(I) SANYO SPECIAL STEEL

# REPORT 2023 APRIL 1.2022-MARCH 31.2023 Sanyo Special Steel Report 2023 (Integrated Report)

# **CONTENTS**

/ Corporate Philosophy	1
/Top Message	2
/Our Business	5
/ Global Business Development	6
/ Value Creation Process	7
/ Special Feature ① Revision of 2025 Mid-Term Management Plan	8
/ Special Feature ② Initiatives of Ovako Toward Carbon Neutrality	11
/ Special Feature ③ Round-Table Talk of External Directors Toward Enhancement of Corporate Value and Contribution to a Better Future	12
/Topics	14
/Important ESG-related Issues	17
Environment	
/ Environmental Management	18
/ Climate Change Prevention Initiatives	19
/ Information Disclosure According to TCFD Recommendations	21
/ Contribution to a Resource-recycling Society	22
/ Reduction of Environmental Impact	22
Social	
/ Creating a Safe Workplace	24
/ Disaster Prevention Initiatives	25
/ Promotion of Diversity Management	26
/ Promotion of Corporate Health Management	27
/ Human Resource Development	28
/ Respect for Human Rights	28
/ Quality Improvement Initiatives	29
/ Expanding Technological Superiority	29
/ Promotion of DX	30
/ Realization of Sustainable Procurement	30
Governance	
/ Enhancement of Corporate Governance	31
/Officers	33
/ Key Financial Data	34

# Corporate Philosophy

# Confidence-based Management

# **Confidence of Society**

We aim to earn the confidence of society by contributing to the realization of an affluent and culturally rich society and fulfilling our responsibilities as a member of society through our "high-quality special steel manufacturing."

# **Confidence of Customers**

We aim to earn the confidence of our customers by rapidly and accurately identifying their needs and appropriately providing high-quality special steel products.

# **Confidence among People**

We will build confidence among people by deepening communication with all stakeholders and acting autonomously in accordance with social norms.

# Editorial Policy

This report summarizes the Sanyo Special Steel Group's environmental, social, and governance (ESG) initiatives aimed at realizing a sustainable society.

# Period and Scope of Coverage

This report contains information on the initiatives of Sanyo Special Steel and its Group companies in FY2022 (April 1, 2022 to March 31, 2023), but also includes information outside the period covered.

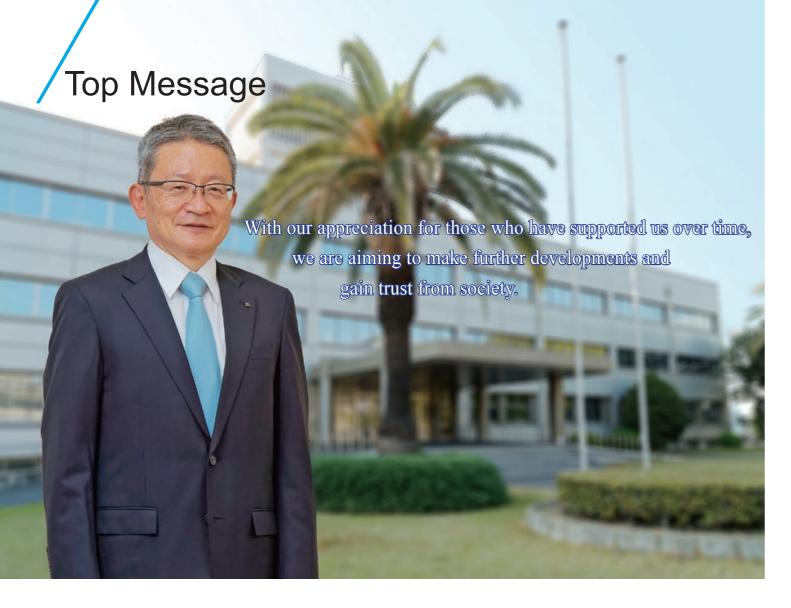
# Reference Guidelines and Other Documents

"International Integrated Reporting Framework," IIRC
"Guidance for Integrated Corporate Disclosure and
Company-Investor Dialogue for Collaborative Value
Creation," Ministry of Economy, Trade and Industry
"Environmental Reporting Guidelines 2018," Ministry
of the Environment

Task Force on Climate-Related Financial Disclosures (TCFD) Recommendations

# Notes on forecasts

The forward-looking statements in this report are based on the judgment of the Group based on the information currently available. These statements are subject to a number of uncertainties, and actual results may differ materially depending on a number of factors.



In commemoration of reaching our 90th year since establishment, we adopted the slogan,

# "90th anniversary with gratitude and moving toward our 100th and beyond."

Selected from among a large number of entries submitted by employees, this slogan embodies our appreciation for everyone who has supported us over a long period of time and also our determination to make Sanyo Special Steel even more long-standing."

Over its long history, Sanyo Special Steel has faced numerous crises and challenges including the turmoil following World War II, corporate reconstruction after the application of corporate reorganization law in the 1960s, the collapse of the bubble economy, and upheavals in the global economy. Taking on challenges such as, most recently, the rapid globalization of its businesses, its journey has never been smooth. Amid these circumstances, we have been able to overcome many crises, undergo changes, and continue to grow, thanks to the efforts, support, and cooperation of numerous stakeholders such as employees including former personnel, labor unions, affiliates, cooperative companies, and business partners.

Even under major social and industrial changes in the future, such as carbon neutrality, the highly reliable special steel products of our Group will be in even greater demand around the world as important materials to support the development of society. Under these circumstances, the Sanyo Special Steel Group will further build up the reliability of the brand "Sanyo Special Steel - the confident choice" by, on a group-wide scale, strengthening its business foundation and innovating technologies that are ahead of the times. Without evolution on a constant basis, companies become unable to meet the ever-changing needs of society and are thus doomed to deteriorate. We will continue to actively take on new challenges, striving to maintain our status as a company trusted by society as set forth in our corporate philosophy.

MIYAMOTO Katsuhiro, Representative Director and President



# 90th anniversary with gratitude and moving toward our 100th and beyond



Original 3-ton electric arc furnace (1933)



Main building (current head office) constructed (1964



150-ton electric arc furnace (1982)



Acquiring Ovako, a European special steel manufacturer, as an affiliate (2019) \*The photograph shows Imatra Mill (Finland)

# 1933 Establishment and through tumultuous times

Founded in 1933 as Sanyo Steel Works by YAMAMOTO Tousaku the fourth, our company commenced the manufacturing of bearing steel upon its incorporation in 1935.

Having overcome the turmoil caused by World War II, we implemented large-scale capital investment such as in manufacturing facilities for seamless steel tubes and expanded our business in response to the rapid development of postwar Japanese industry.

# 1960 - Rapid growth and ordeal period

In 1964, successive capital investment implemented in response to expanding demand for special steel came to completion. However, caught by securities market slumps arising in the same period, we had no choice but to file an application under corporate reorganization law in 1965.

Subsequently, efforts toward the enhancement of the business structure bore fruit, leading to the successful rebuilding of our company in 1973.

# 1980 During the time of high economic growth

We achieved the relisting of our stock and completed the construction of No. 2 Steelmaking Plant and a small and medium bar rolling mill (then, No. 2 Bar & Wire Rod Mill), which are our main factories today. Furthermore, we entered into the metal powders business in 1988. In the 1990s, we significantly advanced our technological capabilities, exemplified by the development of ultra-high-cleanliness steel.

# 2000 Promoting overseas expansion to be a global special steel manufacturer

This has been an era during which our business environment has undergone drastic changes due to events such as the Lehman shock in 2008, the Great East Japan Earthquake in 2011, the COVID-19 pandemic in 2020, and the Russian invasion of Ukraine in 2022.

Amid this situation, we have been strengthening our business structure to cope with changes in the environment and promoting the overseas expansion of our business. Our business has been globally developed, as exemplified by the acquisition of an Indian special steel manufacturer MSSPL (now SSMI) as a subsidiary in 2018, and becoming a member of the Nippon Steel Corporation Group and affiliating Ovako, a leading European special steel manufacturer in 2019.

# Top Message

# Review of FY2022 and Current Business Environment

### **Business results for FY2022**

In FY2022, despite automobile production cutbacks due to supply chain disruptions caused by semiconductor shortages and the lockdown of Chinese cities, and the soaring prices of raw materials and fuels including the price of steel scrap, we managed to achieve consolidated net sales of 393.8 billion yen, an increase of 30.6 billion yen on a year-on-year basis, and consolidated ordinary income of 28.9 billion yen, an increase of 7.2 billion yen on a year-on-year basis, due to factors such as revised selling prices following the application of the scrap surcharge system, improved margins from the sophistication of our product mix, and Ovako's improved earnings including one-offs. (The ordinary income of Ovako excluding one-offs was 19.3 billion yen, substantively at the same level as in the previous year, FY2021.)

### Forecasts for FY2023

In FY2023, while demand for special steel is expected to recover from the second half of the year with a gradual recovery in automobile production, which had been in decline due to semiconductor shortages and other factors, and the gradually lessening impact of inventory adjustment in the supply chain, our full-year sales volume is expected to remain at the FY2022 level due to the continued adjustment phase of demand in relation to construction and industrial machinery and concerns about a stagnant global economy attributable to inflation and high interest rates. Furthermore, while energy prices have peaked, raw material prices remain high, and the transient effects of Ovako are expected to wear off, in addition to inflationary effects on various materials, etc. The demand environment to date has been largely in line with our expectations, with the exception of Ovako's energy costs which have remained lower than expected. In times to come, however, the business environment of our Group is considered to remain challenging as the recovery in demand for special steel is likely to be slower than anticipated due to economic deterioration in Europe and the slow recovery of the Chinese economy. Under these circumstances, our Group will continue our cost reduction initiatives, secure base order volumes and margins through application of surcharges, and take other necessary actions, thereby aiming to achieve ordinary income of 20 billion yen, which is substantively the same level as in FY2022

# Revision of 2025 Mid-Term Management Plan

### Background of the revision

Aiming to further increase its corporate value in the global high quality special steel market, Sanyo Special Steel has formulated and implemented the 2025 Mid-Term Management Plan covering the period from FY2021 to FY2025. In light of major changes in the business environment that have arisen since the original plan was formulated, such as resource price inflation (decoupled from the steel supply and demand cycle), intensifying human resource constraints, and accelerated drive to EVs and carbon neutrality, as well as the fact that our current financial results have been outperforming the original plan, we revised the 2025 Mid-Term Management Plan on July 28.

### Basic policies

Our Group, as a whole, will seek to strengthen our business base and profitability in Japan and overseas by making aggressive investment and flexibly allocating the necessary human capital, centrally for carbon neutrality and DX, as well as by flexibly revising prices based on value in use, expanding and enhancing the surcharge system, continuously working to sophisticate our sales mix, and taking other relevant actions. thereby aiming to achieve further profit increase on top of the FY2022 consolidated ordinary income of 19.3 billion yen excluding the oneoffs of Ovako and the consolidated ordinary income of 20 billion yen projected for FY2023. Furthermore, we will strive to improve our corporate value and presence in the global special steel market, with the aim of realizing 1x PBR through strengthening of our ESG initiatives such as those for carbon neutrality and through management with capital cost and our share price taken into account.

# Synergies with Nippon Steel and Ovako

# Initiatives

### **Pursuing Efficient** Production



# Supporting operational improvements of Ovako

- Nippon Steel and Sanyo dispatched rolling and steelmaking experts to Imatra (Finland) and Smediebacken (Sweden)
- Supported improving productivity and yield and reducing recurring problems and defects. Held regular meetings between Ovako and the Japan, made repetitive follow-ups and feedbacks on progress of operational improvement initiatives.

# Strengthening Responsiveness Customers

Reducing

Others

# Sales expansion through sharing customer information. Improving sales margin by further differentiation.

- Enhancing joint sales & marketing, mutually utilizing each sales and marketing network (ex. Utilizing Ovako's network for European based Japanese customers). Promote product differentiation based on global presence.
- Utilization of resources and infrastructure of Procurement Costs the whole group
  - Optimization of procurement items and purchase pricing. Utilization of by-products from blast furnaces in electric furnaces.
  - Reduction of logistics costs by utilizing domestic transport infrastructure.

# Regular exchange of development in several sectors: Safety, Environment (CN), Quality and R&D, etc.

- Improvement of safety performance by establishment of awareness to 'safety first' and sharing information on accidents Sharing advanced CN initiatives of Ovako, Prevention of quality incidents
- (ex. material mix-up) through sharing know-how and information.
- utual evaluation of technological capabilities.

**Future initiatives (towards 2024)** 

achieve full synergies by FY2024. Transferring operational improvement initiatives to all production sites of Ovako

Continue and deepen initiatives and

- Establish optimum production allocation by region and
- Promotion of sales expansion among Nippon Steel and
- Strengthen proactive proposal capabilities through collaborative R&D
- · Continuing procurement optimization through utilizing
- Enhancing procurement optimization in India
- Further improvement of safety and quality
- Promoting personnel exchanges

# Impact of the shift to EVs and our activities

Decrease in special steel

consumption per automobile

(Engines and transmissions, etc.)

Structural changes in demand associated with the shift to EVs. and growing need for smaller and lighter automotive parts, etc.



- Growing need for our highly reliable special steel products associated with the shift to EVs
- Increase in demand for our special steel products with properties that contribute to the size and weight reduction of parts

### CASE\*

- ECOMAX Series contributes to auietness
- High hardness and high toughness steel replacing carburizing steels
- High temperature carburizing steel ensuring ideal grain size
- Advanced Tool Steels supreme fit with high strengthened materials

(\*) CASE CASE:Connected, Autonomous, Sharing and Electric

- · With our strength in high high-cleanliness steel, accurately respond to new customer requirements and environmental issues arising from changes in social and industrial structures
- Strengthen supply chain competitiveness by enhancing collaboration with customers

# Synergies Among Sanyo Special Steel, Nippon Steel Corporation (NSC), and Ovako

Sanyo Special Steel, NSC, and Ovako have planned to generate synergies worth about 10 billion yen among them, on a 50% scale by the third year (FY2021) and on a 100% scale by the sixth year (FY2024), and have currently implemented specific collaborative measures. We have dispatched engineers to Ovako to support its technical and operational improvement toward better productivity, having been steadily realizing cost reductions. In addition, as synergies with NSC, we have implemented various initiatives including those seeking to reduce distribution costs and the costs of materials, equipment, and ferroalloy through utilization of the iron sources and transportation infrastructure of the group. These initiatives have also steadily yielded results. Furthermore, various other activities have also been implemented. including the production consolidation of the product types of each company's specialty and R&D collaboration utilizing the knowledge. manpower, etc. of the NSC Group. In FY2022, the fourth year of these synergies, we achieved more results than planned. We are focusing on bringing out full synergy effects by FY2024 as scheduled. In order to survive among increasingly fierce global competition, it is important to have rock-solid cost competitiveness as well as technological and quality competitiveness. By utilizing the strengths that are unique to us and continuously expanding and maximizing synergies among the three companies, we will strive to further enhance our corporate value and presence in the increasingly competitive global special steel market.

# Responses to the Shift to EVs

The shift toward electrification of automobiles for carbon neutrality is accelerating around the world. Accordingly, it is expected that automotive structures will significantly change, likely to cause an impact on special steel consumption, as well. Besides, it is likely that steel used for engines and transmissions will decrease, and that competition with competing manufacturers whose sales activities have mainly focused on those fields will intensify.

At the same time, we foresee the rise of new demand following the shift to EVs. In particular, the downsizing and weight reduction of EV parts for energy-saving purposes cause an increased load for some of such parts, and the materials used for those parts inevitably require high performance (strength), quality, and reliability. It is this aspect where we believe our Group can take advantage of its high manufacturing technologies to produce highly reliable and high-quality special steel.

# Contribution to carbon neutrality

Furthermore, there is growing need for steel products with less CO<sub>2</sub> emissions and for special steel that can contribute to reducing CO<sub>2</sub> emissions generated in the course of parts production at customers' sites. Each of Sanyo Special Steel, Ovako, and SSMI manufactures special steel products by recycling materials with steel scrap as the main raw material, which puts them into a position of relative superiority in terms of CO2 emissions, as well. Special steel is characterized not only by its properties as a steel material but also by its superior functionality achieved by combining post-processes (processing processes) such as forging and heat treatment. In this regard, our Group has enhanced its technologies, quality, and service capabilities, for example, by working closely with customers on joint development and meeting advanced needs including the reduction of processing costs and the realization of weight reduction. Such collaboration and the knowledge that we have built up through such collaboration have led to the development of products such as "ECOMAX™ Series" and "TOUGHFITTM" which can contribute to the reduction of CO2 emissions at customers' sites by enabling them to omit or simplify processes. Leveraging these strengths, we will promote the development of ecoproducts aimed at realizing a decarbonized society and meet new needs arising from the shift to EVs, etc., will expand our technological superiority and strengthen our cost competitiveness through, for example, the development of differentiated products, and will utilize our technologies to steadily address demand in those non-automotive fields which are expected to grow in the future (such as wind power generation and railroad bearings)

# Top Message

### **Toward Carbon Neutrality**

### Roadmap to carbon neutrality by 2050

Based on the roadmap of Sanyo Special Steel toward carbon neutrality, in addition to reducing our own CO<sub>2</sub> emissions (Scopes 1 and 2) by 50% or more compared to the FY2013 level by FY2030 through promotion of eco-processes, green energy utilization, and other actions, we are aiming to contribute to reducing emissions by approximately 40% of the FY2013 level by employing eco-products that contribute to customers' CO<sub>2</sub> emission reductions and eco-solutions that deploy energy-saving and productivity-enhancing technologies at overseas Group companies. For eco-processes, we have been promoting the use of regenerative burners for heating furnaces, inverters for large motors, and LEDs for factory lighting among other items, having made steady progress with the CO<sub>2</sub> emissions during FY2022 (Scopes 1 and 2) being 540 thousand tons (a 36% reduction from the FY2013 level). In FY2022, partial use of electricity derived from renewable energy sources was started. In FY2023, we will introduce an internal carbon pricing system to facilitate investment in energy conservation and further reduce CO<sub>2</sub> emissions. To achieve carbon neutrality, it is necessary to reduce CO<sub>2</sub> emissions not only in our own manufacturing processes but also throughout the entire life cycle of products covering raw material procurement and customers' processing and use of such products as end products. In addition to Scope 1-2 emissions from our own manufacturing processes, we will advance our initiatives to reduce emissions throughout the supply chain, including Scope 3 emissions, and put more of our energy into the development of eco-products that can contribute to the reduction of CO<sub>2</sub> emissions generated in customers' steel processing and parts manufacturing processes.

### Initiatives implemented by Ovako

Having promoted the world's pioneering initiatives, Ovako became carbon neutral in January 2022 and at the same time started selling green steel with climate surcharges (premiums) applied to all of its steel products. In parallel with these actions, Ovako has been working on its initiatives to reduce  $CO_2$  emissions even further, starting operation of a plant for production of carbon-free hydrogen through the electrolysis of water with fossil-free electricity in September 2023.

# Initiatives implemented by SSMI

SSMI signed an agreement with the Tata Power Group in August 2023 to purchase renewable-energy-based electricity from solar power generation. By purchasing solar-power-based electricity from the same group starting in March 2024 and using it for SSMI's own special steel production, SSMI is expected to be able to reduce CO<sub>2</sub> emissions generated from its own special steel manufacturing processes by approximately 25%.

In the midst of global demand for addressing climate change issues, the Sanyo Special Steel Group will promote initiatives to reduce CO<sub>2</sub> emissions and achieve carbon neutrality through its global business activities involving not only Group companies in Japan but also Ovako in Europe and SSMI in India

# CO<sub>2</sub> Reduction through "Eco-products"



Long-life bearing steel





# Promotion of Transformation of Business Processes and Business Models Through DX

# Establishment of the DX Promotion Project Team

Digital technologies such as AI and IoT have made remarkable progress in recent years, and the pace of their progress will continue to accelerate in the future. The key to outpace increasingly intense global competition is how to utilize such leading-edge technologies for one's own competitiveness. In addition, in Japan, human resource constraints have intensified due to its declining labor population attributable to a declining birthrate and an aging population. The reform of work styles by improving operational efficiency and productivity is an urgent issue.

Against this backdrop, we set up a DX Promotion Project Team in January 2023 to organize a structure to strongly promote companywide initiatives under my leadership. We will construct an integrated information infrastructure for data utilization and promote the transformation of business processes and business models, such as by using the latest digital technologies to visualize information, make real-time information available, and automate and streamline operations (work). At the same time, by ensuring that all employees actively use digital technologies to take on transforming our organization and culture, we will strive to lay a foundation for quickly and flexibly responding to changes in the business environment and society and maintain and strengthen our competitiveness into the future.

# **DX Roadmap**

Establish infrastructure corresponding to changes in business environment and society Reinforce corporate competitiveness

Transform into Digital Company

• Establish sophisticated business foundation

• Enhance corporate value

STEP

2

2

22027

Expand application of digital technology

• Improve efficiency of operation and production

• Transform business process and business model

# Establish integrated information infrastructure

- Establish integrated database
- · Visualize and "real-time" data

# **Initiatives to Expand Human Capital**

### Initiatives for safety

For the Sanyo Special Steel Group as a group of manufacturing companies, the safety and wellbeing of employees form the basic premise of its business activities and take precedence over everything else.

Based on this recognition, our Group promotes the reduction of work-related risks and the creation of a safe workplace by "integrating top-down and bottom-up approaches" and "implementing both hard and soft measures" and also works to prevent accidents from occurring and to prevent the spread of damage in the event of a disaster by raising employees' awareness of disaster prevention and conducting disaster drills.

### Development of global human resources

In order for us to conduct business with confidence in the face of fierce international competition, the technology and skills to produce world-class, distinguished products and the ability to reliably communicate with customers and other stakeholders around the world are indispensable. For that reason, we are accelerating the development of global human resources. We develop a global mindset among young and mid-career employees and, by enabling them to gain experience, for example, from working at overseas affiliates and studying abroad in accordance with our human development plan, work to systematically develop human resources who can act from diverse perspectives beyond borders and who can produce results through sufficient communication with users and other stakeholders around the world.

### Promotion of participation by women

We have for some time driven forward the development of an environment for the active participation of women from both hard and soft aspects. In June 2022, we appointed our first female executive officer. In addition, the active participation of senior employees and the stable employment of persons with disabilities are currently regarded as important issues. In this regard, we established a specialized organization, Diversity (Human Resources Diversification and Utilization) Promotion Group, in January 2021 in our efforts to organize a structure to support the active roles of all employees in the global arena regardless of gender, age, etc.

We also put our energy into the facilitation of male employees' participation in childcare and household duties, making efforts to improve their work-life balance by encouraging them to take childcare leave, develop multiskilled workplaces, and improve work efficiency.

# Corporate health management

Furthermore, we formulated the "Sanyo Special Steel Declaration of Corporate Health Management" and have worked on improving employees' lifestyles and preventing mental health problems through walking events, etc. that seek to support them in making physical exercise an established routine. On the basis of such efforts of ours, we have been recognized as a Certified Health & Productivity Management Outstanding Organization (Large Corporation Category) for two consecutive years. We will continue to promote the creation of a work environment in which all employees can work in a fulfilling manner every day.

As the value in working diversifies, it is also very important to create a workplace culture that encourages employees to feel fulfilled with work and proud to work for Sanyo Special Steel. In addition to working on the construction of new company housing for single employees to be opened in the spring of 2024 as part of the development of a fulfilling living environment for young employees who have joined our company from distant areas, and on the occasion of the 90th anniversary of the company's founding, we are implementing anniversary projects for the purpose of raising employees' sense of belonging and deepening mutual understanding between organizations, among other purposes. We will promote communication and deepen dialogue within the company on a regular basis, without distinction of rank or organ, and work on creating a workplace where all employees can work comfortably and find fulfillment.



Safety patrol participating by President



Overseas language training for new employees in planning positions



Illustration of the new single dormitory

# **Further Enhancement of Corporate Governance**

In order to ensure that Sanyo Special Steel is firmly trusted by various stakeholders including shareholders, customers, and communities, we are making efforts to strengthen corporate governance by establishing a corporate governance structure suited to our Group's business, thereby seeking to improve the efficiency, soundness, transparency, etc., of our management.

