative changes in cash flows from or the changes in fair value of hedged items and the corresponding changes in the hedging derivative instruments.

Foreign currency translation — Receivables and payables denominated in foreign currencies are translated into Japanese yen at the year-end rates.

Balance sheets of consolidated overseas subsidiaries are translated into Japanese yen at the year-end rates except for account components of net assets, which are translated at historical rates. Income statements of consolidated overseas subsidiaries are translated at average rates except for transactions with the Company, which are translated at the rates used by the Company.

Inventories — Inventories are mainly stated at the lower of cost determined by the first-in first-out (FIFO) method or net selling value of inventories regarded as the decreased profitability of assets, whose write-downs are included in cost of sales.

Property, plant and equipment — Property, plant and equipment are stated at cost.

Depreciation of property, plant and equipment is computed by the straight-line method, based on the estimated useful lives of respective assets. The depreciation period generally ranges from 2 years to 60 years for buildings and structures and 2 years to 22 years for machinery and equipment.

Accrued restructuring charges — Accrued restructuring charges are provided by the Company and its consolidated subsidiaries to cover the costs of business reconstruction.

Accrued environmental measures — Accrued environmental measures are estimated and recorded to provide for future potential costs, such as costs related to the disposal of polychlorinated biphenyl (PCB) and lead.

Retirement benefits — In calculating projected benefits obligations the benefits formula basis is used to attribute the expected benefit to the respective years. Actuarial gains and losses are recognized in expenses using the straight-line method over 10 years within the average remaining service years commencing from the following period.

Prior service costs are recognized in expenses using the straight-line method over 10 years within the average remaining service period.

Some domestic consolidated subsidiaries use the simplified method for the calculation of projected benefit obligations.

Research and development expense — Research and development expense is charged to income as incurred.

Accounting for certain lease transactions — Finance leases, except for certain immaterial leases, are capitalized and depreciated over the lease term.

Income taxes — Deferred tax assets and liabilities are determined based on the differences between the financial statement carrying amounts and the tax bases, and measured using the statutory tax rates which will be in effect when the differences are expected to be realized.

Sales — Sales of merchandise and finished products are recognized when the products are shipped to customers.

Change in accounting policies — The Company and its consolidated domestic subsidiaries have adopted “Revised Accounting Standard for Business Combinations” (ASBJ Statement No. 21, September 13, 2013 (hereinafter, “Statement No. 21”)), “Revised Accounting Standard for Consolidated Financial Statements” (ASBJ Statement No. 22, September 13, 2013 (hereinafter, “Statement No. 22”)) and “Revised Accounting Standard

for Business Divestitures" (ASBJ Statement No. 7, September 13, 2013 (hereinafter, "Statement No. 7")) (together, the "Business Combination Accounting Standards"), from the current year. As a result, the Company changed its accounting policies to recognize in capital surplus the differences arising from the changes in the Company's ownership interest of subsidiaries over which the Company continues to maintain control and to record acquisition related costs as expenses in the year in which the costs are incurred. In addition, the Company changed its accounting policy for the reallocation of acquisition costs due to the completion following provisional accounting to reflect such reallocation in the consolidated financial statements for the year in which the business combination took place. The Company also changed the presentation of net income and the term "non-controlling interests" is used instead of "minority interests." Certain amounts in the prior year comparative information were reclassified to conform to such changes in the current year presentation.

With regard to the application of the Business Combination Accounting Standards, the Company followed the provisional treatments in article 58-2 (4) of Statement No. 21, article 44-5 (4) of Statement No. 22 and article 57-4 (4) of Statement No. 7 with application from the beginning of the current year prospectively.

There is no effect on the consolidated financial statements of the current year.

Accounting standards issued but not yet effective —

"Revised Implementation Guidance on Recoverability of Deferred Tax Assets" (ASBJ Guidance No. 26, March 28, 2016 (hereinafter, "Guidance No. 26"))

(1) Overview

Following the framework in Auditing Committee Report No. 66 "Audit Treatment regarding the Judgment of Recoverability of Deferred Tax Assets," which prescribes estimation of deferred tax assets according to the classification of the entity by one of five types, the following treatments were changed as necessary:

- (i) Treatment for an entity that does not meet any of the criteria in types 1 to 5;
- (ii) Criteria for types 2 and 3;
- (iii) Treatment for deductible temporary differences which an entity classified as type 2 is unable to schedule;
- (iv) Treatment for the period which an entity classified as type 3 is able to reasonably estimate with respect to future taxable income before consideration of taxable or deductible temporary

differences that exist at the end of the current year; and
 (v) Treatment when an entity classified as type 4 also meets the criteria for types 2 or 3.

(2) Effective date

Effective from the beginning of the year ending March 31, 2017

(3) Effects of application of the Guidance

The Company and its consolidated domestic subsidiaries are currently in the process of determining the effect of the new guidance on the consolidated financial statements.

Amount per share of common stock — Basic net income per share is computed based on the weighted-average number of shares of common stock issued during each year.

Diluted net income per share assumes that outstanding convertible bonds were converted into common stock at the beginning of the period at the current conversion price.

Cash dividends per share represent the actual amount applicable to the respective year.

3 Notes to financial instruments

(1) Status of financial instruments

(i) Policies on the handling of financial instruments

The Group procures the funds necessary for its capital expenditure, investment and loan plans mainly through bank loans and the issuance of bonds. Short-term operating funds are funded through bank loans as required. In the event of a need for new funds, the Group, in principle, looks to the issuance of short-term bonds (commercial paper). This is supplemented by bank loans and the use of liquidation schemes applicable to notes and accounts receivable. The Group takes great care to monitor the status of its funding needs and financial position. This is to ensure that the Group does not overly rely on specific procurement methods and financial instruments. Accordingly, steps are taken to ensure a balanced funding portfolio from both the short and long term as well as direct and indirect financing perspectives.

Temporary surplus funds are utilized only for highly safe financial assets for which there is a low probability of a loss of principal.

Derivative transactions are only used to avoid the risks attributable to fluctuations in the prices of non-ferrous metals as well as foreign currency exchange and interest rates. The Group does not engage in derivative translations for speculative purposes.

(ii) Details of and risks associated with financial instruments

Notes and accounts receivable, which are trade receivables, are exposed to the credit risk of customers. In addition, foreign currency-denominated trade receivables, which are generated by global business operations, are also exposed to fluctuations in foreign currency exchange rates. Turning to the metals business, trade receivables are also exposed to the risk of movements in the prices of non-ferrous metals. Investment securities, which largely represent shares of companies with whom the Group trades or has formed an equity alliance, are exposed to the risk of changes in their market prices.

Notes and accounts payable, which are trade obligations, generally have maturity dates of one year or less. In similar fashion to trade receivables, trade obligations in the metals business are subject to the risk of movements in the prices of non-ferrous metals. A certain portion of trade obligations are related to the import of raw and other materials and as such are denominated in foreign currencies. On this basis, they too are open to the risk of fluctuations in the foreign currency exchange rates. Within loans and bonds payable, bank loans payable primarily represent funding applicable to operating transactions while long-term loans (with a maximum maturity up to January 6, 2031) and bonds mainly concern funding relating to capital expenditures. A certain portion of loans and bonds payable is provided on a floating rate of interest basis. Accordingly, this portion is exposed to the risk of fluctuation in interest rates.

Derivative transactions employed in an effort to offset the aforementioned risks include forward foreign currency exchange rate contracts; forward and option transaction agreements; interest rate swap transaction agreements; and interest rate cap transaction agreements, which seek to provide hedges for the risks of fluctuations in the foreign currency exchange rates of trade receivables and trade obligations; the prices of non-ferrous metals applicable to non-ferrous metal trade receivables and trade obligations; and interest rates applicable to loans and bonds payable, respectively. For hedging instruments and hedged items, hedging policy, the method of assessing the effectiveness of hedges and other details in connection with hedge accounting, refer to the "Derivatives and hedge accounting" described in the Note 2 Summary of significant accounting policies.

(iii) Risk management systems relating to financial instruments

(a) Management of credit risk (risk relating to nonperformance of a contract obligation by a counterparty, etc.)

With respect to trade receivables, each operating department and division within the Group is guided by its own set of management rules and regulations. Sales and marketing departments and divisions regularly monitor the status of customers, managing due dates and balances on an individual customer basis. In this manner, every effort is made to ensure early detection and the mitigation of concerns regarding collection due to deterioration in financial standing or other factors. With respect to the use of derivative transactions, steps are taken to engage in transactions with highly rated financial institutions only. These steps are taken with the aim of mitigating counterparty risk.

The maximum amount of the credit risk is shown in the value of financial assets on the balance sheet which are subject to credit risk.

(b) Management of market risks (risks associated with fluctuations in the price of non-ferrous metals, foreign currency exchange as well as interest rates, etc.)

The Group employs commodity forward transaction and commodity option transaction agreements, which seek to provide hedges for the risks of fluctuations in the prices of imported raw materials with respect to non-ferrous metals as well as the sales prices of commodity metals and copper concentrate on international commodities markets.

At the same time, the Group utilizes forward foreign currency exchange rate contracts in an effort to offset the risks of movements in foreign currency exchange rates in connection with trade receivables and obligations denominated in foreign currencies, interest rate swap transaction agreements, and interest rate cap transaction agreements aimed at hedging the risks of fluctuations in interest rate.

With respect to investment securities, the Group regularly monitors fair values as well as the financial status of issuers (counterparties), and reviews its holdings on a continuous basis taking into consideration its relationships with counterparties.

As for derivative transactions, in accordance with derivative transaction management rules and regulations

that outline the purpose and objectives of derivative transactions while providing authority and setting limits and scope, individual departments and divisions are responsible for formulating operating rules with respect to the implementation of derivative transactions, executing and booking transactions and reconciling balances with counterparties on a regular basis. Consolidated subsidiaries also adhere to the Company's derivative transaction management rules and regulations while working to build the aforementioned management structure under which derivative transactions are managed.

- (c) Management of liquidity risks associated with the procurement of funds (the risk of being unable to make payments on due dates)

The Group manages liquidity risk by preparing and updating a cash management plan six months in advance based on reports from each department and division.

Certain domestic consolidated subsidiaries have adopted a cash management system and are efficiently maintaining appropriate levels of liquidity and cash on hand.

- (iv) Supplementary explanation for fair values, etc. of financial instruments

Fair values of financial instruments are determined by market prices. If no market price is available, the fair value is based on the value that is calculated in a reasonable manner. The determination of such values contains variable factors and as such the adoption of wide ranging and differing assumptions may cause values to change. In addition, with respect to contract and other amounts applicable to derivative transactions outlined as follows in "2. Fair values, etc. of financial instruments" such amounts themselves do not indicate the size of market risks associated with derivative transactions.

(2) Fair values, etc. of financial instruments

Amounts on the consolidated balance sheets, fair values and the differences between the two as of March 31, 2016 and 2015 are shown as follows. Certain financial instruments were excluded from the following table as the fair values were not available (refer to the table shown in (ii) below).

