

Material Flows within Business Activity

INPUT (Resources & Energy)

Raw Materials ¹		Recycled Materials ²	
Gold and silver ore	1,063 kt	Copper scrap	97 kt
Copper concentrates	1,350 kt	Secondary zinc	27 kt
Nickel oxide ore	8,844 kt	Secondary precious metals	2 kt
Nickel matte, etc.	37 kt	Electric arc furnace dust	105 kt
Raw material for batteries	12 kt	ALC waste	437 t
ALC raw material, incl. silica rock	205 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

Materials	
Silica sand (for copper smelting)	125 kt
Chemicals (lime-based)	1,389 kt
Chemicals (sodium-based)	73 kt
Chemicals (magnesium-based)	11 kt
Sulfuric acid	710 kt
Cement, etc.	112 kt

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



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

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

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

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

Recycling-derived products ratio
3.75%

1. 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.)
2. Does not include materials recycled within plants.
3. 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.
4. 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.
5. 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.
6. 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.
7. Discharges into rivers flowing into enclosed seas are included as "discharges into seas."
8. Total transfers to sewerage and off-site transfers.

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

	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).

Laws Covered in the Environmental e-learning Course Content

Environmental Laws	Environmental Laws Basic	Environmental Laws	Environmental Laws Basic	Environmental Laws	Environmental Laws Basic
Basic Environment Act	Basic Environment Act	—	Act on Promotion of Global Warming Countermeasures	PRTR Law	PRTR Law
—	Basic Act on Biodiversity	Act on the Rational Use, etc. of Energy	Act on the Rational Use, etc. of Energy	Poisonous and Deleterious Substances Control Act	—
Basic Act on Establishing a Sound Material-Cycle Society	Basic Act on Establishing a Sound Material-Cycle Society	Air Pollution Control Act (including the content of the Act on Pollution Prevention Systems in Specified Factories)	Air Pollution Control Act	Waste Management and Public Cleansing Act	Waste Management and Public Cleansing Act
—	Act on the Promotion of Environmental Conservation Activities through Environmental Education	Water Pollution Control Act	Water Pollution Control Act	PCB Special Measures Law	—
—	Law Concerning the Promotion of Business Activities with Environmental Consideration	Soil Contamination Countermeasures Act	—	—	Act on Promoting Green Purchasing

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
	Full-time 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

Consolidated Employee Breakdown (March 31, 2016)

	Younger than 30		30-49 years old		50 and older		Total
	Male	Female	Male	Female	Male	Female	
Managers	28	13	662	75	513	18	1,309
Regular employees	1,383	513	3,391	941	975	117	7,320
Total	1,411	526	4,053	1,016	1,488	135	8,629

* The 126 full-time officers and 774 non-regular/limited-term employees of the SMM Group are not included in this table, hence the different totals under "Number of Employees & Officers Worldwide (Consolidated)" and "Number of Employees & Officers by Region (Consolidated)" on this page.

Company-Wide Human Resources Development Program

	Duty-based program	Development of global human resources	Regular hire Management Trainee 3-yr. program	Seminar for newly promoted employees	Development of next generation or management	Project leaders	Specialized education	Step up	Women's career support	Compliance, governance, RIM	Safety, skills	Self-development
Officers				3-yr. training program for newly promoted general managers	Officers' coaching school				GM and group company president seminar	Seminar for group company presidents and officers		
General managers		Language training prior to overseas assignment	Overseas training	Follow-up seminar		Project management training (brush-up)						
Section managers		Overseas training prior to overseas assignment	Fee assistance for language proficiency tests	New GM seminar								
E-class	Introductory duty-based OJT for new employees	Language training prior to overseas assignment	Global staff registration program	Section manager seminar								
S-class		Overseas training prior to overseas assignment		E-class employee seminar								
F-class J-class		Newly promoted S-class management track employee seminar		S-class employee seminar (for each branch office)								
		3-yr. training program for univ. graduates		F-class employee seminar (for each branch office)								
		Second-year training										
		Short-term overseas training										
		Introductory training										

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	10,500
Number of officers and employees at the end of the fiscal year	125	1,309	7,320	1,746	10,500	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/>

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**

The EITI² Principles

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|--|---|--|
| <p>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.</p> <p>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.</p> <p>3. We recognise that the benefits of resource extraction occur as revenue streams over many years and can be highly price dependent.</p> <p>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.</p> | <p>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.</p> <p>6. We recognise that achievement of greater transparency must be set in the context of respect for contracts and laws.</p> <p>7. We recognise the enhanced environment for domestic and foreign direct investment that financial transparency may bring.</p> <p>8. We believe in the principle and practice of accountability by government to all citizens for the stewardship of revenue streams and public expenditure.</p> <p>9. We are committed to encouraging high standards of transparency and accountability in public life, government operations and in business.</p> | <p>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.</p> <p>11. We believe that payments' disclosure in a given country should involve all extractive industry companies operating in that country.</p> <p>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.</p> |
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2. EITI: The Extractive Industries Transparency Initiative <http://eiti.org/>

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.

CSR Data Other

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