# Transitioned to a Company with an Audit & Supervisory Committee

By June 2022, Sanyo Special Steel completed its transition to a Company with an Audit & Supervisory Committee in order to accelerate management decision-making, enhance discussions of basic management policies at Board of Directors meetings, and strengthen the supervisory function of the Board of Directors in the execution of operations.

# Reflection of ESG indicators in executive compensation

In addition to the conventional performance-linked numerical indicators for executive compensation, we have decided to reflect five more ESG indicators in performance-linked compensation in FY2023 in order to further strengthen our ESG initiatives toward sustainable growth

We will continue to make ongoing efforts to enhance corporate governance in order to live up to the trust and confidence placed in us by our shareholders, suppliers, and other stakeholders, achieve sound and sustainable growth of our Group, and enhance our corporate value over the medium- to long-term.

We hope that this report, which introduces our initiatives, will help you to better understand the activities of Sanyo Special Steel Group, and we look forward to your continued support and assistance.

# **Our Business**

# **Highly reliable steel that supports** global manufacturing







In the Steel Products business, we manufacture and sell a variety of special steel products, including bearing steel, engineering steel, stainless steel, heat-resistant steel, and

The Sanyo Special Steel Group's special steel products are used as materials for some of the most important parts of automobiles, industrial machinery, and plants, contributing to the functional improvement of end products and the reduction of environmental impact in the manufacturing processes of our customers.

**Steel Products** 

technologies

Bearing steel

Stainless steel

High alloy

**High-performance metal powders that** support the development of advanced



In the Metal Powders business, we manufacture and sell metal powder products.

Sanyo Special Steel manufactures high-performance metal powders with low impurities and excellent flowability and powder metallurgy products formed by our unique technology to support the development of advanced technologies in various settings, from the front lines of research and development to manufacturing sites.





**Metal Powders** 



Example of additive manufacturing



Sputtering target

# Supply system to meet global needs





In the Formed and Fabricated Materials business, we manufacture and sell formed and fabricated materials made from special steel bars and tubes.

In addition to Japan, the Sanyo Special Steel Group has established a supply system for formed and fabricated materials in North America and China, which are growth markets for the automotive industry, thereby contributing to the simplification of the processing process and local production for local consumption for customers who are expanding their business globally.

Formed and **Fabricated Materials** 











Metal Powders business that provides solutions to customers through its materials and technologies

Metal Powder Manufacturing & Sales Division General Manager of the Metal Powder Technology Department AIKAWA Yoshikazu

In the Metal Powders business, we deal with a variety of alloy powders, primarily ironbased alloy powders, cobalt-based alloy powders, and nickel-based alloy powders. Our target markets are wide-ranging, including aerospace, automobiles, electronic components, and medical care. Also, our customers have a great variety of needs. Under these circumstances, we have established a development system that allows alloy designs and property evaluation according to individual needs, on the basis of which we develop new products. In particular, we are currently focusing on the development of products with the keywords "response to DX" and "contribution to carbon neutrality," for both of which social needs are growing. In relation to DX, we have commercialized, among other products, sputtering target materials, which can contribute to higher-capacity recording media, and magnetic powders for noise absorption, which can assist electronic devices in smooth information processing. Additionally, we are also working on expanding our "NOVASHAPE™ Series," metallic powder products for 3D printers, as eco-products to contribute to carbon

We will continue to provide customers with solutions from both material and technological aspects by taking advantage of our vacuum melting and inert gas atomization facilities, which can produce spherical powders having good flowability and enabling a wide range of alloy designs, and by utilizing the knowledge that we have accumulated as a special steel manufacturer

# **Formed and Fabricated Materials** business that meets the needs of globally operating customers



Formed & Fabricated Products Division General Manager of the Planning Group HIROTA Kvoko

In the Formed and Fabricated Materials business, we provide customers with formed and fabricated materials whose added-value is enhanced by processing our high-cleanliness special steel into a variety of forms close to end products such as bearings. Santoku Tech Co., Ltd., our subsidiary, manufactures formed and fabricated materials for highperformance bearings used for industrial machinery and high-speed railroads in Japan. Also, we have established formed and fabricated materials business companies in China and Mexico, which engage in an integrated manufacturing process covering forging to turning (for the company in Mexico, up to partial heat treatment), to meet overseas customers' needs for local production aimed for local consumption, centrally automobile-related needs.

Special steel products demonstrate their superior functionality that is derived not only from the properties of their steel materials but also from the combinations of their materials and processing processes such as forging and heat treatment. The Sanyo Special Steel Group has developed processing technologies based on the properties of materials by reflecting CAE analysis technology in the designs of dies and processes, and has built a system capable of producing, through integrated processes, high-quality formed and fabricated materials from high-cleanliness steel prepared by employing high-cleanliness steel production technology. We will continue to leverage our strengths in terms of technology and quality based on our domestic and overseas supply chains and integrated processes and thereby meet the needs of customers that are expanding their businesses globally.



Ovako Group AB
President & Chief Executive Officer
Marcus Hedblom

# Ovako's determined commitment to Safety, Sustainability, and Competitiveness

In these uncertain times, our steadfast foundation serves as a cornerstone for progress at Ovako. We remain resolute in our commitment to improving safety, reducing carbon emissions, and fortifying our competitive edge through utilizing synergies with Nippon and Sanyo.

# Clear ambition within safety - a zero accident workplace

Ovako has reduced accidents with sick leave, LTIFR, with 95% since 2015. Our dedicated safety work continues, and safety is our number one priority in everything we do, every day. We are among the safest steel companies in Europe, but we must never let down the guard. Maintaining and continuing our efforts in the safety work will always be top focus for Ovako.

# **Current business environment**

Business is currently characterized by relatively low demand and attractive margins. The peak of the current cycle seems to have been around March 2022 and we are still in decline on a rolling-12-month basis. Our main scenario is that we will see the cycle bottoming out during the second half of 2023 and then gradually start to recover towards the end of the fiscal year.

# A new chapter in Swedish steel history

An Important step in our sustainability journey is the construction of Sweden's largest electrolyzer, set to produce fossil-free hydrogen. On September 5, 2023, we inaugurated the world's first fossil-free hydrogen plant for heating steel before rolling. With the new facility in Hofors, a new chapter begins in Swedish steel history with significant potential for global emissions reductions.

# Relentless pursuit of sustainability

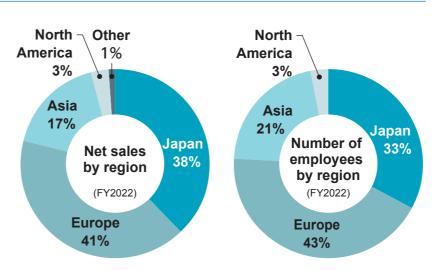
Our dedication to sustainability continues to intensify, and I wish to express my deep gratitude for the commitment of our dedicated colleagues who lead and support this every day. We have already reduced carbon emissions by an impressive 58% since 2015, and we have an ambitious target of 80% reduction by 2030. As we move forward on this journey, we invite all stakeholders to join us in shaping a more sustainable future. Together, we will work towards a more sustainable tomorrow.

# Global Business Development



# Global Network to Meet Special Steel Needs Around the World

The Sanyo Special Steel Group has integrated special steel manufacturing bases in Japan, Europe, and India to meet the needs of special steel in all regions of the world through a tripolar global structure. In addition, we have established a supply chain in the growing automotive market through our Formed and Fabricated Materials business to meet the local procurement needs of our customers who are expanding their business globally. By making full use of these global networks, we will steadily capture the growing global demand for special steel over the medium- to longterm and provide a stable supply of high-quality special steel products to customers around the world, thereby achieving profitable growth for the Group and enhancing corporate value.







Sanyo Special Steel Manufacturing India Pvt., Ltd. (SSMI)

Managing Director

# **Dilipkumar Pachpande**

SSMI is strategically positioning itself in the Indian manufacturing industry, particularly in the production and sale of high-quality special steel. The company is focused on capturing both domestic demand and international demand for high-grade steel materials. SSMI aims to improve its competitiveness and maximize group synergies by collaborating with other Sanyo and Nippon Steel Group companies. Importantly, SSMI is committed to sustainability as a fundamental pillar of its business strategy.

The company acknowledges its role in economic growth, environmental preservation, and social well-being. The commitment to sustainable development is deeply ingrained in the company's projects, ensuring equitable growth while considering environmental and social responsibilities.

# **Key Sustainability Initiatives:**

# **Climate Action Leadership**

SSMI is a pioneer in taking steps to mitigate climate change. It has set ambitious Science Based Targets to reduce CO<sub>2</sub> emissions intensity by 40% by 2030, with the ultimate goal of achieving Carbon Neutrality by 2050.

Renewable Energy Adoption

SSMI is transitioning from fossil fuel energy to renewable sources, aiming to reduce its carbon footprint and decrease its dependence on non-renewable resources.

# **Natural Gas Substitution**

The company is replacing traditional fuels with natural gas, a cleaner and more efficient energy source, to reduce emissions while maintaining operational integrity.

**Energy Efficiency Improvements** 

SSMI is continually working on implementing energy-efficient processes to reduce costs and minimize its environmental impact.

# **Resource Efficiency and Circularity**

The company is actively focusing on resource efficiency and adopting circular economy principles to optimize resource usage and minimize waste throughout its value chain.

# **Collaboration for Clean Energy**

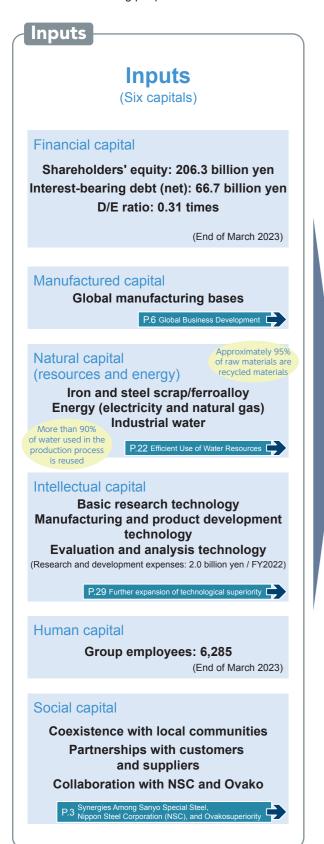
SSMI has partnered with Tata Power Renewable Energy Limited (TPREL) to establish a Captive Solar plant, demonstrating its commitment to clean and green energy solutions and reducing CO<sub>2</sub> emissions in steel manufacturing.

SSMI sees sustainability not as a mere checkbox but as the essence of its business. The company understands the significance of its actions in shaping the future and is committed to integrating economic, environmental, and social responsibility into its core strategy. By doing so, SSMI aims to leave a lasting positive impact on the planet and society while ensuring the long-term growth and profitability of its business, in collaboration with stakeholders, towards a more sustainable and prosperous future.

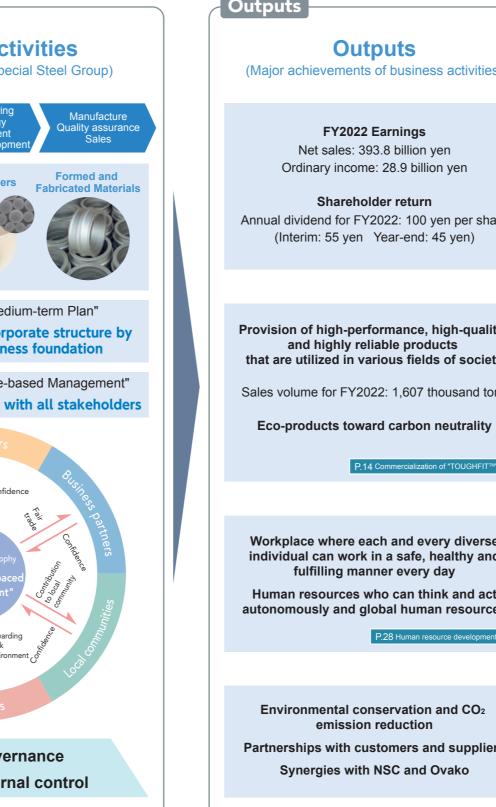
# Value Creation Process

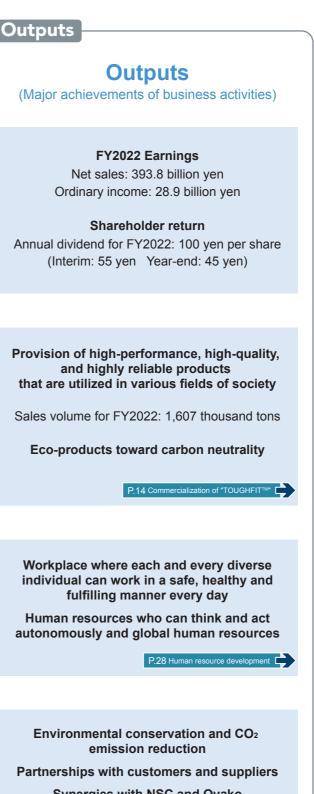
Since its establishment in 1933, the Sanyo Special Steel Group has played a role in a resource-recycling society by manufacturing special steel products from iron and steel scrap, a recycled resource, and has contributed to industrial and economic development by providing highly reliable, high-quality special steel products.

We will continue to strive for the sustainable growth of the Group and contribute to the realization of a sustainable society through the practice of our corporate philosophy, "Confidence-based Management," which aims to establish confidence of society, confidence of customers, and confidence among people.









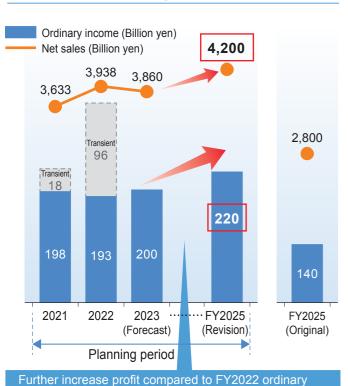
# **Outcomes Outcomes** (Values created) Creation of economic value **Enhancement of corporate** value in the global special steel market Global branding of "Sanyo Special Steel - the Confident Choice" Creation of social value **Contribution to the realization** of a sustainable society Development of an affluent and culturally rich society Carbon-neutral society **Establishment of a resource** recycling society Realization of a safe and secure society **Diversity and inclusion SUSTAINABLE DEVELOPMENT**

# Revision of 2025 Mid-Term Management Plan

Aiming to further increase our corporate value in the global high quality specialty steel market, Sanyo Special Steel has formulated and implemented the 2025 Mid-Term Management Plan, covering the period from FY2021 to FY2025. In light of major changes in business environment that have arisen since the original plan was formulated, such as resource price inflation (decoupled from steel supply and demand cycle), intensifying human resource constraints and accelerated drive to EVs and carbon neutrality, as well as the fact that our current financial results are outperforming the original plan, we have decided to revise the 2025 Mid-Term Management Plan.

### **Outline of Mid-Term Management Plan Business Environment Five Core Pillars Financial Targets** Net sales Approx. 420 billion yen Further Enhance Corporate Value and Global Presence Ordinary income Approx. 22 billion yen Approx. 7 % ROE Resource Price Inflation **Reinforce Profitability of** (decoupled from steel supply Approx. 8 % ROE all Global Operations and demand cycle) (excluding goodwill amortization) **Strengthen ESG Initiatives** Carbon Neutrality **Investment of Resources Achievement of** Intensifying Human Carbon Neutrality by 2050 Approx. 16 billion yen **CAPEX** Resource Constraints (FY2023 - FY2025) 5/ Number of **Promotion of DX** Approx. **6,500** employees (End of FY2025)

# **Progress and New Targets of the Mid-Term Management Plan**



income (excluding one-offs of Ovako) of 19.3 billion yen.

and FY2023 forecast ordinary income of 20 billion yen

# **Initiatives to Achieve 1x PBR**



- Sustainable profit growth × Exploring growth opportunities
- Through seamless dialogue with investors, promotion of the situation surrounding the implementation of CN and ESG Initiatives
- $\rightarrow$  Aiming to reflect them in the share price
- Increase in the tradable share ratio by reviewing crossshareholdings held
- → Aiming to reduce the cost of capital
- Revision of the dividend policy
- → Dividend payout ratio (DPR): approx. 35%

  DPR excluding goodwill amortization: approx. 30%

  With the per-share dividend level also taken into consideration
- Target ROE for FY2025 revised to 8% (excl. goodwill amortization)

# **Priority Measures to Realize the Five Core Pillars**

# 1 Further Enhance Corporate Value and Global Presence

- Strengthening of the corporate foundation by securing human capital and by making capital investment, etc.
- Continuous improvement of margins and sophistication of sales mix
- Exploring growth opportunities that will contribute to enhancing the corporate value and presence
- Aiming to achieve 1x PBR through management with the cost of capital and stock price taken into account

# 2/ Reinforce Profitability of all Global Operations

Steel Products business:

(Domestic) Securing appropriate margins by strengthening market-sector-specific foundations

(Overseas) **Ovako**: Strengthening of its profit structure through cost optimization by leveraging its advantage in terms of carbon neutrality

**SSMI**: Enhancement of its presence in the Indian market by improving its costs and strengthening its sales capabilities

- Formed and Fabricated Materials business: Strengthening of its profit structure on the basis of its integrated competitiveness in the global supply chain
- Metal Powders business: Achievement of profit growth by capturing highly-profitable fields in which demand is
  expected to increase

# 3/Strengthen ESG Initiatives

- Strengthening of governance- and ESG-related initiatives and appropriate information disclosure
- In addition to diversity and health management, focusing on developing global human resources and improving employee engagement

Further promote	Reform work styles	Promote corporate
female managers	and promote work-life balance	health management

Addition of ESG indicators to the executive compensation

CDP climate	Health management	Safety	Ratio of female	Board effectiveness evaluation
change score	rating	index	managers	by external directors

# 4/ Achievement of Carbon Neutrality by 2050

- Group-wide promotion of "eco-processes," "green energy utilization," "eco-products," and "eco-solutions"
- Acceleration of the leadership of Ovako that is a leader in terms of carbon neutrality
- Deepening of technology to meet needs for high reliability in the fields of "EVs," "wind power generation,"
   "railroads," and "hydrogen society"
- Strengthening of group-wide initiatives, steered by the Carbon Neutrality Promotion Committee chaired by the President

# 5/Promotion of DX

- Establishment of the DX Promotion Project Team led by the President
- Enhancement of business and operational efficiency and execution of process reform, based on the two pillars of business reform and factory reform
- Aiming to sophisticate the business structure and increase the corporate value through DX implementation leading to operational transformation

# Revision of 2025 Mid-Term Management Plan



Director, Member of the Board, Managing Executive Officer

# **OMAE Kozo**

Aiming to realize technological renovation to meet the expectations of globally operating customers Director, Member of the Board, Managing Executive Officer YANAGIMOTO Katsu

Taking advantage of our technological superiority in highcleanliness steel, we sell approximately one million tons of special steel products annually, both domestically and overseas. Of this total, about 20% is directly exported to overseas countries, and the majority is sold to domestic customers. Many of such domestic customers globally conduct business in fields such as bearings, automobiles, construction machinery, and industrial machinery. Accordingly, our special steel is sold worldwide in the form of processed metal products.

On the basis of our estimation, it is our understanding that approximately 80% of the special steel we sell is used globally.

# Capturing growing overseas special steel markets

As for future trends in demand for special steel, taking our core field of the automotive industry as an example, while domestic automobile sales in Japan are not expected to grow significantly due to an aging society and a declining birthrate in the country among other factors, automobile sales around the world are expected to continuously grow, especially in emerging countries. Against the backdrop of these trends, in addition to our domestic sales offices, we have established local subsidiaries in the US, China, and Thailand to directly work on growing overseas special steel markets and capture demand. Furthermore, other than the Steel Products business sector, with respect to our Formed and Fabricated Materials business, we are developing our forging and turning business in China (Zhejiang Province) for Japanese bearing manufacturers. Similarly, we are also developing our forging and turning business in Mexico, with the steady North American economy taken into account.

# Sales alliance with overseas Group companies

Meanwhile, in recent years, against the backdrop of increasing political and economic frictions and tensions between regions, there has been an ever-accelerating trend toward local procurement of raw materials, parts, etc., coupled with the expansion of overseas operations by customers. In response to such changes in the environment, we are working on strengthening our sales cooperation with SSMI of India, which became a subsidiary in 2018, and Ovako of Sweden, which became a subsidiary in 2019.

Ovako has the technological capability to produce special steel products of the same high quality as our products and is not only a leading supplier of special steel in Europe but also a wellestablished world-leading special steel manufacturer in terms of carbon neutrality. In cooperation with our parent company, NSC, the three companies of NSC, Sanyo Special Steel, and Ovako have set up a marketing project for each field and region, have formulated and implemented sales strategies that take advantage of each company's strengths, and follow up their implementation. Also, since India is the most promising region in terms of future growth in demand for special steel, we are providing full sales and technical support to SSMI while making efforts to expand the sale of special steel in cooperation with NSC and Ovako.

The fact that we have special steel manufacturing subsidiaries overseas, and that we can develop a global sales network with the four companies including NSC is a major advantage that our competitors do not have. We will utilize this strength to the fullest to intensify our presence in the global special steel market.

We are committed to technology development under the policies of "sincerely listening to the voices of customers" and "providing technologies and products that go with the times by utilizing our excellent production technologies and development capabilities."

During the 90 years since our founding, we have developed many distinctive production technologies and products, including high-cleanliness steel, to respond to the expectations and trust that customers and society have for "Sanyo as a technology company." Global and flexible responses are required to the needs for development of advanced technology and products corresponding to recent major environmental changes. For that reason, our Group as a whole aims to "expand our technological superiority" under the 2025 Mid-Term Management Plan. I would like to discuss the status of our technological development under the ongoing Mid-Term Management Plan and also our future initiatives and issues beyond the plan.

# Development toward carbon neutrality by 2050

For our Group, the realization of carbon neutrality is the most important company-wide theme, and we believe that the role of technology development is also significant. In addition to, among other matters, "long-life bearing steel for automobiles, wind power generation, and railroads" and "high-performance powders for AM (additive manufacturing)" which take advantage of our strong production technology, we will strive to develop technologies and products that can contribute to "customers' elimination and simplification of their processes" and "realizing a hydrogen society.

# Global collaboration

As the special steel market is becoming increasingly globalized, we cooperate with Ovako of Europe and SSMI of India in a wide range of areas in terms of technological development, as well. Although requirements differ depending on the market environment and local conditions, including in the case of the Formed and Fabricated Materials business at NSSP of China and SMM of Mexico, our Group will, with Sanyo Special Steel playing a central role, take on technological and quality challenges and further enhance cooperation so as to be able to diffuse and practice "reliable manufacturing as the Sanyo Special Steel Group" on a global scale.

# Initiatives aimed at further expanding our technological superiority

Not only the special steel industry but all manufacturing industries are constantly in the midst of global competition, and initiatives for technological innovation are activities for surviving medium- and long-term competition. We believe that such technological innovation is possible only if we can manage both "identifying the direction that customers and markets demand" and "maintaining our excellent technological development capabilities that can materialize such demand." The "ability to sincerely listen to the voices of global customers" and the "technological capabilities to materialize those voices" are both exerted by individuals. We recognize that it is an important task under the ongoing Mid-Term Management Plan to actively earn the trust of our customers without becoming content with the status quo and to develop excellent human resources who are eager to improve their technical skills. By implementing this task, we will continuously strive to respond to our customers as "Sanyo as a technology company."

# Revision of 2025 Mid-Term Management Plan



Director, Member of the Board, Managing Executive Officer

# OI Shigehiro

Aiming to achieve 1x PBR through management with the cost of capital and share price taken into account Director, Member of the Board, Managing Executive Officer TAKAHASHI Kozo

In January 2023, we set up a DX Promotion Project Team, which is led by the President, and have intensively implemented "Sanyo DX," a basic policy of the 2025 Mid-Term Management Plan. DX is the concept of "transforming" people's lives for the better through the utilization of advanced digital technology. I believe that the adoption of digital technology itself does not constitute DX since digital technology itself is just a means, and that the key point is to "transform" the very business model through the use of such technology. With this in mind, we have established five working groups (WGs) in the Project Team to promote DX.

