# Sustainability at the SMM Group Management Approach

# Sumitomo Metal Mining Group Sustainability Policy

The SMM Group will tackle management issues that contribute to society's sustainable development, and will strive to achieve continuous growth in our business and improve our corporate value.

# **Reorganization of Sustainability Promotion Structure**

Drawing on the Sumitomo Business Spirit that has been passed down for 430 years since our founding, our Group has consistently endeavored to solve social issues through business, calling for respect for all individuals and sustainable co-existence with the global environment in our Corporate Philosophy. However, the term CSR has recently come to be used as a means for sustainability, such as social contribution activities, so we have reorganized our sustainability promo-

tion organization, including a progressive reorganization from the CSR Committee to the Sustainability Committee, as of April 1, 2022. We did this in response to various social issues such as climate change, and to ensure that our activities to promote our Vision for 2030 are properly understood both inside and outside the Company, and to respond more promptly and accurately to the ever-changing demands and expectations of society.

# **Sustainability Promotion Framework**

The SMM Group's sustainability activities are led by the Sustainability Committee. The Sustainability Committee is chaired by the president, with the executive officer in charge of sustainability (executive officer in charge of the Corporate Planning Department) serving as deputy chair, and the general managers of divisions, the general managers of Administration Department, the General Manager of the Technology Division, the General Manager of the Planning & Administration Department of the Technology Division, the General Manager of the Engineering Division, the General Manager of the Facilities Technology Department of the Engineering Division, and the heads of operational divisions in the Head Office as members. The Sustainability Department and Corporate Planning Department serve as the secretariat, and meetings are held at least twice a year.

Specifically, the committee deliberates and decides on the following important matters related to sustainability activities and indicators to evaluate the level of achievement of the Sustainability Policy: revision or abolition of the Sustainability Policy, material issues, and the Vision for 2030; important items regarding sustainability activities such as annual plans for sustainability activities; indicators to evaluate the level of achievement toward the Vision for 2030; periodic evaluations and corrective actions related to sustainability activities; provision and exchange of information on the promotion of sustainability activities, explanation of important measures and sharing of awareness. They also deliberate on important themes related to sustainability activities.

In addition, as an internal control and supervisory function for sustainability activities, the Board of Directors deliberates on sustainability activities on a regular or ad hoc basis.

Through these deliberations by the Sustainability Committee, the progress of sustainability activities, evaluations of performance, and review and revision of the next year's activity plan are carried out, and the PDCA cycle is followed.

Subordinate to the Sustainability Committee there are seven Sustainability Subcommittees, 4 Management Systems Working Groups, the Corporate Value Enhancement Strategic Committee, the DX Promotion Committee, and the Carbon Neutrality Promotion Committee. Each of these organizations serves as a secretariat, with the relevant department in charge, establishing and implementing annual targets and plans in line with KPIs defined for each theme.

# The 7 Sustainability Subcommittees

The 7 Sustainability Subcommittees form a cross-company organization with members from business and corporate divisions, and promote sustainability activities that are integrated with business, such as the promotion of the Vision for 2030 and the consideration and establishment of the Vision for 2030.

	-	-
Decision-Making and Sup	pervision	Board of D
Business Execution		Presic
		Sustainability
 7 Sustainability Subcommittees	4 Management Systems Working Groups	Corporate Value Enh
— Efficient Resource Utilization Subcommittee	— Risk Management Working Group	— Group for Realizing V
— Environmental Preservation Subcommittee	— Compliance Working Group	— Company-wide G
— Corporate Citizenship Subcommittee*	— Quality Assurance Working Group	Shikinen Kaikaku
— Diversity Subcommittee	"Responsible Mineral Sourcing" Working Group	
— Human Rights Subcommittee		
— Occupational Health & Safety Subcommittee		
Communications Subcommittee	* The na	me was changed

# Four Management Systems Working Groups

The Risk Management Working Group, the Compliance Working Group, the Quality Assurance Working Group, and "the Responsible Mineral Sourcing" Working Group are responsible for promoting the Group's major management systems across the organization and strengthening the management foundation. The relevant business and corporate division heads participate in these working groups, which formulate policies in accordance with their respective themes and check the progress of activity plans.

# Corporate Value Enhancement Strategic Committee

We have established the Corporate Value Enhancement Strategic Committee to grow the SMM Group's business sustainably and enhance our corporate value. To further ensure the achievement of this objective, we have established the Group for Realizing World Leader in Non-Ferrous Metal Industry, the Company-wide Group on Human Resources , and the Shikinen Kaikaku Group as subordinate organizations. In addition, to sustainably realize our growth strategy, we manage the pipeline of large-scale projects and flexibly respond to issues that emerge as we work to enhance corporate value, and adapt to the environment. We confirm the progress of large-scale projects and provide appropriate advice and instructions on the spot.

# **DX Promotion Committee**

The committee was established in April 2021 to clarify the future vision of Digital Transformation (DX) that our Group should aim for and to maximize the contribution to management through Group-wide promotion of DX. The committee



from Shakaikoukenbukai to Chiikishakaikoukenbukai in Japanese. on September 30, 2022

is chaired by the executive officer in charge of DX promotion and holds regular meetings at least twice a year. Committee members are the general managers of divisions, the executive officers in charge of corporate divisions, the executive officer in charge of the Safety & Environmental Control Department, the executive officer in charge of the Quality Assurance Department, the General Manager of the Corporate Planning Department, the General Manager of the Personnel Department, the General Manager of the Technology Division, the General Manager of the Engineering Division, and the General Manager of the Information Systems Department.

# **Carbon Neutrality Promotion Committee**

The committee was established in April 2022 to clarify the policy and path toward the realization of carbon neutrality that our Group should aim for, and to promote it more quickly and more strongly Group wide. The basic principle is that each business division, and each organization related to carbon neutrality, should work together with the aim of having all parties involved actively engage in activities according to their roles. The committee is chaired by the executive officer in charge of promoting carbon neutrality, with the executive officer responsible for the Safety & Environmental Control Department as deputy chair, and the general managers of divisions, the General Manager of the Technology Division, the General Manager of the Engineering Division, the General Manager of the Safety & Environmental Control Department, the General Manager of the Corporate Planning Department, the General Manager of Sustainability Department, and the General manager of the Finance & Accounting Department as committee members, and they hold regular committee meetings.

# Vision for 2030, Material Issues, KPIs (Indicators and Goals)

# Effective Use of Non-Ferrous Metal Resources

1. A company that stably provi 2. A company that contributes industry, academia, and gov 3. A company that contributes	tes resources through high technological capabilities des non-ferrous metals to society to society by effectively using impurities through collaborative, open technological development among ernment to the construction and maintenance of recycling systems for non-ferrous metals nd supplies highly advanced materials that contribute to the resolution of social issues
KPI Indicators	Goals
1. 1) Advance copper mine projects	<ul> <li>Strengthen production structure at JV mines to achieve and maintain copper production levels of 300 kt/ year from interests</li> <li>Achieve steady copper production level by reinforcing exploration of surrounding and deep areas in JV mines, expanding mineral processing technology, and improving operations leveraging IoT and AI</li> <li>Advance Phase 2 and later projects at the Quebrada Blanca Copper Mine</li> </ul>
<ol> <li>Acquire new superior copper and gold resources</li> </ol>	Develop new mines for which we have operatorship
3) Improve productivity by introducing new technology	Promote remote operation and unmanned operation of heavy machinery and information infrastructure     equipment inside and outside of the Hishikari Mine
<ol> <li>Advance nickel ore projects and improve productivity</li> </ol>	<ol> <li>(1) Nickel production: 150 kt/year</li> <li>(2) Recovery rate compared to FY2018: +2%</li> <li>(3) Recovery of scandia by-product</li> <li>(4) Recovery of chromite by-product</li> </ol>
<ol> <li>Develop technology to separate, stabilize and bleed off impurities, and create value from impurities generated by smelting pro- cesses and mines</li> </ol>	Develop technology to stabilize and bleed off impurities: Develop and demonstrate the process
2) Develop technology to create value from unused non-ferrous metal resources	Contribute to existing (e.g. marine resource development) and new development projects
<ol> <li>Recover non-ferrous metals from hard-to- process resources</li> </ol>	Participate in business and technology for recovery of lithium from salt-lake water in the presence of high levels of impurities
3. Demonstrate and commercialize automobile secondary battery recycling technology	Demonstrate, commercialize, and expand scale of recycling technology that recovers cobalt from automo- tive lithium-ion batteries     Commence commissioning and commercial operation of pre-commercial plant: FY2024
<ol> <li>Leverage our strengths to create new prod- ucts and new businesses that contribute to society</li> </ol>	Research, develop, and commercialize new advanced materials in the fields of energy, automobiles, and     information communications
<ol> <li>Hold raw materials in-house for favorable and stable procurement</li> </ol>	Commercialize NiO for fuel cells following demonstration project
<ol> <li>Expand sales of low-cost battery cathode materials through favorable, stable procure- ment of our own nickel raw materials</li> </ol>	Maintain top class global share in the expanding cathode materials market

# 2 Climate Change

Vision for 2030 A company that actively undertakes climate change countermeasures, by reducing emissions and stably supplying products contributing to a low-carbon society, a future with zero greenhouse gases (GHGs)		
KPI Indicators		Goals
Reduce GHG emissio		<ol> <li>Continuing to grow our business while maintaining GHG emissions below the level of FY2013. Accelerating actions to achieve net zero GHG emissions by 2050 or sooner.</li> <li>Cut GHG emissions intensity by at least 26% compared to FY2013</li> <li>Expand contribution of GHG reduction by products contributing to a low-carbon society: 600 kt-CO2 or more</li> </ol>

## 3 Significant Environmental Accidents 4 Biodiversity

Vision for 2030 A company that values water resources and biodiversity, and protects the richness of the sea and land		
KPI Indicators	Goals	
1. Zero significant environmental accidents	1) Promote improvements through the use of risk management and environmental management systems 2) Reinforce and improve equipment and infrastructure to address increases in sources of natural hazard	
2. Reduce emissions of hazardous substances (year-on-year)	<ol> <li>Optimize water use; reduce emissions of hazardous substances to the atmosphere and water</li> <li>Promote various environmental preservation and biodiversity preservation activities, such as regular reforestation</li> </ol>	

# **Employees' Occupational Health and Safety**

	nployees work together with safety first the priority in a comfortable working safe facilities and operations
KPI Indicators	Goals
1. Prevent occupational accidents	Serious accidents: zero (in Japan and overseas, including contractors) All accidents: reduce year-on-year, with aim of eventually reaching zero

Occurrence of occupational diseases: zero

Number of workplaces that present higher health risks: reduce year-on-year

Vision for 2030	1 A company that respects the	nployees can take a vibra humanity of each and every er ch and every employee with op
KPI Indicators		Goals
places that make u	style reform and create work- ise of digital technology, uman resources to play roles	<ol> <li>Improve scores for "Manag employee awareness surve</li> <li>(1) Number of female man (2) Ratio of female employ</li> <li>Expand number of manage</li> <li>Percentage of employees y</li> <li>Assign jobs and provide su</li> </ol>
2. Support employee	s' mental and physical health	<ol> <li>Reduce the number of em</li> <li>Percentage of employees v</li> </ol>
, , , ,	ities to enhance the abilities rding to employee needs	<ol> <li>Utilize one-on-one meetin growth of subordinates thu</li> <li>Reconstruct the human resprovide opportunities to e</li> <li>Provide opportunities for s</li> <li>dence courses conline trains</li> </ol>

# 8 Engagement with Stakeholders

6 Diverse Human Resources

Vision for 2030	A company that is appre	eciated and understood to
KPI Indicators		Goals
1. Further penetrate employees	our Group brand among	<ul> <li>Improve results of employee Company)</li> </ul>
information and di	quantity in communication of alogue at the level of "world errous metals industry"	Expand opportunities for dia     Achieve positive evaluations
5	ition and understanding of leader in the non-ferrous	Improvement in findings of
_		

# 9 Co-Existence and Mutual Prosperity with Local Communities

Vision for 2030 A company that contribu	utes to regional developm
KPI Indicators	Goals
Participate in local communities through dia- logue and collaboration	Accurately identify local issues measures
1. Support the local community via employee participation	Implement employee partici
2. Hire and procure locally	Continually implement and a
3. Support for nurturing of the next generation	<ol> <li>Implement programs to nur etc. (one or more times/yea</li> <li>Establish and award scholar</li> </ol>
4. Support for people with disabilities and the elderly	Implement programs to supplication local bodies, NPOs, etc. (one of the second se
5. Support during and after disasters	Support regions affected by
-	*

# **10** Rights of Indigenous Peoples

Vision for 2030	A company that unders	tands and respects the tr
KPI Indicators		Goals
1. Understand indige ditions and culture	enous peoples and their tra-	Percentage of SMM Group
	that lead to respect for the ures of indigenous peoples	<ol> <li>Provide scholarships for in</li> <li>Support indigenous people</li> </ol>

# **11** Human Rights in the Supply Chain

Vision for 2030	A company that undertakes sustainable procurem	
KPI Indicators		Goals
Promote sustainable responsible mineral	e procurement, particularly sourcing	<ol> <li>Responsible mineral sourcin         <ol> <li>Establish a responsible mineral sourcin             <li>Establish a responsible mineral of FY2021</li> <li>Maintain a record of zero             human rights in the supp</li> <li>Sustainable procurement             <ul></ul></li></li></ol></li></ol>

2. Prevent occurrence of occupational diseases

# 7 Development and Participation of Human Resources

## ant and active part

mployee, and where employees feel pride, motivation, and joy in work oportunities to improve his/her capabilities, and grows together with employees

gement by managers and superiors,""Appeal of job," and "Work environment" in /ev

nagers: 50 (SMM non-consolidated)

yees: 20% or higher (SMM non-consolidated)

gerial track employees of foreign nationality with disabilities: 3% or higher (SMM non-consolidated)

upport matched to employees' life stages

nployees taking long-term leave

with abnormal findings indicated in health checkups: 50% or lower

ngs that bring out the motivation and potential of every employee and boost the

nrough regular dialogues between superiors and subordinates

esources development program (in-house education, external education, etc.) to employees to enhance their abilities in line with their roles

self-development matched to each employee's life plans and needs (corresponining, etc.)

# to be the world leader in non-ferrous metals

e awareness survey (increase ratio of employees who feel pride in working at the

ialogues with media and investors ns of our Integrated Report from outside the Company

f surveys by external bodies (degree of recognition and understanding, etc.)

## ment and earns trust as a member of the local community

es through dialogues with local communities, and execute the following

cipation programs (from 2023)

l assess of performance

urture the next generation in collaboration with government, local bodies, NPOs,

arships in Japan and maintain existing overseas scholarships (from 2023)

oport people with disabilities and the elderly in collaboration with government, or more times/year)

large-scale disasters

# raditions and culture of indigenous peoples

sites implementing in-house education: 100% by the end of FY2023

ndigenous peoples (continue existing initiatives) le-related initiatives by NGOs, academic societies, etc.: one initiative or more each year

# nent across the supply chain

nineral sourcing management system in line with international standards by the

o mines, smelters, and refineries complicit in child labor or other infringements of ply chain

ave received and agreed with the Sumitomo Metal Mining Group Sustainable % by the end of FY2030

rocurement management system in line with international standards by the end

# For Co-creating Value with Society

# Vision for 2030: (Results and Achievement Criteria and Action Plan up to FY2030)

We are implementing activities in accordance with each of our roadmaps to realize our Vision for 2030.

