

The Hitachi Metals Group Report 2022

Integrated Report



Strategies

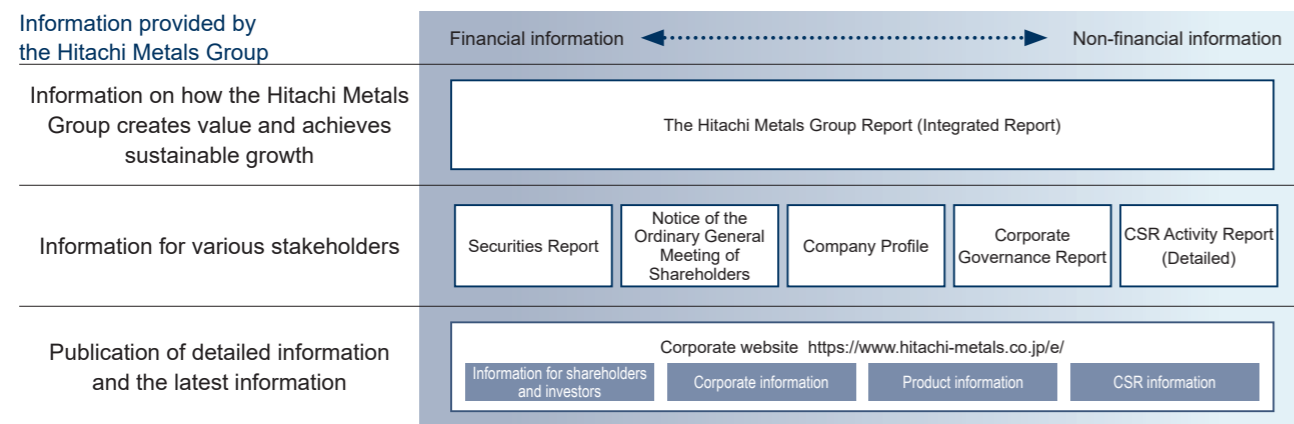
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Strategies

Information provided by the Hitachi Metals Group



Editorial Policy

From 2016 (Fiscal 2015 Report), we have released the Hitachi Metals Group Report (Integrated Report) for all stakeholders, including shareholders and other investors. The aim of the report is to deepen understanding among stakeholders about how the Group utilizes its strengths to create value for customers and achieve sustainable growth. This report was edited referencing the International Financial Reporting Standards (IFRS)'s recommended International Integrated Reporting Framework and the Ministry of Economy, Trade and Industry (METI)'s Guidance for Integrated Corporate Disclosure and Company-Investor Dialogues for Collaborative Value Creation. In addition to the Hitachi Metals Group Report (Integrated Report), we provide information to our various stakeholders as shown in the chart above. We also periodically update our corporate website with the latest information, including detailed information and news releases.

Review Period

Fiscal 2021 (April 1, 2021–March 31, 2022)

Note: Where possible, the latest information is used at the time of publication.

Relevant Entities

Hitachi Metals, Ltd. and its consolidated subsidiaries

Note: In cases where information contained herein refers to a review period and/or relevant entities different from those stated above, this is pointed out accordingly.



Mission Mission and universal role of Hitachi Metals in society

Make the best quality available to everyone

Striving for the highest standards in our original technologies, products, processes, and people, we will bring new levels of value to customers all around the world.

質の量産

独創的な技術と、製品・ビジネスプロセス・人に関する高い質の追求によって、新たな価値を生み出し、世界の人々に広く提供していく

Vision Our future ideal

Leading sustainability by high performance

Through the creation of best-in-class materials, to be a company that solves individual customer issues and contributes to the prosperity and vitality of all..

持続可能な社会を支える高機能材料会社

お客様の課題を解決する高機能材料の創造によって、持続可能な社会の実現に貢献し続ける企業となる

Values Values we cherish

Unflinching integrity

We earn the trust of our customers and other stakeholders by being honest and sincere in our daily activities and by understanding our obligation to the people and communities we serve.

至誠

人や社会に対する責任を常に自覚し、日々のあらゆる活動に誠実に向き合う。約束を守る、正直に行動することを徹底し、私たちに関わる全ての人々の信頼と期待に応える

United by respect

Across our organization, we respect diversity and the free and independent exchange of opinions, learn from each other, and collaborate to achieve our common goal.

和すれば強し
和則強

多様な個を尊重し、主体性をもって自由に意見を交わし合い、学び合い、共通の目的に向けてチーム全員の情熱と能力を結集することで成果を出す

With our Corporate Philosophy at the core of management, we aim to achieve sustainable growth and further development of the Hitachi Metals Group.



Mitsuaki Nishiyama

Representative Executive Officer, Chairperson, President, and CEO

- March 1979 Faculty of Economics, Tohoku University, Japan
- April 1979 Joined Hitachi, Ltd.
- July 1990 Master of Business Administration (MBA), Georgia State University, USA
- April 2008 General Manager of Finance Department I of Hitachi, Ltd.
- April 2011 Executive Officer of Hitachi Cable, Ltd. (current name: Hitachi Metals, Ltd.) June 2012 Executive Officer and Director of Hitachi Cable, Ltd.
- April 2013 Vice President and Executive Officer and Director of Hitachi Cable, Ltd. July 2013 Vice President and Managing Officer of Hitachi Metals, Ltd.
- April 2014 Vice President and Executive Officer
- April 2015 Vice President and Executive Officer, and General Manager of Finance Group of Hitachi, Ltd.
- April 2016 Representative Executive Officer, Senior Vice President and Chief Financial Officer and General Manager of Finance Group of Hitachi, Ltd.
- April 2020 Representative Executive Officer, Chairperson and Chief Executive Officer of Hitachi Metals, Ltd.
- June 2020 Representative Executive Officer, Chairperson, President and Chief Executive Officer, and General Manager of Advanced Metals Division
- April 2021 Representative Executive Officer, Chairperson, President and Chief Executive Officer, (current position)

The Hitachi Metals Group reorganized its Corporate Philosophy to clarify the significance of its existence for future growth.

In September 2022, we decided to approve a tender offer for the Company's shares from a consortium of companies led by Bain Capital (hereinafter, the "New Partners"). After the completion of the tender offer, the Company will become unlisted and start operations under a new company name, PROTERRIAL, Ltd., in January 2023.

The Group has long aimed to enter a growth trajectory as a materials company that "leads sustainability by high performance." We have been pursuing a growth strategy of optimizing our portfolio in each segment while transforming and making our profit structure more resilient to demand fluctuations. With capital restructuring (tender offer and participation in management by the New Partners), we will accelerate our transformation and growth toward our goals through bold investments and reforms that make maximal use of the New Partners' resources.

As we accelerate our transformation and growth, we have reorganized our Corporate Philosophy in order to share the Group's significance of existence and direction of management among all Group members, and to clearly present our Corporate Philosophy to all stakeholders. In restating our Corporate Philosophy, all Executive Officers first unpacked the principles in thought and actions that the Group valued, beginning with the Company's founding philosophy. Through discussions, we identified the Group's core values. What's more, we held numerous meetings with employees to define the core values in terms that allow all employees globally to share a common understanding. As a result of our discussions, our Corporate Philosophy was reorganized into Mission: "Make the best quality available to everyone," Vision: "Leading sustainability by high performance," and Values:

"Unflinching integrity" and "United by respect."

Furthermore, to realize our Corporate Philosophy, our management strategy has identified the Group's materialities and systematized related measures, key management indicators, and target values.

Our greatest strength is our original product line, produced through collaborative creation.

Looking back, since its founding in 1910, the Group has "made the best quality available to everyone" through quality mass production in accordance with the needs of our customers. We have built an unsurpassed technological foundation with structural and compositional control technologies at its core for a wide variety of materials through concentration on carefully selected, high-quality products and through proposing, designing, and manufacturing materials that solve our customers' issues. In addition, from very early on, we expanded into the global market with the goal of diverse manufacturing. At present, our products are favored by the world's top companies in a wide range of industries.

Based on the relationships of trust we have developed with our customers since our founding, we have discovered the needs of each industry and "collaboratively create" with our customers, using our proven technological capabilities, to create new best-in-class materials. Our greatest strength is our numerous original product lines, which are indispensable to our customers' products. Through "collaborative creation," we can further strengthen relationships with our customers and build up our technological foundation, which drives forward further "collaborative creation." We will realize our mission of "Make the best quality available to everyone" by providing new value widely to people around the world through high-quality products produced through this "collaborative creation."

What's more, we will continue this pursuit of

quality not only through the development of unique products that form the essence of the Group, but also through the valuable development of our human resources. We will engage in the materialities below by effectively investing management capital while leveraging the Group's cultivated strengths.

Concerning the environment, we will work to contribute to the realization of a decarbonized society. Leveraging the Group's technologies, we will expand our product lineup to include products that contribute to resource conservation and recycling and to environmental solutions. The Group seeks to achieve carbon neutrality by 2050 as a long-term goal. Besides reducing CO₂ emissions in business activities, the Group is working to contribute to the transition to a low-carbon society by developing environmentally-friendly products that address the issue of climate change. Furthermore, we will continue to strengthen information disclosure in accordance with the TCFD Framework to tackle climate change.

Concerning social issues, the Group will work to ensure practices by not only employees but stakeholders to place the highest priority on health and safety, and to accelerate growth by taking advantage of the diversity in our organization.

Concerning governance, we will continue to strengthen our quality assurance system. At the same time, we will adapt our risk management and business models and processes in response to changes in the management environment to improve resilience.

We will continue to contribute to the realization of a sustainable society by solving our customers' and society's issues. We will concentrate our high value-added product lines, created by our business activities, in three markets: automobiles, industrial infrastructure, and electronics. We believe that we are embodying our Corporate Philosophy by providing value to society through these business processes.

Continuing to solve social issues through business activities based on the Group's Corporate Philosophy.

We human beings face a variety of social issues today, from climate change and natural disasters brought about by global warming to food insecurity and resource depletion, growing poverty and inequality, and wars and conflicts. Meanwhile, the COVID-19 pandemic has brought about great changes in people's lifestyles and values, leading to fast social changes and drastic transformation of the industrial structure.