# Initiatives of each WG

The System Infrastructure Reform WG aims to fundamentally reform our systems for the purpose of utilizing an enormous quantity of data and ensuring security, among other purposes. The Business Efficiency WG works on enabling all employees to reform their operations and on developing human resources to sustain such reformed operations. The Business Process Reform WG seeks to optimize, on a company-wide scale and by making the data held by each division shared with other divisions, the QCD (quality, costs, and delivery dates) of our work, which means a series of business operations in which the engineering division assigns quality specifications to the details of each order received by the sales division from a customer and passes the order onto the production division whose departments then engage in the production of the relevant product according to the specifications, subsequently the product is delivered to the customer, and the payment for the product is collected.

The Operation Efficiency WG strives to collect various types of data from production facilities in real time, analyze and evaluate such data using AI (artificial intelligence), and further improve quality by immediately providing feedback for maintaining and managing the optimal conditions of facilities and for improving the quality and productivity of special steel produced. The Production Process Reform WG strives to collect facility operation information by utilizing digital technology and to enable the sales, engineering, and administrative divisions as well as production sites to make use of more accurate forecasts obtained through analysis of the information by comparing it with the plan created in cyberspace.

# With a view to total optimization and collaboration

Currently, in order to solve the "problems" of each WG, what needs to be done within each WG and how each WG should be are being organized. In other words, we are just beginning to see the "vertical connection" of each WG.

However, when considering the DX of Sanyo Special Steel as a whole, it is important to set out the "horizontal connection" of the WGs with a view to total optimization and collaboration. We consider it necessary to firmly organize and establish vertical and horizontal connections in order to execute our DX in its entirety in the most efficient manner.

DX cannot be realized overnight. However, in order to deal with "changes in the business environment," such as market globalization and changing customer needs, we will implement our DX with a strong determination to transform our business operations themselves and also our business model.

In the revision of the 2025 Mid-Term Management Plan, a policy of aiming for 1x PBR through management with the cost of capital and stock price taken into account was set. We have regarded our share price as the market appraisal of us, have constantly paid attention to it and its trends, and have internally shared such trends. We consider that the setting of our share price as a specific target of our management plan is a major turning point for our Group.

# Issues with our shares

The stocks of companies in the steel industry, including Sanyo Special Steel, have long been regarded as those whose business performance is susceptible to economic cycles and volume fluctuations. However, in recent years, we have sought appropriate margins suitable for the value of our products and have promoted measures such as the expansion of the surcharge system, which has enabled us to secure relatively stable earnings.

In addition, with the acquisition of SSMI of India in June 2018 and Ovako of Europe in March 2019 as subsidiaries, our Group has a tripolar structure consisting of Japan, Europe, and India to capture the global demand for special steel, which has grown over the medium to long term. Most recently, consolidated business performance has expanded due to Ovako's improved earnings, among other factors.

On the other hand, as an issue on the stock front, we believe that investors view Sanyo Special Steel as a brand with a high risk of price volatility, partly due to a low volume of trading in the market. In addition, as circumstances unique to us, the liquidity of our shares is low. In light of the listing criteria for the Prime Market, we must consider improving the liquidity, among other relevant factors.

# Toward 1x PBR

In improving the PBR, it is important to strengthen profitability as well as Sanyo Special Steel's reputation in the stock market.

With respect to shareholder returns, we have revised our dividend policy to set the consolidated dividend payout ratio at around 35% as a standard level, comprehensively taking account of the funds required for investment in growth and other purposes. Also, we will take even further steps to eliminate crossshareholdings with business partners, financial institutions, etc. in order to facilitate the market circulation of our shares.

Furthermore, since highly reliable special steel continues to be indispensable for social evolution, it is possible for our Group to aim for medium- to long-term profit growth by capturing the global demand for special steel even in the situation where it is difficult to envisage domestic economic growth. Treating the global trend toward decarbonization and innovations of information technology as significant opportunities for our Group, we will actively make investment primarily in carbon neutrality and DX, flexibly deploy the human capital required for sustainable growth to strengthen our corporate foundation, and explore opportunities that will further enhance our corporate value, thereby intensifying our presence in the global special steel market.

Moreover, we will strive to achieve 1x PBR by strengthening investor relations activities to widely disseminate the ESG initiatives on which we will further focus, as well as the growth story of our Group.

# Initiatives of Ovako Toward Carbon Neutrality

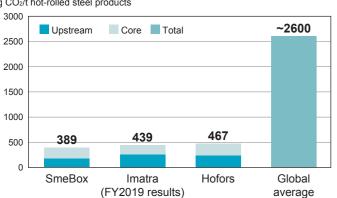
Playing a part in the recycling of iron and steel resources in the European region through its special steel production business with iron and steel scrap as the main raw material, Ovako has long promoted world-leading initiatives for the realization of sustainable special steel production and has already reduced CO<sub>2</sub> emissions from its own manufacturing processes by 58% compared to the FY2015 level. In April 2020, Hofors Mill successfully heated steel before rolling using hydrogen as a fuel. For the practical realization of this technology, the construction of a carbon-free hydrogen generation plant was commenced at Hofors Mill in June 2021. Furthermore, in January 2022, Ovako became carbon neutral by offsetting its remaining CO<sub>2</sub> emissions through a carbon offset program and commenced the sale of green steel.

Ovako has a total of three special steel manufacturing bases in Sweden and Finland, and the CO2 emissions of each of these bases are at the same level as or lower than one-fifth of the global average for steel. In Europe, customers demanding materials with low CO<sub>2</sub> emissions are already on the increase, and being carbon neutral is a strong advantage.

Additionally, Ovako is actively working with customer industries toward carbon neutrality, as exemplified by its participation in the "Polestar 0 project" through which Polestar, a local EV manufacturer (an EV brand of Volvo Cars), aims to realize automobile production with net zero greenhouse gas emissions; and by working with SKF, a major bearing manufacturer, and successfully realizing the bearing production that can reduce CO<sub>2</sub> emissions by 90% or more compared to the production of conventional products.

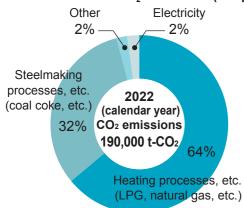
# CO, emissions per ton of Ovako's products (Scopes 1 + 2 + 3)

Kq CO<sub>2</sub>/t hot-rolled steel products



# Breakdown of Ovako's CO<sub>2</sub> emissions (Scopes 1 + 2)

Sources: Climate declarations and company estimates, verified by KPMG





# Shifting to Carbon Neutrality by Utilizing an Offset Program

For the purpose of further accelerating initiatives for early resolution of the issue of climate change, Ovako has become carbon neutral (net zero CO2 emissions in its own manufacturing processes) since January 2022. Ovako purchases carbon credits applicable to the Clean Development Mechanism (CDM), which invests in greenhouse gas emission reduction projects primarily in developing countries, to offset its remaining CO<sub>2</sub> emissions (Scopes 1 and 2) until it achieves zero CO<sub>2</sub> emissions in its manufacturing processes.

In conjunction with this, a climate surcharge system was introduced for steel product prices to promote further initiatives to address climate change issues and investment in new technologies.



# **Completion of the Construction of a Carbon-free Hydrogen Plant**

On September 5, 2023, Ovako has inaugurated fossil-free hydrogen plant built at Hofors mill in Sweden, and held a ceremony in the presence of Swedish Prime Minister Ulf Kristersson and many other prominent quests.

This plant will generate about 4,000m3 of fossil-free hydrogen per hour through electrolysis of water using fossil-free electricity. By using fossil-free hydrogen produced at this plant as fuel for production of special steel, Ovako will be able to significantly reduce CO2 emissions from the process of heating steel before rolling at Hofors mill.

Ulf Kristersson, Swedish Prime Minister (center), Katsuhiro Mivamoto, President of Sanvo (left), and Marcus Hedblom, Ovako CEO (right) at the inauguration

In his speech at the ceremony, Prime Minister Kristersson praised Ovako's initiative, saying, "What Ovako is accomplishing here today is a crucial step - this is green transition in action not just words"





Ulf Kristersson, Swedish Prime Minister (right) and Ovako officers starting up the hydrogen plant (from left: Marcus Hedblom CEO. Rickard Qvarfort Head of Business Unit Hofors Hellefors, and Katsuhiro (Iivamoto President of Sanyo)

Ovako will be able to reduce CO<sub>2</sub> emissions in steel production by approximately 50% (about 20 thousand tons annually) at Hofors mill. In addition, this technical solution will be the first step in development of hydrogen infrastructure that can be utilized in the transport sector; for example, development of fossil-free freight transportation using fuel cell-powered trucks. The solution is also expected to contribute to improving stability of the power grid. Moreover, the residual heat can be utilized in local area heating networks.



Electrolyzer of Hydrogen plant of Ovako

# **Working with Major European Bearing Manufacturer SKF on the Realization** of Bearing Production Reducing CO<sub>2</sub> **Emissions by 90% in Comparison with** the Production of Standard Products

Using carbon-neutral steel produced by Ovako, the production of bearings with 90% less CO<sub>2</sub> emissions compared to standard products was made possible at SKF's Gothenburg Plant which had achieved net-zero emission.

Ovako and SKF aim for net-zero carbon bearing production with a view to early transition to a sustainable society, and the above-mentioned achievement is an important step toward



Marcus Hedblom CEO, Ovako (left) and Rickard Gustafson CEO, SKF (right)

# Participation in the "Polestar 0 project" that Aims for Automobile Production with **Net Zero Greenhouse Gas Emissions**

For the ultimate goal of zero CO<sub>2</sub> emissions toward the resolution of the climate change issue, Ovako participates in the "Polestar 0 project" in partnership with Polestar, Volvo Cars' EV

This project aims to realize climate neutral (net zero greenhouse gas emissions) automobile production by 2030 in collaboration with the entire supply chain. As a materials manufacturer upstream in the supply chain, Ovako is expected to play the roles of supplying materials with the lowest possible carbon footprint and of increasing the use rate of recycled raw materials to reduce the need for procurement of mined resources even further.

Through various initiatives. Ovako will continue to contribute to the early realization of a carbon neutral society.



# Toward Enhancement of Corporate Value and Contribution to a Better Future



# **External Directors' Impressions of Sanyo Special Steel**

# **FUJIWARA**

First of all, I believe that Sanyo Special Steel has worldleading technological capabilities in the production of special steel. I feel that we manage to provide society with a good cycle by recycling iron and steel resources to provide highly reliable special steel products and by helping customers reduce their carbon footprints and environmental burden. This is also a source of pride for me as an external director. I think that our growth in the future will be based on our continued provision of products of high social value with reliable quality that please many customers, through practicing our Corporate Philosophy "Confidence-based Management: Confidence of Society x Confidence of Customers x Confidence among People."

### TOIDE

I believe that our significant strength lies in our human resources and corporate culture that support our technical capabilities. They were not built up overnight but have continuously been cultivated over the long history of our company, and constitute an indispensable foundation for us to continue growing and demonstrating our strengths.

Also, as a corporate group, we have excellent companies that actively incorporate the latest technology and endeavor to enhance their social value, such as Ovako, a Swedish special steel manufacturer. Furthermore, NSC, the parent company supporting our entire Group, is also a very important player. I think that having a stable business foundation as a member of the NSC Group is very promising in terms of our future growth.

The provision of sufficient prior explanations about proposals to external directors and the implementation of regular opinion exchange sessions, etc., separately from board meetings, are very good initiatives for us, who have different areas of experience, to engage in discussions on management. Also, the number of occasions for discussing important issues related to the medium- to long-term growth of our Group, such as discussions on the Mid-Term Management Plan and overseas business, is increasing. In particular, it is important to review and optimize the Mid-Term Management Plan not only when it is formulated but also periodically to check its progress and according to changes in the business environment. Our Board of Directors meetings continuously hold discussions in such manner. It is my opinion that such discussions and operation have been made possible because the President accepts the opinions of directors with sincerity, and also because directors, regardless of whether they are internal or external directors, are willing to incorporate each other's opinions to create a good meeting body.

# YOGI

I feel that the effectiveness of board meetings has been enhanced over the years. One of the most important matters of corporate governance is whether it is possible to constantly steer the company in a better direction under various circumstances, and whether it is possible to stop things when the company is heading in the wrong direction. In addition, it is important to constantly monitor the risk of "overriding of internal controls by management," which is regarded as a very significant risk for internal controls, and to ensure the atmosphere allows for rebuttals where necessary. I believe that Sanyo Special Steel has managed an environment in which the various opinions of the four external directors are listened to with sincerity, primarily by the President, and in which it is easy to express opinions in an open manner in term of "what is best for the Sanyo Special Steel Group."

Independent External Director, Member of the Board

USUKI Masaharu



Independent External Director, Member of the Board

# FUJIWARA Kayo



Independent External Director. Member of the Board, and Audit & Supervisory Committee Member

# YOGI Hiroshi



Independent External Director, Member of the Board, and Audit & Supervisory Committee Member

# TOIDE Iwao



# **Initiatives for ESG Including Carbon Neutrality**

### **TOIDE**

"Iron" is an essential element for humanity. However, because the steel industry emits large amounts of CO2, it is necessary to reduce the CO<sub>2</sub> emissions generated in manufacturing processes with a view to achieving carbon neutrality by 2050. In addition to putting our energy into our own carbon neutrality, we have Ovako as our subsidiary, which was one of the first companies in the world to achieve carbon neutrality and focuses on further initiatives such as installing hydrogen plants. I think this is excellent as a corporate initiative and also in terms of its impact on management.

# **FUJIWARA**

In times to come, the need for products and technologies that reduce environmental impact will increase further, including the increased introduction of renewable energy sources and the size and weight reduction of parts in line with the shift of automobiles to EVs. Sanyo Special Steel is focusing on the implementation and further dissemination of eco-products that contribute to the reduction of CO<sub>2</sub> emissions not only in its own manufacturing processes but also in the stage of parts manufacturing at customers and during end product use.

For the realization of a carbon neutral society, it is important to determine what iron is to be offered to each customer. I can see that our officers and employees enthusiastically engage in work with a sense of responsibility in order to provide long-life products that are even more durable and low-carbon than ever.

Although it is a very hard task to deal with ESG including carbon neutrality since a wide range of topics is involved, the President and other officers work on it diligently, employees have also set up a Carbon Neutrality Committee and a DX Project Team, and numerous departments come together and continue holding discussions.

The implementation and activeness of such company-wide initiatives are extremely important in continuing our responses into the future. While the level of difficulty in this regard is expected to increase as we move toward 2050, we will continue to provide support so as to ensure that progress is continuously made toward the accomplishment of various targets set by Sanyo Special Steel by itself.

# **USUKI**

ESG initiatives lead to the long-term enhancement of corporate value by reducing business risks. I have seen a growing awareness of ESG initiatives among our officers and employees after, among other factors, the introduction of a system to partly reflect the results of ESG initiatives in executive compensation. In the future, I would like to focus on the "utilization of human capital," which has received significant attention in recent years, to create an environment in which employees can work with a refreshing feeling every day; in other words, a corporate culture in which they can work in a healthy, safe, and energetic manner. I am willing to put more of my energy into making this happen and to hold discussions in board meetings on measures to realize such environment.

ESG is a value creation process itself. Although I feel our Board of Directors understands it when holding discussions, it is important to reaffirm it periodically and discuss what we need to do as members of society. Only then should we implement each measure, confirm its progress one year later, and hold discussions on how to make improvements; I hope to connect those processes in such a manner. Also, I would like to receive honest feedback from management, executives, and employees on what role we as external directors should play to make a greater contribution. On the basis of this feedback, we would like to improve ourselves and make relevant efforts.

# Toward Enhancement of Corporate Value and Contribution to a Better Future

# What is Expected from Future Sanyo Special Steel

### **FUJIWARA**

With respect to the active participation of women, the percentage of women in Sanyo Special Steel is still low, compared to other industries. I think, in the current situation, the "benefits of women's participation" are not fully realized even by women themselves. Sanyo Special Steel is increasing opportunities for female employees to express their opinions, such as by organizing round-table talks between female employees and female external directors. In order to further promote such initiatives, I hope that female employees to have the courage to speak up in their workplaces, and I myself would like to encourage them to do so. In addition, our global operations have been expanded, there will be more opportunities to interact with people from different cultures, religions, or values. When people from diverse backgrounds work together, there are moments when you find the beauty of diversity. At the same time, it is not easy to understand people who are different from you. However, I believe that the first step is to communicate your opinion and listen to the opinions of others as colleagues of the same Sanyo Special Steel Group.

### **TOIDE**

Having an impact on the company's future competitiveness, DX is a very important factor. Commonly applicable to many Japanese companies, the ultimate objective of DX is business model transformation by utilizing AI and IT. This is extremely difficult to achieve, and there are not many companies that have accomplished it. Sanyo Special Steel is one of the companies working on DX at the moment, and a variety of opinions have been received from work fields. As the process has just begun, I would like Sanyo Special Steel to continue implementing its initiatives.



In relation to DX, I participated in a workshop the other day and listened to the opinions of some young individuals. With respect to the guestions "What is DX" and "What to do," many individuals appear to start from details leading to the streamlining of their own work or the enhancement of their productivity. DX is not a top-down process; it is important for each individual employee to realize the importance of DX through its benefits related to the employee, such as the streamlining of the employee's own work or the enhancement of his/her productivity, and to be in a position of promoting DX. In that sense, I feel that the current progress of Sanyo Special Steel is very good. The question is what will be the next step. It is extremely difficult to review the work processes that have been well-established over the course of the company's history in transforming its business through DX. This requires a high level of leadership, and thus I think it is a matter that should be discussed and implemented by management including the Board of Directors in an integrated manner.

### YOGI

The greatest transformations of Sanyo Special Steel in recent years were that it became a member of the NSC Group, and that its overseas business rapidly expanded. In order to appropriately respond to these transformations, it is important to enhance internal controls in the entire Sanyo Special Steel Group. As an Audit & Supervisory Committee member, I have paid attention to this point. In this situation, although serious efforts have been made for the development and enhancement of human resources. which is an important theme, my impression is that there is still a long way to go. The key point for the corporate group including Ovako, a leading company in terms of carbon neutrality, and for further expanding global operations, is global human resources. Despite some sense of relief that the senior management recognize the difficulty of developing human resources, have created a long-term roadmap, and have worked on human development, I feel it is my role to encourage management to continuously come out with the measures necessary to secure and develop global human resources in the future.

# USUKI

For issues which have become hot topics in recent years, such as management that pays attention to price-to-book ratio (PBR) improvement and the cost of capital, it is not always possible for results to be produced in the short term. However, since investors should be interested in checking that the Board of Directors discuss such issues and continue to do so in the future. the corporate disclosure of information is becoming increasingly important. For Sanyo Special Steel, too, the easy-to-understand communication of the topics covered by the Board of Directors and the policies we are implementing, such as through Integrated Reports, leads to enhancement in our corporate value. I suggest that helping a wide range of external stakeholders understand and recognize not only the quantitative aspects of our company but also what we are working on, how we feel while working at it, and the value we are creating will lead investors to value our company. On my side, I am willing to work on ensuring that both the Board of Directors' "discussion" and the "communication of information" on our initiatives are enhanced.



### FU.IIWARA

On occasions of discussion including meetings of the Board of Directors, we, external directors, also feel that we are offered opportunities to study. By making efforts as a member of the team that takes on building a better future of Sanyo Special Steel, I also feel a sense of fulfillment in my own life.

I think that working at a company intrinsically "enriches the worker's own life." The work of each individual leads to his/ her own learning and growth, the growth of the company, and ultimately the growth of society. I am willing to make efforts in ensuring that our company is able to continue the chain of such



# **Topics**

# Participation in the GX League

Having endorsed the GX League Basic Concept, which aims to transform the economic and social systems in their entirety to achieve carbon neutrality by 2050 in which corporate growth, consumer happiness, and contribution to the global environment are simultaneously achieved, we started taking part in the GX League in May 2023.

The GX League was established to provide a forum for discussion on the transformation of the economic and social systems in their entirety and practice for the creation of new markets with players who are taking on the challenge of GX (Green Transformation) to achieve carbon neutrality by 2050. We will actively take part in various activities within the framework of the GX League, such as voluntary emissions trading, the formation of rules for market creation. the development of business opportunities, and interactions in the GX Studio.



# **CDP Climate Change Score "B"**

Sanyo Special Steel responded to the CDP climate change questionnaire for the first time in July 2022 and received a "B" score.

CDP is a British NGO that operates a global environmental disclosure system. In cooperation with institutional investors, CDP requests companies to disclose information about their activities regarding climate change and greenhouse gas emissions and ranks companies' efforts on climate change on an 8-level scale from A to D-. In 2022, more than 18,700 companies were surveyed around the world.



# "EcoLeaf" Certification, an Environmental Product Declaration that **Discloses Environmental Information Relating to Special Steel Products**

Sanyo Special Steel has obtained "EcoLeaf" certification, an environmental product declaration (EPD) that quantitatively discloses environmental information that has been verified by a third-party organization relating to the special steel products (bearing steel, engineering steel, and tool steel) manufactured and sold by Sanyo Special Steel.

EcoLeaf uses LCA (Life Cycle Assessment) to disclose quantitative environmental information based on the entire life cycle of a product, from resource gathering, manufacturing, logistics and use, to disposal and recycling. Through the disclosure of data verified by a third party to ensure reliability and transparency, customers will be able to assess the quantitative environmental impact of the products they use and incorporate this information in their decision making when selecting environmentally friendly products. With this EcoLeaf certification, we are now able to present our customers with objective and highly transparent environmental information related to our products. This is the first time that a Japanese special steel manufacturer has obtained EcoLeaf certification. We will continue to contribute towards the realization of a sustainable society by supplying high-quality and environmentally friendly special steel products.



JR-AW-23001E

◆ Japan EPD Program by SuMPO https://ecoleaf-label.ip/english

# Approved for "TPG Certification" as a Supplier of Steel Products for Critical Components of Wind Power Generator for the First Time Among Japanese Steelmakers

TPG certification is a U.S. certification program that certifies that the TPG requirements specified for each certification area, such as steel manufacturing, heat treatment, and nondestructive testing, have been met for the manufacture of transportation and power generation-related products. Some wind turbine generator manufacturers have already decided to require their suppliers to obtain TPG certification.

In recognition of our highly reliable manufacturing technology and quality control system that enable us to stably produce such high-cleanliness special steel and meet the TPG requirements in the steel manufacturing field, we became the first Japanese steelmaker to receive TPG certification.

In addition to our continuous casting process, which can produce special steel with high productivity, we have also been certified for our ingot making method, which can produce large-diameter steel products used in large bearings for wind turbine generators, etc., making us the first company in the world to be certified for both processes.



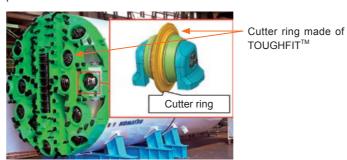
The introduction of wind power generation is expected to expand toward the realization of a carbon neutral society.

# Commercialization of High-carbon Steel TOUGHFIT<sup>™</sup> that can Contribute to Achieving a Carbon-neutral Society

Innovative high-carbon steel TOUGHFIT<sup>™</sup>, which has overcome the disadvantage of being "hard but brittle," was commercialized.

Since the hardness of TOUGHFIT<sup>™</sup> can be increased without reducing its toughness by employing quenching heat-treatment (through hardening) without carburization, the application of TOUGHFIT<sup>™</sup> can contribute to reducing CO<sub>2</sub> emissions in steel part manufacturing processes. In addition, because this high-carbon steel equipped with both high hardness and toughness leads to improvement in the fatigue life of each power transmission part, it can contribute to CO<sub>2</sub> emission reductions by enabling size- or weight-reduced part designs leading to improved fuel efficiency.

