

## Environment

### Environmental Management

PACIFIC METALS has established an environmental management system, and works to continuously improve its activities to reduce environmental impact through the stable implementation of the PDCA cycle. Based on this environmental management system, we have established an environmental policy and environmental objectives and targets, and are developing and implementing various environmental measures at each site.

#### Environmental policy

##### Basic philosophy

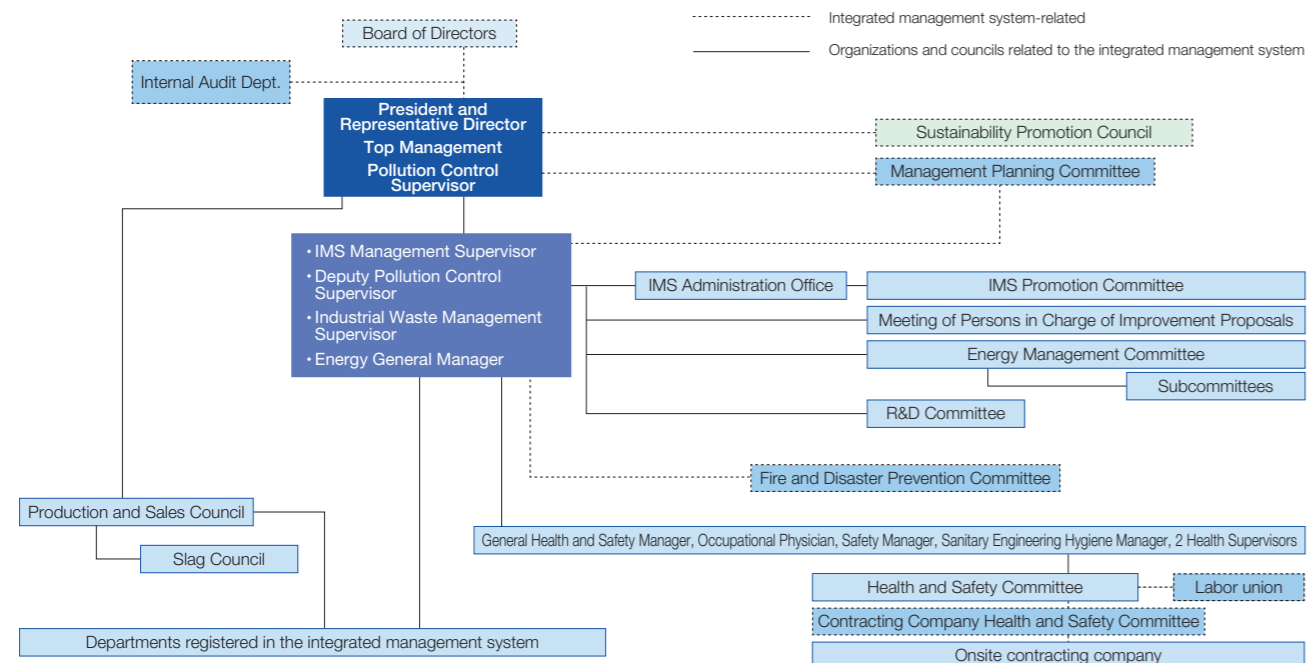
Recognizing that environmental problems are an important issue common to all mankind, PACIFIC METALS CO., LTD. is committed to harmony with the environment and engages in activities aimed at conserving the global environment and contributing to society.

##### Basic policy

PACIFIC METALS CO., LTD. uses large quantities of ore and energy in the production of nickel. The use of this ore and energy emits soot and greenhouse gases, so we consider environmental issues to be an important challenge for the Company and work together in our efforts to continuously reduce our environmental impact.

- Reduction of environmental impact**  
We strive to prevent air pollution caused by dust, soot and smoke emissions, and water pollution caused by wastewater. We also consider the reuse of these emissions and strive to minimize their impact on the environment.
- Reduction of greenhouse gas emissions**  
We pursue the development of energy-saving and environmentally friendly technologies, promote operational efforts to improve productivity and yield, and strive to reduce greenhouse gas emissions.
- Contribution to zero emissions**  
We will promote the reduction and recycling of waste generated in the course of our operations. We will also contribute to zero emissions by promoting the proper disposal of contracted waste.
- Compliance with laws, regulations, etc.**  
We comply with environment-related laws, regulations, tripartite agreements and industry standards, while also setting voluntary standards and actively working to protect the environment.
- Ensure operation and continuous improvement of the environmental management system**  
In order to achieve this environmental policy, we have set environmental objectives and targets for each department, and all employees promote efforts in environmental management. In addition, we will regularly review our environmental objectives and targets, and strive to promote a more effective environmental management system.
- Dissemination of the environmental policy**  
This environmental policy is communicated to all employees, including those of affiliated companies. We also inform our partner companies of this policy and request their understanding and cooperation.

#### Environmental management system



#### Environmental accounting and safety accounting

Aggregated results for environmental accounting and safety accounting in FY2021 are shown below. We spent about 2,280 million yen on environmental accounting as a whole. Pollution control costs, resource recycling costs, and environmental damage response costs account for the bulk of this spending. We spent about 70 million yen on safety accounting as a whole. Most of this was for capital investments in safety countermeasure construction, etc. and in costs relating to health and safety protective equipment.

##### Environmental accounting

Classification	Main content	Amount (10,000 yen)
Business area costs	Dust collector maintenance costs	195,176
	Pollution prevention costs	
	Wastewater treatment facilities maintenance costs	
	Purchase costs for ammonia water for denitration	
Global environmental protection costs	Energy conservation-related training costs	6
Resource recycling costs	Costs for in-house treatment of waste generated by the Company	18,176
Upstream and downstream costs	—	—
Management activity costs	International Organization for Standardization (ISO) inspection costs	3,113
	On-site tree planting and management costs	
	Sustainability report publishing costs	
	Various monitoring equipment maintenance and management costs	
R&D costs	—	—
Social activity costs	General road cleaning costs for the vicinity	22
Costs of dealing with any environmental damage	Pollution load levy	11,607
<b>Total</b>		<b>228,100</b>

##### Safety accounting

Classification	Amount (10,000 yen)
Capital investment (constructions for safety measures, etc.)	2,238
Safety, health, and disaster prevention education costs	238
Legal inspection costs (boilers, cranes, firefighting related)	602
Health checkup fees	1,031
Safety and health protective equipment costs	2,965
<b>Total</b>	<b>7,074</b>

# Response to the TCFD Recommendations



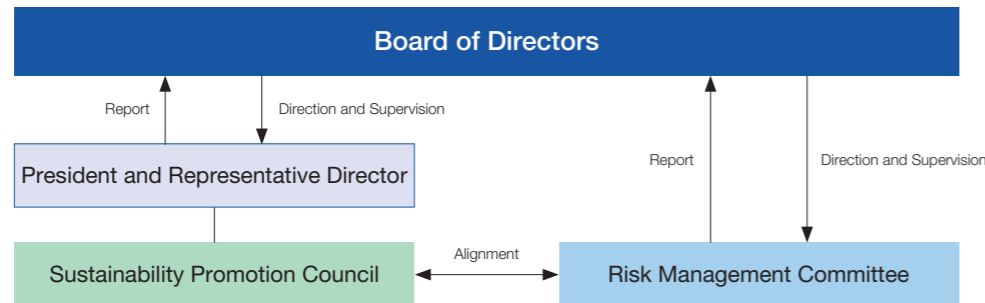
We have endorsed the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) established by the Financial Stability Board (FSB). Positioning the response to climate change and the realization of a sustainable society as important management issues, we are promoting company-wide initiatives, including deliberation on medium- to long-term initiatives and orientation regarding important issues (materiality) related to sustainability, as well as response to ESG issues, promotion of CSR, and initiatives toward carbon neutrality. As part of these efforts, the Company has established a framework for promoting initiatives for addressing issues regarding ESG/SDGs, sustainability and climate change.

We will proactively promote initiatives that contribute to climate change mitigation and adaptation and information disclosure in line with the TCFD recommendations, build a deep relationship of trust with our stakeholders, and contribute to resolving climate change issues and realizing a sustainable society through our business activities.

## Governance

We regard responding to climate change and realization of a sustainable society as important management issues. The Sustainability Promotion Council was established to discuss medium- and long-term initiatives and orientation related to materiality, as well as to promote specific measures across the Company to address ESG issues, promote CSR, achieve carbon neutrality, etc. The Sustainability Promotion Council meets quarterly.

The Sustainability Promotion Council is chaired by the President and its membership comprises executive officers. It reports to the Board of Directors for direction and supervision.

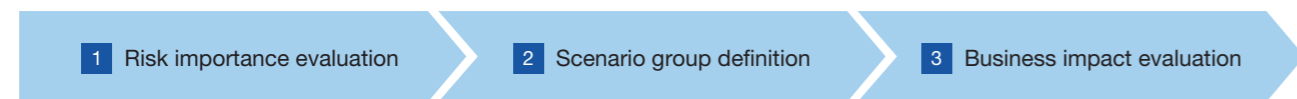


## Risks and opportunities

We examined “climate-related transition and physical risks” and “climate-related opportunities through climate change mitigation and adaptation solutions” according to the TCFD classifications.

Scenario analysis was conducted for 1.5°C and 4°C scenarios, with reference to the International Energy Agency (IEA) and the Intergovernmental Panel on Climate Change (IPCC). We have conducted a scenario analysis as shown on the following page, and the results confirmed that our strategy has resilience with regard to the response to each risk and opportunity.

Risk analysis procedure



## Risk management

We have established the Risk Management Committee for company-wide risk management, including risks related to climate change. The Risk Management Committee is chaired by a director appointed by the President and its membership comprises executive officers and general managers. It meets quarterly to conduct routine risk management (risk identification, evaluation, monitoring, etc.). For risk countermeasures, we prioritize risks based on likelihood and impact, and we engage in risk mitigation activities for priority risks and manage progress.

The Risk Management Committee reviews “climate-related risks and opportunities” annually and the status of activities is reported to the Board of Directors at least once a year for direction and supervision. Matters affecting important sustainability issues are reported to the Sustainability Promotion Council.

## Scenario analysis (GHG emissions are in CO<sub>2</sub> equivalent)

Prerequisites:

- We examined risks and opportunities expected in 2030.
- Financial impacts of climate change have been estimated.