2016	Millions of yen			Thousands of U.S. dollars		
	Book values of Consolidated Balance Sheets	Fair Values	Difference	Book values of Consolidated Balance Sheets	Fair Values	Difference
Cash and cash equivalents	¥ 197,825	¥ 197,825	¥ —	\$1,756,571	\$1,756,571	\$ —
Time deposits	5,049	5,049	—	44,832	44,832	—
Notes and accounts receivable	98,904	98,904	—	878,210	878,210	—
Investment securities	252,007	307,085	55,078	2,237,675	2,726,736	489,061
Long-term loans receivable	126,224	131,166	4,942	1,120,796	1,164,677	43,881
Total Assets	¥ 680,009	¥ 740,029	¥ 60,020	\$6,038,084	\$6,571,026	\$ 532,942
Notes and accounts payable	45,433	45,433	—	403,419	403,419	—
Bank loans and long-term debt due within one year	112,523	112,536	13	999,139	999,254	115
Long-term debt due after one year	288,036	291,074	3,038	2,557,591	2,584,567	26,976
Total Liabilities	445,992	449,043	3,051	3,960,149	3,987,240	27,091
Derivative transactions	¥ (1,664)*1	¥ (1,761)*1	¥ (97)	\$ (14,775)*1	\$ (15,637)*1	\$ (862)

2015	Millions of yen		
	Book values of Consolidated Balance Sheets	Fair Values	Difference
Cash and cash equivalents	¥ 177,720	¥ 177,720	¥ —
Time deposits	4,944	4,944	—
Notes and accounts receivable	116,218	116,218	—
Investment securities	292,595	374,350	81,755
Long-term loans receivable	142,891	146,354	3,463
Total Assets	¥ 734,368	¥ 819,586	¥ 85,218
Notes and accounts payable	36,767	36,767	—
Bank loans and long-term debt due within one year	99,094	99,094	—
Long-term debt due after one year	295,000	296,362	1,362
Total Liabilities	430,861	432,223	1,362
Derivative transactions	¥ 63*1	¥ (424)*1	¥ (487)

*1 Net receivables and obligations arising from derivative transactions are shown as a net amount and items for which aggregated results lead to net obligations are shown in parentheses.

(i) Fair values of financial instruments, and matters pertaining to securities and derivative transactions

Assets

(a) Cash and cash equivalents

The book values approximate to the fair values due to their high liquidity.

(b) Time deposits

The book values approximate to the fair values due to their high liquidity.

(c) Notes and accounts receivable

The book values approximate to the fair values due to short-term maturities of these instruments.

(d) Investment securities

The fair values of investment securities are based on the market prices of securities exchanges on which shares are listed.

For details regarding securities on an individual holding purpose basis refer to the Note 4 Securities.

(e) Long-term loans receivable

The fair values of floating-rate long-term loans receivable are based on their book values because the fair values of floating-rate long-term loans receivable reflect market interest rates within a short period of time and closely approximate their book values. The fair values of fixed-rate long-term loans

receivable are based on a method of calculation whereby the total principal and interest are discounted at the contracted rates as adjusted considering the market rate.

Liabilities

(a) Notes and accounts payable

The book values approximate to the fair values due to short-term settlement of these instruments.

(b) Bank loans

The book values approximate to the fair values due to short-term settlement of these instruments.

(c) Bonds

The fair values are based on market prices.

(d) Long-term debt

The discounted cash flow method was used to estimate the fair values, based on marginal borrowing rates as discount rate.

Derivative transactions

Refer to the Note 5 Derivative transactions.

(ii) The financial instruments excluded from the above table as of March 31, 2016 and 2015 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
	Book values of Consolidated Balance Sheets	Book values of Consolidated Balance Sheets	Book values of Consolidated Balance Sheets
Unlisted equity securities	¥ 196,722	¥ 289,458	\$ 1,746,777

These instruments are not included in "Investment securities" (refer to above table) as the fair values are not available.

(iii) The aggregate maturities subsequent to March 31, 2016 and 2015 for financial assets are as follows:

	Millions of yen				Thousands of U.S. dollars			
	Due within 1 year	Due after 1 year and within 5 years	Due after 5 years and within 10 years	Due over 10 years	Due within 1 year	Due after 1 year and within 5 years	Due after 5 years and within 10 years	Due over 10 years
2016								
Cash and cash equivalents	¥197,825	¥ —	¥ —	¥ —	\$ 1,756,571	\$ —	\$ —	\$ —
Time deposits	5,049	—	—	—	44,832	—	—	—
Notes and accounts receivable	98,904	—	—	—	878,210	—	—	—
Long-term loans receivable	—	1,351	18,187	106,686	—	11,996	161,490	947,310
Total	¥301,778	¥ 1,351	¥ 18,187	¥106,686	\$ 2,679,613	\$ 11,996	\$ 161,490	\$ 947,310

	Millions of yen			
	Due within 1 year	Due after 1 year and within 5 years	Due after 5 years and within 10 years	Due over 10 years
2015				
Cash and cash equivalents	¥177,720	¥ —	¥ —	¥ —
Time deposits	4,944	—	—	—
Notes and accounts receivable	116,218	—	—	—
Long-term loans receivable	—	33,667	107,584	1,640
Total	¥298,882	¥ 33,667	¥107,584	¥ 1,640

(iv) The amount scheduled to be repaid after March 31, 2016 of long-term debt

Refer to the Note 8 Bank loans and long-term debt.

4 Securities

(1) The following tables summarize acquisition costs and book values (available fair values) as of March 31, 2016 and 2015:

Available-for-sale securities

Securities with book values (available fair values) exceeding acquisition costs

	Millions of yen					
	2016			2015		
	Acquisition cost	Book value	Difference	Acquisition cost	Book value	Difference
Equity securities	¥ 55,032	¥ 89,818	¥ 34,786	¥ 78,596	¥ 145,589	¥ 66,993

Thousands of U.S. dollars

	2016		
	Acquisition cost	Book value	Difference
Equity securities	\$ 488,652	\$ 797,532	\$ 308,880

Securities with book values (available fair values) not exceeding acquisition costs

	Millions of yen					
	2016			2015		
	Acquisition cost	Book value	Difference	Acquisition cost	Book value	Difference
Equity securities	¥ 28,428	¥ 22,556	¥ (5,872)	¥ 6,343	¥ 5,381	¥ (962)

Thousands of U.S. dollars

	2016		
	Acquisition cost	Book value	Difference
Equity securities	\$ 252,424	\$ 200,284	\$ (52,140)

(2) The following table summarizes book values of the securities with no available fair values as of March 31, 2016 and 2015:

Available-for-sale securities	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Unlisted equity securities	¥ 20,088	¥ 54,418	\$ 178,370

(3) Total sales of available-for-sale securities sold during the year ended March 31, 2016 amounted to ¥2 million (US\$18 thousand) and related gains amounted to ¥2 million (US\$18 thousand).

No losses on sales of available-for-sale securities were recognized for the period.

Total sales of available-for-sale securities sold during the year ended March 31, 2015 amounted to ¥20 million (US\$166 thousand) and related gains amounted to ¥10 million (US\$83 thousand).

No losses on sales of available-for-sale securities were recognized for the period.

(4) Impairment losses on available-for-sale securities amounted to ¥1,463 million (US\$12,991 thousand) during the year ended March 31, 2016.

There was no impairment loss on available-for-sale securities during the year ended March 31, 2015.

If the fair value of available-for-sale securities declines by over 50% compared to the acquisition cost thereof, the Company and its consolidated subsidiaries write down the book value of such securities. If the fair value of available-for-sale securities declines between 30% and 50% compared to the acquisition cost thereof, the Company and its consolidated subsidiaries write down the book value of the securities considering the possibilities for recovery of the fair value.

5 Derivative transactions

The following tables summarize the market value information as of March 31, 2016 and 2015 of derivative transactions for which hedge accounting has not been applied:

	Millions of yen									
	2016					2015				
	Contracted amount and others		Fair value	Recognized gains (losses)	Contracted amount and others		Fair value	Recognized gains (losses)		
Total	Over 1 year	Total			Over 1 year					
Currency:										
Forward contracts:										
Buy position—U.S. dollars	¥ 7,676	¥ —	¥ (26)	¥ (26)	¥ 11,300	¥ —	¥ (22)	¥ (22)		
Total	¥ 7,676	¥ —	¥ (26)	¥ (26)	¥ 11,300	¥ —	¥ (22)	¥ (22)		
Interest:										
Interest rate cap contracts:										
Buy position	¥ 1,350	¥ —	¥ 14	¥ (1,336)	¥ 1,350	¥ —	¥ 136	¥ (1,214)		
Total	¥ 1,350	¥ —	¥ 14	¥ (1,336)	¥ 1,350	¥ —	¥ 136	¥ (1,214)		
Commodity:										
Forward contracts:										
Sell position—Metal	¥ 1,231	¥ —	¥ 559	¥ 559	¥ 792	¥ —	¥ (501)	¥ (501)		
Buy position—Metal	5,264	—	—	—	454	—	—	—		
Option contracts:										
Sell position										
Call option—Metal	—	—	—	—	20,893	—	(60)	(60)		
Buy position										
Put option—Metal	—	—	—	—	13,020	—	151	151		
Total	¥ 6,495	¥ —	¥ 559	¥ 559	¥ 35,159	¥ —	¥ (410)	¥ (410)		

	Thousands of U.S. dollars			
	2016			
	Contracted amount and others		Fair value	Recognized gains (losses)
Total	Over 1 year			
Currency:				
Forward contracts:				
Buy position—U.S. dollars	\$ 68,158	\$ —	\$ (231)	\$ (231)
Total	\$ 68,158	\$ —	\$ (231)	\$ (231)
Interest:				
Interest rate cap contracts:				
Buy position	\$ 11,987	\$ —	\$ 124	\$ (11,863)
Total	\$ 11,987	\$ —	\$ 124	\$ (11,863)
Commodity:				
Forward contracts:				
Sell position—Metal	\$ 10,931	\$ —	\$ 4,964	\$ 4,964
Buy position—Metal	46,741	—	—	—
Option contracts:				
Sell position				
Call option—Metal	—	—	—	—
Buy position				
Put option—Metal	—	—	—	—
Total	\$ 57,672	\$ —	\$ 4,964	\$ 4,964

Derivative transactions for which hedge accounting has been applied for the years ended March 31, 2016 and 2015 consisted of the following:

			Millions of yen		
			Contracted amount and others		
			Total	Over 1 year	Fair Value
2016					
Type of transaction	Type of derivative transaction	Major hedged items			
Interest	Interest rate swap contracts:				
	Paid fixed/received floating	Long-term loans	¥ 3,885	¥ 1,295	¥ (4)
	Total		¥ 3,885	¥ 1,295	¥ (4)
Commodity	Forward contracts:				
	Sell position—Metal	Accounts receivable	¥ 12,503	¥ —	¥ (452)
	Buy position—Metal	Accounts receivable, Accounts payable	27,616	1,190	(2,074)
	Option contracts:				
	Sell position				
	Call position—Metal*1	Accounts receivable	16,951	—	319
Total			¥ 57,070	¥ 1,190	¥ (2,207)
Interest	Interest rate swap contracts*2:				
	Paid fixed/received floating	Long-term loans	¥ 11,542	¥ 3,847	¥ (97)
	Total		¥ 11,542	¥ 3,847	¥ (97)

*1 Commodity call option contracts are based on zero cost option contracts. There is no transfer of option fees.

*2 The interest rate swap contracts are used as hedges and meet certain hedging criteria. The net amount to be paid or received under these interest rate swap contracts is added to or deducted from the interests on the assets or liabilities for which these interest rate swap contracts were executed. Main items hedged are long-term loans.

			Millions of yen		
			Contracted amount and others		
			Total	Over 1 year	Fair Value
2015					
Type of transaction	Type of derivative transaction	Major hedged items			
Interest	Interest rate swap contracts:				
	Paid fixed/received floating	Long-term loans	¥ 6,909	¥ 4,145	¥ (32)
	Total		¥ 6,909	¥ 4,145	¥ (32)
Commodity	Forward contracts:				
	Sell position—Metal	Accounts receivable	¥ 18,775	¥ —	¥ (505)
	Buy position—Metal	Accounts receivable, Accounts payable	17,880	2,757	700
	Option contracts:				
	Sell position				
	Call position—Metal*1	Accounts receivable	1,700	—	196
Total			¥ 38,355	¥ 2,757	¥ 391
Interest	Interest rate swap contracts*2:				
	Paid fixed/received floating	Long-term loans	¥ 20,523	¥ 12,314	¥ (487)
	Total		¥ 20,523	¥ 12,314	¥ (487)

*1 Commodity call option contracts are based on zero cost option contracts. There is no transfer of option fees.