1. A company that 2. A company that industry, acader 3. A company that 4. A company that	stably p contrib nia, and contrib develo	erates resources through high technological ca provides non-ferrous metals to society utes to society by effectively using impurities through colla government utes to the construction and maintenance of recycling syst ps and supplies highly advanced materials that contribute t	borative, open technological development among ems for non-ferrous metals
<ul> <li>Achieve steady copper proc processing technology, and</li> </ul>	cture a luction impro	t JV mines to achieve and maintain copper produc level by reinforcing exploration of surrounding a ving operations leveraging IoT and AI s at the Quebrada Blanca Copper Mine	•
FY2021 Results		Final Year of 2021 3-Year Business Plan (FY2024)	Final Year of 2027 3-Year Business Plan (FY2030)
Copper production on an interest basis at JV mines was 230 kt in FY2021 Despite the COVID-19 pandemic,	Achievement Criteria	Achieve copper production level on an interest basis of 270 kt by starting production in Quebra- da Blanca Phase 2, etc.	Aim to obtain further interests to achieve cop- per production level on an interest basis of 300 kt, which is the long-term vision.
JV mines overall secured copper production level in line with plans	Action Plan	Post-pandemic, strengthen collaboration with operating sites and contribute in terms of man- agement and technology to ensure production levels in JV mines exceed plans	Continue to strengthen collaboration with oper- ating sites and contribute in terms of manage- ment and technology to ensure production levels in JV mines exceed plans
KPI 1. 2) Acquire new superior co • Develop new mines for white			
Continuing exploration activities in Canada, Australia, and others while shifting focus from exploration by ourselves to exploration through	Achievement Criteria	Participate in new exploration projects through joint ventures and make preparations to acquire new mines to obtain new operatorship	Participate in new exploration projects through joint ventures and make preparations to acquire new mines to obtain new operatorship
joint ventures • Invested in a junior exploration company	Action Plan	Gather information required to form new explo- ration projects through joint ventures and con- ducted site surveys. Also, enhance project pipeline management, including participation in late-stage exploration projects.	<ul> <li>Gather information required to form new explo- ration projects through joint ventures and con- ducted site surveys. Also, enhance project pipeline management, including participation in late-stage exploration projects.</li> </ul>
<ul> <li>KPI 1. 3) Improve productivity by</li> <li>Promote remote operation a side of the Hishikari Mine</li> </ul>		ucing new technology manned operation of heavy machinery and inforr	nation infrastructure equipment inside and out-
Made preliminary preparations to introduce heavy machinery that can be automated at the Hishikari Mine	Achievement Criteria	• Establish information infrastructure (Wi-Fi) and begin introduction of (1) automated Load Haul Dump (LHD); (2) automated drilling machinery; and (3) remote operation and monitoring of heavy machinery and vehicles, etc. at the Hishi- kari Mine	<ul> <li>Firmly establish (1) automated LHD; (2) automated drilling machinery; and (3) remote operation and monitoring of heavy machinery and vehicles, etc. (plan to introduce some during the 2024 3-Year Business Plan) and begin further introduc- tion of new technology at the Hishikari Mine</li> </ul>
	Action Plan	Based on status of introduction of new technol- ogy at the Hishikari Mine, examine more specific measures for promoting remote operation and unmanned operation of heavy machinery and information infrastructure equipment inside and outside the mine	Based on status of introduction of new technol- ogy at the Hishikari Mine, examine more specific measures for promoting remote operation and unmanned operation of heavy machinery and information infrastructure equipment inside and outside the mine
KPI 1.4) Advance nickel ore proje • Nickel production: 150 kt/ye • Recovery rate compared to	ear		
<ul> <li>Discontinued feasibility study on Pomalaa Project</li> <li>Recovery rate of CBNC and THPAL achieved target due to success in technology development</li> </ul>	Achievement Criteria	<ul> <li>Increase production volume to achieve 150 kt/year</li> <li>Maintain and increase recovery rate</li> </ul>	<ul> <li>Increase production volume to achieve 150 kt/year</li> <li>Maintain and increase recovery rate</li> </ul>
	Action Plan	Continue to develop technology and improve processes to increase production volume     Continue to develop technology by increasing leaching rates and improving processes, etc.     Search for new nickel mineral sources	<ul> <li>Continue to develop technology and improve processes to increase production volume</li> <li>Continue to develop technology by increasing leaching rates and improving processes, etc.</li> <li>Search for new nickel mineral sources</li> </ul>

<ul> <li>Recovery of scandia by-prod</li> <li>Recovery of chromite by-pro</li> </ul>			
Continued commercial production of scandia Commenced commercial produc- tion of chromite in March 2021	Achievement Criteria	<ul> <li>Increase production volume to design capacity</li> </ul>	Maintain production volume at design capacity
	Action Plan	Ensure recovery rate and increase production     volume	• Ensure recovery rate and maintain production volume
		, e, stabilize and bleed off, and create value for impur d bleed off impurities: Develop and demonstrate	
Conducted joint R&D on copper and arsenic separation with Kyushu University (JOGMEC-supported project)	Ach	Utilize knowledge gained through research	Utilize knowledge gained through research
JOGMEC on results of mineral pro- cessing tests using actual ore	Action Plan	• Examine use of knowledge gained through research in future mine operations and other separation technology	• Examine use of knowledge gained through research in future mine operations and other separation technology
		alue from unused non-ferrous metal resources resource development) and new development pr	ojects
<ul> <li>Continuing joint venture participation in JOGMEC project on marine mineral resource development</li> <li>Made functional improvements to mining equipment (shape and materials of drill bits, etc.) for seafloor massive sulfide deposits</li> <li>Conducted pyrometallurgical tests to improve cobalt recovery rate of cobalt-rich crust</li> </ul>	Achievement Criteria	• Participate in some form in the next Ocean Ener- gy & Mineral Resource Development Plan (FY2023 onward) to be formulated by the Minis- try of Economy, Trade and Industry	
	Action Plan	<ul> <li>Contribute to the industry by participating in JOGMEC committees for each type of ore and joint ventures for research and development of individual projects</li> </ul>	• Contribute to the industry by participating in JOGMEC committees for each type of ore and joint ventures for research and development of individual projects
KPI 2. 3) Recover non-ferrous met • Participate in business and to		m hard-to process resources logy for recovery of lithium from salt-lake water in	the presence of high levels of impurities
<ul> <li>Launched a pilot test using actual salt-lake brine</li> <li>Continuing development of adsor- bent with long-term reliability in cooperation between industry and academia</li> </ul>	hieve Crite	<ul> <li>Develop adsorbent for practical use and manufacturing processes for lithium chemicals</li> <li>Demonstrate process feasibility through on-site pilot tests, etc.</li> </ul>	<ul> <li>Participate in construction and operation of commercial plant (plan to implement study of commercialization model during the 2024 3-Year Business Plan)</li> </ul>
	Action Plan	<ul> <li>Improve adsorbent through joint research with academia</li> <li>Study overall process design and economic rationality</li> </ul>	<ul> <li>Participate in lithium recovery operations and stabilize product quality</li> <li>Items or targets to be implemented during the 2024 3-Year Business Plan</li> <li>Obtain data for feasibility study through con- struction and test run of demonstration plant</li> <li>Conduct design and feasibility study of commen- cial plant</li> </ul>
Demonstrate, commercialize	, and e	recycling technology for automobile secondary be expand scale of recycling technology that recover	s cobalt from automotive lithium-ion batteries
Commence commissioning a • Established basic technology in development of battery recycle process	Achievement Criteria	<ul> <li>mmercial operation of pre-commercial plant: FY2</li> <li>Commence commissioning and commercial operation of pre-commercial plant by FY2024</li> </ul>	<ul> <li>Continue processing of 10,000 t/year (plan to establish processing system for 10,000 t/year at pre-commercial plant during the 2024 3-Year Business Plan)</li> </ul>
	Action Plan	Construct pre-commercial plant and prepare its commercial operation in FY2024	<ul> <li>Improve technology to increase processing vol- ume of its pre-commercial plant</li> </ul>

		e new products and new businesses that contribu ize new advanced materials in the fields of energy,	
<ul> <li>Moved on to the next stage of the new exploration themes and development themes for FY2022</li> <li>Held workshops and study sessions to explore hydrogen-related themes under the Vision Co-Creation Partnership with Tohoku University</li> </ul>	Achievement Criteria	<ul> <li>Study potential R&amp;D themes that will lead to commercialization</li> <li>Implement working group activities led by young employees from within the Group and activities such as joint research on future co-creation with universities</li> </ul>	<ul> <li>Move on to the next stage of R&amp;D themes with a view to commercialization</li> <li>Continue joint research with universities on new businesses</li> </ul>
	Action Plan	<ul> <li>Operate new business creation system and manage progress of research themes</li> <li>Develop human resources and explore themes utilizing new working group activities and co-creation activities with universities</li> <li>Use our X-MINING information dissemination website and take part in exhibitions</li> </ul>	<ul> <li>Continually improve activities aimed at new business creation</li> <li>Items or targets to be implemented during the 2024 3-Year Business Plan</li> <li>Operate new business creation system and manage progress of research themes</li> <li>Continually develop human resources to create new businesses and new themes</li> <li>Continue to disseminate information, including at exhibitions</li> </ul>
<ul> <li>KPI 4. 2) Hold raw materials in-hou</li> <li>Commercialize NiO for fuel ce</li> </ul>			
<ul> <li>Identified issues for mass production capaction and verified production capactity and cost through demonstration project at pilot plant</li> <li>Meanwhile postponed installation of mass production equipment until FY2024 onwards due to slow start of fuel cell market</li> </ul>	Achievement Criteria	<ul> <li>Continue demonstration project through pilot plant</li> <li>Decide on investment in mass production based on feasibility study</li> </ul>	<ul> <li>Expand business size to accommodate sustained growth of fuel cell market</li> <li>Items or targets to be implemented during the 2024 3-Year Business Plan</li> <li>Introduce mass production equipment and expand business size</li> <li>Establish business profitability</li> </ul>
	Action Plan	<ul> <li>Improve profitability by reducing production costs and optimizing selling prices</li> <li>Prepare for mass production (installation loca- tion, design, and quotations) and carefully examine market</li> <li>Decide on investment in mass production based on feasibility study</li> </ul>	<ul> <li>Continually assess business feasibility and make decisions on investment in boosting production</li> <li>Gain further competitive advantage (cost, technology, etc.)</li> <li>Items or targets to be implemented during the 2024 3-Year Business Plan</li> <li>Introduce mass production equipment and start up as soon as possible</li> <li>Achieve business profitability by expanding sales</li> </ul>
		y cathode materials through favorable, stable pro he expanding cathode materials market	curement of our own nickel raw materials
Established 4,550 t/month produc-	Achievement Criteria	<ul> <li>Expand production capacity for cathode materials to reach 7,000 t/month (complete in FY2025)</li> <li>Maintain top class share of market</li> </ul>	<ul> <li>Construct 15,000t/month production capacity for cathode materials</li> <li>Maintain top class share of market Items or targets to be implemented during the 2024 3-Year Business Plan</li> <li>Establish 10,000t/month production capacity for cathode materials</li> <li>Maintain top class share of market</li> </ul>
	Action Plan	FY2022 • Establish stable production of 4,850 t/month FY2023 • Expand production by 2,000 t/month	• Aim for 15,000t/month production capacity (Aim for 10,000 t/month during the 2024 3-Year Business Plan)



# supplying products contributing to a low-carbon society, a future with zero greenhouse gases (GHGs)

# 1. Continuing to grow our business while maintaining GHG emissions below the level of FY2013. Accelerating actions to achieve net

usiness Plan (FY2024)	Final Year of 2027 3-Year Business Plan (FY2030)
elow the level of	<ul> <li>Reduce GHG emissions in line with targets and achieve KPIs during each 3-Year Business Plan</li> </ul>
t zero by 2050 and	period • Reduce Scope 3 emissions
s and set Scope 3 s	
r Business Plan and with regard to reduc-	Implement the roadmap to achieve KPIs     Verify and revise roadmap and measures
easures, including y of KPIs for achieving	Improve accuracy of Scope 3 calculations and     revise reduction targets
review for setting	
FY2013	
ensity to achieve KPIs	• Reduce GHG emissions intensity in line with tar- gets and achieve KPIs during each 3-Year Busi-

	gets and achieve KPIs during each 3-Year Busi- ness Plan period
with regard to reduc-	<ul> <li>Implement each 3-Year Business Plan and measures for each year to achieve KPIs</li> <li>Verify and revise measures</li> </ul>

tion by products contributing to a low-carbon society: 600 kt-CO2 or more					
<ul> <li>Increase avoided GHG emissions by products contributing to a low-carbon society</li> <li>Increase number of products contributing to a low-carbon society and revise KPIs</li> </ul>	<ul> <li>Increase avoided GHG emissions by products contributing to a low-carbon society and achieve KPIs during each 3-Year Business Plan period</li> </ul>				
<ul> <li>Implement the 2021 3-Year Business Plan and the measures for each year with regard to increasing the number of products contributing to a low-carbon society</li> <li>Conduct investigation and review to increase the number of products contributing to a low-carbon society (R&amp;D and market development), plan measures and verify suitability of KPIs</li> </ul>	<ul> <li>Implement each 3-Year Business Plan and measures for each year to achieve KPIs</li> <li>Conduct investigation and review to increase the number of products contributing to a low-carbon society (R&amp;D and market development), and verify and revise measures</li> </ul>				

Vision for 2030 A company tha	t valu	es water resources and biodiversity, and protec	ts the richness of the sea and land
KPI 1. Zero significant environmer		cidents the use of risk management and environmental m	anagement systems
FY2021 Results	l	Final Year of 2021 3-Year Business Plan (FY2024)	Final Year of 2027 3-Year Business Plan (FY2030)
<ul> <li>No significant environmental accidents or violations occurred due to implementation of management improvements using a risk management system (RMS) and an environmental management system (EMS)</li> <li>Continued to confirm and improve legal and other compliance mechanisms at business sites</li> </ul>	Achievement Criteria	Maintain zero significant environmental accidents     Maintain zero significant violations     Eliminate significant environmental compliance     violations	
	Action Plan	<ul> <li>Strengthen management based on risk registra- tion/management as significant environmental aspects</li> <li>Strengthen communication with site manag- ers, including patrols</li> <li>Provide education and support for improving competence of environmental staff</li> <li>Invest in improving treatment of wastewater and exhaust gas</li> </ul>	<ul> <li>Strengthen management based on risk registration/management as significant environmental aspects</li> <li>Respond to tighter laws and regulations</li> <li>Invest in improving treatment of wastewater and exhaust gas and promote investment in remote, automation and other cutting edge technology (DX)</li> </ul>
KPI 1. Zero significant environmen 2) Reinforce and improve equ		cidents It and infrastructure to address increases in source	es of natural hazard
<ul> <li>Based on results of climate change scenario analysis, identified risks, considered countermeasures, and incorporated into the 2021 3-Year Business Plan</li> <li>Created management manuals and procedures in accordance with standards for managing tail- ings dams at decommissioned and closed mines and shared them internally</li> <li>Reviewed risks at individual decommissioned and closed mines and continued improvements</li> </ul>	Achievement Criteria	<ul> <li>Based on results of climate change scenario analysis review, identify risks, consider and implement countermeasures</li> <li>Establish standards and guidelines for respond- ing to increasingly severe rainstorms and pro- mote improvements and enhancements</li> <li>Revise BCPs</li> </ul>	<ul> <li>Based on results of climate change scenario analysis review, identify risks, consider and implement countermeasures</li> <li>Establish standards and guidelines for respond- ing to increasingly severe rainstorms and pro- mote improvements and enhancements</li> <li>Revise BCPs</li> </ul>
	Action Plan	<ul> <li>Implement risk assessment using the WWF Water Risk Filter and countermeasures for each site based on the results</li> <li>Link with activities of the Carbon Neutrality Pro- motion Committee</li> </ul>	<ul> <li>Implement risk assessment using the WWF Water Risk Filter and countermeasures for each site based on the results</li> <li>Link with activities of the Carbon Neutrality Pro- motion Committee</li> </ul>
KPI 2. Reduce emissions of hazard		: Jbstances (year-on-year) ions of hazardous substances to the atmosphere (	:
• Further improved emissions of haz-	:	<ul> <li>Reduce transfers and emissions of hazardous substances through continuous improvements</li> <li>Publish water policy and implement initiatives</li> </ul>	Reduce transfers and emissions of hazardous substances through continuous improvements     Implement initiatives on water and disclose information
	Action Plan	Promote improvements and enhancements based on risks     Analyze PRTR* data and provide feedback to sites and support based on results     Consider and formulate water policy     PRTR: Pollutant Release and Transfer Register	<ul> <li>Promote improvements and enhancements based on risks</li> <li>Continue to promote action based on PRTR* data improvement and results</li> <li>Promote water policy and initiatives</li> </ul>
KPI 2. Reduce emissions of hazard		ubstances (year-on-year)	s such as regular referentation
<ul> <li>2) Promote various environme</li> <li>Continued regular reforestation— CBNC 39 ha, THPAL 87 ha</li> <li>Identified trends in Japan and overseas on disclosure of biodiver- sity information</li> </ul>	:	Continue regular reforestation     Formulate initiatives and policy on preserving     biodiversity	Continue and review regular reforestation     Continue to improve initiatives on preserving     biodiversity
	Action Plan	<ul> <li>Promote reforestation by CBNC and THPAL and continue communication with mining compa- nies through the two companies</li> <li>Examine and analyze nature-related risks and opportunities</li> </ul>	<ul> <li>Promote reforestation by CBNC and THPAL and continue communication with mining compa- nies through the two companies</li> <li>Continue to promote measures to counter nature-related risks</li> </ul>

## 5 Employees' Occupational Health and Safety sion for 2030 A company where all employees work together with safety first the priority in a comfortable working environment as well as safe facilities and operations KPI 1. Prevent occupational accidents 1. Serious accidents: zero (in Japan and overseas, including contractors) All accidents: reduce year-on-year, with aim of eventually zero CY2021 Results Calendar Year of 2021 3-Year E 1) Serious accidents: 3 of which 2 Zero serious accidents (in Jap were fatal including contractors) 2) All accidents Numbers in parentheses are CY2020 results 2022 targets Japan Group employees: 20 (15) Japan employees all accident Japan contractor employees: 8 (8) Japan contractors all acciden Overseas business site employ-Overseas employees all accid ees: 1 (0) 1. Enhance equipment safety 1) Initiate DX in mines and 2) Education on risk assessm 2. Develop the management 1) Identify the actual circum management Utilize work observation Check and review measu ring accidents Plan 3. Develop human resources 1) Formulate education pro and supervisors, etc. 2) Improve education for all Hazard simulation training KPI 2. Prevent occurrence of occupational diseases 2. Number of workplaces that present higher health risks: reduce year-on-year Occurrence of occupational diseases: zero Number of workplaces that 1) Achieved year-on-year reduction in number of workplaces that health risks: reduce year on y present higher health risks Occurrence of occupational 2020: 8 workplaces 2021: 5 workplaces 2) Occurrence of occupational diseases: zero Make improvements to equ management Upgrade management tech management and manage of improvement Reduce individual exposure

,	
Business Plan (FY2024)	Calendar Year of 2027 3-Year Business Plan (FY2030)
pan and overseas,	Targets through all 3-Year Business Plan periods Serious accidents: zero (in Japan and overseas, including contractors) All accidents: reduce year on year, with aim of
nts: 7/year or less nts: 2/year or less dents: 1/year or less	eventually zero
y battery plants iment manuals t system mstances of line	<ol> <li>Enhance equipment safety</li> <li>Promote (2024 3-Year Business Plan) and real- ize (2027 3-Year Business Plan) DX</li> <li>Promote (2024 3-Year Business Plan) and real- ize (2027 3-Year Business Plan) equipment based on risk assessment</li> </ol>
n sures against reoccur- s	<ol> <li>Develop the management system</li> <li>Strengthen (2024 3-Year Business Plan) and enhance (2027 3-Year Business Plan) line management</li> </ol>
ograms for managers III employees I using virtual reality	<ol> <li>Develop human resources</li> <li>Revise (2024 3-Year Business Plan) and enhance (2027 3-Year Business Plan) manager and supervisor education</li> <li>Review (2024 3-Year Business Plan) and enhance (2027 3-Year Business Plan) new education for all employees</li> </ol>