Category of risks and opportunities		Overview of risks and opportunities	1.5°C scenario financial impact	4°C scenario financial impact	PACIFIC METALS's response	
Risks	Transition	Policies and regulations	Higher energy costs for business operations (manufacturing and transportation) due to introduction of carbon tax	Large	Small	<ul style="list-style-type: none"> <li>• Process electrification</li> <li>• Transition to renewable energy use</li> </ul> <ul style="list-style-type: none"> <li>• Installation of microwave equipment in the raw material drying and burning process to reduce coal and fossil fuels as heat sources</li> <li>• Phased transition to the use of purchased renewable energy</li> </ul>
		Market and technology transition	Higher energy risks and costs due to higher fossil fuel prices caused by changes in the supply-demand balance resulting from climate change and unstable supply due to unseasonable weather and other factors	Small	Large	
		Reputation in the market	Greater customer demand for decarbonization. Lower product competitiveness (e.g., declining market share) if the Company's response to decarbonization is insufficient	Large	Medium	<ul style="list-style-type: none"> <li>• Creation of new businesses</li> </ul> <ul style="list-style-type: none"> <li>• Restructuring of business portfolio, with an eye to creating new businesses in the long term</li> </ul>
		Acute	Higher Ni prices due to higher demand reflecting shift to EVs, leading to replacement of raw materials for stainless steel by less expensive alternative metals	Large	Large	
	Physical	Chronic	Preference for ESG-responsive suppliers in the supply chain, leading to damage to corporate value and additional ESG-related costs	Large	Small	<ul style="list-style-type: none"> <li>• Diversification of risks by diversifying raw material suppliers</li> </ul> <ul style="list-style-type: none"> <li>• Procurement risk diversification by diversifying the suppliers of raw materials, including recycled resources</li> </ul>
		Resilience	Declining value in capital markets (e.g., share price declines) because of failure to respond to climate change information disclosure requirements	Large	Small	
Opportunities	Resource efficiency	Physical damage to production sites and the supply chain, causing suspension of operations and logistics, resulting in lost profits and additional costs.	Small	Small	<ul style="list-style-type: none"> <li>• Establishment of a system for resource recycling</li> <li>• Establishment of a new system for resource recycling by collecting and accepting a larger amount of recycled resources</li> </ul> <ul style="list-style-type: none"> <li>• Installation of microwave equipment in the raw material drying and burning process to reduce coal and fossil fuels as heat sources</li> <li>• Phased transition to the use of purchased renewable power</li> </ul> <ul style="list-style-type: none"> <li>• Strengthening of sales capabilities and expansion of new customers</li> <li>• Cultivation of new business partners, such as overseas manufacturers</li> </ul> <ul style="list-style-type: none"> <li>• Strengthening of governance</li> <li>• Planning, implementation, and management of response to ESG issues</li> </ul>	
	Energy source	Additional production costs due to changes in properties, such as increased moisture content of raw materials, because of longer rainy seasons in the regions where resources are procured.	Small	Small		
	Products and services	Expanded use of recycled metal resources (alternative to metal resources), which produce less GHG emissions and show higher manufacturing efficiency than natural resources	Large	Large		
	Resilience	Innovation in the manufacturing process, which results in a substantial decrease in fossil fuel use and a reduction in energy costs and in turn reduces GHG emissions and improves the impact of carbon pricing	Large	Large		
Opportunities	Resilience	Innovation in the manufacturing process, which contributes to GHG emission reductions in customers' supply chains and increases product competitiveness	Medium	Small	<ul style="list-style-type: none"> <li>• Sale of low-carbonization products, leading to better relationships with customers</li> </ul>	
	Resilience	More flexible and speedy response due to the transition of active engagement in ESG issues to company-wide strengthening of governance, leading to support and cooperation from investors and other stakeholders, increased corporate value, strengthening of business foundation, and further business expansion	Medium	Small		

1.5°C Scenario: A scenario where continued efforts are made to limit the average temperature increase to 1.5°C.  
 4°C Scenario: A scenario where no measures are taken and the situation takes its natural course.

## Goals and indicators

In “PAMCO-2024” announced in May 2022, we set the following goals.

### Initiatives to achieve the goals

Reduction of GHG emissions (from PAMCO-2024 priority measures)

To achieve carbon neutrality by FY2050, we will implement measures with clear targets, including use of carbon-free energy and introduction of new technologies.

### Scope 3

We have compiled category-specific calculation methods for Scope 3 emissions and aim to disclose the emissions soon.

# Environmentally Friendly Ferronickel Manufacturing Process

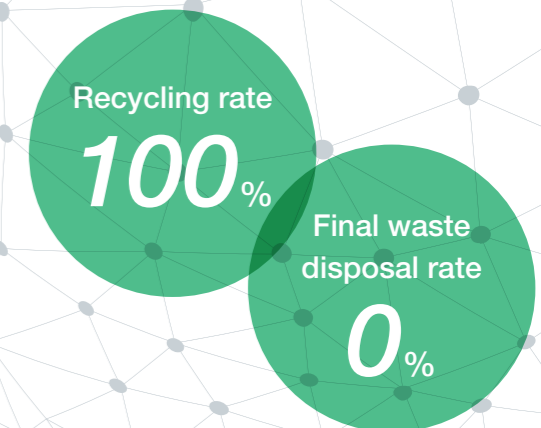
Ferronickel, which is the main raw material for stainless steel, and we are the number one domestic producer of ferronickel. Utilizing the world's top level smelting technology, we carry out efficient manufacturing with the world's largest electric furnace. Ingenuity to reduce environmental impact, we apply many technologies such as reducing energy consumption by using high-temperature exhaust gas from electric furnaces into the ore drying process, and partly replacing nickel ore with recycled resources containing nickel.

## Flow of inputs and outputs

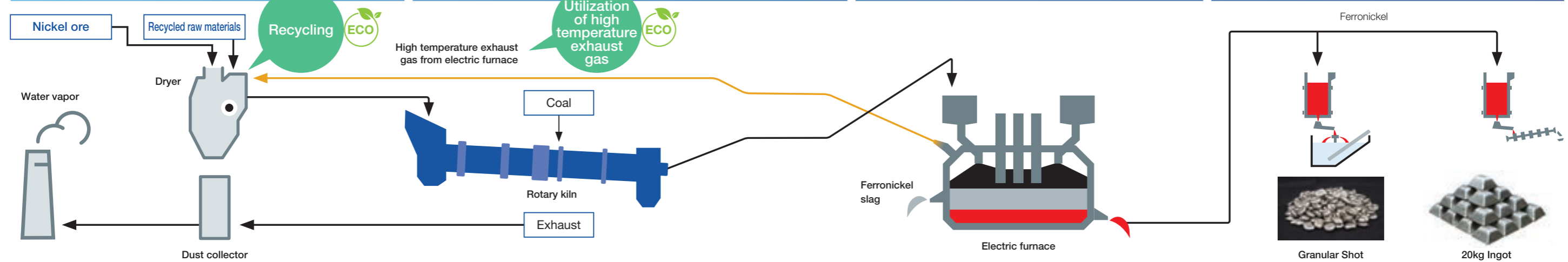
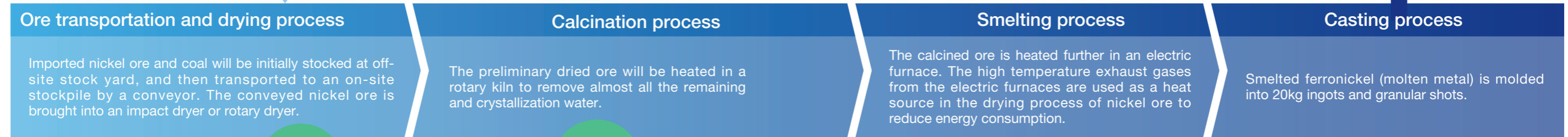
INPUT			Results for FY2021
Main raw materials	Nickel ore	2,260,000 t	
	Secondary ingredients	330,000 t	
Industrial water		6,070,000 m <sup>3</sup>	

For total energy, see P35

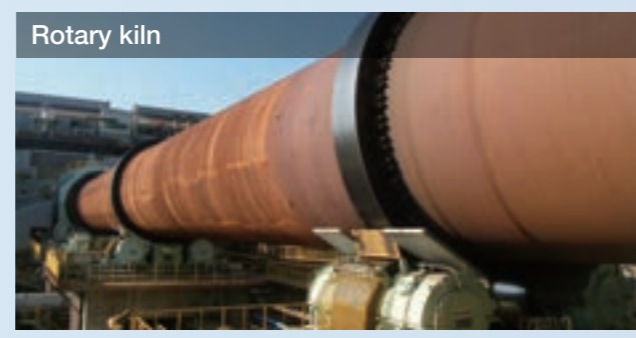
OUTPUT			Results for FY2021
Product	Ferronickel	180,000 t	
Resource recycling	Ferronickel slag	1,380,000 t	
Wastewater	Discharged water	4,920,000 m <sup>3</sup>	
Atmospheric release	CO <sub>2</sub>	740,000 t	
	SO <sub>x</sub>	855 t	
	NO <sub>x</sub>	1,487 t	
	Soot and dust	29 t	



## Ferronickel manufacturing process



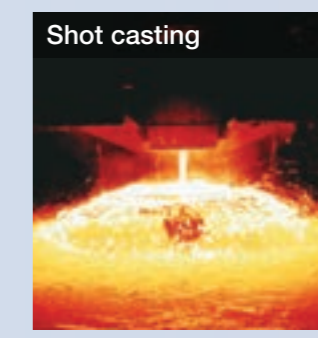
Raw material conveyor is total around 2.4km length.



A calcining equipment, over 100m in total length that thermally processes dried ore by heating it to approximately 1,000 degrees Celsius.



These are the world's largest electric furnaces that is heated by using electric resistance, and used for smelting ferronickel from ore.



Molten metal is rapidly cooled with water in a water tank and finished into small particles.



Molten metal is poured into molds and finished into 20kg ingots.

# Waste Recycling Business

We are engaged in the waste recycling business by utilizing the advanced technology cultivated in ferronickel smelting. At the incineration ash/scallop shell recycling facility, incineration ash from general waste and industrial waste together with scallop shells in Aomori Prefecture are melted in a DC electric furnace and recycled into metal raw materials and fine aggregate for concrete (artificial aggregate).

## Flow of inputs and outputs

Results for FY2021

INPUT		
Main raw materials	Waste	2,244t
	Scallop shells	815t
	Waste generated in-house	1,301t
	Collateral raw materials	755t
Industrial water		1,393m <sup>3</sup>

For total energy, see P35

Results for FY2021

OUTPUT		
Product	Molten metal	136t
	Molten slag	3,546t
Waste	Soot and dust, etc.	143t
Wastewater	Discharged water	0m <sup>3</sup>
	CO <sub>2</sub>	1,000t
Atmospheric release	SO <sub>x</sub>	0.02t
	NO <sub>x</sub>	0.83t
	Soot and dust	0.02t



Click here for information on industrial waste disposal, etc.

WEB <https://www.pacific-metals.co.jp/environment/waste.html>



# Eco Products That Contribute to Reducing Environmental Impact

## Effective use of by-products

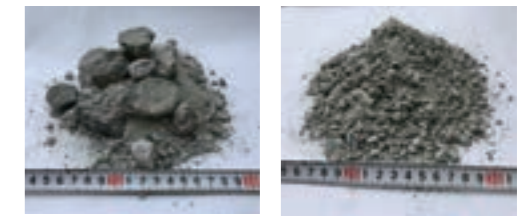
Ferronickel slag obtained as a by-product of the ferronickel manufacturing process is cooled by the slow cooling method, and then the entire product is recycled according to the intended use and sold as an attractive product that can be used in a wide range of applications. The slag's constituent components are stable, environmentally friendly, and have the same quality as natural resources and thus contribute to energy saving by conserving natural resources, and to the formation of a recycling-oriented society.



Used as a civil engineering material in earthquake disaster reconstruction areas

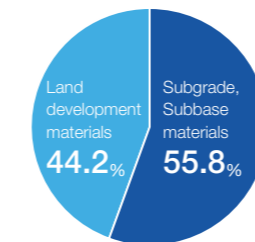
## Ferronickel slag (Product name: Pamco crustone)

After cooling, ferronickel slag is crushed by crushing equipment to particle sizes of 5mm or less, 5 to 20mm, or 20 to 40mm, which thus allows for a wide range of particle size adjustments when combined according to customer requests. The slag is characterized by the fact that it is environmentally friendly, highly safe, and does not contain harmful substances, and because it has high roadbed bearing capacity after compaction, it is easy to install, and has excellent frost heaving suppression. In the Tohoku area, it is used mainly as a substitute civil engineering material for mountain sand and crushed stone (for roads, embankments, and land development).



Ferronickel slag of 0 to 40mm Ferronickel slag, 5mm or less

## Percentage of ferronickel slag product by application (period ended March 2022)



Application	Main Features and Effects
Land development materials	Excellent roadbed material strength and low freeze-thaw resistance
Subgrade, Subbase materials	Suitable as soft ground improvement soil
Coverage materials, Earthwork materials	Suitable for embankments etc. because it compacts well to form firm ground
Blast furnace steelmaking materials	Used as an auxiliary material for adjusting blast furnace slag components

## LCA for ferronickel slag products

Our ferronickel slag products meet all the elution amount and content standards notified by the Ministry of the Environment, are free from harmful substances, are environmentally friendly and boast high safety, and crushed stones the reduction of environmental load. The figure below is an LCA<sup>1</sup> evaluation comparing ferronickel slag products and quarry products<sup>2</sup>, confirming a reduction in CO<sub>2</sub> emissions<sup>3</sup>.

