

Sustainability Report
2022



Management Philosophy

1. Bring about progress and enriched quality of life to society by providing superior products.
1. With independence as our basis, utilize creation and efficiency together to endlessly pursue growth and improvement.
1. Increase well-being of the ones while progressing with us, and provide society with an even larger place to do rewarding work.

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Editorial Policy

Nippon Yakin Kogyo has published Sustainability Report 2022 to present our sustainability policy and contribution to a sustainable society and the environment by providing value to customers. This report allows our stakeholders, shareholders and investors to comprehensively understand how we will achieve sustainability. This is the second report, following last year's inaugural issue, outlining our activities based on "the six issues of materiality" determined for the medium and long term periods. We aim to enhance communication with all our stakeholders in order for us to further improve our sustainability management.

Scope of reporting: Nippon Yakin Kogyo Co., Ltd. (including activities conducted as the entire Nippon Yakin Kogyo Group)

Reporting period: From April 2021 to March 2022 (FY2022, including some activities conducted before and after the period)

Publication: January 2023

Referenced guidelines

- GRI Sustainability Reporting Standards
- International Integrated Reporting Framework, International Integrated Reporting Council (IIRC)
- Environmental Reporting Guidelines 2018, Japanese Ministry of the Environment

Disclaimer of guarantee

We describe current plans of Nippon Yakin Kogyo and strategies for the future. It must be noted that prospects for the future entail risks and uncertainties.

Global Network



< In Japan >

- ◆1 Head Office (1-5-8 Kyobashi, Chuo-ku, Tokyo)
- ◆2 Kawasaki Plant (4-2 Kojima-cho, Kawasaki-ku, Kawasaki City, Kanagawa Prefecture)
- ◆3 Oheyama Plant (413 Aza Suzu, Miyazu City, Kyoto Prefecture)
- ◆4 Tokyo Branch
- ◆5 Osaka Branch
- ◆6 Nagoya Branch
- ◆7 Kyushu Branch
- ◆8 Hiroshima Branch
- ◆9 Niigata Branch

< Outside Japan >

- ◆1 Nippon Yakin America, Inc. (Subsidiary in Chicago)
- ◆2 Nippon Yakin Shanghai Co., Ltd. (Subsidiary in Shanghai)
- ◆3 Nippon Yakin Europe Limited (Subsidiary in London)
- ◆4 Nippon Yakin Asia Pte. Ltd. (Subsidiary in Singapore)
- ◆5 NISCO Nippon Yakin Kogyo Nanjing Co., Ltd. (Joint venture in Nanjing)

< Major affiliates >

NAS TOA CO., LTD., NAS STAINLESS STEEL STRIP MFG CO., LTD., NAS TRADING CO., LTD., Clean Metals Co., Ltd., NAS CREATE CO., LTD., NAS ENGINEERING CO., LTD., NAS TEC CO., LTD., MIYAZU KAIRIKU UNYU CO., LTD. and NAS TOA (THAILAND) CO., LTD.

* Nippon Yakin Kogyo acquired and merged with NAS CREATE CO., LTD. on April 1, 2022.

Corporate Profile

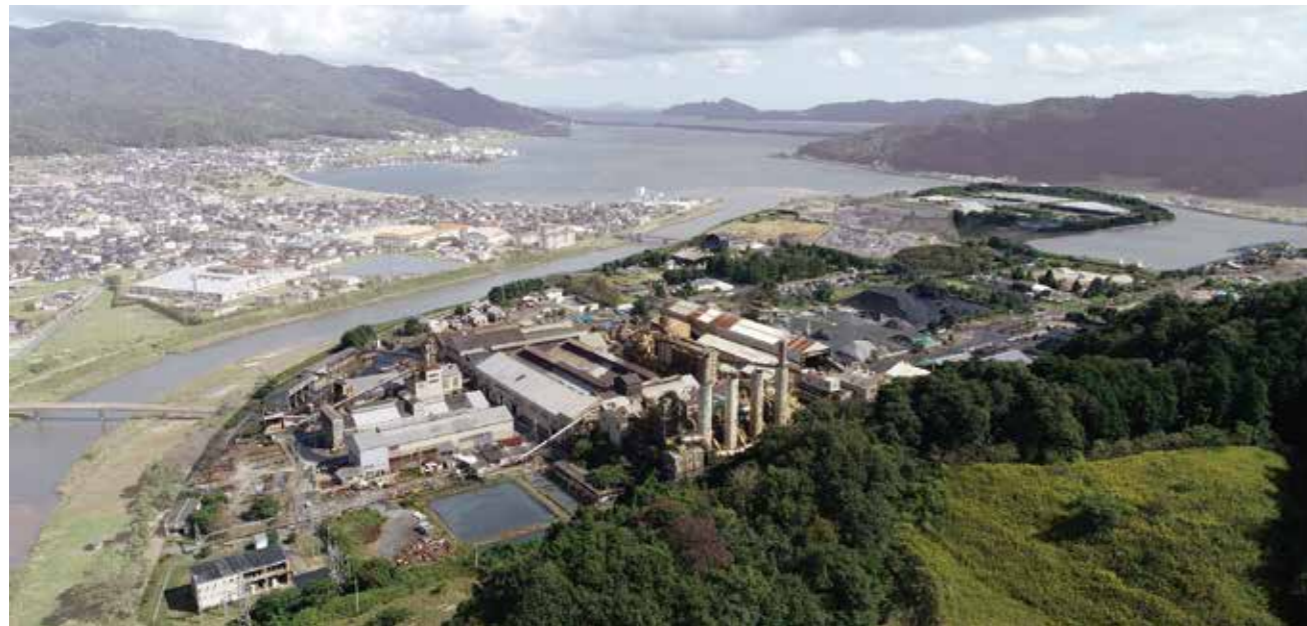
Company name:	Nippon Yakin Kogyo Co., Ltd.
Establishment:	August 22, 1925
Head office location:	1-5-8 Kyobashi, Chuo-ku, Tokyo 104-8365
Business details:	Manufacture and sale of stainless steels, heat-resistant alloys and high nickel alloy steel sheets, plates and strips (in coil form) and forgings and processed products as well as the manufacture of ferronickel alloys
Capital:	24,300,910,790 yen
Representative:	Hisashi Kubota, President and Representative Director
Number of employees:	1,106 (non-consolidated), 2,080 (consolidated)
Net sales:	124,778 million yen (non-consolidated), 148,925 million yen (consolidated) (FY2022)

(As of March 31, 2022)

Introduction of Our Plants

Nippon Yakin Kogyo has unique manufacturing processes, which are based on the globally proprietary technologies.

Oheyama Plant



- Oheyama Plant is located in the vicinity of an area of great scenic beauty. It is near the Amanohashidate (Heaven's bridge) sandbar, one of the three most scenic views in Japan with the Oe mountains behind. Oheyama Plant is obviously responsible for conserving the natural environment of this beautiful place. (See page 23.)
- Here, we produce ferronickel alloy, all of which is sent to Kawasaki Plant as the major nickel raw material to produce stainless steels.

- Oheyama Plant is the only plant in the world utilizing the Krupp-Renn process* for the production of ferronickel alloy.
- We have traditionally been importing nickel ore to produce ferronickel alloy. The use of recycled materials from so-called "urban mines" along with nickel ore has recently been expanded thereby contributing to society through efficient recycling. Further, we have been developing a smelting technology helping a brand new system contributing to the sustainability of nickel resources. (See page 19.)

* Krupp-Renn process: A smelting process applying rotary kilns to allow the production of ferronickel alloys without electric furnaces.

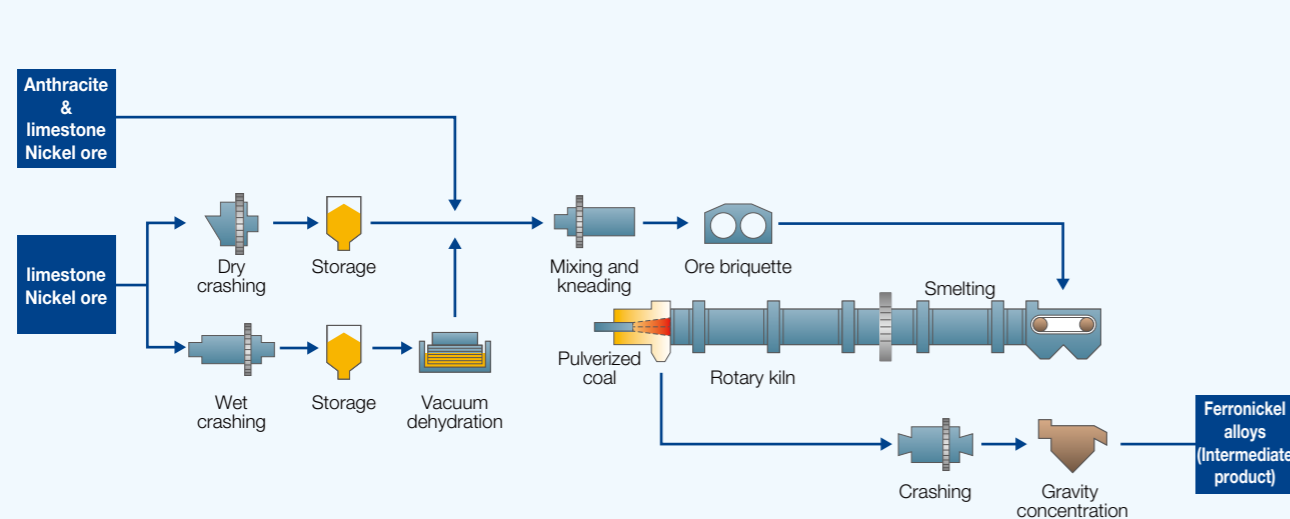
Kawasaki Plant



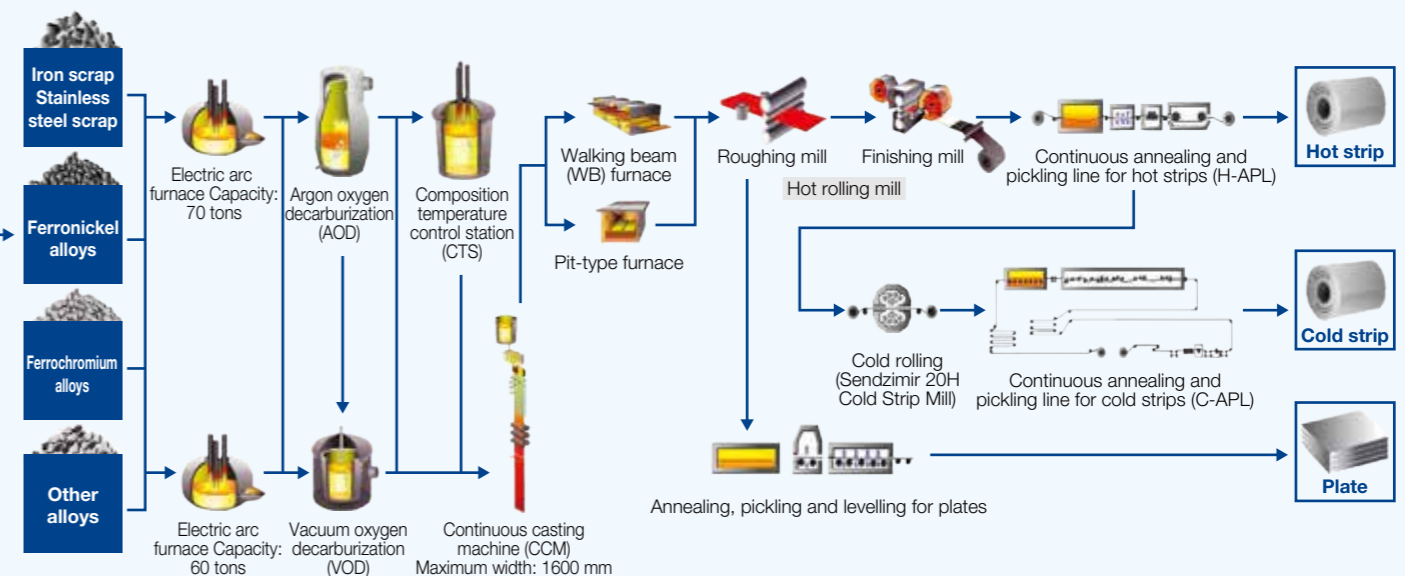
- Kawasaki Plant faces Haneda Airport across the Tama river. Specifically, it is in the Keihin industrial area, which is in the vicinity of urban residential areas.
- In compliance with environmental laws and regulations, the Plant is operating based on the safe and stable production system, while fostering harmony with local communities.

- Kawasaki Plant is an integrated mill to efficiently produce stainless steels along with high nickel alloys from the melting process to the rolling process where sheets and plates are produced establishing a competitive capability in the global market.
- High nickel alloys (defined as "high-performance alloys") are generally produced by a special melting process applying different equipment. On the other hand, we already developed a unique process to produce the high nickel alloys with equipment to produce stainless steels. This means that Kawasaki Plant is the only plant in the world to produce the two different products of stainless steels and high nickel alloys.

Ferronickel alloys producing process



Stainless steel and high nickel alloy plate & strip production process



Nippon Yakin Kogyo was founded as Chuo Rika Kogyo Co., Ltd. in 1925 as a manufacturer and seller of fire extinguishers. Subsequently, in 1928, the company name was changed to Nippon Kako Co., Ltd. The company entered the metallurgical business with the first stainless steel product being released in 1935. In 1942, the company was renamed Nippon Yakin Kogyo Co., Ltd. In 1943, Oheyama Nickel Kogyo Co., Ltd. was merged with us to establish an integrated system to produce stainless steels utilizing nickel ore. We thereafter achieved significant growth in line with the vigorous growth of the economy of Japan. Simultaneously, we continuously supply various types of stainless steels —with excellent corrosion

resistance, designability and workability— to provide value to Japanese society. Our steels contributed to allow living standards to rise with higher quality resulting in improving sanitation, comfort and essentially needed infrastructure. Nippon Yakin Kogyo has undertaken greater capital investment to promote the high-performance alloys business to win against global competitors in stainless steels responding to the globalized economic condition in Japan. As a result, we have been able to establish a globally unique business model. We are confident to carry on progressing to create new value to further contribute to the society together with the global environment based on our long history.

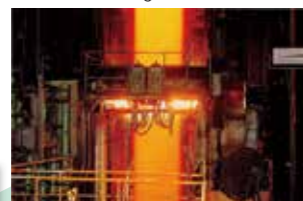
II. Establishment of a Mass Production System for Stainless Steels

1959: Started to operate the Sendzimir 20H Cold Strip Mill

Manufacture of the first stainless steel product



Continuous casting machine



1934: Established Oheyama Nickel Mining Industry Co., Ltd. (predecessor of Oheyama Nickel Kogyo Co., Ltd.)

1935: Manufactured the first stainless steel product

1928: Renamed Nippon Kako Co., Ltd. and became a manufacturer of fireworks, government-commissioned manufacturer and seller of blasting supplies, and seller of explosives

1942: Renamed Nippon Yakin Kogyo Co., Ltd.

1943: Merged with Oheyama Nickel Kogyo Co., Ltd.

