() SANYO SPECIAL STEEL

REPORT 2022 APRIL 1.2021-MARCH 31.2022 Sanyo Special Steel Report 2022 (Integrated Report)

NIPPON STEEL | 🗘 SANYO SPECIAL STEEL



CONTENTS

	Corporate Philosophy	
	Top Message	
	Our Business	
	Value Creation Process	1. I
	Global Business Development	
	Management Plan (2025 Medium-term Plan)	80
	Topics	
	Important ESG-related Issues	1
E	nvironment	
	Environmental Management	1
	Climate Change Prevention Initiatives	1
	Information Disclosure According to TCFD Recommendations	1
	Contribution to a Resource-recycling Society	1.
	Reduction of Environmental Impact	1
S	ocial	
	Creating a Safe Workplace	1
	Disaster Prevention Initiatives	18
	Promotion of Diversity Management	1
	Promotion of Corporate Health Management	2
	Human Resource Development	2
	Quality Improvement Initiatives	2
	Expanding Technological Superiority	2
	Realization of Sustainable Procurement	2
G	Bovernance	
	Enhancement of Corporate Governance	2
	Internal Control Systems	2
	Officers	2
	Key Financial Data	2

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 FY2021 (April 1, 2021 to March 31, 2022), 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.

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.

Corporate Philosophy

Top Message

We are committed to contributing to the realization of a sustainable society through the practice of our corporate philosophy, "Confidence-based Management," as well as meeting the ever-increasing need for highly reliable special steels in the face of major changes in industry and society, including carbon neutrality.

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 special steel products to various fields of society. In addition, we have responded to the globalization of markets ahead of others, and have established integrated manufacturing bases for special steel in Japan, Europe, and India to capture global demand for special steel and formed and fabricated material business bases in the growing automotive markets of China and North America, thereby building a supply chain that responds to local production and local consumption in customer industries.

Even under major social and industrial changes such as carbon neutrality, our highly reliable special steel products 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 brand of the "Sanyo Special Steel - the confident choice" by strengthening its business foundation and innovating technologies that are ahead of the times to meet the needs of customers. We will continue to strive for the creation of economic and social value and contribute to the realization of a sustainable society by creating through the practice of our corporate philosophy, "Confidence-based Management," which aims to establish "confidence of society," "confidence of customers," and "confidence among people."

MIYAMOTO Katsuhiro,

シコ/Mexico

國際農業式会社

用工業模式会社

サントラテック株式会社

STREET STREET

BE-17.88 85-1

アントク保障サービス株式会社

BRE ROWSSIT-COMP.

シトクコンピュータサービス機会

PROPER DESIGNATION.

和市場のなど 単純な話のようやまうさ

ALC: NOT THE OWNER

Representative Director and President



Top Message

Review of FY2021 and Current Business Environment

Review of FY2021

In FY2021, while the global economy was recovering from the severe situation caused by the COVID-19 pandemic, prices of raw materials and fuels, including iron and steel scrap, rose sharply. However, we achieved consolidated net sales of 363.3 billion yen and consolidated ordinary income of 21.7 billion yen, a marked improvement from FY2020, when the Group was in the red, due to factors such as an increase in sales volume resulting from a recovery in key customer industries, including automobiles, industrial machinery, and construction machinery; higher sales prices resulting from the application of the scrap surcharge system; and improved earnings at Group companies, including European subsidiary Ovako. (Figure 1)

In FY2021, the first year of our five-year management plan "2025 Medium-term Plan," under the policy to strive to increase earnings by strengthening our structure in anticipation of changes in the demand structure and intensifying international competition, we have been working to improve the profitability of our overseas businesses and to guickly demonstrate the synergies of the collaboration with NSC and Ovako, which is a strength not found in competitors. In the overseas businesses. Ovako made progress in improving its profitability and contributed significantly to consolidated business performance, and in the collaboration, under the plan to generate about 10 billion yen in synergies among the three companies in FY2024, the sixth year of the collaboration, the results were achieved with progress exceeding the plan in FY2021, the third year of the collaboration.

Current Business Environment and Response Policies

In recent years, international competition in the special steel industry has become even more intense as competitors have increased capacity and improved quality and technology. In addition, the current situation has seen unprecedented cost increases due to a significant rise in energy prices, mainly due to the situation in Ukraine, as well as the depreciation of the yen. (Figure 2)

With regard to demand for special steel, there are concerns about a slowdown in the economy due to automobile production cuts caused by a shortage of semiconductors, etc., the prolonged situation in Ukraine, global inflation, and other factors. It is therefore necessary to continue to pay close attention to future trends.

Under these circumstances, the Sanyo Special Steel Group, based on its basic policy of "Securing appropriate margins" will promote sales price revisions and expansion of the application of surcharges, as well as focus on stable operations and take necessary measures to address increased costs due to rising raw material and fuel prices. Based on this policy, we aim to achieve ordinary income of 10.0 billion yen(Note) for the full year in FY2022 and strive to further enhance our corporate value in the global special steel market by establishing a solid corporate structure that can continue to secure stable earnings.

Figure 1 Trends in consolidated business performance



Figure 2 Trends in raw material and fuel prices (Index based on the value of the first guarter of FY2020 as 100)



ESG Initiatives for the Realization of a Sustainable Society

Toward Carbon Neutrality by 2050

Companies are expected to contribute to the realization of a sustainable society. In particular, climate change is an important issue that affects the very existence of humankind, and in July of last year, we announced a roadmap for achieving our policy goal of realizing carbon neutrality by 2050. Based on this roadmap, in addition to reducing our own CO₂ emissions by 50% or more compared to the FY2013 level in FY2030, we will promote ecoproducts that contribute to CO₂ emission reductions by customers and eco-solutions that deploy energy-saving and productivityenhancing technologies at overseas Group companies, aiming at contributing to reducing emissions by approximately 20% of the FY2013 level.

Ovako, the Sanyo Special Steel Group's European subsidiary, has been promoting its world's most advanced initiatives toward decarbonization, and in January 2022, it shifted to a carbonneutral production through a carbon offset program. Ovako has introduced a climate surcharge in conjunction with this and has begun selling green steel. In Europe, there is a strong interest in low-carbon steel in customer industries, and we recognize that Ovako's advantage in the European special steel market has been further enhanced by being one of the first to achieve carbon neutrality.

In terms of reducing CO₂ emissions and improving energy efficiency, we believe that the need for highly reliable special steel products, in which our Group excels, will further increase. Recognizing this as a great opportunity to demonstrate our Group's strengths, we will actively promote innovations that contribute to achieving carbon neutrality for society as a whole and responses to new steel material needs that contribute to environmental issues faced by our customers.

Aiming for Growth of People and Technology

As a group of manufacturing companies, we believe that safety, disaster prevention, and health are the basic premise of our business activities and take precedence over everything else. Based on this recognition, the Group promotes 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" with regard to safety, works to prevent accidents from occurring and to prevent the spread of damage in the event of a disaster by raising employee awareness of disaster prevention and conducts large-scale earthquake disaster drills with regard to disaster prevention. With regard to health, in August 2021, we formulated the "Sanyo Special Steel Corporate Health Management Declaration" and established a corporate health management promotion structure with the Representative Director and President as the Chief Corporate Health Officer to promote the creation of an environment in which each and every employee can safely and healthily engage in rewarding work on a daily basis

In terms of diversity, Sanyo Special Steel raised its mandatory retirement age to 65 in April 2021 to promote the active participation of the senior generation, and has long promoted measures to promote the active participation of female employees. In June 2022, a female executive officer was appointed. Moreover, in order to respond to the globalization of business activities, we are developing global human resource development initiatives. Although the spread of COVID-19 has made it difficult

(Note) Publicly announced business performance forecast as of October 31, 2022

to travel to and from foreign countries thus far, we will accelerate the interaction of human resources across national borders in the future

In addition to these factors, technological growth is essential for our Group's sustainable growth. For the purpose of enhancing our corporate value in the global special steel market, we will promote further expansion of our technological superiority by strengthening our research, development, and quality competitiveness.

Enhancement of Corporate Governance

In June 2022, Sanyo Special Steel has 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 execution of operations. 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 lona-term.

We hope that this report, which introduces our ESG initiatives, will help you to better understand the activities of our 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 tool steel. 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

Tool steel

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



In the Metal Powders business, we manufacture and

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.

sell metal powder products.



Formed and



Supply system to meet global needs

Global suppl



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.

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.



Business environment surrounding the Sanyo Special Steel Group

Decrease in domestic demand due to declining and aging population

Decrease in direct and indirect exports due to structural changes such as local production for local consumption and review of global supply chain

Increase in global demand, especially in China and India

Intensifying competition among domestic and foreign special steel manufacturers in light of future progress in the shift to EVs, etc. (1

(Note) Publicly announced business performance forecast as of October 31, 2022



Intensifying competition in procurement, especially for iron and steel scrap, toward carbon neutrality by 2050

Global Business Development





Net sales

Sanyo Special Steel Manufacturing India

Net sales : 24.2 billion yen





Management Plan (2025 Medium-term Plan)

With the aim of further enhancing its corporate value in the global special steel market, the Sanyo Special Steel Group has formulated a management plan (2025 Medium-term Plan) with an implementation period from FY2021 to FY2025.