Under these circumstances, the Group will contribute to solving social issues through the expansion of its business activities.

As mentioned above, the Group has "made the best quality available to everyone" through quality mass production over the years to provide new value to people around the world. We have provided best-in-class, unique products created through collaborative creation with our customers as we walk alongside them in solving their issues. Furthermore, the pursuit of quality is also connected to the development of human resources. We thus recognize again that sustainability management has been the orientation of Group's management since its founding.

As social issues become more serious and the business environment changes rapidly, the Group will continue to devote its energy to initiatives that contribute to solving social issues from a long-term perspective, with the aim of "Leading sustainability by high performance."

We look forward to your continued support.

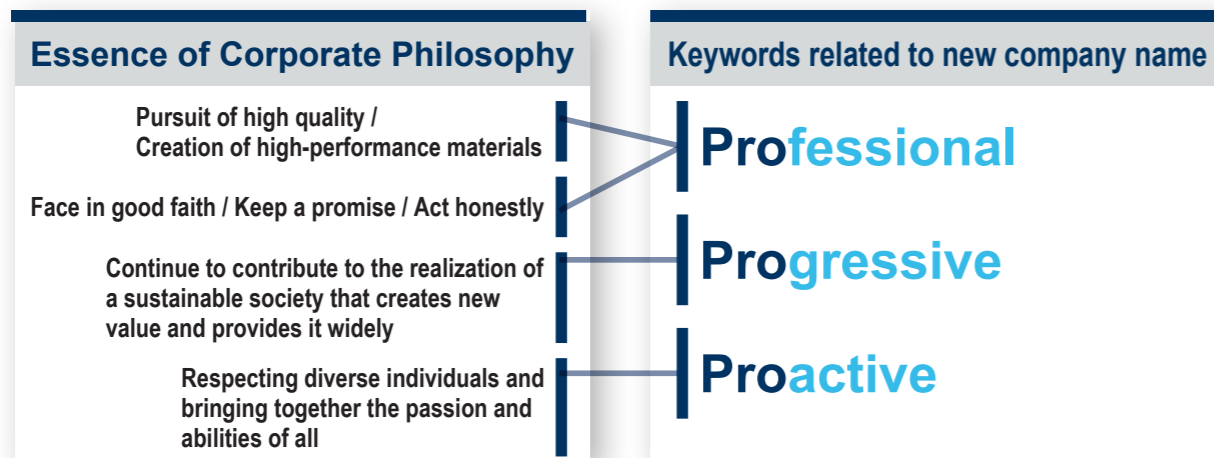
Since its founding in 1910, and continuing after its spin-off from Hitachi, Ltd. in 1956, the Group has grown by providing society with unique products using its advanced technological capabilities. After completion of capital restructuring (tender offer by a consortium of companies led by Bain Capital and its participation in management), we seek to further to accelerate our growth as materials company that “leads sustainability by high performance.” As part of this capital restructuring, or our second independence, we will change our company name to signal a new start.

■The new company name

Proterial, Ltd.

■Thinking behind our company name

“Proterial” reflects the essence of our corporate philosophy, which consists of three elements: Mission: “Make the best quality available to everyone;” Vision: “Leading sustainability by high performance;” and Values: “Unflinching integrity” and “United by respect.” It combines “pro-” with the word “material.”



PRO × MATERIAL

“Pro-” represents our “three pros”:
 Professional — work that exceeds expectations
 Progressive — a spirit that keeps challenging
 Proactive —an enterprising attitude
 “Material” refers to the high-performance materials that our original technologies produce and which underpin the three pros. With our focus on solving customer issues and bringing new levels of value, we promise to contribute to the realization of a sustainable society through the products and services that embody our philosophy.

■Brand Logo

PROTERIAL

Our logo uses a typeface that expresses simplicity, power, and dignity. Its navy blue treatment suggests calmness and depth.

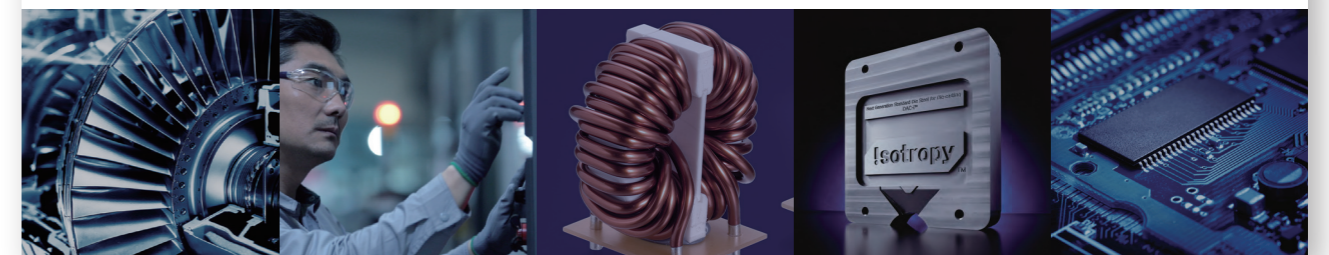


■Our Promise (Brand Story)

Proterial produces world-class, high-performance materials for mobility, industrial infrastructure, and electronics. Since 1910, we’ve brought together specialists of all kinds to improve our skills and technologies, reflecting our commitment to achieve the best possible quality in everything we do. Moving forward, we’ll continue to elevate both our products and the processes and people that define them.

Only by conducting all our activities with unflinching integrity can we meet the expectations and trust of the communities we serve. By creating new and ongoing value, we’ll help customers realize innovation and contribute to a sustainable society.

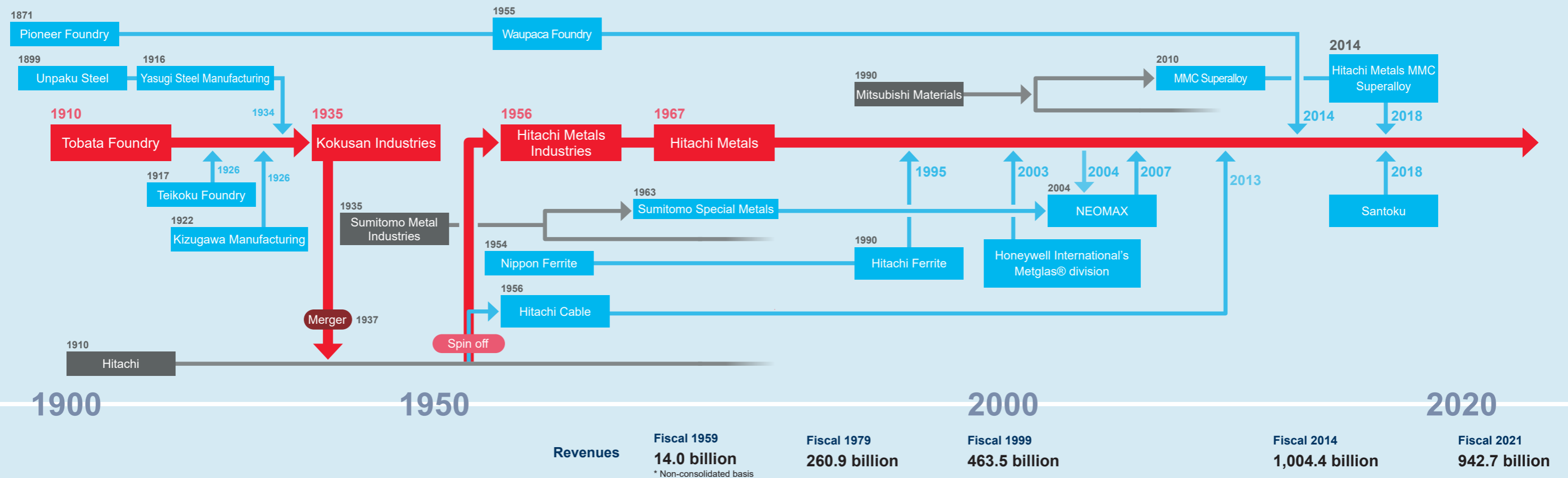
With our professional determination, progressive intent, and proactive approach, we’ll strive unceasingly to provide exceptional materials that pave the way to a brighter future.



With the Group's Corporate Philosophy as the starting point, we seek to be a materials company that leads sustainability by high performance to support a sustainable society. We have created a great number of original product lines through collaborative creation. These achievements are made possible through our "unsurpassed technological foundation" and "solid relationships with a wide range of customers" developed over more than 100 years since the Group's founding. Leveraging these strengths, we are investing capital in our business activities, including human capital and manufactured capital, and expanding our business activities while fixing our attention to six ESG materialities. We develop, manufacture and provide high-performance materials that contribute to solving our customers' issues in primarily the automobile, industrial infrastructure, and electronics sectors. Through these activities, we will continue to contribute to realizing a sustainable society and further connect them to our Corporate Philosophy. The Group will continue to proactively engage in solving social issues and support the realization of a sustainable society.



Since the founding of Tobata Foundry in 1910, Hitachi Metals has unwaveringly “made the best quality available to everyone” through quality mass production in accordance with the needs of our customers. The Group’s orientation for selected high-quality products has been passed down for over 100 years, and from very early on, we expanded into the global market with the goal of manufacturing a wide range of products, which are favored by our customers. These achievements allow us to continue to “make the best quality available to everyone” to this day and build a brand that has gained currency around the world. Our extreme pursuit of quality is passed down not only through the development of original products that form the essence of Hitachi Metals, but also through the development of our valuable human resources. By providing high-quality products and services to people around the world, the Group is contributing to the creation of a prosperous society.



1910 Tobata Foundry

At a time when a modernizing Japan relied on imports for almost all of its industrial goods, Yoshisuke Ayukawa acquired malleable cast iron manufacturing technology and established Tobata Foundry, the predecessor of Hitachi Metals. In 1911, the company began manufacturing Gourd brand-black heart malleable cast iron pipe joints. The company later began to make products for other uses including shipbuilding, railways, and spinning machines, and orders grew steadily as the superior quality of these products was recognized. Business areas were diversified through mergers with Teikoku Foundry, which at the time was producing steel for steel rolling, Kizugawa Manufacturing, a producer of fittings, and steelmaker Yasugi Steel Manufacturing.