1956: Established a research institute

5AP⁴



No. 5 rotary kiln (Oheyama Plant)



1966: Completed a planetary mill (for hot rolling) and started the operation

1965: Started to operate a continuous casting machine (CCM)

1962: Started to operate a 30-ton-capacity electric arc furnace¹ (first large furnace operated by a stainless-steel manufacturer in Japan)

1968: Started to operate a 60-ton-capacity electric arc furnace¹

1971: Started to operate the 60-ton-capacity VOD² process

1977: Started to operate the AOD³ process

1989: Completed the expansion of the second cold strip mill shop (5AP⁴, HK line⁵ and finishing equipment) (World's first combined CAP⁶ [5AP⁴])

1990: Started to operate the No. 5 rotary kiln (at Oheyama Plant)
Started to operate the 60-ton-capacity CTS⁷

I. Founding Period of Nippon Yakin Kogyo

1925: Chuo Rika Kogyo Co., Ltd. founded as a manufacturer and seller of fire extinguishers

III. Capital Investment to Be More Competitive and Sales Promotion for High-Performance Alloys

Creation of a Wider Range of Value

Planned for completion in 2024:
Introduction of a highly efficient cold rolling mill

Planned for completion in 2023:
Revamping and new establishment of slitter lines

2022: Started to operate a new electric arc furnace ("E furnace")

2021: Updated the press equipment at the plate shop
Revamped cut-to-length line for hot strips at the plate shop

2018: Started to operate the joint venture in China

2008: Started to operate new AOD³

1996: Started to operate a new hot rolling mill
First 5-feet-wide Steckel mill in Japan

New hot rolling mill



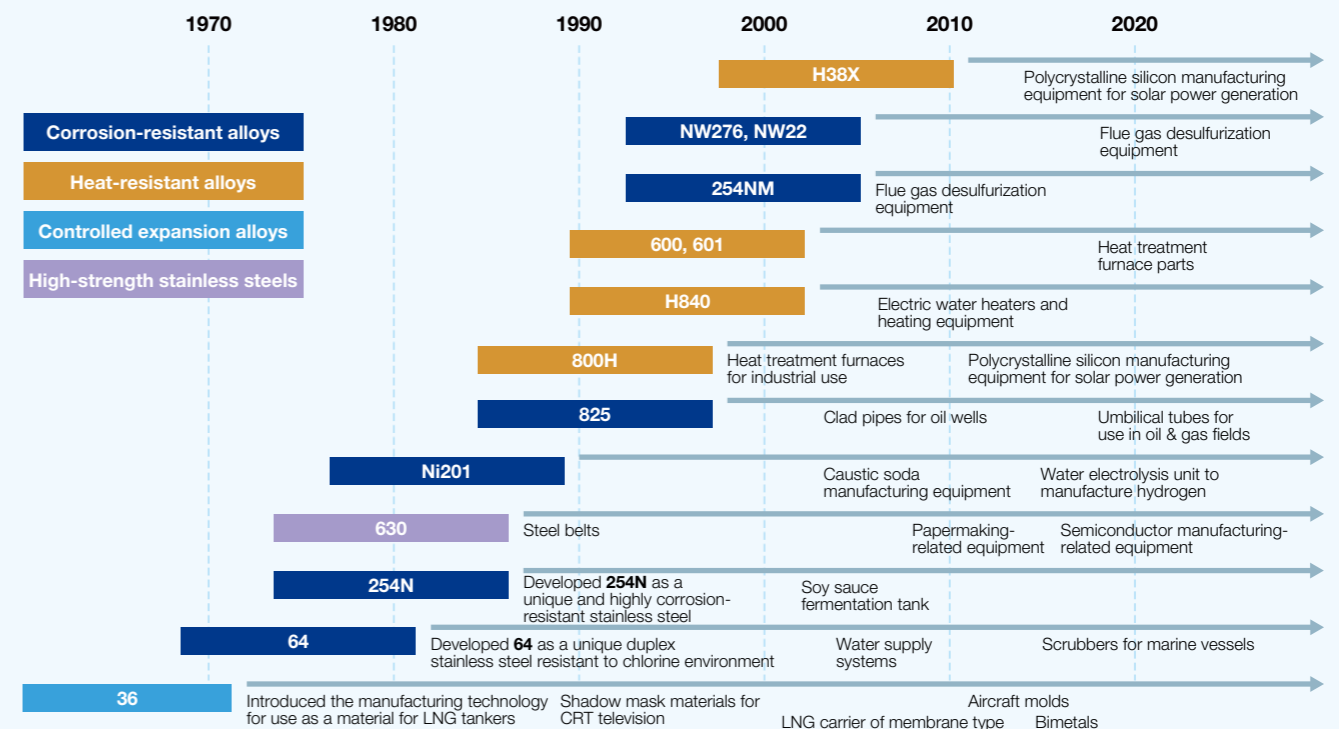
New AOD³



New electric arc furnace ("E furnace")



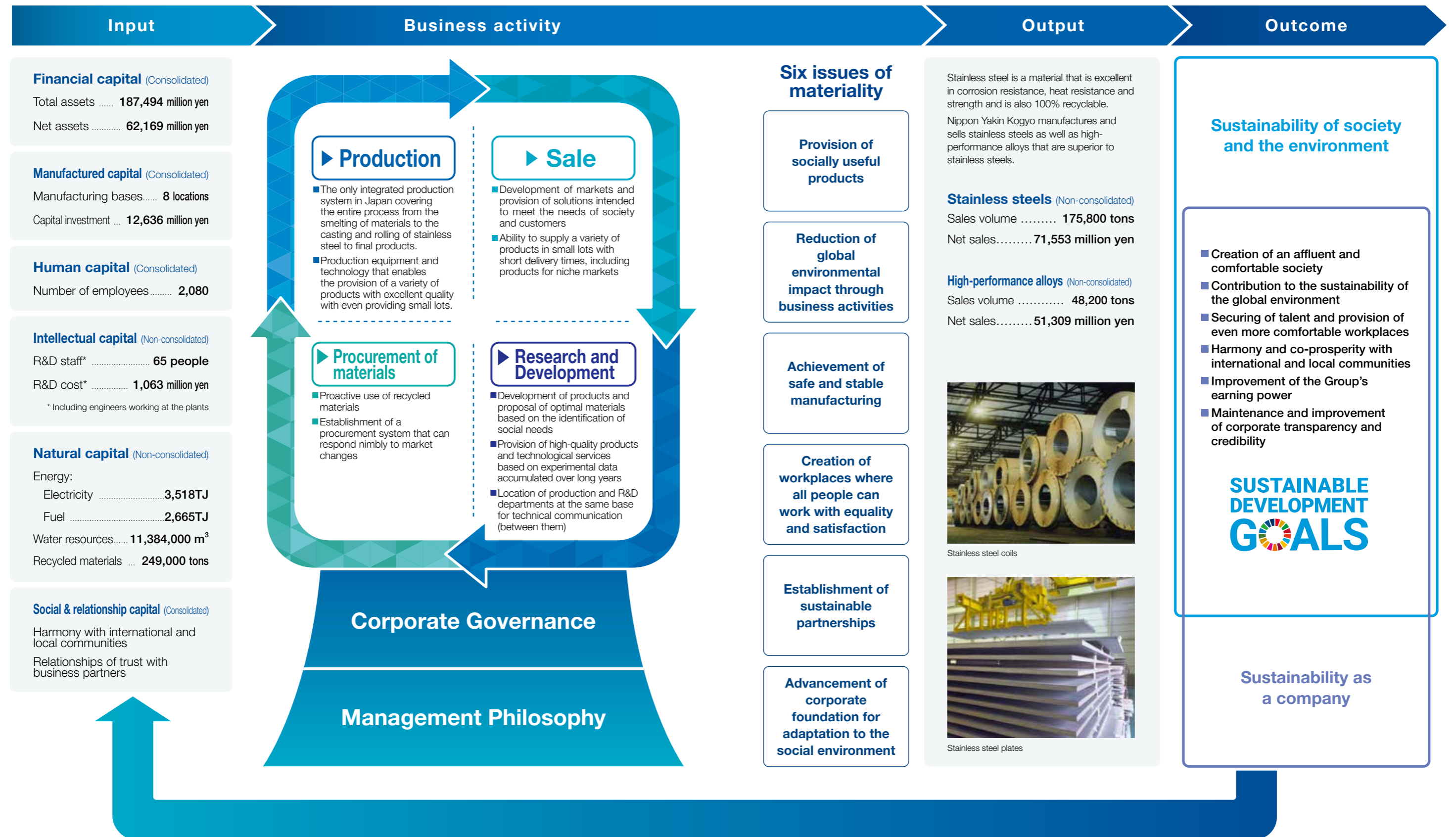
Usage of high-performance alloys (Common examples)



*1 Electric arc furnace: Furnace that uses electricity to melt metals *2 VOD: Vacuum oxygen decarburization *3 AOD: Argon oxygen decarburization
*4 5AP: Abbreviation for Nippon Yakin Kogyo's fifth annealing and pickling line *5 HK line: Original name given to Nippon Yakin Kogyo's product polishing line
*6 Combined CAP: Continuous annealing and pickling line for cold rolled strips that is combined with a skin-pass rolling mill and leveling equipment
*7 CTS: Original name given to Nippon Yakin Kogyo's equipment used to adjust the composition and temperature of molten steel in the finishing process

Nippon Yakin Kogyo's Value Creation Process *Results for FY2022

Nippon Yakin Kogyo delivers a variety of products to society based on the technology and experience that it has long accumulated as a manufacturer of stainless steels and high-performance alloys. As companies are more strongly required to fulfill their responsibilities for the creation of a sustainable society, we will work harder to provide even better value through our business activities.



Implementing Sustainability Measures in Search of a Way to Make Our Company Even More Socially Useful

Hisashi Kubota

President and Representative Director



What impacts has Russian's invasion of Ukraine affected the Company's business?

Prices have been rising, including those of nickel, raw materials other than nickel as well as crude oil, LNG and the other energy resources due to the economic sanctions imposed on Russia by other countries. It is inevitable for us that these higher prices lead to an increase in our production costs. However, the geopolitical risk revealed by this crisis has helped us clearly understand the importance of promoting two types of diversification; one is of the raw materials which we procure and the other is in developing products. We have to keep in mind that nickel ore is unevenly distributed around the world, under which circumstances we produce stainless steel products. We have therefore to more efficiently utilize recycled materials generated from so-called "urban mines" in combination with the development of products more easily recycled. I think we need to provide this benefit to society, even if we have to invest a large amount for development.

These "two types of diversification" are indeed what you have been aiming to achieve in your effort to reform the structure of your stainless steel business.

We consume a large amount of electricity to melt raw materials in the electric arc furnaces in our stainless steel process. Kawasaki Plant is therefore ranked relatively high among plants in Kanagawa Prefecture for electricity consumption. Our furnaces used in various processes also consume a substantial amount of energy. We need to save energy along with enhancing energy transition at our plants with which we are able directly to contribute to carbon neutrality. In 2021, Nippon Yakin Kogyo established the Sustainability Strategy Promotion Committee, chaired by the president, and published the first Sustainability Report. We have since been working to reform our business structure, which includes implementing measures to solve social issues involving those related to the SDGs. I am therefore confident of the appropriateness of our past activities and aim to implement more initiatives to create a sustainable society to have our business more socially useful in a systematic manner.

Please outline the specific initiatives implemented by the Company.

We will embrace the challenge of "carbonless nickel smelting" to protect the natural environment around Oheyama Plant, where we smelt nickel ore to produce the raw material of ferronickel alloys. We aim to reduce per unit CO₂ emissions here by 70% relative to FY2014 with this challenge. We are sure to transition from coal to LNG as the energy resource along with the replacement of coal as the reductant of nickel ore with waste plastic to achieve the target. We are also promoting diversification to extend to apply recycled materials. For example, we are developing a technology to extract nickel from several hundred types of recycled materials, including spent batteries from electric vehicles. The recycled materials contain larger amounts of nickel than nickel ore. We therefore need to further develop our technology to separate and extract nickel from such materials without any waste.



What measures are implemented at Kawasaki Plant?

In January 2022, we started to operate a highly efficient electric arc furnace equipped with the latest functions. In May 2023, the revamping of the slitter line for hot strips and the construction of a new slitter line for cold strips will be completed. Moreover, in November 2024, we plan to introduce a highly efficient cold rolling mill (to the Plant). All the equipment is designed for the efficient use of energy, reduction of workload and improvement of the operators' working environment and is indeed friendly to both people and the environment.

Kawasaki Plant is also enhancing collaboration with the local government. In May 2022, Kawasaki City established a public-private council for carbon neutrality in Kawasaki coastal area, in which Nippon Yakin Kogyo is participating as a member. At Kawasaki Plant, new plans are being formulated, including those to foster energy conversion to LNG and to introduce a new combustion system that uses synthesized methane and hydrogen. Going forward, we will contribute to carbon neutrality in cooperation with the local government and other companies.

Please outline your human resource-related measures.

As a matter of fact, we worked to update and enhance our facilities for employees as our first initiative for sustainability. Specifically, we renewed Kawasaki Plant canteen and established a futsal court on the rooftop of the building. Moreover, in July 2022, our new employee housing condominium was completed near Kawasaki Plant. It is composed of 80 units and is so nice that I want to live in one of the units myself. For sustainability-oriented management, I believe it is of utmost importance to provide employees with an environment where they can work comfortably.

Furthermore, in 2022, to improve the transparency of governance, we began to include a skill matrix, or a list showing the capabilities of individual directors, in each of the convocation notices for the annual general meeting of shareholders. Moreover, also in 2022, we appointed a female outside director of the Company for the first time in

our history, aiming to ensure the diversity of the Board of Directors.

In 2025, under the medium-term management plan that will start in 2023, the Company will celebrate the centennial. How would you characterize the plan?

If the period for the plan is set to be three years, we will celebrate the centennial in the final year of the plan in FY2026. Looking beyond 2025, we are aiming to formulate the plan by thinking about what we can do in 2030. We have been upholding the target of reducing the CO₂ emissions by 46% relative to FY2014 in FY2031 and achieving net zero emissions by FY2051. In addition, we have started to think about what kind of company we want Nippon Yakin Kogyo to be by making predictions about 2030 in a creative manner. We are engaging in free-ranging discussions based on the assumption that it will be all right even if we find out later that our predictions are a bit off. We are in search of something that we can do toward 2030, including things that we cannot achieve by the end of the period of the medium-term management plan.

Please share your message for stakeholders.

The stainless steel industry is susceptible to changes in the general economic situation and the performance tends to fluctuate accordingly. The industry has also been affected by a business restructuring trend. I spent a long time working in personnel affairs and have many times faced the need to perform layoffs. In view of these painful experiences, I aim to provide the Company with a more stable management foundation so that it will not be so easily affected by the ups and downs of the broader economy.

Philip Marlowe, the fictional detective created by Raymond Chandler, said: "If I wasn't hard, I wouldn't be alive. If I couldn't ever be gentle, I wouldn't deserve to be alive." I have recently felt that this also applies to corporate entities. In order to make the Company tough as well as gentle, I am determined to make further efforts.

Outline of the Medium-Term Management Plan 2021

We formulated the current medium-term management plan (April 1, 2020 – March 31, 2023) in order to achieve resilient and sustainable growth toward and beyond the centennial of the Company in 2025. To this end, we set the target of continuing to earn trust from our customers

by achieving industry-best quality, delivery and responsiveness* while ensuring safety and security at our producing facilities.

* Responsiveness to meet customers' needs in terms of quantity, quality, cost, delivery date, technology, solutions and others



Basic Strategy under the Medium-Term Management Plan 2021

We uphold the following three items as our basic strategy.

<p>1</p> <p>Respond to customers' needs and contribute to society through the industrial materials business, mainly in the fields of environment & energy and infrastructure</p> <p>Main measures</p> <ul style="list-style-type: none"> Promote sales of high-performance alloys by expanding business in the field of environment & energy Enhance our customer base and earnings base in the stainless steel business Expand the product lineup through the joint venture in China 	<p>2</p> <p>Make strategic capital investment and further improve our technological capabilities to be more competitive</p> <p>Main measures</p> <ul style="list-style-type: none"> Update facilities including with the installation of highly efficient electric arc furnaces and make improvements to reduce manufacturing bottlenecks for higher productivity Enhance and expand our core technologies for high-performance alloys Establish an environment-friendly nickel smelting technology that uses recycled materials 	<p>3</p> <p>Harmony with the environment and society based on a robust and independent business foundation</p> <p>Main measures</p> <ul style="list-style-type: none"> Ensure the diversity of human resources and enhance employee welfare measures Deal with the aging of equipment as a premise for safe and stable operation Make investments to improve the working environment and to save labor and energy, and also make use of AI and IoT Enhance the financial foundation in response to business expansion and environmental changes Build relations of trust with stakeholders Promote consolidated management for the optimization of the entire Group
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Results of Implementing the Measures

Respond to customers' needs and contribute to society through the industrial materials business, mainly in the fields of environment & energy and infrastructure

- Promoted the sale of high-performance alloys**
With regard to the sales promotion strategy for high-performance alloys, demand for the following products is steadily expanding: polycrystalline silicon manufacturing equipment for solar power generation, semiconductor manufacturing equipment, and sheathed heaters and bimetal used in home electrical appliances. Also, demand has been brisk for basic products in the energy-related field.
- Succeeded in manufacturing ultra-wide plates**
By using the wide-strip rolling mill at our joint venture partner in Nanjing Iron and Steel Co.,Ltd., we succeeded in manufacturing ultra-wide (more than 3 m) plates made of the **800T** and **625** highly corrosion- and heat-resistant nickel alloys and are promoting sales of the plates.

Make strategic capital investment and further improve our technological capabilities to be more competitive

- Decided to invest in the expansion of finishing equipment at the cold strip mill shop of Kawasaki Plant (May 2021)**
- Started the operation of a new electric arc furnace, which is highly efficient, energy-saving and environment-friendly (January 2022)**
- Decided to invest in the expansion of the cold rolling mill at the cold strip mill shop of Kawasaki Plant (January 2022)**
- Started to implement measures to meet the challenge of carbonless nickel smelting at Oheyama Plant (March 2022)**
For carbon neutrality and the creation of a recycling-oriented society, Oheyama Plant started to implement measures to meet the challenge of carbonless nickel smelting. To this end, the Plant is fostering reforms for the establishment of a sustainable system for nickel materials. (See page 19.)

Harmony with the environment and society based on a robust and independent business foundation

- Updated the wastewater treatment system at Kawasaki Plant (October 2020)**
- Built a new employee housing condominium in Kawasaki-ku, Kawasaki City (July 2022)**
- Made necessary responses to the revised Corporate Governance Code**
- Implemented measures to deal with environment, social and governance (ESG)-related challenges**
We regard measures for the SDGs and ESG issues as essential measures to increase our corporate value on a medium- to long-term basis, and established the Sustainability Strategy Promotion Committee in August 2021 to foster such measures.