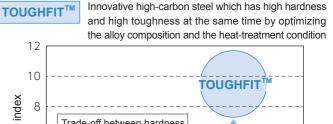
The application of TOUGHFIT<sup>™</sup> to materials used for the wear resistant parts and power transmission parts of automobiles and construction and industrial machinery can contribute to CO2 emission reductions through simplification of hardening heat treatment and size and weight reduction of

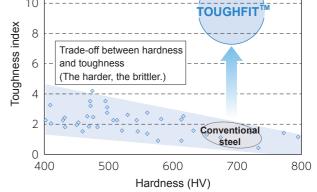


Appearance of a Komatsu-made tunnel boring machine and the cutter ring form

A cutter ring for a tunnel boring machine requires high toughness that can withstand big shocks without sustaining damage, in addition to extremely high hardness and wear resistance, in order to cut through solid rock and large amounts of sand and earth. Recognized for its excellent performance, TOUGHFIT<sup>™</sup> has been put into practical use as a cutter ring material for Komatsu's tunnel boring machines.







# NOVASHAPE<sup>™</sup> Series – Advanced Metal Powders for Additive Manufacturing

# Released a New Metal Powders for Die Casting Molds with Higher Thermal Conductivity

Sanyo Special Steel has released a new metal powder lineup enabling formation of high-thermal-conductivity die casting molds by additive manufacturing, thereby reducing the cycle time for die casting and enabling additive manufacturing of large molds.

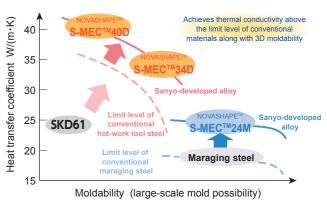
When these new metal powders are used with 3D printers to produce die casting molds, effective cooling of the molds during die casting can be achieved. Besides raising productivity by reducing cycle time, use of these powders can be expected to extend the life of molds.

Moreover, the combination of high thermal conductivity and excellent moldability makes them suitable for additive manufacturing of large molds. We will continue to focus our efforts on developing new products in the NOVASHAPE™ Series and new technologies, providing solutions that utilize materials and technology to improve the competitiveness of our

### Technical challenges relating to additive manufacturing of die casting molds

Large-size molding and high thermal conductivity

- SKD61\* has a tendency to crack during additive manufacturing, making it difficult to achieve large-size molding.
- · Maraging steel has low thermal conductivity, leading to insufficient mold cooling.
- → Difficult to overcome both these challenges with conventional materials \*EU equivalent X40CrMoV5-1



# Features of additive manufacturing

# Rapid melting and solidifying in each micro area

- · Comprehensive hardening effectiveness
- · Inhibition of embrittlement by rapid solidifying
- → It should be possible to reduce alloy elements compared to conventional materials

# **Development concept**

# Alloy design that utilizes features of additive manufacturing

S-MECTM40D : Improve thermal conductivity by reducing alloy elements required to ensure hardenability of casted JIS-SKD61

S-MEC™34D : Improve moldability by modifying alloy design from S-MEC™ 40D to control deformation during additive manufacturing

S-MECTM24M : Improve thermal conductivity by reducing alloy elements required to prevent embrittlement of maraging steel

# **Topics**

# **Dialogue Between External Director and Female Employees**

Three round-table talks were held between FUJIWARA Kayo Director, who is a female independent external director, and female mid-career employees in January to March 2023. These talks were regarded as opportunities for female employees to envision attractive career paths by having a dialogue with Fujiwara Director, who had been involved in overseas procurement and corporate management at energy-

> related companies, through which those female employees got to know Fujiwara's hands-on experience and received advice in response to their frank opinions.

> > In order for many female employees to play active roles in managerial positions or positions involved in management in the future, we will continue such initiatives, etc. to raise awareness among female employees and to promote a workplace culture in which they feel comfortable to play active roles.



FUJIWARA Kayo, Independent External Director

# Formulation of a General Employer Action Plan Based on the Act on Advancement of Measures to Support Raising Next-generation Children and the Act on the Promotion of Women's Active Engagement in Professional Life

Innovation creation is the key in enhancing corporate value over the medium to long term, and co-creation by diverse individuals is the driving force behind such innovation creation. With the aim of becoming a company that promotes diversity management to enable all employees to energetically work with high motivation and achieve a good work-life balance, we have established a fulfilling support system and are working on developing a workplace environment to ensure that employees can continue working with a sense of security even in the face of significant life events such as childbirth and occasions of being required to provide childcare or nursing care.

# General Employer Action Plan Based on the Act on Advancement of Measures to Support Raising Next-Generation Children [7th Term: April 1, 2023 to March 31, 2026]

1 Initiatives primarily for employees engaged in childcare

Target 1 Percentage of employees taking childcare leave Male: 50% or higher Female: 80% or higher

<Outline of initiatives> • Internal posting of this Action Plan and the childcare leave system.

Provision of individual guidance and counseling to eligible individuals

Target 2 Provision of support to female employees in balancing their work and family lives, raising their motivation, etc.

< Outline of initiatives > • Effective use of the Support Program for Balancing Career Development and Childcare

2 Initiatives for employees including those not engaged in childcare

Target 3 Percentage of employees taking annual paid leave: 80% or higher by FY2025

Labor-management consultation and deliberation on and implementation of effective measures

3 Initiatives that are not limited to the company's own employees and things outside of improving the employment environment

Target 4 Continuing to accept local elementary school students for factory tours, junior high school students for work experience, and high school students for internships

ostering a workplace

culture that enables mplovees to work and

rest as they wish

<Outline of initiatives> • CAcceptance of factory tours, and work experience, and arrangement of visiting classes Provision of steel materials for practical training to nearby high schools with the aim of helping students acquire knowledge and improve skills

# General Employer Action Plan Based on the Act on the Promotion of Women's Active Engagement in Professional Life [3rd Term: April 1, 2023 to March 31, 2026]

Fostering a culture in which female employees can play active roles

(1) Increase by 1 point in the percentage of female managers (5.3% to 6.3%)

(2) Increase by 3 points in the percentage of female employees in unit chief ranks for next-generation managers (16.0% to 19.0%)

- <Outline of initiatives> Training on gender unconscious bias, and external career development training for female employees
  - Dialogue between female directors and female employees

of the attractive points in working

Target 2 Number of employees using the work-from-home system 50% or higher of all employees in planning positions by FY2025

<Outline of initiatives> Promotion of paperless work and development of an environment that enables work-from-home by DX

• Improvement of the work management levels of supervisors over employees engaged in work-from-home of the work-from-home

# Certified as a Hyogo Women's Active Promotion Enterprise - "Mimosa Certified Company"

Three round-table talks were held between FUJIWARA Kayo Director, who is a female independent external director, and female mid-career employees in January to March 2023. These talks were regarded as opportunities for female employees to envision attractive career paths by having a dialogue with Fujiwara Director, who had been involved in overseas procurement and corporate management at energy-related companies, through which those female employees got to know Fujiwara's hands-on experience and received advice in response to their frank opinions.

In order for many female employees to play active roles in managerial positions or positions involved in management in the future, we will continue such initiatives, etc. to raise awareness among female employees and to promote a workplace culture in which they feel comfortable to play active roles.

The certification of "Mimosa Certified Company" is a system of the Hyogo Prefectural Government to certify companies, etc. that meet certain standards in the following certification categories with the aim of promoting the success of women in companies in the prefecture: company philosophy, career development support, promotion of women, and promotion of women's retention.



# ひょうご女性活躍推進認定

Mimosa certified company

# Introduction of the Support Program for Balancing Career Development and Childcare

A program to support employees taking childcare leave in balancing their careers and childcare was introduced.

Sanyo Special Steel has developed a childcare support system that is superior to the statutorily required level. While the use of this system enables employees to take long-term leave or work shorter working hours, it is also possible that employees feel anxious about returning to work or their career formation after return or experience difficulty in balancing their work and child-raising. With the support program enabling employees on long-term childcare leave to take seminars, e-learning courses, etc. useful for balancing work and childcare, we will support employees facing life events such as childbarth and childcare in their smooth return to work and career formation by allowing childcare leave periods to be used as opportunities for self-development rather than blank periods.



# **Topics**

# Recognized as a Certified Health & Productivity Management Outstanding **Organization 2023**

Based on the recognition that the safety and health of its employees is a prerequisite for its business activities, Sanyo Special Steel has considered health control from a management perspective and has worked on vitalizing the organization to lift the energy of employees and enhance productivity through health management.

Under the health management system with the Representative Director and President acting as Chief Health Officer, we have established a PDCA structure based on the monitoring of the implementation status of health management measures, the verification of the effectiveness of such measures, and the implementation of additional measure.

Furthermore, we work together with the health insurance association to promote efforts to improve employees' lifestyles and prevent mental health problems by, for example, holding a calisthenics session before the start of work in each workplace, a walking event "Sanyo Walk," exercise seminars, and lecture presentations on health for the purpose of supporting employees in making physical exercise an established routine. These efforts led to the acknowledgement of Sanyo Special Steel as a Certified Health & Productivity Management Outstanding Organization (Large Corporation Category) again, as was the case in 2022. We will continue to further promote corporate health management and create a workplace environment in which all employees can work to the fullest of their abilities every day.

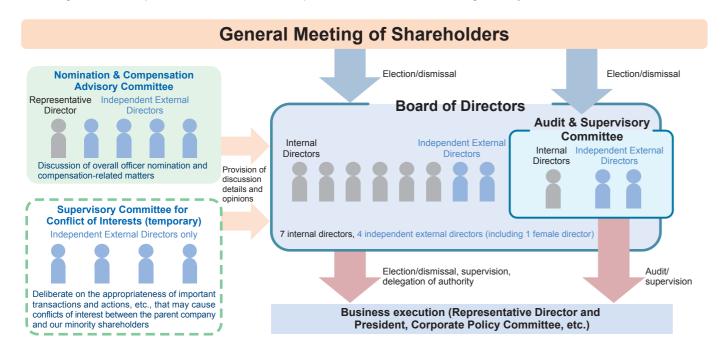


# Formulation of Multi-Stakeholder Policy

On the basis of the growing importance of value co-creation in corporate management not only with shareholders but also with diverse stakeholders including employees, business partners, customers, creditors, and local communities, Sanyo Special Steel formulated a multistakeholder policy. We will continue to promote cooperation, coexistence, and co-prosperity through sustainable provision of returns to employees and formation of partnerships with business partners from the perspective that proper collaboration with various stakeholders and the appropriate distribution of earnings and results generated through value co-creation and productivity enhancement will help maintain the momentum for wage increases and lead to sustainable economic development.

# Transition to a Company with an Audit & Supervisory Committee

In June 2022, we transitioned to a company with an Audit & Supervisory Committee in order to accelerate management decision-making, enhance discussions of basic management policies at Board of Directors meetings, and strengthen the supervisory function of the Board of Directors in the management. In addition, we stipulated in the Articles of Incorporation that all or part of the decisions on the execution of important business operations (excluding matters stipulated in each item of Article 399-13, paragraph (5) of the Companies Act) may be delegated to the directors, for the purpose of focusing deliberations at the Board of Directors to enhance discussions on management policy formulation and other matters. In addition, we strive to speed up the decision-making process by delegating executive authority to the executive officers and below, who are in charge of business operations in accordance with the prescribed rules for decision-making authority.



# **Appointment of Female Executive Officer**

We are therefore promoting the awareness building of female employees themselves and the creation of a workplace culture that encourages female employees to take an active role in the company through planned recruitment of female employees, expansion of job categories for females employees, and external training, etc. As of April 2022, the percentage of female managers increased to 5.6%, and the first female executive officer was appointed on June 24, 2022.

We will continue to work toward the activation of diversity and inclusion, where diverse human resources come together and interact with each other in a mutually beneficial manner, through career development support and training, etc., for female employees, in order to ensure diversity in the appointment of core human resources, etc.



I was assigned to be in charge of announcement of financial results and IR with no experience in financial closing work, and my first M&A case was to do with the current subsidiary in India. However, we have a warm corporate culture where someone will always come to your rescue if you do not give up and work to the best of your abilities in a positive manner. The internal control operations for which I am now responsible are very rewarding because they are important duties that seek to continuously improve our Group's risk management

system in normal times and, in the event of an incident although such an incident should never happen, to play a central role in investigating the cause of such incident and preventing its recurrence. In the course of my work, there are both advantages and disadvantages of being a woman. However, in general, I feel that my gender is accepted as my own personal quality. I have been a top runner since I joined the company, and now I feel reassured as the number of younger workers is gradually increasing.

Since joining Sanyo Special Steel in 1990 as the first woman in a management track

position, I have experienced a variety of operations in the fields of information systems,

corporate planning, finance, and general administration. Currently I am engaged in internal

control operations. Looking back, I took on some seemingly foolhardy challenges; for instance,

SUDA Atsuko. Executive Officer and General Manager of the Internal Control & Audit Department

(appointed on June 24, 2022)

# **Reflection of ESG Indicators in Executive Compensation**

Sanyo Special Steel has determined the base amount by position, taking into consideration the required abilities and responsibilities as well as the content of the duties of each position according to the full-time/part-time status, and has adopted a performance-linked compensation system for business execution directors, executive officers, and executive councilors, under which the base amount varies within a certain range according to the consolidated performance, etc. of Sanyo Special Steel, so as to provide incentives for the sustainable growth of the Sanyo Special Steel Group and the improvement of its corporate value. We will further strengthen our ESG initiatives toward sustainable growth by reflecting, in performance-linked compensation from FY2023, five indicators of the CDP climate change score, health management rating, safety index, ratio of female managers, and board effectiveness evaluation by external directors, in addition to the existing numerical indicators.

# Original

- Consolidated ordinary income Short-term performance incentives Medium-to-long-term performance incentives
- ROE

# Five additional indicators

# From July 2023

- CDP score
- Health management rating
- Safety indicators
- Ratio of female managers
- Board effectiveness appraisal by outside directors

# Important ESG-related Issues

The Sanyo Special Steel Group aims to achieve sustainable growth of the Group and contribute to the realization of a sustainable society by building trust relationships with all stakeholders.

A company is a member of society, and its development would not be possible without the trust of its stakeholders. We will continue to practice our corporate philosophy of "Confidence-based Management" and contribute to the realization of a sustainable society.

	Important issue	Targets and initiatives	FY2022 results (some are FY2023 results)	Reference page	Related SDGs
	Prevention of climate change	Aiming to achieve carbon neutrality by 2050 FY2030 target: 50% reduction from FY2013	Our CO <sub>2</sub> emissions in FY2022: 535,000 tons 36.4% (306,000 tons) reduction compared to FY2013	P.19~21	13 CLIMATE 9 MOUSTRY, INNOVATION ACTION 9 AND AVERAGE TRUCTURE
E	Contribution to a resource recycling society	Reduction of by-products, promotion of 3Rs	Achieved 87.3% recycling rate of our by-products	P.22	12 RESPONSIBLE CONSUMPTION AND PRODUCTION AND PRODUCTION
Environment	Reduction of environmental impact	Compliance with regulatory standards (Water Pollution Prevention Act, Air Pollution Control Act, etc.)	Complied with regulatory standards for all items (no cases of violation or deviation from laws, regulations, and agreements)	P.22~23	14 UFE RELOW WHERE  15 OF LAND  THE PROCESS OF LAND
	Safety and disaster prevention	Achievement of a total absence of accidents (zero occupational accidents, zero accidents on the way to work) Enhancement of disaster prevention measures and business continuity management (BCM)	Promotion of the reduction of work risks and the creation of a safe workplace by "integrating top-down and bottom-up approaches" and "implementing both hard and soft measures." Conducted disaster drills, etc., in preparation for factory fires and wide-area disasters	P.24~25	3 GOOD HEALTH AND WELL-GEBING
	Promotion of diversity management	Promotion of participation of women (increase percentage of employee and managers) and the elderly, support for participation of persons with disabilities, and promotion of work-life balance	Percentage of female employees 14% (26% in planning position, 7% in technical service position)  Percentage of female managers 6.1% (+2.2% compared to April 2020)  Rate of male employees taking childcare leave: 74%	P.26	5 GENDER 8 DESENTI MONX AND ECONOMIC DROWTH
	Promotion of Corporate Health Management	Creation of a workplace environment in which each and every employee can work to the fullest every day	Recognized as a Certified Health & Productivity Management Outstanding Organization 2023 (Large Corporation Category)	P.27	3 GOOD HEALTH G B DECENTINGNE AND ECONOMIC GROWTH
	Human resource development	Development of human resources who can think and act autonomously  Development of global human resources	Initiatives for long-term development of human resources who can think and act autonomously and of global human resources Implementation of a self-transformation program based on multifaceted observation	P.28	8 DECENT WORK AND PERSONNEL SOUTH 9 MODIFIES TRUCTURE
S	Respect for Human Rights	Promotion of business activities that respect human rights	Formulation of a human rights policy  Operation of human rights-related education and relief mechanisms (help desks)  Procurement of ferroalloys with respect for human rights	P.28	1 NO PROVERTY  10 REQUIATIONS  (中華)  10 REQUIATIONS  10 REQUIATIONS
Social	Quality improvement	Continuous improvement of quality management system, etc.	Maintaining and managing the quality management system Approved for "TPG Certification" as a supplier of steel products for critical components of wind power generator	P.29	9 MUSTITY INDIVIDUAL 12 DESPONSIBLE CONSUMPTION AND PRODUCTION
	Further expansion of technological superiority	Rapid and continuous creation of highly reliable products and new technologies with a view to global business expansion	Expanding development advantageous technology to meet the needs for even higher reliability in areas of "EV (new drive train mechanisms, etc.)", "wind power generation (high quality materials for large-scale applications, etc.)", "railroad (global high-speed railroad bearings, etc.)" and "hydrogen society (hydrogen-related equipment, etc.)" Commercialization of high-carbon steel TOUGHFIT™ that can contribute to achieving a carbon-neutral society	P.29	9 MOUSTIN ANDIAMON AND REPORTS INCIDENT AND PRODUCTION AND PRODUCTION CONSUMPTION AND PRODUCTION
	Promote DX	Rapid problem-solving by utilizing digital technology, and strengthening of competitiveness through creation of new value	Establishment of the DX Promotion Project Team led by the Representative Director and President	P.30	8 BECENT WORK AND ECONOMIC GROWTH  9 MODIFICATION AND MODIFICATION  FOR THE PROPERTY OF THE PR
	Realization of sustainable procurement	Establishment of fair and equitable transactions and partnerships Establishment of a stable procurement structure	Promoted stable procurement Presented supplier awards	P.30	10 APBORT   12 ⊃CARE
G	Corporate governance	Enhancement of corporate governance	Transitioned to a Company with an Audit & Supervisory Committee Continued improvement of operation of the Board of Directors based on effectiveness evaluation	P.31~33	
Governance	Internal control systems	Promotion of risk management and compliance activities	Continued improvement of autonomous internal control systems  Conducted internal control education and dissemination activities  Appropriate operation of compliance help desk (whistle-blowing system)	1.01 00	

# **Environmental Management**

Sanyo Special Steel has established an environmental policy that forms the basis of our environmental conservation activities.

Based on this policy, we have formulated an improvement plan for environmental preservation and are working to reduce environmental risks through the use of an environmental management system, including measures to prevent global warming, recycling of by-products, and measures to prevent environmental pollution.

In addition, we contribute to the recycling of metal resources by manufacturing products using iron and steel scrap as the main raw material, and we also promote the manufacturing of products that contribute to the reduction of environmental impact by extending the service life and reducing the size and weight of parts and dies.

# | Environmental Policy

We recognize that environmental problems such as global warming, air, water, and soil pollution, and waste problems are important issues common to all humankind. As a company located in a rich environment with the World Cultural Heritage National Treasure "Himeji Castle" to the north and the Setonaikai National Park to the south, we are committed to contribute to the construction of a recycling society by giving consideration to environmental conservation at all stages of our business activities.

### <Policv>

Based on the fact that we are a company with plants that manufacture and sell special steel and nonferrous metals, we will implement environmental management based on the following policies.

- 1) We will contribute to the recycling of metal resources through the manufacture of steel products made from iron and steel scrap.
- 2) In addition to complying with environmental laws, regulations, and agreements, we will strive to continuously improve our environmental management system to enhance our environmental performance, and responsibly manage business activities that may have an adverse impact
- 3) We will promote resource and energy conservation, recycling of by-products and reduction of waste, and reduction of pollutant and greenhouse gas emissions to reduce the environmental impact at all stages of our business activities and contribute to environmental conservation and climate change mitigation. In addition, we will strive to prevent environmental pollution by developing products that contribute to the reduction of
- 4) We will focus on raising the environmental awareness of each and every employee in our environmental conservation activities.
- 5) In order to achieve this environmental policy, we will set environmental targets, review them at least once a year, and revise them as necessary.
- 6) We will appoint the General Manager of the Environmental Management Department as the Environmental System Manager to ensure that all employees are thoroughly familiar with this environmental policy through education and training and that the environmental system is operated

# **Environmental Management Structure**

# Carbon Neutrality Promotion Committee/Working-Level Liaison Meeting

The Carbon Neutrality Promotion Committee meets four times a year to deliberate on basic strategies for achieving carbon neutrality by 2050, as well as short- and long-term themes related to its promotion, and reports the main deliberated details to the Board of Directors.

Furthermore, a working-level liaison meeting attended by the general managers of relevant offices and groups within divisions of Sanyo Special Steel is held monthly from February 2023 to select issues to be addressed and manage the progress of each individual issue, thereby promoting initiatives toward achieving carbon neutrality on a company-wide scale.

# **Environmental Conservation Committee**

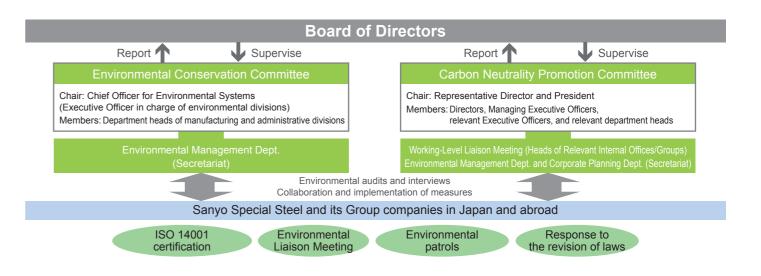
In order to promote the strengthening of environmental management and the reduction of environmental risks, the Environmental Conservation Committee meets annually to formulate basic guidelines for environmental conservation and deliberate on matters related to basic measures.

In FY2022, the Committee deliberated on the FY2021 results and FY2022 plans of the Environmental Conservation Improvement Plan, including CO<sub>2</sub> emission reduction targets, and reported the content of the deliberation to the Board of Directors.

### Acquisition of ISO 14001 Certification

Sanyo Special Steel has acquired ISO 14001 certification, the international standard for environmental management systems, at our head office plant (manufacturing base) and the main plants of Ovako and SSMI which are special steel manufacturing subsidiaries, and are working to establish this certification through annual internal audits and external audits.

We, through internal environmental audits, work on facilitating the understanding of company-wide environmental management systems and improving those systems, and periodically confirm through external audits that the environmental management systems effectively function.



# **Environmental Liaison Meetings**

Environmental Liaison Meetings are held monthly to share information on the environment; those attending include the Chief Officer for Environmental Systems, officers, and department heads, etc.

At the meeting, information is shared on the following items, etc., to reduce environmental risks.

- (i) Status of responses to items pointed out in environmental
- (ii) Legal and regulatory compliance assessment results We share the results of measurements of air, wastewater, etc., as required by laws and agreements.
- (iii)Status of industrial waste treatment and results of inspection of industrial waste disposal facilities

We share the status of industrial waste treatment and the results of inspections of industrial waste disposal facilities of contractors.

- (iv)Communication on the environment with government and industry associations, etc.
- (v) Latest revisions to environmental laws

# **Conducting Environmental Patrols**

A team consisting of the Chief Officer for Environmental Systems, officers, department heads, pollution control managers, etc. conducts a patrol once a month, mainly at manufacturing sites. We make efforts to reduce environmental risks by taking action at each manufacturing site in response to points raised through patrols.

(i) Checks on the status of environmental management

Patrols are conducted at manufacturing sites to check on the control status of soot, smoke, and wastewater, the waste separation status, etc., thereby working on improving environmental management levels and reducing risks.