1935 Kokusan Industries

As the business expanded to cover heavy industries in general, Tobata Foundry changed its name to Kokusan Industries.

1956 Hitachi Metals Industries

Hitachi transferred its metals business with five originally Tobata Foundry plants (Tobata, Fukagawa, Kuwana, Wakamatsu, and Yasugi) to establish Hitachi Metals Industries.

1967 Hitachi Metals

Hitachi Metals Industries changed its name to Hitachi Metals. Through creative monozukuri and proactive mergers and acquisitions, the Company went through a succession of changes and grew to become one of the world’s leading materials manufacturers. Today, the Company provides technologies and services that are contributing to the shift in automobiles to electric vehicles, and advances in industry, infrastructure, and electronics around the world.

1995 Hitachi Ferrite

Merged with Hitachi Ferrite in 1995 to strengthen the soft magnetic materials business in response to increased demand for noise reduction in automobiles and electronics.

2003 Honeywell International's Metglas® division

Acquired the Metglas® (amorphous metal materials) division of Honeywell International of the United States. Strengthened the soft magnetic materials division as demand in the electronics segment grew for size and weight reductions, energy conservation, and electromagnetic noise reduction.

2007 NEOMAX

Established through the merger of the magnetic materials and applications operations of Hitachi Metals and Sumitomo Special Metals to manufacture high-performance neodymium magnets and ferrite magnets widely used in motors for automotive equipment and home appliances. With demand for automotive-use motors expected to grow, the merger was carried out in 2007 to integrate the magnetic materials businesses and increase synergies.

2013 Hitachi Cable

Merged with Hitachi Cable, the Hitachi Group’s electric wires and cable business, in 2013. As the pace of movement toward a low-carbon society accelerated, the merger was intended to create synergies in terms of technologies and sales in the automotive, electronics, and industrial infrastructure segments.

2014 Waupaca Foundry

Made Waupaca Foundry, the world’s largest manufacturer of automotive-use castings with an overwhelming share of the U.S. market, a subsidiary in 2014. Expanded our business to become the world’s largest supplier of iron castings.

2014 Hitachi Metals MMC Superalloy

Made MMC Superalloy, with extensive experience and technological capabilities in aircraft parts, a subsidiary with a view toward global growth in core industries including aircraft and energy. Hitachi Metals’ Okegawa Works established in April 2018.

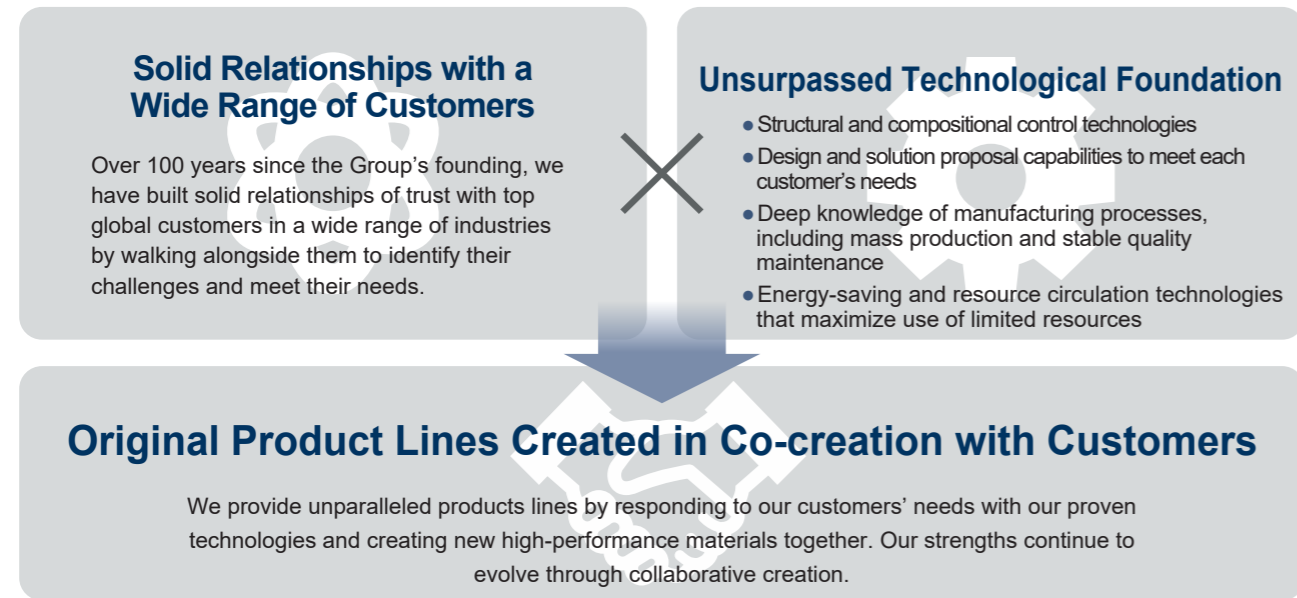
2018 Santoku

Made a subsidiary to strengthen the production system for neodymium magnets and optimize the material flow from raw materials to finished products.

With an orientation toward "making the best quality available to everyone" through quality mass production, the Group has built an unsurpassed technological foundation with structural and compositional control technologies at the core for a wide variety of materials. In addition to proposing, designing, and manufacturing materials that are indispensable for our customers' products, we have strengthened our technological foundation with production technologies that smoothly realizes mass manufacturing of materials from the R&D level, stable quality maintenance, and resource conservation/resource recycling technologies. In addition, our early expansion into the global market for the purpose of mass production of a wide variety of products has made our products the favored choice of top global customers in a wide range of industries.

Our greatest strength is our numerous original product lines, which are indispensable to our customers' products. This is made possible by facing our top global customers' issues head on, discovering their needs, and using our proven technological capabilities to "collaboratively create" new high-performance materials together with them.

Through "collaborative creation," we can further strengthen our relationships with our customers and build up our technological foundation, which drives forward further "collaborative creation."



Product Lines Born from Collaborative Creation with Customers

Supporting the development of society, our product lines, created in collaboration with our customers, are used in a wide range of fields, with a focus on the automobile, industrial infrastructure, and electronics sectors.

*Share is estimated based on various data

No. 1 market share in the world
Piston ring materials
 Growing demand for high-quality, high-performance stainless steel piston rings to improve environmental performance from small to large cars

No. 1 market share in the world
CVT belt materials
 Metal belt materials made of maraging steel developed for CVT (continuously variable transmission), which contributes greatly to low fuel consumption in engines

No. 1 market share in the world
Torque sensors
 High-performance and high-reliability automotive electrical components suited for high control-performance electric power steering

Rare earth magnets
 Used in energy-saving and high-efficiency applications and in magnet motors for electric cars and hybrid cars, which seek to improve environmental friendliness and fuel efficiency

No. 1 market share in the world
Ferrite magnets
 Used in a wide range of applications, primarily in the automobile and home appliance segments. The Group meets customers' needs for ferrite magnets with a global supply system.

Power electronics materials
 Products featuring the Group's strengths, including high-performance soft magnetic materials and ceramic materials, contribute to improved energy efficiency and more advanced information communications.

No. 1 market share in the world
Clad materials
 Widely used in heat dissipation substrates for semiconductor modules and in components for lithium-ion batteries

No. 1 market share in the world
Lead frame materials
 The Group provides nickel- and copper-based semiconductor lead frame materials. In particular, our nickel-based materials have maintained top market share globally.

Electric wires for railway cars
 Widely used for wiring in a great number of railway cars in Japan and abroad, such as the Shinkansen bullet trains. Applications include wiring in the cab, under-floor wiring, and inter-car wiring.

Intensifying climate change

- Global warming has the potential to significantly impact society and the economy. Environmental consciousness is increasing.
- As demand for energy increases, especially in developing countries, the shift to clean energy is accelerating.
- As a result of such changes in the external environment, the market for environmentally-friendly products and services will expand. There will be a growth of clean mobility and an emphasis on waste reduction and recycling.

Increasing demand for high-quality materials

- There are growing needs from customers for application and development of new materials due to the electrification of automobiles, development of medical technologies, etc.
- Providing products and services that meet these changes in the business environment and needs will be emphasized.

AI technology development

- The spread of robotics, AI, and machine learning will enable labor saving.
- Expansion of 3D printers will revolutionize production and manufacturing methods.
- Efficiency in production and manufacturing will increase through greater productivity due to the use of these technologies.

Insufficient human resources and competition for personnel

- Risks including insufficient human resources and intensified competition for personnel are growing due to a shrinking working age population.
- Improving efficiency by labor saving and acquiring human resources by increasing corporate value will become critical.

Increasing geopolitical and procurement risks

- In recent years, risks in procurement have been growing due to geopolitical risks and competition for rare metals.
- Measures such as control of difficult-to-obtain raw material will become necessary.

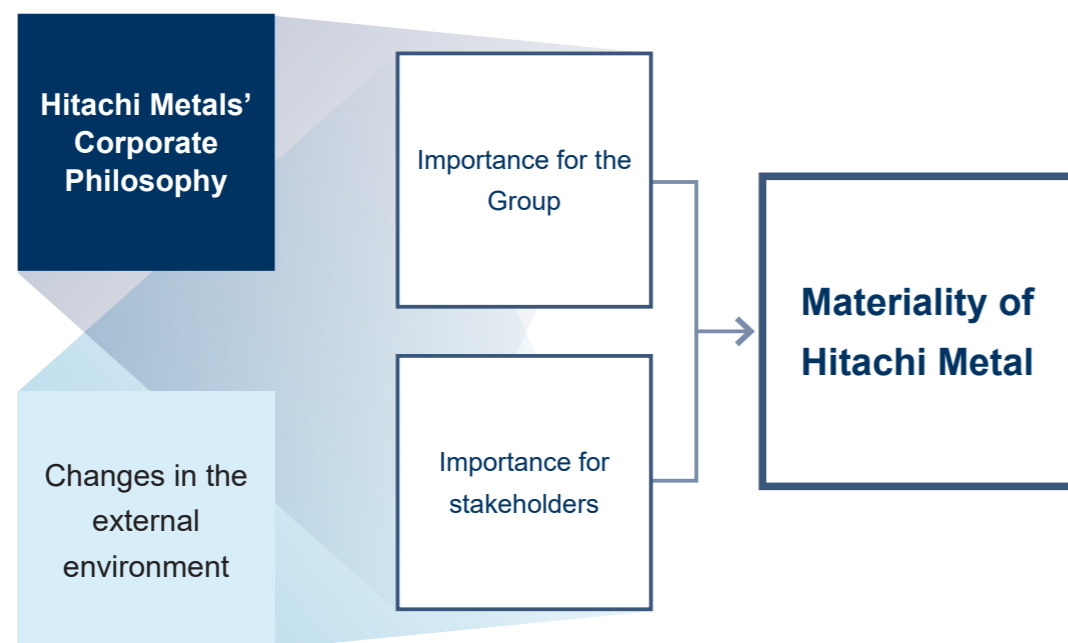
Public demand for stronger governance

- Corporate transparency is growing in importance, and how it is handled affects reputational risk.
- Promotion of transparency of corporate activities will be important.