	Results for FY2021	Results for FY2022	Medium-Term Management Plan 2021 Target for the final year (FY2023)
Sales ratio of high-performance alloys	40.5%	41.1%	45%
Operating profit (Consolidated)	6.1 billion yen	14 billion yen	9 billion yen or more
ROE (Consolidated)	7.1%	14.4%	10%
Net D/E ratio (Consolidated)	0.79	0.99	Less than 1.0
Total return ratio (Consolidated)	24.8%	24.9%	Around 25%

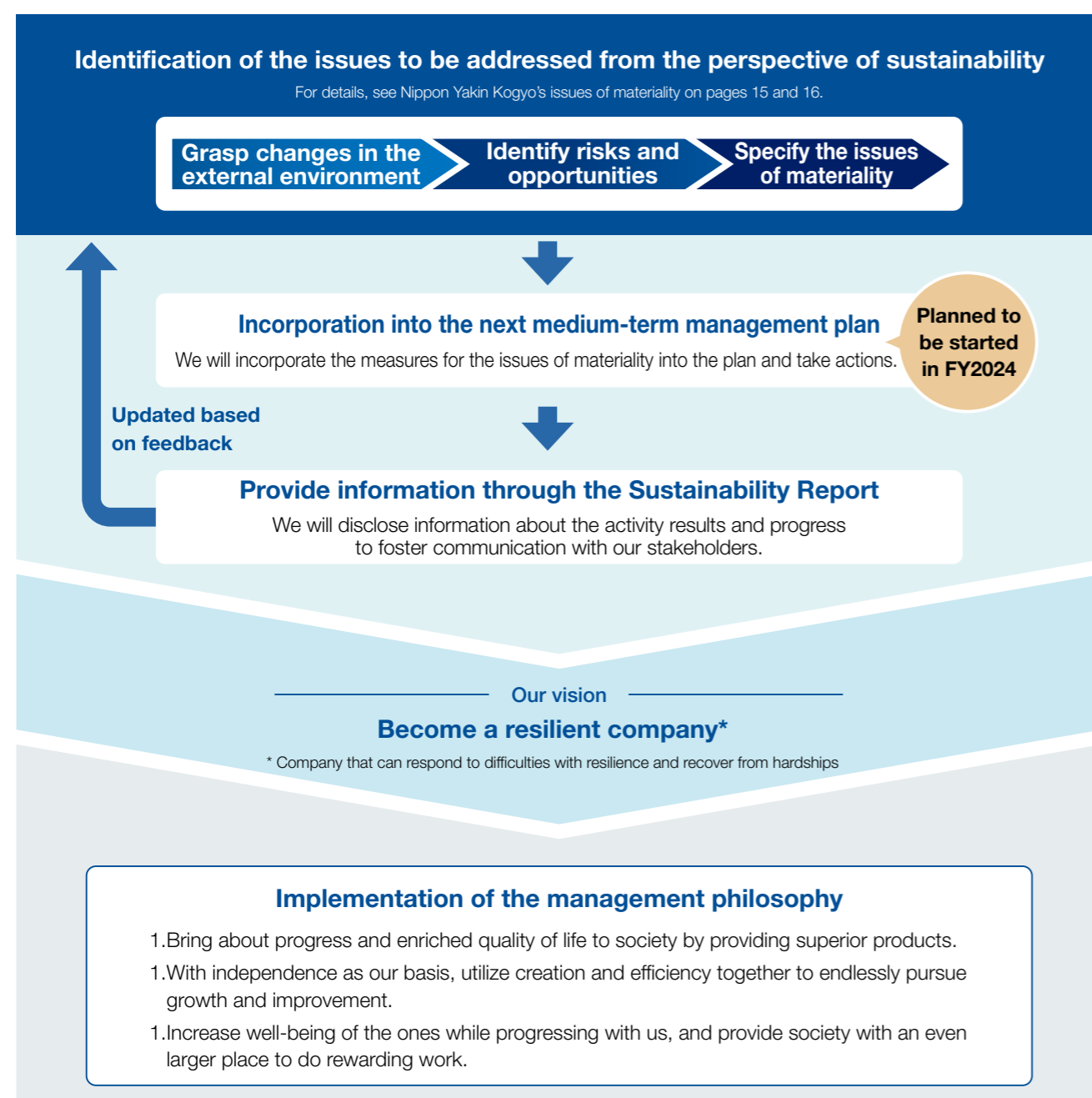
Commitment to Sustainability

Nippon Yakin Kogyo's Management Philosophy and commitment to sustainability

Nippon Yakin Kogyo upholds the vision of becoming a "resilient company" for the creation of a sustainable society. Accordingly, we are implementing measures to increase the sustainability of Nippon Yakin Kogyo Group itself.

Moreover, in response to changes in the external environment, including increased calls for a sustainable society through the achievement of the SDGs and carbon neutrality, we have identified the challenges that we need to embrace as our issues of materiality.

We will incorporate the identified issues of materiality into our next medium-term management plan to make it more effective in helping us respond to changes in the external environment. We will also share information about the activity results and progress as necessary.



Sustainability promotion system

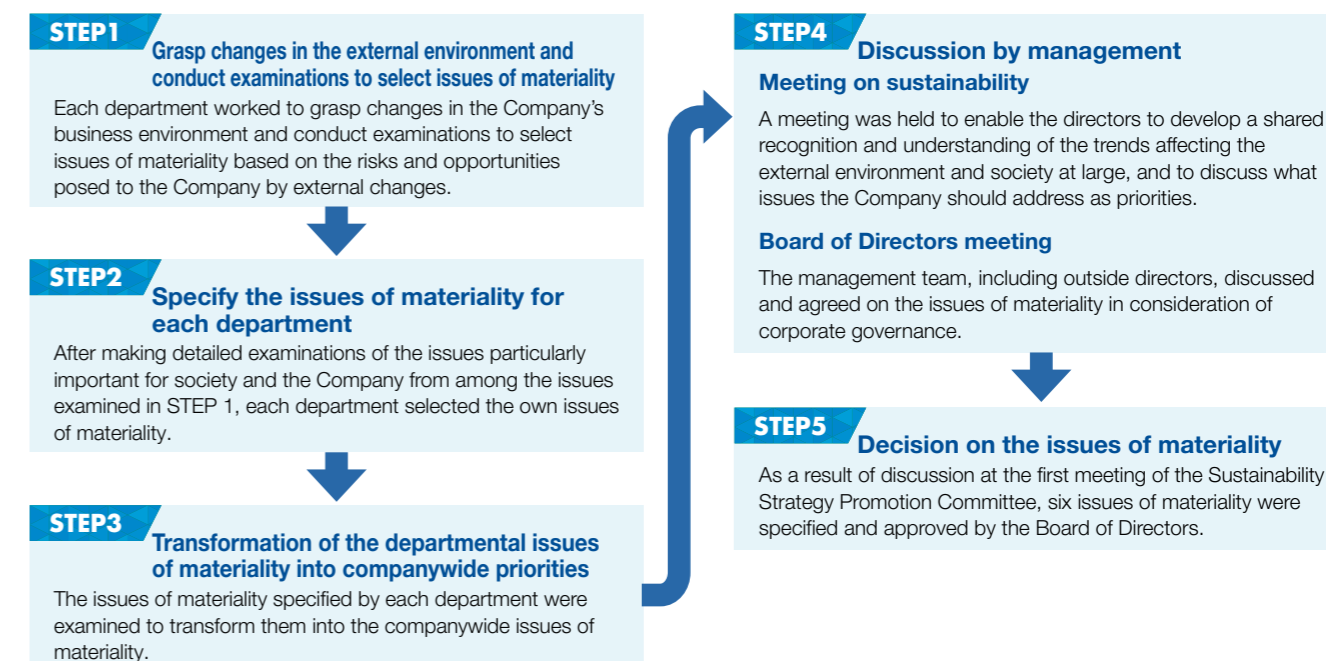
Nippon Yakin Kogyo established the Sustainability Strategy Promotion Committee, chaired by the president, on August 1, 2021, with an eye to addressing the sustainability-related issues of materiality across the board. In FY2022, the committee held a total of six meetings to identify the issues of materiality, implement measures for carbon neutrality and for TCFD recommendations, and to publish the Sustainability Report.

As the top-level organization to lead our sustainability-related measures on a companywide basis, the Sustainability Strategy Promotion Committee is tasked with specifying the Company's sustainability-related issues of materiality, evaluating the relevant activities conducted by the Company and fostering strategies concerning the sustainability-related issues of materiality set by each of the departments and committees.



Process to specify the issues of materiality

The following shows Nippon Yakin Kogyo's process to specify the issues of materiality.



Changes in the External Environment

Global environment	Business environment	Working environment
<ul style="list-style-type: none"> Intensification of natural disasters due to climate change and global warming Social calls for a decarbonized, recycling-oriented society Depletion of natural resources Threat posed by pandemics 	<ul style="list-style-type: none"> Changes in the international political situation and power balance Emergence of protectionism Changes in the global market structure Enhanced resource nationalism Trend of business model reforms due to digital technology-based innovation 	<ul style="list-style-type: none"> Respect for diversity and creation of an inclusive society Decrease in national population and in working population due to the aging of Japanese society and decreasing birth rate



Risks and Opportunities

(◆:Risks ◆:Opportunities)

Global environment	Business environment	Working environment
<ul style="list-style-type: none"> ◆ Decrease in productivity and risk of operational suspension ◆ Increase in cost due to the introduction of carbon pricing and expanded capital investment ◆ Expansion of opportunities for technological innovation and investments toward carbon neutrality ◆ Increase in demand for our products that help solve environmental issues ◆ Effective use of green energy 	<ul style="list-style-type: none"> ◆ Surges in materials cost and difficulty of procuring materials ◆ Expanded volatility of domestic demand due to borderless market ◆ Stagnant domestic demand due to continued low economic growth ◆ Promotion of business reform (DX reform), mainly at manufacturing facilities, by the use of AI and big data ◆ Enhancement of collaboration with business partners ◆ Enhancement of collaboration with local and international communities ◆ Pioneering of a new market 	<ul style="list-style-type: none"> ◆ Labor shortages and difficulty of passing skills on to younger generations ◆ Diversification of human resources and utilization of such resources ◆ Labor saving through digitized operation

Issues of materiality	Main measures and challenges (Being implemented⇒○ To be achieved possibly by FY2031⇒☆ To be achieved possibly by FY2051⇒★)	Activities conducted in FY2022 (including some conducted before and after that year)
1 Provision of socially useful products ▶ P17-18	Build a flexible production system to be able to respond nimbly to changes in the demand structure (○☆) Promote sales in the newly emerging field of environment & energy (Carbon neutrality, renewable energy, etc.) (○☆) Respond to customer needs in an attentive manner (○)	<ul style="list-style-type: none"> ■ Succeeded in manufacturing the 625 highly corrosion-resistant and heat-resistant nickel alloy ultra-wide plates as a product to follow on from the 800T product by using the wide-width rolling equipment possessed by the partner company in the Chinese joint venture ■ Expanded the sales of the Chinese joint venture ■ Sales ratio of high-performance alloys: 41.1% ■ Expanded the sales of the high nickel heat-resistant alloy H38X for use in polycrystalline silicon manufacturing equipment for solar power generation ■ Development of new alloy types: 2 cases
2 Reduction of global environmental impacts through business activities ▶ P19-26	Establish carbonless smelting technology by increasing the use of recycled materials (○☆) Improve operational technology and further reduce per unit energy use (○) Foster fuel conversion for carbon neutrality - Shift from heavy oil to LNG (○☆) - Shift from LNG to hydrogen, ammonia and synthetic methane (★) Use green electricity effectively (☆) Reduce by-products and waste and increase the recycling rate (○☆)	<ul style="list-style-type: none"> ■ Used recycled materials on an experimental basis (continued) ■ Started to implement measures to meet the challenge of carbonless nickel smelting ■ Started the operation of the new electric arc furnace ("E furnace") ■ Promoted a stepwise shift from heavy oil to LNG ■ Kawasaki Plant: Concluded an agreement to provide environmental value by responding to a request for demand response (DR) from an electric power company (for FY2023) ■ Recycling of by-products generated from the manufacturing process: 233,000 tons
3 Achievement of safe and stable manufacturing ▶ P27-29	Make strategic investments on a medium- to long-term basis through the Manufacturing Process Innovation (MPI) project (○) Maintain and improve occupational health and safety standards (○) Make investments for stable operation (○)	<ul style="list-style-type: none"> ■ Installed a highly efficient, energy-saving and environment-friendly leading-edge electric furnace and started the operation ■ Kawasaki Plant: Decided to introduce highly efficient cold rolling equipment and to revamp the existing cold rolling equipment installed at the cold strip mill shop ■ Kawasaki Plant: Decided to revamp the slitter line for hot strips and install a new slitter line for cold strips with an eye to enhancing the finishing equipment at the cold strip mill shop ■ Kawasaki Plant: Revamped the cutting line for hot strips and updated the press equipment at the plate shop to enhance the competitiveness of the plate products ■ Rate of incident victims who took leave (Frequency rate): 0.64% ■ Rate of lost-time accidents (Severity rate): 0.017% ■ Kawasaki Plant: Updated the motor of the hot rough rolling equipment ■ Made the host computer system an open system (continued)
4 Creation of workplaces where all people can work with equality and satisfaction ▶ P30-33	Promote diversity & inclusion (○☆) Improve the working environment with automation and labor-saving measure (○) Enhance employee welfare facilities (○) Make use of advanced technologies for human resource development and the transfer of skills to younger generations (○☆)	<ul style="list-style-type: none"> ■ Employed 15 new employees as candidates for executive positions (including four women) ■ Rate of employment of people with disabilities: 1.9% ■ Improvement of workplaces for female staff ■ Improved working environment by the introduction of a new electric arc furnace ■ Completed the new employee housing condominium (July 2022) ■ Conducted voluntary improvement activities ■ Provided e-learning-based training ■ Provided safety education using VR
5 Establishment of sustainable partnerships ▶ P34-35	Respect human rights across the supply chain (○) Enhance collaboration with business partners (○) Maintain relations of trust with local communities (○) Disclose information to and promote dialogue with stakeholders (○)	<ul style="list-style-type: none"> ■ Regularly checked for the purchase of conflict minerals and other materials of concern as part of human rights due diligence ■ Publicly announced the Declaration of Partnership Building (June 2022) ■ Conducted cleanup activities around Kawasaki and Oheyama Plants ■ Made a donation to the Yuruyaka Koryu relationship building project implemented by Yosano Town in Yosa-gun, Kyoto ■ Held two IR briefing sessions per year ■ Dispatched 22 news releases in Japanese (105% relative to FY2021) ■ Published Sustainability Report 2021 in Japanese
6 Advancement of corporate foundation for adaptation to the social environment ▶ P36-41	Enhance the financial foundation to ensure business continuity and foster business development (○) Continue to implement measures for legal compliance (○) Raise employees' awareness of sustainability-related measures (○☆) Enhance corporate governance to meet market needs (○)	<ul style="list-style-type: none"> ■ Net D/E ratio (Consolidated): 0.99 (Target for the final year of the medium-term management plan: less than 1.0) ■ Informed employees of the internal reporting system and operated it appropriately ⇒ Regular sharing of information through the in-house magazine ■ Distributed copies of Sustainability Report 2021 to all directors and employees of the Group ■ Held an in-house briefing session ■ Disclosed the Board of Directors effectiveness evaluation results and the skill matrix (FY2023) ■ Responded to the revision of the Corporate Governance Code

Issue of Materiality 1: Provision of useful products for society

Nippon Yakin Kogyo Group provides stainless steels and high-performance alloys that are excellent in corrosion and heat resistance, workability and designability. Each of our products demonstrates high performance when used in the environment of intended use. By delivering highly functional products to society, we are creating value in a variety of forms and contributing to the creation of a sustainable society and environment.



Photo provided by Jiangsu Sunpower Heat Exchanger & Pressure Vessel Co., Ltd.

Polycrystalline silicon manufacturing equipment

800H and **H38X** are adopted for chemical reactors used in polycrystalline silicon manufacturing equipment for solar power generation. In particular, **H38X** helps make the reactors thinner due to the superior heat resistance, thereby contributing to the upsizing and higher productivity of the equipment.



Flue gas desulfurization equipment used in thermal power plants

In thermal power plants, flue gas desulfurization equipment is used in a very corrosive environment. **254NM**, **NW276** and **NW22** demonstrate high-level performance in this severe environment.



Hydrogen station

316L is used in the heat exchangers of hydrogen stations, where fuel cell vehicles (FCVs) are refilled with hydrogen. This product is applied in this special environment after being made suitable through the adjustment of the chemical composition. It thus contributes to the establishment of infrastructure for a hydrogen energy-based society.



Photo provided by HONMA CO., LTD.



Photo provided by TANICO CORPORATION



Photo provided by MITSUBISHI ELECTRIC BUILDING SOLUTIONS CORPORATION

Cooking equipment/Elevators

Stainless steels have excellent corrosion resistance, workability and designability and support our lifestyles of comfort and convenience. They are used in household, industrial and commercial kitchen equipment as well as being used as an interior material for elevators, thus contributing to the creation of comfortable living spaces.



Sheathed heaters

The photo on the left shows sheathed heaters, a component used in microwave ovens, electric water heaters and coffeemakers as a heating element. **H840**, **800** and **H880**, which demonstrate superior heat resistance and corrosion resistance, are used as the material to sheath the heaters.

Contributing to the conservation of the global environment

Contributing to comfortable living spaces

Contributing to the creation of an affluent society

Supporting scientific development



The jacket type pier of Haneda Airport's runway D

Being highly rated for their corrosion resistance against seawater, **185N** and **354N** are used for the pillar cover of the pier at Haneda Airport's runway D. Compared with coating the pillars with paint, the use of the maintenance-free alloys helps reduce the runway's life cycle costs. **354N** is developed independently by Nippon Yakin Kogyo.