Demand for special steel in Japan is expected to decline in the future due to changes in the social structure, such as a declining and aging population. Direct exports of special steel or indirect exports of products using special steel, etc., are also expected to decrease in the medium- to long-term due to increasing demand from overseas customers for local production for local consumption and review of the global supply chain.

Strengthening the Competitiveness of the Entire Group

Fortifying corporate value in the global special steel market

- Strengthening the cost competitiveness of the entire Group by reducing both fixed and variable costs
- Securing appropriate margins and improve sales mix to ensure capture of global demand

Reinforcing profitability of overseas businesses

- · Ovako : Establishing a solid earnings structure by strengthening its cost competitiveness
- SSMI : Further enhancing its position in the Indian market by strengthening its cost competitiveness and sales strengths

Utilizing synergies with Nippon Steel and Ovako

· Focusing on early implementation of measures to coordinate sales, production, procurement, etc., to achieve full effect by FY2024



NIPPON STEEL SANYO SPECIAL STEEL

Boosting profitability of Formed & Fabricated Products and Metal Powder Businesses

- Formed and Fabricated Materials business: Strengthening of the integrated profitability by leveraging the strength of the integrated manufacturing process from forging to turning.
- · Metal Powders business: Development and sales expansion of strategic items for 5G and decarbonization. etc.



Rearranging global corporate structure

 Strengthening of the Group's overall structure through consolidation and reorganization, etc.

2025

Further enhancement of corporate value in the global **special steel market Further** expansion of technological superiority

[2025 earnings plan] Net sales: Approx. 280 billion yen Ordinary income: Approx. 14 billion yen **ROS: Approx. 5% ROE: Approx. 5%**

[2025 financial indicators] Equity ratio: Approx. 60% D/E ratio: Approx. 0.2 times D/EBITDA: Approx. 1 time

Establishment of a solid corporate structure capable of securing stable earnings

> Five years to strongly solidify the management foundation

[Management resource allocation] Capital investment: 60 billion yen/5 years R&D expenses: 12.5 billion yen/5 years

Expanding technological superiority



Environment • Social • Governance

Achieving carbon neutrality by 2050

and "eco-solutions" by the President



Promoting digital transformation (DX)

 Reform and efficiency improvement of production and business processes through the use of the latest digital technologies

Strengthening governance system and promoting diversity and health management

- system
- corporate health management

In addition, although demand for special steel is expected to increase mainly in China and India, we anticipate intensifying competition with domestic and overseas special steel manufacturers in light of future changes in social and industrial structures, such as the shift to EVs, as well as intensifying competition in procurement, especially for iron and steel scrap, toward carbon neutrality by 2050.

In view of these medium- and long-term changes in the structure of demand for special steel and intensifying international competition, the Management Plan (2025 Medium-term Plan) aims to establish a solid corporate structure that can secure stable earnings by strengthening our business foundation and further enhance our corporate value in the global special steel market.

Deepening Technology

 Accurately responding to new customer demands and environmental issues based on our strength in high-cleanliness steel

· Deepening technology to meet the high reliability needs in the fields of "EV," "wind power generation," "railroads," and "hydrogen society," etc.

Promotion of "eco-processes," "green energy utilization," "eco-products,"

· Establishment of the "Carbon Neutrality Promotion Committee" headed

Strengthening of corporate governance

· Promotion of diversity management and



Topics

Roadmap to Carbon Neutrality by 2050



Sanyo Special Steel has long recognized the issue of climate change as an important challenge and has been promoting fuel conversion, energy conservation measures, and other initiatives to reduce CO₂ emissions. In order to further accelerate these initiatives, we have formulated a Roadmap to Carbon Neutrality by 2050 in July 2021.

Approximately 80% of our CO₂ emissions come from the use of electricity and city gas. In order to achieve carbon neutrality by 2050, we will strive to reduce our own CO₂ emissions by 50% or more from the FY2013 level by FY2030 through our own self-help efforts as well as the use of clean energy such as carbon-free electricity and hydrogen, etc. In addition, we aim to contribute to a reduction equivalent to approximately 20% of the FY2013 emissions with eco-products and eco-solutions.

P.12 Roadmap to Carbon Neutrality by 2050

Endorsement of TCFD Recommendations

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.

TCFD is a task force established by the Financial Stability Board (FSB) in which central banks and financial regulators from major countries participate. In its final report, published in June 2017, TCFD recommends that companies disclose the financial impact of risks and opportunities arising from climate change, as well as specific responses and strategies.

We will disclose information on the impact of climate change on the Sanyo Special Steel Group's business activities, etc., taking into account the purpose of the TCFD Recommendations and the situation of international society that is working to achieve the long-term goals of the Paris Agreement.



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.



European Subsidiary Ovako Shifts to Carbon Neutral

Our European subsidiary Ovako has been promoting its world's most advanced initiatives toward the achievement of sustainable steel production, reducing CO₂ emissions from its special steel manufacturing process by 54% as of 2020 compared to the 2015 level. In April 2020, the Hofors mill in Sweden became the first in the world to successfully demonstrate the use of hydrogen to heat steel before rolling, and is working to further reduce CO₂ emissions

In order to further accelerate its initiatives to promptly resolve climate change issues. Ovako has shifted to carbon neutral (net zero CO₂ emissions in its manufacturing processes) in January 2022 by purchasing 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 CO₂ emissions (Scope 1 and Scope 2) until it achieves zero CO₂ 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.

Construction of Carbon-free Hydrogen Plant at Hofors Mill in Sweden

Ovako is constructing a carbon-free hydrogen plant at its Hofors mill in Sweden that will utilize fossil-free electricity. The plant is capable of producing 3,500 m³ per hour of carbon-free hydrogen from water electrolysis using fossil-free electricity, making it the largest carbon-free hydrogen plant in Sweden.

In April 2020, Ovako succeeded for the first time in the world in heating steel billets using hydrogen as fuel in a pit furnace at the Hofors mill. By utilizing carbon-free hydrogen as fuel for the furnace, we can reduce CO₂ emissions at the Hofors mill by approximately 50% (approximately 20,000 tons per year).

The hydrogen plant will be the first step in the development of a hydrogen infrastructure that can be utilized in the field of transportation in the future, such as supplying generated hydrogen to fuel cell trucks, etc. The plant is also expected to contribute to the improvement of the stability of the local power grid by demonstrating the interaction between the hydrogen plant and electric power network, and the use of waste heat for district heating, etc.









Successful demonstration of the use of hydrogen to heat steel before rolling for the first time in the world



Image of ripple effects from the establishment of a hydrogen plant

Topics

Development of "ECOMAX[®]5" That Achieves Elimination/Simplification of **Parts Manufacturing Process**

Contribution to size and weight reduction of gears, shafts, etc., for automobiles

For parts that require high strength, materials with rare and expensive alloying elements such as nickel and molybdenum added or increased in quantity are generally used. The ECOMAX series, including ECOMAX5, is based on high-cleanliness steel manufacturing technology that maximizes the original performance of steel, and optimizes the alloy balance of chromium, silicon, etc., and the operating conditions during steel manufacturing to significantly increase the strength despite low-alloy steel. In particular, it has achieved a service life more than five times longer than that of ordinary case-hardened steel (JIS SCM420) against peeling damage (pitching) on the gear tooth surface. The improved fatigue strength of the parts is expected to realize compact and lightweight designs and contribute to further size and weight reduction of various mechanical units, including those for automobiles.



Gears and shafts to which ECOMAX5 is expected to be applied

Contribution to CO₂ emission reduction through simplification/elimination of parts manufacturing processes

In the process of manufacturing parts made of case-hardened steel, a heat treatment called "annealing" is applied to soften the material when cold forging is performed. In the annealing process for alloy steels such as case-hardened steel, the material is heated until it reaches an austenitic structure, usually around 800°C, and then cooled slowly over a long period of time to soften the material by precipitating carbides in a spherical shape. ECOMAX5 can precipitate into a spherical shape and soften carbides in less than half the processing time of

conventional methods, without slow cooling, by maintaining a low temperature range for a short time. In addition, the uniform dispersion of spherical carbides resulting from annealing facilitates high-precision molding in cold forging and improves the compatibility of the material with near net molding.

In addition, the property of suppressing grain growth during carburizing treatment is superior to that of general case-hardened steels and other steel grades in the series, and is expected to significantly shorten the treatment time by eliminating the normal normalizing process after cold forging and before carburizing and quenching, and by increasing the carburizing temperature.



Manufacturing process of gear and shaft parts (example)

"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 highquality and environmentally friendly special steel products.

製品環境情報 https://ecoleaf-label.jp/

JR-AW-23001E

Transition to a Company With an Audit & Supervisory Committee

Sanyo Special Steel continues to make ongoing efforts to enhance corporate governance in order to live up to the trust and confidence placed in it by its shareholders, suppliers, and other stakeholders, achieve sound and sustainable growth of the Sanyo Special Steel Group, and enhance its corporate value over the medium- to long-term.