(ii) Checks on emergency response drills

Emergency response drills are conducted to verify that there are no problems with emergency operating procedures, and that there are no defects in equipment and instruments.

(iii)Patrols attended by the President

Once a year, environmental patrols are conducted with the attendance of the President.

During FY2022, the management status of wastewater treatment facilities was checked

# Responding to Revisions to Environmental Laws

If there is a revision of laws and regulations related to our business, we revise our internal environmental standards and provide education, etc., to persons concerned. We also hold "Study Sessions on Environmental Laws and Regulations" to deepen understanding of legal compliance obligations for all employees of group companies and promote education for employees at all levels to reduce the risk of legal violations due to insufficient knowledge.

# <Example of response to the revision of laws>

· Act on Rationalizing Energy Use and Shifting to Non-fossil Energy (Act on the Rational Use of Energy)

The submission of reports on initiatives implemented for the shifting of fossil energy used in plants to nondetails: fossil energy has become mandatory.

(Enforced in April 2023)

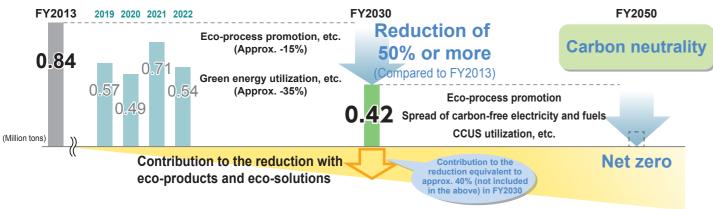
The Environmental Liaison Meeting was held to inform response: the entire company of the details of the revised Act. In addition, the utilization of non-fossil fuels is promoted on a company-wide scale

# Climate Change Prevention Initiatives

# Roadmap to Carbon Neutrality by 2050

Recognizing that climate change is an important issue that affects the survival of humankind. Sanyo Special Steel adopted a policy to "aim to achieve carbon neutrality by 2050" at the Board of Directors meeting in April 2021, and formulated and announced a roadmap for achieving this goal in July of the same year. We aim to reduce CO<sub>2</sub> emissions not only in our own manufacturing processes, but also at every stage of society by saving energy and utilizing green energy in our manufacturing processes and contributing with eco-products and eco-solutions.

# [Our CO<sub>2</sub> emissions]





# **Eco-processes**

Promoting company-wide energy conservation measures, mainly at manufacturing sites, and development of manufacturing technologies to improve energy efficiency



# **Eco-products**

Promoting development and supply of products that contribute to CO2 emission reduction at the stage of product use and products that contribute to eco-processes of consumers



# **Green energy utilization**

Utilizing carbon-free electricity, fossil-free fuels, and renewable energy

\*Started partial use of electricity derived from renewable energy sources in FY2022



Deployment of

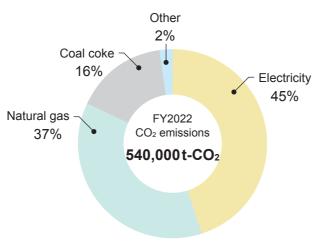
# **Eco-solutions**

Deployment of energy-saving and productivityenhancing technologies that contribute to the reduction of unit energy consumption to overseas Group companies, including Ovako and SSMI

# Our CO<sub>2</sub> Emissions Derived from Energy Use

### Trends in CO<sub>2</sub> emissions derived from energy use (Million tons) CO<sub>2</sub> emissions intensity 0.67 (t-CO<sub>2</sub>/per crude steel ton) 0.56 0.54 1.0 0.48 Independent 0.84 assured items 0.71 0.5 0.57 0.54 0.49 2013 2019 2020 2022 2021

# Breakdown of CO<sub>2</sub> emissions derived from energy use

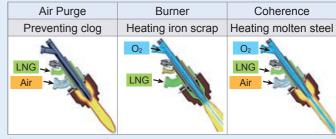


Calculated based on the "Greenhouse Gas Emissions Accounting, Reporting, and Disclosing System" under the Act on Promotion of Global Warming Countermeasures The scope of aggregation and converted emission factor are as shown in the preconditions for calculating Scope 1 and 2 emissions on the next page.

# **Examples of CO<sub>2</sub> Emission Reduction Initiatives**

# Introduction of High Efficiency Air Purge Burners to **Electric Furnaces**

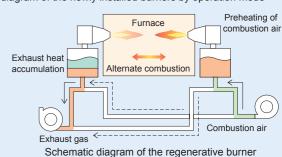
For electric furnaces, oxygen blowing and auxiliary burners are used as heat sources in addition to electricity. The introduction of high-efficiency air purge burners, which optimize the use method of LNG and oxygen employed by conventional auxiliary burners and are thereby effective in reducing CO2 emissions, has reduced LNG consumption by 16% compared to the auxiliary burners used before the introduction. In addition, the change and optimization of burner locations and the reduction of burner units have made it possible to suppress electrode wear.



Schematic diagram of the newly installed burners by operation mode

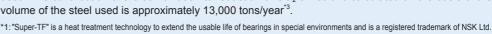
# Introduction of Regenerative Burner Type Continuous Heating **Furnaces**

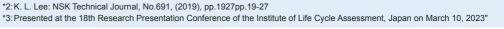
A regenerative burner type heating furnace was introduced for billet heating in the Small and Medium Bar Rolling Mill. While a pair of two burners equipped with heat accumulators repeats alternate combustion, the exhaust air from one of the burners is used to heat the combustion air of the other burner, thereby greatly improving combustion efficiency and resulting in an energy-efficiency effect of over 10% compared to the heating furnace used before the introduction.



### Contribution to CO<sub>2</sub> Emission Reduction with Eco-Products - Contribution to Stable Operation of Wind Power Generators

The bearing steel manufactured by Sanyo Special Steel for wind power generators can, with its effect of usable life extension, contribute to reduction of CO<sub>2</sub> emissions through suppression of downtime caused by the breakdown of wind power generation facilities. In the case of steel jointly developed with a customer, it has been confirmed that the combination of our steel and the special heat treatment of "Super-TF" can achieve a life time four times longer than that of SUJ2. a conventional bearing steel 2 in the environment where the facilities concerned are expected to be used. The contribution of the combination to reduction of CO2 emissions calculated on the basis of the volume of the steel used is approximately 13,000 tons/year\*3.





# SSMI Signs Power Purchase Agreement for Renewable Power

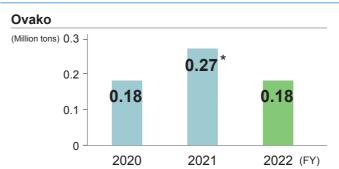
SSMI, our Indian special steel manufacturing affiliate, has signed a purchase agreement of solar power with the Tata Power Renewable Energy Limited (TPREL), a subsidiary of Tata Power, one of Indian's largest integrated power companies.

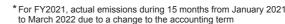
SSMI has decided to 61.875 million KWh annually of solar power from the TPREL and use it for its own special steel production.

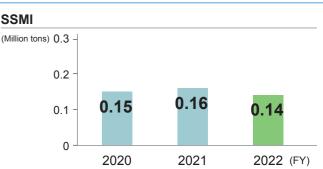
As a result, SSMI is expected to reduce CO<sub>2</sub> emissions by ~42,534 tons annually, equivalent to approximately 25% of the CO2 emitted in the company's special steel manufacturing process.



# Trends in CO<sub>2</sub> Emissions of Major Subsidiaries (Scope 1 + Scope 2 Emissions)







# Climate Change Prevention Initiatives

# **CO<sub>2</sub> Emissions in the Value Chain**

The  $CO_2$  emissions derived from energy use in our manufacturing operations (Scope 1 and Scope 2) and the  $CO_2$  emissions in our supply chain (Scope 3) calculated using "Green Value Chain Platform" by the Ministry of the environment and other information are as follows.

Independent assurance has been received for emissions in FY2022 for Scope 1, Scope 2, and Category (1) of Scope 3 (purchased goods and services).

		CO <sub>2</sub> emis	sions (thousa	and t-CO <sub>2</sub> )	Onlandation mathemat
		FY2020	FY2021	FY2022	Calculation method
Scope1	Direct emissions from fuel usage at the Company	237	336	286*	Saa provinua paga
Scope2	Indirect emissions from the use of energy produced by other companies	254	373	249 <sup>*</sup>	See previous page
Scope1+2	Emissions	491	710	535 <sup>*</sup>	
Scope3	Other indirect emissions equivalent to the Company's supply chain				
(i) Product	) Products/services purchased		378	350 <sup>*</sup>	Calculated by multiplying the quantity or value of raw materials purchased by the CO <sub>2</sub> emissions intensity
(ii) Capital	i) Capital goods		18	31	Calculated by multiplying the amount of capital investment by the CO <sub>2</sub> emissions intensity
` '	el- and energy-related activities not included in ope 1 and 2		134	117	Calculated by multiplying the quantity of electricity purchased and fuel used by CO <sub>2</sub> emissions intensity
(iv) Upstrea	nm transportation and delivery	19	20	19	Calculated by multiplying the quantity of fuel used reported under the Act on Rationalizing Energy Use by the CO <sub>2</sub> emissions intensity
(v) Waste ç	aste generated from business operations		4	4	Calculated by multiplying the volume of waste by the ${\rm CO_2}$ emissions intensity
(vi) Busines	es trips	0	0	0	Calculated by multiplying the number of employees by the CO <sub>2</sub> emissions intensity
(vii) Commu	iting by employees	1	1	1	Calculated by multiplying the number of employees by the CO <sub>2</sub> emissions intensity

<sup>•</sup> CO<sub>2</sub> emissions are being calculated for (ix) Downstream transportation and delivery, (x) Processing of sold products, (xi) Use of sold products, and (xii) Disposal of sold products.

★Independent assured items

### **Preconditions for calculating Scope 1 and 2 emissions**

# <Scope of aggregation>

Sanyo Special Steel (Head Office/Works, Tokyo Regional Office, Nagoya Branch, Osaka Branch, Hiroshima Branch, and Kyushu Sales Office)

### <Converted emission factor>

Source: List of calculation methods and emission factors posted on the Ministry of the Environment's website "Greenhouse Gas Emissions Accounting, Reporting, and Disclosing System"

# <Calculation period>

FY2022 (April 1 to March 31)

# **Preconditions for calculating Scope 3 emissions**

### <Scope of aggregation>

Sanyo Special Steel (Head Office/Works, Tokyo Regional Office, Nagoya Branch, Osaka Branch, Hiroshima Branch, and Kyushu Sales Office)

### <Converted emission factor>

Source: "Emission Intensity Database for Calculating Greenhouse Gas Emissions of an Organization Through the Supply Chain" posted on the website of the Ministry of the Environment/Ministry of Economy, Trade and Industry "Green Value Chain Platform"

# <Calculation period>

FY2022 (April 1 to March 31)



# Independent Assurance Report

Mr. Katsuhiro Miyamoto President Sanyo Special Steel Co., Ltd.

We performed an independent and limited assurance engagement for Sanyo Special Steel Co., Ltd. (the "Company") on the greenhouse gas (GHG) emissions stated in the Sanyo Special Steel Report 2023 ("Report 2023") for FY2022 (from April 1, 2022 to March 31, 2023). The information that we assured is the CO₂ emissions (the equivalent values to the GHG emissions) marked with ★ in Report 2022.

### 1. The Company's Responsibility

The Company is responsible for the preparation of the GHG emissions in accordance with its own criteria and procedures for their calculation and reporting ("Company's criteria"). As mentioned in International Standard on Assurance Engagements (ISAE)3410 "Assurance Engagements on Greenhouse Gas Statements," the Company's calculation of GHG emissions is subject to inherent uncertainties that are difficult to completely eliminate.

### 2. Our Independence and Quality Control

We have established and maintained a comprehensive quality control management system as a certification and assurance body, based on ISO 17029:2019 "Conformity assessment -- General principles and requirements for validation and verification bodies." To conduct the engagement, we complied with the basic principles including independence, required in ISO 17029:2019.

# 3. Our Responsibility

Our responsibility is to express a limited assurance conclusion as to whether GHG emissions have been properly prepared, through the procedures that we performed and based on the information that we obtained. To execute our responsibility, we conducted our engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised) "Assurance engagements other than audits or reviews of historical financial information" and ISO 14064-3:2019 "Greenhouse gases – Part 3: Specification with guidance for the verification and validation of greenhouse gas statements."

Our engagement consisted of a combination of tasks, such as conducting inquiries with the Company's members, visits to and observations of the processes related to GHG emissions, review of the related documents and records, evaluation of the suitability and the internal control of the Company's criteria, analyses and evaluation of the information for the assurance, and matching and checking the records and the original data. Each engagement was conducted at the Company's headquarters and/or works.

Our assurance team selected for fulfilling this engagement consisted of professionals and individuals based on their knowledge, experience, and qualifications. The team included lead auditors and verifiers for ISO 14001 certification and GHG emissions verification.

As defined in ISAE 3000, the nature, timing, and extent of procedures performed in a limited assurance engagement are limited compared with those necessary in a reasonable assurance engagement. Therefore, the level of our assurance is not as high as that provided by a reasonable assurance, although limited assurance provides a level at which assurance is meaningful for the intended users.

### 4. Conclusion

Based on our procedures performed and evidence obtained, nothing has come to our attention that leads us to believe that the CO<sub>2</sub> emissions stated in Report 2023 are not prepared, in all material respects, in accordance with the Company's criteria.

JIC Quality Assurance Ltd. (JICQA) Tokyo, JAPAN

Ryoichi Kanno, Ph.D.
President
September 1, 2023

20

<sup>(</sup>viii) Lease assets (upstream), (xiii) Lease assets (downstream), (xiv) Franchise, and (xv) Investment are not subject to calculation.

# Information Disclosure According to TCFD Recommendations

TCFD is the Task Force on Climate-related Financial Disclosures established by the Financial Stability Board (FSB). The Task Force released its final report (TCFD Recommendations) in June 2017, setting forth a framework for corporate information disclosure of climate-related risks and opportunities.

Sanyo Special Steel has expressed its endorsement of the TCFD Recommendations in October 2021, in light of the situation of international society that is working to achieve the long-term goals of the Paris Agreement. Based on this, we will disclose information on the impact of climate change on our business activities, etc.

# (Reference) TCFD-recommended disclosure items and where to find in this report

Overview of TCFD-recommended disclosure items	Page							
[Governance] The organization's governance around climate-related risks and opportunities								
a) The Board of Directors' oversight of climate-related risks and opportunities	P.18							
b) Management's role in assessing and managing climate-related risks and opportunities	P.18							
[Strategy] The actual and potential impacts of climate-related risks and opportunities on the organization's busi strategy, and financial planning where such information is material								
a) The climate-related risks and opportunities the organization has identified over the short, medium, and long term	P.21							
b) The impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning								
c) The resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	P.21							
[Risk Management] How the organization identifies, assesses, and manages climate-related risks								
a) The organization's processes for identifying and assessing climate-related risks	P.18							
b) The organization's processes for managing climate-related risks	P.18							
c) How processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management								
[Metrics and Targets] The metrics and targets used to assess and manage relevant climate-related risks ar opportunities where such information is material	nd							
<ul> <li>a) The metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process</li> </ul>	P.19、23							
b) Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks	P.19、20							
c) The targets used by the organization to manage climate-related risks and opportunities and performance against targets	P.19、23							

# **TCFD Scenario Analysis**

The TCFD Recommendations call for disclosure of strategies and organizational resilience, taking into account climate-related risks and opportunities under multiple climate change scenarios, including the  $2^{\circ}$ C or lower scenario. In the special steel industry, investors and other stakeholders are increasingly concerned about the impact of and responses to changes in key customer industries, such as a shift to EVs, and introduction of carbon pricing for significant reductions in  $CO_2$  emissions in the future.

Sanyo Special Steel has conducted a scenario analysis by referring to the International Energy Agency's (IEA) Net Zero Emissions by 2050 (1.5°C scenario) and the Intergovernmental Panel on Climate Change's (IPCC) SSP5-8.5 (4°C scenario) to consider the long-term impacts on the Group through 2050.2050 (1.5°C scenario) and the Intergovernmental Panel on Climate Change's (IPCC) SSP5-8.5 (4°C scenario) to consider the long-term impacts on the Group through 2050.

- \* Net Zero Emissions by 2050: A roadmap scenario modeling what will be needed to put the world on track to net zero CO<sub>2</sub> emissions by 2050
- \* SSP5-8.5: A higher reference scenario without introducing climate policy under fossil fuel dependent development

# TCFD scenario analysis

Scenario	Major climate-related events	Assumed impacts (key risks and opportun	ities)	Sanyo Special Steel's responses and strategies
	Carbon neutral-related responses in customer industries, etc.  (growing need for low-carbon and decarbonized steel and products/ technologies that reduce environmental impact, shift to transportation with less CO <sub>2</sub> emissions (railroad), shift to a hydrogen society, etc.)	*Increase in demand for electric arc furnace steel, which emits relatively less CO <sub>2</sub> , and materials, technologies, and products that help customers reduce CO <sub>2</sub> emissions (long-life bearing steel, hydrogenresistant stainless steel, etc.)	Opportunity	<ul> <li>Promote the development of eco-products that contribute to CO₂ emission reduction in the stage of parts manufacturing at customers and during end product use</li> <li>(deepen technologies to meet the needs for higher reliability in the fields of "EV," "wind power generation," "railroads," and "hydrogen society," etc., which are expected to grow globally toward carbon neutrality, and develop and expand sales of strategic items (metal powders for additive manufacturing, etc.)</li> <li>Commercialization of high-hardness, high-toughness, and high-carbon steel TOUGHFIT™ that is produced without carburization to contribute to reduction of CO₂ emissions (announced in March 2023)</li> <li>Promote CO₂ emission reduction of our Steel Group with ecosolutions such as eco-processes and the use of green energy</li> </ul>
	Structural changes in demand associated with the shift to EVs, and growing need for smaller and lighter automotive parts, etc.	Growing need for our highly reliable special steel products associated with the shift to EVs     Increase in demand for our special steel products with properties that contribute to the size and weight reduction of parts      Decrease in special steel consumption per automobile	Opportunity High Risk	With our strength in high-cleanliness steel, accurately respond to new customer requirements and environmental issues arising from changes in social and industrial structures     Strengthen supply chain competitiveness by enhancing collaboration with customers
1.5°C scenario	Growth of wind power market due to expansion of renewable energy	Increase in demand for our highly reliable bearing steel, which leads to reduced maintenance and failure prevention of wind power generation facilities	Opportunity	<ul> <li>Elucidate the fatigue mechanism under the unique environment of wind power generation, and promote development and market introduction of bearing steel for wind power generation that achieves long life and high reliability</li> <li>Approved for "TPG Certification" as a supplier of critical components of wind power generators in September 2022</li> </ul>
4	Intensifying competition for mineral resources due to increase in demand for	Increasing need for our hihg performance materials that do not rely on rare metals	Opportunity	<ul> <li>Promote development and supply of scarce resource-saving high-performance products (ECOMAX series, Co-free maraging steel powder, etc.)</li> </ul>
	electricity and storage batteries, etc.	*Instability in procurement of secondary raw materials due to restrictions on rare metal exports, etc.	Risk	Secure and expand sources for ferroalloy procurement     Further enhance procurement supply chain management
	Introduction of carbon pricing including carbon	Increase in costs for electricity, fuel, etc.	Risk	<ul> <li>Promote procurement of low-cost carbon-free electricity, etc.</li> <li>Request suppliers to reduce CO<sub>2</sub> emissions</li> <li>Promotion of further investment in energy-saving facilities through the introduction of an internal carbon pricing (ICP)</li> </ul>
	tax	<ul> <li>Improve relative advantage of electric arc furnace steels with relatively low CO<sub>2</sub> emissions and especially of Ovako, which is a leader in decarbonization</li> </ul>	Opportunity	system     Negotiation with customers on price pass-on     Promotion of low-carbon (decarbonized) steel products
	Shift of steel production to electric arc furnaces and increased use of iron and steel scrap	Intensifying global competition to acquire superior scrap		Secure and expand sources of iron and steel scrap procurement and optimize raw material mix     Secure iron sources in collaboration with the NSC Group
4°C scenario	Increasing frequency and severity of weather- related disasters Increase in average temperature Decrease in water resources and rise in sea levels due to climate change	Damage to production facilities and inundation of business bases and warehouses in coastal areas due to severe weather disasters, and disruptions to the procurement of raw materials, equipment, and other materials, and product supply, etc.  Increase in risk of heat stroke and other health hazards and equipment failure  Operational disruptions due to decline in water supply stability, etc.	Risk	Continuously improve BCM (Business Continuity Management), including enhancement of disaster prevention management and natural disaster countermeasures     Ensure restoration financing measures by purchasing property insurance and utilizing the Group's CMS     Enhance procurement supply chain management

# [Definition of degree of impact]

High: Risks/opportunities that could have a significant impact on business performance, such as increases or decreases in sales, losses, or profits in the order of billions of yen or more. Medium: Risks/opportunities that may have a certain impact on business performance, such as increases or decreases in sales, losses, or profits in the order of hundreds of millions of yen.

# Contribution to a Resource-recycling Society

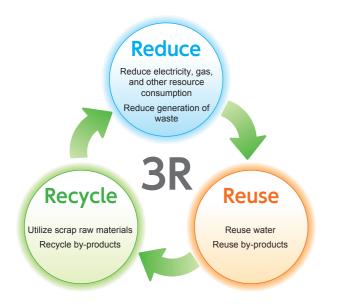
# **Special Steel Products Produced from Recycled Raw Materials**

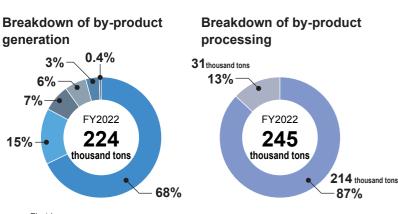
Sanyo Special Steel manufactures special steel by the electric arc furnace steelmaking method using iron and steel scrap as the main raw material, contributing to the recycling and effective use of iron and steel resources. In FY2022, iron and steel scrap accounts for approximately 75% of the raw materials, and when internally recycled materials are included, approximately 94% of the raw materials were recycled products.

# **Initiatives to Reduce By-Products**

In FY2022, the volume of by-products generated by our production activities was 224 thousand tons, and the volume processed, including the volume sold, was 245 thousand tons. Byproducts include electric arc furnace slag, scale, dust, brick waste, and sludge.

We promote resource recycling based on the 3R (Reduce, Reuse, and Recycle) concept, and in FY2022, we reduced approximately 87% of the processed volume either by recycling or incineration, and finally disposed of the remaining 13% in landfills. We will continue to work to expand the use of by-products in new applications in order to reduce the volume of landfill disposal.





Recycling, etc. Landfill disposal

# **Recycling of Electric Arc Furnace Slag**

Sanyo Special Steel promotes the recycling of electric arc furnace slag generated as a by-product of the manufacturing process and continues to achieve a 100% recycling rate by stabilizing the quality of such products and meeting diversifying needs. Electric furnace slag has attracted attention mainly as a substitute for natural resources such as stone and sand, and is used for roadbed material and asphalt aggregate applications.

In the future, it is expected to be used as inhibitors to control foam expansion in steelmaking process, and as an aggregate for recycled pavement. Our electric arc furnace slag products are processed at the highest level in Japan using pressurized steam aging equipment that is effective in stabilizing expansion.

In addition, we use multi-functional classification equipment made up of a classifier that can sort electric arc furnace slag products into six stages simultaneously, from coarse-grained aggregate to fine powder, and a granulator that chamfers aggregate particles to adjust grain size and improve wear resistance. Using these manufacturing processes, we provide customers with high-quality electric arc furnace slag products. We will continue to focus on the realization of a sustainable society by putting in place a management system covering all aspects of production, quality, and sales in compliance with the "Guidelines for Management of Iron and Steel Slag Products" of the Nippon Slag Association, and by undergoing reviews by third-party organizations to strengthen the management system and further improve its reliability.