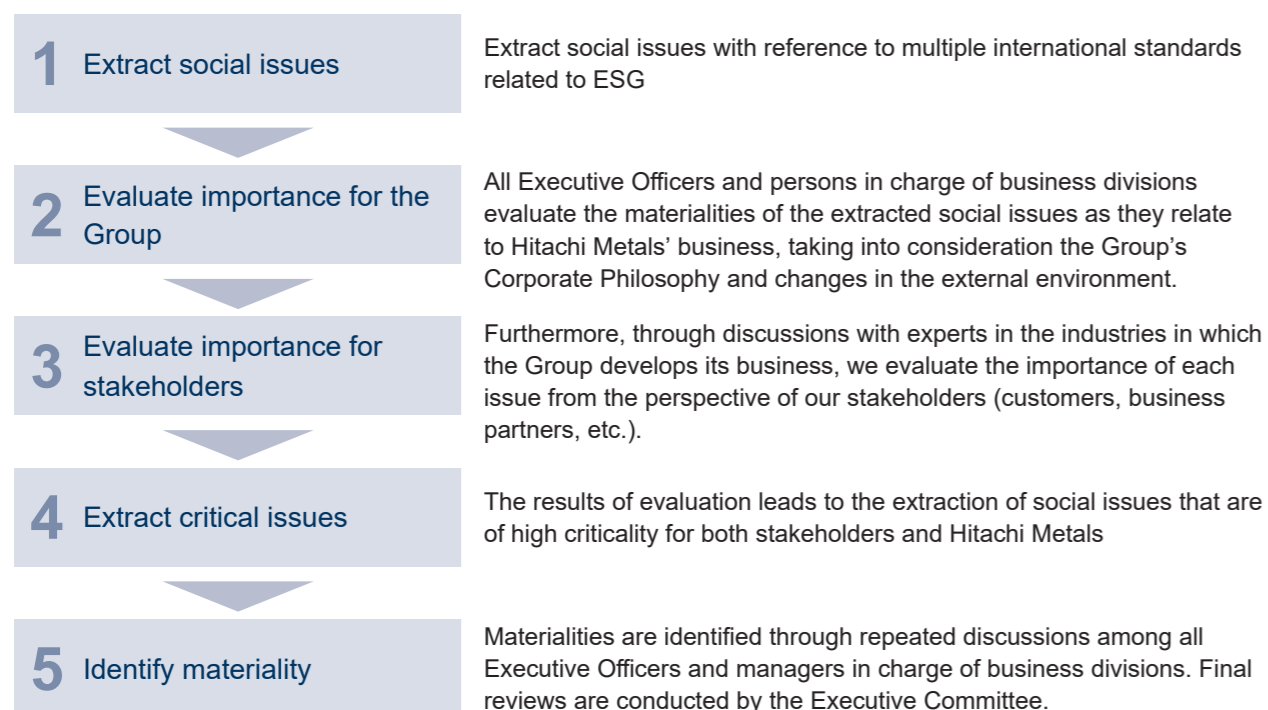
Hitachi Metals believes that promoting business activities that contribute to social and environmental sustainability is the foundation of its business continuation and presents important business opportunities for the Group's growth.

The Group has long carried out business activities with a strong consciousness of ESG issues. To further accelerate our efforts, we have identified materialities (critical issues) to which to devote our energy. In addition, we have also organized measures and key management indicators related to each materiality. We have also presented SDG goals related to each materiality.

Approach for Identifying Materiality



Process of Identifying Materiality



Materialities of Hitachi Metals

The identified materialities are classified into six categories. All materialities are reflected in concrete management measures, implemented based on the Group's Value of "Unflinching integrity" and Vision of "Leading sustainability by high performance." Furthermore, by continuously improving and deepening our engagements in these materialities, we will embody our Mission of "Make the best quality available to everyone."

Materiality	Description	Related external environmental changes (opportunities and risks)	Related SDGs	
Environment	Contributing to realize a decarbonized society	Under the vision of "Leading sustainability by high performance," we will contribute to the realization of a society where greenhouse gas emissions are reduced to net zero through green manufacturing activities and efficient use of energy.	Opportunities: Increase in momentum to promote carbon neutrality among customers, suppliers, governments, etc., as climate change becomes more serious. Risks: More stringent regulations on greenhouse-gas emissions, higher prices for clean energy due to increased energy demand and geopolitical risks, etc.	7 エネルギーを安全に としてカーボンに 9 産業と技術革新の 基盤をつくらう
	Ubiquitization of resource-conserving, recyclable, and environmentally-friendly products	Under the vision of "Leading sustainability by high performance," we will continue to contribute to the realization of a sustainable society by designing and delivering products that contribute to solving environmental issues including resource conservation and recycling.	Opportunities: Expansion of the market for environmentally-friendly products through the promotion of environmental initiatives in customer industries, growing momentum for waste reduction and recycling, development of new material technologies, etc. Risks: Increased demand for recycled resources, competition for rare metals, soaring resource prices and challenges in procurement due to geopolitical risks, etc.	12 つくも買得 つかう買得 13 気候変動に 関係する対策を
Social	Safety and health are our overriding priority	Based on the concept of "Prioritizing the protection of safety and health above all else," our highest priority is to protect the physical and mental health of our employees, their families, and our other stakeholders, including our business partners and the communities where we operate.	Opportunities: Development of robot technology for hazardous work, etc. Risks: Lack of business successors due to intensified competition for human talent, outbreaks of infectious diseases, occurrences of natural disasters, etc.	5 ジェンダー平等を 実現しよう
	Diversity and Inclusion	Guided by the "United by respect" section of our values statement, we respect the diversity in the workplace and strive to create a workplace where each employee can work with a sense of fulfillment, trust, and ownership, thereby creating a team that delivers results.	Opportunities: Increase in importance and social momentum for work style reform due to intensifying competition for human talent, etc. Risks: Insufficient human resources due to intensified competition for personnel, etc.	8 働きがいも 経済成長も
Governance	Make quality a strength	To deliver high-quality products and services to customers, thoroughly implement measures to prevent the recurrence of quality problems and make quality our strength that sets us apart from others	Risks: Increase in society's interest in quality assurance, technological advances in measures against internal fraud, etc. Risks: —	9 産業と技術革新の 基盤をつくらう
	Business model and process evolution anticipating changes in the external environment	By anticipating rapid changes in the external environment and flexibly changing the way we operate, including the value provided by our products and services, the procurement of materials, and our production methods, we will continue to meet the demands of society and be a company that is needed by society.	Risks: Increase in customer demand for resilience to changes in the external environment (e.g., stable supply), development of related technologies (e.g., new materials, R&D technologies), etc. Risks: Increase in geopolitical risks, outbreaks of infectious diseases, occurrence of natural disasters, etc.	17 パートナーシップで 目標を達成しよう

Along with setting major measures to respond to six materialities identified for the environment, society, and governance, the Group has set indicators to manage the progress of major measures. We are implementing steady measures to achieve the target values of these key management indicators by FY2030. Through achieving these targets, we aim to greatly increase our corporate value as a materials company that “leads sustainability by high performance,” along with developing superior competitiveness at the top level of industries.

Materialities		Major Measures	Key Management Indicators	FY 2021 actual results* ⁸ (Consolidated *Non-consolidated)	FY2030 target* ⁸ (Consolidated *Non-consolidated)
Environment	Contributing to realize a decarbonized society	Expansion of deployment of renewable energy and promotion of energy saving	Reduction in CO ₂ emissions (compared to FY2015)	20% (emission: 2,216 kt-CO ₂)	38% (emission: 1,723 kt-CO ₂)
			Amount of renewable energy deployed	407 MWh/year	35,000 MWh/year
			Improvement in energy consumption unit ¹ (compared to FY2015)	0.1%	14%
	Ubiquitization of resource-conserving, recyclable, and environmentally-friendly products	Expansion of environmentally-friendly products that contribute to decarbonation and reduction of energy use over the product lifecycle. Expansion of use of recycled raw materials Effective use of water resources	Sales ratio of environmentally-friendly priority products ²	21.2%	30%
			Waste landfill rate	11.7%	8.5%
			Improvement rate of water use (compared to FY2010)	29.9%	38.5%
Social	Safety and health are our overriding priority	Promotion of activities to disseminate basic rules (ironclad rules) to prevent disasters and make facilities intrinsically safe	Frequency rate of occupational accidents ³	0.30	0.15
			Number of serious accidents ⁴	0	0
	Diversity and Inclusion	Reflection of employee survey results in management Thorough implementation of diversity and inclusion	Ratio of positive evaluation of engagement indicators	56%	70%
			Diversity in recruitment ratio (women, foreign nationals, career hires)	50%*	50% or more*
			Ratio of female managers	1.8%*	5.0%*
			Diversity ratios at the executive level positions (women, foreign nationals, career hires)	9.1%*	30% or more*
Governance	Make quality a strength	Data collection without human intervention	Percentage of automatic inspection and testing	21%	100%
		Expansion of activities to minimize and control variation in the 4Ms (huMans, Machines/equipment, Materials, and Methods)	Major quality incident index ⁵	0.2	0
		Improved human resource development	—	—	—
		Thorough implementation of actions with integrity at the core	Ratio of positive evaluation of compliance awareness, etc.	68%	90% or more
	Business model and process evolution anticipating changes in the external environment	Promotion of comprehensive risk assessment and countermeasures through risk management Diversification of procurement sources in response to changes in the procurement environment Acceleration of R&D and realization of safe, high-quality production through DX	—	—	—
			Number of items required for source diversification	—	—
			Manufacturing lead time ⁶ (compared to FY2022)	—	50%
			Comparison of new products ⁷	16%	30%

*1. Energy consumption unit: Energy consumption divided by sales

*2. Environmentally-friendly priority products: Selected products that are being expanded in terms of business strategy and contribute highly to solving environmental issues such as climate change and effective use of resources. To strengthen environmentally-friendly products, we are currently studying definitions of management indicators, target values, and strategies to achieve them.