In June 2022, we transitioned to a Company with an Audit & Supervisory Committee in order to accelerate management decisionmaking, 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

Sanyo Special Steel believes that it is important for all employees, regardless of gender, age, nationality, educational background, or work experience, to fully demonstrate their abilities, thereby improving our competitiveness. 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.



the Internal Control & Audit Department

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	FY2021 results (some are FY2022 results)	Reference page	Related SDGs
	Prevention of climate change	Aiming to achieve carbon neutrality by 2050 FY2030 target: 50% reduction from FY2013	Our CO_2 emissions in FY2021: 15% (130,000 tons) reduction compared to FY2013	P.11~14	13 CUINATE ACTION ACTION 9 ANDIVERSITY INVOLUTION ANDIVERSITY INVOLUTION
E	Contribution to a resource- recycling society	Reduction of by-products, promotion of 3Rs	Achieved 89% recycling rate of our by-products	P.15	12 RESPONSIBLE CONSUMPTION ADD PRODUCTION COCO
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.16	14 UFF RELIOW WATER TO DIV 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.17~18	3 GODD HEALTH AND WELLINE ING
	Promotion of diversity management	Promotion of participation of women (increase in average length of service and percentage of managers) and the elderly, support for participation of persons with disabilities, and promotion of work-life balance	Percentage of female managers: +1.7% compared to April 2020 Average years of service of female employees: Management track position +4%, Technical service position +11.5% Rate of male employees taking childcare leave: 37.8%	P.19	5 ECHDER EQUALITY 5 ECONOME GROWTH 5 ECONOME GROWTH
	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 2022 (Large Corporation Category)	P.20	3 GOOD HEALTH AND WELL-BEING
S	Human resource development	Development of human resources who can think and act autonomously Development of global human resources	Implemented a self-transformation based on multifaceted observation Formulated a long-term global human resource development plan	P.21	8 DECENT WORK AND ECONOMIC GROWTH
Social	Quality improvement	Continuous improvement of quality management system, etc.	Strengthened technologies in the fields of "wind power generation," "railroads," and "electrification of automobiles," which are expected to grow, and conducted activities to support quality improvement at overseas Group companies	P.22	
	Further expansion of technological superiority	Rapid and continuous creation of highly reliable products and new technologies with a view to global business expansion	Developed "ECOMAX [®] 5," a high-strength case-hardened steel that achieves elimination/simplification of the parts manufacturing process, and "QTP-HARMOTEX [®] ," a die steel that contributes to consistent die life and product quality in harsh operating environments	P.23	9 ANDERIEY ENVIOLITION AND INFRASTRUCTURE AND PRODUCTION AND PRODUCTION
	Realization of sustainable procurement	Establishment of fair and equitable transactions and partnerships Establishment of a stable procurement structure Promotion of procurement that takes the environment and human rights into consideration	Promoted stable procurement Presented supplier awards	P.24	10 REDUCED INCOMMITES
G	Corporate governance	Enhancement of corporate governance	Transitioned to a Company with an Audit & Supervisory Committee (in June 2022) Continued improvement of operation of the Board of Directors based on effectiveness evaluation	P.25	
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)	P.26	



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

<Philosophy>

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.

<Policy>

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 on the environment.
- 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 environmental impact.
- 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 and managed properly.

Environmental Management Structure

Carbon Neutrality Promotion Committee

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.

In FY2021, the Committee deliberated on the roadmap to achieve carbon neutrality by 2050 and the response to climate change information disclosure based on the TCFD Recommendations, and the main contents of the discussion were reported and deliberated at the Board of Directors meeting.

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 FY2021, the Committee deliberated on the FY2020 results and FY2021 plans of the Environmental Conservation Improvement Plan, including CO₂ emission reduction targets, and reported the content of the deliberation to the Board of Directors.



Acquisition of ISO 14001 Certification

We have acquired ISO 14001 certification, the international standard for environmental management systems, at our head office plant (manufacturing base), and are working to establish this certification through annual internal audits and external audits.

Younger employees are also present at internal environmental audits to promote understanding of the environmental management system and to improve the system. We are also focusing our efforts on ongoing training to facilitate a smooth generation change of internal auditors.

In external audits, our environmental management system is assessed as functioning effectively, and we will continue our efforts to further reduce environmental risks through the use of our environmental management system.

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 patrols
- (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 patrols once a month, mainly at manufacturing sites. We are working to reduce environmental risks by taking action at each manufacturing site in response to points raised by patrols.

(i) Checks on significant environmental aspects

Patrols are conducted on processes and equipment with significant environmental aspects (elements that may have a significant impact on the environment), and inspections are carried out on the management status of facilities and measuring equipment and the work standards, etc., to improve management levels and reduce 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.

In FY2021, we confirmed initiatives related to the recycling of electric arc furnace slag generated as a by-product in the manufacturing process, among others.

Responding to revisions to environmental laws

As stipulated in our environmental policy, compliance with laws and regulations is the basic premise of our business activities. 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 a wide range of employees, from foremen, team leaders, and Group companies' general managers to managers of sales divisions, 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 the law>

• Act on Promotion of Global Warming Countermeasures

Revision details:	The government's goal of achieving a decarbonized society by 2050 was clearly stated in the basic principles. (Enforced in June 2021)
Status of response:	The Environmental Liaison Meeting was held to inform the entire company of the details of the revision of the law, and the Carbon Neutrality Promotion Committee was established to strengthen initiatives for decarbonization activities.

Environmental Accounting

The costs of environmental conservation measures in FY2021 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 3.1 billion yen.

In addition, approximately 300 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	1,081	119
Cost of global warming measures	242	59
Resource recycling cost	1,568	100
Administrative activity cost	139	0
R&D costs	33	0
Other environmental costs	11	0
Total	3,075	278

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 conservationrelated qualifications, such as pollution control managers, and we have also been working to have employees create a household eco-account book.

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 CO₂ 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 CO₂ emissions]



Group companies

Our CO₂ Emissions Derived from Energy Use

contribute to eco-processes of consumers

Trends in CO₂ emissions derived

power generation



from energy use Other 2% Coal coke 14% Electricity Natural gas 51% 33% FY2021 CO₂ emissions 710.000 t-

 CO_2

Breakdown of CO₂ emissions derived

Group companies, including Ovako and SSMI

<Calculation method>

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

*1 CO₂ emissions in previous fiscal years have been retroactively adjusted due to the improved accuracy of the data.

CO₂ Emission Reduction Initiatives

Promotion of eco-processes (CO₂ emission reduction in the manufacturing process)

As part of its initiatives to prevent climate change, Sanyo Special Steel is working to reduce CO₂ emissions, which is one of the greenhouse gases (GHGs).

CO₂ emissions derived from energy use in FY2021 were reduced by 15% (130,000 tons) from the FY2013 level (840,000 tons) to 710,000 tons. We have been promoting eco-processes such as the use of regenerative burners for heating furnaces, inverters for large motors, and LEDs for factory lighting. We will continue our initiatives to achieve carbon neutrality by 2050 by further promoting eco-processes and utilizing green energy.

Contribution to CO₂ emission reduction with eco-products

Sanyo Special Steel is focusing on the development of ecoproducts that contribute to the reduction of CO₂ emissions not only in our 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, the need for products and technologies that reduce environmental impact is expected to increase further, including the increased introduction of renewable energy sources such as wind power generation and the size and weight reduction of parts in line with the shift of automobiles to EVs. We will contribute to the reduction of CO₂ emissions at all levels of society and the realization of a carbon neutral society by implementing and further promoting eco-products with further enhanced material properties, such as longer service life of parts and elimination/simplification of parts manufacturing processes, based on the high-cleanliness steel manufacturing technology, which is one of our strengths.

Long-life bearing steel

Reducing nonmetallic inclusions, which are the sources of fatigue fracture, to extreme minimum, contributes to CO₂ emission reduction by reducing the size and weight of automobile parts with improved durability and reliability and by reducing failures and enabling maintenance-free operation of wind power generation facilities, etc. with longer service life.



mproving durability and reliability ailure rate reduction ree operation

Heat-resistant stainless steel tubes

Improving corrosion resistance and high temperature strength using our proprietary material technology enables waste heat recovery at higher temperatures and improves energy efficiency by raising temperature and pressure of boilers, thereby contributing to CO₂ emission reduction

High-hardness and high-toughness steel

Achieving both high hardness and

carburizing during the manufacture of

automotive parts.

through higher strength

through new chemical

through higher corrosio resistance

toughness through our component design and steel heat treatment technology contributes to the reduction of CO2 emissions by eliminating/simplifying composition technology hardening heat treatment such as

composition and new heat treatment

Contribution to CO₂ emission reduction with eco-solutions

Sanyo Special Steel is promoting the reduction of CO₂ emissions not only in Japan, but also at our global manufacturing bases by deploying its technologies that contribute to energy conservation and reduction of unit energy consumption, such as rapid melting technology in electric arc furnaces and yield/productivity improvement in the rolling process, to our Group companies that manufacture special steel products overseas, including Ovako and SSMI.

Reduction of environmental impact during product transportation

In order to reduce CO₂ emissions, it is essential to work not only on the manufacturing process but also on logistics. In particular, the means of transportation for product shipment is an important point in reducing the environmental impact of logistics.