*2 The interest rate swap contracts are used as hedges and meet certain hedging criteria. The net amount to be paid or received under these interest rate swap contracts is added to or deducted from the interests on the assets or liabilities for which these interest rate swap contracts were executed. Main items hedged are long-term loans.

			Thousands of U.S. dollars		
			Contracted amount and others		
			Total	Over 1 year	Fair Value
2016					
Type of transaction	Type of derivative transaction	Major hedged items			
Interest	Interest rate swap contracts:				
	Paid fixed/received floating	Long-term loans	\$ 34,497	\$ 11,499	\$ (36)
	Total		\$ 34,497	\$ 11,499	\$ (36)
Commodity	Forward contracts:				
	Sell position—Metal	Accounts receivable	\$ 111,019	\$ —	\$ (4,013)
	Buy position—Metal	Accounts receivable, Accounts payable	245,214	10,567	(18,416)
	Option contracts:				
	Sell position				
	Call position—Metal*1	Accounts receivable	150,515	—	2,833
Total			\$ 506,748	\$ 10,567	\$ (19,596)
Interest	Interest rate swap contracts*2:				
	Paid fixed/received floating	Long-term loans	\$ 102,486	\$ 34,159	\$ (861)
	Total		\$ 102,486	\$ 34,159	\$ (861)

*1 Commodity call option contracts are based on zero cost option contracts. There is no transfer of option fees.

*2 The interest rate swap contracts are used as hedges and meet certain hedging criteria. The net amount to be paid or received under these interest rate swap contracts is added to or deducted from the interests on the assets or liabilities for which these interest rate swap contracts were executed. Main items hedged are long-term loans.

6 Inventories

Inventories as of March 31, 2016 and 2015 consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Merchandise and finished products	¥ 47,648	¥ 75,188	\$ 423,087
Work in process	60,197	57,962	534,514
Raw materials and supplies	54,129	68,273	480,634
Total	¥ 161,974	¥ 201,423	\$ 1,438,235

7 Loss on impairment of fixed assets

(1) Loss on impairment of fixed assets for the year ended March 31, 2016 consisted of the following:

2016			Millions of yen	Thousands of U.S. dollars
Location	Major use	Asset category	Loss	Loss
Ome City, Tokyo Metropolis, Japan	Manufacturing facilities for thin-film paste	Machinery and other assets	¥ 233	\$ 2,069
Isa City, Kagoshima Prefecture, Japan	Manufacturing facilities for sapphire substrates	Machinery and other assets	348	3,090
Jiangsu, China	Manufacturing facilities for lead frames	Machinery and other assets	64	568
Hyuga City, Miyazaki Prefecture, Japan	Manufacturing facilities for ferronickel	Machinery and other assets	143	1,270
Kaohsiung, Taiwan	Building for thin-film paste manufacturing	Building	25	222
Total			¥ 813	\$ 7,219

The Company categorizes its operating assets by such business units as plants and manufacturing processes based on the divisions of managerial accounting.

Loss on impairment was recognized for the following reasons:

(i) The book values of manufacturing facilities for thin-film paste were reduced to their recoverable amounts because the sales volume of ITO target will not be expected to recover.

The values in use of assets were used as recoverable amounts for the measurement of impairment losses.

Since future cash flow was expected to be negative, it was assumed that there was no recoverable value.

(ii) The book values of manufacturing facilities for sapphire substrates were reduced to their recoverable amounts due to the withdrawal from sapphire substrate business.

The net sales price (fair value less cost to sell) of the assets was used as the recoverable amount for the measurement of impairment loss. As sale of these assets was expected to be difficult, the net sales price was assessed as zero.

(iii) The book values of manufacturing facilities for lead frames were reduced to their recoverable amounts due to the adverse market environment.

The net sales price (fair value less cost to sell) of the assets was used as the recoverable amount for the measurement of impairment loss. It was based on third-party appraisal or by similar means.

(iv) The book values of manufacturing facilities for ferronickel were reduced to their recoverable amounts because one of the electric furnaces was mothballed.

The values in use of assets were used as recoverable amounts for the measurement of impairment losses.

Since the resuming of the furnace is not yet determined, it was assumed that there was no recoverable value.

(v) The book value of the building for thin-film paste manufacturing was reduced to its recoverable amount due to the relocation of the factory.

The net sales price (fair value less cost to sell) of the asset was used as the recoverable amount for the measurement of impairment loss. As sale of the asset was expected to be difficult, the net sales price was assessed as zero.

(2) Loss on impairment of fixed assets for the year ended March 31, 2015 consisted of the following:

2015			Millions of yen
Location	Major use	Asset category	Loss
Kako-gun, Hyogo Prefecture, Japan	Manufacturing facilities for prime western grade zinc	Building and structures and machinery and other assets	¥ 612
Niihama City, Ehime Prefecture, Japan	Manufacturing facilities for certain copper-clad polyimide film substrates	Machinery and other assets	1
Selangor, Malaysia	Office electronics	Other assets	1
Total			¥ 614

The Company categorizes its operating assets by such business units as plants and manufacturing processes based on the divisions of managerial accounting.

Loss on impairment was recognized for the following reasons:

- (i) The book values of manufacturing facilities for prime western grade zinc were reduced to their recoverable amount because the production of zinc at the Harima Smelter will be discontinued.

The values in use of assets were used as recoverable amounts for the measurement of impairment losses.

Since future cash flow was expected to be negative, it was assumed that there was no recoverable value.

- (ii) The book values of manufacturing facilities for certain copper-clad polyimide film substrates were reduced to their

recoverable amounts due to the expectations that these facilities would cease to operate.

The net sales price (fair value less cost to sell) of the asset was used as the recoverable amount for the measurement of impairment loss. As sale of these assets was expected to be difficult, the net sales price was assessed as zero.

- (iii) The book values of office electronics were reduced to their recoverable amounts due to the expectation that they would no longer be in use.

The net sales price (fair value less cost to sell) of the assets was used as the recoverable amount for the measurement of impairment loss. As sale of these assets was expected to be difficult, the net sales price was assessed as zero.

8 Bank loans and long-term debt

Bank loans are generally represented by short-term notes (most of which are unsecured) and bank overdrafts, and bore interest at annual weighted average rate of 1.01% and 0.74% as of March 31, 2016 and 2015, respectively.

(1) Long-term debt as of March 31, 2016 and 2015 consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Long-term loans:			
Due within one year *1	¥ 24,933	¥ 18,734	\$ 221,391
Due after one year, maturing through 2031 *2	248,036	245,000	2,202,415
0.48% domestic bonds due in 2016	10,000	10,000	88,794
0.77% domestic bonds due in 2018	30,000	30,000	266,383
1.26% domestic bonds due in 2021	10,000	10,000	88,794
Total	322,969	313,734	2,867,777
Amount due within one year	(34,933)	(18,734)	(310,185)
Total	¥ 288,036	¥ 295,000	\$ 2,557,592

*1 Weighted average interest rate at March 31, 2016 is 1.33%

*2 Weighted average interest rate at March 31, 2016 is 0.82%

(2) The aggregate annual maturities of long-term debt as of March 31, 2016 are as follows:

Years ending March 31,	Millions of yen	Thousands of U.S. dollars
2017	¥ 34,933	\$ 310,185
2018	15,098	134,061
2019	46,854	416,036
2020	117,990	1,047,682
2021	21,522	191,103
Thereafter	86,572	768,710
Total	¥ 322,969	\$ 2,867,777

(3) Assets pledged as collateral for bank loans and long-term debt as of March 31, 2016 and 2015 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Cash and cash equivalents	¥ 1	¥ 1	\$ 9
Property, plant and equipment, at net book value and other assets	39,153	42,477	347,656
Investment securities	34,654	93,690	307,707
Long-term loans receivable	25,227	26,914	224,001
Others	338	376	3,001
Total	¥ 99,373	¥ 163,458	\$ 882,374

9 Income taxes

Income taxes in the accompanying consolidated statements of income comprise corporation taxes, inhabitants' taxes and enterprise taxes. Consolidated overseas subsidiaries are subject to income taxes of the countries in which they are domiciled.

The following table summarizes the significant differences between the statutory tax rate and the Company's and its consolidated subsidiaries' effective tax rate for financial statement purposes for the years ended March 31, 2016 and 2015:

	2016	2015
Statutory tax rate	33.1%	—%
Loss of consolidated subsidiaries	4,387.3	—
Permanently nontaxable dividends received	(2,783.4)	—
Effect of eliminating intercompany dividends received	2,285.7	—
Difference of statutory tax rate in subsidiaries	1,541.1	—
Decrease (Increase) in valuation allowance	(709.3)	—
Equity in earnings of unconsolidated subsidiaries and affiliated companies	(486.1)	—
Difference in local tax system	(197.9)	—
Undistributed earnings of foreign subsidiaries	(169.2)	—
Tax credit	(133.3)	—
Effect of mining taxes	(118.1)	—
Permanently non-deductible items, including entertainment expenses	34.5	—
Others	(42.9)	—
Effective tax rate	3,641.5%	—%

Information for the year ended March 31, 2015 is not provided because the difference between the effective tax rate and the statutory tax rate is immaterial.

(Adjustment of deferred tax assets and liabilities based on enacted changes in tax laws and rates)

On March 31, 2016, amendments to the Japanese tax regulations were enacted into law. Based on the amendments, the statutory income tax rates utilized for the measurement of deferred tax assets and liabilities expected to be settled or realized from April 1, 2016 to March 31, 2018 and on or after April 1, 2018 were changed from 32.3% to 30.9% and 30.6%, respectively, as of March 31, 2016.

Due to these changes in statutory income tax rates, net deferred tax liabilities (after deducting deferred tax assets) decreased by ¥288 million (US\$2,557 thousand) and deferred gains (losses) on hedges decreased by ¥37 million (US\$329 thousand) as of March 31, 2016, deferred income tax expense recognized for the year ended March 31, 2016 increased by ¥206 million (US\$1,829 thousand), net unrealized gains on securities increased by ¥531 million (US\$4,715 thousand) as of March 31, 2016.

Significant components of the Company's and its consolidated subsidiaries' deferred tax assets and liabilities as of March 31, 2016 and 2015 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Deferred tax assets:			
Net defined benefit liability	¥ 6,786	¥ 5,299	\$ 60,256
Overseas exploration costs	5,370	4,310	47,682
Unrealized profits	2,836	2,778	25,182
Asset retirement obligations	2,157	112	19,153
Net operating losses carry forwards	2,079	5,596	18,460
Loss on impairment of fixed assets	1,542	1,973	13,692
Contribution gains on securities to employee retirement benefits trust	1,238	1,183	10,993
Allowance for bonus payable	1,084	1,335	9,625
Allowance for losses on investments	—	12,671	—
Others	6,310	9,144	56,030
Gross deferred tax assets	29,402	44,401	261,073
Less valuation allowance	(4,616)	(20,624)	(40,988)
Deferred tax assets after deducting valuation allowance	24,786	23,777	220,085
Deferred tax liabilities:			
Depreciation	(11,592)	(11,671)	(102,930)
Net unrealized holding gains on available-for-sale securities	(9,585)	(20,426)	(85,109)
Reserve for losses on overseas investment	(4,973)	(4,953)	(44,157)
Accumulated earnings of overseas subsidiaries	(4,507)	(3,039)	(40,020)
Deferred gains on properties for tax purpose	(1,899)	(2,068)	(16,862)
Reserve for explorations	(1,402)	(1,184)	(12,449)
Gains on securities contributed to employee retirement benefits trust	(535)	(472)	(4,750)
Others	(1,297)	(1,639)	(11,517)
Deferred tax liabilities	(35,790)	(45,452)	(317,794)
Net deferred tax assets (liabilities)	¥ (11,004)	¥ (21,675)	\$ (97,709)

10 Retirement benefits and pension costs

(1) Outline of retirement benefits and pension costs

The Company and certain consolidated subsidiaries have a defined benefit pension plan and a defined contribution pension plan.

The defined benefit pension plan is based upon years of service, compensation at the time of severance and other factors.