<sup>1</sup>: Abbreviation for Life Cycle Assessment. A method of quantifying the environmental impact of a product during its lifetime (resource extraction, manufacturing, use, disposal).  
<sup>2</sup>: Products manufactured by collecting and mining natural stones  
<sup>3</sup>: Evaluation results for ferronickel slag products manufactured in FY2018

Ferronickel slag product application	CO <sub>2</sub> emissions (t-CO <sub>2</sub> /year)		CO <sub>2</sub> reduction rate
	Crushed stone	PACIFIC METALS ferronickel slag products	
Land development materials	2,360	44	98%
Subgrade, Subbase materials	115	32	72%
Coverage materials, Earthwork materials	2,059	571	72%
Blast furnace steelmaking materials	5,518	1,477	73%
<b>Total</b>	<b>10,052</b>	<b>2,124</b>	<b>79%</b>

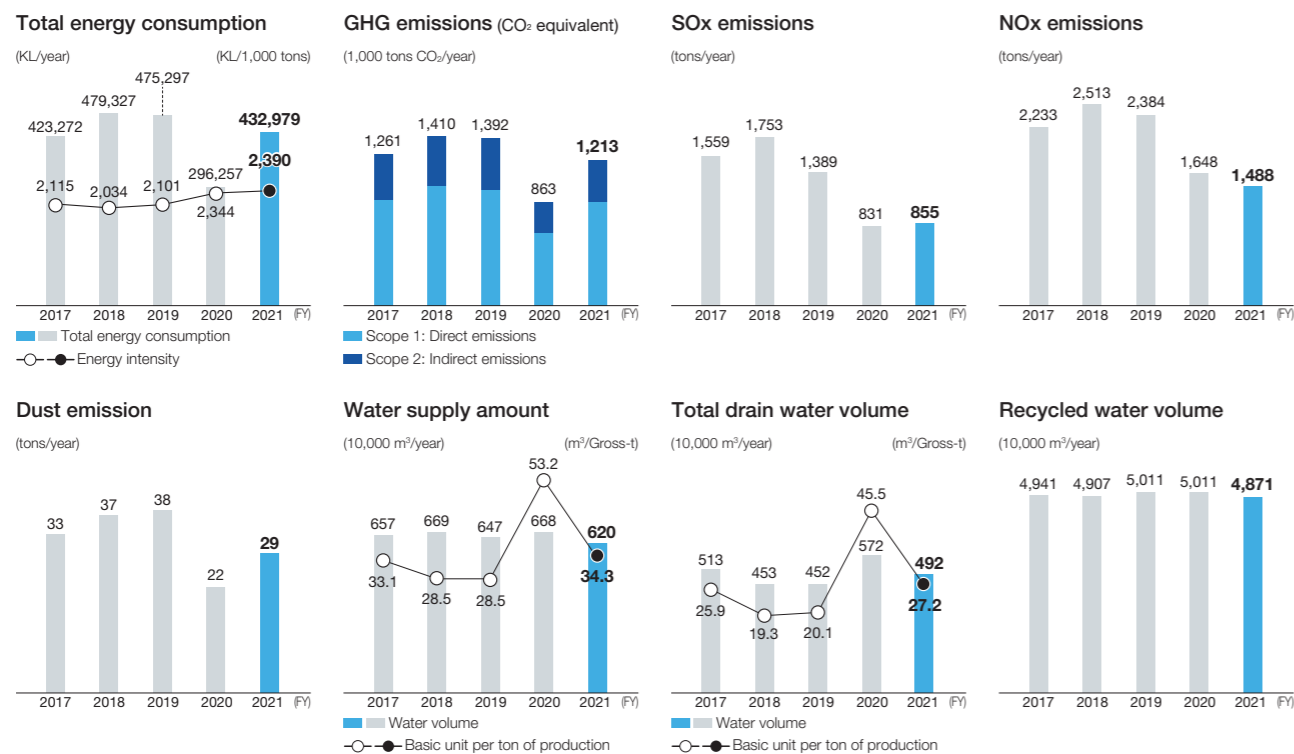
Click here for product information

WEB <https://www.pacific-metals.co.jp/en/products/kras.html>



# Initiatives for Reducing Environmental Impact

We use significant amounts of electricity and fossil fuels in the manufacturing process and emit soot and smoke. For this reason, we are actively working on energy-saving measures and to reduce the environmental impact on the atmosphere and water.



## Curbing global warming and energy conservation measures

We are engaged in efforts to use energy more efficiently, including using hot electric furnace exhaust gas in our nickel ore drying process to reduce the amount of heavy oil and LNG we use in our production process. In FY2021, our total energy consumption, CO<sub>2</sub> emissions, and energy used per unit of production (energy intensity) rose in line with higher production volumes.

## Air pollution control measures

To monitor the soot and smoke generated by production processes and private power generation equipment, we have taken new measures such as constant monitoring using telemeters and upgraded non-gas continuous measuring devices, and have implemented internal circulation of the management status of self-managed values as well as training in legal and regulatory compliance to raise employee awareness. We also prevent the scatter of dust by running watering and dust collecting devices in front of furnaces 24-hours a day in mines and on-premises road surfaces, etc. In FY2021, SO<sub>x</sub>, NO<sub>x</sub>, and dust emissions were roughly level with the previous year. Going forward, we will continue to consider measures for curbing emissions.

## Water pollution control measures

We are making efforts to reduce the amount of water we use by using circulating water to cool electric furnaces and ferronickel slag. In addition to measuring wastewater regularly, we manage it thoroughly on a daily basis through real-time monitoring using continuous surveillance monitors and employee patrols, etc.

Furthermore, at our wastewater terminal treatment facilities, in addition to performing appropriate controls such as adjusting treatment water levels when turbidity concentrations rise during rainfall, we change the filtering media in the filters on a regular basis. Our wastewater terminal treatment facilities ran properly again in FY2021, and there were no values that exceeded the wastewater agreement value. Both water supply amount and total drain water volume were at the same level as in the average year.

## Green procurement initiatives

We have formed a policy of prioritizing procurement of products and services from suppliers that are working to reduce their environmental loads, and are striving to procure environmentally friendly products and services that must;

- Use reduced amounts of hazardous substances.
- Conserve resources and energy.
- Be available over the long term.
- Be reusable or recyclable.
- Use recycled materials and components. (products, containers, packaging materials)
- Be ease to disassemble and treat when discarded.

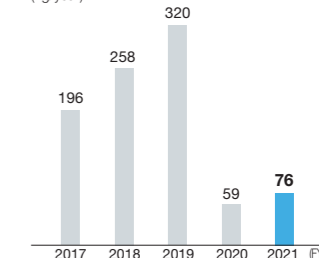
## Proper management of chemical substances

Based on the PRTR system, we ascertain the amount of emissions from and movements of substances subject to notification and report them to the government every year. The four types of substances subject to PRTR notification in FY2021 are shown in the table below. We control the amounts of chemical substances we procure, use, and store, and are working to reduce the amounts of hazardous substances we use. Using a chemical control system procured in FY2019, we are controlling the chemicals used in testing more thoroughly than ever before. Furthermore, since controlling the nickel compounds discharged from our ferronickel production process is one of our most important control items, we take various control measures, including 24-hour a day watering and cleaning with motorized sweepers.

### Substances subject to PRTR notification in FY2021

Emission volumes	Transfer volumes	Substances subject to PRTR notification in FY2021			
		Nickel compounds (kg/year)	Chromium and trivalent chromium compounds (kg/year)	Manganese and compounds thereof (kg/year)	Dioxins class compounds (mg/year)
Atmospheric	External waste	60	18	13	0.00082
Waterways		16	0	0	0
Soil		0	0	0	0
Landfill		0	0	0	0
		0	0	0	16.9

### Nickel compound emissions



## Observance of environmental laws and regulations

We regularly inspect business-use air conditioning, refrigerating, and freezing equipment in accordance with the Fluorocarbon Emissions Restraining Act. Inspection results revealed no leaks that needed to be reported. We also measured total mercury in exhaust gas from waste incinerators, which are classified as mercury discharge facilities under the Air Pollution Control Act, in accordance with the act and there were no mercury emissions that exceeded standards under the act. We outsource the treatment of product waste that uses mercury (fluorescent lamps, etc.) appropriately in accordance with the Waste Disposal Act. With respect to PCB-containing equipment, we are eliminating the treatment of insulating oil containing trace amounts of PCBs in large transformers.

## Initiatives for a recycling society

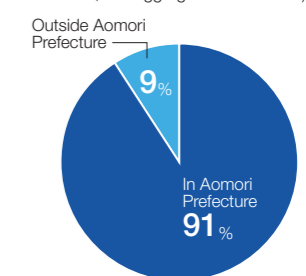
In FY2021, we produced 1,380,000 tons of by-product ferronickel slag. Ferronickel slag is what remains after nickel and steel are extracted from ore, and its main components are silica and magnesia. Since it contains no hazardous Substances, it is effectively used as a soil covering material and earthwork material, etc. Furthermore, we recycle waste oil generated by our ferronickel production process and private power generation facilities in-house. Since we have all waste, we cannot treat in-house recycled by subcontractor industrial waste treatment companies, we have achieved zero waste emissions. We have participated in the "Aomori Eco Town" since 2007. We also contribute to local zero emissions efforts by effectively using waste as a resource, not alone, but together with multiple nearby companies.

### Amount of industrial waste disposal subcontracted in FY2021

Type of Waste	Amount Disposed (t)	Type of Waste	Amount Disposed (t)
Dust (hazardous)	93.9	Waste plastic and metal scrap mixtures	16.9
Sludge	5.8	Waste oil	32.6
Strong acid	1.9	Wood scrap	11.6
Cinders (hazardous)	48.9	Asbestos	0
Cinders	0.8	Stable mixed waste	54.4
Waste alkali	1.1	Glass, concrete, and ceramic scrap	3.5
Waste alkali (hazardous)	0.1	Waste PCBs, etc.	100.7
Flammable waste oil	0.1	Other waste	7.0
Waste plastics	27.6	<b>Total</b>	<b>406.9</b>

### Percentage of slag processed products sold by region

(Blast furnace steelmaking materials, fertilizers, fine aggregate for concrete)



## Acquisition of environment-related technical qualifications

To enhance environmental awareness and strengthen our environmental control initiatives, we promote the acquisition of environment-related technical qualifications. Acquisition status is as shown on the right.

### Number of environment-related technically qualified personnel

Name of qualification	Number of qualified personnel	Name of qualification	Number of qualified personnel
Atmospheric pollution control manager - Type 1	16	Garbage treatment facility technical manager	6
Water quality pollution control manager - Type 1	13	Crushing and recycling facility technical manager	2
Dioxin pollution control manager	7	Industrial waste final disposal site technical manager	1
Disposal courses relating to specially controlled industrial waste treatment businesses	1	Specially controlled industrial waste management supervisor	6
Industrial waste incinerator technical manager	14		
Industrial waste intermediate treatment facility technical manager	4		

# Quality Control System

To reliably provide products all of our stakeholders can trust, we have come together company-wide to promote quality management activities based on our Quality Management System (QMS) and the Industrial Standardization Act.

## ISO certification registration

We have registered certifications for ISO 9001, ISO 14001, and ISO 45001. The surveillance examination in FY2021 uncovered no minor nonconformities and 26 opportunities for improvement. The Administration Office and each department are forming action plans and engaging in correction and improvement initiatives. One a positive note, we were given good assessments on 19 items. Furthermore, in addition to implementing continuous initiatives for preventing disasters and accidents due to small group activities with the goal of reducing labor disasters and accidents, we strengthened our health management initiatives, including mental health and work hour management, in collaboration with the HR Department.