565.2610	
<ul> <li>Number of workplaces that present higher health risks: reduce year on year</li> <li>Occurrence of occupational diseases: zero</li> </ul>	<ul> <li>Targets through all 3-Year Business Plan periods</li> <li>Number of workplaces that present higher health risks: reduce year on year</li> <li>Address new risks (2024 3-Year Business Plan)</li> <li>Realize comfortable workplace environment (2027 3-Year Business Plan)</li> <li>Occurrence of occupational diseases: zero</li> </ul>
<ul> <li>Make improvements to equipment led by top management</li> <li>Upgrade management techniques through line management and manage and maintain effects of improvement</li> <li>Reduce individual exposure time Analyze and utilize individual sampling and con- tinuous monitoring data. Utilize biosensors for heatstroke prevention, etc.</li> <li>Ensure implementation of the three areas of management in occupational health and safety (working environment management, work man- agement, and health management)</li> </ul>	<ul> <li>Continue and review the actions on the left</li> <li>Respond to new regulations and risks of handled substances (2024 3-Year Business Plan)</li> <li>Include improvement of workloads and strengthening of health management through DX (2027 3-Year Business Plan)</li> </ul>

	1 A company that re	spects	employees can take a vibrant and active part the humanity of each and every employee, and where em s each and every employee with opportunities to improve	
vibrant and	active roles		d create workplaces that make use of digital techn	
FY2021 Re	- ,			Final Year of 2027 3-Year Business Plan (FY2030)
mproved scores for " by managers and sup of job," and "Work env employee awareness	'Management periors," "Appeal vironment" in s survey	Achievement Criteria	<ul> <li>Improve scores from the previous fiscal year for "Management by managers and superiors," "Appeal of job," and "Work environment" in employee awareness survey</li> </ul>	<ul> <li>Improve scores from the previous fiscal year for "Management by managers and superiors," "Appeal of job," and "Work environment" in employee awareness survey</li> </ul>
		Action Plan	<ul> <li>Confirm scores and verify review of KPIs in the employee awareness survey to be conducted annually from FY2022</li> <li>Review personnel-related systems</li> </ul>	<ul> <li>Confirm scores and verify review of KPIs in the employee awareness survey</li> <li>Review personnel-related systems</li> </ul>
vibrant and 2) (1) Number	active roles of female manag	gers: 5	d create workplaces that make use of digital techn 50 (SMM non-consolidated) % or higher (SMM non-consolidated)	ology, enabling diverse human resources to play
<ul> <li>(1) Number of female SMM managers: 13 (3% of managers)</li> <li>(2) Percentage of female SMM employees: 14% (406 employees)</li> </ul>	Achievement Criteria	<ol> <li>(1) Number of female SMM managers: 25 (3% of managers)</li> <li>(2) Percentage of female SMM employees: 14% (460 employees)</li> </ol>	<ol> <li>Number of female SMM managers: 50 (35 during 2024 3-Year Business Plan)</li> <li>(7% of managers) (5% during 2024 3-Year Business Plan)</li> <li>Percentage of female SMM employees: 20%</li> <li>(16% during 2024 3-Year Business Plan) (550 employees) (500 employees during 2024 3-Year Business Plan)</li> </ol>	
	Action Plan	<ul> <li>(1) Continue training to foster role models</li> <li>(2) Target number of women to be hired: 10–15/ year (new graduates + mid-career)</li> </ul>	<ol> <li>Develop career paths for training female managers (2 production sites, 4 positions in administrative offices (3 positions during 2024 3-Year Business Plan)</li> <li>Target number of women to be hired: 10–15/ year (new graduates + mid-career)</li> </ol>	
vibrant and	active roles		d create workplaces that make use of digital techn ck employees of foreign nationality	ology, enabling diverse human resources to play
13 as of March 2021		Achievement Criteria	Increase from the end of FY2021	<ul> <li>Increase from the number achieved during each</li> <li>3-Year Business Plan</li> </ul>
	Action Plan	<ul> <li>Develop an environment that allows employees of foreign nationality to become established at the company</li> </ul>	<ul> <li>Develop an environment that allows employees of foreign nationality to become established at the company</li> </ul>	
vibrant and	active roles		d create workplaces that make use of digital techn abilities: 3% or higher (SMM non-consolidated)	ology, enabling diverse human resources to play
2.6% as of June 1, 20	021	Achievement Criteria	• 2.7%	• 3% (2.9% during 2024 3-Year Business Plan)
	Action Plan	<ul> <li>Host practical workplace training for people with intellectual disabilities (all sites)</li> <li>Head Office recruitment: recruit college gradu- ates and those with higher qualifications from internship programs</li> <li>Recruit people with mental illness (Head Office)</li> </ul>	<ul> <li>Recruit people with intellectual disabilities</li> <li>Expand recruitment channels (graduate intern- ship, high school graduate workplace training, mid-career, employment support)</li> </ul>	

5) Assign jobs and provide su	pport	matched to employees' life stages	
<ul> <li>Childcare support Uptake of parental leave Female: 100% Male: 21%</li> <li>Employees who left work due to nursing care: zero</li> <li>Considered measures for medical treatment</li> </ul>	Achievement Criteria	<ul> <li>Childcare support</li> <li>Uptake of parental leave</li> <li>Female: 100% (maintain)</li> <li>Male: 30% or more (100% of male applicants)</li> <li>Employees who left work due to nursing care: zero</li> <li>Implement measures for medical treatment</li> </ul>	<ul> <li>Childcare support</li> <li>Uptake of parental leave</li> <li>Female: 100% (maintain)</li> <li>Male: 30% or more (100% of male applican)</li> <li>Employees who left work due to nursing care: zo</li> <li>Implement measures for medical treatment</li> </ul>
	Action Plan	<ul> <li>Seminars on support systems for balancing childcare and work</li> <li>Seminars on parental leave system</li> <li>Implement interviews before taking parental leave and before and after returning to work</li> <li>Nursing care consultations (Work-life (WL) Support Desk)</li> <li>Consultations for balancing medical treatment and work (WL Support Desk)</li> </ul>	<ul> <li>Seminars on support systems for balancing childcare and work</li> <li>Seminars on parental leave system</li> <li>Implement interviews before taking parental leave and before and after returning to work</li> <li>Nursing care consultations (WL Support Desk</li> <li>Consultations for balancing medical treatmer and work (WL Support Desk)</li> </ul>
KPI 2. Support employees' mental 1) Reduce the number of emp			
Percentage of people found to require support in FY2021: 7.2%	1	Reduce the number of employees taking long- term leave	Reduce the number of employees taking long term leave
	Action Plan	<ul> <li>Assess current situation of employees on long- term leave and confirm actions for individual situations</li> </ul>	Continue actions for individual situations
KPI 2. Support employees' mental		: ohysical health onormal findings indicated in health checkups: 509	: % or lower
<ul> <li>Health and productivity management initiatives</li> <li>As a result of offering support for quitting smoking, 40 employees had participated as of March 31, 2021. Of these, 27 quit smoking completely and 2 quit for a short time</li> <li>Individual guidance for employees with a high risk of developing lifestyle-related diseases consisted of identifying such high risk employees based on the findings of specific checkups and sending them follow up letters</li> </ul>	Achievement Criteria	<ul> <li>Health and productivity management initiatives</li> <li>Develop Health and Productivity Management Declaration and organization and systems for its promotion</li> <li>Obtain Certified Health &amp; Productivity Outstand- ing Organization Recognition</li> <li>Percentage of employees with abnormal find- ings indicated in health checkups: 55% or lower</li> </ul>	<ul> <li>Health and productivity management initiative</li> <li>Continue selection under Health &amp; Productivi Stock Selection</li> <li>Percentage of employees with abnormal find ings indicated in health checkups: 50% or low (52% or lower during 2024 3-Year Business Placet Section 2024 3-Year Business Placet Business P</li></ul>
	Action Plan	<ul> <li>Initiatives for obtaining Health &amp; Productivity Stock Selection</li> <li>Steadily implement measures for both mental and physical health (encourage voluntary health checkups, establish exercise habits, support improved dietary habits, continue employment</li> </ul>	<ul> <li>Initiatives for continually obtaining Health &amp; P ductivity Stock Selection</li> <li>Steadily implement measures for both menta and physical health (encourage voluntary hea checkups, establish exercise habits, support improved dietary habits, continue employme environment currer)</li> </ul>
ees based on the findings of spe- cific checkups and sending them	Plan	environment surveys) • Send follow up letters to employees with a high risk of developing lifestyle-related diseases • Verify and review effectiveness of measures	<ul> <li>environment surveys)</li> <li>Send follow up letters to employees with a hi risk of developing lifestyle-related diseases</li> <li>Verify and review effectiveness of measures</li> </ul>
ees based on the findings of spe- cific checkups and sending them follow up letters KPI 3. Diversify opportunities to e 1) Utilize one-on-one meeting	nhanc gs that	<ul> <li>Send follow up letters to employees with a high risk of developing lifestyle-related diseases</li> <li>Verify and review effectiveness of measures</li> <li>the abilities of employees according to employee thing out the motivation and potential of every e</li> </ul>	<ul> <li>Send follow up letters to employees with a hi risk of developing lifestyle-related diseases</li> <li>Verify and review effectiveness of measures</li> <li>e needs and work needs</li> </ul>
ees based on the findings of spe- cific checkups and sending them follow up letters KPI 3. Diversify opportunities to e 1) Utilize one-on-one meeting	nhanc gs that	<ul> <li>Send follow up letters to employees with a high risk of developing lifestyle-related diseases</li> <li>Verify and review effectiveness of measures</li> </ul>	<ul> <li>Send follow up letters to employees with a hiritary risk of developing lifestyle-related diseases</li> <li>Verify and review effectiveness of measures</li> <li>The needs and work needs</li> </ul>

employees to enhance the	ir abilit	ies in line with their roles	
<ul> <li>Introduced Work Experience Pro- gram aimed at supporting career development</li> <li>Began onsite training to increase rate of participation in JCO Study Center training (participation rate: SMM employees 89.8%; Group companies' employees 68.5%)</li> </ul>	Achievement Criteria	<ul> <li>Opportunities to consider future career (roles) and OJT and OFF-JT to realize such careers are provided</li> <li>JCO Study Center training participation rate (SMM employees: 90%; Group companies' employees: 80%)</li> </ul>	<ul> <li>Opportunities to consider future career (roles) and OJT and OFF-JT to realize such careers are provided</li> <li>JCO Study Center training participation rate (SMM employees: 90%; Group companies' employees: 80%)</li> </ul>
	Action Plan	<ul> <li>Implement grade-specific career training and introduce a talent management system</li> <li>Check participation rates and take action for sites with low participation rates</li> </ul>	<ul> <li>Examine measures in light of 2021 and 2024</li> <li>3-Year Business Plans</li> <li>Check participation rates and take action for sites with low participation rates</li> </ul>
<ul> <li>KPI 3. Diversify opportunities to enhance the abilities of employees according to employee needs and work needs</li> <li>3) Provide opportunities for self-development matched to each employee's life plans and needs (correspondence courses, online training, etc.)</li> </ul>			
• Considered mechanisms to support learning in addition to existing self-development support tools and introduced online video learning	Achievement Criteria	• Create an environment in which employees of all generations with willingness to learn on their own can acquire the required knowledge and skills in a timely manner	<ul> <li>Create an environment in which employees of all generations with willingness to learn on thei own can acquire the required knowledge and skills in a timely manner</li> </ul>
	-	Collect information on self-development sup-	Collect information on self-development sup-



# Final Year of 2021 3-Year Business Plan (FY2024) Final Year of 2027 3-Year Business Plan (FY2030) Improve employee awareness survey KPI values Improve employee awareness survey KPI values from results of each fiscal year's survey Implement in-house communication measures Refine in-house communication measures at each site to gain understanding and empathy . Verify level of penetration of the brand within the Group (continue from 2024 3-Year Business Plan), consider strategies for application to Group companies

itside the Company		
formation dissemina- 18 3-Year Business Plan) top management to and investors (com- Business Plan) the integrated report by	<ul> <li>During all 3-Year Business Plans, compared to the previous plan</li> <li>Quantitatively increase information dissemination</li> <li>Expand the methods for disseminating information</li> <li>Increase opportunities for top management to engage with shareholders and investors</li> <li>Earn a high reputation for the integrated report from outside the Company</li> <li>Target for final year of the 2027 3-Year Business Plan</li> <li>Establish a system capable of building relation-ships with international media</li> </ul>	
terviews, news releas- tents conducted spokesperson closure in investor rela- tions engagement ols for engagement testors (integrated munications, etc.)	<ul> <li>Increase the number of interviews, news releases, and public relations events conducted</li> <li>Establish public relations organizations at overseas business sites</li> <li>Acquire (2024 3-Year Business Plan) and increase highly specialized human resources in the field of public relations</li> <li>Improve the quality of disclosure in investor relations and shareholder relations engagement</li> <li>Improve and enhance tools for engagement with shareholders and investors (integrated reports, shareholder communications, etc.)</li> <li>Expand the types of information dissemination media</li> </ul>	

ith FY2021 in survey body	<ul> <li>Maintain target value in the 2021 3-Year Business</li> <li>Plan in survey of recognition by external body</li> </ul>	
es that lead to recogni- mpathy for SMM. Run ampaign to secure nunication measures ual sites to build posi- amunities and	<ul> <li>Run ongoing advertising campaigns to consolidate recognition, understanding, and empathy</li> <li>Continue external communication measures at individual sites over the medium to long term</li> <li>Items or targets to be implemented during the 2024 3-Year Business Plan</li> <li>Consider additional measures for branding activities depending on KPI achievement status</li> <li>Promote and accelerate external communication measures</li> </ul>	

and public relations events (2024 3-Year Business Plan)

# Q Co-Existence and Mutual Prosperity with Local Communities

KPI Participate in local communit			
<ul> <li>Accurately identify local issu</li> </ul>	es thro	ough dialogues with local communities, and execu	ite the following measures
FY2021 Results		Final Year of 2021 3-Year Business Plan (FY2024)	Final Year of 2027 3-Year Business Plan (FY2030)
<ul> <li>Changed the framework of activities from departments to regions, and conducted an exchange of opinion that included the person responsible for general affairs starting in FY2022</li> <li>Examined ways of understanding issues and expectations through dialogues with local communities with outside experts</li> </ul>	Achievement Criteria	<ul> <li>Establish mechanisms for identifying issues and expectations through dialogues with local communities</li> <li>Identify baseline values for local community con- tribution levels at all sites in Japan (17 regions), specify expected contributions and contribution levels by the end of FY2030, and incorporate them in each measure</li> </ul>	Ascertain the achievement status of community contribution levels at all sites in Japan compared to the baseline values and clarify issues to be addressed in the future Items or targets to be implemented during the 2024 3-Year Business Plan Manage progress of all sites in Japan with regard to issues and expectations through dialogues with local communities and incorporate into measures, including any subsequent changes
	Action Plan	<ul> <li>Run trial operation of mechanisms for identifying issues and expectations through dialogues with local communities at model business sites (FY2022)</li> <li>Operate mechanisms as necessary at all sites in Japan to identify baseline values for community contribution levels, specify expected contribu- tions and contribution levels by the end of FY2030, and incorporate them in each measure</li> </ul>	<ul> <li>Operate mechanisms as necessary at all sites in Japan, ascertain contribution levels compared to baseline values, identify expected contributions and any changes in level by the end of FY2030, and revise and adapt each measure as necessary</li> </ul>
<ul> <li>(PI 1. Support the local communi</li> <li>Implement employee partici</li> </ul>			·
	;	• Support social contribution activities of employees	Accortain offacts of ampleivag participation pro
<ul> <li>Conducted activities to collect used books, used stamps, and PET bottle caps and donate blood (Head Office, Besshi and other sites)</li> </ul>	Achievement Criteria	<ul> <li>Support social contribution activities of employees and develop employee participation programs at all sites to improve employee satisfaction and motiva- tion to contribute to society</li> </ul>	<ul> <li>Ascertain effects of employee participation pro- grams (number of participants and employee sat- isfaction) and manage progress</li> <li>Improve employee participation programs</li> </ul>
<ul> <li>Featured existing initiatives (blood donation, collection of used books, and local cleanups, etc.) in in-house bulletins</li> </ul>		<ul> <li>Trial a program at Head Office that incorporates the findings of the FY2021 Company Employee Social Participation Questionnaire survey conduct- ed in the Head Office (FY2022)</li> <li>Conduct a questionnaire survey at the main sites and offer the program trialed at Head Office all sites with modifications</li> <li>Ascertain baseline values for the numbers of employees participating and satisfaction and improve programs</li> </ul>	Conduct the Company Employee Social Participa- tion Questionnaire survey at the main sites at the end of FY2024 and the end of FY2027, ascertain satisfaction and needs, and improve programs
<ul><li>KPI 2. Hire and procure locally</li><li>Continually implement and a</li></ul>	assess	of performance	
Assessed hiring and procurement status at the main sites and dis- closed the information in Integrated Report 2021	Achievement Criteria	<ul> <li>Assess hiring and procurement status at the main sites and disclose the information on the compa- ny website</li> </ul>	<ul> <li>Assess hiring and procurement status at the main sites and disclose the information on the compa- ny website</li> </ul>
	Action Plan	<ul> <li>Assess hiring and procurement status at the main sites and collect data</li> </ul>	<ul> <li>Assess hiring and procurement status at the main sites and collect data</li> </ul>
KPI 3. Support for nurturing of the 1) Implement programs to nur		generation e next generation in collaboration with governmen	t, local bodies, NPOs, etc. (one or more times/year)
<ul> <li>Leased ground to junior baseball team (Harima)</li> <li>Sponsored junior baseball tourna- ment (GRANOPT Co., Ltd.)</li> <li>Hosted high school student interns (Isoura, Hyuga Smelting Co., Ltd.)</li> </ul>	Achievement Criteria	<ul> <li>Provide support for nurturing of the next generation in line with the expected content and level of contribution as assessed through mechanisms for regular dialogue with local communities</li> <li>Gain recognition from local communities for the above activities</li> </ul>	<ul> <li>Provide support for nurturing of the next generation in line with the expected content and level of contribution as assessed through mechanisms for regular dialogue with local communities</li> <li>Gain recognition from local communities for the above activities</li> </ul>
Donated to local high school brass band club (Sumiko Energy Materials Co., Ltd.) Provided visiting classes for Sobiraki Elementary School (Besshi) Donated to NPO Kaibigan Ermita Outreach Foundation, Inc in the Philippines (Head Office) Held social contribution forum about Children's Shelters and Other Children's	Action Plan	<ul> <li>Provide support for nurturing of the next generation in line with the expected content and contribution levels as assessed through mechanisms for regular dialogue with local communities</li> <li>Share information on methods of support and know-how via the person in charge of general affairs at sites at the regular Corporate Citizenship Subcommittee meetings</li> <li>Collaborate with the Communications Subcommittee</li> </ul>	<ul> <li>Provide support for nurturing of the next generation in line with the expected content and contribution levels as assessed through mechanisms for regular dialogue with local communities</li> <li>Share information on methods of support and know-how via the person in charge of general affairs at sites at the regular Corporate Citizenship Subcommittee meetings</li> <li>Collaborate with the Communications Subcommited and the communications Subcommited and the communications Subcommendation of the context of t</li></ul>