Such retirement benefits are provided through a lump-sum benefit or a funded pension plan. The Company has a retirement benefit trust.

Some domestic consolidated subsidiaries use the simplified method for the calculation of projected benefit obligations. Also, certain consolidated subsidiaries enroll in multiemployer pension plans. Such plans are recognized as defined contribution plans.

(2) Defined benefit plans

The detailed notes relating to retirement benefit plans for the 12-month period ended March 31, 2016 and 2015 are as follows:

(i) Movements in retirement benefit obligations, excluding plans to which the simplified method is applied

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Balance at beginning of year	¥ 59,972	¥ 52,921	\$ 532,516
The cumulative effect of an accounting change	—	3,279	—
Restated balance at beginning of year	59,972	56,200	532,516
Service costs	2,051	1,921	18,212
Interest costs	550	679	4,884
Actuarial gains and losses	3,211	2,798	28,512
Benefits paid	(2,282)	(1,928)	(20,263)
Prior service costs	(19)	58	(169)
Others	93	244	826
Balance at end of year	¥ 63,576	¥ 59,972	\$ 564,518

(ii) Movements in plan assets, excluding plans to which the simplified method is applied

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Balance at beginning of year	¥ 53,370	¥ 49,323	\$ 473,895
Expected return on plan assets	1,156	1,034	10,265
Actuarial gains and losses	(3,332)	3,326	(29,586)
Contributions paid by the employer	818	857	7,263
Benefits paid	(1,281)	(1,170)	(11,375)
Balance at end of year	¥ 50,731	¥ 53,370	\$ 450,462

(iii) Movements in liability (asset) for retirement benefits to which the simplified method is applied

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Balance at beginning of year	¥ 830	¥ 1,272	\$ 7,370
Retirement benefit costs	642	(32)	5,701
Benefits paid	(200)	(220)	(1,776)
Contributions paid by the employer	(178)	(190)	(1,581)
Balance at end of year	¥ 1,094	¥ 830	\$ 9,714

(iv) Reconciliation from retirement benefit obligations and plan assets to liability (asset) for retirement benefits

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Funded retirement benefit obligations	¥ 66,858	¥ 63,567	\$ 593,660
Plan assets	(54,555)	(57,452)	(484,417)
	¥ 12,303	¥ 6,115	\$ 109,243
Unfunded retirement benefit obligations	1,636	1,317	14,527
Total net liability for retirement benefits at end of year	¥ 13,939	¥ 7,432	\$ 123,770
Liability for retirement benefits	¥ 14,128	¥ 7,763	\$ 125,448
Asset for retirement benefits	(189)	(331)	(1,678)
Total net liability for retirement benefits at end of year	¥ 13,939	¥ 7,432	\$ 123,770

(v) Retirement benefit costs

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Service costs	¥ 2,051	¥ 1,921	\$ 18,212
Interest costs	550	679	4,884
Expected return on plan assets	(1,156)	(1,034)	(10,265)
Net actuarial gains and losses amortization	(135)	102	(1,199)
Prior service costs amortization	154	191	1,367
Retirement benefit costs based on the simplified method	642	(32)	5,701
Total retirement benefit costs for the year	¥ 2,106	¥ 1,827	\$ 18,700

(vi) Other comprehensive income on defined retirement benefit plans, before tax

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Prior service costs	¥ (154)	¥ (133)	\$ (1,367)
Actuarial gains and losses	6,438	(645)	57,165
Total	¥ 6,284	¥ (778)	\$ 55,798

(vii) Accumulated other comprehensive income on defined retirement benefit plans, before tax

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Unrecognized prior service costs	¥ 47	¥ 201	\$ 417
Unrecognized actuarial gains and losses	5,161	(1,220)	45,827
Total	¥ 5,208	¥ (1,019)	\$ 46,244

(viii) Plan assets

(a) Plan assets consisted of the following:

	2016	2015
Bonds	35.7%	32.4%
Equity securities	53.8	58.0
Cash and cash equivalents	4.7	4.5
Others	5.8	5.1
Total	100.0	100.0

Plan assets include the retirement benefit trusts that were established in regards to lump-sum payment plans of 35.1% at March 31, 2016 and 36.4% at March 31, 2015.

(b) Long-term expected rate of return

Current and target asset allocations, and historical and expected returns on various categories of plan assets have been considered in determining the long-term expected rate of return.

Assumptions used in calculating the above numbers are as follows:

		2016	2015
Discount rate	(Mainly)	0.5%	0.9%
Expected long-term return on plan assets	(Mainly)	3.5%	3.5%

(c) Defined contribution plans

The amounts of required contributions to the defined contribution plans of the Company and certain consolidated subsidiaries for the years ended March 31, 2016 and 2015 were ¥404 million (US\$3,587 thousand) and ¥327 million, respectively.

(d) Multiemployer pension plans

The amounts of required contributions to the multiemployer plans which are recognized as defined contribution plans for the years ended March 31, 2016 and 2015 were ¥70 million (US\$622 thousand) and ¥81 million, respectively.

The funded status of the multiemployer pension plans at March 31, 2015 and 2014, to which contributions were recorded as net periodic retirement benefit costs, was as follows:

	Millions of yen		Thousands of U.S. dollars
	2015	2014	2015
Plan assets	¥ 329,141	¥ 349,753	\$ 2,922,580
Actuarial liability based on pension plan finance calculation and minimum actuarial reserve	361,482	386,624	3,209,749
Balance*	¥ (32,341)	¥ (36,871)	\$ (287,169)

* The principle factor relating to the balance was the prior service costs in pension financing which were -¥32,939 million (-US\$292,479 thousand) at March 31, 2015 and -¥35,835 million at March 31, 2014. The multiemployer pension plan (The Tokyo-to Kensetsu-gyou Employees' Pension Insurance), in which Igeta Heim Co., Ltd. had been enrolled, was dissolved on November 20, 2015, with the approval of the Minister of Health, Labour and Welfare who acted to return the contracted-out portion to the government, which has been handling it since December 2015. Consequently, it is not included in those assets at March 31, 2015. The impact of dissolution of the plan on operating income and loss before income taxes was immaterial.

The percentages of the Group's contributions to the multiemployer pension plans at March 31, 2015 and 2014 were 0.40% and 0.45%, respectively.

11 Research and development expense

Research and development expense included in selling, general and administrative expenses for the years ended March 31, 2016

and 2015 are ¥5,772 million (US\$51,252 thousand) and ¥5,865 million, respectively.

12 Net assets

Net assets comprise three subsections, which are shareholders' equity, accumulated other comprehensive income, and non-controlling interests.

Under the Japanese Corporate Law (the "Law"), the entire amount paid for new shares is required to be designated as common stock. However, a company may, by resolution of the Board of Directors, designate an amount not exceeding one-half of the price of the new shares as additional paid-in capital, which is included in capital surplus.

Under the Law, in cases where a dividend distribution of surplus is made, the smaller of an amount equal to 10% of dividend or excess, if any, of 25% of common stock over the total of additional paid-in capital and legal earnings reserve must be set aside as additional paid-in capital or legal earnings reserve. Legal earnings

reserve is included in retained earnings in the accompanying consolidated balance sheets.

Under the Law, legal earnings reserve and additional paid-in capital could be used to eliminate or reduce a deficit, or could be capitalized by a resolution of the shareholders' meeting.

Additional paid-in capital and legal earnings reserve may not be distributed as dividends. Under the Law, however, all additional paid-in capital and all of the legal earnings reserve may be transferred to other capital surplus and retained earnings, respectively, however which are potentially available for dividends.

The maximum amount that the Company can distribute as dividends is calculated based on the unconsolidated financial statements of the Company in accordance with Japanese laws and regulations.

13 Contingent liabilities

Contingent liabilities as of March 31, 2016 are as follows:

	Millions of yen	Thousands of U.S. dollars
Notes and accounts receivable sold to factoring companies with recourse	¥ 19	\$ 169
As guarantor for loans of:		
Non-consolidated subsidiaries and affiliated companies	91,048	808,453
As guarantor for the construction costs of:		
Electric facilities which provides electric power to Pogo Gold Mine	225	1,998
As a stockholder for future payment of:		
The mining royalty tax, interests and penalties of Cerro Verde S.A.A.	3,387	30,075
Total	¥ 94,679	\$ 840,695

Pursuant to the Agreement of Guarantees and Measures to Promote Investments with the Government of Peru (the "1998 Stability Agreement"), which was effective from 1999 through 2013, Sociedad Minera Cerro Verde S.A.A. ("Cerro Verde"), the Company's affiliated company accounted for by the equity method, has paid taxes based on the assumption that the mining royalty tax regime of 2004 did not apply to Cerro Verde.

In October 2013, the Peruvian national tax authority issued to Cerro Verde a payment order of taxes for the years 2006 through 2008, plus interests and penalties thereon, because the tax authority decided that the 1998 Stability Agreement did not exempt the Copper Sulfide Ores Development Project, which commenced in

2006 (the "Project"), from the mining royalty tax regime.

Although Cerro Verde has made an appeal to related agencies that the 1998 Stability Agreement exempted the Project, the Company's share of the payment being demanded in case such demand is validated is described above.

Cerro Verde had continued to pay taxes for 2009 and onward based on the same assumption that the 1998 Stability Agreement had been effective and had exempted the Project. Although the tax authority claims that the 1998 Stability Agreement also does not exempt the Project for 2009 or onward, the tax authority has not issued to Cerro Verde a payment order of taxes for such years.

14 Comprehensive income

Amounts reclassified to net income in the current period that were recognized in other comprehensive income in the current or previous periods and tax effects for each component of other comprehensive income are as follows:

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Net unrealized holding gains on securities			
Increase during the year	¥ (38,582)	¥ 21,243	\$ (342,585)
Reclassification adjustments	1,464	(10)	12,999
Sub-total, before tax	(37,118)	21,233	(329,586)
Tax effect	10,890	(5,956)	96,697
Sub-total, net of tax	¥ (26,228)	¥ 15,277	\$ (232,889)
Deferred gains on hedges			
Increase during the year	¥ (3,728)	¥ 739	\$ (33,102)
Reclassification adjustments	1,160	(575)	10,300
Sub-total, before tax	(2,568)	164	(22,802)
Tax effect	785	(39)	6,970
Sub-total, net of tax	¥ (1,783)	¥ 125	\$ (15,832)
Foreign currency translation adjustments			
Increase during the year	¥ (9,104)	¥ 27,975	\$ (80,838)
Reclassification adjustments	—	—	—
Sub-total, before tax	(9,104)	27,975	(80,838)
Sub-total, net of tax	¥ (9,104)	¥ 27,975	\$ (80,838)
Remeasurements of defined benefit plans			
Increase during the year	¥ (6,303)	¥ 485	\$ (55,967)
Reclassification adjustments	19	293	169
Sub-total, before tax	(6,284)	778	(55,798)
Tax effect	1,995	(288)	17,714
Sub-total, net of tax	¥ (4,289)	¥ 490	\$ (38,084)
Share of other comprehensive income of affiliated companies accounted for using equity method			
Increase during the year	¥ (3,798)	¥ 42,123	\$ (33,724)
Reclassification adjustments	(36)	(5)	(320)
Sub-total	¥ (3,834)	¥ 42,118	\$ (34,044)
Total other comprehensive income	¥ (45,238)	¥ 85,985	\$ (401,687)

15 Segment information

(1) General information about reported segments

(i) Basis of decision about reported segments

The reported segments of the Group refer to business units, for which separate financial information is available and that are subject to periodic reviews by the Board of Directors as the supreme, managerial decision-making body to determine the allocation of management resources and assess their respective operating results.

The Company currently has three business divisions— Mineral Resources Div., Non-Ferrous Metals Div., Materials Div.— in the pursuit of effective business operations by products and services. Each of these business divisions plans

its own comprehensive strategies to be carried out in Japan and overseas for its own product and service lines and engages in diverse business activities.