Panels of water tanks

64 duplex stainless steel is used for tap water storage tanks. Used for the top panels of the tank that are located above the surface of the water stored in the tank, **64** demonstrates excellent corrosion resistance in an environment that is highly corrosive due to the residual presence of chlorine used for sterilization.



Photo provided by MORIMATSU INDUSTRY CO., LTD.



Photo provided by ASAHI KASEI CORPORATION

Caustic soda manufacturing plant

Caustic soda and chlorine, which are widely used as industrial materials, are manufactured by the electrolysis of salt. The photo on the left shows an electrolyzer, for which **Ni201** is used as a cathode material.

ALMA Telescope

The large radio telescope is used in the elucidation of the beginning of the universe, origins of life and mechanisms of the birth of planets. In order to minimize the thermal expansion of the antenna to maintain the precision level, **36** is adopted for the platform that supports the antenna and other components of the telescope as a material to control thermal expansion.



Photo provided by National Astronomical Observatory of Japan

Activities of the R&D department

Nippon Yakin Kogyo Group's R&D department develops new high-performance alloys, which are regarded as a strategic field for our Group, and provides customers with technological support.

Regarding the development of new products, the department conducts activities from the following two perspectives: process development and alloy composition. For the former, we cooperate with customers' design departments to identify their potential needs and expand the manufacturing scope in terms of thickness, width and others to meet those

needs. For the latter, R&D staff focus on improving the properties of corrosion-resistant alloys, heat-resistant alloys and electronic alloys that are widely used in the energy, environment and chemistry fields, in which the significance of these materials will further increase.

In providing technological support to customers, R&D staff are working on the improvement of the basic properties of our products' corrosion resistance and heat resistance and are also expanding the database regarding the hydrogen environment. We are also striving to hone their technologies to solve problems in cooperation with customers, including those for welding and processing.

Issue of Materiality 2: Reduction of global environmental impact through business activities

Nippon Yakin Kogyo Group is proactively working to reduce environmental impacts in the business activities. To this end, we are implementing a range of measures to curb CO₂ emissions, including saving energy and increasing productivity, as well as reducing the use of materials derived from natural resources to foster a shift to a circular economy.

Special feature Taking on the Challenge of Carbonless Nickel Smelting

Nippon Yakin Kogyo has an integrated production process from nickel smelting to the production of stainless steels and high-performance alloys. At Oheyama Plant, we produce ferronickel alloys as the major raw material for stainless steels. This system in combination can save a substantial amount of electricity. Meanwhile, a large amount of CO₂ is emitted due to the use of coal. It has been required for us to alter the various resources used in the process taking into account public demand for carbon neutrality along with the increasing difficulty of procuring nickel ore and coal imported from overseas. Accordingly, we have announced a decision to phase out the conventional nickel smelting process, for which we need imported nickel ore and coal. We embrace the challenge of carbonless nickel smelting based on the use of recycled materials toward FY2031.

1 Our vision

We will take on this challenge to establish a system to ensure the sustainability of nickel materials (specifically by implementing the following two items), thereby increasing our Group's own sustainability, while contributing to carbon neutrality and the building of a resource recycling-based society.

- (1) Support Kawasaki Plant's carbon neutrality measures; Supply nickel resources produced with carbonless technology without exposure to procurement risks, available at affordable price, also contributing to resource recycling.
- (2) Utilize recycled nickel resources including both scrap and internally generated waste containing nickel within our Group.

2 Measures for carbonless nickel smelting

We will achieve carbonless nickel smelting in FY2031, while maintaining our cost competitiveness by implementing the following four measures.

1 Energy conversion

For energy resources, enhance the transition from coal to LNG with renewable fuels

2 Carbon replacement (chemical recycling)

For the reductant of nickel ore, enhance the transition from the use of coal (anthracite) to waste plastic (RPF, etc.)

3 Diversification and extended use of recycled raw materials

Promote a shift from the use of nickel ore to the use of recycled materials through the diversification of recycled materials

4 Reduction of byproducts, waste promoting their effective use

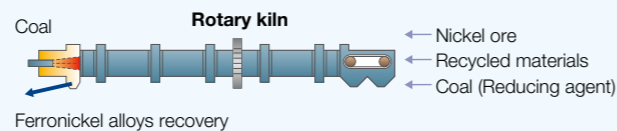
Reuse/reduction of byproducts (NASFINESAND)

3 Reduction of CO₂ emissions

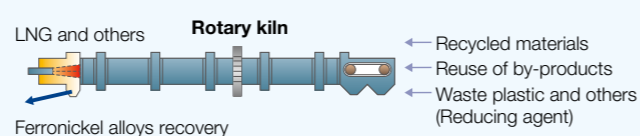
The recycled materials contain a larger amount of nickel. Some contain more than 10 times that found in nickel ore of the same weight. We therefore help reduce the total amount of materials by utilizing recycled materials leading to a decrease in the consumption of energy and reductant. We have been consuming a substantial amount of fuel necessary for the heavy machines in the ore mines with transportation of the thereby mined nickel ore by large marine vessels. Accounting for Scope 3, we focus on reducing CO₂ emissions with the shift from the use of nickel ore to the use of recycled materials. We aim to reduce per unit CO₂ emissions at Oheyama Plant by 70% in FY2031 relative to FY2014. We will also reduce the use of imported ore and coal to establish a sustainable system for nickel materials.

● Illustration of carbonless nickel smelting

<Present status>



<Carbonless nickel smelting>



Rotary kiln at Oheyama Plant

Environmental Management

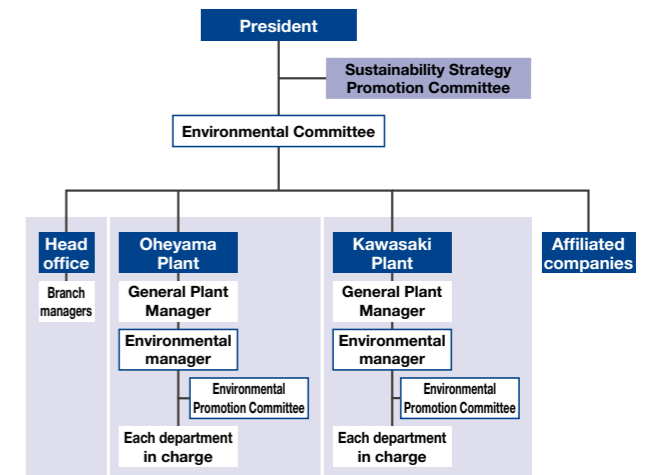
Our approach

We are well aware of the importance of environmental protection. We promote environmentally friendly business complying with environmental treaties, laws, regulations, etc. In addition, we are proactively implementing environmental initiatives, including effective use of resources, saving energy and facilitating green procurement.

Environmental management system

We have the Environmental Committee, chaired by a director appointed by the president to smoothly progress environmental management by Nippon Yakin Kogyo Group. The Committee makes deliberations to report the environmental management plans implemented at our two plants and the issues related to energy conservation. Moreover, the Sustainability Strategy Promotion Committee, chaired by the president, addresses issues related to sustainability promoting measures for these issues across the board. Kawasaki and Oheyama Plants have standardized ISO 14001/JIS Q 14001 environmental management systems, certified in March 1999 and November 2001, respectively.

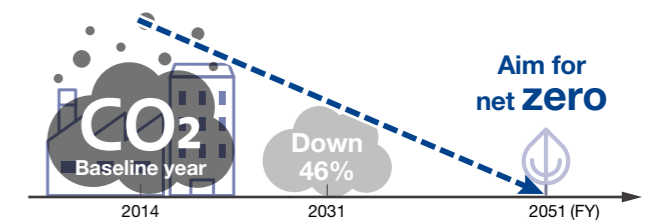
● Nippon Yakin Kogyo's environmental management structure



Environmental policies

We have implemented measures for our plants to achieve the environmental policies and environmental management planned by the environmental strategy promotion committee of the plants. We post the environmental policies of the plants on our official website (only in Japanese). <https://www.nyk.co.jp/about/environment/policy.html>

● Nippon Yakin Kogyo's CO₂ emissions reduction targets (Scopes 1 + 2)



Scope 1: Direct greenhouse gas emissions from the company
Scope 2: Indirect greenhouse gas emissions due to the use of electricity, heat and steam supplied by other companies to the company

Roadmap to carbon neutrality

Nippon Yakin Kogyo formulated a roadmap to achieve carbon neutrality by FY2051. We aim to facilitate the usage of recycled materials at Oheyama Plant to establish a carbonless operation technology targeting Scope 1 emissions. We will strengthen the shift to LNG and other energy along with working on installation of a new synthetic methane/hydrogen combustion system. As for Scope 2 emissions, the new electric arc furnace contributes to energy conservation. We will consider

Climate Change Countermeasures

Our approach

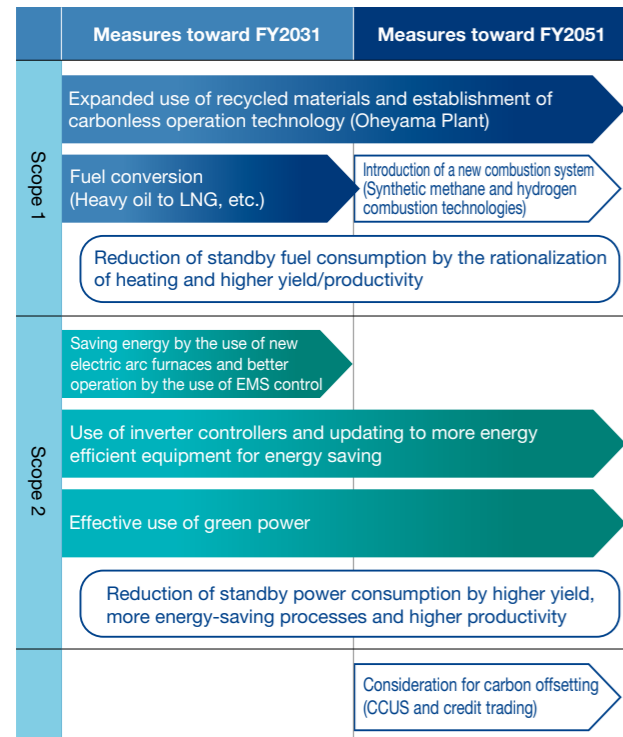
The steel industry is a large emitter of CO₂. As a member of this energy-intensive industry, Nippon Yakin Kogyo is proactively working for carbon neutrality to fulfill the social responsibility.

Our CO₂ emissions reduction targets

We aim to reduce our CO₂ emissions (Scopes 1 + 2) by 46% in FY2031 relative to FY2014 considering the global trend toward decarbonization because of the intensification of natural disasters due to climate change. We also aim at net zero emissions by FY2051 toward the creation of a carbon neutral society.

introducing green power in the near future during the renewal of equipment, one of which is equipping with an inverter controller. We will consider conducting carbon offset activities for CO₂ emissions in order for us to implement all possible countermeasures for energy saving and emissions (from purchased products and services) accounting for 75% of the total.

● Roadmap to carbon neutrality

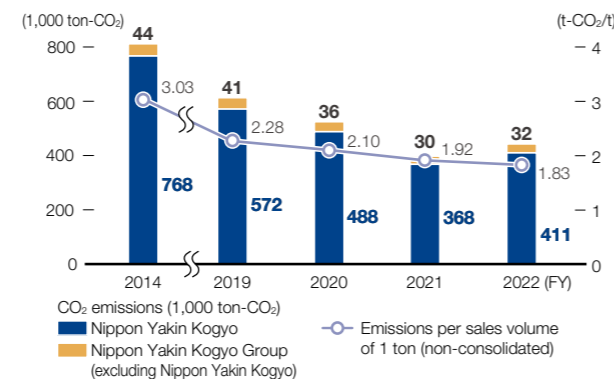


Progress with measures

Nippon Yakin Kogyo has been thoroughly implementing energy-saving countermeasures in all the business activities. We use the devices equipped with inverters and LED lamps at Kawasaki Plant. We also installed an efficiently energy-saving electric arc furnace (“E furnace”) in the plant in December 2021 to start operating the following month. Moreover, we began operating a system responding to demand enabling flexible operation according to changes in the electricity supply-demand balance. In addition, since FY2023, we have been operating an internal carbon pricing (ICP) system on a trial basis to set carbon prices and virtually convert our CO₂ emissions into monetary costs for capital investment to reduce our CO₂ emissions. We announced that we would embrace the challenge of carbonless nickel smelting at Oheyama Plant producing ferronickel alloys as the major raw material for stainless steels. We extended the use of materials recycled from “urban mines” to decrease per unit of fuel to suppress the CO₂ emissions to meet this challenge. (See page 19.) The total amount of CO₂ emissions for FY2022 from Nippon Yakin Kogyo on a

non-consolidated basis came to 411,000 ton-CO₂ including emissions from Kawasaki and Oheyama Plants. The amount of emissions from the entire Nippon Yakin Kogyo Group totaled 443,000 ton-CO₂. It is generally recognized that the amount of CO₂ emissions significantly depends on the amount of production. However, we are aiming at achieving our reduction targets by steadily decreasing per unit emissions by adjusting the production rate. We aim to reduce CO₂ emissions from Nippon Yakin Kogyo Group by 46% in FY2031.

● CO₂ emissions



CO₂ emissions from the entire supply chain

In order to grasp the amount of CO₂ emissions generated across the entire supply chain that supports our business activities, we estimated our Scope 3 emissions based on the basic guidelines (Ver. 2.4) for the estimation of greenhouse gas emissions across the supply chain published by the Ministry of the Environment and the Ministry of Economy, Trade and Industry. As a result, our total Scope 3 emissions were estimated to be 669,000

● CO₂ emissions (Scope 3)

Calculation target: Nippon Yakin Kogyo (non-consolidated)

Category for Scope 3 emissions	CO ₂ emissions (1,000 ton-CO ₂)	Composition
1. Purchased goods and services	502	75%
2. Capital goods	39	6%
3. Fuel- and energy-related activities not included in Scope 1 or Scope 2	38	6%
4. Upstream transportation and distribution	89	13%
5. Waste generated in operations	0.7	0%
6. Business travel	0.1	0%
7. Employee commuting	0.3	0%
Total	669	100%

Scope 3: Indirect emissions other than those included in Scope 1 and Scope 2 emissions (Those emitted by other companies but related to the activities of the company)

Sources for emission factor data: (1) Emission factor database to calculate greenhouse gas emitted by organizations across their supply chains (Ver. 3.2) and (2) Inventory Database for Environmental Analysis (IDEA) Ver. 2 (for the calculation of greenhouse gas emissions across a supply chain)

ton-CO₂, which is about 1.5 times the total amount of our Scope 1 and Scope 2 emissions. By category, Category 1 emissions (from purchased products and services) accounted for 75% of the total.

Risks and opportunities posed by climate change

For the creation of a decarbonized society, each country has announced their respective greenhouse gas emissions reduction targets. We likewise regard the risks and opportunities posed by climate change as an important issue for our own sustainability. Accordingly, we have analyzed the risks and opportunities in line with the recommendations made by the Task Force on Climate-Related Financial Disclosures (TCFD).

The Sustainability Strategy Promotion Committee chaired by the president leads the execution of a plan-do-check-act (PDCA) cycle for the risks and opportunities posed by climate change, fosters relevant measures for the entire company, and reports the details as necessary to the Board of Directors, as shown in the figure showing our sustainability promotion system on page 14.

We analyzed the risks and opportunities based on the “4 degrees Celsius” scenario (“business as usual” scenario) and the “below 2 degrees Celsius” scenario

(promotion of climate change countermeasures and introduction of carbon pricing), as well as the stricter “1.5 degrees Celsius” scenario. We predicted the worldwide situation in 2030 based on each of the scenarios and identified the risks and opportunities, and then divided the identified risks into transition risks and physical risks. For transition risks we referred to the IEA World Energy Outlook for future energy supply and demand and carbon taxes and for physical risks we referred to the hazard maps created by local governments. By using these materials, we quantified the impact of the risks on our business to make impact assessments. Also, each of our departments discussed countermeasures against the risks. The following table shows the results.

Against this backdrop, in September 2022, Nippon Yakin Kogyo announced the support for the TCFD’s recommendations. Going forward, we will conduct more detailed examinations for the scenario analysis and continuously enhance our climate change countermeasures while disclosing the related information to the public.