*3. Frequency rate of occupational accidents: Number of fatalities and injuries due to occupational accidents divided by total actual working hours x 1,000,000 (number of accidents per 1 million working hours in a calendar year).

*4. Number of serious accidents: Serious accidents include fatalities, serious injuries equivalent to fatalities (disabling injuries of Severity 7 or higher), and accidents in which three or more persons are injured at the same time.

*5. Major quality incident index: Index of accidents that caused serious damage to customers' bodies or property, or serious damage to society (including violations of laws and regulations), with FY2020 set as 1.

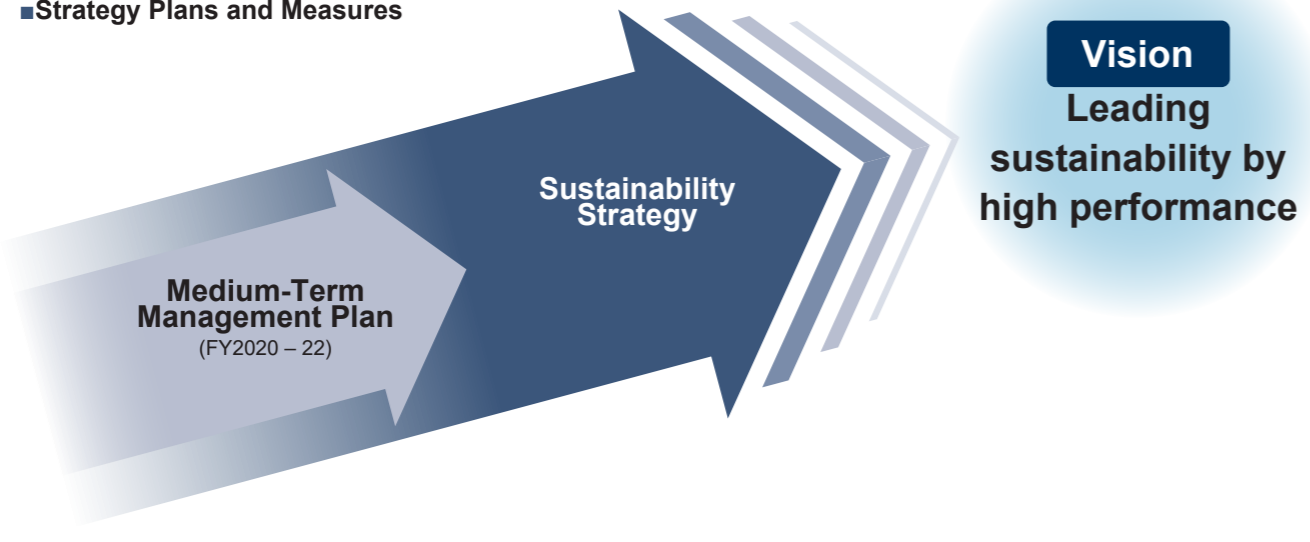
*6. Manufacturing lead time: Percentage decrease in the time from the start of manufacture to the delivery of products for priority products. FY2022 figures are used as the benchmark.

*7. New product ratio: Ratio of sales of new products to consolidated sales revenue. New products are registered as those that open up new markets or new applications, or have significantly improved performance. A product that has been become generalized three years after registration as a new product is removed from the register.

*8. Indicators that are not suitable and those with a non-disclosure policy are indicated with “—”.

The Group recognizes that a sustainability strategy is a critical strategy for achieving medium- to long-term growth and increasing corporate value. Based on this premise, we are advancing measures to transform our business structure in the Medium-Term Management Plan, which will end in FY2022. This term is positioned as a preparatory period for future growth, and the plan seeks to achieve a business structure capable of securing capital for future growth investments. As a result, we returned to profitability in FY2021, and are steadily improving our business structure. Besides accelerating transformation and growth from FY2022 onward, we will further promote our sustainability strategy with targets for 2030. Through these measures, the Group aims to achieve growth with the Vision “Leading sustainability by high performance.”

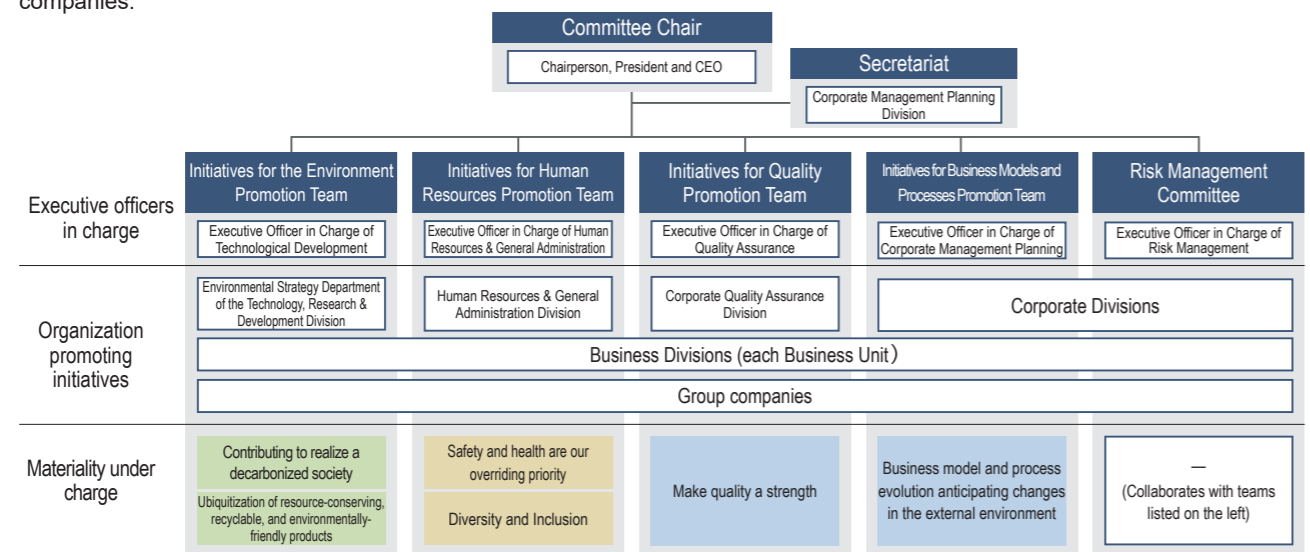
■ Strategy Plans and Measures



	2020	2023	2030
Medium-Term Management Plan (FY2020 – 22)	Shift to revenue base capable of securing capital for future growth investments (period of preparation for future growth)		
Sustainability Strategy	Reinforcement of business foundation and business regrowth (period to accelerate growth) through promotion of sustainability initiatives		

■ Framework for promoting sustainability strategy

The Group has established a Sustainability Promotion Committee. It deliberates and decides important sustainability-related policies and measures, as well as share progress and achievements to seek further improvements. The committee chair is the Group’s Chairman, President and CEO, and its secretariat is part of the Corporate Planning Division. Under Executive Officers, who are in charge of promoting initiatives for each materiality, related measures, critical management indicators, and their target values are studied and decided. The initiatives are implemented in cooperation with both Business Divisions and Group companies.



The Group is striving to provide environmental value in each stage related to monozukuri. From the R&D stage to the product lifecycle, we are developing products that contribute to decarbonation and reduction of energy use. With the aim of achieving carbon neutrality in production, we are expanding the deployment of renewable energy and promoting energy saving. And, at the stage of using the Group’s products by our customers, we are providing environmental value that meets the demands of the times, such as environmentally-friendly products that reduce the use of energy and greenhouse-gas emissions.

Aiming to realize a decarbonized and energy-efficient society throughout the product lifecycle

R&D

Major measures

- Strengthening environmentally-friendly products that contribute to decarbonization and reduction in energy used over products life cycle.

Examples of efforts

Reduction of greenhouse-gas emissions during manufacture of cathode materials (→ p. 21)

Comparison of new products

Uses

Major measures

- Promotion of sales of environmentally conscious products
- Promotion of decarbonation and energy conservation (for customers)

Examples of efforts

Neodymium magnets: Contributing to popularization of xEVs
Amorphous alloys: Contributing to energy efficiency of power transformers (→ p. 22)

Sales ratio of key environmentally conscious products

Manufacturing

Major measures

- Expansion in deployment of renewable energy
- Promotion of energy conservation
- Expansion of use of recycled raw materials

Examples of efforts

One of the largest photovoltaic panel installations in Japan (→ p. 21)

CO₂ emission reduction (compared to FY2015)



R&D

Reducing greenhouse-gas emissions during production of cathode materials

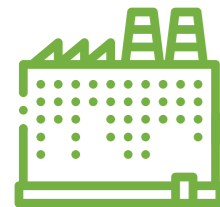
Lithium-ion batteries (LIBs) are used in a wide range of fields, from mobile devices to hybrid and electric vehicles, owing to their high energy density, compact size, and light weight, and demand for LIBs is expected to grow rapidly, especially for use in electric vehicles. The key component of LIBs is the cathode material, which assures LIBs have both high capacity and long life.