The three aforementioned business divisions are classified as “business segments” of the Group.

The Group integrated these three business segments into three reported segments: “Mineral Resources” “Smelting & Refining”, “Materials.” In determining these reported segments, in accordance with the integration criteria and quantitative standards set forth in the “Accounting Standard for Disclosures about Segments of an Enterprise and Related Information” (ASBJ Statement No. 17 issued on March 27, 2009) and “Guidance on Accounting Standard for Disclosures

about Segments of an Enterprise and Related Information” (ASBJ Guidance No. 20 issued on March 21, 2008).

As described above, the Group consists of three segments identified by products and services based on the business divisions.

(ii) Types of products and services of each reported segment

In the Mineral Resources segment, the Group mainly engages in the exploration, development and production of non-ferrous metal resources in Japan and overseas, as well as sales of ores and other products.

In the Smelting & Refining segment, the Group mainly engages in smelting and sales of copper, nickel, ferro-nickel, zinc and lead, as well as smelting and sales of precious metals such as gold, silver and platinum.

In the Materials segment, the Group mainly engages in manufacturing, processing and sales of semiconductor materials such as lead frames, tape materials, substrates (electronic packaging materials used to make LCD panel

integrated circuits) as well as of advanced materials such as pastes, powder materials (e.g., nickel powder), battery materials (e.g., nickel hydroxide, lithium nickel oxide) and crystalline materials (e.g., lithium tantalate, lithium niobate), manufacturing and sales of automotive exhaust processing catalysts, chemical catalysts, petroleum refinery and desulfurization catalysts, as well as autoclaved lightweight concrete (ALC) products.

(2) Basis of measurement regarding reported segment income (loss), segment assets and other material items

The accounting methods for each reported segment are basically the same as those set forth in Note 2, entitled the “Summary of significant accounting policies,” excepting the allocation of the amount equivalent to the interest on the internal loan payable to each segment.

Inter-segment net sales are calculated based on the prices of arm's length transactions.

(3) Information about reported segment income (loss), segment assets and other material items

Segment information as of and for the years ended March 31, 2016 and 2015 are as follows:

	Millions of yen						
2016	Mineral Resources	Smelting & Refining	Materials	Total of reported segments	Others*1	Adjustment**2	Consolidated
Net sales:							
Outside customers	¥ 70,448	¥ 622,523	¥ 158,302	¥ 851,273	¥ 4,134	¥ —	¥ 855,407
Inter segment	49,303	19,409	13,295	82,007	11,157	(93,164)	—
Total	¥ 119,751	¥ 641,932	¥ 171,597	¥ 933,280	¥ 15,291	¥ (93,164)	¥ 855,407
Segment income (loss)	¥ (44,317)	¥ 25,258	¥ 5,972	¥ (13,087)	¥ (828)	¥ 1,151	¥ (12,764)
Segment assets	¥ 344,673	¥ 683,830	¥ 197,114	¥ 1,225,617	¥ 20,767	¥ 384,416	¥ 1,630,800
Segment liabilities	¥ 54,299	¥ 323,449	¥ 107,939	¥ 485,687	¥ 10,526	¥ 58,592	¥ 554,805
Other items:							
Depreciation	¥ 13,972	¥ 21,673	¥ 8,014	¥ 43,659	¥ 386	¥ 2,096	¥ 46,141
Amortization of goodwill	135	—	23	158	—	—	158
Interest income	344	280	130	754	—	10,038	10,792
Interest expense	123	4,119	372	4,614	19	240	4,873
Equity in earnings (losses) of affiliated companies	(79,720)	2,885	2,856	(73,979)	—	756	(73,223)
Investment in equity-method affiliated companies	146,649	93,250	29,127	269,026	—	56,799	325,825
Capital expenditures	11,648	15,230	21,632	48,510	366	2,137	51,013

	Millions of yen						
2015	Mineral Resources	Smelting & Refining	Materials	Total of reported segments	Others*1	Adjustment**2	Consolidated
Net sales:							
Outside customers	¥ 72,349	¥ 684,347	¥ 161,027	¥ 917,723	¥ 3,611	¥ —	¥ 921,334
Inter segment	41,442	25,944	13,179	80,565	13,755	(94,320)	—
Total	¥ 113,791	¥ 710,291	¥ 174,206	¥ 998,288	¥ 17,366	¥ (94,320)	¥ 921,334
Segment income	¥ 53,775	¥ 81,323	¥ 12,914	¥ 148,012	¥ (80)	¥ 26,294	¥ 174,226
Segment assets	¥ 402,391	¥ 701,040	¥ 179,143	¥ 1,282,574	¥ 18,796	¥ 438,876	¥ 1,740,246
Segment liabilities	¥ 28,683	¥ 371,970	¥ 90,232	¥ 490,885	¥ 8,969	¥ 81,447	¥ 581,301
Other items:							
Depreciation	¥ 10,615	¥ 18,044	¥ 7,392	¥ 36,051	¥ 327	¥ 1,747	¥ 38,125
Amortization of goodwill	118	—	23	141	—	—	141
Interest income	274	158	61	493	—	6,687	7,180
Interest expense	16	3,347	387	3,750	19	199	3,968
Equity in earnings of affiliated companies	8,920	10,943	3,755	23,618	—	325	23,943
Investment in equity-method affiliated companies	196,442	78,313	28,272	303,027	100	83,662	386,789
Capital expenditures	20,193	20,126	10,962	51,281	712	3,239	55,232

Thousands of U.S. dollars

2016	Mineral Resources	Smelting & Refining	Materials	Total of reported segments	Others*1	Adjustment*2	Consolidated
Net sales:							
Outside customers	\$ 625,537	\$ 5,527,642	\$ 1,405,630	\$ 7,558,809	\$ 36,707	\$ —	\$ 7,595,516
Inter segment	437,782	172,341	118,052	728,175	99,068	(827,243)	—
Total	\$1,063,319	\$5,699,983	\$1,523,682	\$8,286,984	\$135,775	\$ (827,243)	\$7,595,516
Segment income (loss)	\$ (393,509)	\$ 224,276	\$ 53,028	\$ (116,205)	\$ (7,352)	\$ 10,220	\$ (113,337)
Segment assets	\$3,060,495	\$6,072,012	\$1,750,257	\$10,882,764	\$184,400	\$3,413,390	\$14,480,554
Segment liabilities	\$ 482,143	\$2,872,039	\$ 958,435	\$ 4,312,617	\$ 93,465	\$ 520,263	\$ 4,926,345
Other items:							
Depreciation	\$ 124,063	\$ 192,444	\$ 71,160	\$ 387,667	\$ 3,427	\$ 18,611	\$ 409,705
Amortization of goodwill	1,199	—	204	1,403	—	—	1,403
Interest income	3,055	2,486	1,154	6,695	—	89,132	95,827
Interest expense	1,092	36,574	3,303	40,969	169	2,131	43,269
Equity in earnings (losses) of affiliated companies	(707,868)	25,617	25,360	(656,891)	—	6,713	(650,178)
Investment in equity-method affiliated companies	1,302,158	828,006	258,631	2,388,795	—	504,341	2,893,136
Capital expenditures	103,427	135,234	192,080	430,741	3,250	18,975	452,966

*1 The "Others" segment refers to businesses other than those included in the reported segments and other profit-seeking business directly operated by Head Office divisions/departments.

Other businesses include real estate businesses and technical engineering.

*2 Notes to the various items of the "Adjustment" segment are below. (i–viii)

(i) Adjustments for segment income

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Head Office expenses not allocated to each reported segment*1	¥ (90)	¥ (1,461)	\$ (799)
Internal interest expense	562	543	4,990
Eliminations of inter-segmental transactions among the reported segments	267	1,039	2,371
Non-operating income/expenses not allocated to each reported segment*2	412	26,173	3,658
Total	¥ 1,151	¥ 26,294	\$ 10,220

*1 Head Office expenses not allocated to each reported segment mainly consist of general administrative expenses and R&D expenses, which are not attributable to the reported segments.

*2 Non-operating income/expenses not allocated to each reported segment mainly consist of foreign exchange gains/losses and interest expenses, which are not attributable to the reported segments.

(ii) Adjustments for segment assets and liabilities

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Corporate assets not allocated to each reported segment*1	¥ 482,978	¥ 471,716	\$ 4,288,563
Offset and eliminations of inter-segmental receivables among the reported segments, including those toward Head Office divisions/departments	(98,562)	(32,840)	(875,173)
Total	¥ 384,416	¥ 438,876	\$ 3,413,390

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Corporate liabilities not allocated to each reported segment*1	¥ 197,656	¥ 203,498	\$ 1,755,070
Offset and eliminations of inter-segmental payables among the reported segments, including those toward Head Office divisions/departments	(139,064)	(122,051)	(1,234,807)
Total	¥ 58,592	¥ 81,447	\$ 520,263

*1 Corporate assets and liabilities not allocated to each reported segment mainly refer to the assets and liabilities under the control of the Administration Dept. at the Head Office, which are not allocated to the reported segments.

(iii) Adjustments on depreciation refer to depreciation at the Head Office divisions/departments, which are not allocated to the reported business segments.

(iv) Adjustments on interest income consist of interest income at the Head Office divisions/departments, which is not allocated to the reported segments, and eliminations of transactions among the reported segments.

(v) Adjustments on interest expense consist of interest expense at the Head Office divisions/departments, which are not allocated to the reported segments, and eliminations of transactions among the reported segments.

(vi) Adjustments on equity in earnings (losses) of affiliated companies refer to the deduction of unrealized income relating to the inter-segmental transactions among the reported segments.

(vii) Adjustments on investment in equity-method affiliated companies represent the amount corresponding to "Foreign currency translation adjustments."

(viii) Adjustments on capital expenditures refer to increases thereof at the Head Office divisions/departments, which are not allocated to the reported segments.

Related information

(1) Information about geographic areas

(i) Sales

2016						Millions of yen	
	Japan	East Asia	Southeast Asia	North America	Others	Total	
	¥ 515,177	¥ 175,901	¥ 70,140	¥ 73,384	¥ 20,805	¥ 855,407	
2015						Millions of yen	
	Japan	East Asia	Southeast Asia	North America	Others	Total	
	¥ 558,183	¥ 192,433	¥ 71,406	¥ 75,619	¥ 23,693	¥ 921,334	
2016						Thousands of U.S. dollars	
	Japan	East Asia	Southeast Asia	North America	Others	Total	
	\$ 4,574,472	\$ 1,561,898	\$ 622,802	\$ 651,607	\$ 184,737	\$ 7,595,516	

*1 Net sales are segmented by country or region according to customers' location data.

*2 Regions are segmented based on their geographical proximity, and only those countries for which the net sales amount accounts for more than 10% of the net sales stated in the consolidated statements of income are separately listed.

*3 Major countries or regions that belong to the segments are as follows:

- East Asia: China, Taiwan, Hong Kong, South Korea, etc.
- Southeast Asia: Indonesia, Malaysia, Thailand, Vietnam, etc.
- North America: United States, Mexico and Canada
- Others: Australia, Germany, Italy, Turkey, etc.

(ii) Property, plant and equipment

2016							Millions of yen	
Japan	East Asia	Philippines	Southeast Asia	United States	Others	Total		
¥ 152,008	¥ 7,112	¥ 222,680	¥ 2,004	¥ 64,280	¥ 5,450	¥ 453,534		
2015							Millions of yen	
Japan	East Asia	Philippines	Southeast Asia	United States	Others	Total		
¥ 141,791	¥ 8,484	¥ 244,572	¥ 2,028	¥ 66,484	¥ 6,014	¥ 469,373		
2016							Thousands of U.S. dollars	
Japan	East Asia	Philippines	Southeast Asia	United States	Others	Total		
\$ 1,349,742	\$ 63,150	\$ 1,977,269	\$ 17,794	\$ 570,769	\$ 48,394	\$ 4,027,118		

*1 Regions are segmented based on their geographical proximity, and only those countries for which the property, plant and equipment amount accounts for more than 10% of the property, plant and equipment stated in the consolidated balance sheets are separately listed.