Scenario analysis results

Scenario	Impact assessment item (Social changes)	Impact assessment*		Risks and opportunities	Countermeasures
		4°C	Below 2°C and 1.5°C		
Transition risk	Introduction of carbon pricing Policies, Laws & regulations, Market	-	Large (Downward)	Increase in the manufacturing cost due to the additional cost caused by carbon pricing	- Capital investment and operational improvement for energy conservation and carbon neutrality - Fuel conversion to hydrogen, ammonia, synthetic methane and biofuels - Development of carbonless nickel smelting technologies
	Shift to a carbon neutrality-oriented society Technologies, Market, Reputation	-	Large (Downward)	- Higher electricity/fuel prices - Higher cost of procuring materials, transportation services, etc.	- Promotion of energy-saving operation (decrease of per unit energy use) - Appropriate product pricing in consideration of the cost
		-	Medium (Downward)	Increase in the amount of capital investment for CO ₂ emissions reduction	- Investment decisions in consideration of the environmental impact reduction effect - Appropriate product pricing in consideration of the investment cost
		-	Medium (Downward)	Shrinkage/elimination of demand in fields with large CO ₂ emissions (Flue gas desulfurizers for low-efficiency coal-fired thermal power plants, boilers and EGR systems)	- Development of environment-friendly products in response to customers’ needs - Sale of solutions to meet new demand for hydrogen, renewable energy sources, electric vehicles (EVs), fuel cell vehicles (FCVs), secondary batteries and CCUS
		-	Large (Upward)	New demand in the environment- and energy-related fields	- Diversified use of recycled materials by the introduction of a new electric arc furnace - Securing of supply sources that offer reasonable prices (Oheyama Plant)
Physical risk	Impact of abnormal weather events on business Acute	Large (Downward)	Medium (Downward)	More frequent and intense natural disasters (heavy rain, strong winds and storm surges) that cause the suspension of production, fragmentation of the supply chain and the suspension of logistic services	- Examination and implementation of natural disaster countermeasures (inspection and enhancement of equipment, BCP measures, etc.) - Shared use of equipment with other companies through outsourced production and others - Effective use of domestic resources and securing of stable sources for logistics, sales and surveys for the establishment and diversification of the supply chain
	Degradation of the working environment due to rise in temperature Chronic	Medium (Downward)	-	Expanded risks of health damage caused by infectious diseases and heatstroke	- Improvement of the working environment and investment to increase labor productivity - Enhancement of BCPs against infectious diseases and heatstroke

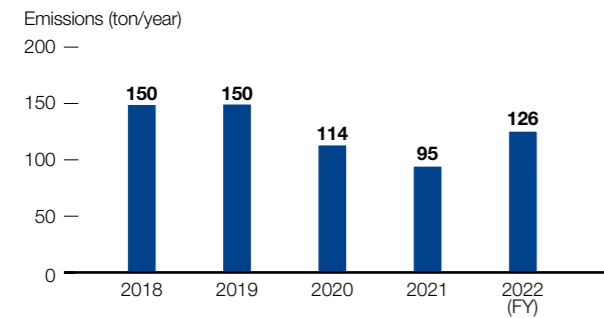
▼: Risks ▲: Opportunities -: No or few impacts

Reduction of Environmental Impact

Preventing air pollution

We regularly monitor the air emissions discharged from our facilities according to the related laws to manage and improve them. We combined a wet-type precipitator and a leading-edge electrostatic precipitator at Oheyama Plant to decrease particulate matter by replacing the previous system equipped in 2021 to comply with the Mine Safety Act along with meeting the regulatory standards determined under Kyoto Prefecture's ordinance for environmental protection. Here, we have applied a burner with low NOx for a furnace since this is a major source of nitrogen oxide emissions. We are also trying to reduce emissions of nitrogen oxides through appropriate combustion control.

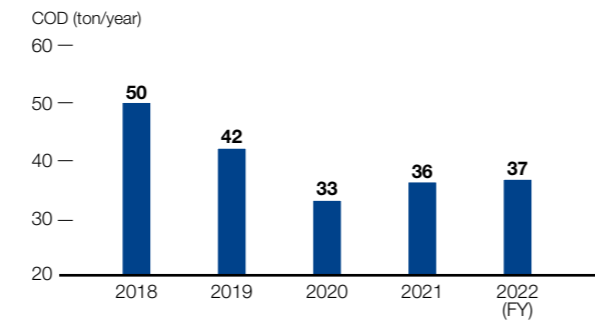
Release of nitrogen oxides into the air by Nippon Yakin Kogyo



Preventing water pollution

We recycle at least 70% of the water in the production process at Oheyama Plant. We release the wastewater out of the plant after cleaning the water so as to meet all the regulatory standards relevant to prevention of water pollution. At Kawasaki Plant, as well, we recycle more than 90% of the water utilized in the production process at the treatment facilities. We further perform regular analysis of the contained hazardous substances with constant monitoring of the contents of water pollutants (nitrogen and phosphorous) and chemical oxygen demand (COD). Thus, we are safely able to release only wastewater meeting regulatory standards from Kawasaki Plant. The measured results of nitrogen, phosphorous and COD included in the target to constantly monitor are automatically sent to Kawasaki City in accordance with the city's guidelines on the maintenance and management of measuring instruments to be followed for the municipal emitting source automatic monitoring system.

COD of water released into the environment by Nippon Yakin Kogyo



Management of chemical substances

We quantify the amounts of pollutants released and transferred into the environment (air and public waters) from our sites according to the pollutant release and transfer register (PRTR) system*. We annually submit a report on the released amount to the national government continuously ensuring the most appropriate control of chemical substances. We stock PCB waste in an appropriate manner coinciding with the plan to complete the management by the deadline indicated by the national government based on the Act on Special Measures concerning Promotion of Proper Treatment of PCB Waste.

Release and transfer of substances regulated under the PRTR system

		(Ton/year)			
		2018	2019	2020	2021
Release	Into the air	1.6	1.4	0.9	1.0
	Into public waters	53	49	41	42
Transfer	To outside the sites	573	245	94	203

* PRTR system: Companies measures the amounts released from their sites into the environment (air, water and soil) and the amounts contained in waste transferred to outside of their premises to report the results to the national government under this system treating the chemical substances potentially harmful to human health and ecosystems. The government calculates the total amounts of release and transfer referring to the reports and relevant estimates to disclose the data to the public.

Electrostatic precipitator installed at Oheyama Plant

An electrostatic precipitator in service since March 2021 was partially replaced at Oheyama Plant. Soot and dust generated from the rotary kilns with high temperature operation are filtered by a cyclone and spray wet-type precipitator. The finer dust and soot are collected by discharged electricity to meet the regulatory standards of release into the air. The revamped equipment can collect more dust, requires less maintenance and is more durable and efficient due to its higher corrosion resistance.



Electrostatic precipitator

Effective use of by-products

We utilize the ferronickel and stainless steel making slag, by-products from Oheyama Plant and Kawasaki Plant, respectively, as substitutes for concrete aggregate in roadbed materials. The effective use of slag also significantly contributes to the conservation of natural resources.

JIS certification for ferronickel alloys slag used as concrete aggregate

NASSAND is the ferronickel slag generated at Oheyama Plant and it is certified as concrete aggregate material under JIS-A-5011 (Slag aggregate for concrete – Part 2: Slag aggregate for ferronickel alloys slag).



NASFINESAND

NASFINESAND is produced from the ferronickel slag generated in the unique nickel ore smelting process at Oheyama Plant. The slag is granulated into fine particles (with diameters of 75μm or smaller) which composes 90% of NASFINESAND. This material can be widely applied for embankment, backfilling, land development, foundation for drainage and the use of heavy machinery. The material produced by our unique method has already been patented and registered with the New Technology

Information System (NETIS) of the Ministry of Land, Infrastructure, Transport and Tourism.



NASFINESAND

Stainless-steel slag: NASFILLER certified under the Low CO₂ Kawasaki Brand and Kawasaki Mechanism Certification Systems

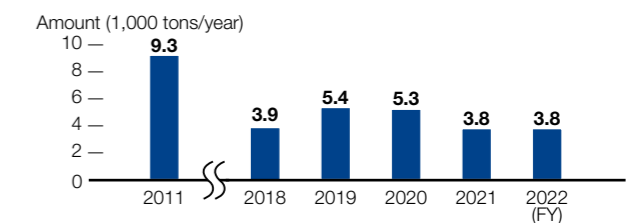
Stainless steel slag generated from Kawasaki Plant, called "NASFILLER," is certified as a product made in Kawasaki, contributing to reduction of CO₂ emissions throughout the life cycle under the Low CO₂ Kawasaki Brand Certification System and the Kawasaki Mechanism Certification System.



Waste generation

Nippon Yakin Kogyo has been suppressing the generation of industrial waste and promoting the recycling of such waste to reduce the final disposal amount. Relative to FY2012, the final disposal amount has been almost halved in recent years.

Final disposal amount of industrial waste generated by Nippon Yakin Kogyo



Building a Recycling-Oriented Society

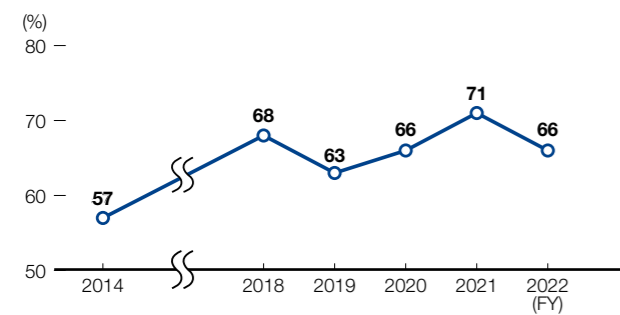
Our approach

The 20th century has been recognized as a period of mass production, mass consumption and mass disposal, all of which are outgrowths of the progress of science and technology. The excessive pursuit of economic growth has resulted in both environmental destruction and climate change as serious negative legacies of humankind. This fact is in obvious contrast to the enriched living standards with allowing diverse cultures to flourish. Stainless steels are 100% recyclable and collectable as end-of-use stainless steel products as scrap for recycling. Our Kawasaki and Oheyama Plants apply the raw materials reclaimed from "urban mines" in the community based on efficient equipment. Thereby we minimize the impact on climate change and the environment while supporting the prosperity of society.

Usage rate of recycled materials

We have to choose recycled materials suitable for the processes of Kawasaki and Oheyama Plants. Therefore, we develop technologies allowing us to more effectively use them to increase the usage ratio of recycled materials. Accordingly, we developed a technology resulting in the nickel amount extracted from recycled materials to be approximately 70% of the net amount of nickel used at Kawasaki Plant. This amount of nickel includes ferronickel alloys supplied by Oheyama Plant. We indeed need to further develop technologies responding to the probable changes depending on the coming eras that may alter the compositions, grades and the shapes of recycled materials. We will definitely carry on developing our technologies to address the probable changes.

● Usage rate of recycled materials (in terms of the net amount of nickel) by Nippon Yakin Kogyo

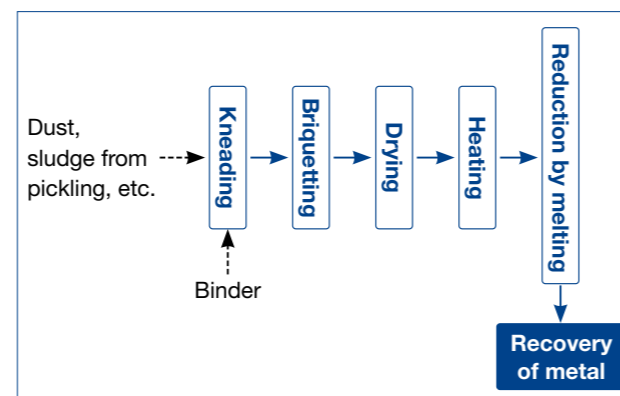


Water recycling

As an important resource we recycle water in our production processes. The recycling rate attained is more than 70% and more than 90% at Oheyama and Kawasaki Plants, respectively. We also reuse the water used to cool the production processes indirectly by storing water again in the cooling tower.

Recycling of sludge and dust

In the stainless steel process, byproducts are generated including dust from the electric arc furnace and sludge from the pickling process of wastewater treatment. NAS TEC CO., LTD., one of our Group companies located inside Kawasaki Plant, mixes the byproducts with water after which they are kneaded into briquettes, which are then dried followed by melting in a submerged arc furnace to extract the valuable metals by separating slag. They contain valuable metals including iron, chromium, nickel, molybdenum and others. The extracted metal is collected and put into the electric arc furnace at Kawasaki Plant as a recycled material to help produce stainless steels. We installed a new briquetting machine in 2012 with equipment to add binder to strengthen the briquette. This investment also contributed to the recovery rate of valuable metals. We applied the subsidy provided by the national government for companies using rare earths for the installation. This equipment allowed us to operate the submerged arc furnace at higher temperatures to increase the recovery ratio.



Briquetting machine

Briquettes made by the machine

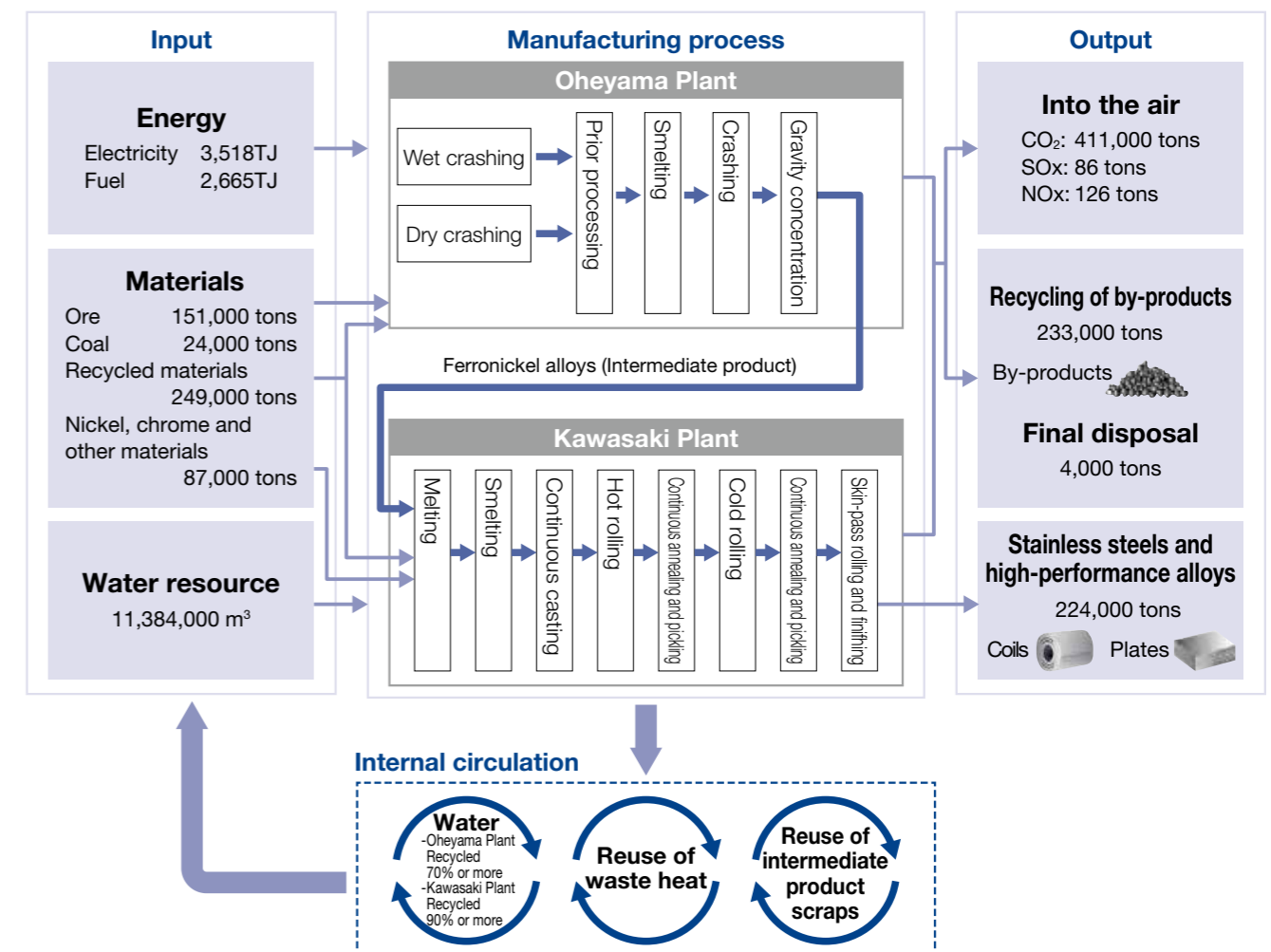
Material Flow

Results for FY2022

We mainly use the recycled materials in our processes effectively adaptable contributing to the creation of a recycling-oriented society. We are proactive in use of materials extracted from stainless steel scrap widely available in society together with materials from so-called "urban mines." We are also making an effort to improve

our technology through capital investment allowing us to offer more value to society. We have developed our own in-house recycling process efficiently using the byproducts generated in our production processes. We are also considering new applications for the byproducts. For example, we are working on the recycling of slag into a roadbed material for sale outside the company.

Material Flow



Issue of Materiality 3: Achievement of safe and stable manufacturing

Nippon Yakin Kogyo Group is committed to continuing the safe and stable production to fulfill the supplier responsibility to customers, while also fulfilling the corporate responsibility to all the stakeholders, including local communities and employees. We are reducing the load imposed on our employees, improving their work efficiency through automation, striving for the elimination of disaster-related risks, and updating our equipment for the prevention of equipment failures. We are thus making improvements in both tangible and intangible ways.