### Certification Registration Information

Certification standard	Registration scope	Registration No.	Expiry date	Initial registration
ISO 9001:2015	Hachinohe Head Office (Manufacturing Works)	0314	February 15, 2024	April 9, 1998
ISO 14001:2015		E1998		March 19, 2009
ISO 45001:2018	Tokyo Head Office	H063		February 16, 2012



## Main initiatives and specific results

Main initiatives	Specific results
Measures to improve customer satisfaction	<p>Our ferronickel products are highly regarded by our customers in a variety of aspects, including stable quality, stable supply, and precise adherence to delivery deadlines, etc. Our regular CS surveys help us create products that meet customer needs.</p> <p>In addition, we are striving to deliver better products and services, and to provide proposal-type selling that benefits our customers. Our production and sales departments are working as one team to further improve customer satisfaction.</p> <p>Our ferronickel slag products are of high environmental safety quality and are mainly used for civil engineering works (roads and land development) in Aomori Prefecture and neighboring areas. We strive day in day out to meet customer requirements for the particle size and component of our products. They are highly regarded by our customers for their ease of use, etc.</p> <p>We also work to properly control our management system in compliance with all relevant laws and regulations and in accordance with the Japan Mining Industry Association's "Guidelines for Managing the Production and Sale of Nonferrous Slag Products." In this manner, we manage our operations so as not to impose environmental impacts or other issues on local residents. To serve the local community, we regularly clean transportation roads in Hachinohe City. These efforts have been well received.</p>

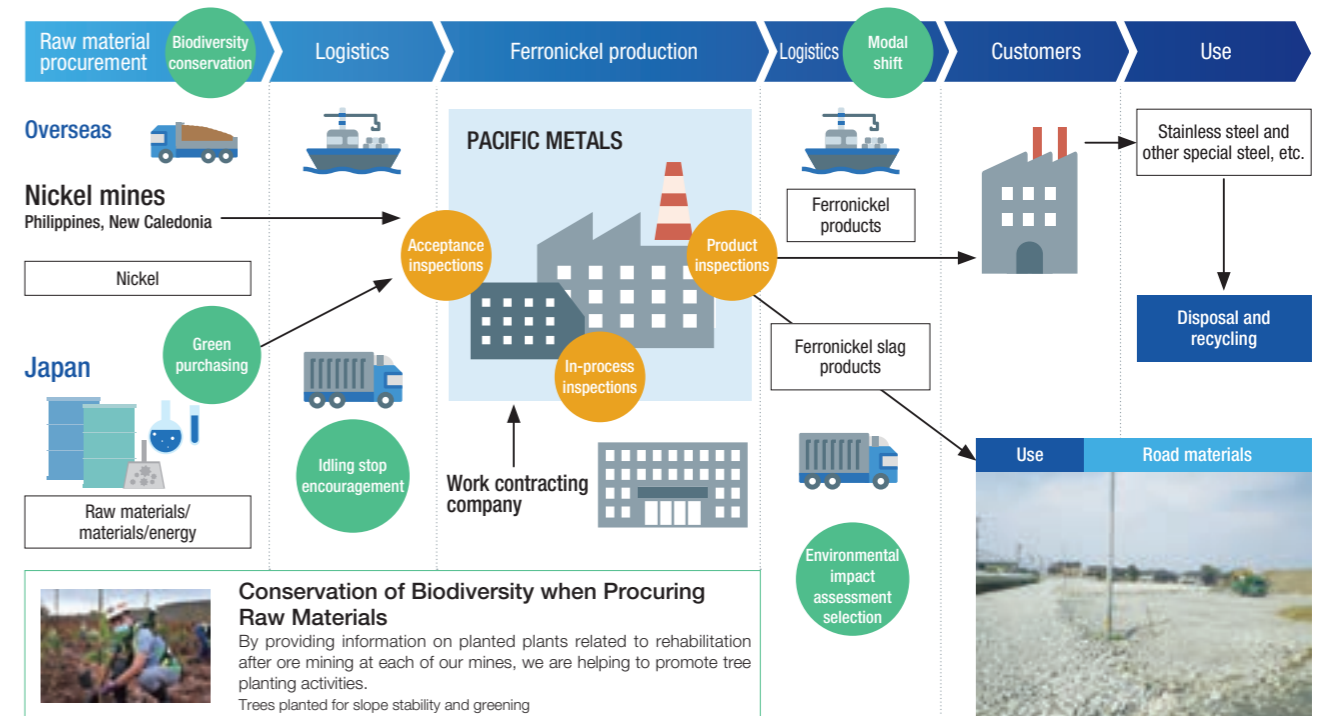
Main initiatives	Specific results
Brush up of our analytical techniques to improve product quality reliability	<p>We conduct OJT based on a skills chart including diagrams and photographs, which document the tacit knowledge of experienced employees, such as sensory-based techniques and knowhow. In this manner, we are also working to expand individual scopes of work, implement initiatives to enhance competence, and share knowledge and experience of analytical techniques among all department staff. We are also working to improve our analytical techniques by adding and updating new information and knowledge to the skills chart.</p>  <p>Skills Chart</p>
Laboratory accreditation of testing and calibration laboratories (ISO/IEC 17025)	<p>Since the prices of ferronickel products and nickel ore depend on the amount of nickel they contain, ensuring the reliability of nickel analysis values is an important matter. We are certified under ISO/IEC 17025 in "methods for chemically analyzing components in ferronickel," "X-ray fluorescence methods for analyzing components in ferronickel," and "methods for chemically analyzing components in nickel ore," which we use to ensure the international and objective reliability of product inspections and raw material acceptance inspection results.</p> <p>For activities that we have implemented, we have participated in laboratory proficiency tests, and improved and expanded our work qualifications. In FY2021, we maintained our certifications by undergoing the surveillance examination.</p>

## Supply chain management

We conduct a variety of activities that take the environment and quality into consideration at each stage in the supply chain, not just at our production sites. As an environmental measure, we carry out afforestation at local mines in order to restore (rehabilitate) sites to their original states to the degree possible after ore mining. In addition, we comply with internationally unified safety regulations for the sea transportation of cargo, and take safety measures and environmental considerations into account.

Regarding quality, in addition to product inspection before shipment, we thoroughly control the quality of manufacturing processes such as acceptance inspections of raw materials. We also contribute to the reliability of product quality in analyzing the chemical composition of ferronickel products. For slag products, we regularly conduct tests based on the Soil Contamination Countermeasures Act to confirm that our products meet the required standards.

## Overview diagram of the PACIFIC METALS supply chain



\*Photograph provided by Rio Tuba Nickel Mining Corporation

# Occupational Health and Safety

We have been promoting voluntary work accident prevention activities under the slogan “Be Safety!” and working to prevent workplace accidents by raising safety awareness.

We are also promoting health management activities so that employees can maintain a safe and healthy work environment.

## Basic views

### Occupational safety management

- ◎ **Health and safety policy:** Eliminating accidents and strengthening physical and mental health management for our employees
- ◎ **Priority goal:** Raising employee safety awareness to ensure elimination of accidents
- ◎ **Goal:** Thorough elimination of accidents (including contractors)
- ◎ **Specific activities**
  - (1) Promoting various safety activities through small group (team) activities
  - (2) Raising safety awareness through continued initiatives for safety focus campaigns
  - (3) Strengthening follow-up on health and safety education for new employees and visitors
  - (4) Identifying hazard sources for one-person work during night work and establishing a safety confirmation contact system
  - (5) Re-identification of risks by reconfirming hazardous and harmful operations in contracted work
  - (6) Response to the revision of the law in relation to the inclusion of welding fumes in the regulations on specified chemical substances
  - (7) Achieving zero traffic accidents for employees through initiatives to eliminate traffic accidents and violations

### Occupational health management

- ◎ **Priority goal:** Strengthening physical and mental health management for our employees
- ◎ **Goal:** Reducing the number of people with findings in their medical checkups
- ◎ **Specific activities**
  - (1) Reducing the number of people with findings in their health checkups
    - ① “Individual goals” activities for voluntary and proactive health management
    - ② Promoting the active use of the health guidance system
    - ③ Considering and continuing support for health management activities (health education, in-house exercise facilities)
  - (2) Reducing mental health illnesses by properly carrying out stress checks and mental health training
  - (3) Improving the workplace environment by continuing to measure the working environment

## Occupational safety activities

As small group activities, we held safety activities covering a total of 88 themes. These manager-led activities included improvement of facilities, emergency response training, risk reduction measures, as well as other issues that are relevant to the current status of each department. In addition, we selected good examples of small group activities in FY2020 and compiled them into a collection of case studies. We circulated these throughout the Company to help raise safety awareness.

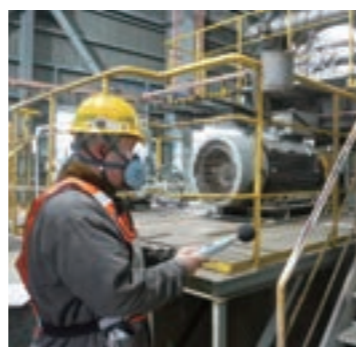
From FY2021, we began providing safety training to new employees in the Production Department before they are assigned to shift work, in addition to training at the time of hire. This ensures that they have a better understanding of safety and recognize that safety is a priority in their work. In addition, we have newly updated the accident-free record bulletin board located at the guard station. We keep our safety record on display at all times, making it more visible to employees in order to raise safety awareness.



## Hygiene activities

We have set a departmental goal of strengthening physical and mental health management of our employees. We are encouraging employees to engage in voluntary activities by setting individual goals to reduce the number of findings in regular health checkups by one. In addition, as a means of promoting the active use of the health guidance system, we have focused on employees who are at high risk of developing lifestyle-related diseases due to findings in the results of health checkups, such as obesity, blood pressure, cholesterol, or blood sugar levels, and preventive effect can be highly expected by improving their lifestyle, and we have actively encouraged them to use our health guidance system, which helps them to review their lifestyle habits. This effort has led to an increase in the utilization rate of specific health guidance and of workers' compensation secondary health checkups. More than half of the employees in question have lost weight, and their health awareness has improved.

We carry out weekly regular workplace patrols by Health Supervisors as workplace labor environment improvement activities, during which supervisors check for work environments that could impact worker health and point out defects to each department, which we then correct.



## Disaster prevention activities

During the annual Comprehensive Disaster Prevention Training, employees are trained to carry out evacuations, and confirm damage situation and safety in preparation for large earthquakes with seismic intensities of 5 or higher. It also involves teaching new employees how to fight fires using fire extinguishers, and water discharge training using trucks carrying transportable pumps, thereby providing understanding of the importance of extinguishing fires quickly.

Our tsunami evacuation training conducted on March 11 assumes the issuance of a major tsunami warning with a height of more than 10 meters following a major earthquake. In the disaster simulation exercise, each employee considered possible responses from their own position, making it possible to quickly and reliably evacuate personnel and confirm safety during the limited time available when a major tsunami warning is issued. This has improved our disaster preparedness. In addition, we conduct training for scenarios in which a large-scale natural disaster such as an earthquake or tsunami occurs at night or on holidays. In the training, personnel remaining on Company premises quickly check the damage situation and the safety of personnel, using an app to quickly and smoothly share information concerning the premises.

In addition, we have increased the number of AEDs installed on our premises by 10 for a total of 14. In addition, by holding general lifesaving training sessions for team leader class managers, we are establishing a system that enables prompt first aid using AEDs during emergencies.



## Human Resources

# Human Resources

We are working to realize our Company Philosophy of “Leverage the power of people to deliver the earth’s resources in more useful forms and contribute to the happiness of humankind.” To this end, we are developing a work environment and education system that allows a diverse workforce to thrive.

### Personnel education to ensure diversity

#### Initiatives for diversity

To realize diversity, we will continue conducting training and other programs aimed at self-development. We strive to reform awareness and build a supportive corporate culture by actively implementing efforts to resolve any issues as they arise. We will also continue our initiatives for improving productivity and work-life balance.

In addition, we are raising the retirement age to 65 years old for employees who will turn 60 years old in FY2022. We will work to create a system that takes employees' health into consideration while allowing them to continue to perform as well as ever.

#### Diversity management training

We carried out training in which participants learned about the concept of diversity and diversity management with the aim of gaining the ability to develop and promote the advancement of diverse human resources required for management positions, including women. The training is also aimed at creating a less stressful workplace and improving employee motivation.