*2 Major countries or regions that belong to the segments are as follows:

- East Asia: China and Taiwan
- Southeast Asia: Malaysia and Singapore
- Others: Australia, Solomon Islands, Peru, Chile and Brazil

(2) Information about major customers

Customer's designation or name	Millions of yen		Thousands of U.S. dollars		Related reported segments
	2016	2015	2016	2015	
Sumitomo Corporation	¥ 133,912	¥ 136,925	\$ 1,189,061		Smelting & Refining, Materials
MITSUI & CO., LTD.	¥ 63,915	¥ 75,918	\$ 567,528		Smelting & Refining

(3) Information about impairment loss of fixed assets by reported segment

							Millions of yen
2016	Mineral Resources	Smelting & Refining	Materials	Others	Adjustment	Consolidated	
Loss on impairment of fixed assets	¥ —	¥ 143	¥ 670	¥ —	¥ —	¥ 813	

							Millions of yen
2015	Mineral Resources	Smelting & Refining	Materials	Others	Adjustment	Consolidated	
Loss on impairment of fixed assets	¥ —	¥ 612	¥ 2	¥ —	¥ —	¥ 614	

							Thousands of U.S. dollars
2016	Mineral Resources	Smelting & Refining	Materials	Others	Adjustment	Consolidated	
Loss on impairment of fixed assets	\$ —	\$ 1,270	\$ 5,949	\$ —	\$ —	\$ 7,219	

(4) Information about unamortized balance of goodwill by reported segment

							Millions of yen
2016	Mineral Resources	Smelting & Refining	Materials	Others	Adjustment	Consolidated	
Balance at end of year	¥ 268	¥ —	¥ 54	¥ —	¥ —	¥ 322	

							Millions of yen
2015	Mineral Resources	Smelting & Refining	Materials	Others	Adjustment	Consolidated	
Balance at end of year	¥ 403	¥ —	¥ 77	¥ —	¥ —	¥ 480	

							Thousands of U.S. dollars
2016	Mineral Resources	Smelting & Refining	Materials	Others	Adjustment	Consolidated	
Balance at end of year	\$ 2,380	\$ —	\$ 479	\$ —	\$ —	\$ 2,859	

16 Asset retirement obligations

(1) Asset retirement obligations that are recorded in the consolidated balance sheets

With regard to mines and quarries in operation in Japan, the Company is required by the Mining Safety Act, the Law on Special Measures for Mine Damages Caused by the Metal Mining Industry, etc., the Quarrying Act and leasing agreements to undertake mine pollution prevention activities for post-use specified facilities and to restore such facilities to their original condition. Based on these requirements, the Company records as asset retirement obligations a rational estimate of the expenses required for mine pollution prevention activities and any removal expenses.

For the domestic facilities of the Group in Japan, the Company makes rational estimates of the costs of demolishing and conducting surveys in accordance with requirements regarding special removal methods and obligations to conduct environmental surveys under asbestos damage prevention regulations of asbestos-related regulations and occupational

health and safety regulations of dioxin-related regulations, and posts these amounts as asset retirement obligations.

Sumitomo Metal Mining Pogo LLC, Sumitomo Metal Mining Arizona Inc., Sumitomo Metal Mining Oceania Pty. Ltd., Coral Bay Nickel Corporation and Taganito HPAL Nickel are subject to the U.S.GAAP or International Financial Reporting Standards, as well as the mining laws and regulations of the United States, Australia and the Republic of the Philippines, respectively. Based on its business plans, the Company determines asset retirement obligations by making rational estimates of its obligations under such regulations of restoring operating mines and smelters to their original condition and the expenses of fulfilling these obligations. Asset retirement obligations are calculated based on determining the estimated period until expenditure, the remaining useful life of facilities and the mine life (13 to 69) and discounted by the rates of 1.3% to 11.0%.

The asset retirement obligations as of March 31, 2016 and 2015 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Balance at beginning of year	¥ 7,525	¥ 6,030	\$ 66,818
Newly recorded obligations	—	296	—
Adjustment due to passage of time	421	319	3,738
Decrease due to fulfillment of obligations	(57)	(93)	(506)
Increase due to change in estimates	64	130	568
Others	(30)	—	(266)
Foreign exchange adjustment	(92)	843	(817)
Balance at end of year	¥ 7,831	¥ 7,525	\$ 69,535

(2) Asset retirement obligations other than those recorded in the balance sheets

The Group is required under leasing agreements to restore certain facilities on borrowed buildings and sites to their original condition at the time of removal. In cases where the period of use for lease assets is unclear or for which no relocation plans are in existence, asset retirement obligations cannot be rationally estimated.

Furthermore, certain sites at our facilities employ hazardous

substances specified under the Water Pollution Control Act, and at the time of removing its facilities the Company is required to conduct soil remediation surveys in accordance with the Soil Contamination Countermeasures Law. However, as the responsibility for fulfilling this obligation is estimated to be deferred, the timing for performing such surveys is unclear. Therefore, asset retirement obligations cannot be rationally estimated. Consequently, no corresponding asset retirement obligations are included in these obligations.

17 Information for certain leases

(1) Finance leases

Lease assets — Primarily, the production management server at the headquarters (machinery and equipment)
For lease assets related to finance leases that do not transfer

ownership, depreciation of leased assets is computed over the lease period using the straight-line method with no residual value.

(2) Operating leases

Future minimum lease payments as of March 31, 2016 and 2015 are as follows:

	Millions of yen		Thousands of U.S. dollars	
	2016	2015	2016	
Due within one year	¥ 247	¥ 246	\$ 2,193	
Due after one year	1,498	1,145	13,302	
Total	¥ 1,745	¥ 1,391	\$ 15,495	

18 Related party transaction

(1) Related party transaction

Related party transaction for the years ended March 31, 2016 and 2015 are as follows:

2016

Name of related party	Location	Capital investment	Segment	Voting interest	Description of the business relationship	Transaction detail	Amounts		Accounts		Balance	
							Millions of yen	Thousands of U.S. dollars	Millions of yen	Thousands of U.S. dollars	Millions of yen	Thousands of U.S. dollars
Sierra Gorda S.C.M.	Santiago, Chile	\$1,659,400	Mineral Resources	Indirectly 45.0%	Debt guarantee and pledge as security for the loan etc. from the financial institution and others	Debt guarantee*1	¥ 89,948	\$ 798,686	—	¥ —	\$ —	—
						Pledge as security*2	71,739	637,001	—	—	—	—
						Loans	Loans*3	—	—	Long-term loans receivable	106,084	941,964

2015

Name of related party	Location	Capital investment	Segment	Voting interest	Description of the business relationship	Transaction detail	Amounts		Accounts		Balance	
							Millions of yen	Thousands of U.S. dollars	Millions of yen	Thousands of U.S. dollars	Millions of yen	Thousands of U.S. dollars
Sierra Gorda S.C.M.	Santiago, Chile	\$1,214,302	Mineral Resources	Indirectly 45.0%	Debt guarantee and pledge as security for the loan etc. from the financial institution and others	Debt guarantee*1	¥100,164	—	¥ —	—	—	—
						Pledge as security*2	84,015	—	—	—	—	
						Loans	Loans*3	36,318	—	Long-term loans receivable	106,110	—

*1 The Company guarantees the loan etc. from the financial institution.

*2 The Company pledges its owned shares in Sierra Gorda S.C.M. as security for the loan from the financial institution to finance developments of the Sierra Gorda copper project. The amounts of security are the debt balance as of March 31, 2016 and 2015.

*3 The Company determined terms and conditions of loan based on market interest rates, etc. The amounts include exchange gains and losses.

(2) Condensed financial information of major affiliated companies

Pursuant to the relevant accounting standards, condensed financial information of major affiliated companies which are disclosed for the years ended December 31, 2015 and 2014 are as follows:

Sociedad Minera Cerro Verde S.A.A.

	Millions of yen		Thousands of U.S. dollars
	2015/12	2014/12	2015/12
Total current assets	¥ 127,342	¥ 81,698	\$ 1,130,723
Total long-term assets	819,144	614,174	7,273,522
Total current liabilities	66,112	66,618	587,036
Total long-term liabilities	338,183	90,941	3,002,868
Total net assets	542,191	538,313	4,814,340
Net sales	135,112	155,204	1,199,716
Net income before tax	9,632	65,181	85,527
Net income	4,031	39,947	35,793

Sierra Gorda S.C.M.

	Millions of yen		Thousands of U.S. dollars
	2015/12	2014/12	2015/12
Total current assets	¥ 33,230	¥ 54,168	\$ 295,063
Total long-term assets	687,588	696,018	6,105,381
Total current liabilities	54,348	50,517	482,579
Total long-term liabilities	577,797	552,921	5,130,501
Total net assets	88,673	146,748	787,365
Net sales	34,686	—	307,991
Net income (loss) before tax	(157,068)	—	(1,394,672)
Net income (loss)	(112,221)	—	(996,457)

19 Earnings per share

Reconciliation of the difference between basic and diluted net income per share for the years ended March 31, 2016 and 2015 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Basic net income per share calculation			
Numerator:			
Net income (loss) attributable to owners of the parent	¥ (309)	¥ 91,113	\$ (2,744)
Denominator (thousands of shares):			
Weighted average number of shares	551,653	551,848	—
Basic net income (loss) per share (yen and U.S. dollars)	¥ (0.56)	¥ 165.11	\$ (5.00)
Diluted net income (loss) per share calculation			
Numerator:			
Net income (loss) attributable to owners of the parent	¥ (309)	¥ 91,113	\$ (2,744)
Adjusted net income (loss)	—	91,503	—
Denominator (thousands of shares):			
Weighted average number of shares	551,653	551,848	—
Assumed conversion of convertible bonds	—	60,459	—
Adjusted weighted average number of shares	551,653	612,307	—
Diluted net income per share (yen and U.S. dollars)	¥ —*	¥ 149.44	\$ —*

* Diluted net income per share for the year ended March 31, 2016 is not calculated because of the net loss for the year although dilutive bonds exist.

20 Subsequent event

(1) Completion of acquisition of additional interest in the Morenci Copper Mine

On May 31, 2016, through SMM Morenci Inc., the Company's subsidiary, the Company completed procedures for acquisition of an additional interest in the Morenci Copper Mine in Arizona, USA, owned by a subsidiary of Freeport-McMoRan Inc.

(i) Reason of acquisition

Producing about 480,000 metric tons of copper a year, the Morenci Copper Mine is the largest copper mine in North America and has an attractive cost structure. This represents the expansion of copper business and the step to the goal in its long-term vision of achieving an annual copper production interest of 300,000 metric tons.

(ii) Percentage of shares to be acquired

The additional 13% interest in Morenci Copper Mine from owned by a subsidiary of Freeport-McMoRan Inc.

(iii) Percentage of shares after acquisition

The Company has the 25% interest of the mine.

(iv) Acquisition price

US\$1 billion

(v) Timing of acquisition

On May 31, 2016

(vi) Financing procurement

- Method: Bank loans
- Timing: On June 28, 2016

(2) The expense for preparations for the decommissioning of facilities owned by JCO Co., Ltd.

JCO Co., Ltd., a consolidated subsidiary of the Company, is preparing for the decommissioning by dismantlement and decontamination of its facilities. As regards this plan, JCO Co., Ltd. provided the expenses of ¥9,770 million (US\$86,752 thousand) for future losses that can be reasonably estimated in the first quarter of the year ending March 31, 2017.