Capital Investment

Example of strategic capital investment

New electric arc furnace (“E furnace”)

Nippon Yakin Kogyo held a ceremony to launch the operation of a new electric arc furnace^{*1} in December 2021 and it has subsequently been in operation on a full scale since January 2022. Significant attention has been paid to electric arc furnaces in the steel industry in the trend toward a decarbonized society. The leading-edge high efficiency electric arc furnace installed in Kawasaki Plant is equipped with a driving system to rotate the furnace body in combination with an electromagnetic stirrer. The furnace is covered by an openable and closeable wall to collect more dust while preventing noise to a significant extent. Moreover, many of the tasks to be conducted prior to operations have been automated to substantially decrease the workload imposed on human operators. In addition, we introduced the furnace body detachment method^{*2} for the replacement of bricks of the furnace. Thereby, this method allows the offline replacement to be made at any time obeying our required schedule and improving the environment for furnace maintenance staff. Full operation of the new highly efficient electric arc furnace will reduce our energy cost and environmental impact toward contributing to the creation of a sustainable society.



Ceremony to launch the operation of the new electric arc furnace



The body of the new electric arc furnace

*1 We call the new electric arc furnace an “E furnace,” which means “Electric arc furnace with high Efficiency, Energy saving and Environmental improvement.”

*2 Furnace body detachment method: In the past, furnace bricks could be replaced only during the regular furnace maintenance period, but now the furnace body itself can be detached to replace the bricks whenever it is necessary.

Plans for new operational improvements

Plan 1: Introduction of a highly efficient cold rolling mill

Nippon Yakin Kogyo, as a part of the strategic investment in Kawasaki Plant, announced it would install a highly efficient cold rolling mill in the cold rolling shop to replace one of existing cold rolling mills in January 2022. The mill will start operation in November 2024, for which the total investment amount will reach around 11 billion yen. We will further replace the two existing cold rolling mills with a leading-edge cold rolling system in response to the expansion of demand for high performance alloys, our strategic products. This investment will solve the shortage of capacity in the cold rolling process resulting from the profile of products becoming thinner, while also remodeling one of the existing cold rolling mills to increase the production capacity. We will acquire sufficient product supply capacity through the investment to meet demand. We are further able to increase our production efficiency and stabilize our product quality. This allows us to establish a production system to promptly respond the diversified needs of customers. The newly installed cold rolling mill will simplify strip inserting along with a reduced problem-recovery time. Moreover, the rolling conditions can be automated owing to equipping with a high-performance automatic shape control function leading to a substantial reduction in workload. We will additionally construct a building for the equipment and upsize the fume collector^{*3} to improve the working environment.

*3 Oily smoke generated in the rolling process

Plan 2: Revamping and new installation of slitter lines

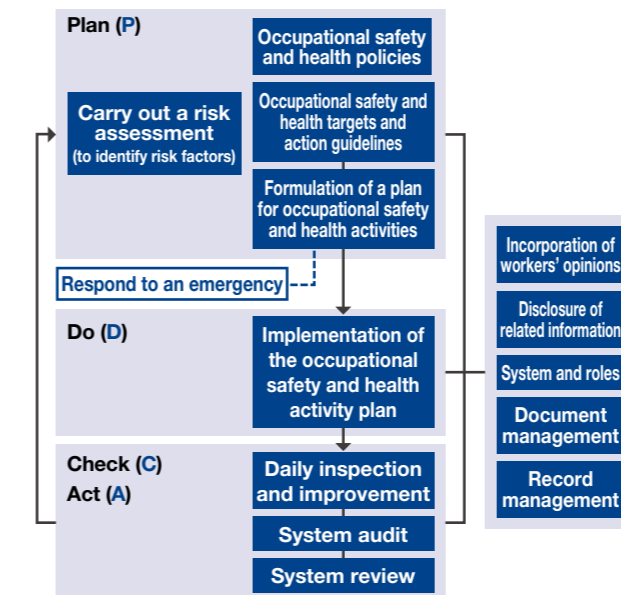
We have decided to revamp the existing slitter line for hot strips by newly installing a slitter line for cold strips to strengthen the finishing equipment of the cold strip mill shop in Kawasaki Plant. We announced the predicted effects in May 2021. The total investment amount for the slitter lines will be around 2.5 billion yen scheduled for completion in May 2023. The capital investment significantly increases our production capacity satisfying the needs for higher precision processing. The production capacity will be expanded by approximately 50% after revamping the existing line. This will mainly increase the efficiency of the preparatory work. Besides, installing a new line will bring the maximum possible automation. Further, we will be able to meet more diverse and advanced customer needs through the introduction of the high precision leading-edge slitter equipment. It is generally known that it takes a long time to learn to be an operator with advanced skills including the positioning of slitters. This investment will surely reduce the workload on the operators with automation.

Occupational Safety and Health

Our approach

A number of occupational safety and health activities are carried out at our production sites in line with the Industrial Safety and Health Act combined the individual rules of the companies. We have introduced an occupational safety and health management system (OSHMS)^{*1} making an effort to take our occupational safety and health to the next stage. The OSHMS is a system to organizationally and systematically comply with the laws and regulations and manage the implementation of voluntary rules. By executing a PDCA cycle as a core element of the OSHMS, we will continue to step up the level of the occupational safety and health. Thereby, we prevent the occurrence of occupational accidents along with providing all employees with safe and healthy workplaces.

Outline of the PDCA cycle



*1 The occupational safety and health management system (OSHMS) is designed to prevent labor accidents, promote workers' health and create comfortable workplaces to raise the level of on-site safety and health by setting and implementing a plan-do-check-act cycle, or PDCA cycle, for the voluntary and continuous management of on-site safety and health. Since January 2009, Kawasaki Plant has been certified as a JISHA-compliant OSHMS-certified business site (certification no.: 09-14-9) based on the guidelines set by the Ministry of Health, Labour and Welfare.

Management system

In line with the Industrial Safety and Health Act, we have an occupational safety and health system in place at both Kawasaki Plant and Oheyama Plant.

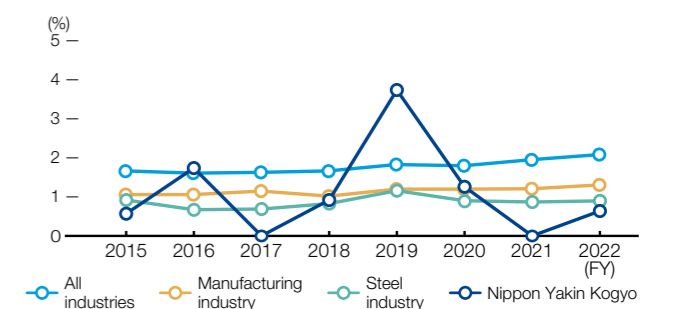
The plant head serves as the occupational safety and health supervisor and appoints an occupational safety and health manager (from among department managers) and an industrial physician, whose roles are defined in our

occupational safety and health management rules. Also, each of the plants has the own occupational safety and health committee composed of the occupational safety and health supervisor, occupational safety and health manager, industrial physician and a representative of the labor union. The committee meets once a month to discuss and monitor legal issues and works to raise employees' awareness of the plant's annual safety and health plan and monthly initiatives.

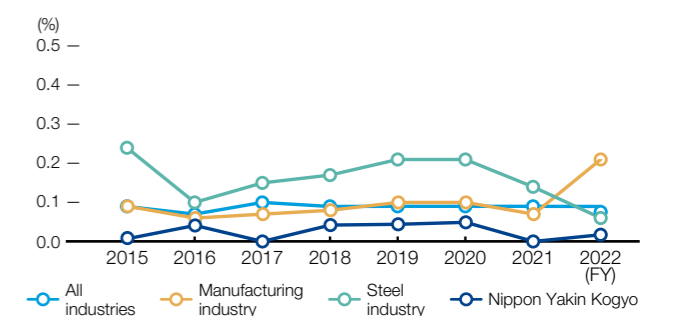
Safety records

The following figures show Nippon Yakin Kogyo's safety record. Compared with other industries and the steel industry overall, our rate of accidents requiring leave (frequency rate) was higher for some fiscal years. However, we have been able to maintain the rate of lost-time accidents (severity rate) at a low level for many years. We have thus been successfully preventing the occurrence of serious accidents but have not yet reduced the number of minor accidents to zero. Zero accidents is a challenge that we should meet. Deeply recognizing the result, we will work to further improve our safety level for zero accidents.

Frequency rate



Severity rate



Quality

Our approach

Nippon Yakin Kogyo produces products that meet customer needs and specifications while complying with related laws, regulations and standards. As a method to manage and increase our product quality, we are committed to establishing, implementing, maintaining and constantly improving our quality management system that meets the requirements determined by JIS Q 9001/ISO 9001 and JIS Q 9100.

Quality policy

Kawasaki Plant is strict with the quality policy and quality assurance activity-related concept decided by General Plant Manager. The policy and concept are communicated across the Plant in a manner helping all on-site workers understand the details. The quality policy is intended to have the following attributes:

1. Be appropriate for the purpose and situation of the Plant and help it to make progress in a strategic manner
2. Provide a framework for the Plant to set the quality targets
3. Include a commitment to meeting the requirements applied to the Plant
4. Also include a commitment to improving the quality management system on a continual basis

Quality improvement initiatives

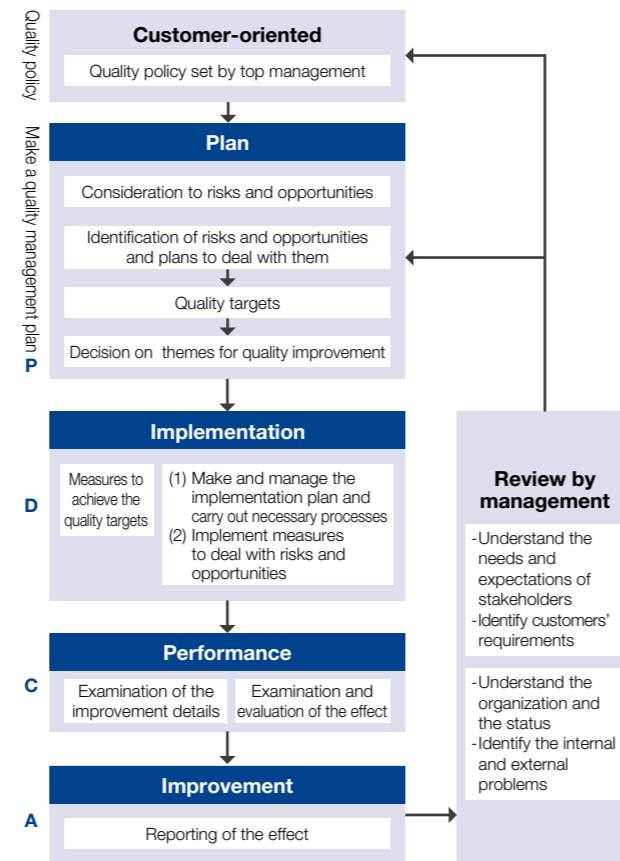
Nippon Yakin Kogyo is executing a PDCA cycle as provided for under JIS Q 9001 for the maintenance and improvement of the product quality. Specifically, we make a plan (P) in consideration of risks and opportunities, do (D) things as planned for the achievement of our quality targets, check (C) the improvements made, and then act (A) by reporting the results for review by the management team.

Quality assurance system

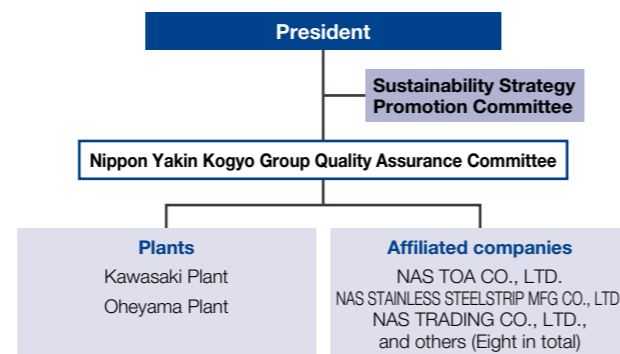
We have the Nippon Yakin Kogyo Group Quality Assurance Committee, chaired by a director appointed by the president to continuously improve the Nippon Yakin Kogyo Group's quality assurance system. This committee is tasked with the following roles:

- Formulate policies on the improvement of the quality assurance system
(For example, introduce an automatic Rockwell hardness testing machine to increase the reliability of test/inspection data by fostering data transmission)
- Carry out audits at Group companies' major manufacturing bases (once a year in principle)
- Organize a meeting of Group companies' employees in charge of quality assurance (once a year)

Measures for risks and opportunities (PDCA cycle executed under the QMS)



Nippon Yakin Kogyo's quality assurance system



Automatic Rockwell hardness testing machine

Issue of Materiality 4: Creation of workplaces where all people can work with equality and satisfaction

"Business and human rights" is globally attracting more attention as an issue related to corporate social responsibility. Nippon Yakin Kogyo Group aims to create workplaces where all people can work with equality and satisfaction by implementing measures to employ and develop diverse people, improving the workplace environment especially at our manufacturing facilities, and enhancing welfare facilities for employees.

Human Rights

Background and our approach

Companies are required to avoid human rights infringements recognizing the fact that they may have direct and/or indirect impacts on human rights through their business activities. Accordingly, Nippon Yakin Kogyo respects and protects the human rights of all the employees based on the code of conduct. We determined the rule to prevent harassment set out to clarify the suitable actions to be taken in the Company. We also established our own internal consulting and reporting system to promptly detect and take corrective action against unfair acts by organizations and individuals within the Group and formulated Nippon Yakin Kogyo Group Helpline Rules. In 2020, Japanese government determined the National Action Plan on Business and Human Rights, since then issues related to human right, including those related to supply chains, have been attracting considerable attention. In response, Nippon Yakin Kogyo aims to create an even better system than mandated by the above government rules to protect human rights based on the recognition of the importance of the issue with ongoing discussions at the meetings of the Sustainability Strategy Promotion Committee.

* For our measures for supply chain-related human rights, please see page 35 ("Issue of Materiality 5: Establishment of sustainable partnerships").

Diversity

Our approach

Nippon Yakin Kogyo upholds a call to "Respect diversity and heterogeneity and demonstrate comprehensive abilities with a spirit of harmony" as one of the action guidelines. According to the results of a survey conducted by the Ministry of Internal Affairs and Communications, Japan's working population has been decreasing since reaching a peak in 2008 and will continue to drop at an accelerating rate. Against this backdrop, women and older people are increasingly expected to join the workforce. Also, in line with the changes of the times, values have become diversified and a range of flexible work arrangements are needed. We believe that the diverse backgrounds and ideas of employees will help us achieve sound growth and are promoting diversity in the workplace accordingly.

Prevention of harassment

Nippon Yakin Kogyo has the own rules to prohibit harassment and all other forms of misconduct, including sexual harassment, abuse of power and harassment of pregnant employees and employees taking maternity, paternity, parental or long-term care leave. Workplace harassment undermines personal dignity and integrity. Such unfair acts, which degrade the workplace environment, should never be permitted. Based on this recognition, we provide employees with education to prevent harassment and, in FY2023, conducted an online harassment prevention training seminar targeting all managers. We also provide employees with contact points to seek advice about harassment, including an internal contact point that they can access by email as well as a readily accessible external contact point. To protect the victims of harassment, we have also set rules to safeguard the privacy of anyone who uses the advisory service and prevent any disadvantageous treatment of them.

Reemployment of post-retirement workers

Nippon Yakin Kogyo operates a system for the reemployment in principle of all retirees who want to keep working so that they can remain with the company until they reach the age of 65. For FY2023, the number of those reemployed was 52, or 5% of the total workforce (as of April 1, 2022).

Employment of people with disabilities

Nippon Yakin Kogyo also fosters the employment of people with disabilities for the creation of a society where all people can make valuable contributions. Kawasaki Plant provides the employees with disabilities with a special office space where they can work in comfort, giving due consideration to their individual characteristics.

Empowerment of women

Nippon Yakin Kogyo is taking on the challenges of proactively employing women and assigning them to diverse workplaces and of providing women with workplaces where they can work with peace of mind. To meet these challenges, we are implementing the following initiatives.

First, we have set the target of increasing the rate of women hired as candidates for executive positions to at least 20% of the total number of candidates in our action

plan made in line with the Act on the Promotion of Female Participation and Career Advancement in the Workplace. Among the 15 such employees who joined the company in April 2022, four are women.

We have a total of 12 female production operators as of April 2022. To help our female operators work in greater comfort, we have introduced electric tools, workbenches and lifters to reduce the physical load imposed on them. We have also installed shower rooms and powder rooms for exclusive use by female employees.