# Recycled pavement in Himeji City

# Reduction of Environmental Impact

# **Efficient Use of Water Resources**

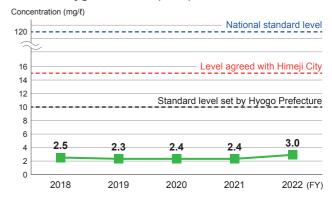
Water is essential in the manufacture of our products, for cooling steel and equipment, and as a source of power for equipment. Although our manufacturing base (Himeji City, Hyogo Prefecture) is not located in an area exposed to high water stress as assessed by the WRI Aqueduct, we reuse more than 90% of the water used in our production processes, based on our recognition that water is a limited resource. In addition to water supply from the industrial water works, we also have our own source of water (groundwater) . Contaminated water that has been used in the factory is sent to an on-site treatment facility to be purified. The purified water is then reused within the factory, while the remainder undergoes further treatment before being discharged into public waters. At the drainage outlets to public waters, a system is in place in which pH levels, turbidity, chemical oxygen demand (COD), nitrogen, and phosphorus are constantly monitored by automatic measurement, and if they exceed our voluntary internal management standards, which are stricter than the standards set by prefectural ordinances, an alarm is issued to enable the staff in charge to respond quickly. In addition, periodic analysis of hazardous substances, etc., is conducted by an external organization as part of our efforts to manage water quality and prevent water pollution.

Wastewater treatment facility

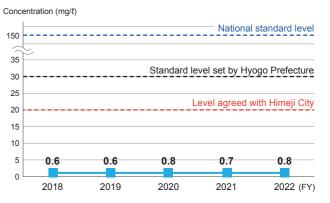


Patrol of wastewater treatment facility

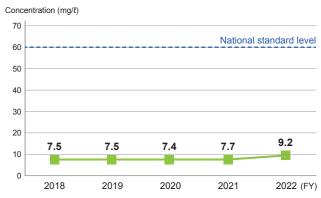
### Chemical oxygen demand (COD) in wastewater



# Suspended particulate matter (SS) in wastewater



# Nitrogen concentration in wastewater



# Reduction of Environmental Impact

# **Reduction of Air Pollutant Emissions**

At facilities that generate soot and smoke, we have achieved SOx (sulfur oxide) emissions well below the agreement value with Himeji City by switching the fuel from heavy crude oil with high sulfur content to LNG (city gas) which contains almost no sulfur. For NOx (nitrogen oxides) emissions, we are employing low NOx burners and proper combustion controls, etc., to reduce the emissions. We have also installed automatic NOx measurement equipment in the system to enable constant monitoring of heating furnaces, which emit large amounts of NOx.

In addition, the April 2018 revision of the Air Pollution Control Act stipulates that mercury concentrations in the exhaust gas from electric arc furnaces for steelmaking should be voluntarily reduced. Sanyo Special Steel regularly measures and records mercury concentrations in accordance with the voluntary standards recommended by the Japan Iron and Steel Federation to confirm that the concentrations meet the voluntary control standards.

As for dust collection facilities, we are working to increase equipment capacity, including the installation of additional dust collectors in buildings of continuous casting factories in FY2018.

We also use traditional methods to help prevent dust dispersion, including patrols by water sprinkler vehicles and street sweepers.

# **Proper Management of Chemical Substances**

In accordance with the PRTR Act\*, we monitor emissions and transfers of chemical substances and report them to the Ministry of Economy, Trade and Industry annually.

We also work on initiatives to suppress the emissions. In addition, PCB waste is properly stored and managed in accordance with the Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes, and the renewal/disposal of applicable equipment is carried out systematically in order to complete disposal within the time limit specified by the Act. As for highly concentrated PCB waste, we conducted final identification of equipment subject to disposal in accordance with a written notification from the Ministry of Economy, Trade and Industry, and completed disposal of all the equipment by JESCO within the time limit. For low-concentration PCB waste, we have listed the equipment subject to disposal and are proceeding with the planned renewal/disposal of equipment in order to complete disposal within the time limit.

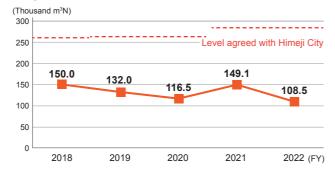
\* PRTR (Pollutant Release and Transfer Register): Act on the Assessment of Releases of Specified Chemical Substances in the Environment and the Promotion of Management Improvement



### Sulfur oxide emissions



### Nitrogen oxide emissions



# **Proper Disposal of Waste**

Sanyo Special Steel outsources disposal to industrial waste disposal companies and ensures that they can properly dispose of our waste by checking their licenses and conducting preliminary inspections of their disposal facilities. In addition, we confirm that our wastes are properly disposed of through periodic inspections of disposal facilities and by checking the status of industrial waste disposal using manifests. We have introduced electronic manifests to ensure proper operation, and we are working to thoroughly separate waste at the sites where waste is generated.

# **Environmental Awareness Development Activities**

We believe that it is important to raise the environmental awareness of each and every employee when working on our environmental conservation activities, and we regularly conduct new employee education and grade-based environmental training. In addition, we have established an incentive program to encourage employees to acquire environmental conservation related qualifications, such as pollution control managers, and we have also been working to have employees create a household eco-account book.

# **Improvement Plans for Environmental Conservation**

# Our plans to improve environmental conservation and status of initiatives

Topic	Target/KPIs	Status of initiatives (FY2022 results, etc.)	Self- assessment*
Energy-saving and global warming prevention	Reduction in CO <sub>2</sub> emissions through promotion of energy-saving measures, etc. (FY2030 target: 50% reduction from the FY2013 level)	CO <sub>2</sub> emissions in FY2022: 36% reduction from the FY2013 level Reduction of fuel consumption by introducing air purge burners to electric arc furnaces Reduction of fuel consumption by introducing regenerative burner to continuous heating furnaces	00
Recycling of	Reduction in dust and sludge landfill volumes	Outsourcing of dust recycling to contractors	$\circ$
byproducts	Improvement of the recycling rate of brick waste	Use of brick waste as a heat-resistant raw material	00
Compliance with laws and regulations	Compliance with regulatory standards (Water Pollution Prevention Act, Air Pollution Control Act, etc.)	Attainment of regulatory standards for all items     (no cases of violation or deviation from laws, regulations, and agreements)	000
Education and	Regular implementation of education and awareness	Implementation of community beautification activities (approx. 200 participants)	000
awareness-raising activities for	raising activities for employees	Recording of household eco-account books (approx. 10 participants)	000
employees	Increase in the number of employees with environment related public qualifications	Ongoing initiatives to increase the number of employees qualified as pollution control managers	00
Promotion of information	Periodic publication of environmental reports	Publication of "Sanyo Special Steel Report" and its release on website	000
disclosure	Cooperation with local governments and other environmental administrations	Implementation of initiatives for Environment Month events	000

<sup>\*</sup> Self assessment: The level of achievement of targets is indicated on a 3-point scale.

# **Environmental Accounting**

The costs of environmental conservation measures in FY2022 were aggregated in accordance with the guidelines from the Ministry of the Environment.

Expenses related to environmental conservation, such as costs for maintenance and management of dust collectors, water treatment facilities, and other environmental measures equipment, and for recycling and disposal of by-products, totaled approximately 3.7 billion yen.

In addition, approximately 200 million yen was invested in the maintenance of dust collectors, the decommissioning and replacement of transformers containing PCBs and other equipment, and the conversion to LED lighting for the purpose of energy conservation. We will continue to implement measures to protect the environment.

		(Millions of yen)
Classification	Expense	Investment
Cost of environmental measures	1,596	25
Cost of global warming measures	169	64
Resource recycling cost	1,540	125
Administrative activity cost	156	0
R&D costs	272	0
Other environmental costs	10	0
Total	3,744	213

# Awarded the Hyogo Prefectural Governor's Commendation for Meritorious Service in Environmental Conservation

OKADA Kenichi Senior Expert (SE), a member of the Environmental Management Department of Sanyo Special Steel, was awarded the Governor's Commendation as a person who had rendered distinguished service in environmental conservation. Utilizing his knowledge and experience concerning facilities cultivated through facility maintenance and construction work, OKADA SE dedicated himself to reducing CO<sub>2</sub> emissions and introducing energy-saving facilities, contributing to efficient facility operation. Furthermore, his service as a pollution prevention manager for air starting in 2014 and for water quality starting in 2016, his efforts made in environmental improvement activities, and the activities he participated in as a member of the Hyogo Prefecture Environmental Conservation Managers Association were recognized.

OKADA Kenichi, awarded the Governor's Commendation for Meritorious Service in Environmental Conservation



OOO: Plans have been achieved OO: Steady progress toward achieving plans O: Further initiatives will be undertaken to achieve plans

# Creating a Safe Workplace

For a manufacturing company, safety is the basic premise of business activities and should be dealt with on a top-priority basis. The Sanyo Special Steel Group promotes safety activities for which top-down approaches and bottom-up approaches are integrated, aiming to achieve the total absence of accidents.

There are no shortcuts in safety activities. We continue our daily safety activities and work on ensuring a workplace where all workers can work with peace in mind in terms of security.

# 2023 Comprehensive Health and Safety Management Policy

### Basic policy

Creating a safe workplace environment by raising the code of conduct aimed to foster a new safety culture and improving communication skills

### Slogan

Promoting the best conditions for persons, safety equipment, and hygienic work environments by improving communication skills

### Three safety principle

Stop, step back, check hands & feet – then double-check that it is really safe

# Goals

Achievement of a total absence of accidents
Occupational accidents "0" Accidents on the way to work "0"

# **Safety and Health Management**

In order to ensure the safety and health of employees in the workplace, the Safety and Health Committee, chaired by the General Safety and Health Manager, meets monthly to deliberate on basic measures to prevent employee hazards and health problems as well as on the causes of occupational accidents and measures to prevent recurrence, etc. Half of the members of the Safety and Health Committee are labor union representatives, in accordance with laws and regulations, to ensure that the opinions of workers are reflected in safety and health measures. We also promote the reduction of work risks and the creation of a safe workplace by "integrating top-down and bottom-up approaches" and "implementing both hard and soft measures" and report the monthly implementation status of safety activities and the annual summary of safety and health activities to the Board of Directors, thereby effectively implementing the PDCA management cycle (planning, implementing, monitoring/supervising, and taking improvement measures) for constant improvements.

For our overseas subsidiaries, we monitor safety at local plants and use web conferencing to identify weak points in terms of safety and provide support and guidance for safety activities by exchanging opinions and sharing information on each company's initiatives, etc., thereby promoting the safety activities of the entire Group.







Safety Professionals Selected From Each Workplace

# Safety Proposal System and Safety Professionals' Activities

A safety proposal system has been put in place since 2019, under which workers in each workplace can propose measures to improve the safety of their own work and workplace.

Soliciting safety proposals from workers who actually engage in work on-site is not only effective in formulating specific safety measures, but also raises workers' safety awareness through the proposal process and leads to a transformation to true bottom-up safety activities which form the core of our safety activities.

In addition, safety professionals are appointed from among the team leaders at work sites to identify work risks through patrols in their own workplaces, analysis of near-accidents, etc. and to work on making improvements. Safety professionals who are well-versed in operations on manufacturing sites are expected to take the initiative in improving the work operations and environments at their own workplaces, thereby raising safety awareness and creating a synergy with the safety proposal system.

# **Safety Promoter Activity**

Sanyo Special Steel has been implementing the "safety promoter activity" since 2016 to develop human resources who can make judgments and act on their own by educating young and mid-career employees selected from each workplace on correct safety knowledge and the importance of compliance with rules, with the aim of achieving "true safety" by integrating top-down safety activities and bottom-up safety activities.

Young and mid-career employees appointed as safety promoters patrol their own and other workplaces to enhance their perspectives to recognize good and bad points of their own workplaces and improve their sensitivity to recognize dangerous conditions as hazardous. In addition, they experience risk assessment activities to identify hazardous operations and assess risks, leading to the improvement of intrinsic safety through improvement measures, including equipment measures.



# **Safety Experience Training Center**

We have established a Safety Experience Training Center that enables us to have simulated experience of hazards.

In 2022, 2,452 employees received training at the center, and to date the total is 33,689.



# **Organizing "Sanyo Thorough Thinking Academy"**

- To Improve the Sanyo 4 (Awareness, Initiative, Independence, and Autonomy -

The Sanyo Thorough Thinking Academy was opened in FY2023, which is for new employees who have been assigned to workplaces for some time.

This is a one-month training program designed to educate new employees, who have experienced their workplace environments and actual work, to understand again the importance of fully following rules, acquire knowledge about safety and health, and put independent safety thinking and acting into practice. By providing this educational occasion, we will develop safety-conscious employees who will play crucial roles for Sanyo in the future.

# Awareness

Deeply understanding your own individuality

# Independence

Aiming for further self-growth

# Initiative

Active actions to compensate for your weakness

# Autonomy

Realizing your own emotional dependence and carelessness and correcting yourself

# **Disaster Prevention Initiatives**

# **Risk Management for Emergency Situations**

Many employees work at Sanyo Special Steel, which has a variety of equipment and facilities. In addition to establishing a permanent fire and disaster prevention management system, we are working to prevent accidents from occurring and to prevent the spread of (minimize) damage in the event of a disaster by developing manuals in preparation of plant accidents such as fires and explosions and natural disasters such as earthquakes, and conducting regular disaster drills, etc. In FY2022, we set the following five points as priority promotion items under our basic policy for the year: "All employees in the workplace shall raise their awareness of fire and disaster prevention through risk assessment to prevent disasters, and acquire further high level of disaster response capability through education and training."

- Enhancement of fire and disaster prevention management
- · Strengthening of management of facilities and other equipment at high risk of fire, explosion, and oil leakage
- Improvement of disaster response capabilities through continued implementation of fire and disaster prevention education and training
- Strengthening of disaster prevention measures through the activities of dedicated disaster prevention teams
- Acceleration of initial response by reviewing lifesaving equipment and fire-fighting equipment

In addition, fire and disaster prevention risk assessment activities started in FY2020 are reviewed annually, such as the addition of new check items for storm and flood damage, crisis management, etc. in FY2021. We will strive to raise employees' awareness of disaster prevention and reduce potential risks by identifying new risks and formulating and implementing countermeasures, both in factories and offices.

# **Initiatives to Raise Disaster Prevention Awareness**

With the aim of further raising employees' awareness of disaster prevention, Sanyo Special Steel holds workshops for hazardous materials safety supervisors and managers and workshops for managers in charge of fire and disaster prevention every year. We are working to improve the management level of licensed hazardous material facilities, small quantity hazardous materials, and miniscule hazardous materials by providing direct instructions to workplace managers and those responsible for handling hazardous materials and high-pressure gases. In FY2022, at the workshops for hazardous materials safety supervisors and managers held in August, the participants were again informed of the importance of security measures by referencing accident cases involving hazardous material facilities, in addition to the responsibilities and duties they must fulfill as safety supervisors and managers, and main points on storage and handling management. At the workshops for managers in charge of fire and disaster prevention held in September, the participants received an explanation of the disaster prevention management rules and fire fighting plans that workplace managers should be aware of, and were reminded of daily preventive management and the standards of behavior in case of emergencies. They also deepened their understanding of the necessity of chest compressions and AED to save lives from disasters, accidents, and sudden illnesses. Regarding the management of facilities, we worked on 3S activities for licensed hazardous material facilities and high-pressure gas facilities, with June and March designated as the months for strengthening management of licensed hazardous material facilities and October as the month for strengthening management of high-pressure gas facilities. We will continue to promote further improvement in awareness of disaster prevention through these disaster prevention education and management enhancement activities. In addition, since FY2018, we have been holding first aid training sessions for foremen, where they receive practical training on emergency medical care (chest compressions and the use of AED), hemostatic techniques, etc., with help from nurses.

# **Conducting Disaster Drills**

In Sanyo Special Steel, the equipment and hazardous materials used vary from workplace to workplace. In addition, employees' awareness of and experience with disaster prevention varies widely, not to mention new employees participating in disaster drills for the first time. Furthermore, depending on the scale of the disaster, cooperation with firefighter may also be required. For this reason, disaster drills are conducted in a more specific and practical manner by identifying appropriate emergency situations.

# Disaster drills conducted in FY2022

49

# Large-scale earthquake disaster drill

In FY2022, we conducted a large-scale earthquake disaster drill under the assumption that a huge earthquake with an epicenter in the Nankai Trough had occurred, shutting down lifelines such as electricity, water, gas, communications, and transportation. After confirming information on the earthquake and tsunami, we set up the Disaster Task Force and collected information from each department on the safety of employees and damage to facilities. In response, the Disaster Task Force issued instructions for initial response to injured people and damaged facilities, for confirmation of the safety of cooperative companies, and for prevention of secondary disasters caused by blackouts (loss of power), tsunamis, etc., and each department reported its activities to the Disaster Task Force. We will continue to work to raise employee awareness and improve their disaster response capabilities through drills.



# Joint factory disaster drill with the Shikama Fire Department

In December 2022, we conducted a joint factory disaster drill with the Shikama Fire Department under the assumption that a fire had occurred in a scrapyard. During the drill, the Disaster Task Force played a central role and collaborated with the Fire Department members to conduct initial fire fighting by the fire brigade, fire fighting by private and public fire brigades, and rescue and first-aid activities for the injured, etc. This year's drill newly included evacuation and support requests to employees not only of the plant where the drill was conducted, but also of neighboring plants, as well as preparations for the unlikely event of the spread of fire. After the drill, the participants exchanged opinions and received feedback and guidance on the drill from members of the Shikama Fire Department. We will continue to conduct drills that will help raise the level of the entire organization.

# **Preparedness for Large-scale Earthquakes and Other Wide-area Disasters**

In the event of a wide-area disaster such as a large-scale earthquake, it would be difficult to confirm the safety of employees and consolidate such information through ordinary means of communication such as telephone calls.

Sanyo Special Steel has therefore introduced an Internet-based safety confirmation system to quickly gather information on the safety of employees in the event of an emergency and, based on that information, take measures necessary for business continuity. In addition, at our head office plant, we have stockpiled emergency food and drinking water necessary for our employees and employees of our subsidiaries and cooperative companies working on our plant premises to safely return home and stand by. In addition, at sales bases located in urban areas, we have stockpiled disaster prevention supplies in anticipation that employees would have difficulty returning home to prepare for the unlikely event of wide-area disasters such as large-scale earthquakes.

# **Promotion of Diversity Management**

Innovation creation is the key in enhancing corporate value over the medium to long term, and co-creation by diverse individuals is the driving force behind such innovation creation. The Sanyo Special Steel Group considers it necessary to proactively work on diversity in knowledge and experience, such as expertise, experience, sensibility, and a set of values. In addition, we strive to create a system that enables employees to achieve a good work-life balance and fully demonstrate their abilities with a sense of fulfillment in their work, and strive to develop a comfortable workplace environment where employees can continue to work with peace in mind and an environment that allows for a work style that is not restricted by time or place.

# **Promotion of Participation by Women**

With the goal of increasing the percentage of female employees to 25%, Sanyo Special Steel has increased the number of workplaces where female employees can actively work by systematically hiring female employees and expanding their work areas, and has introduced support systems, such as childcare leave and shorter working hours, to reduce their burden during life events and enable them to continue working. Furthermore, we are promoting the awareness building of female employees themselves through external training, etc. and promoting the creation of an organizational culture that encourages female employees to take an active role in the company.



Childbirth, Childcare, and Nursing Care Support Guidebook

# **Awareness Reform for Diversity Promotion**

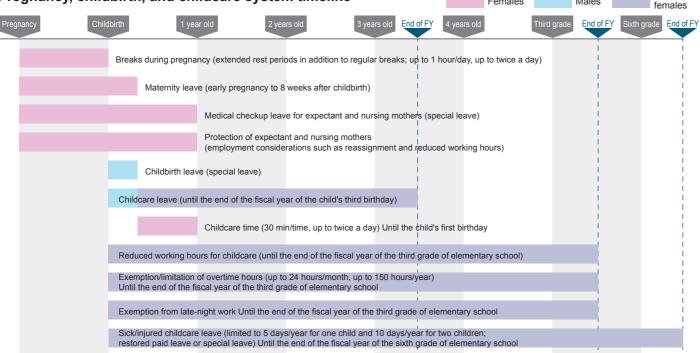
In order to promote diversity management and create a workplace in which each and every employee can demonstrate their abilities and work as effectively as possible, it is essential to change the understanding and awareness of each and every employee.

From this perspective, Sanyo Special Steel conducts training programs such as unconscious bias training, in which organizational leaders learn skills to understand and control unconscious biases related to gender and age; the holding of round-table talks with female directors as opportunities for female employees to envision attractive managerial positions; and management candidate training, in which female employees learn about diverse role models and interact with female employees of other companies to improve their awareness and motivation to become managers. In this way, we are working to improve the mindset and career education of female employees in order to promote their participation.



Males and

# Pregnancy, childbirth, and childcare system timeline







OHIRA Akemi, Chemical Analysis Foreperson,

I am in charge of chemical analysis and evaluation of powder products prior to shipment. Since I became a foreperson in April 2016, I have attended company-wide meetings and training sessions as a supervisor representing my workplace, and my interdivisional connections have increased dramatically. I have been blessed with opportunities to learn a lot from many persons including the forepersons of other workplaces, which has greatly broadened my perspective.

In recent years, the pace of technological innovation has been extremely fast, and new products are created all the time. Besides, analytical technology and measuring instruments also evolve fast, and our work must keep pace with this evolution. I will continue to improve the level of our analytical work with a focus on sharing information and cooperation in order to meet the needs of customers, and will also put my energy into passing on the skills and knowledge necessary for my work to younger staff, taking into account the history of the company and my experience among other factors, in order to help my colleagues grow by making the most of their individuality.

# **Promotion of Participation by Senior** Generation

Sanyo Special Steel extended the retirement age from 60 to 65 in April 2021. Additionally, it established the "Senior Citizen Partner Program" as a system for extending the employment of employees over the age of 65. We work on strengthening our competitiveness by maintaining and improving our manufacturing capabilities through extension of the employment of those employees who have reached the age of 65 and who are deemed necessary from the viewpoint of business execution and the transfer of technology and skills as "senior citizen partners"; and through further enhancement of the environment for promoting the transfer of technology and skills and the development of future generations.

# **Stable Employment of Persons with Disabilities**

Sanyo Special Steel and its domestic Group companies promote the employment of persons with disabilities in order to realize a society in which everyone can work to the best of their abilities. In addition to promoting recruitment activities in cooperation with Hello Work offices (public employment security offices) and special support schools, we are also continuously working to improve the work environment in both hard and soft aspects with working life counselors for persons with disabilities in the companies playing a central role. For employees who are certified as persons with disabilities after joining their companies. consideration is given to the nature and hours of their work so that they can continue to work.

# **Promotion of Work-life Balance**

Sanyo Special Steel flexibly responds to the diversification of work styles through introduction of its flexible working hour system, shorter working hour system, and work-from-home system, and also works to increase the rate of paid leave taken, in addition to the implementation of "no overtime day" every Wednesday and productivity improvements aimed at reducing overtime hours. Furthermore, we encourage employees to take consecutive paid leave and special incentive leave, and have established systems that surpass legal standards, such as leave systems for maternity, childcare, and nursing care. Also, we support the realization of a work-life balance for each and every employee by creating a workplace environment and culture that makes it easier for employees to take such leave.

Percentage of employees taking paid leave

83.6%

Percentage of male employees taking childcare leave (FY2022)

**74**%

# Promotion of Corporate Health Management

Based on the recognition that the safety and health of its employees is a prerequisite for its business activities and is thus an important management issue, Sanyo Special Steel formulated the "Sanyo Special Steel Corporate Health Management Declaration" in August 2021 and established a corporate health management structure with the Representative Director and President as the Chief Corporate Health Officer. Furthermore, we promoted initiatives to improve employees' lifestyles and prevent mental health problems, such as walking events that supported them in making physical exercise an established routine. In March 2023, we were certified as a Certified Health & Productivity Management Outstanding Organization (Large Corporation Category) under the Certified Health & Productivity Management Outstanding Organizations Recognition Program jointly implemented by the Ministry of Economy, Trade and Industry and Nippon Kenko Kaigi.