Sanyo Special Steel has been striving to promote the use of rail transportation, which can reduce CO₂ emissions by approximately 90% compared to truck transportation, and freight ship transportation, which can reduce CO₂ emissions by approximately 80% compared to the same, on condition that product quality is ensured. The percentage of our total product shipments transported by freight ship is much higher than the manufacturing industry average.

<Specific initiatives>

- Use of rail transportation to Tohoku area
- · Use of freight ships for transportation to relay warehouses located in the Kanto, Chubu, Chugoku, Shikoku, and Kyushu areas
- Switch from trucks to barges for transportation to Kobe Port where export vessels depart

Endorsement of the GX League Basic Concept

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 endorse 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.

CFC (Chlorofluorocarbon) Emission Control

CFC gas, a greenhouse gas, is used in commercial air conditioners, etc. If released into the atmosphere, it is believed to have an impact on global warming. In accordance with the Act on Rational Use and Appropriate Management of Fluorocarbons, we conduct inspections of Class I Specified Products such as commercial air conditioners and ensure the recovery of chlorofluorocarbons at the time of equipment disposal in order to properly manage CFC gases.

Climate Change Prevention Initiatives

CO₂ Emissions in the Value Chain

The CO₂ emissions derived from energy use in our manufacturing operations (Scope 1 and Scope 2) and the CO₂ 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 FY2021 for Scope 1, Scope 2, and Category (1) of Scope 3 (purchased goods and services).

		CO ₂ emis	sions (thousa	ind t-CO ₂)	Colouistian method
		FY2019	FY2020	FY2021	Calculation method
Scope1	Direct emissions from fuel usage at the Company	261 ^{*1}	237*1	336 *	
Scope2	Indirect emissions from the use of energy produced by other companies	305 ^{*1}	254 ^{*1}	373 *	See previous page
Scope1+2	Emissions	566 ^{*1}	491 ^{*1}	710 *	
Scope3	Other indirect emissions equivalent to the Company's supply chain				
(i) Produc	(i) Products/services purchased		267 ^{*2}	378 *	Calculated by multiplying the quantity or value of raw materials purchased by the $\rm CO_2$ emissions intensity
(ii) Capita	Capital goods		31	18	Calculated by multiplying the amount of capital investment by the CO ₂ emissions intensity
(iii) Fuel- a Scope	nd energy-related activities not included in 1 and 2	113 ^{*2}	100 ^{*2}	134	Calculated by multiplying the quantity of electricity purchased and fuel used by CO_2 emissions intensity
(iv) Upstre	am transportation and delivery	24	19	20	Calculated by multiplying the quantity of fuel used reported under the Act on Rationalizing Energy Use by the CO_2 emissions intensity
(v) Waste	(v) Waste generated from business operations		3	4	Calculated by multiplying the volume of waste by the CO_2 emissions intensity
(vi) Busine	(vi) Business trips			0 0 Calculated by n by the CO ₂ emi	
(vii) Commuting by employees		1 ^{*2}	1*2	1	Calculated by multiplying the number of employees by the CO_2 emissions intensity
(xv) Investr	nent	231 ^{*2}	210 ^{*2}	237	Calculated by multiplying the emissions of major subsidiaries (Ovako, SSMI, and Santoku Tech) by their capital ratios

★ 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>

FY2021 (April 1 to March 31)

*1 CO₂ emissions in previous fiscal years have been retroactively adjusted due to the improved accuracy of the data.

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>

FY2021 (April 1 to March 31)

*2 CO₂ emissions in previous fiscal years have been retroactively adjusted due to the improved accuracy of the data.

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. ("Company") on the Greenhouse Gas (GHG) emissions stated within the Sanyo Special Steel Report 2022 ("Report 2022") during FY2022 (from April 1, 2021 to March 31, 2022). The information that we assured is the CO₂ emissions (the equivalent values to the GHG emissions) marked with \star in the 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 the calculation and reporting ("Company's criteria"). As mentioned in ISO 14064-3:2019 "Greenhouse gases — Part 3: Specification with guidance for the verification and validation of greenhouse gas statements," the Company's calculation of the 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 14065:2020 "General principles and requirements for bodies validating and verifying environmental information." For pursuing the engagement, we complied with the basic principles including independence, required in the ISO 14065:2020 and the ISO 14064-3:2019.

3. Our Responsibility

Our responsibility is to express a limited assurance conclusion as to whether the 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 the ISO 14064-3:2019.

Our engagement consisted of combinations of those such as conducting inquiries to the Company's members, visits to and observations of the processes related to the 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 work was conducted at both or either of headquarters and/or works. Our assurance team for fulfilling this engagement consisted of professionals and individuals selected based on their knowledge, experience and qualifications. The team included lead auditors and verifiers for ISO 9001 certification, ISO 14001 certification and GHG emissions verification.

As defined in the ISAE 3000, the nature, timing, and extent of procedures performed in a limited assurance engagement are limited compared with that 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 causes us to believe that the CO_2 emissions stated in the Report 2022 are not prepared, in all material respects, in accordance with the Company's reporting criteria.



JIC Quality Assurance Ltd. (JICQA) Tokyo, JAPAN

Ryoichi Kanno, Ph.D. President September 9, 2022

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.11
b) Management's role in assessing and managing climate-related risks and opportunities	P.11
[Strategy] The actual and potential impacts of climate-related risks and opportunities on the organization's busir strategy, and financial planning where such information is material	iesses,
a) The climate-related risks and opportunities the organization has identified over the short, medium, and long term	P.14
b) The impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning	P.14
c) The resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	P.14
[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.11
b) The organization's processes for managing climate-related risks	P.11
 c) How processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management 	P.11
[Metrics and Targets] The metrics and targets used to assess and manage relevant climate-related risks an opportunities where such information is material	ld
 a) The metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process 	P.12、16
b) Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks	P.12、16
c) The targets used by the organization to manage climate-related risks and opportunities and performance against targets	P.12、16

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° 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 CO₂ 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 CO₂ 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
1.5°C scenario	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 ₂ emissions (railroad), shift to a hydrogen society, etc.)	 Increase in demand for electric arc furnace steel, which emits relatively less CO₂, and materials, technologies, and products that help customers reduce CO₂ emissions (long-life bearing steel, hydrogen- resistant stainless steel, etc.) 	Opportunity	 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 (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 3D printers, etc.)
	Structural changes in demand associated with the shift to EVs, and growing need for smaller	 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 	Opportunity High	 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
	and lighter automotive parts, etc.	Decrease in special steel consumption per automobile	Risk Medium	collaboration with customers
	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 High	 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
	Intensifying competition for mineral resources due to increase in demand for electricity and storage batteries, etc.	 Increasing need for our high- performance materials that do not rely on rare metals 	Opportunity High	 Promote development and supply of scarce resource-saving high-performance products (ECOMAX series, Co-free maraging steel powder, etc.)
		 Instability in procurement of secondary raw materials due to restrictions on rare metal exports, etc. 	Risk Medium	 Secure and expand sources for ferroalloy procurement Further enhance procurement supply chain management
	Introduction of carbon pricing including carbon tax	 Increase in costs for electricity, fuel, etc. If additional burdens such as a carbon tax were to be imposed, the resources for research and development, etc., would be lost, which could lower the international competitiveness of Japanese industry as a whole 	Risk High	 Promote CO₂ emission reduction of our Steel Group with eco-solutions such as eco-processes and the use of green energy Promote procurement of low-cost carbon-free electricity, etc., gain customer understanding of the low- and de-carbonization value of steel products and the costs required to achieve it, and reflect them in calce prices to secure appropriate matrices.
		 Improve relative advantage of electric arc furnace steels with relatively low CO₂ emissions and especially of Ovako, which is a leader in decarbonization 	Opportunity High	 Strengthen cost competitiveness of the entire Group through collaboration with NSC and Ovako, etc. Request suppliers to reduce CO₂ emissions
	Shift of steel production to electric arc furnaces and increased use of iron and steel scrap	Shift of steel production • Intensifying global competition to o electric arc furnaces • Intensifying global competition to and increased use of iron acquire superior scrap and steel scrap • Intensifying global competition to		 Secure and expand sources of iron and steel scrap procurement and optimize raw material mix Secure iron sources in collaboration with the NSC Group
nario	Increasing frequency and severity of weather- related disasters Increase in average	 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, 	Risk	 Continuously improve BCM (Business Continuity Management), including enhancement of disaster prevention management and natural disaster countermeasures
4°C scena	temperature Decrease in water resources and rise in sea levels due to climate change	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.	High	 Ensure restoration financing measures by purchasing property insurance and utilizing the Group's CMS (implemented) Enhance procurement supply chain management, implement flood control measures in anticipation of high water, etc., and maintain private water sources for industrial use (continued)

[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. Iron and steel scrap accounts for approximately 80% of the raw materials, and when internally recycled materials are included, approximately 95% of the raw materials are recycled products.

Initiatives to Reduce By-Products

In FY2021, the volume of by-products generated by our production activities was 252 thousand tons, and the volume processed, including the volume sold, was 243 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 FY2021, we reduced approximately 90% of the processed volume either by recycling or incineration, and finally disposed of the remaining 10% 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 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 coarsegrained 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 highquality 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.