Powder room for exclusive use by female employees

Action plan based on the Act on the Promotion of Female Participation and Career Advancement in the Workplace*

1 Period

April 1, 2022 to March 31, 2025

2 Our challenges

- Proactive employment of women and their assignment to diverse workplaces
- Provision of workplaces where women can work with peace of mind

3 Targets

- Increase the number of women hired as candidates for executive positions to at least 20% of the total
- Consistently maintain the rate of paid holidays taken at 70% or higher

* We disclosed the relevant information on our official website in March 2022. To access this information, please visit the following site (in Japanese only).
https://www.nyk.co.jp/pdf/about/women_plan.pdf

Data on employees for last three years

Basic information

		Men	Women	Total
As of Apr. 1, 2020	No. of employees (persons)	1,043	91	1,180
	Rate (%)	88.4	7.7	-
	Average age (years old)	41.3	41.1	41.3
	Term of service (years)	19.2	19.2	19.2
As of Apr. 1, 2021	No. of employees (persons)	1,082	98	1,180
	Rate (%)	91.7	8.3	-
	Average age (years old)	41.4	40.3	41.3
	Term of service (years)	19.1	18.3	19.0
As of Apr. 1, 2022	No. of employees (persons)	1,077	102	1,179
	Rate (%)	91.3	8.6	-
	Average age (years old)	41.7	40.2	41.6
	Term of service (years)	19.6	18.1	19.4

Turnover rate*

	No. of employees (persons)	No. of those who resigned (persons)	Turnover rate
As of Jan. 1, 2019	1,128	44	3.9%
As of Jan. 1, 2020	1,119	35	3.1%
As of Jan. 1, 2021	1,130	20	1.8%

* The turnover rate was calculated by including retirees (who did not wish to be reemployed and who were transferred to other Group companies) in addition to those who resigned from the company for their own reasons

Rate of employment of people with disabilities

2019	1.89%
2020	2.00%
2021	1.93%

Human Resource Development

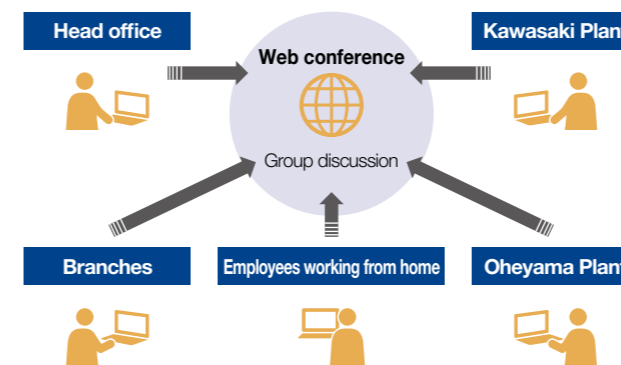
Our approach

In recognition of the structural changes in our business environment, we are promoting human resource development to ensure that Nippon Yakin Kogyo can celebrate the 100th anniversary of the founding in 2025 and continue to achieve resilient and sustainable growth beyond that date.

Provision of collective training through an online conference system

We introduced a remote online communication system to make it possible for employees to receive training, participate in group discussions from their own bases or from home because COVID-19 made it difficult to safely gather people.

Online collective training



Introduction of e-learning

We have a system to help career-track employees develop their abilities. As a part of the system, we provide them with online video training. We have thus improved the environment for learning by providing opportunities to learn on a daily basis without restriction of when and where different from the conventional education style. Under the system, employees can choose for themselves the items they wish to learn depending on their job duties.

Financial support for capacity building

We provide the financial support to take external training to encourage career-track employees, manager candidates and experts in practical operations, to independently acquire additional skills outside of their jobs. This includes correspondence courses and book purchases to boost their management, leadership, and financial skills, accounting knowledge and increasing their IT literacy.

Educational system for production operators

For production operators, we clarify the skills necessary for them to perform their jobs and formulate specific development plans to help them acquire those skills through OJT and OFF-JT. We use an evaluation table to centrally manage their education to help them develop the skills they need.

For new employees, we have a training system called "shop adviser" under which they receive one-on-one education from senior staff members. Through this system, we hope to better motivate new employees while also helping them promptly acquire the necessary skills as they gradually adjust to the workplace.

In our safety education, we make effective use of VR technologies to provide trainees with virtual experiences of work hazards in a safe and immersive manner, thereby preventing accidents and raising their safety awareness.



Hands-on safety training using a VR system

Training provided in FY2022 (Examples)

- Training for new employees and follow-up training for young employees
- Training for personnel evaluators
- Training on how to instruct subordinates and junior staff members
- "Shop adviser" training

Measures for Work-Life Balance

Our approach

We are implementing measures to help employees maintain a work-life balance so that they can perform their duties and achieve job satisfaction while also spending time outside the workplace meeting family responsibilities, participating in their local communities and pursuing personal goals, thereby leading a healthy and fulfilling life.

Major systems and initiatives

Results concerning the major systems and initiatives

System	Results for FY2022
Childcare leave	6 people
Shorter working hours for childcare	10 people
Long-term nursing care leave	1 person
Shorter working hours for long-term nursing care	Not used
Nursing care leave for children	15 people (67.5 days in total)
For encouraging employees to take paid holidays	Rate of paid holidays used: 42%
For the accumulation of paid holidays*	30 people (298 days in total)

* Employees can accumulate paid holidays not taken before the expiration of the two-year period and use them for specific purposes, such as recuperation and volunteer activities.

Workplace vaccination against COVID-19

To prevent the further spread of COVID-19, we started to provide employees who wanted it with vaccination against the disease in July 2021. We offered vaccines to a total of around 2,600 people through the workplace vaccination campaign, including three additional rounds of vaccination at our facilities.

We offered vaccines not only to our own employees but also to their family members who wanted it as well as employees of our partner companies and their families to help prevent the spread.



Workplace vaccination

Mental health measures

To help each employee to keep working in good physical and mental health, we are implementing measures to help them ward off mental illness and detect any issues at an early stage. We conduct a stress check test of employees every fall and annually provide employees in charge of occupational safety and health at each of our workplaces with mental health training.

TOPICS

Construction of a new residential building for employees

In July 2022, our new employee housing condominium (composed of 80 units) was completed in Kawasaki-ku, Kawasaki City. We decided to integrate the two aged residential buildings into one new building and increase the number of units in order to provide employees with housing support. Based on this decision, construction work was started in April 2021.

The name chosen for the condominium was "Cradle Egawa," indicating our intention to provide employees and their families with suitable homes for rest and rejuvenation and for starting their new life.

The new building for employees was constructed as part of our core measures related to society, specifically for the retention of diverse human resources and enhancement of employee facilities. We hope that the green spaces surrounding the condominium will also contribute to the revitalization and beautification of the local community, as will the provision of a community room housed within the condominium for activities of the local residents' association.



Community room ▶



Issue of Materiality 5: Establishment of sustainable partnerships

For corporate sustainability, companies need to understand what their stakeholders expect from them and what they are interested in. To this end, Nippon Yakin Kogyo Group is promoting communication with various stakeholders, including local communities. Through this communication we aim to help them deepen their understanding of the Group and to achieve harmony and co-prosperity with them by listening to their opinions.

Stakeholder Engagement

Communication with local communities: social contribution activities

Nippon Yakin Kogyo, under the leadership of Kawasaki and Oheyama Plants and in cooperation with the related Group companies, communicates with local residents to help them deepen their understanding of the Company and to contribute to the creation of a safe and comfortable living environment and the revitalization of local communities.

Kawasaki Plant

Inari festival

The Plant has an Inari shrine on the premises where we hold a festival every year on November 3. We invite local residents to attend the festival, at which we pray for the safe operation of the Plant and for the safety of the local area and also dedicate a dance to the god of the shrine.



Summer festival

Together with the labor union, Nippon Yakin Kogyo annually holds a summer festival to reward employees for their efforts and to promote exchange with the local residents' associations and others related to the company. (However, in FY2022 we canceled the event due to COVID-19.)



Clean-up activity on a public road

Employees of Kawasaki Plant conduct a clean-up activity on the public road in front of the Plant (the Itsukushima Bridge [overpass] and Tonomachi Yakosen) twice a month.



Oheyama Plant

Donation made to Yosano Town through the regional revitalization support tax system

Through the regional revitalization support tax system (hometown tax system for companies), in November 2021, we donated 10 million yen to the regional revitalization project implemented by Yosano Town, Kyoto Prefecture, where Oheyama Plant is located. Specifically, the donation was made for the construction of a storage shed to protect the old Kaya Railway cars under the town's cultural asset protection and utilization project. (The shed was completed in April 2022.)

In the shed, three steam locomotive cars, which had been displayed in Kaya SL Square (operated by Miyazu Kairiku Unyu Co., Ltd., an affiliate of Nippon Yakin Kogyo, and closed in March 2020) were stored and exhibited. The three cars were transferred gratis from MIYAZU KAIRIKU UNYU CO., LTD., to Yosano Town, and one of the cars is designated by the national government to be an important cultural asset.

We will continue to contribute to the protection and passing on of local culture and tradition while working to foster harmony with the environment and society.



Clean-up activity for the Amanohashidate sandbar

A total of 20 employees, including the head of the Plant, participate in the activity to clean up the Amanohashidate sandbar, which is regarded as one of Japan's three most scenic views, every spring and fall for the beautification and protection of the scenic beauty.



Communication with shareholders and investors

Nippon Yakin Kogyo aims to further increase the corporate value, for which we promote information disclosure to shareholders and investors in an appropriate manner and as necessary through year-end reports, reports published after the end of the second quarter of each fiscal year, and other documents. We also hold briefing sessions attended by the president twice a year for institutional investors to provide explanations about our financial results and management plans.

In 2019, as a new initiative, we invited individual shareholders to take a tour of Kawasaki Plant. We subsequently suspended this initiative due to COVID-19 but are hoping to resume it sometime in the future when conditions allow.



Procurement

Our approach

For responsible mineral procurement, a range of guidelines have been set across the globe including the Dodd-Frank Wall Street Reform and Consumer Protection Act of the United States, the OECD Due Diligence Guidance and the EU Conflict Minerals Regulation. Moreover, the types of minerals included in the target are increasing.

In addition, the risk coverage has been expanded to include all human rights violations, and the geographic area covered has been expanded to include “high-risk areas (CAHRAs).”

Most recently, sanctions have also been expanded following Russia’s invasion of Ukraine and stakeholders are promoting due diligence across the supply chain.

Nippon Yakin Kogyo is working to avoid the risk of any involvement in human rights abuses or armed conflict by monitoring industry trends and enhancing information sharing and cooperation between related departments for the detailed examination of the supply chain.

Communication with customers

As we are required to supply products that meet the needs of our customers, we aim to continuously earn their trust by providing the industry’s top-level products and services in terms of quality, due dates, cost, and technologies and solutions in order to be a sustainable company.

Our products have a significant effect on the quality and performance of the final products made by customers. Accordingly, it is essential for us to communicate appropriately with our customers at the consulting stage, before we receive orders from them, and subsequently, including at the manufacturing, delivery and follow-up stages. While responding to changes in the market environment including the trends for globalization and carbon neutrality, we are sincerely working to meet our customers’ requests from a long-term viewpoint.

For the provision of solutions, we are fostering communication with customers mainly through the Material Solutions Sales Department. We offer advice on product selection based on sample testing and property confirmation, guidance on processing and welding methods, and proposals that utilize our database and technical knowledge. Moreover, we closely cooperate with our customers for product improvements and the development of new products, thereby building even stronger relationships with them.

Management of conflict minerals

We have established the Conflict Minerals Management Rules (hereinafter, “the Rules”) for the management of so-called Conflict Minerals (i.e., gold, tin, tantalum, tungsten, and other minerals themselves, or alloying materials containing such minerals).

We obtain the CRT (Cobalt Reporting Template) and CMRT (Conflict Minerals Reporting Template) from raw material suppliers via trading companies, and otherwise collect and confirm information on conflict minerals.

We also incorporate into our rules and regulations inquiries about raw materials and other supply chain issues related to countries and regions of human rights concern, such as the Xinjiang Uyghur Autonomous Region.

At Nippon Yakin Kogyo, the Export Trade Control Committee deals with issues related to conflict minerals. The Export Trade Control Committee checks the Company’s responses to conflict minerals, which are also examined through internal auditing, and reports the details of its activities at the Management Meeting.

Issue of Materiality 6: Advancement of corporate foundation for adaptation to the social environment

It is essential to create a system to help leaders make managerial decisions in a prompt and appropriate manner, while monitoring them and providing them with appropriate advice for a company to achieve sustainable growth while increasing the corporate value continuously on a medium- to long-term basis. Based on this recognition, Nippon Yakin Kogyo is striving to advance the corporate foundation under an even better governance system. Hereby, the system can progress business smoothly by meeting the changing requests and expectations of the public based on the background of the continuously changing social environment.

Corporate Governance

Our approach

Our management philosophy states our commitment to “Bring about progress and enriched quality of life to society by providing superior products.” We are working to do this in our business activities to meet the expectations and trust of all our stakeholders including shareholders and business partners and thereby increasing our corporate value. For our sustainable corporate growth and the medium- to long-term increase of our corporate value, we need to pursue effective corporate governance. To ensure the soundness of our business management and further increase our credibility as a company, we are striving to enhance our corporate governance as one of our priorities, for which we are disclosing our management information in a timely and appropriate manner while ensuring compliance.

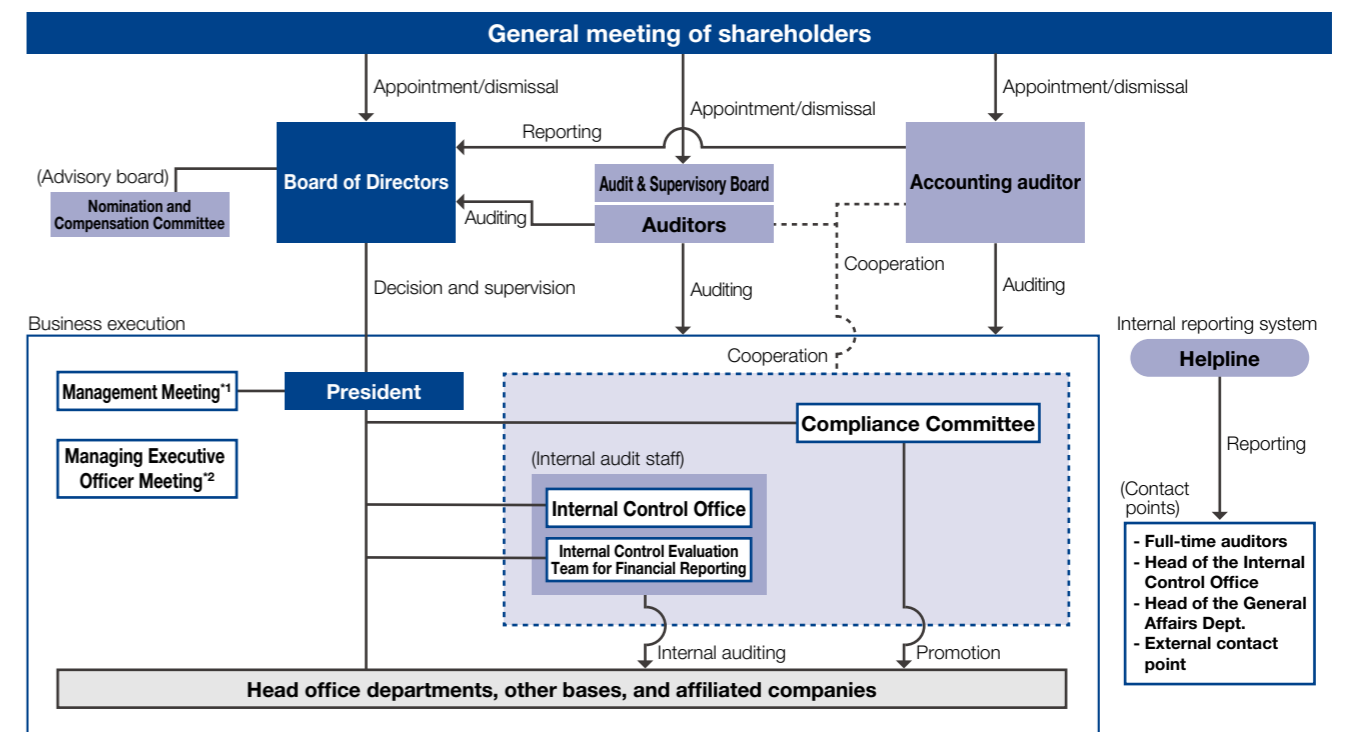
Corporate governance system

For our Board of Directors to wholly fulfill the management supervisory role and respond promptly to changes in the management environment, the number of directors is set at nine. Moreover, in order to ensure the transparency and objectivity of our business management by incorporating the viewpoints of third parties in decisions made by the Board, we have been appointing outside directors since June 2013, and presently have four outside directors.

Nippon Yakin Kogyo has introduced the executive officer system to increase the efficiency and speed of business execution while clarifying the related responsibilities and roles. We presently have 15 executive officers.

Furthermore, as an optional advisory organization for the Board of Directors, we have the Nomination and Compensation Committee, which is chaired by the president and composed of four members who serve as outside directors of the Company. This committee deliberates the following issues in a fair and transparent manner and reports to the Board as appropriate: important issues related to the appointment and compensation of directors and officers including those related to the nomination of candidates for director and auditor positions; dismissal of directors; appointment and dismissal of executive officers; and compensation paid to directors and executive officers.

Nippon Yakin Kogyo also appoints auditors to ensure the appropriate auditing of the directors’ fulfillment of their duties. Presently, our Audit & Supervisory Board is composed of four members (two full-time auditors and two outside auditors). Auditors attend the important meetings such as the Board of Directors and check important final decisions to audit the execution of duties by the directors. We also have the Internal Control Office under the direct control of the president, which carries out internal audits on the execution of business by the entire Group.



*1 Management Meeting: Held weekly in principle with the participation of the directors and full-time auditors

*2 Managing Executive Officer Meeting: Held with the participation of directors who also serve as executive officers. Members of the Audit & Supervisory Board examine the meeting materials and participate as necessary or receive explanations from the related departments.

Compliance

Our approach

We established the Compliance Committee to make sure that all directors, officers and employees are aware of corporate ethics and the importance of complying with laws and regulations. The Committee deliberates compliance-related policies and monitors compliance with the policies in cooperation with the related departments. We have also posted our declaration on compliance on our official website to inform the public of our commitment to continuously enhancing our compliance awareness.