We will continue to further promote corporate health management and create a workplace environment in which all employees can work to the fullest of their abilities every day.

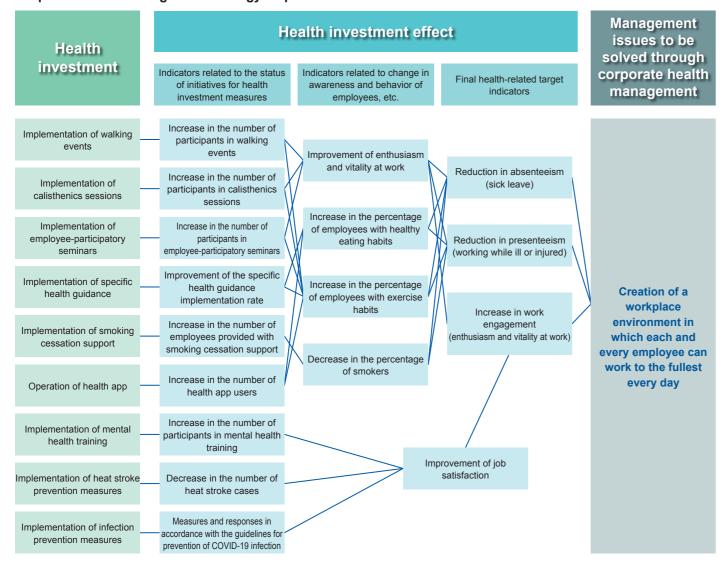
# Sanyo Special Steel Declaration of Corporate Health Management

Based on the recognition that the safety and health of its employees is a prerequisite for its business activities and an important management issue, Sanyo Special Steel declares that it will work together with the Sanyo Special Steel Health Insurance Association to comprehensively address health maintenance and promotion, and continue to create a workplace environment in which each and every employee can work to the fullest every day.

August 2021

Sanyo Special Steel Co., Ltd. MIYAMOTO Katsuhiro, Representative Director and President

# Corporate health management strategy map





Participants in the walking event "SANYO WALK"

# For the Promotion of Corporate Health Management

Poor mental and physical health among employees not only causes a decline in productivity, but may also lead to an outflow of human resources in some cases due to leave of absence, leaving a job, or other reasons. In addition to providing employees with statutory health checkups, medical checkups for metabolic syndrome, and health guidance, Sanyo Special Steel continues to conduct stress checkups, which were made mandatory in FY2016. We also conduct group analysis based on the results of these checkups and recommend employees with high stress levels to see an occupational physician. Moreover, we have a mental health help desk in place and provide smoking cessation support and dietary restriction counseling, etc. In August 2021, we have established a corporate health management promotion structure with the Representative Director and President as the chief health officer in order to promote further initiatives and continuous improvement. We have also established the Corporate Health Management Promotion Council, which includes occupational physicians, health insurance association, and labor union as its members, as a meeting body for continuous improvement, and appointed employees in charge of health promotion in each workplace. In addition, we are also promoting initiatives including the establishment of "No Smoking Day", creation of a comfortable workplace environment by providing air-conditioned uniforms, giving health related lectures, radio exercises at start of work, and holding walking/health check—events to prompt establishment of exercise habits.



Establishment of "No Smoking Day"



Holding health check events



Conducting a health seminar

# Human Resource Development

# **Develop Human Resources Who Can "Think and Act Autonomously"**

Under our basic policy of "developing employees and make full use of their potential," we have developed a meticulous education and training system. In addition to education through daily work, we provide grade-based training based on the years of service and positions and education for promotion of the participation of women, and reform the awareness of individuals in the company, in order to develop human resources with an independent mindset and motivation to take on challenges who can "think and act autonomously," such as those having the ability to set and solve challenges on their own. Furthermore, for the purpose of broadening the perspective of employees and strengthening their solidarity, we provide them with opportunities to interact with outsiders, such as visits to clients' factories and the dispatch of personnel to various external training sessions, and work on energizing employees' mutual communication by, for example, organizing opinion exchange sessions between employees from different workplaces and workplace visits among employees.



# **Development of Global Human Resources**

We are accelerating the development of human resources who can play active roles on a global stage due to our increasingly globalized business environment and developing a global mindset through overseas language training for new employees in management track positions and short-term language study abroad for selected employees, among other initiatives. We also promote international exchange and innovation through technical collaboration and mutual dispatch of human resources with overseas Group companies and assign employees to overseas affiliates based on a human resource development model or to study abroad.



# Human Resource Management System (establishing work tasks and training themes through dialogue)

Under the personnel appraisal system of Sanyo Special Steel, each employee is supported in building up and fully demonstrating their abilities from when they join the company until they reach the retirement age and in working with pride and a sense of fulfillment. In so doing, the system rewards individuals who have boldly taken on challenges and produced results, thereby enhancing the comprehensive strength of the company in terms of human resources. We focus not only on resultant achievements but also on whether employees "set high goals and boldly strived to achieve them" or whether they "executed the process to achieve the goals without fail" in their appraisal, in order to foster employees' autonomy and motivation to take on challenges. In addition, the items covered in personnel appraisal include "the development and management of subordinates and junior colleagues" and "the creation of a comfortable-to-work workplace," thereby indicating within the company the importance of human resource development and also striving to enhance employees' engagement. Furthermore, we support the self-realization of each and every employee, for example, through dialogue with their superior aimed at clarifying topics and issues in the improvement of their skills and through career consultations with personnel in charge of personnel affairs from a long-term perspective.

# **Self-transformation Program Through Multifaceted Observation**

We have introduced a self-transformation program through multifaceted observation. The program is designed for officers, department heads, and other management levels to confirm their evaluations by superiors, colleagues, and subordinates and understand how their actions are viewed by their subordinates and others around them, thereby providing them with an opportunity to objectively recognize their own management and behavioral characteristics for self-transformation.

# Respect for Human Rights

In the "Guidelines for Corporate Behavior," which describe the actions to be taken as a company, the Sanyo Special Steel Group has stipulated that it shall respect human rights both in Japan and overseas, comply with relevant laws and regulations, international rules, and the spirit thereof, and fulfill its social responsibilities with high ethical standards to create a sustainable society. Furthermore, we endorse and respect the "International Bill of Human Rights" and the "Declaration on Fundamental Principles and Rights at Work" and promote business activities that respect human rights with the "Guiding Principles on Business and Human Rights" as our guidelines to follow.

# Sanyo Special Steel Group Human Rights Policy (excerption)

# [Respect for Human Rights]

- We understand that human rights may be affected through our business activities, such as procuring raw materials, manufacturing, selling, and distributing products, research and development, and recruitment. We are also aware that our business relationships with other stakeholders may end up impacting human rights.
- We will strive to neither violate human rights ourselves nor support any human rights abuse by our stakeholders, including business partners.
- Supporting and respecting the "International Bill of Human Rights" and the "Declaration on Fundamental Principles and Rights at Work,"
  we will conduct our business activities under the Guiding Principles on Business and Human Rights. We will prohibit discrimination
  based on nationality, race, religion, age, gender, physical or mental disorders, gender identification, sexual orientation, and upbringing, or
  discrimination for any other irrational reasons.
- We will also strive to prohibit long working hours, harassment, forced labor, and child labor, respect freedom of association and collective bargaining rights, and ensure safety and health in the workplace. We will comply with the laws and regulations of the countries and regions where we conduct business activities. When there are discrepancies between globally recognized human rights and the laws and regulations of the country or region, we will seek appropriate ways to respect the internationally recognized human rights to the extent possible while complying with such laws and regulations.

# Human Rights-related Education and Relief Mechanisms

Through various educational opportunities, such as gradebased training and labor management seminars, we are working to develop a corporate culture in which each employee's human rights and diversity are respected.

In addition, we have established a help desk for various compliance issues, including human rights, and made known to all employees and other concerned parties the details of the system, contact information for the service, and the fact that no one would suffer any disadvantages for consulting or reporting.

This mechanism makes it easier for them to consult and for the company to understand and identify human rights violation cases. In dealing with individual cases received at the help desk, we investigate the facts with due care to ensure that those who have informed/consulted are protected and that they are not treated disadvantageously, and, if necessary, obtain advice from lawyers and external experts to seek appropriate resolution of the case.

# **Prevention of Child Labor and Forced Labor**

Based on international norms on human rights and the Guidelines for Corporate Behavior, etc., we ensure compliance with labor-related laws and regulations in each country and region, and prevent the occurrence of child labor and forced labor in our business activities.

# Procurement of Ferroalloys with Respect for Human Rights

In the procurement of ferroalloys needed for special steel production, we have confirmed through our suppliers that our procurement is "DRC conflict-free" (free from concerns that our procurement forms any source of funding for armed groups, infringes human rights, or foments any conflicts).

# **Building and Maintenance of Sound Labor-management Relations**

We respect the "right to organize" and "right to collective bargaining" of the labor union in accordance with laws, regulations, and labor agreements, and strive to build and maintain sound labor-management relations.

The relationship with the labor union is based on mutual understanding through bilateral dialogues, and we regularly hold discussions with the labor union on management conditions, safety and health, various management-related issues, working conditions such as salaries and bonuses, and work-life balance.

In addition to complying with the minimum wages, etc., stipulated by the laws and regulations of each country and region, we also set salaries and other treatments based on the conditions agreed upon in sincere negotiations with the labor union. We have adopted a performance-linked bonus system in which the amount to be paid is determined based on the business performance of the previous fiscal year after reaching an agreement through negotiations with the labor union.

# **Initiatives for Human Rights Due Diligence**

In order to identify, evaluate, prevent, and mitigate any adverse impact of Sanyo Special Steel and its Group companies, suppliers, etc. on human rights, and for the effectiveness evaluation of initiatives, we will construct a mechanism for human rights due diligence.

# **Quality Improvement Initiatives**

Quality assurance is to improve customer satisfaction by accurately identifying customer needs and building up a process that enables a stable supply of products that meet those needs, and is directly linked to our corporate philosophy of "Confidence-based Management." The Sanyo Special Steel Group has established a quality management system based on ISO 9001:2015 and promotes quality control activities in which the sales, engineering, production, and quality assurance divisions work together to build quality in order to satisfy the product quality required by various product standards such as JIS, overseas standards, and the specifications of each individual customer.

We aim to become a company that continues to grow sustainably by focusing not only on controlling product quality but also on improving the quality management system, which is a key part of our corporate structure, to make it more efficient and responsive to changes in the environment, such as globalization and changing customer needs.



# **Quality Assurance System**

The Quality Assurance Department plays a central role in maintaining and managing the quality management system, which is the cornerstone of our quality assurance system. The process of product quality control, in which the sales division identifies customer needs, the engineering division reflects those requirements in process design, and the production division manufactures products according to that design, is developed through collaboration among divisions. In addition, the Quality Assurance Department, an independent division, is responsible for overall quality assurance operations to provide an effective check and balance function, thereby ensuring that the quality assurance function is optimized and enhanced to provide more reliable products. The Quality Assurance Committee, chaired by the Officer in Charge of Quality Assurance, meets regularly to discuss basic quality assurance policies and plans for the fiscal year, and implements improvement activities such as "systematic improvement of important issues," "prevention of quality complaints," and "improvement of customer satisfaction."

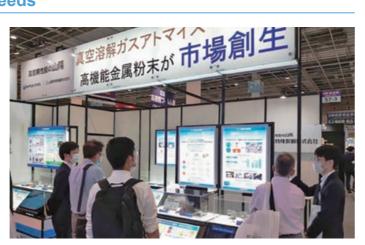
# **Quality Assurance Initiatives**

In response to the ISO 9001 requirement of "addressing risks and opportunities," each organization conducts risk assessments of its operations.

Based on the issues identified through this process, the PDCA (Plan, Do, Check, Act) cycle is implemented from a medium- to long-term perspective to improve the level of quality assurance. Specifically, we are working to improve our quality management system by continuously revising our quality manuals, conducting quality patrols, and promoting information sharing between organizations through internal quality audits. Furthermore, we promote awareness-raising activities in this regard, for example through e-learning programs on quality compliance and quality lectures, to raise employees' awareness.

# **Understanding and Reflecting Customer Needs**

Once a year, we ask our customers to evaluate our QCDD (Quality, Cost, Delivery, and Development) and analyze the results. We then identify and improve the low evaluation items, leading to further improvement of customer satisfaction. In addition, in order to understand customer needs in a timely manner, we hold meetings to exchange technical ideas with customers and take part in domestic and international exhibitions. We introduce products and new technologies developed by us, provide detailed information on our products, and collect information on latest customer needs, which is then used to develop and improve our products.



# **Expanding Technological Superiority**

The Sanyo Special Steel Group is promoting further expansion of its technological superiority by strengthening its research and development and quality competitiveness in order to further enhance its corporate value in the global special steel market. To this end, we are clarifying the functions of product development, process development, and basic research, and strengthening the medium- to long-term research and development planning function to ensure the rapid and continuous creation of highly reliable products and new technologies with a view to global expansion.



# Basic research: Pursuing principles with an eye toward product characteristics

All technologies are based on principles. Now more than ever before, it is essential to pursue the principles by strengthening basic research, given today's demands for ever more advanced product characteristics and mass-production technology. The Sanyo Special Steel Group is gazing down at the microscopic level to elucidate various mechanisms while keeping an eye on the performance of the final product.

# New product and technology development: Responding to needs from a multilateral approach

As the pace of technological progress accelerates, customer needs are becoming increasingly diverse and sophisticated. The Sanyo Special Steel Group uses the customer's perspective to identify the truly key characteristics and optimizes the composition, structure, and production of steel, thereby exploring the very limits of steel's potential to meet society's needs.

# Evaluation technology: Earning trust with advanced evaluation and analysis technologies

For special steels, even slight differences in composition, microstructure, etc., can affect their properties. The development of evaluation technology that makes the invisible visible and the unknown known is a source of new knowledge. The Sanyo Special Steel Group utilizes cutting-edge evaluation and analysis technologies as the basis for reliability in product and technology development.

# **Research and Development Activities**

The status of research and development activities by segment is shown in the table below.

Research and development activities of the Sanyo Special Steel Group are promoted mainly by the "Research and Development Center," and the total amount of research and development expenses in FY2022 was 2,019 million yen. With the creation of "ecoprocesses" and "eco-products" toward carbon neutrality in 2050 in mind, we are pursuing the deepening of technologies to meet the needs for even higher reliability, especially in the fields of EVs, wind power generation, railroads, and hydrogen society, which are expected to grow globally. Furthermore, we are focusing on the early realization of synergies through collaboration among Group companies.

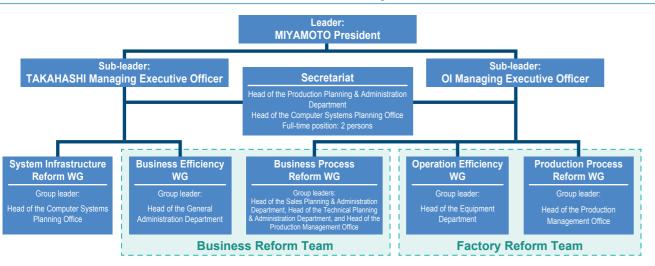
R&D expenses Major issues and results Segment Research purposes (FY2022) Development of high-performance products to be launched in the fields of wind power generation, automobiles. railroads, environment and energy, etc., which are Commercialization of high-carbon steel TOUGHFIT  $^{\text{TM}}$  that can expected to grow contribute to achieving a carbon-neutral society Steel Strengthening of quality and cost competitiveness through 1,626 utilization of DX for the manufacturing processes of core **Products** million ven products such as bearing steel, structural steel, stainless steel, and tool steel Development of eco-products that can contribute to carbon neutrality in customers' processes ESuccessful registration of a trademark "NOVASHAPE™" for a product lineup of various alloy powders suitable for 3D printers Development of new products, mainly information Metal Practical realization of CoCrMoW alloy, which is a material for recording and processing products and powders for 3D **Powders** artificial teeth and the first domestically-produced powder to million yen printing, which can be expected to grow in the future receive marketing approval under the pharmaceutical affairs law of Japan, as "CCMS $^{\text{TM}}$ -W" Development of manufacturing technology for newly ordered Establishment of die forged parts manufacturing technology products of the Formed and Fabricated Materials business using CAE analysis technology Formed and 32 Establishment of rapid design technology for optimal molds Formulation of optimal processing dimensions by applying **Fabricated** and ring rolling analysis technology, and development of CAE analysis technology to forecast the amount of million ven Materials manufacturing technology for saving manpower, with the aim deformation by heat treatment, and quality improvement of of strengthening cost competitiveness

# Promotion of DX

Sanyo Special Steel promotes digital transformation (DX) utilizing digital technology which has made remarkable progress in recent years

In January 2023, we set up a DX Promotion Project Team led by the Representative Director and President. In order to be able to deal with accelerating changes in society and markets and maintain its high level of competitiveness into the future, the Sanyo Special Steel Group aims to break away from an analog mindset and practice relying on the large-scale mobilization of labor and to accomplish both the transformation of personnel into digital personnel and the transformation of its Group companies into digital companies.

# Implementation Structure of the DX Promotion Project Team

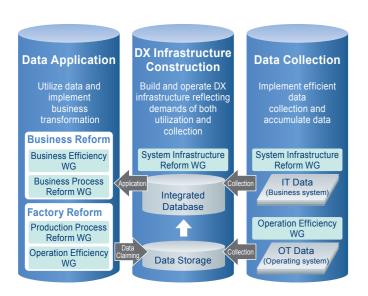


# **Purposes of the DX Promotion Project:**

- To promote the resolution of issues through fault-finding and DX in work/operations
- To construct an integrated database and facilitate the sharing of necessary data between operational systems
- To utilize the latest digital technology to facilitate the visualization of information, the introduction of real-time information, the automation and labor-saving of operations, etc.
- To sophisticate the business structure through operational transformation based on DX initiatives, and enhance the corporate value

# **Concept of DX Promotion**

In the DX Promotion Project, the construction of a data infrastructure to share necessary data between operations is underway. Each WG leads each department in the consideration of how structured data should be utilized and the introduction of digital technology and works on the transformation of business processes and business models.



# **DX Roadmap**

The DX Promotion Project Team strives to establish an infrastructure that can respond to changes in the business environment and society according to three steps and thereby to maintain and strengthen the competitiveness of Sanyo Special Steel.

# [Step 1: Construction of an integrated information infrastructure]

Construct an integrated database to realize the sharing of digital data and develop an infrastructure for data utilization, including data visualization, making real-time data available, and data analysis.

# [Step 2: Expansion of digital technology application]

By streamlining and improving the operations/factories to which digital technology has been applied, promote the reform of business processes and facilitate the obtaining of effects from DX.

# [Step 3: Transformation into a digital company]

Through realization of DX leading to operational transformation, sophisticate the business structure and enhance the corporate value.

# Realization of Sustainable Procurement

The Sanyo Special Steel Group ensures compliance with laws, regulations, and social norms in accordance with its Procurement Policy, conducts fair and equitable transactions with a wide open door policy both in Japan and overseas, and promotes environmentally friendly procurement activities with its suppliers. In our procurement activities, we confirm the principles of "sustainable procurement," including accountability, transparency, respect for human rights, and ethical behavior, for the raw materials and services we procure, and reflect them in our procurement decision-making. We also strive to maintain and improve mutual understanding and trust relationships with our suppliers, aiming for mutual development as a business partner and are working to realize "sustainable procurement" that contributes to the sustainability of our supplier's business operations through strengthened partnerships.

# **Procurement Policy**

In our procurement activities, we, Sanyo Special Steel, comply with relevant laws and regulations, conduct an open-door policy across the board both domestically and internationally, conduct fair and equitable transactions, and thereby strive to build partnerships with our suppliers. We also promote environmentally friendly procurement activities.

# 1. Compliance with laws, regulations, and social norms

We comply with all relevant laws, regulations, and social norms, in good faith, and thoroughly manage information obtained in the course of business transactions.

In addition, we ensure not to have any relationship with anti-social forces that threaten the order and security of civil society.

# 2. Fair and equitable transactions

We conduct an open-door policy across the board both domestically and internationally, to provide all our suppliers opportunities to participate, and conduct transactions based on economic rationality.

# 3. Partnership building

We conduct transactions with all of our suppliers on an equal and fair basis, strive to maintain and improve mutual understanding and trust relationships, and aim for mutual development as business partners.

# 4. Promotion of environmentally friendly procurement activities

In collaboration with our suppliers, we build a system to avoid purchasing raw materials, equipment, and various other materials containing hazardous chemicals.

# Initiatives to build a stable procurement structure

Sanyo Special Steel factories are normally in production 24 hours a day. Therefore, with the cooperation of our suppliers, we receive shipments of iron and steel scrap, our main raw material, on a 24-hour basis. We also procure the required quantities of ferroalloys and secondary materials, etc., when needed.

In anticipation of risks such as supply disruptions due to disasters, etc., we strive to understand the production status, production locations, and delivery routes, etc., of our major procurement items by, for example, visiting the factories of our suppliers. We have also established a system that enables us to sustain production activities even in the event of an emergency by sharing information on procurement items with our suppliers on a daily basis, promptly securing substitute items in the event of an emergency, and maintaining an appropriate amount of stock on our premises.

### Supplier award system

Sanyo Special Steel values its partnerships with suppliers.

As part of our appreciation, we have established a supplier award system. Under the supplier award system, we comprehensively evaluate each supplier's quality, cost competitiveness, delivery date management, business status, environmental responsiveness, service provided, and other factors in transactions carried out with us over a fixed time period in the areas of raw materials, various other materials, maintenance, and outsourcing, select those suppliers which have attained outstanding achievements, and present them with awards. In FY2023, six companies were awarded for their outstanding achievements.

# **Declaration of Partnership Building**

Sanyo Special Steel has announced its "Declaration of Partnership Building," which aims to increase added value throughout the supply chain by promoting cooperation, coexistence, and co-prosperity with our suppliers in the supply chain. We will continue to strengthen partnerships with our suppliers and aim for mutual development as business partners by preventing small- and medium-sized enterprises (SMEs) and small businesses from bearing burdens caused by unfair trade conditions, continuously making subcontracting transactions fair and proper, and working to promote new collaborations such as initiatives to increase added value throughout the supply chain and open innovation beyond business scales, groups, borders, etc.

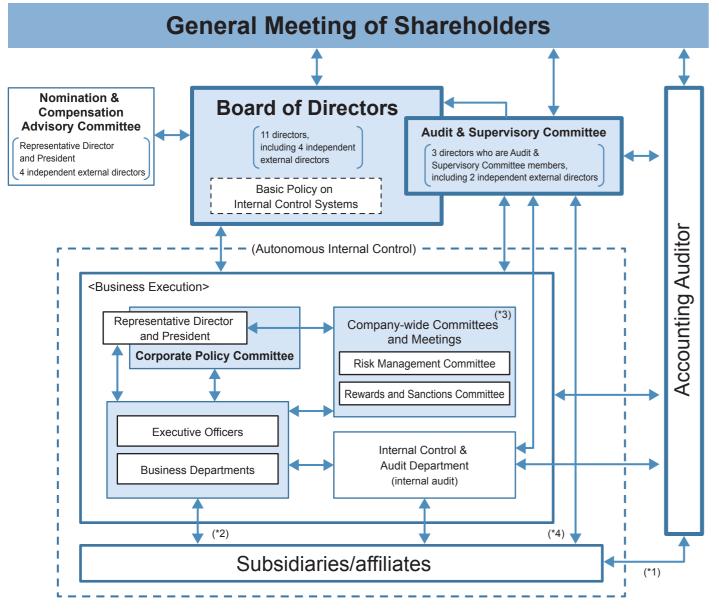


# **Enhancement of Corporate Governance**

Based on its corporate philosophy "Confidence-based Management," Sanyo Special Steel aims to earn the confidence of society by contributing to the realization of an affluent and culturally rich society and fulfilling our responsibilities as a member of society through the "manufacture of high-quality special steel." In addition, we aim to earn the confidence of our customers by rapidly and accurately identifying their needs and appropriately providing them with high-quality special steel products. We also strive to communicate with all stakeholders and build confidence among people through autonomous actions in accordance with social norms. We recognize that these are the requirements and mission for the survival of the company.