Received "Award of the Director-General of the Industrial Science and Technology Policy and Environment Bureau, METI" at the Awards for Resources Recirculation Technologies and Systems Awarded theme: "Recycling Iron and Steel Scrap, etc., into High-value-Added Special Steel Using Electric Arc Furnace"

In October 2021, Sanyo Special Steel received the "Award of the Director-General of the Industrial Science and Technology Policy and Environment Bureau, Ministry of Economy, Trade and Industry" at the Awards for Resources Recirculation Technologies and Systems.

The purpose of the Awards is to promote the recirculation business by recognizing, encouraging, and disseminating projects and initiatives that feature outstanding technological developments, etc., that contribute to the reduction of waste generation, reuse, and recycling. It is hosted by Japan Environmental Management Association for Industry under the auspices of the Ministry of Economy. Trade and Industry.

Sanyo Special Steel has been offering high-value-added special steel products that contribute to longer life, smaller and lighter parts, and lower parts manufacturing costs by developing a highly productive process for ultra-high-cleanliness steel and scarceresource-saving case-hardened steel in the manufacturing process of special steel using the electric arc furnace steelmaking method, which uses iron and steel scrap discharged from factories, etc., as raw material. These initiatives were highly evaluated for their contribution to 3R* activities that contribute to the creation of a resource-recycling society and their potential to help achieve carbon neutrality.

* 3R: Reduce, Reuse, and Recycle





Electric arc furnace slag



Recycled pavement in Himeji City

Kecycle Recycle iron and s teel resources and by-products





Raw materials (iron and steel scrap, etc.)

Sanyo Special Steel's 3R activities (image)

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.

Chemical oxygen demand (COD) in wastewater



Suspended particulate matter (SS) in wastewater



Nitrogen concentration in wastewater

Concentration (mg/l) Legal standard (no additional criteria for prefectural ordinance) 60 7.9 7.5 7.5 7.4 7.7 2017 2018 2019 2021 (FY) 2020



Wastewater treatment facility

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 the consignment of all the equipment to JESCO for disposal 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



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.

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.

Improvement Plans for Environmental Conservation

Our plans to improve environmental conservation and status of initiatives

Торіс	Target/KPIs	Status of initiatives (FY2021 results, etc.)	Self- assessment*	
Energy-saving and global warming prevention	Reduction in CO_2 emissions through promotion of energy-saving measures, etc. (FY2030 target: 50% reduction from the FY2013 level)	 CO₂ emissions in FY2021: 15% reduction from the FY2013 level Reduction of city gas by updating burners of electric arc furnaces Energy-saving by improving combustion temperature control of heating furnaces 	00	
Recycling of by-	Reduction in dust and sludge landfill volumes	Outsourcing of dust recycling to contractors	00	
products	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	
Education and awareness-raising activities for	raising activities for employees	 Recording of household eco-account books (approx. 10 participants) 		
employees	Increase in the number of employees with environment- related public qualifications	notion of • CO ₂ emissions in FY2021: 15% reduction from the FY2013 level · Reduction of city gas by updating burners of electric arc furnaces • Energy-saving by improving combustion temperature control of heating furnaces • Outsourcing of dust recycling to contractors mes • Outsourcing of dust recycling to contractors • Outsourcing of dust recycling to contractors to waste • Use of brick waste as a heat-resistant raw material • O tion Control • Attainment of regulatory standards for all items (no cases of violation or deviation from laws, regulations, and agreements) • Implementation of community beautification activities (approx. 200 participants) awareness- • Implementation of control managers • Recording of household eco-account books (approx. 10 participants) n environment- • Ongoing initiatives to increase the number of employees qualified as pollution control managers orts • Publication of "Sanyo Special Steel Report" and its release on website other • Implementation of initiatives for Environment Month events		
Promotion of	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	Status of initiatives (PY2021 results, etc.) as • CO2 emissions in FY2021: 15% reduction from the FY2013 level • Reduction of city gas by updating burners of electric arc furnaces • Energy-saving by improving combustion temperature control of heating furnaces • Outsourcing of dust recycling to contractors • Use of brick waste as a heat-resistant raw material • Attainment of regulatory standards for all items (no cases of violation or deviation from laws, regulations, and agreements) • Implementation of community beautification activities (approx. 200 participants) • Recording of household eco-account books (approx. 10 participants) • Ongoing initiatives to increase the number of employees qualified as pollution control managers • Publication of "Sanyo Special Steel Report" and its release on website • Implementation of initiatives for Environment Month events • Implementation of initiatives for Environment Month events	000	

* Self assessment: The level of achievement of targets is indicated on a 3-point scale.

000: Plans have been achieved 00: Steady progress toward achieving plans 0: Further initiatives will be undertaken to achieve plans

Sulfur oxide emissions



Nitrogen oxide emissions



Creating a Safe Workplace

The Sanyo Special Steel Group believes that, as a manufacturing company, "safety" should be prioritized above all else. This is evidenced by the fact that employees greet each other with "Keep Safe!" to impart a sense of safety in one another. In our safety activities, we have set a goal of "a total absence of accidents throughout the year" in order to practice our corporate philosophy, "Confidence-based Management." We believe that we need to achieve a total absence of accidents throughout the year across the entire Group in order to build relationships of trust with various stakeholders and to achieve sustainable growth. We cannot achieve this goal if even one person is left behind. There are no shortcuts to safety activities. We aim to achieve a total absence of accidents throughout the year through daily safety activities and by creating a workplace where all workers can work safely with peace of mind.

2022 Comprehensive Health and Safety Management Policy

Basic policy

Challenge safety activities that enable employees to know themselves (awareness), act on their own (initiative), promote their own growth (independence), and discipline themselves (autonomous), to deepen mutual understanding, and promote the creation of an open, safe, and healthy workplace.

Slogan

Company-wide initiative to change behavior Challenge to create a new safety culture

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 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 Experience Training Center

We have established a Safety Experience Training Center that enables us to have simulated experience of hazards. In 2021, 2,483 employees received training at the center, and to date the total is 31,237.

In 2018, we installed VR (virtual reality) equipment to provide a more realistic experience. We will continue to add new educational content and work with our employees to think about the importance of avoiding hazards



Grade-based Training

Safety knowledge, risk behavior, and sensitivity to hazards, etc., vary for each age group and grade. Therefore, we need to conduct specialized training for each respective grade. For the training targeting employees who have extended their retirement age, rehired employees (those aged 60 to 64), and senior citizen partners (those aged 65 and older) in 2021, we will expand the scope of training to include employees of our partner companies.

Safety Proposal System

We have introduced a safety proposal system aimed at enhancing accident prevention measures by inviting proposals on ways to identify unsafe spots in each workplace, ideas for safety measures, and methods for working safely, and making improvements based on them. Soliciting safety proposals from workers who are actually working 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 forms the core of our safety activities.

In addition, safety professionals are appointed from among the team leaders at work sites, and they are expected to take the initiative in improving work operations and environment 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 topdown 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.

(Number of cases)





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 FY2021, we set the following four 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 a 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

In addition, for fire and disaster prevention risk assessment activities started in FY2020, new check items such as storm and flood damage and crisis management were added 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 minute hazardous materials by providing direct instructions to workplace managers and those responsible for handling hazardous materials and high-pressure gases. In FY2021, at the workshops for hazardous materials safety supervisors and managers held in July, the participants were again informed of the types and designated quantities of hazardous materials stipulated in fire laws and regulations, the need to notify the fire department and apply for permission when making changes, etc., and the responsibilities and duties they must fulfill as safety supervisors and managers. At the workshops for managers in charge of fire and disaster prevention held in September, the participants were explained of the disaster prevention management rules and fire fighting plans that workplace managers should be aware of, and reminded of daily preventive management and the standards of behavior in case of emergencies. They also deepened their understanding of the necessity of first aid, cardiopulmonary resuscitation, 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 months for strengthening management of licensed hazardous material facilities and October as a month for strengthening management of high-pressure gas facilities. We will continue to promote further improvement of employees' 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 cardiopulmonary resuscitation (chest compressions, use of AED) and 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 affiliates may also be required. For this reason, disaster drills are conducted in a more specific and practical manner by identifying appropriate emergency situations.

51

Disaster drills conducted in FY2021

Large-scale earthquake disaster drill

In FY2021, 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, 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 and for secondary evacuation (tsunami evacuation to high places), 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 2021, we conducted a joint factory disaster drill with the Shikama Fire Department under the assumption that an oil fire had occurred at our large rolling mill. 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

Based on the recognition that "a good workplace for women is also a good workplace for men," Sanyo Special Steel promotes the creation of a workplace where all employees can work to the best of their abilities regardless of gender. In addition, business activities are becoming increasingly globalized, with approximately 70% of the Group's employees now being foreign nationals. Under such circumstances, we established the "Diversity (Human Resources Diversification and Utilization) Promotion Group" in January 2021 as a specialized organization to further promote diversity management.

It is important that a company's diversity initiatives lead to the improvement of the company' competitiveness by enabling all employees to fully demonstrate their abilities, regardless of gender, age, nationality, educational background, or work experience. In order to promote the growth of each and every employee and the development of the Sanvo Special Steel Group through the activation of diversity and inclusion, where diverse human resources come together and interact with each other in a developmental manner, we are promoting various initiatives such as further promotion of female participation, utilization of elderly employees after the extension of the retirement age, and stable employment of persons with disabilities.