For our declaration on compliance, please visit the following website (only in Japanese):
<https://www.nyk.co.jp/about/governance/compliance/compliance.html>

Internal control

We set out our code of conduct to show the items to be complied with by all of our directors, officers and employees in our effort to conduct our corporate activities appropriately by complying with laws and regulations both in Japan and abroad and respecting social norms. Also, through the Compliance Committee headed by one of our full-time directors, we have established a system to prevent legal noncompliance or any acts that might lead to noncompliance.

For our action guidelines and code of conduct, please refer to the following website (only in Japanese):
<https://www.nyk.co.jp/about/governance/compliance/principles.html>

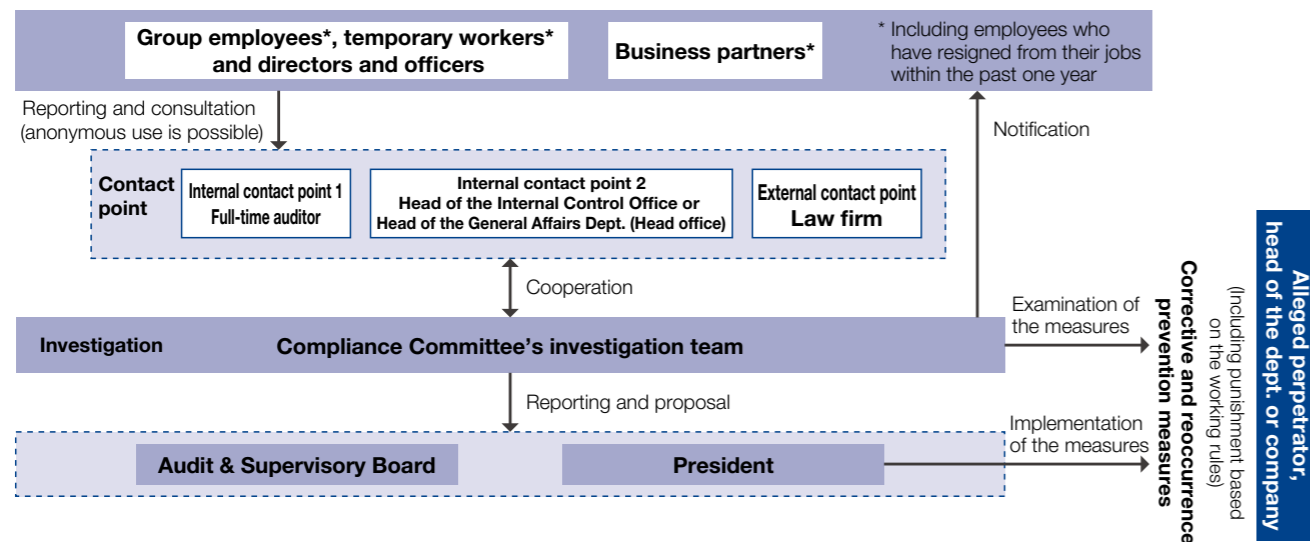
Compliance activities

Through the Compliance Committee, the members, who are departmental heads, share information about the annual compliance education plans and how they are implemented as well as compliance-related cases and measures across the Group. The secretariat of the Committee supports the activities by providing information to the members and employees through the intranet and by giving them cautions and helping them increase their compliance awareness.

Internal reporting system (Helpline)

Nippon Yakin Kogyo Group has established rules regarding the internal reporting system (“Nippon Yakin Kogyo Group Helpline Rules”). For the business activities of Group companies, employees can seek advice from and make reports to the contact points set by Nippon Yakin Kogyo upon detecting any acts that constitute or may constitute a violation of laws, regulations or the Company’s code of conduct. We have several cases of reports being made/advice being sought each year, and to make it function more effectively we are continuously raising awareness of the importance of making internal reports and whistleblower protection through our in-house magazine and others.

Internal reporting system: Nippon Yakin Kogyo Group Helpline



Risk Management

Our approach

Nippon Yakin Kogyo Group defines risks as factors that could hinder Group companies from implementing their basic management policies (management philosophy, action guidelines and code of conduct) and management plans (business policies, medium-term management plans and budgets). We are working to ensure the corporate soundness and sustainability of the Group by precisely understanding the risks posed to our business management, establishing a system to appropriately manage the risks, and implementing the system in an effective manner.

Management system

Accordingly, Nippon Yakin Kogyo Group has set out Nippon Yakin Kogyo Group Risk Management Rules. The Company’s president serves as the risk management supervisor, and the director in charge of each department, chairpersons of the permanent committees, and the departmental managers in charge serve as risk managers. Under their leadership, we implement the following risk management process: (1) Identify risks; (2) Analyze and evaluate the risks and decide on countermeasures; and (3) Formulate and carry out plans to implement the measures. As for specific risk management activities, we discussed at the Management Meeting, Sustainability Strategy Promotion Committee and others for the promotion of these activities as regular activities. In addition, according to the types of risks, the permanent committees, such as the Compliance, Environmental, Quality Assurance and Export Trade Control Committees conduct activities to deal with the relevant risks. We also monitor each Group department to check their risk awareness and responses, and review the monitoring results under the leadership of the heads of the administrative departments to conduct group-wide working group activities.

Emergency response system

We are working to minimize the risks posed to us through risk management. However, we are still subject to certain inherent and residual risks, and in the event that any such risks or other unexpected risks do materialize, we will implement our emergency response system as planned in preparation against such risks. We are thus appropriately managing risks by formulating a plan to collect and communicate information, launch an emergency response organization, and set emergency response measures in case of an emergency.

Information security

We have various information security-related rules, including the Information Security Policy, Information Security Implementation Criteria, Confidential Information Management Rules and Information Systems Security Management Rules. These rules have been established with a view to protecting the safety of the information that we own as well as the information systems that we use, while also ensuring the protection and appropriate management of our internal information, including personal information. We have thus clarified our rules on information security management, including our policies on information security management measures, protection of our trade secrets, ensuring of data confidentiality, completeness and availability, and the prohibition of insider trading. Moreover, we are working to implement the rules in an effective manner.

The Information Security Implementation Criteria include policies on the information security management system and punishments for noncompliance. We take inventory of our information assets and carry out a risk assessment of the assets once every year to identify the related risks and their magnitude and assess the level of vulnerability to incidents as well as the possible frequency of incidents. Based on the risk assessment results, we update the list of information security risks that we will manage and eliminate through spending up to the amount available for each risk. We also educate relevant personnel about the management of information security based on the risk assessment results, the updated list and the result of implementing the measures. The secretariat annually reports on the maintenance and management of information security, the updated list and security-related incidents and problems at the Management Meeting.

Management of intellectual property

Nippon Yakin Kogyo has acquired around 140 patents in Japan to maintain the technological superiority in high-performance alloys, and we also have a range of patent rights outside Japan, including in China.

List of Directors

Directors

President and Representative Director
Hisashi Kubota

Board of Directors meeting participation rate: 100% (16/16 times)

1 2 4



Representative Director and Senior Managing Executive Officer
Shingo Kobayashi

In charge of the General Affairs, Human Resources and Accounting Departments

Board of Directors meeting participation rate: 100% (16/16 times)

1 4 6



Director and Managing Executive Officer
Shigemi Urata

In charge of the Corporate Marketing Division (Sales Planning Dept., Material Solutions Sales Dept.), six branches engaging in sales activities, the Overseas Sales Department, and overseas subsidiaries

Board of Directors meeting participation rate: - (Newly appointed)

1 2 5 6



Director and Managing Executive Officer
Hiroshi Toyoda

In charge of the Corporate Planning, Legal and Public Relations, and IT Systems Department

Board of Directors meeting participation rate: - (Newly appointed)

1 4 5 6



Director and Managing Executive Officer
Hisashi Yamada

General Plant Manager of Kawasaki Plant

Board of Directors meeting participation rate: - (Newly appointed)

1 3 6



Audit & Supervisory Board members

Full-time auditor
Yasuhiro Kiuchi

Board of Directors meeting participation rate: 100% (16/16 times)
Audit & Supervisory Board meeting participation rate: 100% (18/18 times)

1 2 4 5 6



Full-time auditor
Yasuhiro Kobayashi

Board of Directors meeting participation rate: 100% (16/16 times)
Audit & Supervisory Board meeting participation rate: 100% (18/18 times)

1 4 6



Outside auditor
Yasuji Kawabata

Board of Directors meeting participation rate: 100% (16/16 times)
Audit & Supervisory Board meeting participation rate: 100% (18/18 times)

1 2



Outside auditor
Tetsuo Hoshiya

Outside director,
Yakiniku Sakai Holdings Inc.

Board of Directors meeting participation rate: 100% (13/13 times)
Audit & Supervisory Board meeting participation rate: 100% (11/11 times)

1 4 5



Outside directors

Outside director
Takashi Michibayashi

Board of Directors meeting participation rate: 100% (16/16 times)

1 4 5



Outside director
Kenji Tani

Outside director,
Daiki Aluminium Industry Co., Ltd.

Board of Directors meeting participation rate: 100% (13/13 times)

1 2 5



Outside director
Taizo Suga

Board of Directors meeting participation rate: 100% (13/13 times)

1 4 5



Outside director
Naomi Eto

Outside director, Morinaga & Co., Ltd.
Outside director,
The Nisshin OilliO Group, Ltd.

Board of Directors meeting participation rate: - (Newly appointed)

1 4 6



About the skill icons

Nippon Yakin Kogyo categorizes the skills required of the directors into those for 1 corporate management; 2 sales (in and outside Japan) and marketing; 3 manufacturing, equipment and R&D; 4 financial, accounting and personnel affairs; 5 global issues; and 6 IT and risk management. The skills possessed by each of the Board of Directors members are shown by using the icons indicated on the right.

- | | |
|---|--|
| 1 Corporate management | 4 Financial, accounting and personnel affairs |
| 2 Sales (in and outside Japan) and marketing | 5 Global issues |
| 3 Manufacturing, equipment and R&D | 6 IT and risk management |

Message from one of the new directors

I have worked for 2 companies that have completely different features for a total of more than 40 years, specifically, a leading manufacturer that was founded in Japan before the war and a relatively new company operating in the restaurant industry. During those years, tasked with issues related to PR, the environment and shareholders, I served as a point of contact between the companies and society.

Over this period, I have examined the companies from the viewpoint of society at large and hope to draw on my experience to contribute to the advancement of Nippon Yakin Kogyo's sustainability-oriented management and the development of the business through sustainability management.

Nippon Yakin Kogyo has already implemented a range of initiatives that contribute to the solution of social issues, including the use of recycled materials at a high rate and supporting environment- and energy-related projects through the supply of high-performance alloys. For a company

operating in an energy-intensive industry, carbon neutrality poses a great challenge. However, the Company has already been steadily implementing measures for this, including starting the operation of a highly efficient electric arc furnace at Kawasaki Plant this year.

On the other hand, it is also essential for the Company to ensure the diversity of the personnel so that it can respond to changes that are underway in our society. Also, the first priority should always be given to appropriately ensuring quality and the safety of all people related to the business operations.

Going forward, from the viewpoint of society at large, I hope to monitor whether or not Nippon Yakin Kogyo is implementing necessary measures in an even more proactive manner and is making adequate efforts to raise the public's awareness of the measures, and to then express my opinions frankly to the Company.

Outside Director **Naomi Eto**

The Board of Directors and the Audit & Supervisory Board

Evaluation of the Board of Directors' effectiveness

Nippon Yakin Kogyo deems it essential to ensure the effectiveness of the corporate governance for the sustainable growth and to increase the corporate value on a medium- to long-term basis. To this end, we have been evaluating the effectiveness of the Board of Directors since FY2017 by checking the results of and progress with our corporate governance measures and identifying related problems.

For the evaluation, we send a questionnaire survey to each member of the Board of Directors and of the Audit & Supervisory Board, asking them to perform a self-evaluation by answering the questions. Then, under the leadership of outside directors, the answers are analyzed, evaluated and discussed by the Board of Directors. Regarding the evaluation results for FY2022, high marks were given for the Company's prompt implementation of measures for sustainability. Specifically, the Sustainability Strategy Promotion Committee was founded to deal with environment, social and governance (ESG) issues, the Board of Directors discussed and decided on the issues of materiality for the Company based on the risks and opportunities identified in consideration of the environmental issues, and the Company published the Sustainability Report 2021. In consideration of the details of other answers, it was concluded that the effectiveness of the Board of Directors was well maintained.

Going forward, the Board of Directors will formulate and implement measures to deal with the issues identified and shared through the evaluation process. In FY2023, we will continue to discuss and promote measures for sustainability-related issues of materiality based on the recognition that our stakeholders are expecting us to continuously make proactive responses to ESG issues. We will also examine how to improve the Board of Directors effectiveness evaluation framework and the evaluation method.

For details of the evaluation results about the effectiveness of Nippon Yakin Kogyo's Board of Directors, please refer to the following website (only in Japanese).

<https://www.nyk.co.jp/about/governance/board.html>

Total amount of compensation paid in FY2022

Category	No. of targeted persons (persons)	Total payment amount (millions of yen)	Total payment amount by category (millions of yen)		
			Basic salary	Performance-linked compensation (bonus)	Non-monetary compensation (restricted stock units)
Directors (Outside directors)	8 (4)	230 (20)	137 (20)	81 (-)	12 (-)
Auditors (Outside auditors)	5 (3)	38 (12)	38 (12)	- (-)	- (-)

Notes 1. The total payment amount includes the payments made to one director and one auditor who resigned during the fiscal year.

2. As performance-linked compensation, the Company pays a bonus to directors excluding outside directors. For the calculation of the amount to be paid, the consolidated operating profit is referred to as it is one of the targets listed in the medium-term management plan. In addition, the total amount of dividends paid to shareholders and others is taken into consideration in deciding whether or not to pay a bonus to directors and in determining the total payment amount. For the fiscal year, consolidated operating profit totaled 13,966 million yen.

3. As non-monetary compensation, the Company distributes restricted stock units (RSUs) to directors excluding outside directors.

Compensation system

The compensation paid to our directors is composed of (1) basic salary; (2) stocks of the Company; and (3) bonuses for directors/officers. However, to ensure their independence from management as well as their objectivity, outside directors and Audit & Supervisory Board members are paid only a basic salary.

For the first component of compensation, basic salary, the amount is set by job rank and is paid at a fixed amount in cash on a monthly basis. For the second component, as a medium- to long-term incentive that aligns the directors' interests with those of shareholders, restricted stock units are distributed to directors excluding outside directors in the amount equivalent to 10% of their basic salary at a certain timing each year. For the third component of compensation, as a short-term incentive, a bonus is paid to directors according to their individual performance. The amount paid in the form of stocks is equivalent to one-tenth of that paid as basic salary, while the bonus is linked to the Company's performance and may not be paid depending on such performance.

For the total amount of basic salary and bonus paid, the Board of Directors makes a resolution in reference to the report made by the Nomination and Compensation Committee, which is mainly composed of independent outside directors. The amount paid to each director is decided by the president, being commissioned by the Board of Directors and based on the deliberation report made by the Nomination and Compensation Committee.

The total amount paid in the form of stocks is decided by the Board of Directors in reference to the deliberation report made by the Nomination and Compensation Committee. The specific amount paid to each director is decided by the president in the form of a certain ratio to their basic salary.

The basic salary to be paid to individual auditors is decided by themselves in reference to the deliberation report made by the Nomination and Compensation Committee.

Financial Performance

	FY2018	FY2019	FY2020	FY2021	FY2022
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Profit & Loss Statement and Balance Sheet (Consolidated)

Net sales (millions of yen)	119,091	143,740	136,373	112,482	148,925
Operating profit (millions of yen)	4,168	9,443	7,838	6,145	13,966
Operating profit margin (%)	3.50	6.57	5.75	5.46	9.38
Ordinary profit (millions of yen)	3,386	8,178	6,342	4,990	12,807
Profit attributable to owners of parent (millions of yen)	4,575	7,686	5,325	3,764	8,471
Net assets (millions of yen)	41,829	47,940	51,131	55,127	62,169
Total assets (millions of yen)	147,624	150,115	158,568	161,230	187,494

Other financial data (Consolidated)

Cash flows from operating activities (millions of yen)	5,031	9,172	7,979	11,182	(697)
Cash flows from investment activities (millions of yen)	(2,852)	(6,207)	(5,511)	(6,776)	(15,656)
Cash flows from financing activities (millions of yen)	(2,475)	(2,417)	8,692	(7,995)	15,049
Capital investment (millions of yen)	5,812	4,854	5,028	12,083	12,636
Return on Equity (ROE) (%)	11.6	17.1	10.8	7.1	14.4

Earnings per share (EPS) (yen)	295.85	497.02	350.09	247.85	561.25
Dividend per share (DPS) (yen)	4.0	6.0	33.0	45.0	120.0
Book-value per share (BPS) (yen)	2,704.48	3,099.68	3,368.36	3,629.02	4,121.13

(Note) On October 1, 2019, we consolidated 10 stocks into one stock.

We calculated the BPS and EPS based on the assumption that the stock consolidation was carried out at the beginning of FY2018.

NIPPON YAKIN KOGYO CO., LTD.

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