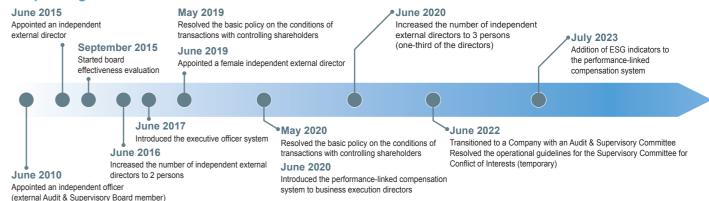
In order to achieve this, we will strive to strengthen corporate governance by establishing a corporate governance structure suited to the Group's business in order to improve the efficiency, soundness, transparency, etc., of our management.

# **Corporate Governance Structure**



- (\*1) Audits of subsidiaries and affiliates are conducted through audits of consolidated financial statements.
- (\*2) Supervisory departments are designated for each subsidiary and affiliate.
- (\*3) Other than the above, committees and meetings include the Carbon Neutral (CN) Promotion Committee and the Safety and Health Committee, etc. In order to prevent the occurrence or recurrence of any breach of compliance, we have also established a whistle-blowing system "compliance help desk."
- (\*4) Directors who are Audit & Supervisory Committee members investigate the status of operations and assets of subsidiaries as necessary.
- (\*5) In the event of an important transaction that would cause a conflict of interest between the parent company and minority shareholders, a "Supervisory Committee for Conflict of Interests" consisting of all independent external directors will be established on a case-by-case basis to deliberate and review the situation, and the Board of Directors will make a decision based on the results.

# **Corporate governance structure**



# **Board of Directors**

In Sanyo Special Steel, the Board of Directors meets once a month in principle to discuss management policies and important management matters relating to business execution, the appointment and dismissal of officers, the policy for determining executive compensation, matters relating to ensuring the appropriateness of operations, matters relating to the dividend of surplus, and other relevant matters.

In FY2022, the Board of Directors held a total of 16 meetings and discussed the following matters.

# <Main proposals discussed by the Board of Directors during FY2022>

- · Monthly closing of accounts
- Budgeting for the fiscal year and the second half of the year
- · Announcement of quarterly and year-end financial results
- Proposed changes to the Articles of Incorporation in connection with the convocation of the General Meeting of Shareholders, the transition to a Company with an Audit & Supervisory Committee, etc.
- Relocation of the Tokyo Regional Office and Nagoya Branch
- Internal control plan and J-SOX audit
- Changes to the policy for determining executive compensation, and the compensation and performance targets of officers, etc.
- The situation of shareholders, IR activities, and CG report
- · Revision of the Basic Policy on Internal Control Systems
- Establishment of a special committee to deliberate and review the status of transactions with controlling shareholders and important transactions that conflict with the interests of controlling shareholders and those of minority shareholders
- The status of progress of the 2025 Mid-Term Management Plan
- Safety and health activities
- · Initiatives for environmental protection and carbon neutrality
- Establishment of the DX Promotion Project Team
- Board effectiveness evaluation
- Significance of retention of strategic shareholdings and selling thereof
- Capital policies such as those on financing
- Assessment of the management soundness of affiliates
- Consolidation/abolition and reorganization of Group companies to strengthen the Group structure

# **Nomination & Compensation Advisory Committee**

In order to ensure the soundness of the procedures for determining the appointment and compensation of officers, the Board of Directors of Sanyo Special Steel resolves on the nomination of director candidates, the selection of representative directors, and the determination of the compensation of directors (excluding directors who are Audit & Supervisory Committee members) after discussion by, and the hearing of the opinions of, the Nomination & Compensation Advisory Committee for the sake of enhanced transparency and objectivity.

In FY2022, a total of four meetings of the Nomination & Compensation Advisory Committee was held in May, June, and December 2022 and February 2023, respectively.

# **Risk Management Committee**

The "Risk Management Committee" of Sanyo Special Steel, which consists of all the directors including the independent external directors and the officers in charge of the functional departments responsible for risk management in the relevant areas, meets quarterly to discuss, and exchange opinions on, the status of formulation and implementation of an internal control plan, compliance with relevant laws, regulations and company rules, etc., occupational safety, human rights violations such as sexual harassment and power harassment, the environment, disaster prevention, quality, financial reporting, the matters related to risk management including sustainability risks such as information security, the operational status of the whistle-blowing system and other relevant matters.

# **Audit & Supervisory Committee**

In accordance with the Standards for Audits, etc. established by the Audit & Supervisory Committee, and in close cooperation with the internal audit division, audits are conducted on the status of development and operation of internal control systems in light of the audit policy, the division of duties, and other relevant matters. Furthermore, the Audit & Supervisory Committee monitors and verifies the status of performance of duties by business execution directors, employees, etc. by attending important meetings, such as meetings of the Board of Directors, the Risk Management Committee, and the Corporate Policy Committee, by viewing important approval documents such as approval requests, and by taking other relevant actions. In addition, by receiving reports from accounting auditor on the status of performance of their duties and requesting explanations as necessary, the Committee monitors and verifies that the accounting auditor maintains an independent position and executes appropriate audits.

During FY2022, two meetings of the Board of Auditors were held by June 24, 2022 on which Sanyo Special Steel transitioned to a Company with an Audit & Supervisory Committee, after which eight meetings of the Audit & Supervisory Committee were held by the end of the fiscal year.

# **Enhancement of Corporate Governance**

# **Internal Control Systems**

In Sanyo Special Steel, the Board of Directors has resolved the "Basic Policy on Internal Control Systems," and the Internal Control & Audit Department, which is in charge of internal control planning and internal auditing, and functional departments in charge of risk management in their respective areas have been established to form an operational structure for the internal control systems of the Sanyo Special Steel Group.

In addition, risk management officers are assigned to each department and Group company to be in charge of planning and promoting autonomous internal control activities in the department and Group company.

# **Compliance and Risk Management Systems**

Sanyo Special Steel has established the "Guidelines for Corporate Behavior" that define the code of conduct we should follow as a corporation, and the "Code of Conduct" as guidance on conduct to be observed in the course of business activities based on the "Guidelines for Corporate Behavior." We are working to ensure that all officers and employees are familiar with these standards. Furthermore, a compliance promotion structure has been put in place with the establishment of a compliance help desk and the periodic holding of Risk Management Committee meetings, among other details, prescribed in company rules.

By continuing to periodically provide employees with education on the need and significance of observing various laws, regulations, and rules associated with corporate management, we will strive to cultivate higher ethical standards. We will also maintain and improve the soundness of management not only of Sanyo Special Steel but also of the entire Group, and practice our corporate mission to "make a social contribution through business" by promoting business activities rooted in high ethical standards.

# **Guidelines for Minority Shareholders Protection Policy in Transactions with Controlling Shareholders**

The Board of Directors has resolved that transactions with the parent company's group shall be based on appropriate terms and conditions similar to those generally applicable to transactions with other companies, and confirmed that for transactions required under internal regulations, the terms and conditions of such transactions shall not differ significantly from those normally applicable to transactions with third parties, and that the implementation of such transactions shall contribute to our business and not be detrimental to our interests.

With respect to important transactions or actions that may cause conflicts of interest between the parent company and minority shareholders, the Board of Directors establishes a "Supervisory Committee for Conflict of Interests" consisting of all independent external directors to deliberate and examine the appropriateness of the subject transaction, etc., on a case-by-case basis, and the Board of Directors makes a decision based on the results.

# **Officer Training**

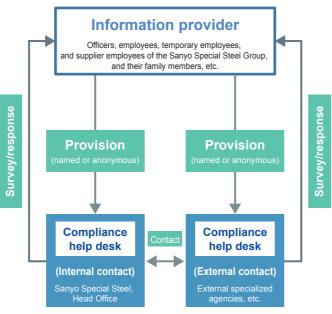
Sanyo Special Steel provides directors with opportunities to acquire necessary knowledge such as their responsibilities under the Companies Act and other important laws and regulations, as well as systems, etc. related to their work. Such opportunities include training given by outside instructors. In addition, we actively provide opportunities for external directors to visit our factories and interact with the Representative Director and President, internal directors, etc. so as to enable them to deepen their understanding of our Group's business operations

# **Compliance Help Desk (Whistle-blowing System)**

In order to prevent the occurrence and recurrence of incidents or actions that are or may have been in violation of laws, regulations, social norms, or company rules, etc., we have established a compliance help desk as an whistle-blowing and consultation system that also takes into account the Whistleblower Protection Act revised in June 2022.

This help desk can be used by anyone in the Sanyo Special Steel Group, including officers, employees, temporary employees, supplier employees (including those who were either of these within one year prior to the date of the report or consultation), and their family members, etc. For those with a problem that is difficult to solve in the workplace or a concern that you cannot talk to anyone about, the help desk is available for consultation so that they do not need to take it all on themselves. Anonymous consultation and reporting is also possible, and no one will be disadvantaged as a result of consultation or reporting. In addition to our help desk, the Compliance Consultation Office of our parent company, NSC, can also be used.

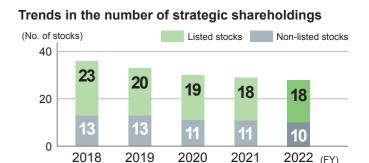
It is our policy to take prompt and appropriate action in the event of consultation or reporting. The compliance help desk also has a role in monitoring the status of internal control activities.



\* No one will be disadvantaged as a result of consultation or reporting Secrecy is maintained in strictest confidence.

# **Strategic Shareholdings**

Sanyo Special Steel holds strategic shareholdings (all shares other than those of our affiliates) for the purpose of enhancing its medium- to long-term corporate value by, for example, maintaining and strengthening business and trade relationships, maintaining and developing partnerships, and smoothly promoting its business activities. With respect to each brand included in the shareholdings, the Board of Directors annually reviews the rationality of holding the shares in light of the purpose of holding them, the situation surrounding relevant business transactions, etc. For those share brands the holding of which we have found not to be rational, we are working on reducing the number of their shares held by us through dialogue and negotiations with the business partners concerned.



# **Dialogue with Shareholders and Investors**

With a view to achieving sustainable growth and enhancing its medium- to long-term corporate value, Sanyo Special Steel is taking various measures to promote constructive dialogue with shareholders and investors and committed to enriching such measures through the cooperation of various divisions in the company with each other, including officers, the Accounting & Finance Department, and the General Administration Department.

During FY2022, we held four briefings<sup>\*1</sup> on the days of announcement of the quarterly and year-end financial results, 64 individual talks<sup>\*2</sup> with investors, etc., and two factory tours, etc. for institutional investors.

# <Main topics of dialogue>

- Performance results of Sanyo Special Steel and its consolidated subsidiaries
- Trends in major customer industries
- Responses to the soaring prices of raw materials and fuels
- Impact of semiconductor shortages and the Russian invasion of Ukraine
- Impact of the progress of the shift to EVs, and the transition to a company with an Audit & Supervisory Committee
- Initiatives toward carbon neutrality, etc.
- \*1: The Representative Director and President attended the briefings for announcement of the second-quarter and year-end financial results. The Japanese version and English version of explanatory materials were released simultaneously.
- \*2: Individual talks were conducted to communicate with a total of 108 shareholders and investors, among whom a total of 25 overseas shareholders and investors were included.

# **Board Effectiveness Evaluation**

In order to improve the functions of the Board of Directors, Sanyo Special Steel conducts analysis and evaluation of the effectiveness of the Board of Directors. Specifically, we conduct, through a third-party organization, a questionnaire survey of the members of the Board of directors on general matters related to the Board of Directors, such as its composition and operation method, the status of deliberation, the state of cooperation with external officers, etc. On the basis of the results of analysis of the survey results, the Board of Directors evaluates its effectiveness.

In FY2022, based on the results of the board effectiveness evaluation for FY2021, we set the following tasks and took measures.

### <FY2022 tasks and measures>

### (1) Enhancement of opportunities for officer training

In September 2022, we invited an expert from an external organization to give an explanatory session on the present situation surrounding the disclosure of information on human capital. In November 2022, TOIDE Director gave a lecture on the theme of "Future Prospects of the Japanese Automobile Industry"; and in the same month, USUKI Director gave a lecture on the theme of "ESG Investment and Behavioral Economics."

# (2) Enhancement of opportunities for interaction between internal directors and external directors

An opinion exchange session was held on the day of each meeting of the Board of Directors. In the opinion exchange sessions, opinions were expressed and information was exchanged in a free-spirited manner. These sessions served as an opportunity for external directors to deepen their understanding of Sanyo Special Steel, and as an opportunity for internal directors to view the company's issues from an outside perspective.

### (3) Promotion of simplified and paperless board meeting materials

Since April 2022, we have shifted to paperless meetings using a web conferencing function. Following the shift to paperless meetings, we simplified our materials, such as by not attaching non-explanatory materials (reference materials).

# (4) Further enhancement of discussions from a company-wide, medium- to long-term perspective

In the meetings of the Board of Directors held on July 28 and December 27, 2022, we reported on the progress of our mid-term management plan covering the period from FY2021 to FY2025 (2025 Medium-term Plan). In addition, the effect of the enrichment of prior explanations, the implementation of opinion exchange sessions, and the transfer of power following the transition to a company with an Audit & Supervisory Committee, among other factors, has enabled the Board of Directors to focus on broader and more substantive discussions in board meetings. Accordingly, our evaluation has found that the Board of Directors has been becoming more active.

Based on the results of the evaluation of effectiveness for FY2022, which took into account the above initiatives, we have concluded that the Sanyo Special Steel's Board of Directors functions effectively. In FY2023, based on the results of the questionnaire survey conducted, we will continue to enhance officer training and the interaction among the members of the Board of Directors and also to consider making further enhancements in the Board of Directors and expanding the roles and diversity of external directors.

### <Tasks for FY2023>

- (1) Consideration of the diversity of the members of the Board of Directors (2) Enhancement of the interaction among the members of the Board of Directors
- (3) Enhancement of opportunities for officer training (4) Further simplification and prioritization of board meeting materials
- (5) Efficient operation of the provision of explanations prior to meetings of the Board of Directors

# Officers



Representative Director and President **MIYAMOTO Katsuhiro** 



Director, Member of the Board, Managing Executive Officer TAKAHASHI Kozo



Managing Executive Officer

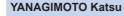




Director, Member of the Board, Managing Executive Officer OMAE Kozo



Director, Member of the Board Managing Executive Officer





Independent External Director, **USUKI Masaharu** 



lember of the Board **FUJIWARA Kayo** 



**SONODA Hiroto** 



Director, Member of the Board, Senior Audit & Supervisory **NAGANO** Kazuhiko



ber of the Board, and Audit & Supervisory Committee **YOGI Hiroshi** 



Audit & Supervisory Committee **TOIDE Iwao** 

# Composition of the Board of Directors and Expertise and Experience of Its Members

In order to ensure flexible decision-making in response to changes in the business environment and the development of an effective corporate governance system, Sanyo Special Steel has set the size of the Board of Directors is appropriate to the Group's business and management issues and ensures that the Board has a well-balanced and diverse mix of members in terms of experience, knowledge, expertise, and gender, etc.

		Expertise and experience									
		Full name	Corporate management	Manufacturing, engineering, research, and development	Sales	Finance and accounting	Personnel and labor relations	International experience	Legal	ESG	Knowledge of other industries
(excluding directors who are Audit & Supervisory Committee members) Director	_	MIYAMOTO Katsuhiro*	•			•	•	•		•	•
	ecutio	TAKAHASHI Kozo	•			•	•			•	
	ss ex	OI Shigehiro	•	•	•					•	
	Business execution	OMAE Kozo	•		•			•		•	
	Ш	YANAGIMOTO Katsu	•	•	•			•			
uding ervisor		USUKI Masaharu* Independent External	•			•				•	•
(excl	ø	FUJIWARA Kayo* External	•		•			•		•	•
	Non-executive	SONODA Hiroto	•								
is an rvisory ember	on-ex	NAGANO Kazuhiko	•			•				•	
Sup	Z	YOGI Hiroshi*				•		•			•
Directo Audit & Commit		TOIDE Iwao* Independent External	•		•			•		•	•

<sup>\*</sup> MIYAMOTO Katsuhiro, USUKI Masaharu, FUJIWARA Kayo, YOGI Hiroshi, and TOIDE Iwao are members of the "Nomination & Compensation Advisory Committee," a non-statutory advisory body of Sanyo Special Steel

# Ratio of independent external directors

(4 out of 11 directors are independent external directors)

# Number of female directors

(1 out of 11 directors is female)

# Policies and Procedures for the Appointment and Removal of Executives and **Nomination of Director Candidates**

It is our policy that the Board of Directors determines the appointment of executives based on the experience, knowledge, and expertise of each individual without distinction as to gender, age, nationality, etc., so as to create an optimal structure in which each person can appropriately fulfill his/her role and responsibilities and the management issues of our Group's businesses can be accurately addressed.

In addition to the above conditions, our policy is to make decisions on the nomination of director candidates by taking into consideration the overall size of the Board of Directors and Audit & Supervisory Committee as a whole and the balance of the candidates that make up the Board and the balance among the candidates.

It is our policy that the Board of Directors makes a comprehensive judgment before deciding on the removal of executives in the event of any irregularity or serious violation of laws, regulations, or the Articles of Incorporation in the execution of their duties, or in the event that the person is deemed unable to fulfill his/her roles and responsibilities.

Procedures for the appointment and removal of executives and the nomination of director candidates are to be resolved by the Board of Directors after deliberations at the "Nomination & Compensation Advisory Committee" consisting of the Representative Director and President and independent external directors. Prior consent of the Audit & Supervisory Committee is to be obtained for the nomination of candidates for directors who are the Audit & Supervisory Committee members.

In addition, the dismissal of a director is determined after deliberations at the "Nomination & Compensation Advisory Committee" and a resolution of the Board of Directors, followed by submission of a proposal for dismissal of the director to the general meeting of shareholders. The dismissal is finalized by the resolution of the said proposal.

# **Policies and Procedures for Determining Directors' Compensation**

# (i) Policy details

# Directors (excluding those who are Audit & Supervisory Committee members)

The base amount is determined by position, taking into consideration the required abilities and responsibilities as well as the content of the duties of each position, depending on whether full-time or part-time. For business execution directors, the total amount of compensation is performance-linked so as to provide incentives for the sustainable growth of the Group and the improvement of corporate value, with the base amount varying within a certain range according to the consolidated performance of Sanyo Special Steel, and the amount of monthly compensation for each director is determined within the upper limit approved at the general meeting of shareholders.

For non-executive directors, the total amount of compensation is fixed in consideration of their duties, and the amount of monthly compensation for each director is determined within the upper limit approved at the general meeting of shareholders.

# **Directors who are Audit & Supervisory Committee members**

The amount of monthly compensation for each director who is an Audit & Supervisory Committee member is determined within the upper limit approved at the general meeting of shareholders, taking into consideration his/her position and the content of his/her duties of each position, depending on whether full-time or part-time.

# (Performance-linked compensation)

As indicators for performance-linked compensation, Sanyo Special Steel uses consolidated ordinary income from the perspective of shortterm and medium- to long-term performance incentives (taking into consideration earnings targets in the mid-term management plan, etc.), the return on equity (ROE) from the perspective of contribution to shareholders, and, from an ESG perspective, the CDP climate change score, health management rating, safety index, ratio of female managers, and board effectiveness evaluation by external directors.

Sanyo Special Steel's performance etc. -linked compensation is calculated by multiplying the base amount determined for each position by a variable rate determined based on the performance of the above indicators.

# (ii) Method of determining policy

For directors (excluding those who are Audit & Supervisory Committee members), the policy is determined by a resolution of the Board of Directors after discussions at the "Nomination & Compensation Advisory Committee" consisting of the Representative Director and President and independent external directors, and for directors who are Audit & Supervisory Committee members, the policy is determined through discussions at the Audit & Supervisory Committee.

# (iii) Procedures for determining the amount of compensation

The specific amount of compensation for each director (excluding a director who is an Audit & Supervisory Committee member) is to be determined by a resolution of the Board of Directors after discussions at the "Nomination & Compensation Advisory Committee" consisting of the Representative Director and President and independent outside directors.

The specific amount of compensation for each director who is an Audit & Supervisory Committee member is to be determined through discussions at the Audit & Supervisory Committee.

# /Key Financial Data

		<b>FY2013</b> (102nd period)	<b>FY2014</b> (103rd period)	<b>FY2015</b> (104th period)	<b>FY2016</b> (105th period)	<b>FY2017</b> (106th period)	<b>FY2018</b> (107th period)	<b>FY2019</b> (108th period)	<b>FY2020</b> (109th period)	<b>FY2021</b> (110th period)	<b>FY2022</b> (111th period)
Business results											
Net sales	(Millions of yen)	161,587	171,495	149,148	138,680	157,485	185,818	262,452	210,721	363,278	393,843
Operating income	(Millions of yen)	6,883	9,169	12,188	11,685	10,969	10,123	-1,417	-5,493	21,416	28,492
Ordinary income	(Millions of yen)	6,749	9,735	11,540	11,736	10,659	9,437	-1,521	-4,762	21,664	28,856
Profit attributable to owners of the parent	(Millions of yen)	4,066	6,547	7,416	7,784	7,034	7,721	-3,717	-6,870	15,267	20,743
inancial conditions											
Total assets	(Millions of yen)	203,522	202,243	179,898	183,444	209,146	374,246	327,963	319,360	377,911	401,218
Net assets	(Millions of yen)	102,905	113,644	113,140	123,143	128,959	200,200	182,202	179,887	198,845	216,024
Interest-bearing debt (net) <sup>*2</sup>	(Billions of yen)	478	332	143	127	284	690	487	469	587	667
Equity ratio	(%)	50.2	55.8	62.4	66.7	61.0	52.3	54.4	55.9	52.1	53.4
D/E ratio (net)	(Times)	0.46	0.29	0.13	0.10	0.22	0.34	0.27	0.26	0.30	0.31
ROS/ROE											
ROS	(%)	4.2	5.7	7.7	8.5	6.8	5.1	-0.6	-2.3	6.0	7.3
ROE	(%)	4.1	6.1	6.6	6.6	5.6	4.8	-2.0	-3.9	8.1	10.1
Per share information											
Net assets per share*1	(Yen)	633.47	699.51	696.69	759.36	3,960.99	3,480.62	3,273.07	3,273.84	3,615.39	3,934.50
Net income per share <sup>⁴1</sup>	(Yen)	25.21	40.60	46.00	48.29	218.34	237.75	-67.14	-126.07	280.19	380.70
Dividend per share ⁴	(Yen)	5.00	10.00	12.00	12.50	31.70	69.00	15.50	-	90.00	100.00
Capital investment/research and	d development	:									
Capital expenditures	(Millions of yen)	4,629	7,176	9,908	9,795	8,119	10,618	27,553	14,446	11,720	13,594
Depreciation	(Millions of yen)	10,965	9,826	9,343	9,098	9,047	9,338	15,033	14,187	15,903	13,764
Research and development expenses	(Millions of yen)	1,388	1,383	1,596	1,608	1,716	1,773	2,475	2,110	2,219	2,019
Cash flows											
Cash flows from operating activities	s (Millions of yen)	9,152	20,698	28,770	15,090	-5,566	10,792	39,425	22,313	7,086	12,155
Cash flows from investing activities	(Millions of yen)	-4,951	-5,873	-8,510	-11,141	-8,354	-69,046	-12,463	-19,412	-13,298	-12,766
Cash flows from financing activities	(Millions of yen)	-5,352	-17,426	-18,807	-10,775	14,705	65,929	-21,093	-5,473	2,286	8,525
Other											
Other Sales volume	(Thousand tons)	1,041	1,054	988	1,013	1,069	1,171	1,615	1,367	1,995	1,607

<sup>\*1:</sup> In October 2017, a reverse stock split of 5 shares into 1 share was implemented.

<sup>\*2:</sup> Interest-bearing debt (net) is the balance of interest-bearing debt minus cash and cash equivalents and deposits to affiliates.