Human resources education, development of environment, etc. to ensure diversity, including promoting active participation of women

Promoting active participation of women

We will always strive to create a comfortable work environment that balances work and home life, including support for child-birth, childcare, and nursing care, etc. We will also provide training for female employees to support their career development, and training for male employees to reform their awareness. We will work to improve the environment in terms of both the work environment and the facility environment to promote the active involvement of women in the workforce.

Number of female employees (non-consolidated)

FY2017	FY2018	FY2019	FY2020	FY2021
4.3%	4.1%	5.0%	4.6%	4.3%



Seminar on supporting active participation of women

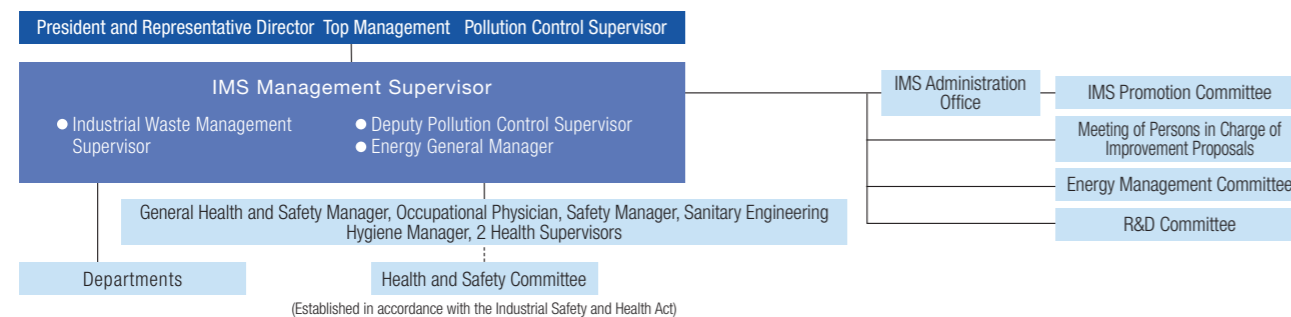
Seminar on supporting active participation of women

We conducted a training program that encouraged participants to think proactively about how to make the most of their value, how to continue contributing to the organization through the way they work, and how to achieve happiness in their own lives, in order to realize a society in which women can fully demonstrate their individuality and abilities, in a social environment where women are expected to play an active role.

Integrated Management System (IMS) concept and education

The Company operates three management systems - Quality Management, Environmental Management, and Occupational Health and Safety Management - as an Integrated Management System (IMS). This system is maximally utilized, with management policies positioned with IMS policies as goal attainment tools in PAMCO-2021.

IMS system diagram



1 The purpose of IMS education

The purpose of these rules is to clarify the competencies (knowledge and skills) required for IMS for those who work for the Company, and to establish education procedures to improve these competencies and ensure their competence.

2 Awareness education

Awareness education is education to help employees understand what is expected of them in the tasks they are entrusted with. It highlights how these tasks support the Company's overall activities and performance, for example by realizing customer satisfaction, reducing environmental impact, and reducing occupational health and safety risks. In this manner, the education helps employees realize that they are entrusted with important tasks that are indispensable to the Company.

We plan and implement awareness education necessary for our employees and for employees of partner companies and subcontractors.

Details of education for employees of partner companies, etc.

1 Technical guidance

- ① How to operate newly installed equipment, etc.
- ② How to operate equipment, etc. that has been refurbished
- ③ At the start of production of a new product
- ④ Instructions on matters that require urgent action for environmental or health and safety reasons

2 Emergency instructions for disasters, accidents, etc.

In case of giving instructions necessary to ensure the health and safety of employees of partner companies and subcontractors in the event of an emergency, such as a disaster or accident

3 Instructions necessary for compliance with laws and regulations, etc.

To provide guidance and instructions necessary to prevent violation of related laws and regulations, Company rules, etc.

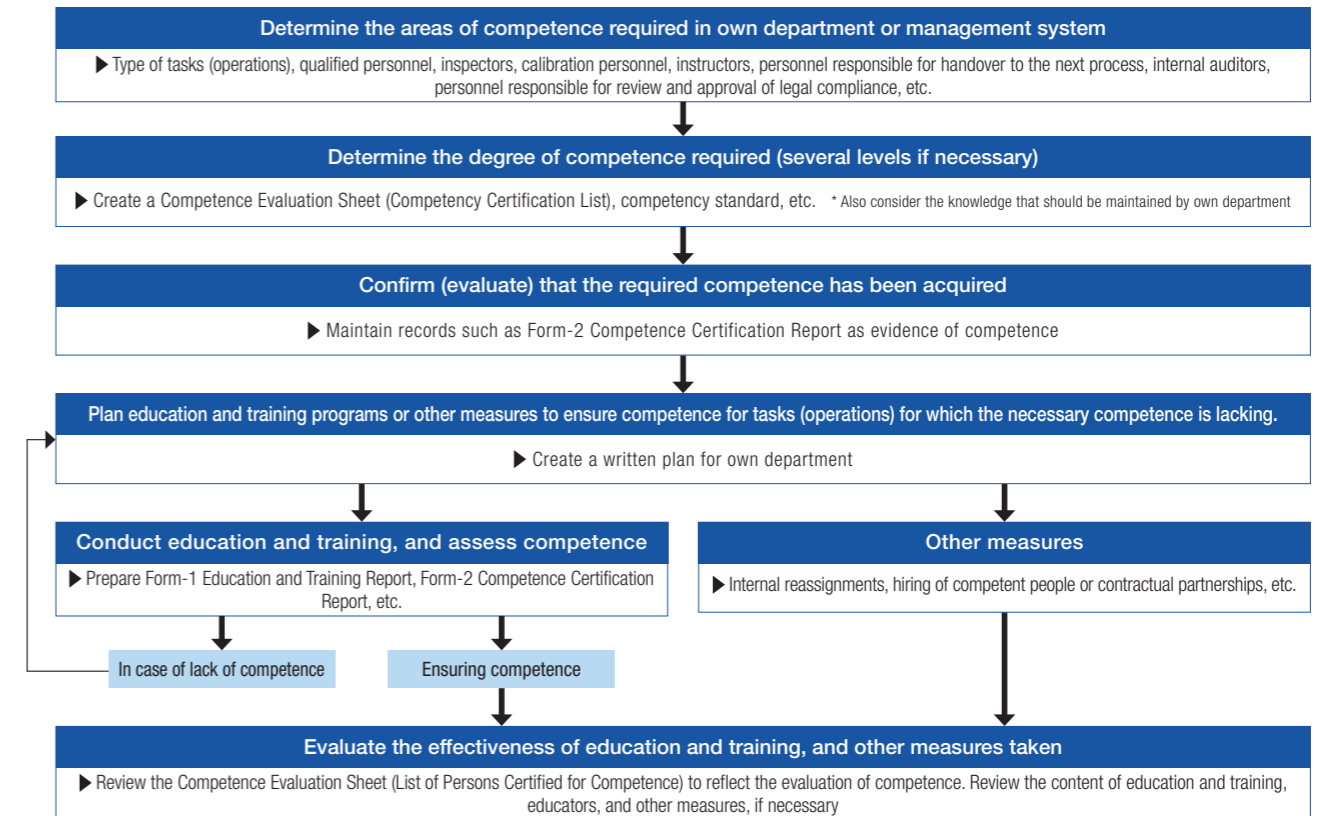
4 Onboarding education, etc.

- ① Onboarding education conducted by the Safety & Health Management Department at the beginning of each fiscal year
- ② Each fiscal year, each Department uses the New Visitor Safety Guide for personnel visiting for the first time.

5 Participation in educational seminars held by the Company (quality, environment, safety and health education)

Acceptance to attend educational seminars held by the Company, if necessary

Procedure for ensuring competence



Human rights awareness activities

We organize our diversity efforts and promote the following ideas within the Company.

1 Basic policy for respecting human rights

We will promote initiatives for respecting human rights, in accordance with international norms and standards as a guideline for fulfilling our responsibilities. Our Corporate Code of Ethics established based on our Company Philosophy and Company Policy states that we will create a work environment where employees can work together and express themselves. In keeping with this, we believe that creating a vibrant workplace whose human resources are diverse in terms of nationality, gender, and age, where we understand each other's values, individuality, and circumstances, and where each individual can fully demonstrate his or her abilities, will lead to higher productivity.

2 Concept for respecting human rights

We will do our utmost not to violate the human rights of all those affected by our business activities. We will work to correct and remedy any situations that have negative impacts on human rights in the event that they occur. We also engage with our stakeholders, and we encourage them not to violate human rights if they have caused any negative impacts.

3 Scope of application

The scope of this policy applies to all employees and officers of the Group. We will promote respect for human rights in cooperation with our business partners with whom we have close relationships.

4 Education

We will promote appropriate education.

5 Human rights due diligence

We will refer to the Guiding Principles on Business and Human Rights, and establish the necessary human rights due diligence system for the Company.

6 Governance system

We will discuss our approach to respect for human rights at the Sustainability Promotion Council.



## Communicating with the Local Community

We value the connection with the local community, carry out clean-up activities, and endeavor to revitalize the community by sponsoring local organizations and participating in local events. We strive to communicate with all of our stakeholders through local initiatives.

### Cleanup activities on factory premises and in the region

It's been 13 years now since we started cleanup activities along harbor-facing roads around our factory to support regional beautification efforts and make contributions to society. In November 2021, a total of 13 employees, including our employees and employees from affiliates and partner companies, donned masks and practiced social distancing as they participated in cleanup activities in the First Industrial Port in the City of Hachinohe's Kawaragi District. They collected a total of 5kg of combustible and non-combustible garbage. The City of Hachinohe recorded this cleanup activity in its "Hachinohe Green System," which supports environmental beautification activities.



### Sponsorship of the local soccer club

We started loaning the artificial turf "PAMCO Field" soccer field, prepared on a final disposal site where we used to bury ferronickel slag, to the local "Vanraure Hachinohe" soccer club in July 2019. We continued our official partnership with Vanraure Hachinohe into FY2021 as well. We very much hope to remain an active part of "Vanraure Hachinohe," and continue our contributions to the promotion of regional sports. In addition, under our sponsorship, the PAMCO Cup was held in FY2021 for the U-10 age group, with all eight teams competing in a league.



### Donations to disaster-stricken areas in Japan and overseas

- Following the heavy rain disasters that occurred on August 9, 2021 in Kazamura Village and Mutsu City, on August 20, we made donations to aid recovery efforts in the disaster-stricken areas.
- On January 24, 2022, we made a donation via the Philippine Red Cross following the damage caused by Typhoon Nalgae in the Philippines.
- In November 2022, we made a donation to victims of the West Java Earthquake in Indonesia.

## Risk Management

We have established and operate a risk management system for dealing with various risks in a timely and appropriate manner.

### Basic views

#### Basic policy

The Company aims to maximize corporate value by generating profits through the use of management resources and assets entrusted to it by shareholders. In making management decisions, the Board of Directors thoroughly scrutinizes and analyzes the risks associated with business and investment activities, and makes decisions based on appropriate procedures in light of the profits to be generated by such activities. In making such possible assumptions on management risks, the Company allows an appropriate level of risks in light of the corresponding business and investment returns. However, risks that affect permanent business continuity are diversifying and increasing as the business and natural environment changes. Depending on how these are handled, it may become extremely difficult to achieve the business plan, and the very survival of the business could come into jeopardy. To maintain a state in which appropriate management decisions can be made, the Company correctly understands the risks that may arise, reduces the possibility of occurrence, and devises measures to reduce probable losses before they occur. To this end, the organization and rules for dealing with each risk are clarified in the Risk Management Regulations. We have established a risk management system to thoroughly manage crises should they occur, minimizing damage and taking responsible measures for early recovery. We continuously implement this system under the following philosophy, basic objectives, and action guidelines. In the event the risk of a critical situation occurs or the possibility of occurrence rises, the Company responds in accordance with the Crisis Management Manual.