We have developed (i) a technology that gives LIBs both longer life and higher capacity while reducing the amount of cobalt used in the cathode material and (ii) a manufacturing technology that increases the options for the raw materials composing the cathode. We have also developed "microstructure-control technology" for suppressing degradation of the crystal structure of the cathode that accompanies the charge-discharge cycle. Moreover, the cobalt content, which is an essential major component of cathode materials, can be reduced by 80% (compared to that of our conventional cathodes). As a result, greenhouse-gas emissions derived from cobalt raw materials during manufacturing can be reduced.

In the future, we will introduce these technologies as solutions for customers involved in mass production of cathode materials and development of LIBs.



Cathode materials for lithium-ion batteries



Manufacturing

One of the largest solar-panel installations in Japan

We have decided to install a solar-power generator with a power-generation capacity of approximately 10 MW (megawatts), which is one of the largest self-consumption-type solar-power generation facilities in Japan, in the Kumagaya district, centered on the Kumagaya Magnetic Materials Works and the Global Research & Innovative Technology Center (GRIT).

We effectively utilized the long daylight hours of Kumagaya City and the green areas in the Kumagaya district to install the large-scale and highly efficient facility. The generator is scheduled to be operational by September 2023, and all of the electricity that it generates, approximately 11.5-million kWh/year, will be consumed in the district. We are using the TPO/PPA model* (Third Party Ownership/Power Purchase Agreement) for this project.

Our Group's policy is to (i) reduce CO₂ emissions from our own operations by 38% by 2030 (compared to 2015) as a mid-term target and (ii) achieve carbon neutrality by 2050. As a result, we will contribute to the transition to a decarbonized society. As for renewable energy, we aim to introduce 35,000 MWh/year by 2030, and the installation of the generator in the Kumagaya district will be the centerpiece of the plan.

* A system by which a power-generation company installs a solar-power generation system on a site or roof provided by the owner of the facility (Hitachi Metals) and provides the power generated by the system to the user of the facility (Hitachi Metals) for a fee.



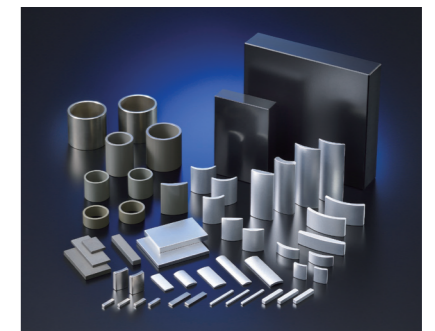
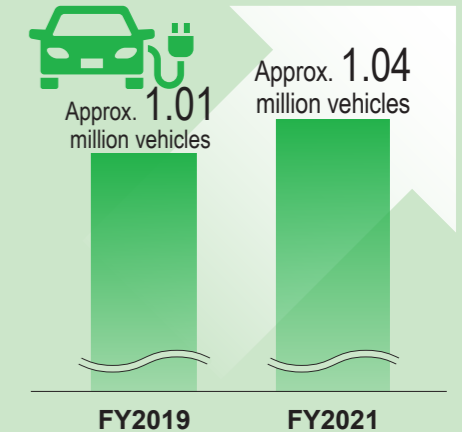
Uses

Neodymium magnets contribute to the popularization of xEV vehicles

In 1982, our company (Sumitomo Special Metals at that time) invented the neodymium magnet, which generates much stronger magnetic force than that of the common ferrite magnet. Generally, as the magnetic force of the magnet gets stronger, the performance of the motor gets higher, and the motor can be designed to be smaller and lighter. In particular, in regard to the technological evolution of xEVs*, it plays an important role as an indispensable material enabling smaller, lighter, more-efficient, and more-energy-efficient motors.

As a permanent magnet boasting the world's-highest magnetic force, NEOMAX® is used in fields such as vehicles, IT and home appliances, industry, medicine, and the environment and energy. Currently, the Hitachi Metals Group is focusing on the automotive field, which is undergoing transformations to, for example, being connected, automated driving, and electrification. By providing high-performance neodymium magnets, we are contributing to production of higher efficiency and smaller drive motors and generators for xEVs.

*xEV: A collective term for electric vehicles (EVs), hybrid electric vehicles (HEVs), and plug-in hybrid electric vehicles (PHEVs).



Neodymium magnet NEOMAX®



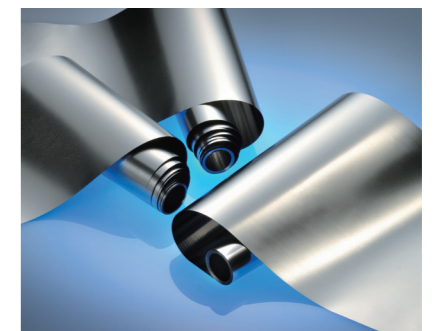
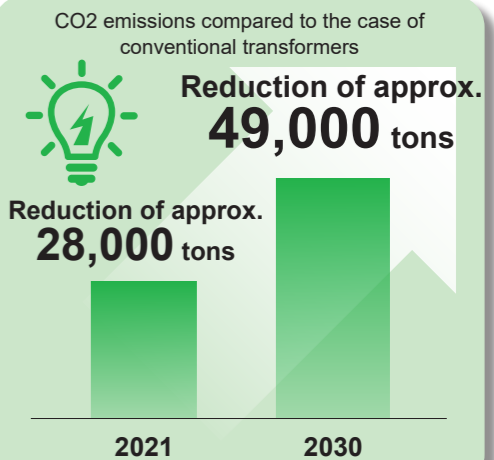
Uses

Amorphous alloy contributes to energy saving in power transformers

Electricity generated at power plants incurs transmission loss while it is being transmitted to factories and homes. High-voltage electricity transmitted from power plants is converted to lower voltages by transformers for safe use; however, transformers not only consume power during the power conversion but also lose power during standby. To solve that problem, since 2003, Hitachi Metals Group has provided Metglas®, namely, an amorphous alloy that reduces standby power consumption to about one-third that in the case of conventional core materials (such as electromagnetic steel sheets) used for transformers.

Unlike ordinary metals and alloys, amorphous alloys have no crystalline structure and exhibit excellent soft magnetic properties, and those features make it possible to suppress power loss in standby mode. By providing core materials for amorphous transformers, we aim to contribute to reducing CO₂ emissions* by approximately 50,000 tons per year (compared to the figure for conventional magnetic-steel transformers). In March 2020, we developed a new amorphous material, called MaDC-A, which will contribute to further improving transformer efficiency.

* Based on shipment volume and difference in transformer energy loss, according to Indian standards. For the CO₂ emission coefficient, we use IEA CO₂ emissions from fuel combustion (2017 world).



Amorphous-alloy ribbon Metglas®

Environmental Vision/Basic Environmental Policies

The Hitachi Metals Group promotes a “Decarbonized Society,” “Resource Efficient Society,” and “Ecosystem Conservation” as the three key pillars of its Environmental Vision. We aim to realize higher-quality lifestyles and a sustainable society by resolving environmental issues through collaboration with our stakeholders.

Hitachi Metals Group Basic Environmental Protection Policies

Philosophy Aiming to pass on the common assets of humankind in a sound state to future generations, Hitachi Metals Group considers environmental issues as an important management priority while we will strive to actively preserve global and local environments.

Slogans

- With a deep awareness that environmental protection is a major issue for all humanity, we will fulfill our social responsibilities by striving to establish a sustainable society in harmony with the environment regarding it as one of the essential aspects of corporate activity.
- We will contribute to society by developing highly reliable technologies and products in response to needs for environmental protection and the limited natural resources.

Action plans

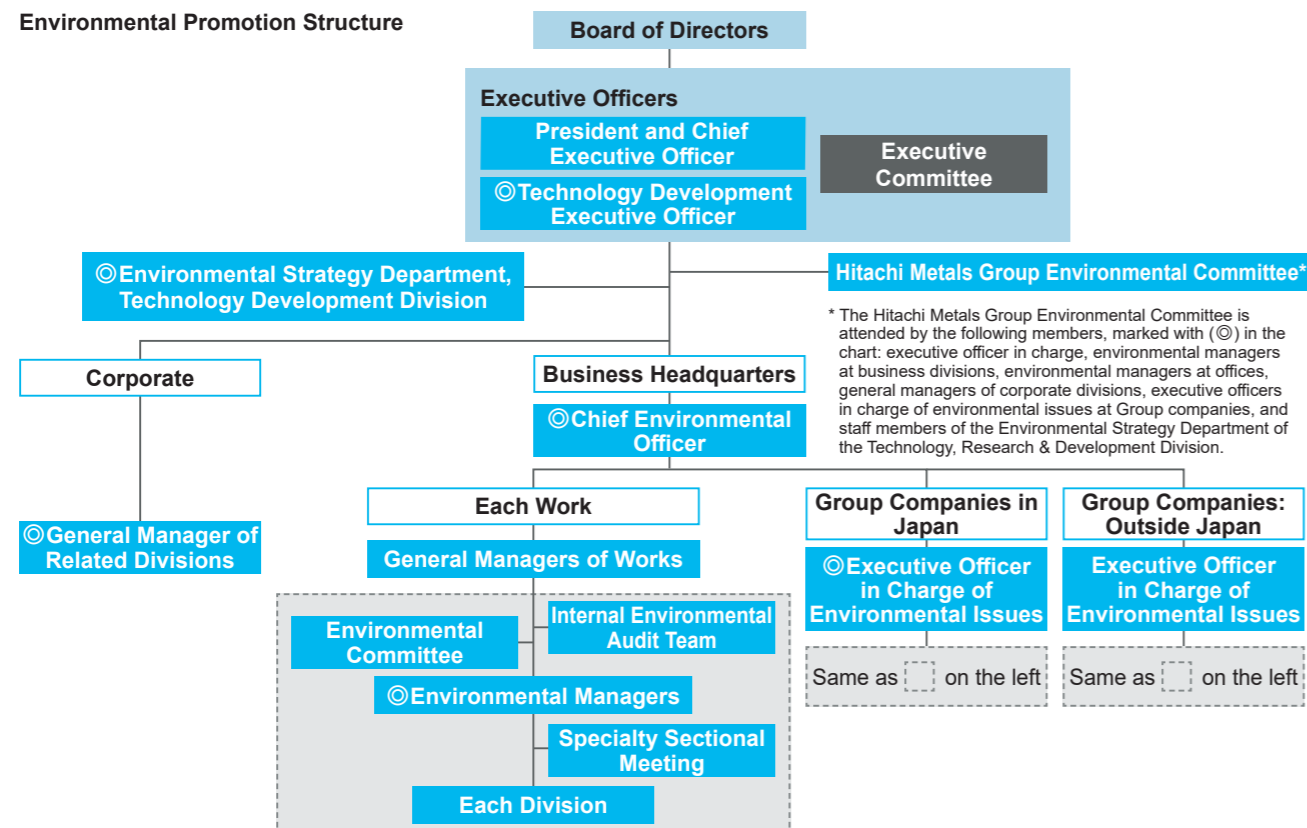
Hitachi Metals Group promotes activities on the basis of our medium-term environmental plan. The plan for implementation measures from fiscal years 2021 to 2022 and the results of implementation measures for fiscal year 2021 are described as follows.