(3) Appropriation of retained earnings

The following appropriation of retained earnings of the Company, which has not been reflected in the accompanying consolidated financial statements for the year ended March 31, 2016, was approved at a shareholders' meeting held on June 27, 2016:

	Millions of yen	Thousands of U.S. dollars
Year-end dividends of ¥10.00 per share	¥ 5,516	\$ 48,979

Independent Auditor's Report



Independent Auditor's Report

To the Board of Directors of Sumitomo Metal Mining Co., Ltd.:

We have audited the accompanying consolidated financial statements of Sumitomo Metal Mining Co., Ltd. and its consolidated subsidiaries, which comprise the consolidated balance sheets as at March 31, 2016 and 2015, and the consolidated income statements, statements of comprehensive income, statements of changes in net assets and statements of cash flows for the years then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in Japan, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in Japan. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgement, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, while the objective of the financial statement audit is not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of Sumitomo Metal Mining Co., Ltd. and its consolidated subsidiaries as at March 31, 2016 and 2015, and their financial performance and cash flows for the years then ended in accordance with accounting principles generally accepted in Japan.

Emphasis of Matter

Without qualifying our opinion, we draw attention to the followings:

- (1) As discussed in Note 20 to the consolidated financial statements, on May 31, 2016, through SMM Morenci Inc., the Company's subsidiary, the Company completed procedures for acquisition of an additional interest in the Morenci Copper Mine in Arizona, USA, owned by a subsidiary of Freeport-McMoRan Inc.
- (2) As discussed in Note 20 to the consolidated financial statements, JCO Co., Ltd., a consolidated subsidiary of the Company, is preparing for the decommissioning by dismantlement and decontamination of its facilities. As regards this plan, JCO Co., Ltd. provided the expenses of ¥9,770 million (86,752 thousands of U.S. dollars) for future losses that can be reasonably estimated in the first quarter of the year ending March 31, 2017.

Convenience Translation

The U.S. dollar amounts in the accompanying consolidated financial statements with respect to the year ended March 31, 2016 are presented solely for convenience. Our audit also included the translation of yen amounts into U.S. dollar amounts and, in our opinion, such translation has been made on the basis described in Note 1 to the consolidated financial statements.

KPMG AZSA LLC

August 10, 2016
Tokyo, Japan

KPMG AZSA LLC, a limited liability audit corporation incorporated under the Japanese Certified Public Accountants Law and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity.

Glossary

Mineral Resources Business and Smelting & Refining Business

Metal Trading

London Metal Exchange (LME)

The LME specializes in trading of non-ferrous metals such as copper, nickel, aluminum, lead and zinc. The LME trading prices for metals are used as the international pricing benchmarks for sales of refined metal and purchases of refining ores.

Treatment Charge (TC) and Refining Charge (RC)

These are commonly used in the terms of purchase for copper concentrate or nickel ore for refining. They are amounts designed to cover refining costs. For example, copper concentrate contracts may define a purchase price based on the LME price at a certain date, minus the TC or RC being used at the time.

London fixing

Gold is not traded on the LME. Its price is determined for each transaction between market participants. The financial institutions in the London Bullion Market Association (LBMA) agree on a standard price for gold based on these transactions and publish it on the morning and afternoon of each trading day. This “London fixing” price is the benchmark for trading in gold.

Pound (lb)

Part of the imperial system of measures, the pound is the standard unit of weight used in measuring and pricing base metals such as copper and nickel, and in TC/RC calculations. One pound equals approximately 453.59 g; a metric ton equals approximately 2,204.62 lb.

Troy ounce (toz)

The troy ounce is the standard unit of weight for precious metals such as gold and silver. It equals approximately 31.1 g. It is named after Troyes, a city in the Champagne region of central France that was the site of a major market in Europe in medieval times. Originally used as a unit of exchange for valuing goods in terms of gold or silver weights, the troy ounce is still used today in gold trading.

Metal Refining

Smelting and refining

Refining processes extract valuable metals from ores or other raw materials. They fall into two basic types: pyrometallurgical (dry) and hydrometallurgical (wet). At SMM's Toyo site (Saijo, Ehime Prefecture) copper concentrate preprocessing (treatment processes) are pyrometallurgical, while the nickel plant (Niigata, Ehime Prefecture) makes use of hydrometallurgical processes throughout. The term “smelting” is used for the extraction of metal from ores using melting and heating (pyrometallurgy). The term “refining” refers to any process that increases the grade or purity of a metal.

Pyrometallurgical refining

The precursor ore is melted at high temperature in a furnace, and refining techniques are applied to separate the metal in a molten state. While this technique allows large-volume ore processing, it also requires periodic furnace maintenance.

Hydrometallurgical refining

The ore and impurities are dissolved in a solution, and chemical reactions are used to separate out the metal. This refining method is stable and allows for continuous refining, but the solutions required are costly.

Metal Ores

Sulfide ores

These ores contain copper, nickel or other metals chemically bonded to sulfur. Since the application of heat breaks these bonds, releasing the sulfur, such ores are generally refined using pyrometallurgical techniques.

Oxide ores

These ores contain metals in oxidized forms. Unlike sulfide ores, oxides need much more energy to achieve melting. For this reason, the hydrometallurgical approach is generally used to refine these ores.

Copper concentrates

Used as raw materials in copper smelting, copper concentrates have a copper content of about 30% by weight. The remainder consists mostly of sulfur and iron. Copper concentrates are made mostly from sulfide ores. Ores extracted from overseas mines have a typical grade of about 1%. The ores are then “dressed” at the mine to increase the purity and produce concentrate. Most of the copper ores imported by SMM for smelting in Japan are concentrates.

Nickel oxide ores

Whilst the higher-grade sulfide ores are used predominantly in nickel refining, nickel oxide ores are more prevalent than nickel sulfides. The sulfide-oxide ratio in current nickel reserves is believed to be about 3:7. High refining costs and technical issues have limited use of oxide ores in nickel refining to date, but SMM has succeeded in refining nickel from low-grade oxide ores based on HPAL technology.

Mixed sulfide (MS) ores

CBNC and Taganito produce a mixed nickel-cobalt sulfide intermediate containing about 55–60% nickel by weight. This is used as a raw material in electrolytic nickel production.

Matte

A matte is another term for metal sulfides. For raw material, electrolytic nickel production at SMM also uses a nickel matte (of about 75–80% purity) sourced from P.T. Vale Indonesia.

Resource Reserves

Gold

Canadian standard

- **Reserve**

Amount of ore evaluated to have purity at or above the level indicated in the prefeasibility study that is judged to be economically recoverable.

- **Resource**

Ore of purity or quality that is estimated to be economically extractable.

Japanese standard (JIS)

- **Recoverable ore**

Amount of ore expected to be recovered, consisting of actually recoverable ore plus slag.

- **Identified resources**

Total ore identified at the site.

Copper and Nickel

Reserve according to standards of the respective country.

Nickel Production Process

Coral Bay Nickel Corporation (CBNC)

Based in the Philippines, this SMM subsidiary produces mixed nickel-cobalt sulfides using HPAL technology and exports the raw materials to the SMM Group's nickel refining facilities in Niihama, Ehime Prefecture.

High Pressure Acid Leach (HPAL)

HPAL technology enables the recovery of nickel from low-grade nickel oxide ores that traditionally were difficult to process. SMM was the first company in the world to apply it successfully on a commercial scale. The oxide ores are subjected to high temperature and pressure and reacted under stable conditions with sulfuric acid to produce a nickel-rich refining intermediate.

Matte Chlorine Leach Electrowinning (MCLE)

Matte Chlorine Leach Electrowinning (MCLE) is the technology used in the manufacturing process at SMM's nickel refinery. The matte and mixed sulfide ores are dissolved in chlorine at high temperature to produce high-grade nickel using electrolysis. MCLE is competitive in cost terms, but poses significant operational challenges, and only two other producers besides SMM have commercialized it, using similar technology.

Main Applications for Metals

Copper

Copper is fabricated into wires, pipes and other forms. Besides power cables, copper is used widely in consumer applications such as wiring in vehicles or houses, and in air conditioning systems.

Electrolytic nickel

This form of nickel, which has a purity of at least 99.99%, is used in specialty steels, electronics materials and electroplating, among other applications. SMM is the only producer of electrolytic nickel in Japan.

Ferronickel

Ferronickel is an alloy containing nickel (about 20%) and iron. Its main use is in the manufacture of stainless steel, which is about 10% nickel by weight. Based in Hyuga, Miyazaki Prefecture, SMM Group firm Hyuga Smelting Co., Ltd. produces ferronickel.

Gold

Gold is in demand worldwide for investment and decorative purposes. Gold is widely used in Japanese industry within the electronics sector because of its high malleability and ductility.

Materials Business

Copper-clad polyimide film (CCPF)

CCPF is a polyimide film that is coated using a copper base. It is used as a material for making COF substrates.

Leadframes

Leadframes are electronic packaging materials used to form connections in semiconductor chips and printed circuit boards. They contain thin strips of a metal alloy containing mostly nickel or copper.

Secondary batteries

Secondary batteries are ones that can be recharged and used again. SMM supplies battery materials that are used in the cathodes of nickel metal hydride batteries and lithium-ion rechargeable batteries, which supply power for electric vehicles, hybrid vehicles or notebook computers, among other consumer applications.

Consolidated Companies and Equity-Method Affiliated Companies

Consolidated companies (68), equity-method affiliated companies (16)

at March 31, 2016

Mineral Resources	Voting Shares (%)	Location	Operations
Consolidated companies			
Sumiko Resources Exploration & Development Co., Ltd.	100	Japan	Geological surveys of resources, test boring
Sumitomo Metal Mining America Inc.	100	USA	Exploration, management of mining subsidiaries in USA
Sumitomo Metal Mining Arizona Inc.	80	USA	Mining and related operations
SMMA Candelaria Inc.	100	USA	Investment in local company in Chile operating Candelaria
Sumitomo Metal Mining Canada Ltd.	100	Canada	Exploration, consulting
Sumitomo Metal Mining Oceania Pty. Ltd.	100	Australia	Resource surveys, mine development and related operations in Oceania
Sumitomo Metal Mining Pogo LLC	100	USA	Investment in Pogo Mine
SMM Resources Inc.	100	Canada	Mineral resources business
SMM Cerro Verde Netherlands B.V.	80	Netherlands	Investments in local Peruvian companies engaged in the Cerro Verde Mine operation
SMM Exploration Corporation	100	USA	Mineral resources business
SMM Solomon Ltd.	100	Solomon Islands	Exploration in Solomon Islands
Sumitomo Metal Mining Peru S.A.	100	Peru	Exploration in South America
Sumitomo Metal Mining Chile Ltda.	100	Chile	Exploration in South America
Sumiko Solomon Exploration Co., Ltd.	70	Japan	Exploration in Solomon Islands
Sumac Mines Ltd.	100	Canada	Exploration
Stone Boy Inc.	80	USA	Exploration
SMM Sierra Gorda Inversiones Ltda.	70	Chile	Investment in Sierra Gorda Project
SMM-SG Holding Inversiones LTDA.	100	Chile	Investment in Sierra Gorda Project
Sumitomo Metal Mining do Brasil Ltda.	100	Brazil	Exploration in Brazil
Equity-method affiliated companies			
Sociedad Minera Cerro Verde S.A.A.	21	Peru	Cerro Verde Mine
Compania Contractual Minera Candelaria	20	Chile	Candelaria Mine
Compania Contractual Minera Ojos Del Salado	20	Chile	Ojos Del Salade Mine
Sierra Gorda S.C.M.	45	Chile	Sierra Gorda Mine
Cordillera Exploration Co., Inc.	25	Philippines	Exploration in the Philippines