#### Philosophy

- (1) Fulfilling the Company's corporate social responsibility
- (2) Ensuring the Company's social credibility

#### Basic objectives

- |   |   |
|---|---|
| (1) Permanent business continuity                   | (2) Responding to climate change risk                   |
| (3) Securing the trust and interest of stakeholders | (4) Ensuring the safety of employees and their families |
| (5) Preserving company assets                       | (6) Enhancing corporate value                           |

#### Action guidelines

- (1) Improve risk response capabilities through continuous risk management activities
- (2) Share information on potential risks
- (3) Act in a manner that does not jeopardize the safety, health or interests of stakeholders
- (4) Minimize the damage caused by the occurrence of a business crisis and take responsible actions for early recovery.

### Management system

The Company will establish a risk management system by preparing the Risk Management System List that describes the risks to be managed, the departments and organizations responsible for those risks, and the rules and regulations governing those bodies.

### Risk identification and assessment process

The Risk Management Committee will implement the following matters under its jurisdiction.

- |  |   |
|--|---|
| (1) Understanding, analyzing and evaluating risks  | (2) Considering countermeasures for evaluated risks |
| (3) Matters related to crisis management           | (4) Report to the Board of Directors                |
| (5) Report to the Sustainability Promotion Council | (6) Other necessary matters related to risk         |

#### ●Crisis Management Manual

The manual outlines the normal situation response in the "Normal situation crisis management policy" and the "Emergency response policy" (specific measures to be taken in the event of a serious crisis or the possibility of a serious crisis occurring).

**Classification of major risks**

The Company classifies and identifies major risks based on the basic objectives of the Risk Management Regulations.

- |   |   |
|---|---|
| <p><b>1. Management risks</b><br/>                 (1) Financial (i) Stock price fluctuation (hostile takeover) (ii) Insufficient funds (iii) Accounting fraud<br/>                 (2) Market (i) LME fluctuation (ii) Exchange rate fluctuation (iii) Demand decline (price competition)<br/>                 (3) Procurement (i) Electricity (price fluctuation, securing procurement volume) (ii) Ore (price fluctuation, securing procurement volume) (iii) Coal and oil (price fluctuation, securing procurement volume) (iv) Other materials<br/>                 (4) Investment (i) New business (ii) Capital investment (iii) Research and development (iv) Acquisition and merger absorption (v) Overseas investment</p> <p><b>2. Labor risks</b><br/>                 (1) Fraud or misconduct by officers<br/>                 (2) Fraud or misconduct by employees<br/>                 (3) Labor disputes and strikes<br/>                 (4) Harassment<br/>                 (5) Leakage of personal information</p> <p><b>3. Social risks</b><br/>                 (1) Crime syndicates, Sokaiya (racketeers that disrupt shareholder meetings), and intimidation<br/>                 (2) Media attacks, criticism, and slander<br/>                 (3) Compliance violations</p> | <p><b>4. Climate change risks</b><br/>                 (1) Global warming caused by GHG emissions</p> <p><b>5. Risks of disasters, accidents, etc.</b><br/>                 (1) Natural disasters (i) Typhoons/storm surges (ii) Earthquakes/tsunami (iii) Water disasters/floods (iv) Tornadoes/wind disasters<br/>                 (2) Accidents (i) Fires, explosions, and high-heat leaks (hot water leaks, etc.) (ii) Chemical substance leaks (iii) Electrical and mechanical accidents (iv) Facilities accidents (v) Traffic accidents (vi) Industrial accidents (vii) Accidents during transportation and shipping (viii) Theft (ix) Trespassing<br/>                 (3) Hygiene (i) Infectious and contagious diseases</p> <p><b>6. Risks in the production and sales process</b><br/>                 (1) Products (i) Product defect warranty (ii) Product liability (PL law) (iii) Defective products (iv) System failure (production, sales management operations, etc.)<br/>                 (2) Environment (i) Oil pollution accident (ii) Liability for environmental pollution (iii) Violation of environmental regulations (iv) Tighter environmental regulations</p> <p><b>7. Network risks</b><br/>                 (1) Cyberattacks, etc.<br/>                 (2) Network failure</p> |
|---|---|

# Compliance

We believe that compliance is essential to supporting the foundation of our corporate activities and avoiding various risks, and take strengthening measures.

**Basic views**

Our Board of Directors has established “Company Policy,” a “Corporate Code of Ethics,” and a “Corporate Code of Conduct,” etc., and advocates compliance with laws and regulations.

To ensure business is conducted based on these policies and norms, we have established an Internal Controls Committee to strengthen compliance. We list the following with respect to compliance and adherence to social norms, and all officers and employees, including directors, carry out their duties with an awareness thereof.

- 1 Conduct corporate activities in accordance with compliance, social norms, and social decency.
- 2 Conduct sound company activities by remaining insulated from antisocial forces that threaten social order and security.
- 3 Comply with international rules and local laws, and respect local cultures and customs when conducting international business activities. Conduct company activities that contribute to the development of each country.

**Providing education on internal controls**

We conduct the following internal control-related training and educational activities to instill compliance in our employees and to achieve adherence.

- Conducting compliance awareness questionnaires
- Compliance training
  - (1) Compliance education for new employees
  - (2) Circulation of the Company’s “Rules of Whistle-blowing” and “Whistle-blowing Processing System” Target: employees, affiliates and business partners
  - (3) Compliance awareness activities Target: officers, managers, entire Company
  - (4) Compliance magazine regular distribution Target: entire Company
  - (5) External seminar for Internal Control Committee Secretariat (correspondence course)

**Whistleblowing**

- The Company has established a whistle-blowing system (internal and external contact points) based on the Rules of Whistle-blowing System. Whistle-blowing reports are submitted to the Board of Auditors, and specific cases are reported to the Board of Directors. Disadvantageous treatment of whistle-blowers is prohibited.

# Corporate Governance

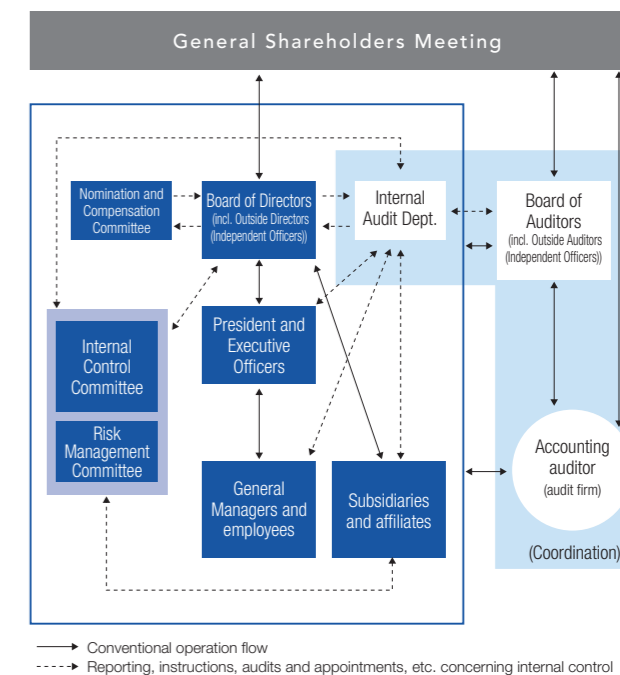
Aiming to improve corporate value, we strive to strengthen and enhance corporate governance through rapid decision making and management efficiency, and through ensuring transparency and soundness of management by strengthening supervisory functions.

**Basic views**

Based on the company philosophy and policy established by the Group, the Company will enhance its corporate governance as described below to achieve sustainable growth and increase its medium- to long-term corporate value.

- The Company shall respect the rights of all shareholders and ensure equality.
- The Company shall collaborate with all stakeholders, including shareholders, consumers, business partners, employees, and local communities, sincerely and appropriately, considering their interests.
- The Company shall proactively disclose information that could serve as a basis for investment decisions, in addition to disclosing information appropriately in compliance with relevant laws and regulations.
- The Company’s Board of Directors shall be responsible for achieving sustainable growth and maximizing medium- to long-term corporate value based on its fiduciary responsibility to shareholders. To this end, the Company shall establish a fair and transparent management structure by introducing an executive officer system to separate decision-making and business execution functions and by strengthening the business execution supervisory function through the appointment of outside officers (outside directors and outside auditors).
- The Company shall engage in constructive dialogue with shareholders to achieve sustainable growth and maximum medium- to long-term corporate value.

**Company governance system diagram**



**Board of Directors**

The Board of Directors consists of nine Directors (including three Outside Directors). In addition to monthly Board of Directors’ meetings, Directors hold meetings as needed for prompt handling of matters, efficient execution of duties, and monitoring of the execution of duties among Directors.

**Board of Auditors**

The Company has adopted an auditor system, and three persons out of four Auditors comprising the Board of Auditors are Outside Auditors. In order to ensure the fair execution of duties by Directors, the Company enables all Auditors including part-time Auditors to attend all Board of Directors’ meetings.

**Nomination and Compensation Committee**

The Company has established the Nomination and Compensation Committee, aiming at enhancing the fairness, transparency, and objectivity of procedures for the nomination and compensation of Directors and Executive Officers, as well as at further improving corporate governance. In response to inquiries from the Board of Directors, the Nomination and Compensation Committee primarily deliberates on matters related to the appointment and dismissal of Directors and other officers, the compensation of Directors, and matters approved by other committees regarding the nomination and compensation of Directors.

**Internal Control Committee**

The Company has established the Internal Control Committee as an advisory body to the Board of Directors to ensure “compliance with laws and regulations in corporate activities,” “securing the reliability of financial reports,” and “securing the effectiveness of duties” of the Group. The Internal Control Committee reports on its activities to the Board of Directors twice or more per year.

**Risk Management Committee**

The Company has established the Risk Management Committee, aiming at enhancing and continuously implementing the risk management system in order to correctly understand all possible risks, lower the possibility of their occurrence, devise measures to reduce probable losses before they occur, and when they occur, perform thorough crisis management, minimize the damage, and take responsible measures for early recovery.

### Reasons of appointment as Outside Directors and status of activities

Name	Reasons of Appointment	Attendance at Board of Directors' meetings
Shinya Matsumoto	The Company determined that Shinya Matsumoto is capable of properly performing his duties as Outside Director based on his professional perspective and broad insight as an attorney. The Company expects him to promote the enhancement of compliance and corporate governance, leveraging the above-mentioned perspective and insight.	22 out of 23 meetings (95.7%)
Hikari Imai	The Company determined that Hikari Imai is capable of properly performing his duties as Outside Director based on his extensive experience as a corporate manager over many years. The Company expects him to promote the improvement of corporate governance and the enhancement of the foundation of corporate management at the Company by leveraging the above-mentioned experience.	22 out of 23 meetings (95.7%)
Yukari Sakai	The Company determined that Yukari Sakai is capable of properly performing her duties as Outside Director based on her extensive experience as a corporate manager in a wide range of business fields. The Company expects her to promote the enhancement and reinforcement of corporate governance based on a variety of perspectives from the viewpoint of diversity, leveraging the above-mentioned experience.	16 out of 16 meetings (100%)

### Evaluation of the effectiveness of the Board of Directors

The Company analyses and evaluates the effectiveness of the Board of Directors as a whole to enhance the functions of the Board of Directors and ultimately the corporate value. In March 2022, the Company implemented the evaluation for FY2021 by means of a questionnaire survey performed by an outside institution, targeting all Directors and Auditors (including Outside Directors and Outside Auditors).

The responses to the survey show that the compensation system for senior management is evaluated positively because compensation is appropriately determined through discussions by the non-statutory Nomination and Compensation Committee (established in May 2021). Accordingly, the Company shared the recognition that the Board of Directors has generally maintained a certain level of effectiveness. On the other hand, the Directors also shared issues such as the need for further discussion concerning the appropriateness of incentives for senior management and full discussion of the basic sustainability policy, including aspects such as ESG and the SDGs, initiatives to improve sustainability, and related disclosure.