Collaborate with the Communications Subcom-

mittee to publish achievements internally and

externally

Collaborate with the Communications Subcom-

mittee to publish achievements internally and

externally



Great East Japan Earthquake: Con-

tinued donations to a fund provid-

ing support for the education of

children who orphaned by the earthquake and held Tohoku Reconstruction Fair: Consuming Foods from Disaster-Hit Areas (Head Office)

KPI 3. Support for nurturing of the next generation

ties during normal times (par

- facilities, etc.)
- Provide timely support for per large-scale disasters oversea wars, etc.) in collaboration wi

and a matching gift of the same amount

Issues, provided employee donations

to the organization (Head Office)

in Q1 FY2023	<ul> <li>Continue to work graduates in positions that contribute to the local community and raise and consolidate awareness of the purpose and results of the scholarship program at each of the qualifying universities</li> <li>Items or targets to be implemented during the 2024 3-Year Business Plan</li> <li>Work some of the first students to receive scholarships in positions that contribute to their local communities after graduation in March 2027</li> </ul>
nes and select qualify- ons (June 2022) ptember 2022) hip students (with	Establish opportunities to communicate the purpose of the scholarships, the philosophy of SMM, and the career paths of graduates to university faculty mem- bers and scholarship recipients (Plan to provide from the 2024 3-Year Business Plan for scholarship recipients)

<ul> <li>Provide support for people with disabilities and the elderly that matches the expected content and contribution levels as assessed through mechanisms for regular dialogue with local communities</li> <li>Receive recognition from local communities for these activities</li> <li>Provide support for people with disabilities and the elderly that matches the expected content and sed through mechanisms for regular dialogue with local communities or these activities</li> <li>Provide support for people with disabilities and the elderly that matches the expected content and level of contribution as assessed through mechanisms for regular dialogue with local communities of support and charge of general affairs at sites at the regular Corporate Citizenship Subcommittee meetings</li> <li>Publish achievements of activities internally and externally</li> </ul>		
ected content and sed through mecha- ith local communities ods of support and charge of general Corporate Citizenship subcommittee meetings civities internally and elderly that matches the expected content and level of contribution as assessed through mecha- nisms for regular dialogue with local communities Share information on methods of support and know-how via the person in charge of general affairs at sites at the regular Corporate Citizenship Subcommittee meetings • Publish achievements of activities internally and	ected content and ed through mecha- ith local communities	elderly that matches the expected content and contribution levels as assessed through mecha- nisms for regular dialogue with local communities • Receive recognition from local communities for
	ected content and used through mecha- ith local communities ods of support and a charge of general Corporate Citizenship	elderly that matches the expected content and level of contribution as assessed through mecha- nisms for regular dialogue with local communities • Share information on methods of support and know-how via the person in charge of general affairs at sites at the regular Corporate Citizenship Subcommittee meetings • Publish achievements of activities internally and

nd support in large- and typhoons, etc.) e affected by disasters	<ul> <li>Provide timely on-the-ground support in large- scale disasters (earthquakes and typhoons, etc.)</li> <li>Continue support for people affected by disasters as necessary</li> <li>Conclude agreements with local governments and others at main sites</li> </ul>
uding donations, in ster prevention activi- articipate in drills, lend people affected by as (major disasters, vith business divisions	<ul> <li>Provide timely support, including donations, in large-scale disasters</li> <li>Consider local disaster prevention agreements (lend facilities, etc.)</li> <li>Provide timely support for people affected by large-scale disasters overseas (major disasters, wars, etc.) in collaboration with business divisions</li> </ul>

# 10 Rights of Indigenous Peoples

KPI 1. Understand indigenous per • Percentage of SMM Group si		and their traditions and culture plementing in-house education: 100% by the end	of FY2023				
FY2021 Results Final Year of 2021 3-Year Business Plan (FY2024) Final Year of 2027 3-Year Business Plan (FY20							
Let's Learn About Indigenous Peo- ples, the first in-house educational video on indigenous peoples, viewed by 5,902 employees and	Achievement Criteria	Screen second and subsequent in-house educa- tional videos at 100% of SMM Group sites	Screen third and subsequent in-house educa- tional videos at 100% of SMM Group sites				
screened at 100% of SMM Group sites	Action Plan	Consider content of second educational video     Exchange information with experts	• Exchange information with experts (Consider content of third educational video during the 2024 3-Year Business Plan)				
		pect for the traditions and cultures of indigenous us peoples (continue existing initiatives)	peoples				
Implemented existing initiatives     [Philippines]     Continued to provide local scholar-	Achievement Criteria	Continue to implement existing initiatives	Continue to implement existing initiatives				
ships in consultation with stake- holders, including local residents and governments [North America and South America JV mines] Implemented initiatives in collabo- ration with efforts of joint venture partners		<ul> <li>Regularly confirm implementation status of existing initiatives</li> <li>Review the need for new scholarships for indig- enous peoples, including exchange of informa- tion with experts and individual sites</li> </ul>	<ul> <li>Regularly confirm implementation status of existing initiatives</li> <li>Review the need for new scholarships for indig- enous peoples, including exchange of informa- tion with experts and individual sites</li> </ul>				
		spect for the traditions and cultures of indigenous ed initiatives by NGOs, academic societies, etc.: on					
• Continued dialogue with experts, but there was no information on the holding of events due to the COVID-19 pandemic, so support	Achievement Criteria	<ul> <li>Support one or more indigenous people-related initiatives by NGOs, academic societies, etc. each year</li> </ul>	<ul> <li>Support one or more indigenous people-related initiatives by NGOs, academic societies, etc. each year</li> </ul>				
was not considered		<ul> <li>Continue dialogue with experts</li> <li>Collect information on indigenous people-related initiatives by NGOs, academic societies, etc.</li> </ul>	<ul> <li>Continue dialogue with experts</li> <li>Collect information on indigenous people-related initiatives by NGOs, academic societies, etc.</li> </ul>				

<ol> <li>Responsible mineral source</li> <li>Establish a responsible mineral</li> </ol>	ing neral s	particularly responsible mineral sourcing ourcing management system in line with internati melters, and refineries complicit in child labor or of	ther infringements of human rights in the supp
FY2021 Results	-	Final Year of 2021 3-Year Business Plan (FY2024)	Final Year of 2027 3-Year Business Plan (FY203
<ol> <li>Established the "Responsible Min- eral Procurement" Working Group with responsibility and authority related to responsible mineral</li> </ol>	Achievement Criteria	<ol> <li>2)</li> <li>Select international standards in response to demands of stakeholders, particularly customers</li> <li>Complete establishment of mineral sourcing management system</li> </ol>	1) 2) • Maintain mineral sourcing management syste
<ul> <li>sourcing under the supervision of the Sustainability Committee</li> <li>Continued to receive third-party audits at gold, silver, and cobalt smelters and refineries</li> <li>Continued to review audit stan- dards for copper and nickel</li> <li>2)</li> <li>Maintained zero mines, smelters, and refineries complicit in infringe- ments of human rights</li> </ul>		<ol> <li>2)</li> <li>Exchange information with customers and industry groups</li> <li>Continue to receive third-party audits of smelt- ers and refineries</li> <li>Continue to respond to supply chain question- naires from customers</li> </ol>	<ol> <li>2)</li> <li>Exchange information with customers and industry groups</li> <li>Continue to receive third-party audits of smelt ers and refineries</li> <li>Continue to respond to supply chain question naires from customers</li> <li>Update management system as appropriate</li> </ol>
		ived and agreed with the Sumiteme Metal Mining	Group Sustainable Producement Policy: 100%
by the end of FY2030 2) Establish a sustainable pro 3) Continue implementing d	curen	nent management system in line with internationa	Group Sustainable Procurement Policy: 100% I standards by the end of FY2024
2) Establish a sustainable pro	curen	nent management system in line with internationa	

# Effective Use of Non-Ferrous Metal Resources

Further information on the promotion framework of the Efficient Resource Utilization Subcommittee: p. 72-73. Further information on FY2021 results: p. 76-78.



# Vision for 2030 A company that generates resources through high technological capabilities

- A company that stably provides non-ferrous metals to society
- 2. A company that contributes to society by effectively using impurities through collaborative, open technological development among industry, academia, and government
- 3. A company that contributes to the construction and maintenance of recycling systems for non-ferrous metals
- 4. A company that develops and supplies highly advanced materials that contribute to the resolution of social issues

# Approach and Policy

We aim to contribute to realizing a sustainable society by using our production capabilities as a foundation for carrying out research and development that includes collaboration with external parties. We will also aim to enhance our technological capabilities related to product creation and advance various initiatives such as realizing a stable supply of non-ferrous metal resources, creating value from unused resources, and utilizing technologies for recovering and recycling hard-to-process resources.

# Initiatives

# Separating Copper and Arsenic

With the recent lowering of the grade of copper deposits, the impurity ratio in copper concentrates has been increasing, which limits the amount of ore acceptable to the smelters and refineries. To this end, we participated in a technology development project conducted by Japan Oil, Gas and Metals National Corporation (JOGMEC) from FY2017 to FY2021 by industry, academia, and government on separation technology with a particular focus on arsenic. In this context, SMM col-

# Recovery of Scandia and Chromite

Nickel ore, the raw material for HPAL, contains trace amounts of scandium and chromium, and Taganito HPAL Nickel Corporation is engaged in the business of recovering them. We began commercial production of scandium as scandia in January 2019 and chromium as chromite in March 2021. Scandia is expected to be in demand for solid fuel cells and aluminum alloys, while chromite is expected to be in demand for stain-

# Initiatives Based on the Vision Co-Creation Partnership with Tohoku University

Since FY2020, we have continued to engage in initiatives based on a Vision Co-Creation Partnership\* with Tohoku University aimed at 2050. These initiatives follow three steps: 1) Develop research ideas, 2) carry out research and development with a view to commercialization, and 3) realize social applications. One of our initiatives for developing research ideas involves energy harvesting (a technology for generating electricity from the energy around us). We are working on the development of thermoelectric materials with high conversion efficiency by controlling the microstructure of materials and point defects in the crystal structure. In FY2021, we test-

laborated with Kyushu University to develop fundamental technologies for the separation and removal of arsenic minerals using physical separation and leaching technologies. As a result, we found a basic process of flotation that selectively separates arsenic minerals at a certain level and produces copper concentrates with low arsenic content, and verified its effectiveness using actual copper ores containing arsenic.

less steel and a wide array of other special steels. The SMM Group intends to add value to its HPAL technology by effi-

ciently recovering these by-products.



Chromite production facility and storage area

# 2 Climate Change

Further information on the promotion framework of the Carbon Neutrality Promotion Committee: p. 72-73. Further information on FY2021 results: p. 79.

Vision for 2030 A company that actively undertakes climate change countermeasures, by reducing emissions and stably supplying products contributing to a low-carbon society, a future with zero greenhouse gases (GHGs)

# Approach and Policy

As a group of companies that produces a significant amount of greenhouse gas (GHG) emissions, we are committed to contributing to mitigating climate change by reducing global GHG emissions. We will do this by reducing GHG emissions based absolute and intensity through operational improvements and technological innovation, as well as expanding our business through the development of products that contribute to a low-carbon society, such as battery materials and functional inks (near-infrared absorbing materials).

# Initiatives and Sustainability Data

# Carbon Neutrality Actions

In October 2021, the International Council on Mining and Metals (ICMM) revised its climate change response policy (see p. 112). The SMM Group, a member of the council, will revise its Vision for 2030 KPIs to achieve net zero GHG emissions by

# Strengthening Promotion System

Responding to climate change is an urgent, material issue, which requires a bold and quick response in order to achieve related ambitious goals. We have reinforced the promotion system by establishing the Carbon Neutrality Promotion

# Using Internal Carbon Pricing (ICP)

ICP is an action in which companies set an in-house carbon price to promote capital investments for decarbonization and energy savings and consider GHG emission reductions as an capital investment effect.

Since introducing an ICP in September 2020, the SMM Group has moved forward with decarbonization investments that make active use of ICP at business sites. Specifically, in addition to energy-saving investments, such as introducing LED lighting and replacing to highly efficient air conditioning equipment, we are actively taking on various challenges, including those related to solar power and a fuel conversion from heavy oil to LNG, which previously could not be undertaken because of poor investment return.

By further expanding ICP and spreading its use in-house, we are aiming to "Continuing to grow our business while maintaining GHG emissions below the level of FY2013. Accelerating actions to achieve net zero GHG emissions by 2050 or sooner," one of the goals of Vision for 2030.

ed the growth of large single crystals of Mg<sub>2</sub>Sn, which is expected to be a thermoelectric conversion material, and succeeded in obtaining  $10mm\Phi$  of single crystal.

Both parties will continue to work on initiatives that leverage Tohoku University's strength in materials science, wide-ranging knowledge, and innovation together with SMM's strengths derived from the 3-business collaboration model and metal materials research and development capabilities.

\* For more information on the Vision Co-Creation Partnership, see the Company's website

WEB https://www.smm.co.jp/en/news/release/2020/06/001261.html

2050, clearly indicate a path toward reducing Scope 1 and 2 emissions, move forward with disclosing Scope 3 emissions, and even examine setting targets.

Committee in FY2021 in order to clarify the strategy and plans at a high level of the organization and more quickly and forcefully move forward with introducing measures throughout the Group (see p. 73).

# Plan for ICP



# **Action for TCFD**

In February 2020, we became a supporter of the Task Force on Climate-related Financial Disclosures (TCFD). We have not only listed climate change as a material issue in Vision for 2030, which was formulated and released in March 2020, and strengthened efforts to achieve the vision of "a company that actively undertakes climate change countermeasures, by

# Climate Change Scenario Analysis

We considered two scenarios for 2050

**1.5°C scenario** A scenario in which ongoing efforts are made to keep the rise in average temperatures to within 1.5°C. Information sources included the IEA's<sup>1</sup> WEO<sup>2</sup> 2019 Sustainable Development Scenario<sup>3</sup> and ETP<sup>4</sup> Beyond 2D Scenario, and the IPCC's<sup>5</sup> special report Global Warming of 1.5°C.

4°C scenario

A scenario in which no countermeasures are taken, and temperatures are allowed to continue rising. Information sources included the IEA's WEO 2018 New Policies Scenario and the IPCC's RCP<sup>6</sup> 8.5 Scenario.

1. IEA: International Energy Agency. A global body focused on energy.

2. WEO: World Energy Outlook. A report issued by the IEA covering topics such as energy demand and the outlook concerning technological development.

3. Sustainable Development Scenario: A scenario that analyzes pathways for fully achieving the targets of the Paris Agreement.

- 4. ETP: Energy Technology Perspectives. A report issued by the IEA.
- 5. IPCC: Intergovernmental Panel on Climate Change.

6. RCP: Representative Concentration Pathway.

Connersia Contensione

reducing emissions and stably supplying products contributing to a low-carbon society, a future with zero greenhouse gases (GHGs)," but also indicated that we will move forward with disclosure of related information.

The TCFD recommendations advise that the disclosure of climate change-related risks and opportunities should be organized according to four core elements of corporate management and operations (governance, strategy, risk management, and metrics & targets).