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 introduced support systems, such as childcare leave and shorter working hours, to reduce the burden during their life events and enable them to continue working.

In addition, under the General Employer Action Plan based on the Act on the Promotion of Women's Active Engagement in Professional Life, we have set the goals of increasing the average length of service of female employees by 15% over the three years from April 2020 to the end of March 2023, and increasing the percentage of female managers by 1% from the March 2020 level. We are promoting the awareness building of female employees through external training, etc., and the creation of an organizational culture that encourages their participation.





Stable Employment of Persons with Disabilities

Sanyo Special Steel promotes the employment of persons with disabilities in order to realize a society in which everyone can work vigorously. 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 playing a central role. For employees who are certified as persons with disabilities after joining the company, consideration is given to the nature and hours of their work so that they can continue to work. As of June 1, 2022, we had 24 persons with disabilities actively working at our respective workplaces.

Promotion of work-life balance

Work-life balance means being able to choose and realize diverse ways of life, including family and community life, while fulfilling one's professional responsibilities and feeling satisfaction and fulfillment in one's work. To further encourage this, the "Act on the Arrangement of Related Acts to Promote Work Style Reform" are being sequentially enforced starting in April 2019. "Work style reforms," such as the prevention of long working hours, proper management of working hours, and requiring employees to take a certain number of days of annual paid leave, are becoming increasingly important in achieving a work-life balance.

In addition to "no overtime day" every Wednesday and productivity improvements aimed at reducing overtime hours, Sanyo Special Steel is also working to increase the rate of paid leave taken.

In addition, we encourage employees to take consecutive paid leave and special incentive leave, and have established systems that exceed legal standards, such as maternity, childcare, and nursing care leave. In addition, 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.

Promotion of Participation by Senior Generation

Extension of retirement age

Ahead of other special steel manufacturers, Sanyo Special Steel has extended the retirement age from 60 to 65 in April 2021. We will promote experienced employees to further demonstrate their abilities as highly skilled experts in the areas of work in which they have been engaged for many years by improving their morale and the vitality of the workplace as a whole. We will also further enhance the environment for promoting the transfer of technology and skills and the development of future generations, and strengthen competitiveness by maintaining and improving our manufacturing capabilities.

Senior Citizen Partner Program

Sanyo Special Steel has established the "Senior Citizen Partner Program" as a system for extending the employment of employees who have reached the age of 65. Participation of the members of the senior generation who are healthy, willing to work, and capable of performing their duties is also consistent with the concept of diversity. We have extended the employment of those who are deemed necessary from the viewpoint of business execution and the transfer of technology and skills when they reach the age of 65 as "senior citizen partners." As of April 1, 2022, we had 80 "senior citizen partners" actively working at our respective workplaces.



Childbirth, Childcare, and Nursing Care Support Guidebook



Promotion of Corporate Health Management

Based on the recognition that the safety and health of its employees is a prerequisite for its business activities, Sanyo Special Steel has regarded the creation of a workplace environment in which each and every employee can work to the fullest every day as an important management issue, and formulated the Corporate Health Management Declaration in August 2021.

As people age, their risk of developing lifestyle-related diseases and serious illnesses increases. In addition, since the occurrence of mental health problems has a significant negative impact on the vitality and productivity of the entire organization, prevention and early detection of such problems are important. From these perspectives, we have established a corporate health management promotion structure with the Representative Director and President as the chief health officer, and work together with the health insurance association to promote comprehensive initiatives to improve the lifestyle of each and every individual and prevent mental health problems from developing.

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 2022 Spring"

For the Promotion of Corporate Health Management

Poor mental and physical health among employees not only causes a decline in productivity but in some cases may also result in the loss of human resources due to leave of absence, resignations, 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 established a mental health help desk and provide support for quitting smoking, diet management counseling, and so on.

In August 2021, we established a corporate health management promotion structure with our President as the Chief Corporate Health Officer 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 a meeting body for continuous improvement, and appointed employees in charge of health promotion in each workplace. 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, and holding walking/health check events to support the establishment of exercise habits.

These efforts led to the acknowledgement in March 2022 of Sanyo Special Steel as a Certified Health & Productivity Management Outstanding Organization (Large Corporation Category). We will continue to further promote corporate health management and create a workplace environment in which all employees can work to the full every day.



Establishment of "No Smoking Day"



Holding health check events







2022 健康経営優良法人 Health and productivity

Conducting a lecture on health topics

Human Resource Development

Sanyo Special Steel has systematically established various types of training according to job classification and career, including training for all employees, to develop the abilities of each and every employee. We also actively encourage employees of affiliates to participate to promote human resource development throughout the Group.



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 timely training to develop human resources with an independent mindset who can "think and act autonomously," such as those having the ability to set and solve challenges on their own.

In addition, we have various training programs and support systems for self-development, including a qualification acquisition incentive system that provides rewards for acquiring qualifications and licenses, specialized training by division such as patents and sales, a wide range of group training, dispatch to various external training programs, and correspondence courses.



Development of Global Human Resources

With the globalization of the business environment, Sanyo Special Steel is accelerating the development of human resources capable of performing on the international stage.

We are developing a global mindset through overseas language training for new employees in planning positions and short-term language study abroad for selected employees, etc. We also promote international exchange and innovation through technical collaboration and mutual dispatch of human resources with overseas Group companies, assignments to overseas affiliates based on a role model, study abroad and dispatch to research institutions overseas. By implementing these measures, we are working to systematically develop human resources who are aware of their status as global human resources, who can act from diverse perspectives beyond borders, and who can produce results while building good relationships through sufficient communication with users and other stakeholders around the world.

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

During personnel appraisals, we focus not only on the results of performance, but also on whether employees "set high goals and boldly strive to achieve them" or whether they "executed the process to achieve the goals without fail" in the appraisal in order to foster autonomy and a challenging spirit in our employees. We are working to help employees to improve their skills through work topics and issues clarified in dialogue with their superiors, and also support the self-realization of each and every employee through career interviews and other means to foster their development 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 describes the actions taken by 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. Based on this, we promote business activities that respect human rights.

Human rights-related education and relief Prevention of child labor and forced labor mechanisms

Through various educational opportunities, such as grade-based 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.

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 vigorously, 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, 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.

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.

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 labormanagement 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.

Quality Improvement Initiatives

Quality assurance is to build a process that enables us to accurately identify customer needs and provide 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 ISO9001:2015 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 JIS, overseas standards, and other product standards. 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 new ISO 9001:2015 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. In November, which is National Quality Month, we hold quality lectures and e-learning programs on quality compliance to raise employees' awareness of quality.

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.



Promotion of Skills Transfer

Sanyo Special Steel has been organizationally and systematically carrying out skills transfer activities since FY2015, and consistently continuing one-on-one training that pairs employees imparting the skills with those learning them, promotion of the creation of teaching materials, and the operation of an award system aimed at increasing their motivation.

In FY2021, we started the "2025 Medium-term Plan" for our skills transfer activities, and each section manager of the production division has set forth a vision (a vision of the workplace that he/she hopes to realize through the activities), aiming to comprehensively "create a strong organization that can respond to all needs, including drastic production increase requests from customers and extreme changes in order composition" throughout the company.

In this fiscal year, the second year of the medium-term plan, the results of human resource development through past activities began to appear in various areas, such as avoiding production stoppages and responding flexibly to unexpected production requests by making up for personnel shortages by the entire workplace to operate facilities.

We will continue to promote skills transfer activities to the future generation as part of a wide range of human resource development activities aimed at further developing multiskilled workers, improving their skills, and fostering new hires as early as possible, with an emphasis on transferring knowledge of skilled employees to future generations.

Promotion of TPM activities

The entire production division is working on TPM (total productive maintenance) activities to achieve zero loss and zero waste due to equipment breakdowns and problems, aiming for stable operation of equipment and improvement of production capacity.

In order to improve on-site capabilities by improving each employee's ability, we have established the "TPM School" as a place to provide training on basic knowledge about equipment and machinery to develop human resources with a good understanding of the equipment. In addition, we have formed common-interest groups for each work category with topics such as zero equipment problems, quality improvement, safety improvement, and cost reduction to conduct improvement activities on a daily basis. The in-house TPM contest, which is held four times a year to present the results of TPM activities, has been held via the Internet since last year so that more concerned parties can attend the contest.

In this fiscal year, an overhead traveling crane simulator was introduced in the TPM School for the purpose of early acquisition of overhead traveling crane licenses by new employees, improvement of safety, and reduction of workload at work sites to further activate TPM activities.

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 the mass production process of special steel manufacturing, we have realized the manufacture of high-cleanliness steel with extremely low non-metallic inclusions through the development of optimal processes and quality control, thereby contributing to extending the service life of various parts manufactured by our customers. In The introduction of wind power generation is expected to recognition of our highly reliable manufacturing technology and quality control system expand toward the realization of a carbon neutral society. 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.