In fiscal 2021, owing to a drop in product demand following the COVID-19 (a novel coronavirus) pandemic, the impact of the decrease in production volume and other factors was more significant than the results of our load-reduction activities, and we fell short of our plan for prioritizing environmentally friendly products and reducing our rate of CO₂ emission. On the contrary, we achieved our plan for the reducing our rate of water consumption, waste generation per unit of production, and ratio of

waste used for landfill.

Regarding the reduction of energy consumption per unit as stipulated in the Act on the Rational Use of Energy (Energy Efficiency Act), in fiscal 2021, we reduced our energy consumption by 10.2% compared to the previous fiscal year or by 13.9% compared to the base year. In conjunction with these reductions in energy consumption, we increased sales revenue by 23.8% compared to the previous fiscal year. From fiscal year 2022 onward, we aim to reduce energy consumption by 1% or more per year (compared to the average over the previous five years) by fiscal year 2023 by formulating and promoting energy-conservation plans that include carbon neutrality.

Environmental Promotion Structure



Roles in the Promotion Structure

Executive Officer in Charge	The Technology Development Executive Officer is in charge of the environment and exercises overall control through the Group Environmental Committee.
Hitachi Metals Group Environmental Committee	Deliberate and determine policies, targets, etc. related to environmental activities within the Hitachi Metals Group.
Chief Environmental Management Officer	Oversee environmental management activities within business headquarters.
Environment Committee Members	Deliberate and determine policies, targets, etc. related to environmental activities at each business site.
Environmental managers	Take responsibility for and promote environmental-management activities at each business site.

Addressing Climate Change Disclosure in accordance with TCFD Recommendations (July 22, 2022)

As countries around the world intensify their efforts to address climate change in accordance with the Paris Agreement, the Japanese government announced in October 2020 its policy goal of reducing emissions of greenhouse gases, as typified by carbon dioxide (CO₂), to virtually zero by 2050. Accordingly, companies are expected to be more proactive than ever in their efforts to transition to a decarbonized society.

Hitachi Metals Group considers the impact of climate change on its business as one of our most-important

management issues, and we believe that enhanced disclosure of climate-change-related information is a key factor in building a relationship of trust with our stakeholders. Accordingly, in June 2021, we registered our support for the TCFD Recommendations, according to which we made our first disclosure in May 2022. And we joined the TCFD Consortium in July 2022. Hitachi Metals Group will continue to enhance our disclosure of information on the impact of climate change on our business activities in accordance with the TCFD Recommendations.



Governance

In April 2010, Hitachi Metals Group established the Hitachi Metals Group Basic Policy on Environmental Preservation to clarify the Group’s unified approach to environmental management. In June 2021, we registered our support for the TCFD Recommendations, and in August of that year, following a report to the Board of Directors, we established a new environmental policy named “Aiming for Green Growth while taking Risk as Opportunity.”

The Hitachi Metals Group Environmental Committee (Group Environmental Committee, hereafter) has been established as a framework for promoting environmental activities such as climate-change countermeasures. The Group Environmental Committee is chaired by the Technology Development Executive Officer, and its executive office is the Environmental Strategy Department, Technology Development Division. Its activities are promoted in cooperation with the environmental-management managers of each business division, business sites, and group companies (see organizational chart on the left). The Group Environmental Committee is responsible for developing environment-related regulations, setting targets for reducing environmental impact, and confirming that

activities are appropriate and effective.

Policies and targets concerning environmental activities are discussed and set by the Group Environmental Committee as mid-term and annual environmental-action plans. With regard to climate-change countermeasures, the Environmental Action Plan sets targets for reducing CO₂ emissions within the Hitachi Metals Group. On the basis of those targets, energy-saving activities and the use of renewable energy are being promoted at each manufacturing site. The status of reductions in CO₂ emissions is monitored regularly, and the Group Environmental Committee meets once a year to share the results of the previous year, the status of numerical targets for the current year, and major initiatives to promote continuous improvement of activities.

Since fiscal year 2021, the Technology Development Executive Officer, who chairs the Group Environmental Committee, reports to the Executive Committee and the Board of Directors twice a year on the status of efforts, including climate-change measures, to address environmental issues.

Status of important decisions on climate change in fiscal year 021

Month/Year	Decisions on important issues related to climate change	Meeting body
June 2021	Endorsement of TCFD	Executive Committee
August 2021	New Environmental Action Policy “Aiming for Green Growth by Taking Risks as Opportunities”	Board of Directors
October 2021	Introduction of “Internal Carbon Price” Internal rules on capital investment stipulate that the effect of CO ₂ reduction by capital investment must be calculated as profit on the basis of the “internal carbon price” and incorporated into profit plans.	Executive Committee

■ Strategy

Hitachi Metals Group has begun “scenario analysis” to clarify the risks and opportunities posed by future climate change and to develop business strategies to reduce risks and expand opportunities. While we recognize that scenario analysis should cover the entire group, including the supply chain, in fiscal year 2021, we limited our analysis to a limited number of scenarios and scope of coverage. In fiscal year 2022, we plan to complete the analysis regarding domestic business and from fiscal year 2023 onward, we will promote scenario analysis including overseas operations.

Scenario-analysis Process

Scenario analysis—consisting of the four steps shown in Figure 1—aims to assess (i) financial and business impacts under different scenarios and (ii) resilience of the Hitachi Metals Group strategy in regard to climate-related risks and opportunities.

Assumptions for scenario analysis (FY2021)

Scenario	Refer to “Below-2°C scenario” for risks and opportunities excluding physical risks, and refer to “4°C scenario” for physical risks.
Target businesses	Advanced Metals Division (domestic sites)
Target year	Impact as of 2030

Reference scenario

Classification	Main reference scenario
Less-than 2°C scenario	<ul style="list-style-type: none"> •IEA World Energy Outlook 2020. Sustainable Development Scenario •IPCC RCP2.6
4°C scenario	<ul style="list-style-type: none"> •IEA World Energy Outlook 2020. Stated Policy Scenario •IPCC RCP8.5

Steps of scenario analysis



- Identify climate-related risks/opportunities
- Evaluate most-significant risks/opportunities
- Assess most-significant risks/opportunities
- Using the information obtained in Step 1, identify scenarios among existing scenarios that are closely related
- Set climate-related scenarios (social image)
- Analyze the financial impact of each scenario set in Step 2 and the key climate-related risks/opportunities and related parameters identified in Step 1
- Assess resilience of the strategy in regard to climate-related risks and opportunities
- Further investigate countermeasures

Risks and Opportunities Posed by Climate Change (Results of FY2021 Study)

Business and Financial Impacts and Responses under the assumption of the year 2030 [Advanced Metals Division (domestic business sites)]

Classification	Type	Content	Business/financial Impact	Our response	
Risk	Transition	Policy/regulations	Increased production and operating costs owing to stricter regulations, such as the introduction of carbon pricing (CP), which includes carbon taxes, taxes on fuel and energy consumption, and emissions trading.	Medium	Currently, we are working to reduce CO ₂ emissions by promoting various energy-saving measures (e.g., LED lighting and renewal and introduction of high-efficiency equipment) and measures to improve productivity. From now onwards, we will actively promote fuel conversion and the introduction of renewable energy (i.e., installation of solar panels) so as to achieve our CO ₂ -reduction target for 2030.
			Higher procurement costs for raw materials (including rare metals and auxiliary materials such as direct complementary materials) due to stricter CP and other regulations.	Medium	As for principle raw materials, we will work to strengthen surcharges (price sliding-scale system) and cultivate of new suppliers. From the perspective of life-cycle assessment (LCA), we will increase the utilization ratio of scrap generating low CO ₂ emissions and nurture new suppliers.
		Technology	Increased operating costs associated with the introduction of manufacturing processes (based on electrification and alternative fuels) to meet decarbonization requirements.	Medium	When introducing new manufacturing processes, we will examine equipment specifications with the aim of reducing its impact on operating costs.
		Market	Decreased sales of peripheral components of internal combustion engines owing to the expansion of xEVs.	Medium	As for capturing demand for components of automotive internal-combustion engines, we will target the commercial-vehicle and agricultural/construction-equipment fields.
			Decreased sales due to changes in customer procurement standards (RE100 and other compliance requirements) in accordance with decarbonization.	Small	As for reducing CO ₂ emissions from manufacturing processes, we will continue to promote both energy conservation and renewable energy, and we will focus on how to respond to customer requests for decarbonization.
	Increased costs of developing new products for a decarbonized society.		Small	We will develop environmentally friendly products and launch them onto the market sequentially while not being restricted to our conventional business areas.	
	Reputation	Increased procurement risk due to increased demand for raw materials.	Small	We will develop processes that utilize overseas scrap alloys and low-grade raw materials as well as processes for reducing the use of rare metals.	
		Decreased sales due to lower customer evaluations resulting from delays in the development and launch of environmentally friendly products onto the market.	Medium	We will strengthen cooperation between the sales departments and the research and development departments with the aim of developing environmentally friendly products, and we will make strengthening that cooperation a company-wide top priority.	
	Physical risk	Acute and chronic	Orders and sales decreased owing to delays in delivery accompanying the suspension of operations caused by natural disasters due to abnormal weather.	Large	We will systematically improve our production systems in anticipation of extreme weather events. We will expand the BCP system and refine the action manual for emergencies.
			Increased business costs due to rising insurance costs.	Small	In areas where disasters such as tidal waves and floods are anticipated on the basis of examples of past disaster, we will systematically implement disaster preparedness measures such as relocation of factories and product warehouses, protection of production lines, etc.
Chance	Resource efficiency	We will increase sales by increasing product value through efficient production and efficient use of materials and energy.	Medium	To achieve the 2030 CO ₂ reduction target, we plan to promote various energy-saving measures (LED lighting, renewal and introduction of high-efficiency equipment, etc.) and productivity-improvement measures while promoting fuel conversion and introduction of renewable energy (i.e., installation of solar panels). Naturally, we will publicize our efforts and achievements.	
	Source of energy	We will increase sales by improving the customer's evaluation of supplier selection by working on decarbonization.	Medium	We will promote CO ₂ reduction by introducing renewable energy and switching to carbon-neutral fuels.	
	Products/Services	We will increase sales by developing and launching environment-friendly products onto the market.	Large	We will promote new orders and increase market share of target products by shortening development lead times and reducing costs of environmentally friendly products. We will continue to expand sales of environmentally friendly products, which are expected to be in more demand in the future. Examples: <ul style="list-style-type: none"> •Mold materials that provide longer service life •Materials for various industrial machinery, aluminum castings, undercarriage parts, and exhaust-gas filters that contribute to improved fuel efficiency and reduced emissions by cars Aerospace products that are expected to improve fuel efficiency of airplanes Battery materials (clad products) and power-semiconductor materials for use in batteries and other products Mass-flow controllers that enable semiconductor manufacturing equipment to save energy	
	Market	We will increase sales by expanding sales into new global markets with increased demand for environmentally friendly products.	Medium	As decarbonization progresses, products are expected to become smaller, more powerful, and lighter; accordingly, we will develop new applications with various alloys that can take advantage of different material properties.	
We will increase sales by expanding into xEV market.		Medium	Many of our products, including cladding materials, are used in lithium-ion rechargeable batteries, for which demand is increasing with the expanding xEV market, so we expect sales to increase.		