The former CSR Committee (currently Sustainability Committee), chaired by the president, and the Environmental Preservation Subcommittee (chaired by the General Manager of the Safety & Environmental Control Department and composed of members from business and corporate divisions), a subordinate organization of the committee, examines the SMM Group's response to climate change and reports their

Scenario	Category	Driver	Anticipated situation (2050)	Impact on business		um- to long-term)	SMM Group app
		Carbon pricing		Increased tax burden, etc.	Risk	Large	• Climate Change: Reduce GHG emissions See p.
	Climate change policy	(carbon taxes, emissions trading, etc.)	Overall monetary amounts have risen (depending on nation or region)	Increases in R&D costs and investment in low-carbon facilities and equipment	Risk Short- to	long-term, large	Climate Change: Reduce GHG emissions See p.     Effective Use of Non-Ferrous Metal Resources:     Improve productivity by introducing new technology
	Climate change policy	Tightening of vehicle reg- ulations, policy to pro- mote LEVs <sup>7</sup>	Fuel consumption regulations have been tightened and restrictions on movement introduced     Policy is supportive of EVs and LEVs Internal combustion-based vehicles have been replaced by LEVs	<ul> <li>Increase in sales due to growing demand for batteries and nick- el accompanying the spread of EVs</li> <li>Increase in sales of nickel oxide powder and lithium batteries</li> </ul>			Climate Change: Reduce GHG emissions     See p.     Effective Use of Non-Ferrous Metal Resources: Av
	Society and infrastructure	Progress of digital trans- formation related to vehi- cles, changes in values	<ul> <li>Self-driving vehicles, MaaS<sup>8</sup>, and car-sharing are common</li> <li>Fewer households own cars</li> </ul>	<ul> <li>accompanying the development of a hydrogen society and the spread of FCVs</li> <li>Increase in sales of other products contributing to a low-carbon</li> <li>society</li> </ul>	Opportunit	Large	ate value from unused non-ferrous metal resource tribute to society, Hold raw materials in-house for materials through favorable, stable procurement o
	Technology	Development of hydro- gen technology, fuel cells	Fuel cell vehicles (FCV) are common     EVs and plug-in hybrid EVs (PHEV) are     common				
1.5°C	Climate change policy	Shift to electrical energy	Electricity occupies a higher propor- tion of final energy consumption	<ul> <li>Increase in demand for copper accompanying the strengthen- ing of electrical grids (although there is competition from alu- minum, etc.)</li> </ul>	Opportunity	Large	Effective Use of Non-Ferrous Metal Resources: A     See p. 76-78, 90
	Technology	Technological shift in automobile storage batteries • There has been a shift in the market share of automobile storage batteries		Rise in the proportion of nickel used in batteries and increased sales of nickel accompanying efforts to move away from cobalt Solid state batteries that leverage SMM technology as next-generation batteries	Opportunity	Medium	Climate Change: Reduce GHG emissions     See p.     Effective Use of Non-Ferrous Metal Resources: A     structure former fo
			Spread of iron and manganese-based batteries accompanying efforts to move away from cobalt     Spread of new batteries that do not leverage SMM technology as next-generation batteries	Risk	Medium	<ul> <li>ate value from unused non-ferrous metal resource tribute to society, Hold raw materials in-house for materials through favorable, stable procurement c</li> </ul>	
	Society and infrastructure	Interest in matters such as sustainable procurement, environmental footprint, and the social impact of businesses	There is greater awareness regarding sustainability     ESG investment is mainstream     There are more possible applications for alternative materials and recycled metals	Limits on raw materials sourcing, increase in materials and manufacturing costs, greater advantages due to owning our own mines     Expansion of the automobile secondary battery recycling business     Impact of ESG investment on financing     Reputational risk if SMM's efforts are evaluated as insufficient	<mark>Opportunit</mark> Risk	Medium Medium to large	<ul> <li>Effective Use of Non-Ferrous Metal Resources: Advance nickel ore projects and improve producti strate and commercialize automobile secondary b</li> <li>Human Rights in the Supply Chain: Promote susta</li> <li>Rights of Indigenous Peoples: Understand indige respect for the traditions and cultures of indigenous</li> </ul>
		Rises in average tempera- ture, sea surface tempera- ture, and sea levels	Sea levels have risen     Storm surges are more frequent	Decline in port functionality, greater risk of storm surges, possi- bility of facility-based countermeasures needing to be taken at some coastal business sites	Risk	Large	Significant Environmental Accidents and Biodive
	Temperatures and rainfall		ncrease in abnormal cli- • Heavy rains and typhoons are more	Increase in risk of flooding or water shortages at business sites in certain regions, possibility of facility-based countermeasures needing to be taken	Risk	Large	Significant Environmental Accidents and Biodive
		mate events, such as heat waves, flooding, and water shortages	frequent <ul> <li>Increased risk of flooding and water</li> <li>shortages depending on region</li> </ul>	Decline in operations at key suppliers, decline in plant operations due to interruptions to procurement and shipping routes	Risk	Large	Significant Environmental Accidents and Biodive substances See p. 80, 96-101
		water shortages	shorages depending offregion	Possibility of facility-based countermeasures needing to be taken due to the increased risk of damage to tailing dams	Risk	Large	Significant Environmental Accidents: Zero significant

8 An abbreviation for MaaS: Mobility as a Service

findings to the Board of Directors, which deliberates on the issue. Concrete measures are then introduced in each division. In April 2022, we further strengthened the system for promoting carbon neutrality throughout the Group by launching the Carbon Neutrality Promotion Committee.

Our climate change scenario analysis involved 1) identifying key drivers, 2) establishing scenarios for temperature rises of  $1.5^{\circ}$ C and  $4^{\circ}$ C, 3) considering impact on business, 4) identifying and evaluating risks and opportunities, and then 5) considering ways to approach these (such as Vision for 2030).

We have shared information gained from the results of this analysis within the Group through means such as briefing sessions for the Sustainability Committee and relevant officers. Even in our 2021 3-Year Business Plan, we tout a strategy for responding to climate change (see p. 45).

See the TCFD Content Index on p. 2 of the supplementary ESG Data Book 2022

# oproach: Initiatives for realizing Vision for 2030

e p. 79, 91–95

e p. 79, 91–95

See p. 76-78, 90

nology, Advance nickel ore projects and improve productivity

## e p. 79, 91–95

s: Advance nickel ore projects and improve productivity, Develop technology to creurces, Leverage our strengths to create new products and new businesses that confor favorable and stable procurement, Expand sales of low-cost battery cathode nt of our own nickel raw materials <u>See p. 76-78, 90</u>

Advance copper mine projects, Acquire new superior copper and gold resources

## e p. 79, 91–95

x: Advance nickel ore projects and improve productivity, Develop technology to creurces, Leverage our strengths to create new products and new businesses that confor favorable and stable procurement, Expand sales of low-cost battery cathode nt of our own nickel raw materials <u>See p. 76-78, 90</u>

: Advance copper mine projects, Acquire new superior copper and gold resources, activity, Hold raw materials in-house for favorable and stable procurement, Demony battery recycling technology [See p. 76-78, 90]

istainable procurement, particularly responsible mineral sourcing See p. 89, 116-117 ligenous peoples and their traditions and culture, Support initiatives that lead to enous peoples See p. 88, 115

ersit	y: Zero	significant	environmental	accidents	See p. 80, 96-101

iversity: Zero significant environmental accidents See p. 80, 96-101

iversity: Zero significant environmental accidents, Reduce emissions of hazardous

nificant environmental accidents See p. 80, 96-101

# **2** Climate Change

# GHG Emissions (Scope 1 + 2)



In FY2021, the SMM Group's GHG emissions (Scope 1+2) were 2,647 kt-CO2e, reduced through energy conservation activities and other efforts. In addition, GHG emissions related to transportation in Japan, which are indirect emissions, were 26 kt-CO2e.

The SMM Group will continue to promote GHG emission reduction efforts in FY2022, and anticipates reductions of 12 kt-CO2e for the year.

GHG emissions reduction due to solar power generated at the solar power plant operated by SMM in Kashima, Ibaraki Prefecture came to approximately 1.6 kt-CO<sub>2</sub>e in FY2021.

# Breakdown of GHG Emissions (FY2021)

	(KL-CO2E)		
	Group companies in Japan	Group companies overseas	Total
Scope 1	488	1,298	1,786
Scope 2	859	2	861
Total	1,347	1,300	2,647

(kt-COro

Smelting & Refining Business in Japan Mineral Resources Business in Japan Battery Materials Business and Advanced Materials Business
 Other Businesses in Japan
 Smelting & Refining Business overseas
 Mineral Resources Business overseas
 Materials Business overseas

Direct emissions for both Japan and overseas are calculated using emission factors conforming to the Japanese law "Act on Promotion of Global Warming Countermeasures". This includes non-energy-originated GHG emissions (349 kt-CO2e) that are outside the scope of the law. The amount of GHG emissions from electric power purchased in Japan is calculated according to the market-based method using the emission factors of electric suppliers. For overseas emission factors, we used the latest emission factors for each country as published by the IEA.

Scope 3: See p. 95

# Energy intensity and CO<sub>2</sub> Emissions intensity Index\*

(Scope: Smelting & Refining Business in Japan)



--- Energy intensity index --- CO2 emissions intensity index

In the SMM Group's Smelting & Refining Business in Japan, energy intensity for FY2021 was approximately the same as the previous year.

SMM is a member of the Japan Mining Industry Association (JMIA), an organization of non-ferrous mining, smelting and refining companies, and we are participating in the Carbon Neutrality Action Plan being led by the Japan Business Federation (Keidanren).

We will continue to proactively engage in thorough energy management, the promotion of energy-saving activities, the introduction of renewable energy, the use of unutilized heat, and other endeavors with the aim of reducing energy intensity by an average of at least 1% per year and further lowering CO<sub>2</sub> emissions over the medium to long term.

\* Energy intensity and CO<sub>2</sub> emissions intensity index: The amount of energy consumed and CO<sub>2</sub> emitted during the production of 1 ton of product, assuming the base year FY1990 value to be 1

# GHG Emissions (Scope 3) FY2021

Category	kt-CO2e	Calculation method and aggregation boundary
1. Purchased goods and services	3,668.7	Σ (weight of key raw materials x emission factors) Emission factors are from the LCI Database IDEA v2.3 Boundary: SMM Group, including overseas
2. Capital goods	225.9	$\Sigma$ (amount of capital expenditures x emission factors) Emission factors are from the Database for Calculating GHG Emis- sions of the Supply Chain, Ver. 3.2, prepared by the Ministry of Envi- ronment and the Ministry of Economy ,Trade and Industry in Japan. Boundary: SMM Group, including overseas
		Note: Capital expenditures include construction in progress, used equipment, and intragroup transactions
3. Fuel- and energy-related activities not included in Scope 1 or Scope 2	239.8	$\Sigma$ (electricity and fuel consumptions x emission factors) Emission factors (electricity) are from the Database for Calculating GHC Emissions of the Supply Chain, Ver. 3.2, prepared by the Ministry of Env ronment and the Ministry of Economy ,Trade and Industry in Japan. Emission factors (fuel) are from the LCI Database IDEA v2.3 Boundary: SMM Group, including overseas
4. Upstream transportation and distribution	25.7	Emissions from domestic transportation are calculated based on the Japanese law "the Act on Rationalizing Energy Use" and "the Act on Promotion of Global Warming Countermeasures".
5. Waste generated in operations	7.2	$\Sigma$ (amount of waste by type (major sites in Japan) x emission factors by waste type) Emission factors are from the Database for Calculating GHG Emissions of the Supply Chain, Ver. 3.2, prepared by the Ministry of Environment and the Ministry of Economy ,Trade and Industry in Japan. Boundary: SMM Group in Japan
6. Business travel	0.8	$\Sigma$ (number of employees (major sites in Japan) x emission factors) Emission factors are from the Database for Calculating GHG Emis- sions of the Supply Chain, Ver. 3.2, prepared by the Ministry of Envi- ronment and the Ministry of Economy ,Trade and Industry in Japan. Boundary: SMM Group in Japan
7. Employee commuting	2.7	(By work type and place) $\Sigma$ (number of employees (major sites in Japan) x number of business days x emission factors) Emission factors are from the Database for Calculating GHG Emissions of the Supply Chain, Ver. 3.2, prepared by the Ministry of Environment and the Ministry of Economy ,Trade and Industry in Japan. Boundary: SMM Group in Japan
8. Upstream leased assets	Not applicable	Calculated in Scope 1 and Scope 2 so this is not applicable.
9. Downstream transportation and distribution	Not applicable	This category is not applicable because it is difficult to calculate emi sions since the products are mainly non-ferrous metals and highly advanced materials, which have diverse applications after sales dest nations, and each application has different GHG emission characteristics.
10. Processing of sold products	Not applicable	This category is not applicable because it is difficult to calculate emi sions since the products are mainly non-ferrous metals and highly advanced materials, which have diverse applications after sales dest nations, and each application has different GHG emission characteristics.
11. Use of sold products	Not applicable	This category is not applicable because it is difficult to calculate emi sions since the products are mainly non-ferrous metals and highly advanced materials, which have diverse applications after sales dest nations, and each application has different GHG emission characteristics.
12. End-of-life treatment of sold products	Not applicable	This category is not applicable because it is difficult to calculate emi sions since the products are mainly non-ferrous metals and highly advanced materials, which have diverse applications after sales dest nations, and each application has different GHG emission characteristics.
13. Downstream leased assets	0.2	$\Sigma$ (electricity and gas consumption by tenants of the Head Office building x emission factors) Emission factors are from the list of emission factors of the Ministry of the Environment's Greenhouse Gas Emissions Calculations Reporting and Publication System.
14. Franchises	Not applicable	SMM group does not have franchises so this is not applicable.
15. Investments	Not applicable	SMM group does not make financial investments for profit, so this is not applicable.

# **3** Significant Environmental Accidents



Further information on the promotion framework of the Environmental Preservation Subcommittee: p. 72–73. Further information on FY2021 results: p. 80.



Vision for 2030 A company that values water resources and biodiversity, and protects the richness of the sea and land

# Approach and Policy

Significant environmental accidents have major impacts on the environment and communities, and can result in loss of the trust that is a prerequisite for business continuity. By improving our facilities and management to address intensifying natural disasters, we are working to prevent serious environmental accidents and mitigate impacts in the event of occurrence.

We are also working to rationalize our use of water resources and to reduce our emissions of harmful substances into the atmosphere and water, and are developing environmental conservation activities that place importance on biodiversity.

## **Operation of Environmental Management Systems**

The president, in whom ultimate accountability resides, sets annual SMM Group Environmental Targets comprising policies, targets, and measures by taking into consideration environmental risks and opportunities for contribution. Acting on these targets, each business division (including each business site and contractor) establishes and operates under environmental management systems based on the ISO 14001 standard. We have acquired certification for environmental management systems at Head Office, branch offices, and all Group manufacturing sites.

# Significant Environmental Accidents: Initiatives

# Managing Tailings Dams

Tailings facilities in which tailings from mines are dumped may collapse and cause considerable damage.

In August 2020, Global Tailings Review (GTR) formulated the Global Industry Standard on Tailings Management (GISTM). The International Council on Mining and Metals (ICMM; see p. 112) is committed to compliance with GISTM. As a member of ICMM, we are conducting examinations to comply with the standard.

# Rehabilitating Tailings Dams

CBNC and THPAL produce intermediates for electrolytic nickel and nickel sulfate. At tailings dams, the slurry after the recovery of nickel through the production process is treated through neutralization to eliminate toxins and precipitate heavy metals. The treated slurry is then pumped to the tailings dam where it allows the solids to settle down. The solids are stored at the tailings dam, whereas the supernatant or treated wastewater with water quality. Some parts of the supernatant is being recycled for plant use.

When the storage capacity of the tailings dams is reached, the site is rehabilitated in order to establish an independent and sustainable ecosystem. Rehabilitation does not simply mean greening, but also making it possible for the area to return into its original state which is conducive to sustaining a

Our Group thoroughly implements measures to prevent major environment accidents at closed mines that it manages and tailings dams managed by Coral Bay Nickel Corporation (CBNC) and Taganito HPAL Nickel Corporation (THPAL), both of which are located in the Philippines.

In FY2021, there were no serious accidents including minor ones

natural ecosystem. This involves agroforest technology wherein the forest is established alongside agricultural farming. Thus, vegetables and fruits are also grown in the area. Many local residents are involved in this work, and rehabilitation plays an important role in creating local employment.



# Managing Decommissioned and Closed Mines

At the closed mines managed by SMM, we operate storage facilities for tailings and other materials and managing wastewater containing heavy metals discharged from drifts.

We operate 42 storage facilities in Japan, and the stability at these facilities is evaluated using mandatory management criteria that were revised in light of the Great East Japan Earthquake. Eleven of these facilities did not meet those criteria, and through 2018, we invested a total of about ¥4.5 billion to complete reinforcement work on the facilities.

On the other hand, managing wastewater requires removing heavy metals until the water quality meets the effluent standards, and thus this is a key part of the management of closed mines. In recent years, focus has been on passive treatment\* technology that uses microbes to remove heavy metals, and we are participating in the development of that technology.

In addition to safely managing closed mines, we will continue to reinforce and improve facilities and infrastructure.

\* Passive treatment is a natural method of purifying wastewater that does not require the use of force or chemicals. It is expected to find use as a lower cost, more en ronmentally friendly process than treatment of mine wastewater using chemicals.

# Effective Use of Water Resources (Water Stewardship)

Our Group's manufacturing processes require large amounts of water, particularly in the Smelting & Refining Business.

At the same time, water is a shared resource of local regions and is closely connected to the lives of local residents and communities, as well as to the surrounding ecosystem. In addition to identifying water risks using WWF Water Risk Filter and then reducing those risks, our Group gives consideration to local communities and the environment in areas where we use water and are working with a sense of responsibility to make good use of the limited water resources. Example initiatives:

- Prevention of excessive intake of water by understanding the amounts of intake by source
- Reduction of water intake and effluent amounts by promoting the use of recycled and reused water
- Promotion of effective use of water by understanding water balance and optimizing our amounts used
- Reduction of environmental impact by reducing amounts of hazardous chemical substances in effluent discharged into water
- Promotion of preservation of biodiversity through aquatic life monitoring surveys near our business sites
- Promotion of infrastructure development in areas where access to water is difficult

At CBNC, in the Palawan Island, the Philippines makes effective use of water resources because the area is prone to water shortages during the dry season. For example, they treat supernatant water accumulated in tailings dams at recycling

# Decommissioned and Closed Domestic Mines

(as of July 1, 2022, dates in parentheses are closure/suspension dates)

# Management framework for decommissioned and closed mines

SMM's management of decommissioned and closed domestic mines includes daily, 24-hour treatment of wastewater discharged from mines and accumulation sites, and maintenance of old drift and slag and waste rock storage facilities , in order to prevent mine pollution



facilities and then reuses the water during its process. The company also supplies that water as industrial water to lime slurry producers, one of its suppliers. Furthermore, CBNC provides handwashing equipment to local residents as part of its water-related contributions to local communities.

In addition, a team that consists of members from the Environmental Management Office (EMO), the department that conducts environmental management activities for the company, local governments, NGOs, and other entities, strives to reduce the environmental effects caused by wastewater by conducting regular water guality tests to determine if plant operation is having a major impact on surrounding water. The SMM Group also completes an annual CDP's water security questionnaire regarding its water management.



Portable handwashing equipment provided to local resident

## **3** Significant Environmental Accidents **4** Biodiversity

# Enforcement of Chemical Management

When a business site intends to handle a new chemical, it conducts a preliminary study that covers hazard statements and other applicable information, and deliberates on safety in a meeting at the business site before deciding whether to adopt the handling of said chemical. In addition, to enable

## Enforcement of Environment-Related Compliance

In addition to providing education on environmental laws using various types of material, including e-learning material, each year we hold seminars on laws and regulations for personnel in charge of the environment at business sites. We also gather information in a range of areas such as legal amendappropriate and safe use of chemicals throughout the supply chain, we also provide customers with information on SMM Group products using safety data sheets (SDS), regardless of whether or not we are legally obligated to do so.