This will allow us to use our special steel products as materials for bearings and other critical parts of wind turbine generators, even when TPG certification is required. We will continue to contribute to the early realization of a carbon neutral society through the development, manufacture and supply of high-cleanliness special steel 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

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 FY2021 was 2,219 million ven. 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.

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

Segment	Research purposes	Major issues and results	R&D expenses (FY2021)
Steel Products	 Development of high-performance products to be launched in the fields of automobiles, railroads, environment and energy, etc., which are expected to growth Strengthening of quality and cost competitiveness through improvement of manufacturing processes of core products such as bearing steel, structural steel, stainless steel, and tool steel 	 Development of "ECOMAX[®]5," a new lineup of the "ECOMAX[®] series" of high-strength case-hardened steels Development of "QTP-HARMOTEX[®]," a pre-hardened die steel that contributes to consistent die life and product quality in the harsh operating environment of hot hammer forging 	1,679 million yen
Metal Powders	 Development of new products, mainly information recording and processing products and powders for 3D printing, which are expected to grow in the future 	• Expansion of the lineup of magnetic flat powders used to eliminate unwanted noise generated by electronic devices such as PCs and cell phones and to improve the information reading performance of IC cards, etc.	501 million yen
Formed and Fabricated Materials	 Strengthening of technology and cost competitiveness of the formed and fabricated materials business Establishment of rapid design technology for optimal molds and ring rolling analysis technology, and development of manufacturing technology for manpower saving 	 Establishment of die forged parts manufacturing technology using CAE analysis technology, quality improvement of ring rolling products, and development of numerical control equipment for turning 	38 million yen

Cold tool steel with high hardness equivalent to high-speed steel (64HRC class) and high toughness

High hardness comparable to high-speed steel and toughness far superior to high-speed steel

> Contribution to improved productivity and production quality and die cost reduction

- Achievement of 64HRC hardness comparable to JIS SKH51 (high-speed steel) and more than twice as much toughness under the equivalent heat treatment conditions as generalpurpose cold tool steel (die steel).
- Improved wear resistance, fatigue life, and crack resistance of punches, press dies, dies, and rolls for cold-working, etc., used under severe conditions
- Supports ultra-high-tensile processing and near-net-shape formation

Suppression of the crystallization of coarse carbides, which can reduce toughness and fatigue strength, with superior microstructure control technology

Die steel that contributes to consistent die life and product quality in harsh operating environments

Significant improvement of high temperature strength and toughness compared to JIS SKT4



Application to hot hammer forging dies to reduce deformation, wear, and cracking

- AContribution to longer die life and reduced forming defects in forged parts
- Reduced CO₂ emissions by curbing energy consumption for materials and operations
- Supports the need to achieve carbon neutrality
- · High strengthening of workpieces to reduce size and weight of parts · Formation into a shape close to that of the final product to meet the demand for omission/simplification of post-processing.

- What is hot hammer forging? -

- · A method that is widely used in the manufacture of parts with complex shapes, such as undercarriage parts for automobiles and construction machinery
- The recent changes in needs have made the environment in which dies are used more severe, causing deformation and wear to progress more quickly





(fatigue strength, crack resistance)



[QTP-HARMOTEX[®]]



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 recent years, corporate social responsibility requires companies to contribute to social sustainability in a variety of ways. 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.

Responsible Procurement



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.

Procurement of ferroalloys with consideration for conflict minerals

Conflict minerals refer to four minerals - tin, tantalum, tungsten, and gold - mined in the Democratic Republic of Congo and neighboring countries in Central Africa (DRC countries), and are referred to by the acronym 3TG. There are concerns that some of the profits from the trade of these 3TGs are used to finance armed groups, thus contributing to human rights violations and conflict. We purchase tantalum and tungsten needed for special steel production and have confirmed through our suppliers that those purchases are "DRC conflict-free" (not a source of funding for armed groups). In addition, we respond to inquiries from customers whether our products are "conflict-free" by using the "Conflict Minerals Reporting Template" to declare so.



Strengthening Partnerships

Supplier award system

Sanyo Special Steel believes that building good business relationships with its suppliers is essential for sustainable procurement and values its partnerships with them. As part of this effort, we have established a supplier award system. Under the supplier award system, we comprehensively evaluate quality, cost competitiveness, delivery date management, business status of the supplier, environmental responsiveness, service provided, and other factors during transactions carried out with us over a fixed time period in the areas of raw materials, various other materials, maintenance, and outsourcing, select suppliers who have attained outstanding achievements, and present them with an award. In FY2022, 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, co-existence, 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 due to the impact of COVID-19 infection and working to promote new collaborations such as initiatives to increase added value throughout the supply chain and open innovation business scales, groups and borders, and others.





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.

Transition to a company with an Audit & Supervisory Committee

Sanyo Special Steel has transitioned to a company with an Audit & Supervisory Committee upon approval at the 110th ordinary general meeting of shareholders held on June 24, 2022.

The transition to the new system will speed up the decision-making process and enhance discussions at the Board of Directors meetings on management policies, etc. The supervisory function of the directors' management has also been strengthened by the fact that directors who are Audit & Supervisory Committee members have voting rights at the Board of Directors meetings and the Audit & Supervisory Committee has the authority to express opinions at the general meeting of shareholders regarding the appointment of directors (excluding directors who are Audit & Supervisory Committee members), their compensation, and other matters.

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. Through these measures, 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.

Initiatives to Improve the Functioning of the Board of Directors

In order to improve the functions of the Board of Directors, Sanyo Special Steel conducts analyses and evaluations of the effectiveness of the Board of Directors. Specifically, we conduct a questionnaire survey members of the Board of directors on general matters related to the Board of Directors, such as its composition, management methods, the state of deliberations, and the state of cooperation with external directors, etc., and the results of the analysis are evaluated by the Board of Directors. In FY2021, based on the results of the effectiveness evaluation for FY2020, we set the following tasks and took measures.

<FY2021 tasks and measures>

- (1) Further enhancement of discussions from a company-wide, medium- to long-term perspective In April 2021, we announced our medium-term management plan (2025 Medium-term Plan), which covers the period from FY2021 to FY2025. We reported on its progress (semiannually) at the Board of Directors meeting held on December 23, 2021, and discussions were held from a medium- to long-term perspective, including follow-up and revision of the plan.
- (2) Enhancement of ESG-oriented measures
- disclosure based on them, etc.
- G: Review of performance-linked compensation system, compliance with the revised corporate governance code, preparation for transition to a
- Company with an Audit & Supervisory Committee, etc.

(3) Enhancement of opportunities for interaction between external directors, internal directors, and Audit & Supervisory Board members (continued from FY2020)

- (iii) August 31: Meeting for exchange of opinions between external directors and Audit & Supervisory Board members (iv) December 23: Meeting for exchange of opinions between external directors and internal directors

Based on the results of the evaluation of the effectiveness for FY2021, which took into account the above measures, we concluded that the

Sanyo Special Steel's Board of Directors is functioning effectively.

In FY2022, based on the results of the questionnaire survey conducted once again, we will focus on the following tasks.

<Tasks for FY2022>

- (1) Enhancement of opportunities for officer training
- (2) Further enhancement of discussions from a company-wide, medium- to long-term perspective (continued from FY2021)
- (3) Enhancement of opportunities for interaction between external directors and internal directors (continued from FY2020)
- (4) Promotion of simplified and paperless board meeting materials

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.

E : Publication of the 2050 Carbon Neutral Declaration and 2030 Roadmap, endorsement of the TCFD disclosure recommendations and

S : Shift to a mandatory retirement age of 65 ahead of other companies in the industry, declaration of corporate health management, etc.

(i) April 30: Regular meeting between the Representative Director, Audit & Supervisory Board members, and external directors (ii) June 25: Plant tour and meeting for exchange of opinions for external directors and Audit & Supervisory Board members

Internal Control Systems

Compliance and Risk Management Systems

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 each area 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 each department and Group company.

Under this operational structure, we operate internal control systems as described below.

Internal control plan

Sanyo Special Steel formulates an internal control plan for the entire Group every year, taking into account revisions to laws and regulations, changes in the business environment, and other factors. This plan includes basic policies, functional plans for safety, environment, disaster prevention, and quality, etc.; internal audit plans; and training plans. Based on the above, each department and Group company formulates its own plan.

Autonomous internal control activities

In accordance with the internal control plan, each department and Group company of Sanyo Special Steel implements its own internal control activities autonomously based on the nature of their business operations and inherent risks. Specifically, they develop and educate employees on operational rules and manuals, etc., conduct self-inspections, and improve operations based on the results of these inspections.

In the event of an accident, disaster, or situation that may violate the law, the department or Group company concerned immediately reports the matter to the Internal Control & Audit Department and takes corrective measures, including measures to prevent recurrence, in cooperation with relevant departments. In addition, the Internal Control & Audit Department collects and shares information on these cases within the Group, while each department and Group company conducts inspections to check for similar risks.

Internal audits, etc.

In internal audits, the Internal Control & Audit Department and each functional department check the status of internal controls using internal control checklists and other written documents, and monitor each department and Group company.