Smelting & Refining	Voting Shares (%)	Location	Operations
Consolidated companies			
Hyuga Smelting Co., Ltd.	60	Japan	Ferro-nickel smelting
Shisaka Smelting Co., Ltd.	100	Japan	Manufacture of crude zinc oxide
Sumiko Logistics Co., Ltd.	100	Japan	Maritime trading, harbor transportation and services, land transportation
Sumic Nickel Netherlands B.V.	52	Netherlands	Investment in nickel and cobalt development businesses, sale of nickel and cobalt
Coral Bay Nickel Corporation	54	Philippines	Manufacture of nickel and cobalt
Taganito HPAL Nickel Corporation	62.5	Philippines	Manufacture of nickel and cobalt
Sumitomo Metal Mining Philippine Holdings Corporation	100	Philippines	Regional headquarters for the nickel business
Sumitomo Metal Mining Management (Shanghai) Co., Ltd.	100	China	Sales of SMM and SMM group company products in China, provision of management business service for Chinese group companies, business consulting
Sumitomo Metal Mining (Hong Kong) Co., Ltd.	100	China	Sales of SMM and SMM group company products in China
Taihei Metal Industry Co., Ltd.	97	Japan	Manufacture of heat-, corrosion- and friction-resistant steel castings and precision castings

Equity-method affiliated companies			
Jinlong Copper Co., Ltd.	27	China	Manufacture and sale of electrolytic copper and sulfuric acid
Acids Co., Ltd.	50	Japan	Manufacture and sale of sulfuric acid and related products
P.T. Vale Indonesia Tbk.	20	Indonesia	Nickel ore mining, nickel smelting
Nickel Asia Corporation	25	Philippines	Nickel ore mining
Figesbal SA	26	New Caledonia	Nickel ore mining, harbor transportation
MS Zinc Co., Ltd.	50	Japan	Manufacture and sale of zinc and related operations
Mitsui Sumitomo Metal Mining Brass & Copper Co., Ltd.	50	Japan	Manufacture and sale of copper and brass products and processed copper and brass products

Materials	Voting Shares (%)	Location	Operations
Consolidated companies			
SH Materials Co., Ltd.	51	Japan	Manufacture and sale of leadframes
Ohkuchi Electronics Co., Ltd.	100	Japan	Recovery and recycling of non-ferrous metals, manufacture of functional inks
Ohkuchi Materials Co., Ltd.	100	Japan	Manufacture of leadframes
Niihama Electronics Co., Ltd.	100	Japan	Manufacture of flexible circuit materials
Niihama Materials Co., Ltd.	100	Japan	Manufacture of leadframes
SH Precision Co., Ltd.	100	Japan	Manufacture of leadframes
Shinko Co., Ltd.	97	Japan	Design, manufacture, and sale of printed circuit boards
SH Asia Pacific Pte. Ltd.	100	Singapore	Regional headquarters for international lead frame operations
Sumiko Tape Materials Singapore Pte. Ltd.	100	Singapore	Regional headquarters for international tape materials operations
Malaysian SH Electronics Sdn. Bhd.	100	Malaysia	Manufacture and sale of leadframes
Malaysian SH Precision Sdn. Bhd.	100	Malaysia	Manufacture and sale of leadframes
SH Electronics Taiwan Co., Ltd.	70	Taiwan	Manufacture and sale of leadframes
Taiwan Sumiko Materials Co., Ltd.	100	Taiwan	Manufacture of thin film materials
SH Electronics Chengdu Co., Ltd.	70	China	Manufacture and sale of leadframes
SH Precision Chengdu Co., Ltd.	70	China	Manufacture of leadframes
SH Electronics Suzhou Co., Ltd.	100	China	Manufacture and sale of leadframes
Suzhou SH Precision Co., Ltd.	100	China	Manufacture of leadframes
Sumiko Tec Co., Ltd.	100	Japan	Terminals and connectors for electronic and electric equipment; components, electric wire, power cords and pressure bonding machines relating to the above and their maintenance; manufacture and sale of formed products for optical equipment, etc.
Nittosha Co., Ltd.	100	Japan	Plating of metal products, surface treatment processing and distribution; electromagnetic shielding processing to electronics resin products through a dry plating method
Sumiko Kunitomi Denshi Co., Ltd.	100	Japan	Manufacture of crystal products and magnetic materials
Sumiko Energy Materials Co., Ltd.	100	Japan	Manufacture of battery materials
Shanghai Sumiko Electronic Paste Co., Ltd.	69	China	Manufacture and sale of thick-film paste
Dongguan Sumiko Electronic Paste Co., Ltd.	85	China	Manufacture and sale of thick-film paste
SMM KOREA Co., Ltd.	100	Korea	Sales support for advanced materials and business operations
SMM Precision Co., Ltd.	100	Japan	Manufacture and sale of optical communications components
Sumico Lubricant Co., Ltd.	100	Japan	Manufacture and sale of various lubricants
Sumico Lubricant Trading (Shanghai) Co., Ltd.	100	China	Sale of various lubricants
Sumitomo Metal Mining Siporex Co., Ltd.	100	Japan	Manufacture and sale of ALC (autoclaved lightweight aerated concrete) and other construction materials

Equity-method affiliated companies			
SH Copper Products Co., Ltd.	50	Japan	Manufacture and sale of copper strips, copper bars, rods, and fabricated parts
N.E. Chemcat Corporation	50	Japan	Manufacture of precious metal catalysts, recovery and refining of precious metals
Nippon Ketjen Co., Ltd.	50	Japan	Manufacture and sale of desulphurization catalysts for petroleum processing
Granopt Co., Ltd.	50	Japan	Manufacture and sale of rare earth iron garnet (RIG)

Others	Voting Shares (%)	Location	Operations
Consolidated companies			
Sumiko Techno-Research Co., Ltd.	100	Japan	Environmental measurement verification operations such as water quality, air, soil, noise and vibration, etc.; data collection, adjustment and product evolution as well as technological development
Sumiko Technical Service Co., Ltd.	100	Japan	Commission-based work in area of non-ferrous smelting, personnel agency business
Sumitomo Metal Mining Engineering Co., Ltd.	100	Japan	Survey, design, manufacturing, repair and maintenance of machinery, equipment and plants in the environment sector
Sumiko Plantech Co., Ltd.	100	Japan	Manufacture of machinery and equipment and repair work for non-ferrous metal smelting and chemical plants, etc.; installation of machinery and equipment and piping work; steel structure work
JCO Co., Ltd.	100	Japan	Management of facilities using uranium and related wastes
Igeta Heim Co., Ltd.	100	Japan	Construction of steel frame and reinforced concrete apartments and condominiums
Japan Irradiation Service Co., Ltd.	100	Japan	Irradiation sterilization service for pharmaceutical products, medical instruments, and pharmaceutical containers, etc.; modification of various industrial materials
SMM Holland B.V.	100	Netherlands	Investment in nickel and cobalt development businesses

Corporate Data and Investor Information

As of March 31, 2016

Corporate Data

Founded	1950
Incorporated	1950
Paid-In Capital	¥93.2 billion
Number of Employees	8,734* (Consolidated)
Head Office	11-3, Shimbashi 5-chome, Minato-ku, Tokyo 105-8716, Japan

* The 21 SMM full-time officers are not included in the figure, hence the year-end total figure in Number of Employees & Officers Worldwide (Consolidated) on p. 98 is different.

Contact Information

Public Relations & Investor Relations Department

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Phone: +81-3-3436-7705

Facsimile: +81-3-3434-2215

Website: <http://www.smm.co.jp/E/>

Investor Information

Closing Date	March 31	
Ordinary General Meeting of Shareholders	June	
Common Stock	Number of authorized shares	1,000,000,000
	Number of issued and outstanding shares	581,628,031
	Number of shareholders	42,678
	Listing of shares	Tokyo
	Stock transaction unit	1,000 shares

Registrar of Shareholders

Sumitomo Mitsui Trust Bank, Limited

4-1, Marunouchi 1-chome, Chiyoda-ku, Tokyo 100-8233, Japan

Stock Transfer Agency Department: Sumitomo Mitsui Trust Bank, Limited

4-1, Marunouchi 1-chome, Chiyoda-ku, Tokyo 100-8233, Japan

Method of Public Notice

Electronic notification (However, if electronic notification is not available due to unavoidable circumstances, notice will be published in the Nihon Keizai Shimbun newspaper.)

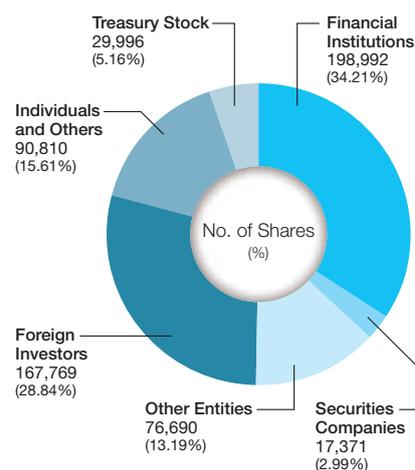
Independent Public Accountant

KPMG AZSA LLC 1-2, Tsukudo-cho, Shinjuku-ku, Tokyo

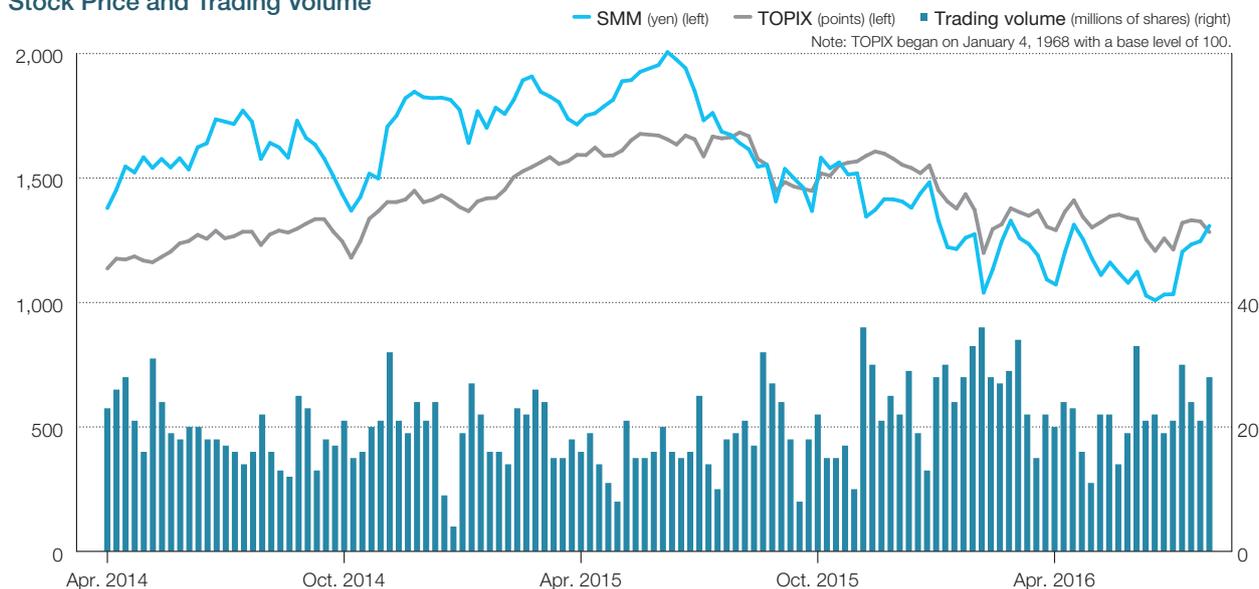
Major Shareholders

	Number of shares held (thousands)	Shareholding ratio (%)
The Master Trust Bank of Japan, Ltd. (Trust Account)	33,656	6.1
Japan Trustee Services Bank, Ltd. (Trust Account)	31,996	5.8
Toyota Motor Corporation	18,916	3.4
Japan Trustee Services Bank, Ltd. (Trust Account 9)	9,210	1.7
Sumitomo Mitsui Banking Corporation	7,650	1.4
Sumitomo Realty & Development Co., Ltd.	7,490	1.4
Sumitomo Life Insurance Company	7,474	1.4
Japan Trustee Services Bank, Ltd. (Trust Account 7)	7,249	1.3
Sumitomo Corporation	7,000	1.3
STATE STREET BANK WEST CLIENT - TREATY 505234	6,749	1.2

Breakdown of Shareholders (thousands of shares)



Stock Price and Trading Volume



 **SUMITOMO METAL MINING CO., LTD.**

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