# ments, including the REACH Regulation\* and other overseas regulations.

\* REACH Regulation: The Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals. An EU regulation concerning the registration, evaluation approval, and limiting of chemical substances.

# **Biodiversity: Initiatives and Sustainability Data**

# Consideration of Biodiversity

We are working to reduce the environmental impact of our development efforts, operations, and product use in order to minimize any undesirable direct or indirect impacts on biodiversity.

# Regular Reforestation in Philippines

CBNC and THPAL, which are located in the Philippines, are working to undertake regular reforestation.

In areas other than those owned by the companies, efforts are underway to promote greening, which involves planting mangroves, bamboo, and other trees. CBNC also holds an annual Shokuju (Tree Planting) Day, an event in which employees and local residents plant seedlings every year (see p. 113), and THPAL, too, holds tree planting for employees, contractors and local residents on Arbor Day, Environmental Month and other significant celebration annually.

# Reducing the Environmental Impact of Constructing New Plants

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-Environmental Management Bureau (DENR-EMB). This required submitting an Environmental Impact Assessment (EIA) to assess and determine the possible impacts of the new project to land, air, water and the people.

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 the operation of the refinery in April 2005

We are systematically curbing our discharges of chemicals and other substances, and continue to further cut our emissions of hazardous chemical substances.



Reforestation at THPAL

based on a design certified by the DENR, and was followed by THPAL in October 2013. The refineries have set up Environmental Management Offices (EMO) that are primarily responsible in promoting environmental initiatives of the 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



Coral near CBNC (when planted (left), now (right))

regular sampling of the air, water, flora and fauna. With this sort of environmental monitoring, 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.

# Environmental Monitoring at the Hishikari Mine

To preserve the ecosystems as well as the foundation of life for communities in the area around the Hishikari Mine, SMM conducts annual environmental monitoring surveys in the area

In addition to monitoring the atmosphere and water level and flow volume of rivers in the area, measuring water temperature, conducting water quality tests, including ones for underground water, and analyzing riverbed soil, we monitor growth of chisujinori\* in the Sendai River of Isa City, Kagoshima Prefecture, where the Hishikari Mine is located, because this is where the algae, which is a government-designated protected endangered species, grows. We also conduct an annual analysis of 18 items, such as rice paddy soil, whole rice, and straw. Furthermore, checks are made every other year that there are no anomalies regarding heavy metals in fish, and the results are reported to the local government, local residents, and similar parties.

# Business Activities in Areas of High Biodiversity Value<sup>1</sup> (FY2021)

Area	Size of production site (hectares)	
Seto Inland Sea	62 (Minoshima & lenoshima islands)	Shisaka Smelting Co., Ltd. op islands, neighboring Setonai to IUCN Category 2)
The Philippines	583	Coral Bay Nickel Corporation ing-prohibited and bird protection areas

Currently, there are no projects in any region requiring the preparation of a management plan.

# Amount of Land Developed or Rehabilitated (FY2021)

	A: Total area of land not rehabil- itated (as of the end of FY2020)	B: Area of land newly developed in FY2021	C: Area of land newly reha- bilitated in FY2021	D: Total area of land developed but not rehabilitated (A+B-C)
Hishikari Mine	22	0	0	22
Coral Bay Nickel Corporation	421 <sup>1</sup>	0	42	417
Taganito HPAL Nickel Corporation	568	0	13	567

1. Historical figures were reviewed and adjustments were made to prior periods.

2. In addition to the rehabilitated area within the development site mentioned above, CBNC cooperated with the Philippine government, and proceeded with the rehabilitation of an additional 35 hectares in nearby regions outside the development site in FY2021, bringing the total certified rehabilitated area to 126 hectares (including bamboo groves) to date. 3. In addition to the rehabilitated area within the development site mentioned above, THPAL cooperated with the Philippine government, and proceeded with the rehabilitation of an additional 86 hectares in nearby regions outside the development site in FY2021, bringing the total certified rehabilitated area to 541 hectares to date.

As a result of the efforts that the companies have undertaken over the years, both CBNC and THPAL were awarded a Presidential Mineral Industry Environmental Award (PMIEA) by the Philippine Department of Environment and Natural Resources for the second year in a row.

\* Chisujinori (Scientific name: Thorea okadae): A Japanese government-designated protected freshwater algae species belonging to the Thoreaceae red algae family that is found only in rivers in central and southern Kyushu. It grows mainly in flowing water, clinging to rocks and trees. The Japanese name (lit. "blood-vessel moss") comes from its similarity in color and shape to blood vessels.



Routine environmental monitoring in the area around the Hishikari Mine

perates on Minoshima and lenoshima aikai National Park (neighboring areas

on operates on Palawan Island (in huntas equivalent to IUCN Category 4)

1. Protected areas classified as Category 4 and above by the International Union for Conservation of Nature (IUCN) and neighboring areas, as well as equivalent areas of high biodiversity value (SMM research). Areas classified as Category 1 are of highest priority

## (hectares)

## **3** Significant Environmental Accidents **4** Biodiversity

# Material Flows within Business Activity (FY2021)

# INPUT (Resources & Energy)

Raw Materials	
Gold and silver ore	190kt
Copper concentrates	1,287kt
Nickel oxide ore	7,998kt
Nickel matte, etc.	39kt
Raw material for batteries	92kt
ALC raw material, incl. silica rock	153kt
Hydrotreating catalyst raw material	49kt

Recycled Materials <sup>1</sup>		Material
Copper scrap	124kt	Silica sand (for copper smelting)
Secondary zinc	12kt	Chemicals (lime-based)
Secondary precious metals	6kt	Chemicals (sodium-based)
Electric arc furnace dust	97kt	Chemicals (magnesium-based)
ALC waste	111t	Sulfuric acid
Percentage of recycled in raw materials used	nput	Cement, etc.
2.38%		

Energy <sup>2</sup>	Consumption	Energy Value				
Non-renewable sources						
Heavy oil	48,850kL	1,998TJ				
Coal/coke	505,241t	13,048TJ				
Diesel/gasoline/kerosene	19,656kL	737TJ				
LPG/LNG	8,792t	447TJ				
City gas	8,531ML	384TJ				
Purchased electricity	1,435,260MWh	13,963TJ				
Purchased steam <sup>3</sup>	– 256GJ	LT0				
Sub-total	30,577TJ					
Renewable sources						
Solar power generation, binary power generation	503MWh	5TJ				
Wood pellets	172t	3TJ				
Biomass steam	64,997GJ	66TJ				
Total energy consumption	-	30,651TJ				

Water <sup>4</sup>	
Total volume of fresh water withdrawn	35,970ML
Surface water (rivers)	13,954ML
Rainwater	53ML
Groundwater	7,108ML
Industrial water (water from another organization)	14,437ML
Tap water (water from another organization)	417ML
Volume of seawater withdrawn	145,301ML
Total volume of water consumed from all areas <sup>5</sup>	4,917ML

89kt

1,114kt

108kt

13kt

472kt

93kt

# OUTPUT (Products & Emissions)

Products		Emissions into the Atmos
Electrolytic copper	419kt	CO <sub>2</sub>
Gold	17t	Scope 1
Silver	231t	(direct emissions) <sup>2</sup>
Electrolytic nickel	52kt	Scope 2
Nickel sulfate	13kt	(indirect emissions) <sup>3</sup>
Electrolytic cobalt	4kt	SOx
Crude zinc oxide	40kt	NOx
Chromite <sup>1</sup>	52kt	Soot and dust
Ferronickel	61kt	PRTR substances
Battery materials	62kt	
Sulfuric acid	373kt	Waste (including Items of Va
Slag	1,325kt	Total waste
Hydrotreating catalysts	8kt	Breakdown of total waste
ALC (Siporex)	310ML	Spoil
Percentage of products from recycled input		Leach sludge from CBNC, THPAL, etc.
<b>6.96</b> %		Industrial waste (Japan)
		Other
		Landfill on company premises
		PRTR substances <sup>5</sup>

1. Does not include materials recycled within plants.

2. Calorific values for both Japan and overseas are calculated using coefficients conforming to the Japanese Act on the Rational Use, etc. of Energy for fuel, heat, electricity, etc. that were consumed in business activities both in Japan and overseas. 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.

3. The consumption and the energy value of purchased steam are indicated by subtracting the amount sold from the amount purchased.

4. SMM uses the WWF Water Risk Filter to determine regions with high water stress. As a result of this, there are no areas of high water stress at SMM Group's production sites. 5. The total water consumption is estimated by subtracting the total amount of water discharged from the total amount of water withdrawn.

1. The percentage of products from recycled input increased because chromite was newly added to products.

2. Direct emissions for both Japan and oversea are calculated using emission factors conforming to the Japanese Act on Promotion of Global Warming Countermeasures. This includes non-energy-derived GHG emissions (349 kt-CO2e) that are outside the scope of the law. GHGs from wood pellets are not included.

3. The amount of GHG emissions from electric power purchased in Japan is calculated according to the market-based method using the emission factors of electric suppliers. For overseas emission factors, we used the latest emission factors for each country as published by the IEA. The amount of indirect emissions was 699 kt-CO2e when calculated for both

Japan and overseas with the location-based method using IEA country-specific emission factors. 4. Discharges into rivers flowing into enclosed seas are included as "discharges into seas." 5. Total transfers to sewerage and off-site transfers.

## 2,647kt

1,786kt (Decrease of 91 kt compared to the previous fiscal year)

861kt (Decrease of 22 kt compared to the previous fiscal year)

> 1,739t 1,352t 84t

> > 9t

# 6 1 2 1 kt

0	, I	2	41	<b>S</b>

12kt	
6,027kt	
84kt	
1kt	
6,039kt	
1,957t	

Emissions into Water					
Total wastewater	176,781ML				
Discharges into seas <sup>4</sup>	175,753ML				
Discharges into rivers	974ML				
Sewerage, etc.	55ML				
COD (chemical oxygen demand)	48t				
BOD (biochemical oxygen demand)	12t				
Total phosphorus	1t				
Total nitrogen	73t				
PRTR substances (discharged into pub- lic water areas)	67t				
PRTR substances (discharged into the soil or in landfills within business premises)	2t				

# **Special Feature** Initiatives for Business and Human Rights

# **Approach and Policy**

The business activities of the SMM Group affect the human rights of its stakeholders, particularly local residents and indigenous peoples, employees in the supply chain, and employees of the SMM Group.

In accordance with the United Nations Guiding Principles on Business and Human Rights, we will avoid causing or encouraging negative impacts on human rights, and will work to correct or remedy human rights violations when they occur. In addition, if a stakeholder is involved in human rights violations, the Group will cooperate in efforts to correct or remedy the situation.

In order to further clarify the Group's stance and initiatives regarding such business and human rights, the Sumitomo Metal Mining Group Policy on Human Rights was revised and published as of June 1, 2022.

# **Promotion Structure**

The Diversity Subcommittee and the Human Rights Subcommittee, which are subordinate organizations of the Sustainability Committee overseen by the Board of Directors and chaired by the president, report regularly to the Committee on their activities and reflect them in the Group policies and procedures to promote initiatives.

# Initiatives

A human rights management program targeting employees was launched in FY2014, and we conduct on-site surveys as needed. In addition, regular dialogues with labor unions are held to confirm employees' opinions and requests (see p.108). There were no reported cases of child labor, forced labor, serious violations of freedom of association, or factory closures due to strikes or other reasons.

We are planning to conduct human rights due diligence targeting local communities at our overseas business sites. In the supply chain, we sent a question-

naire to about 300 of our major suppliers regarding their compliance with the Sumitomo Metal Mining Group Sustainable Procurement Policy, which has already been agreed to by each company, and have received responses from 98% of them (see p. 117).

We are considering the establishment of a grievance mechanism operated by a third-party organization that can be used by external stakeholders, such as local residents, indigenous peoples, and employees in the supply chain.

# Revision of the Sumitomo Metal Mining Group Policy on Human Rights (June 1, 2022)

# **Points of Revision**

In addition to our internal study, we received guidance from outside specialists and exchanged opinions with outside experts, and made revisions with the following points in mind.

- Clearly state support for the UN Guiding Principles on Business and Human Rights
- Clearly state the Group's position on basic human rights violations related to its business activities • Clearly state international norms to be respected, such as the United Nations Declaration on the Rights of Indigenous Peoples
- (UNDRIP) • Clearly state the implementation of human rights due diligence and the establishment of a grievance mechanism and its promotion system
- Clearly state the implementation of dialogue and consultation with stakeholders and regular disclosure of information
- Clearly state that the policy was supported by outside experts, discussed by the internal Sustainability Committee, and approved by the Board of Directors.

# **Guidance from Outside Specialists**



# Mr. Sakon Kuramoto, Attorney at Law Co-representative Director, Japan Center for Engagement and Remedy on Business and Human Rights (JaCER)

The UN Guiding Principles on Business and Human Rights require companies to have three pillars: formulate a human rights policy, conduct and operate human rights due diligence, and establish and operate a remedy mechanism. We believe that the revised policy is more in line with international norms and has been enhanced as a result of our discussions with people in various areas of your company. Your company has been working on due diligence for each of your stakeholders, and we hope that you will operate more in line with international norms in the future. In addition, we would like to see your company consider the use of a remedy (grievance) mechanism that is not limited to individual companies, but is operated by a third-party organization, such as a multi-stakeholder organization, to ensure greater transparency and effectiveness.

# **Opinions from Outside Experts**



# Mr. Minoru Matsubara

Since your company is already making substantial efforts to work to ensure responsible mineral sourcing and a development approach that takes indigenous peoples into consideration, I feel that the revised policy is more in line with the actual situation as well. Rather than stating that human rights issues have been resolved in response to the occurrence of an event that raises concerns about human rights violations, I would like to see information disclosure that shows what the findings are and how the company is working to resolve them when human rights issues become apparent, based on an awareness of human rights risks.

# Mr. Ryusuke Tanaka

Programme Officer, ILO Office for Japan As an initiative to support the sustainability of your company's business, it is particularly important to hold dialogues and consultations with stakeholders, starting with those with labor unions, which have been conducted for many years. I would like you to be particularly conscious of respecting the rights of children, including the abolition of child labor, which has been a focus of attention in the mining and smelting and refining sectors, and of expanding the job opportunities for women from the perspective of gender equality. In order to meet society's expectations of multinational enterprises, I am looking forward to your putting into practice your commitment to the ILO Tripartite Declaration of Principles concerning Multinational Enterprises and

Social Policy, which is clearly stated in this revision.

## Executive Officer, General Manager of Responsible Investment Division, Resona Asset Management Co., Ltd.

# Special Feature Initiatives for Business and Human Rights

# The Sumitomo Metal Mining Group Policy on Human Rights

We, the SMM Group (hereinafter referred to as the Group), support the UN Guiding Principles on Business and Human Rights and promote initiatives to respect human rights based on these principles.

Our SMM Group upholds "Coexistence with the Earth and society" and "Respect for all individuals as the basis" in our corporate philosophy. Our Group aims to focus on its social mission and responsibility as a manufacturing company, and aims to contribute to the formulation of a sustainable society by securing resources and providing society with non-ferrous metals and high-performance materials.

The Group's long-term vision is to become a "World Leader in the Non-Ferrous Metals Industry", and our sustainability policy upholds that we will "contribute to the development of a sustainable society, and we are working to improve both our sustainable growth as a business and our corporate value".

From among the key social issues that are closely related to our Group, 11 material issues have been identified, including "Diverse Human Resources", "Development and Participation of Human Resources", "Co-Existence and Mutual Prosperity with Local Communities", "Rights of Indigenous Peoples and Human Rights in the Supply Chain". Our SMM Group has also formulated the "SMM Group Vision for 2030" and KPIs as milestones in its long-term vision to address these issues, and is promoting initiatives.

We will continue to follow the Sumitomo Business Spirit, which is the basis of our Group, and aim to become a company recognized by society as the "World Leader in the Non-Ferrous Metals Industry".

# 1. Our Group's approach to respect for human rights

Our Group understands that all our business activities may directly or indirectly affect human rights.

Our Group takes utmost care not to infringe on the human rights of all people, avoids causing or contributing to adverse human rights impacts through our business activities, and works towards correcting and remedying any such situation that may arise.

Where stakeholders, in particular business partners such as suppliers, are involved in adverse human rights impacts, the Group encourages them not to infringe on the human rights and cooperates with efforts for correction and remedy. In actual efforts, we will particularly focus on the three areas of "Employees", "Local Residents and Indigenous Peoples" and "Supply Chain (including employees therein)".

## 2. Commitments on fundamental human rights issues

Respect for children's rights and prohibition of child labor
 We respect the fundamental human rights of children under
 18 years of age and engage in relevant business activities
 and social contribution activities. We do not permit child
 labor, especially the worst forms of child labor, such as slave
 labor through forced recruitment in times of conflict, and
 labor that is harmful to the health and safety of children.
 Prohibition of forced labor

We do not recognize modern slavery in the form of forced labor, debt labor (work in situations where a person is forced to work for an employer to repay a debt) and human trafficking.

- 3) Prohibition of discrimination
- Discrimination, harassment and bullying on the basis of race, religion, gender, age, sexual orientation, disability, nationality and other factors are not permitted in employment and work situations.
- 4) Respect for basic labor rights

We respect basic labor rights (such as freedom of association and workers' right to collective bargaining) and engage in constructive dialogue between labor and management. 5) Working hours and wages

We endeavor to properly manage working hours, holidays and leave in accordance with laws and regulations, including reducing excessive working hours, and we pay wages at or above the minimum wage stipulated by laws and regulations.

6) Occupational health and safety We actively address to ensure a safe and healthy working environment and give top priority to safety and health for life and limb.