As a measure to complement internal controls, we have established and operate a whistle-blowing help desk available to officers, employees, temporary employees, and supplier employees of Sanyo Special Steel and its Group companies, as well as their families. In addition, Sanyo Special Steel and its domestic Group companies regularly conduct questionnaire surveys on employee awareness regarding internal control to confirm awareness of compliance and internal control activities, and to educate and enlighten employees through the questions.

Assessments and improvements

The Internal Control & Audit Department and the director in charge of the operations of each functional department report the operational status of the internal control systems to the quarterly Risk Management Committee meeting and the Board of Directors, and share this information with each department and Group company at the quarterly Risk Management Officers Meeting.

In addition, the director in charge of the Internal Control & Audit Department compiles the assessment results of the effectiveness of the internal control systems based on the implementation status of internal control activities and the results of internal audits, etc., and then reports them to the Risk Management Committee and the Board of Directors.

Based on the assessment results, we formulate improvement measures that contribute to enhancing the effectiveness of the internal control systems and reflect them in the internal control plan for the next fiscal year.

5 Education and awareness raising

We provide education on internal control for officers and employees of Sanyo Special Steel and its Group companies by setting up courses on internal control in grade-based training programs, etc. We are also actively working to raise awareness of the concept of internal control and the improvement of workplace culture, etc., through dialogues between the Internal Control & Audit Department and each department/Group company.

Cooperation with external directors, 6 Audit & Supervisory Committee, and accounting auditor

External directors and Audit & Supervisory Committee members are also members of the Risk Management Committee, which deliberates on internal control plans, reports on the operational status, and exchanges opinions. In addition, the Representative Director meets regularly with external directors and Audit & Supervisory Committee members to ensure appropriate and smooth exchange of information. The Internal Control & Audit Department shares information and works closely with Audit & Supervisory Committee members by holding monthly liaison meetings with them to exchange opinions, etc.

We regularly report and exchange opinions with the accounting auditor on the operational status of the Risk Management Committee and the assessment results of internal controls over financial reporting.

Sanyo Special Steel has established the "Guidelines for Corporate Behavior" that defines 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.

In addition, the "Risk Management Committee," chaired by the President, meets quarterly to regularly report on the status of formulation and implementation of the internal control plan and matters related to risk management, including compliance with laws, regulations, and company rules, occupational safety, human rights violations such as sexual harassment and power harassment, and ESG risks such as the environment, disaster prevention, quality, financial reporting, and information security. The contents of the Risk Management Committee meetings are reported at the "Risk Management Officers Meeting," which is attended by the risk management officers of each department and Group company, to be disseminated to each department and Group company, thus ensuring a structure that enables information sharing.

In order to review the status of compliance with laws, regulations, and company rules, etc., we use internal control checklists for each department and Group company, conduct internal audits, have established a whistle-blowing and consultation system, and periodically conduct questionnaire surveys of all employees.

By continuing these activities, 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.



Message from top-level executives



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

Implementation of internal control education and dissemination activities

Under the corporate philosophy of "Confidence-based Management," Sanyo Special Steel ensures compliance among officers and employees through regular training while top-level executives themselves send out messages.

Specifically, we conduct grade-based internal control training, hold regular compliance lectures and e-learning courses on compliance and harassment, etc., within the Group, and theme-based training on antitrust law, security export control, mental health, and labor management, etc. In addition, each department and affiliate conducts internal control training that suits its respective needs and disseminates information on laws, regulations, rules, and penal provisions necessary for business execution.

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.

Officers



Representative Director and President

MIYAMOTO Katsuhiro



Director, Member of the Board. Director, Member of the Board. Managing Executive Officer

Managing Executive Officer **TAKAHASHI Kozo** OI Shigehiro





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

Director, Member of the Board, Managing Executive Officer

YANAGIMOTO Katsu



Independent External Director. lember of the Board **USUKI Masaharu**



Member of the Board **FUJIWARA Kayo**

Director Member of the Board SONODA Hiroto



Independent External Director. Member of the Board and Senior Audit & Supervisory Audit & Supervisory Committ Committee Membe NAGANO Kazuhiko **YOGI Hiroshi**

Independent External Director lember of the Board and Audit & Supervisory Committ **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	
	c	MIYAMOTO Katsuhiro*				•	•	•	•	•	•	
udit & bers)	ecutio	TAKAHASHI Kozo				•	•		•	•		
are A e mem	ss ex	OI Shigehiro			•					•		
rs who imittee ector	usine	OMAE Kozo	•		•			•		•		
directo y Com Dire		YANAGIMOTO Katsu	•	•	•			•				
uding (ervisor	0	USUKI Masaharu*	•			•				•	•	
(excli Sup		FUJIWARA Kayo*	•		•			•		•	•	
	ecutiv	SONODA Hiroto	•		•		•			•		
is an visory ember	on-ex	NAGANO Kazuhiko	•			•	•		•	•		
or who c Super ittee me	Ž	YOGI Hiroshi*				•		•			•	
Direct Audit 8 Commi		TOIDE Iwao*			•					•	•	

* 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)

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, 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, whether full-time or part-time. (Performance-linked compensation)

As indices for performance-linked compensation, Sanyo Special Steel uses "consolidated ordinary income" from the perspective of short-term and medium- to long-term performance incentives (taking into consideration earnings targets in the mediumterm management plan, etc.) and "return on equity (ROE)" from the perspective of contribution to shareholders. The Company's performance-linked compensation is calculated by multiplying the base amount determined for each position by a variable rate determined based on the performance of these indices. This variable rate is varied within a range of ±20% to reflect almost equally the three elements of short-term performance incentives, medium- to long-term performance incentives and shareholder contribution.

(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 external 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.

Number of female directors



(1 out of 11 directors is female)

Key Financial Data

		FY2012 (101st period)	FY2013 (102nd period)	FY2014 (103rd period)	FY2015 (104th period)	FY2016 (105th period)	FY2017 (106th period)	FY2018 (107th period)	FY2019 (108th period)	FY2020 (109th period)	FY2021 (110th period)
Business results											
Net sales	(Millions of yen)	138,306	161,587	171,495	149,148	138,680	157,485	185,818	262,452	210,721	363,278
Operating income	(Millions of yen)	1,516	6,883	9,169	12,188	11,685	10,969	10,123	-1,417	-5,493	21,416
Ordinary income	(Millions of yen)	1,670	6,749	9,735	11,540	11,736	10,659	9,437	-1,521	-4,762	21,664
Profit attributable to owners of the parent	(Millions of yen)	509	4,066	6,547	7,416	7,784	7,034	7,721	-3,717	-6,870	15,267
Financial conditions											
Total assets	(Millions of yen)	198,771	203,522	202,243	179,898	183,444	209,146	374,246	327,963	319,360	377,911
Net assets	(Millions of yen)	97,151	102,905	113,644	113,140	123,143	128,959	200,200	182,202	179,887	198,845
Interest-bearing debt (net) ^{*2}	(Billions of yen)	51.6	47.8	33.2	14.3	12.7	28.4	69.0	48.7	46.9	58.7
Equity ratio	(%)	48.6	50.2	55.8	62.4	66.7	61.0	52.3	54.4	55.9	52.1
D/E ratio (net)	(Times)	0.53	0.46	0.29	0.13	0.10	0.22	0.34	0.27	0.26	0.30
ROS/ROE											
ROS	(%)	1.2	4.2	5.7	7.7	8.5	6.8	5.1	-0.6	-2.3	6.0
ROE	(%)	0.5	4.1	6.1	6.6	6.6	5.6	4.8	-2.0	-3.9	8.1
Per share information											
Net assets per share ^{*1}	(Yen)	598.99	633.47	699.51	696.69	759.36	3,960.99	3,480.62	3,273.07	3,273.84	3,615.39
Net income per share ^{*1}	(Yen)	3.16	25.21	40.60	46.00	48.29	218.34	237.75	-67.14	-126.07	280.19
Dividend per share ^{*1}	(Yen)	2.00	5.00	10.00	12.00	12.50	31.70	69.00	15.50	_	90.00
Capital investment/research and	development	:									
Capital expenditures	(Millions of yen)	14,716	4,629	7,176	9,908	9,795	8,119	10,618	27,553	14,446	11,720
Depreciation	(Millions of yen)	11,581	10,965	9,826	9,343	9,098	9,047	9,338	15,033	14,187	15,903
Research and development expenses	(Millions of yen)	1,424	1,388	1,383	1,596	1,608	1,716	1,773	2,475	2,110	2,219
Cash flows											
Cash flows from operating activities	(Millions of yen)	23,793	9,152	20,698	28,770	15,090	-5,566	10,792	39,425	22,313	7,086
Cash flows from investing activities	(Millions of yen)	-20,534	-4,951	-5,873	-8,510	-11,141	-8,354	-69,046	-12,463	-19,412	-13,298
Cash flows from financing activities	(Millions of yen)	2,503	-5,352	-17,426	-18,807	-10,775	14,705	65,929	-21,093	-5,473	2,286
Other											
Sales volume	(Thousand tons)	905	1,041	1,054	988	1,013	1,069	1,171	1,615	1,367	1,995
Number of Employees	(Persons)	2,829	2,775	2,706	2,625	2,598	2,666	6,835	6,726	6,441	6,402

*1: In October 2017, a reverse stock split of 5 shares into 1 share was implemented.

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