Based on the results of the evaluation of the effectiveness, the Board of Directors of the Company aims to further enhance the functions of the Board of Directors by thoroughly examining the policy of addressing these issues in the future.

#### Identified issues

Issues	Measures
(1) Diversity of Board members (representation of different nationalities, women, etc.)	On June 25, 2021, one female outside director was elected at the Annual General Shareholders Meeting.
(2) Establishment of a Compensation Committee for ensuring the transparency of officers' compensation	On May 20, 2021, the Board of Directors established the Nomination and Compensation Committee (a voluntary body), appointed its members, and established the Committee Regulations. (First meeting: September 14; Second meeting: October 14; Third meeting: December 14; Fourth meeting: February 18, 2022; Fifth meeting: March 15, 2022)
(3) Establishment of a Nomination Committee, including consideration of succession planning	Similar measures to (2). A succession plan is scheduled to be established in FY2022.

### Compensation, etc. for officers, etc.

The Company, through the Nomination and Compensation Committee, has decided the determination policy on the details of individual Directors' compensation, etc. This policy has been established by the Board of Directors in the Officers' Compensation Rules. The Company's determination policy on the details of individual Auditors' compensation, etc. has also been established by the Board of Directors in the Officers' Compensation Rules. Compensation for individual Auditors is determined through discussion between Auditors, within the total compensation limit resolved by the General Shareholders Meeting. The basic policy for Director's compensation is to link the compensation system with the benefits of shareholders in order to make the system fully functional as an incentive to pursue the sustainable improvement of corporate value, and to determine the individual Director's compensation at an appropriate level according to his/her responsibilities.

Specifically, Directors' compensation consists of "basic compensation for officers" as fixed compensation, and

"bonuses for officers (monetary/stock)" as performance-linked compensation. Regarding Outside Directors, who assume the responsibility of oversight, only "basic compensation for officers" is paid in light of their duties. The basic compensation for officers is an amount of fixed compensation based on position, corresponding to the level of duties. Bonuses for officers (monetary) are performance-linked monetary compensation based on single fiscal year performance, etc. as a short-term incentive, which is limited to a maximum of the sum of individual monthly fixed compensation for five months. Compensation is paid after the Company's results, etc. have been determined in each fiscal year. Bonuses for officers (stock) are performance-linked stock compensation based on points awarded, while in office, for the delivery of shares, to promote the sharing of benefits and risks with shareholders from a medium- to long-term perspective. Shares are delivered to Directors upon retirement. Regarding the ratio by compensation type, the ratio of fixed compensation to performance-linked compensation is in the range between 10:0 and 7:3.

Basic compensation for Directors of the Company is fixed monthly compensation, in an amount deliberated by the Nomination and Compensation Committee and determined by the Board of Directors.

Proposals for monthly compensation for individual Directors are submitted to the Nomination and Compensation Committee by the President and Representative Director, based on careful evaluation of the roles expected of each Director by the Company. The Nomination and Compensation Committee, upon deliberation, determines compensation for individual Directors, and the President and Representative Director submits a proposal for the payment of the aggregate amount to the Board of Directors, which decides it.

The aggregate amounts of bonuses for officers, which are performance-linked compensation, are determined in accordance with the allocation standards. The President and Representative Director submits a proposal for the payment of the aggregate amount to the Board of Directors, which decides it. The amounts allocated to individual Directors are determined in proportion to the monthly fixed compensation for each position.

The Board of Directors has measures in place to ensure that the Nomination and Compensation Committee appropriately exercises this authority, with the President and Representative Director submitting the results of the Committee's deliberation to the Board of Directors for decision. Because the amounts of individual Directors' compensation are determined according to these procedures, the Board of Directors believes that they are in line with the determination policy.

The resolution of the Annual General Shareholders Meeting pertaining to officers' compensation was passed on June 29, 2006, which stipulates that the amount of monetary compensation for Directors of the Company shall be up to 350 million yen per year (excluding the portion of employee salary of Directors who concurrently serve as employees). In addition, it was also resolved that the amount of monetary compensation for Auditors of the Company shall be up to 60 million yen per year.

Regarding the amounts of compensation, etc. for individual Directors of the Company, the Nomination and Compensation

Committee, delegated authority by the Board of Directors, deliberates on proposals for the aggregate amounts of compensation for each period, based on the separately-established policy on Directors' compensation. The President and Representative Director submits the results of this deliberation to the Board of Directors, which decides the amounts of compensation, within the total compensation limit resolved by the General Shareholders Meeting.

Authority is delegated to the Nomination and Compensation Committee, a non-statutory advisory body of the Board of Directors composed of a majority of Outside Directors, to ensure the fairness, transparency, and objectivity of processes related to the determination of compensation, etc.

For the current fiscal year, the Nomination and Compensation Committee (Chairperson: Outside Director Shinya Matsumoto; Members: President and Representative Director Masayuki Aoyama, Outside Director Hikari Imai, Outside Director Yukari Sakai) has determined the details of compensation, etc. for individual Directors. The scope of this authority is stipulated under the Committee Regulations as the compensation system basic policy, proposals for compensation limits (including calculation methods), and specific individual compensation amounts (including calculation methods). The Board of Directors and the Nomination and Compensation Committee carried out the following activities in the process of determining the amount of compensation for officers of the Company during the fiscal year under review. The Committee evaluated the current compensation for Directors and organized its concept, conducted a general review of the composition of monthly compensation and performance-linked compensation, and discussed the ideal form of total amount of compensation and individual compensation. As a result, a new policy on Directors' compensation was formulated and the Officers' Compensation Rules was revised by the Board of Directors, adding an objective evaluation of each individual as well as his or her position, responsibilities, and years in office.

#### Total amount of compensation, etc. for each officer category, total amount by type of compensation, etc., and number of eligible officers

Officer category	Total amount of compensation, etc. (million yen)	Total amount of compensation, etc. by type (million yen)				Number of eligible officers (persons)
		Fixed compensation	Performance-linked compensation, etc.	Retirement benefits	Of which, non-monetary compensation, etc.	
Directors (excluding Outside Directors)	193	131	62	-	-	7
Auditors (excluding Outside Auditors)	27	19	8	-	-	1
Outside officers	35	35	-	-	-	6

(Notes) 1 The number of officers and amount paid above include one Director who retired at the conclusion of the 95th Annual General Shareholders Meeting held on June 25, 2021.  
 2 The total amount of compensation, etc. for Directors do not include the portion of employee salary for Directors who concurrently serve as employees.  
 3 The Board of Directors' meeting, held on May 22, 2006, resolved to abolish the retirement benefits system for officers, and the 80th Annual General Shareholders Meeting, held on June 29, 2006, resolved to grant final payments in conjunction with the abolishment of the retirement benefits system. Total amounts of the final payments in the future as of the end of this fiscal year is as follows. A total of 6 million yen for one Auditor  
 4 Outside officers do not receive officers' compensation, etc. from subsidiaries.

### Shareholding status

#### Methods for assessing shareholding policies and rationality of holdings, and details of verification by the Board of Directors, etc. regarding the appropriateness of holding individual issues

The Company holds shares of other companies as cross-shareholdings, with the aim of maintaining or strengthening business relationships and enhancing the medium- to long-term corporate value of investee companies and the Company. In addition, the Company exercises voting rights as to its cross-shareholdings after taking into account the business relationships and the return, etc. from the shareholdings, as well as whether or not the proposed agenda will help improve the corporate value of the investee company and the Company.

The Board of Directors regularly explains the purpose and rationality of shares held by the Company as cross-shareholdings. This is done after comprehensively determining the appropriateness of continuing to hold, based on a quantitative assessment of changes in the stock price and market capitalization, changes in the amount of dividends received and the dividend yield, and changes in ROE over the past five years, as well as qualitative assessment of the medium- to long-term economic rationality and future prospects.

#### Number of issues and balance sheet amount

	Number of issues	Total amount on balance sheet (million yen)
Unlisted stocks	11	190
Stocks other than unlisted stocks	10	7,939

# Officers

## Directors



**Masayuki Aoyama**

President and Representative Director

April 1975 Joined the Company  
 April 2009 General Manager, Utility & Maintenance Dept., Production Div.  
 May 2010 Director, Pacific Energy Center Co., Ltd.  
 June 2011 Executive Officer, the Company  
 June 2014 Director, Rio Tuba Nickel Mining Corporation  
 June 2014 Director, Taganito Mining Corporation  
 June 2014 Director, the Company  
 June 2014 Senior Executive Officer  
 June 2014 General Manager, Production Div.  
 June 2014 President & Representative Director, Pacific Gas Center Co., Ltd.  
 May 2017 Managing Executive Officer, the Company  
 July 2019 In charge of Business Process Reengineering, Production and Recycling Business  
 June 2020 President and Representative Director (to present)  
 May 2021 Member of Nomination and Compensation Committee (to present)



**Yoshiharu Inomata**

Director & Senior Managing Executive Officer

April 1975 Joined the Company  
 June 2014 Senior Executive Officer  
 June 2014 General Manager, Quality Control Dept. and General Manager, Environmental Management Dept.  
 July 2016 General Manager, Quality Control & Environmental Management Dept.  
 September 2016 General Manager, Quality Control & Environmental Management Dept., General Manager, Technical Research & Development Dept. and Manager, Pyrometallurgy Development Sec.  
 June 2017 Director (to present)  
 June 2017 In charge of Safety & Health Management, Quality Control & Environmental Management  
 June 2017 General Manager, Technical Research & Development Dept.  
 July 2019 In charge of Safety & Health Management and Resources & Technology Development Project  
 July 2019 General Manager, Quality Control & Environmental Management Dept.  
 June 2020 Managing Executive Officer  
 June 2020 In charge of Corporate Planning, Safety & Health Management, Quality Control & Environmental Management  
 June 2021 Senior Managing Executive Officer (to present)  
 June 2021 Assistant to President (to present)  
 June 2021 In charge of Corporate Planning, Recycling Business (to present)



**Kenichi Hara**

Director & Managing Executive Officer

April 1988 Joined the Company  
 June 2014 Executive Officer  
 June 2014 General Manager, Ferro Nickel Sales Dept.  
 June 2017 Senior Executive Officer  
 March 2018 Director, Pacific Sowa Corporation (to present)  
 June 2018 Director, the Company (to present)  
 June 2018 In charge of Sales  
 July 2019 General Manager, Sales & Marketing Dept. (to present)  
 June 2020 In charge of Procurement (to present)  
 June 2021 Managing Executive Officer (to present)



**Terunobu Matsuyama**

Director & Managing Executive Officer

April 1988 Joined the Company  
 May 2014 Auditor, Pacific Gas Center Co., Ltd.  
 June 2014 General Manager, Finance & Accounting Dept., the Company  
 June 2017 Executive Officer  
 June 2018 Director (to present)  
 June 2018 Senior Executive Officer  
 June 2020 In charge of IR (to present)  
 May 2021 Director, Taiheiyō Kōsan Co., Ltd. (to present)  
 June 2021 Managing Executive Officer, the Company (to present)  
 June 2021 In charge of Internal Control (to present)  
 June 2021 In charge of General Administration (to present)  
 June 2021 In charge of Finance & Accounting (to present)  
 June 2021 General Manager of Personnel & Labor Relation Dept. (to present)



**Hiroaki Ichiyanagi**

Director & Senior Executive Officer

April 2003 Joined the Company  
 June 2014 Executive Officer  
 June 2014 General Manager, Ore Purchasing & Mining Engineering Dept.  
 June 2017 Senior Executive Officer (to present)  
 June 2018 Director, Rio Tuba Nickel Mining Corporation (to present)  
 June 2018 Director, Taganito Mining Corporation (to present)  
 July 2019 General Manager, Resources & Technology Development Project Dept., the Company (to present)  
 June 2020 Director (to present)  
 June 2021 In charge of Quality Control & Environmental Management (to present)