# 3. Scope of application

This policy applies to all executives and employees of the SMM Group (Sumitomo Metal Mining Co., Ltd. and its subsidiaries). Our SMM Group also expects and encourages stakeholders directly linked to our operations, products or services, in particular business partners, to understand and support this policy.

## 4. Respect for International Norms on Human Rights

Our Group, in cooperation with its stakeholders, will address to respect human rights in accordance with the following international norms and standards. In addition, our Group will comply with all applicable laws and regulations in the regions where we operate. In the unlikely event of a conflict between these laws and regulations and international norms on human rights, we will seek ways to respect international norms while complying with the laws and regulations.

- UN Guiding Principles on Business and Human Rights
   International Bill of Human Rights ("Universal Declaration of
   Human Rights", "International Covenant on Civil and Political Rights", and "International Covenant on Economic,
- Social and Cultural Rights") • International Labor Organization (ILO) Declaration on Fundamental Principles and Rights at Work
- ILO Tripartite Declaration of Principles on Multinational Enterprises and Social Policy
- United Nations Declaration on the Rights of Indigenous
   Peoples (UNDRIP)
- The 2030 Agenda for Sustainable Development (SDGs)
- Convention on the Rights of the Child
- OECD Due Diligence Guidance for Responsible Business
   Conduct
- OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas
- International Council on Mining and Metals (ICMM) Mining
   Principles
- Voluntary Principles on Security and Human Rights

## 5. Governance and Promotion Structure

The Diversity Subcommittee and the Human Rights Subcommittee, which are subordinate organizations of the Sustainability Committee chaired by the President, shall report regularly on the status of compliance with this policy and the Group's efforts to respect human rights to the Sustainability Committee, which is overseen by the Board of Directors, and reflect this information in the Group's business policies and procedures.

# 6. Human Rights Due Diligence

In accordance with the OECD Due Diligence Guidance for Responsible Business Conduct and other guidelines, our Group will conduct the human rights due diligence in the following steps.

In doing so, our Group will strive to utilize the human rights expertise and engage in meaningful consultation with stakeholders.

 Identify and assess adverse impacts associated with our Group's operations, either directly or indirectly.

- Integrate the results of the assessment into the company's processes, including allocating budgets to address any adverse impacts identified as a result of the assessment.
- 3) Seek to cease, prevent and mitigate adverse impacts.
- 4) Monitor and track the status of implementation and carry out assessments of the effectiveness of our Group's
- 5) Disclose information on the status of the implementation and the effectiveness.

# 7. Grievance Mechanism

initiatives

Our Group will establish a grievance mechanism that is accessible to all stakeholders, including not only employees of our Group but also employees in the supply chain, local residents and indigenous peoples, and that aims to resolve grievances by consensus through dialogue.

# 8. Dialogue and Consultation with Stakeholders

Our Group will engage in dialogue and consultation with stakeholders, including human rights experts, labor unions, customers and business partners, to promote comprehensive measures based on expertise and a broad range of perspectives for the adaption and the revision of this policy and for our Group's efforts to respect human rights.

In addition, we will raise awareness and provide training to all executives and employees of our Group to promote their understanding of this policy and their engagement in initiatives to respect human rights.

# 9. Reporting and Information Disclosure

Our Group will regularly disclose the progress of its initiatives based on this policy.

This policy was formulated with the assistance of human rights experts, discussed within the Sustainability Committee of Sumitomo Metal Mining Co., Ltd. and approved by the Board of Directors.

Akira Nozaki President and Representative Director Amended on June 1, 2022

A. Mobili

# 5 Employees' Occupational Health and Safety

Further information on the promotion framework of the Occupational Health & Safety Subcommittee: p. 72-73. Further information on FY2021 results: p. 81

Vision for 2030 A company where all employees work together with safety first the priority in a comfortable working environment as well as safe facilities and operations

# Approach and Policy

The SMM Group aims to create comfortable and safe workplaces, including at our contractors. An environment in which employees can work in safety and with security is an important management element that leads to greater employee motivation and stronger relationships of trust between employees and the Company. To address such issues, we are further advancing our ongoing equipment safety measures and have begun introducing advanced technologies such as the IoT<sup>1</sup> and artificial intelligence (AI).

1. IoT: The Internet of things, under which services are deployed through all manner of things being connected through the Internet.

# **Occupational Health and Safety Management System**

We are building a line management framework in which the president is the person ultimately responsible for occupational health and safety and the person in charge of each business site is appointed as health and safety manager of that site, operating under the guidance and supervision of the general managers of the relevant divisions. Constructive discussions on ways to improve health and safety in the workplace also take place during meetings of the Occupational Health and Safety Committee comprising representatives from both labor and management. Furthermore, the executive officer responsible for the Safety & Environment Control Department tackles occupational health and safety by providing guidance and advice to each department and each of the Group's business sites, as well as coordinating efficiently with the health and safety officer assigned to each division and business site in order to improve health and safety under the concepts of the OSHMS.<sup>2</sup>

We have business sites that have certified according to the Japan Industrial Safety and Health Association (JISHA) OSHMS standards, as well as business sites with ISO 45001 certification. We also conduct risk assessments in line with our Group's risk assessment standards when introducing new equipment or making changes to operational procedures.

At overseas business sites, we are building an occupational health and safety management framework based on local laws and regulations and are implementing initiatives including activities to ensure that hazard prediction, risk assessment, and the improvement of equipment are at the same level as in Japan.

2. OSHMS is an abbreviation of Occupational Safety and Health Management System and it is a management system that aims to improve occupational health and safety levels at business sites through the implementation of a set of processes known as the PDCA cycle (Plan, Do, Check, Act), based on cooperation between businesses and their workers.

# **Initiatives and Sustainability Data**

Work-Related Incidents (2021)	dents (2021) "Employees" includes employees and part-time workers from Group companies							
	Japan					Ove	rseas	
	Emple	oyees	Non-emplo	yee workers	Empl	oyees	Non-emplo	yee workers
Number of work-related fatalities and fre- quency rate (Calculated per 1,000,000 hours, same applies below)	1	0.07	1	0.50	0	0	0	0
Number of work-related injuries resulting in disability and frequency rate	0	0	0	0	0	0	0	0
Number of recordable work-related injuries and frequency rate <sup>1</sup>	20	1.48	8	3.99	1	0.35	7	0.58

1. "Recordable work-related injuries" is the total of injuries that required hospital treatment and resulted in absence from work and injuries not resulting in absence from work.

## Work-Related III Health (2021)

"Employees" includes employees and part-time workers from Group companies

	Jap	ban	Ove	rseas
	Employees	Non-employee workers	Employees	Non-employee workers
Number of fatalities as a result of work-related ill health	0	0	0	0
Number of cases of recordable work-related ill health <sup>2</sup>	0	0	0	0

2. Regarding employees in Japan, we also record the number of workers who receive abnormal findings but do not require treatment (as this is personal information, it is not disclosed).

# VR (Virtual Reality) - based hazard simulation training

Since FY2020, our Group has conducted hazard simulation training using VR equipment. In FY2020, we conducted training using existing content concerning falls, heavy machinery accidents, and other work-related accidents, and confirmed the effectiveness of the training. In FY2021, we worked toward enforcement of work-place rules using original content based on serious accidents in the past, while striving to raise the level of supervisors' safety management by training a large number of supervisors to act as instructors. Looking ahead, we plan expand to our education by preparing and using even more original content using past accidents as reference.

# Specified chemical substances:

Promoting the visualization of work environments To increase the visibility of work environments where specified chemical substances are used, such as powdered nickel compound, at the Isoura Plant, we have installed dust monitors capable of continuous monitoring in workplaces and share measurements in morning employee assemblies to detect leaks of dust at an early stage. When anomalies are detected, we use portable dust meters or special-purpose lights to identify the dust sources. Through measures to prevent the generation of dust, we are largely able to maintain work environments in a good condition.

We plan to further instill awareness of work environment improvements throughout the Isoura Plant. By eradicating and managing sources of dust through regular maintenance, we aim to create workplaces that support stable and favorable work environments.

# Initiatives to prevent the recurrence of serious accidents

Under Vision for 2030, we have been working toward the goal of "serious accidents: zero." However, two fatal accidents occurred in FY2021. In June, an employee of a Group company in Japan was struck by a moving forklift, and in October, an employee of a construction partner company in Japan was involved in an accident with an aerial work platform. To prevent such accidents from happening again, our Group thoroughly analyzes the causes of accidents and advances measures to prevent reoccurrence, including measures to safely separate pedestrians and vehicles and the strengthening of guidance and management for the safe use of aerial work platforms.



R-based hazard simulation training screen



Identification of dust sources using a special-purpose light



Demarcation of walkway boundaries using light

# **6** Diverse Human Resources **7** Development and Participation of Human Resources



# A company where all employees can take a vibrant and active part

1. A company that respects the humanity of each and every employee, and where employees feel pride, motivation, and joy in work 2. A company that provides each and every employee with opportunities to improve his/her capabilities, and grows together with employees

# Approach and Policy

Based on the Group Corporate Philosophy of "respect for all individuals" and in accordance with the SMM Group Policy on Human Rights, we work to secure, develop, and make the most of human resources by respecting the diverse values of each individual employee and fostering workplace environments in which each individual can fully demonstrate their abilities.

# **Diverse Human Resources: Initiatives and Sustainability Data**

# Employee Human Rights Initiatives

In April 2021, we established the Work-life Support Desk to respond to a wide range of requests for consultation from all SMM Group employees and to provide support for resolving issues. These issues span not only harassment and human rights matters but also careers, human relations in the workplace, and balancing work with childcare and nursing care. In FY2021, the desk responded to 23 inquiries.

Since FY2019, we have also undertaken human rights education throughout the Group, with December of every year designated Human Rights Month. Under the high-level theme of "accepting diversity and creating workplaces where all employees can work with spirit," in 2021 we created and distributed an educational text on the sub-theme of "creating workplace environments through every employee," and used the materials to conduct a total of 7,156 hours of human rights training at our workplaces.

# Diversity Initiatives

We continued to expand the range of activities available to women, persons with disabilities, and foreign employees, and offered childcare support-related education to both male and female employees as a form of support matched to employees' life stages. We formulated an action plan for general business owners based on the Act on Advancement of Measures to Support Raising Next-Generation Children for the two years from April 1, 2020 to March 31, 2022. By achieving the goals set in the plan and meeting standards, we received the *Kurumin* certification from the Minister of Health, Labour and Welfare as a company supporting childcare. We also offer caregiver support and conduct LGBT management-employee training on a regular basis every year to deepen employees' understanding of diversity promotion.

Of 100 employees<sup>1</sup> (86 men and 14 women) with the right to take parental care leave in FY2021, 32<sup>2</sup> (18 men and 14

# Dialogues between labor and management

We hold labor-management council meetings, labor-management discussions, and Labor-Management Advisory Committee meetings as needed, as well as Central Labor-Management Conference meetings once per year. We regularly discuss our management status with labor unions and employee representative organizations, and set up opportunities to solicit opinions and requests from employees. In response to requests for improvements in occupational health and safety and working environments, we enact necessary improvement measures after confirming conditions. In the case of changes to frameworks that will have significant effects on employees, we set appropriate notification periods and provide opportunities for stating opinions. To foster a new culture in which all employees come together to share in the joy of achieving goals, in FY2022 we set annual goals shared by labor and management for the reduction of recurring accidents, and launched related initiatives.

women) did so, with the result of a parental leave percentage of 32% (21% for men and 100% for women). In addition, two employees took caregiver leave.



1 Male employees: Number of people who submitted a notification of birth to the Company for birth by a spouse in FY2021

Female employees: Number of people who gave birth in FY2021

2 Male employees: Number of people who took parental leave in FY2021 Female employees: Number of people who gave birth in FY2021 and took parental leave

Further information on the promotion framework of the Diversity Subcommittee: p.72-73. Further information on FY2021 results: p.82-84

Employment Rate of Disabled People Over the Past Five Years (Sumitomo Metal Mining Co., Ltd., employment rate as of June 1 of each fiscal year)



# Development and Participation of Human Resources: Initiatives and Sustainability Data

# Officers' Coaching Schools

We launched the Officers' Coaching Schools in 2014 as a program that allows Company officers and school students to mutually inspire one another and consider self-development. Each school consists of 8 to 10 young and middle-management employees. Executives serve as the head and deputy head of each school, which operates independently and issues a report once a year. Schools covering areas including

# The Shikinen Kaikaku Project (The Fixed Period Reform Project)

The Shikinen Kaikaku Project involves the fixed period, mandatory application of a scrap and build process (inspired by the Shikinen Sengu ritual\*) to the Group's core technologies, programs, and operational systems with the following aims: (1) Swiftly and voraciously identifying and absorbing social and environmental changes, technological trends, and other movement in society and reflecting these in the Group's management (transformation), (2) regularly reviewing and exploring existing technologies, programs, and systems in-depth to gain a fundamental understanding so the Group's

# One-on-one meetings

One-on-one meetings are regular opportunities for dialogues between superiors and subordinates to draw out the capabilities of subordinates and aid their growth. To become "a company where all employees can take a vibrant and active part" and achieve our Vision for 2030, from FY2021 we introduced one-on-one meetings in stages in the Head Office area with the aim of enhancing the quality and quantity of communication. Interviews in the past were led by superiors, who mainly checked progress toward work goals and evaluated the degree of achievement. One-on-one meetings, however, are led by subordinates, who decide the themes for the meetings.

# Total Time Spent on Employee Education (FY2021)

	Offi	cers	Managers		Regular employees		Occasional employees	Total
	Male	Female	Male	Female	Male	Female	and temporary employees	iotai
Annual hours of education per SMM Group's employee (average)	9	0	22	6	37	21	20	30
Number of officers and employees at the end of the fiscal year	109	0	958	103	4,840	1,193	1,214	8,417

In addition to the total time spent on education, employees spent the following number of hours on e-learning courses: 9,450 hours for SMM non-consolidated, and 4,342 hours for consolidated subsidiaries in Japan and overseas

Every year, SMM accepts students with disabilities for internship positions. By deepening understanding of our workplaces and work through the experience, we are increasing the number of students who feel confident in joining our Company.

resources, metals, materials, research and development, equipment and technology, human resources, accounting, and sales select their own themes to undertake every year, and engage in activities with the goals of strengthening the ability to think issues through, to learn together, and to put learning to practical use in the workplace.

technology and culture can be passed down to future generations (legacy), and (3) providing a venue for the focused development of human resources (education). We appoint future leadership candidates as project leaders to provide them with practical experience on various themes which they cannot gain through off-the-job training. We believe this will lead to even greater growth.

\* Shikinen Sengu: A ritual held about every 20 years at Ise Jingu Shrine and other shrines in which the divine palace and its sacred apparel, furnishings, and divine treasures are completely remade and the enshrined deity is moved to the new sanctuary.

Superiors focus on using their coaching skills to present insights to subordinates and to draw out their self-direction. All employees working in the Head Office District undergo training to deepen understanding before one-on-one meet-

ings. In questionnaires conducted after the meetings, many employees report feeling a sense of growth.



One-on-one

# 8 Engagement with Stakeholders

Further information on the promotion framework of the Communications Subcommittee: p. 72-73. Further information on EY2021 results: p. 85



Vision for 2030 A company that is appreciated and understood to be the world leader in non-ferrous metals

# Approach and Policy

We are working to ensure that our diverse stakeholders correctly understand the true size of the Group and encouraging them to share in our goal of becoming the world leader in the non-ferrous metals industry. We have identified the groups of stakeholders who affect or are affected by the SMM Group as customers, shareholders, employees, local communities, creditors, business partners, NGOs and NPOs, and government agencies. We have set targets for how we should engage with each of these groups, and we are advancing various initiatives to achieve these targets.

# Initiatives

# Implementation and Results of the Employee Awareness Survey

The SMM Group has commissioned a specialized external organization to conduct employee awareness surveys in order to communicate with its employees, who are important stakeholders, and to create a better company and workplace. These surveys have been conducted every three years since FY2010, with the fifth survey conducted in FY2021. Their purpose is to gain a guantitative understanding of how employee awareness has changed over the three years since the previous survey and what kind of awareness employees cur-

# Branding Activities

Toward our Vision, we are engaged in branding activities aimed at improving recognition, understanding, and appreciation of SMM as a world leader in the non-ferrous metals industry.

As part of our nationwide advertising efforts in Japan, we ran TV commercials and web ads in the second half of FY2021, and sponsored the special exhibition Pompeii to be held in four locations throughout Japan from FY2021 to FY2022. In addition, in the regions where we operate, we worked to make sure our brand designs are reflected on signs and billboards around our offices. For the Ome District Division, we adopted methods that we have never used before, such as displaying the SMM symbol mark on the glass façade of the building and illustrated ads on signboards at the JR Tachikawa Station.

We will continue to engage in proactive branding activities to make the SMM Group widely known to our stakeholders.

rently have about working at the Company, and to use this information to develop measures to create an even better company and workplace.

A total of 5,153 people were surveyed, with a total of 141 questions. The response rate was 94.4%.

In the FY2021 survey, the ratio of employees who feel pride in working at the Company, which is a target for improvement in our Vision for 2030, was 63.7%, a 0.9-point improvement from the previous survey.



SMM symbol mark posted on Ome District Division building



Illustrated ad at JR Tachikawa Station

# Communication with Shareholders and Investors

The SMM Group strives to provide our shareholders and investors with the information we think they need in a timely, appropriate, fair, and easy-to-understand manner.

On our website, we share our latest announcements, management policies and strategy, business descriptions, business results, and other information.

We also deliver reports to shareholder twice a year and report on financial results and the progress of business strategies. We have also formulated an IR Policy to ensure IR activities are implemented appropriately, which is publicly available on our website. For institutional investors and securities analysts, we hold telephone conferences at the time of announcement of our financial results, four times a year, and twice a year the president and/or general managers of business divisions give Business Strategy Progress Briefing Sessions after the announcements of our financial results. In February 2022, we announced our 2021 3-Year Business Plan and held a briefing session. We are making efforts to proactively disclose information necessary for investment decisions by committing to regular individual dialogues with major institutional investors and holding briefings for individual investors as well.