**Kazuo Iwadate**

Director & Senior Executive Officer

April 1985 Joined the Company  
 December 2012 General Manager, Production Dept., Production Div.  
 November 2015 General Manager, Production Dept. and General Manager, Environmental Business Dept., Production Div.  
 June 2017 Executive Officer  
 June 2017 Assistant General Manager, Production Div., General Manager, Utility & Maintenance Dept. and General Manager, Environmental Business Dept.  
 July 2019 General Manager, Business Process Reengineering Dept. (to present)  
 May 2020 President & Representative Director, Pacific Gas Center Co., Ltd. (to present)  
 June 2020 Director, the Company (to present)  
 June 2020 Senior Executive Officer (to present)  
 June 2020 In charge of Utility & Maintenance and Production (to present)  
 June 2021 In charge of Safety & Health Management (to present)



**Shinya Matsumoto**

Outside Director

April 1987 Registered as attorney, joined Marunouchi Sogo Law Office  
 July 1996 Partner and attorney  
 June 2001 Outside Corporate Auditor, Impress Corporation (now Impress Holdings, Inc.) (to present)  
 June 2006 Member of Special Committee, the Company  
 June 2007 Outside Director, The Shibusawa Warehouse Co., Ltd. (to present)  
 October 2011 Partner and Representative Attorney, Marunouchi Sogo Law Office (to present)  
 June 2013 Outside Director, the Company (to present)  
 May 2021 Chairperson of Nomination and Compensation Committee (to present)



**Hikari Imai**

Outside Director

April 1974 Joined Yamaichi Securities Co., Ltd.  
 January 1986 Joined Morgan Stanley Japan Securities Co., Ltd.  
 April 1993 Joined Merrill Lynch Japan Incorporated  
 January 1999 Deputy Chairman, and Chairman, Investment Banking Division, Merrill Lynch Japan Securities Co., Ltd.  
 November 2007 Vice-President and Director, RECOF Corporation  
 April 2008 President  
 July 2010 Advisor, Ebara Foods Industry, Inc.  
 April 2012 Outside Director, Olympus Corporation  
 June 2015 Outside Director, CYBERDYNE Inc. (to present)  
 June 2016 Outside Director, the Company (to present)  
 November 2019 Outside Director, SHIMACHU CO., LTD.  
 May 2021 Member of Nomination and Compensation Committee, the Company (to present)



**Yukari Sakai**

Outside Director

April 1991 Joined Nomura Securities Co., Ltd.  
 January 2005 Director of Corporate Tune Co., Ltd.  
 June 2005 Standing Outside Audit and Supervisory Board Member of UNITED ARROWS LTD.  
 June 2008 Outside Auditor of REPROCELL Inc.  
 September 2013 Outside Auditor of Beauty Kadan Co., Ltd.  
 June 2016 Outside Director (Standing Audit and Supervisory Committee Member) of UNITED ARROWS LTD. (to present)  
 October 2017 Outside Director (Audit and Supervisory Committee Member) of Tea Life Co., Ltd.  
 March 2019 External Director (Audit & Supervisory Board Member) of Uzabase, Inc.  
 June 2021 Outside Director, the Company (to present)

## Auditors



**Kiichi Tatsunaka**

Full-time Auditor

April 1963 Joined the Company  
 December 1995 Assistant General Manager, Administration Dept., Hachinohe Plant and Manager, Finance & Accounting Dept.  
 July 1999 Assistant General Manager, Finance & Accounting Dept. and Manager, Finance & Planning Dept.  
 April 2003 General Manager, Finance & Accounting Dept.  
 June 2003 Auditor  
 June 2005 Full-time Auditor (to present)



**Ken Yasuda**

Outside Auditor

April 1976 Joined The Kyowa Bank, Ltd.  
 April 1995 Manager of Kawachi Chiyoda Branch, The Asahi Bank, Ltd.  
 April 1997 Manager of Kosaka Branch, The Asahi Bank, Ltd.  
 June 1999 Manager of Kudan Branch, The Asahi Bank, Ltd.  
 April 2001 Manager of Tokyo Chuo Branch and General Manager of Branch Sales Dept. No.1, The Asahi Bank, Ltd.  
 July 2001 General Manager of Tokyo Chuo Region Sales Dept. and General Manager of Regional Sales Dept. No.1, The Asahi Bank, Ltd.  
 January 2003 Manager of Tokyo Chuo Branch, The Asahi Bank, Ltd.  
 June 2003 Executive Officer, General Manager of Tokyo Sales Administration Dept. and In Charge of Tokyo Real Estate Dept., Resona Bank, Limited  
 October 2003 Executive Officer and General Manager of Tokyo Sales Dept., Resona Bank, Limited  
 June 2006 General Manager of General Affairs Dept., JCB Co., Ltd.  
 June 2007 Standing Corporate Auditor, Hibiya Engineering, Ltd.  
 June 2016 External Auditor, NIHON PLAST CO., LTD.  
 June 2018 Outside Auditor, the Company (to present)



**Hideki Ogata**

Outside Auditor

April 1976 Joined Hokkaido-Tohoku Development Corp.  
 October 1999 Assistant General Manager, Human Resources Management Dept., Development Bank of Japan Inc.  
 June 2002 Head of Regional Development Dept., Development Bank of Japan Inc.  
 June 2004 Head of Inspection Dept., Development Bank of Japan Inc.  
 May 2005 Head of Investigation Dept., Development Bank of Japan Inc.  
 June 2005 Inspector (Part-time), Development Bank of Japan Inc.  
 June 2007 Full-time Auditor, Hokkaido Gas Co., Ltd.  
 June 2015 Full-time Auditor, Hokkaido Sugar Co., Ltd.  
 June 2019 Outside Auditor, the Company (to present)



**Shuzo Ikeda**

Outside Auditor

April 1985 Joined the Industrial Bank of Japan  
 April 1995 Deputy Assistant General Manager, International Business Dept., the Industrial Bank of Japan  
 June 1997 Assistant General Manager, Screening Dept., the Industrial Bank of Japan  
 November 1999 Acting General Manager, Industrial Investigation Dept., the Industrial Bank of Japan  
 October 2000 Corporate Researcher, Capital Markets Group, Mizuho Securities Co., Ltd.  
 October 2003 Corporate Researcher, Corporate Marketing Dept. 2, Mizuho Corporate Bank, Ltd.  
 April 2005 Corporate Researcher, Credit Engineering Dept., Mizuho Corporate Bank, Ltd.  
 April 2007 Deputy General Manager, Credit Engineering Dept., Mizuho Corporate Bank, Ltd.  
 April 2011 Vice President, Member of the Board, Japan Industrial Solutions Co., Ltd.  
 September 2012 External Director, ULVAC, Inc.  
 May 2013 Member of the Board, Japan Industrial Solutions Co., Ltd.  
 July 2014 Outside Director, TOKYO ROPE MFG. CO., LTD.  
 June 2020 Outside Auditor, the Company (to present)  
 June 2020 External Auditor, NIHON PLAST CO., LTD. (to present)

## Skills matrix

		①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪
Name		Corporate management	Finance/Accounting	Marketing	Manufacturing	Research/Development/IT	Law	Risk management	Personnel and labor relations	Global management	ESG and sustainability	Audit
Directors	Masayuki Aoyama	●			●			●			●	
	Yoshiharu Inomata	●			●	●		●	●		●	
	Kenichi Hara	●		●	●			●		●	●	
	Terunobu Matsuyama	●	●		●	●	●	●	●		●	
	Hiroaki Ichiyanagi	●		●	●	●		●		●	●	
	Kazuo Iwadate	●			●	●		●			●	
	Shinya Matsumoto	●					●	●				
	Hikari Imai	●	●					●				
	Yukari Sakai	●	●					●	●			
	Kiichi Tatsunaka		●					●				●
Auditors	Ken Yasuda		●				●					●
	Hideki Ogata		●				●					●
	Shuzo Ikeda	●	●				●					●

(Note) The skills matrix classifies knowledge and experience considered to be important for the Company and indicates the fields in which the Directors and Auditors have appropriate expertise and the fields for which the Company has high expectations of the Directors and Auditors.

## Message from Outside Directors



**Shinya Matsumoto**  
Outside Director

According to the Corporate Governance Code, the main roles expected of outside directors are to provide advice and monitoring functions (Principle 4.7). However, if we merely attend the Board of Directors' meetings held in principle once a month, and offer advice and monitoring in a condescending manner, we cannot possibly sway full-time officers. Therefore, I believe as a Director of the Company, that it is essential to have the standpoint of a colleague who shares the desire to make the Company better. Advice should not be a one-sided sales pitch of successful experiences or past

experiences. It should rather be a sharing of wisdom in the process of serious discussion together from a common perspective. Monitoring must be based not on suspicion but rather on trust in full-time officers, while maintaining a reasonable level of tension.

In the case of a certain management issue, the decision was made after numerous discussions with all officers, both inside and outside the Company. It is precisely because we completed this process of discussion that we were able to put in place a follow-up system for pursuing subsequent

results. If the decision had been made only by the full-time officers, would we have been able to have such free and vigorous discussions in the process leading up to the decision? Would we have been able to form a proper system after the decision was made? While it may be a bit presumptuous of me to say so, I believe that outside directors play a role in improving the openness of the discussion forum that is the Board of Directors and in creating an environment that allows for constructive discussions. I am quietly proud of that.



**Hikari Imai**  
Outside Director

When I joined the Company's management as an Outside Director, the nickel market was beset by fierce price competition due to the rise of low-cost Chinese competitors. The Company was in the midst of a severe decline in business performance, with consecutive losses in every fiscal year. The rationality of conducting smelting operations in Japan, where electricity costs are high, was questioned. We faced a situation in which our very existence was called into question. Even in such very difficult circumstances, the management team faced up to the challenges with sincerity. We were able to weather the worst of times by making a heart-rending decision to reduce headcount and adjust production in the past.

The background to this is that, while receiving external pressure for governance reform, the internal officers were frank in the way they listened to outside opinions and engaged in lively discussions at the Board of Directors' meetings. While there was some hesitation, we also appreciate the results of their sincere efforts toward management reform.

Through many years of experience in foreign investment banking, I have gained insights in areas such as the principles of capital markets, the concepts of corporate acquisitions and consolidation, and the requirements and perspectives of foreign investors. At the Board of Directors' meetings, I hope that these insights can provide full-time

officers with different perspectives that will help them find solutions to the issues they face.

Our efforts are still underway in taking drastic measures to address the issues we are facing, in an environment where we are required to pursue the challenges of SDGs and a sustainable circular society. We face challenges that we must resolve, such as business expansion and development through external business alliances and international expansion through overseas investment. I also feel that now more than ever it is necessary to accelerate the hiring of talent from outside the Company as well as initiatives toward diversity.



**Yukari Sakai**  
Outside Director

I was appointed as an Outside Director in 2021. Outside directors are in a position to monitor management objectively from an independent standpoint. Our mission is to continuously enhance corporate value while balancing the interests of stakeholders from employees and shareholders to society as a whole. It has been just over one year since I assumed my post. During that time, our Board of Directors has listened attentively to the opinions and questions of outside officers and communicated very politely. I sense a high degree of integrity in the attitude of the Company.

Starting this fiscal year, the Company has set forth a new long-term vision: "A comprehensive materials company that co-creates a sustainable, recycling-oriented society."

Recently, the environment surrounding the business has been changing rapidly. Many challenges need to be addressed, such as cost structure and environmental issues, which involve variables such as technological characteristics and geopolitical factors. We believe that to increase corporate value sustainably, it is essential that we add new profit models by applying or converting the advanced technologies that we have developed over our long history. I am looking forward to seeing the Company work boldly toward further growth in the spirit of change and challenge.

In terms of governance, as this is the second year since the Nomination and Compensation Committee was established, discussions on the Succession Plan have just begun.

We are discussing the design of the officers compensation system with the idea of linking it to the medium- to long-term business plan and ensuring that it contributes to the common interests of shareholders. I believe that we need to engage in more constructive dialogue with our stakeholders than ever before.

By drawing from my experience as an outside director of several companies in different fields, I will make every effort to ensure the medium- to long-term growth of the Company, the sustainable enhancement of its corporate value, and the strengthening of governance, which is the basis for such growth.