# List of Main External Awards (FY2021)

Awards	Date	Recipient
2021 Sulfuric Acid Award	2021/6	Sumitomo Metal Mining Co., Ltd., Non-Ferrous Metals Division
Encouragement Award from the Head of the Hokkaido Labor Bureau	2021/6	Sumiko Kunitomi Electronics Co., Ltd.
The Japan Society for Analytical Chemistry Medal of Merit	2021/9	Sumiko Techno-Research Co., Ltd. Ohkuchi Electronics Co., Ltd.
Miyazaki Prefecture Governor's Award for High Pressure Gas Safety Achievement	2021/10	Hyuga Smelting Co., Ltd.
58th High Pressure Gas Safety Institute of Japan Chairman's Award	2021/10	Sumitomo Metal Mining Co., Ltd., Non-Ferrous Metals Division
2021 Presidential Mineral Indus- try Environmental Award, PMIEA	2021/12	Coral Bay Nickel Corporation and Taganito HPAL Nickel Corporation
Kaohsiung City, Taiwan: Excel- lent Japanese Company Award	2021/12	Taiwan Sumiko Materials Co., Ltd.

We continue to actively work to provide information and enhance dialogue during the COVID-19 pandemic through the use of online sources, as we did in FY2020, by streaming our briefing sessions online, and posting the videos, meeting minutes, and other information on our website. In addition, since the end of FY2021, we have resumed face-to-face IR activities, including simultaneous on-site and online hosting of briefing sessions.

We will continue working to meet the expectations of all shareholders and investors.



Business Strategy Progress Briefing Session

The award is presented by the Sulfuric Acid Association of Japan, whose members are sulfuric acid manufacturers in Japan, to those who have con-tributed to the development of sulfuric acid production technology through outstanding achievements in the maintenance of sulfuric acid facilities and improvement of operations. The award was presented to a manager of the Toyo Smelter & Refinery's Acid Plant Section, who was highly appraised for his attitude as a mining pollution control officer. This award was given based on a high appraisal of Sumiko Kunitomi Electronics as a model to others for its health and safety activities, including accident prevention measures based on near-miss cases and measures to raise safety awareness through safety patrols conducted jointly by labor and management, in addition to the fact that it has not had a single acci-dent resulting in lost working time injuries in the five years since July 2016. The award is given to individuals who have amassed long-term research results in chemical analysis or for their meritorious service in the mainte-nance and manufacture of equipment, instruments, and reagents which are indispensable for analytical work. The work of two employees was recognized with the Medal of Merit. The award is given to individuals who have been engaged in high pressure gas safety-related work for more than 20 years with no accidents in the last ten years, and who set a good example for others by preventing accidents and promoting public safety in compliance with laws and regulations. The achievements of an employee who has been engaged in high pressure gas safety work for over 30 years was recognized with this award. The award is presented to business sites that have achieved significant results in the prevention of accidents and safety activities involving high pressure gas, as well as to those who have made significant contributions. The Harima Refinery has received the Chairman's Award as an excellent manufacturing site in recognition of its longstanding safety activities in the manufacture and management of high pressure gas. This is the highest honor that can be awarded in the Philippine mining industry. It is given to companies that score highly on a comprehensive assessment of factors including environmental and safety management at plants, conser-vation of local environments, and contribution to local communities. This is the seventh time Coral Bay Nickel Corporation has received the award and the second time for Taganito HPAL Nickel Corporation. Both companies have been simultaneously awarded for the second consecutive year. Among the approximately 200 Japanese-affiliated companies registered in Kaohsiung City, this award is presented by the Kaohsiung City Economic Development Bureau to companies that have reached a 10-year milestone. Taiwan Sumiko Materials celebrated its 20th anniversary since its registration in 2001, and was honored as an excellent Japanese company that has contributed to the city's economic development over the years.

# **Participation in Industry Group Initiatives**

# International Council on Mining and Metals (ICMM)

ICMM is an international organization established to ensure that the mining and metals industries are made safe, fair, and sustainable. It is comprised of the world's biggest mining and metals companies, as well as regional and commodity-focused organizations. SMM is a member company.

The SMM Group reflects the ICMM 10 Principles in the visions and materiality issues of our Vision for 2030, and publishes reports in line with GRI standards, as mandated for

Self-assessments were conducted at target sites\* on the status of PE implementation (results are shown in the table below). Of the target sites, we also prioritized the sites to undergo third-party validation. The Hishikari Mine, Toyo Smelter & Refinery, and Niihama Nickel Refinery were selected based on their production or smelting and refining of gold, silver, copper, and nickel, which are included in the minerals subject to international responsible mineral sourcing,

ICMM member companies. We have also received independent assurance regarding the criteria for prioritizing the application of Performance Expectations (PEs) in the SMM Group, as well as the process of application and their disclosure. Please refer p. 24 of the supplementary ESG Data Book for

details on the 10 Principles and position statements.

WEB Performance Expectations https://www.icmm.com/en-ab/our-principles

# ■ Validation of Implementation and Progress of Performance Expectations (PEs)

their large scale (production volume, number of employees, etc.), and that they produce metals as finished products (excluding facilities producing intermediate products) at their smelters and refineries. Preparations are being made for these three sites to undergo third-party validation.

\* Defined by ICMM as operations involved in the production or refining of minerals and metals for sale or further processing.

# Self-Assessment Results (conducted in 2021)

Site Name	Outcome <sup>1</sup>				Total
	Meets	Partially Meets			IUlai
Corporate	14	13	2 <sup>2</sup>	0	29
Hishikari Mine	24	1	0	6	31
Toyo Smelter & Refinery	23	1	0	7	31
Niihama Nickel Refinery	23	1	0	7	31
Harima Refinery	23	1	0	7	31
Shisaka Smelting Co., Ltd.	22	1	0	8	31
Hyuga Smelting Co., Ltd.	23	1	0	7	31
CBNC	26	2	0	3	31
THPAL	26	2	0	3	31

1. Each of the PEs was evaluated in light of the judgment criteria indicated for each PE in ICMM's Validation Guidance, as follows

Meets: Systems and/or practices related to the PE have been implemented (all the judgment criteria in the Validation Guidance are met) and there is sufficient evidence thereof. Partially meets: Systems and/or practices related to the PE have been partially implemented (some judgment criteria of Validation Guidance are met). Or, verifiable evidence provided is insufficient.

Does not meet: Systems and/or practices related to the PE are not in place (all Validation Guidance judgment criteria are not met) or there is no evidence thereof. N/A: Not applicable

2. Items that fell under "does not meet," the reasons for the differences, and future initiatives

• PE 1.5 regarding political contributions

Data on political contributions are not disclosed. We will consider the possibility of disclosing this information in the future.

• PE 7.1 regarding operations in World Heritage sites.

There is no clear policy for the Group regarding the exploration and development of mines in World Heritage sites. We will consider the possibility of establishing such a policy in the future. Currently, the Group does not conduct any mining exploration or development in the World Heritage sites.

# **9** Co-Existence and Mutual Prosperity with Local Communities

Further information on the promotion framework of the Corporate Citizenship Subcommittee: p. 72–73. Further information on FY2021 results: p. 86-87.

2030 A company that contributes to regional development and earns trust as a member of the local community

# Approach and Policy

We think it is important that we engage with communities in the areas in which we do business these issues. We will also vitalize regional economies hiring and procuring locally and continue to support areas that have been affected by major natural disasters such as earthquakes and typhoons.

# Initiatives

Coral Bay Nickel Corporation (CBNC) implements various measures to achieve co-existence and mutual prosperity with local communities, including holding its annual Shokuju (Tree Planting) Day to maintain and improve the local environment. Since 2010, the event consisted of local residents and employees working together to plant seedling. At the event held in June 2021, 50 local residents and 48 employees (including 24 employees from contractors), planted 2,125 seedlings. This activity has received high praise by the community and will be continued in the future.

# Visiting Class by Besshi-Niihama District Division (support for nurturing of the next generation)

Aware of the importance of dialogue with local communities, SMM aims to be a corporation that gains the trust of local communities by contributing to their development, and works to support efforts to nurture the next generation in response to dwindling birthrates and aging population. Having received a request from an elementary school in Niihama City, Ehime Prefecture that they would like the history and business of the Besshi Copper Mine, the foundation of Niihama City's development, to be taught, the Besshi-Niihama District Division developed, in FY2021, an original multi-session visiting class that incorporates the requested content. Based on the theme of "How is Sumitomo Metals Mining formed?" the division offered a class that discussed such topics as SMM's history, business, and products and its SDG-related initiatives. The class, which incorporated guizzes, was easy even for elementary students to understand.

In FY2022, the division received a request from the same city's Board of Education to conduct a visiting classes for fourth graders at all sixteen elementary schools in the city, and plans to offer that classes.

through dialogue to find out what issues they are facing and to see how we can contribute to solving

Tree Planting by Coral Bay Nickel Corporation (Philippines) (support the local community via employee participation)



Shokuju (Tree Planting) Day



# 9 Co-Existence and Mutual Prosperity with Local Communities

# **10** Rights of Indigenous Peoples

Further information on the promotion framework of the Human Rights Subcommittee: p.72-73. Futher information on EY2021 results: p.88

Vision for 2030 A company that understands and respects the traditions and culture of indigenous peoples

# Ichikawa Research Center's Support for Confectionary Sales by a Workplace for People with Disabilities (support for people with disabilities)

As part of its social contribution activities, the Ichikawa Research Center has provided support to Ichikawa Renkonno-kai, a social welfare corporation that has been supporting people with disabilities in Ichikawa City since January 2013.

Specifically, the Center not only holds in-house events where confectionaries made at a workplace for people with disabilities are sold but also donates unneeded small home electrical appliances provided by employees for disassembly and recycling. The confectionary sales had been conducted around once a month during lunchtime for more than seven years, with new confectionaries being introduced each season. Although the smiling faces of members of Ichikawa Renkon-no-kai cheer employees up, the events are currently suspended to prevent the spread of COVID-19.

As for unneeded electrical appliance donations, the Center started cooperating with these activities in June 2014 and has donated a total of more than one ton of small electrical appliances through the end of 2021.



Confectionary sales event

# Continuing Support for Areas Devastated by the Great East Japan Earthquake (support during and after disasters)

It has been 11 years since the Great East Japan Earthquake approaches, we continue to provide support for rebuilding industry in the disaster area.

By purchasing products such as cookies and carrot curry sold by the NPO Shinsei (Koriyama City, Fukushima Prefecture), which has given lecture on its support for people with disabilities from the Great East Japan Earthquake, and sake made from rice grown in Naraha Town in Fukushima Prefecture, where the Group company Sumiko Energy Materials Co., Ltd. is located, and soda developed by middle School and High School students at Futaba Future School students and made from yuzu oranges grown in the same town, A number of SMM Group's officers and employees participated in projects to help reconstruction in the areas of Fukushima hit by the disaster.

In addition, a matching gift equivalent to the proceeds from purchases by officers and employees was donated to NPO Shinsei.

# Communication with Local Communities and NGOs

We work to raise the direct contribution we make to the local economy through measures such as recruiting from areas surrounding our business site and procuring from local suppliers, and we also contribute to improving the living standards of these communities, particularly in emerging nations, by providing infrastructure such as roads and ports, and building and operating public facilities such as schools, hospitals, and marketplaces. When implementing these measures, we establish opportunities for regular communication with local communities and move forward while also check-



Sake made from sake rice grown in Naraha Town and soda made using yuzu oranges

ing the requirements of local citizens.

In addition, twice a year we exchange opinions with the international environmental NGO FoE Japan regarding issues such as the water quality of rivers around CBNC and Taganito HPAL Nickel Corporation, both of which are located in the Philippines. Those opinions and recommendations are referred to when implementing necessary improvements.

# Approach and Policy

When developing mines, it is particularly important to proceed with the understanding of the indigenous people who live on the land. We collaborate with local governments and other organizations, using international standards such as the United Nations Declaration on the Rights of Indigenous Peoples as references, while also maintaining an ongoing dialogue with local indigenous peoples based on an understanding of their traditions and cultures.

# Initiatives

# Creating In-house Educational Materials

We created video materials that use case studies from within the Group to explain who indigenous people are and how the Group should handle indigenous rights. These will enable employees to understand it is an issue that concerns us all.

The materials present case studies from Taganito HPAL Nickel Corporation in the Philippines, where we built a school for education in the native language of the indigenous people, and from the Cote Gold Project in Canada, where we took part in cultural workshops held by an indigenous people's group and held ongoing dialogues. We also continued dialogues with experts\* regarding content and received guidance to ensure fairness in the materials.

From the first half of FY2021, we made the materials available via e-learning and other means within the Group, with a total of 5,902 employees in Japan and overseas viewing the content as of the end of FY2021. Acting under the guidance of experts, we will continue our efforts to further deepen Group employees' understanding of indigenous peoples and their traditions and cultures.

\* Keiichi Omoto (emeritus professor of anthropology at the University of Tokyo), Tomoaki Nishihara (professor at Seisa University), Eiichiro Noguchi (coordinator of the NGO Taiga Forum)

# Cote Gold Project (Canada) Initiatives

We worked with our development partner IAMGOLD Corporation to get the understanding of the project by the First Nation peoples affected by the project. We have fostered relationships of mutual trust and understanding with the organization through action such as providing explanations before gaining approvals, holding ongoing dialogue, and participating in initiatives such as cultural workshops hosted by the organization, and as a result, we were able to conclude an Impact Benefit Agreement.





School at THPAL offering native language education for indigenous people (from video materials)



Impact Benefit Agreement

# **11** Human Rights in the Supply Chain

Further information on the promotion framework of the Human Rights Subcommittee: p.72-73. Further information on EV2021 results: p.89



Vision for 2030 A company that undertakes sustainable procurement across the supply chain

# Approach and Policy

In our supply chains, we monitor risk related to human rights and labor, compliance, quality assurance, and environment and local communities based on international standards and in accordance with the SMM Group Sustainable Procurement Policy. Should any issues occur, they are corrected. In regard to the sourcing of minerals in particular, we carry out activities with respect to OECD guidance and in accordance with the SMM Group Responsible Mineral Sourcing Policy.

# Initiatives

## SMM Group Responsible Mineral Sourcing Policy

Pursuant to the SMM Group Policy on Human Rights, we do not buy minerals that may be associated with human rights violations such as child labor or forced labor, environmental destruction, illegal mining, or corruption, or minerals that may be used as a source of funding for armed groups or other such organizations. We respect the guidance established by the OECD regarding mineral sourcing, and we exercise appropriate influence over suppliers as we work for responsible mineral sourcing throughout the entire supply chain.

# Responsible Mineral Sourcing

We undertake responsible mineral sourcing initiatives in line with mechanisms advanced by the international Responsible Minerals Initiative (RMI)\* to ensure supply chain transparency (see diagram below).

For the finished product manufacturers that are downstream from smelters and refineries, we have set up an approval process for the responses received to the standardized documentation-based survey form that is extended by customer companies up through the supply chain, to generate unified responses for our Group.

For the mines that are upstream of smelters and refineries, we regularly undergo third-party, international standards-based audits of responsible mineral sourcing mechanisms at our smelters and refineries, covering matters including risk assessments of suppliers.

As a specific example, in FY2012 our gold smelter and refinery began operating in accordance with guidance from

the London Bullion Market Association (LBMA). In FY2018, we also began operations in accordance with LBMA's guidance on silver. In FY2020, we began operations based on standards set by RMI at our cobalt refineries. Looking ahead, we plan to develop international standards-based operational systems at our copper and nickel smelters and refineries.

Additionally, when the Smelting and Refining Business selects a new company as a supplier, we assess how that company carries out environmental management, including management of water resources and tailings dams. In FY2021, there were no new suppliers selected.

\* Responsible Minerals Initiative (RMI): An international initiative on the responsible sourcing of minerals by the Responsible Business Alliance (RBA), an organization founded in 2004 for the purpose of promoting a common code of conduct in the world's electronic equipment industry



## SMM Group Questionnaire on Sustainable Procurement

In April 2020, we established and announced the SMM Group Responsible Sourcing Policy (currently the Sumitomo Metal Mining Group Sustainable Procurement Policy; hereinafter "the Procurement Policy"), to clarify the Group's stance of working to build a sustainable supply chain with consideration of human rights, the environment, and other social issues in all of our procurement activities.

While ensuring thorough compliance with the Procurement Policy by the Group's officers and employees, we also request the understanding of our business partners. In FY2020, we asked major business partners to consent to the Procurement Policy, in response to which approximately 99% of those business partners have stated their consent.

To continue advancing these initiatives, in FY2021 we created the Sumitomo Metal Mining Group Questionnaire on Sustainable Procurement Survey (SAQ) and requested responses from the major business partners who have consented to our Group's Procurement Policy. The guestionnaire consists of 38 questions covering four categories in the Procurement Policy (Human Rights and Labor, Compliance, Qual-

# Results of the FY2021 "SMM Group Questionnaire on Sustainable Procurement"

## Comprehensive evaluation 7.4% C 55.0% 7 79 Evaluati Average score (out of 5 points total) 13.4% S 🛛 4.5 or higher 4.0-4.4 A B 3.5-3.9 C 30-34 D Less than 3.0 16.4%



ity Assurance, and The Environment and Local Communities) to check the status of action by those business partners. As of the end of March 2022, 98% of the surveyed business partners have responded to the questionnaire.

The survey responses reveal that S, A, and B evaluations accounted for about 85% of overall evaluations, confirming that many business partners are advancing initiatives related to sustainability. We plan to cooperate with suppliers who received C or D evaluations to better understand their own situations, and will help them through advice and other means to effect improvements. Looking at average scores by survey category, The Environment and Local Communities had the lowest average score. We plan to work with our business partners to make improvements on points such as lack of progress in the disclosure of data and details regarding environmental activities.

Based on the survey results, we will work to continue implementing due diligence (DD), one of our KPIs under "Vision for 2030: A company that undertakes sustainable procurement across the supply chain."