Definition of assessment of business/financial impact

- Large:** cost or effect equal to or greater than 5% of sales^{*1}
- Medium:** cost or effect equal to at least 1% but less than 5% of sales^{*1}
- Small:** cost or effect equal to less than 1% of sales^{*1}

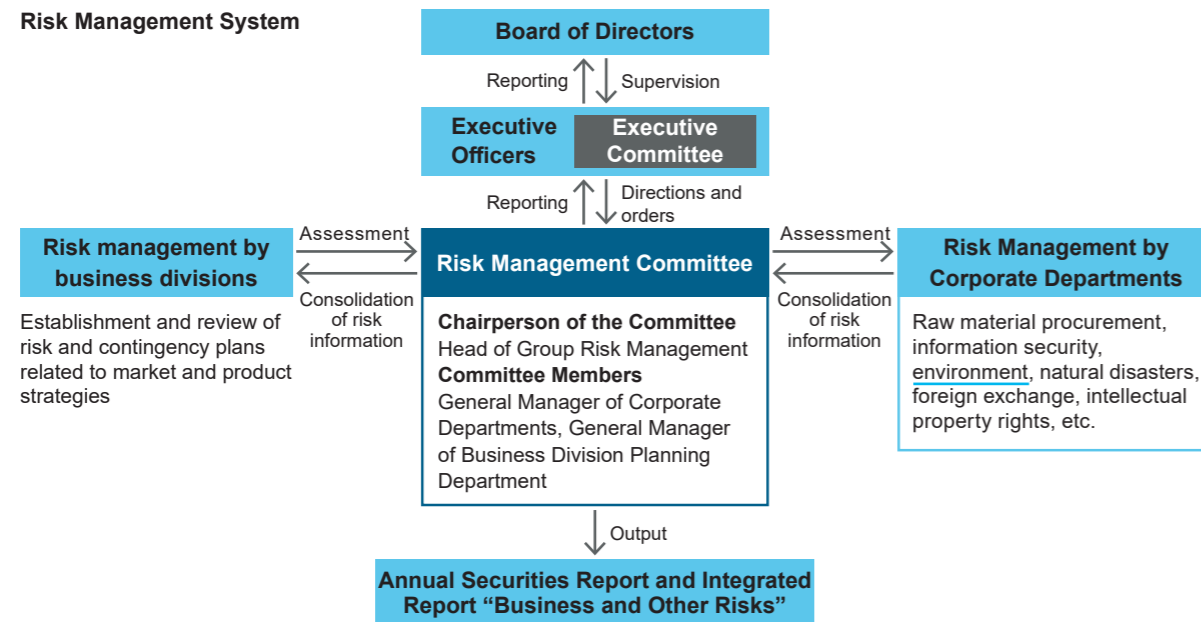
*1 Net sales of target businesses

As described above, the scenario analysis of the business areas of the Advanced Metals Division (domestic offices) verified the response to each risk and opportunity with respect to the strategy for each business, and the analysis results confirmed that our strategy is resilient.

Risk Management

In April 2022, Hitachi Metals Group established a "Company-wide Risk Management Committee" (RMC) under the supervision of the Executive Officer responsible for group-risk management. The RMC summarizes various business risks surrounding the Group and contingency plans for those risk, and evaluates their coverage and weighting. Risks related to climate change identified by the Group Environmental

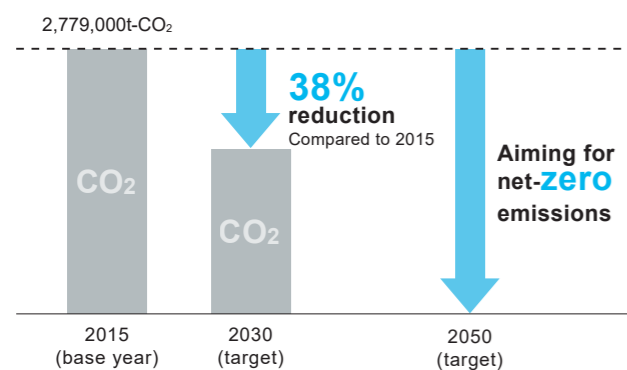
Committee, corporate departments, and business divisions are reported to the RMC together with other risks as one of the risks related to environmental regulations. The RMC is scheduled to meet twice a year, and the results of the interim and year-end risk-management assessments of the RMC are reported to and reviewed by the Executive Committee and the Board of Directors.



Indicators and Targets

Hitachi Metals Group has set the targets for reduction of CO₂ emissions* as shown in the illustration below. In promoting carbon neutrality, we will continue our conventional energy-saving activities while striving to improve processes such as capital investment, convert to alternative fuels for melting furnaces, heating furnaces, and manufacturing processes, develop technologies based on carbon-free fuel, and introduce renewable energy.

Target for reduction of CO₂ emissions



*Scope 1: direct CO₂ emissions by the company
 Scope 2: Absolute amount of indirect emissions associated with the use of electricity, heat, and steam supplied by other companies

Actual achievements for Scopes 1 and 2 (1000t-CO₂)

Target	2019	2020	2021
Scope1+2	2,319	1,995	2,216

Executive compensation

Executive compensation in the Hitachi Metals Group is determined on the basis of the achievement of annual targets. Starting in 2022, the extent to which the targets for reduction of CO₂ emissions have been achieved will be added to the index as an evaluation item for our climate-change response.

Internal carbon price

To promote CO₂ reduction, we have added the concept of "internal carbon pricing" to our internal regulations related to capital investment. In detail, we set a carbon price (8,000 yen/t CO₂) based on the total amount of CO₂ emissions after capital investment, and the effect of the CO₂ reduction of the capital investment is calculated as profit. (October 2021)

Colum

Topics 1

Reduction of CO₂ emissions by using alternative coke

Waupaca Foundry, Inc. ("Waupaca" hereafter) melts scrap metal, by primarily using cupola melting technology, to produce steel castings for fabricating components (such as automotive parts) in various industries. Approximately 50% of Waupaca's CO₂ emissions come from coke used as fuel and carbon additive in cupolas.

To reduce CO₂ emissions, Waupaca implemented the addition of alternative coke as a measure to reduce coke usage. Alternative coke is a method of reducing coke usage by replacing some of the coke with a calorie-free carbon additive, while adjusting the amount of carbon in the cast iron product. Such "coke replacement" is a method of replacing some of the coke with a calorie-free carbon additive to reduce coke usage while adjusting the amount of carbon in the cast-iron product. By implementing this measure (coke replacement), in 2021, we reduced coke usage by 10,995 tons and CO₂ emissions by 31,616 tons. Waupaca also implemented CO₂-reduction measures such as reducing coke consumption by dehumidifying the blast air of the cupola furnace and recovering waste heat from the furnace, resulting in a total reduction of 41,087 tons of CO₂ emissions in 2021.

In addition implementing the above-described measures, Waupaca is considering introducing renewable-energy sources and other measures to actively reduce CO₂ emissions and eventually achieve carbon neutrality.



Topics 2

Cladding materials for rechargeable batteries of xEVs

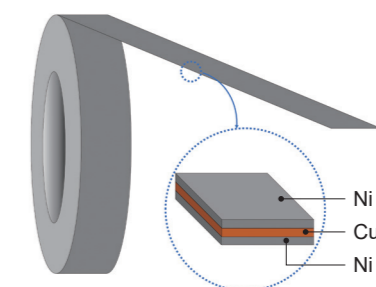
In recent years, demand for xEVs* has been increasing rapidly as people increasingly consider solving climate-change issues. In line with this trend, demand for lithium-ion batteries, which are mainly used in xEVs, has also increased significantly.

Hitachi Metals Neomaterials, Ltd. provides materials for the anode leads used in the lithium-ion batteries. The anode lead must have high electrical conductivity because it serves to extract electricity from the current-collecting foil. It must also have excellent weldability because it is incorporated into the battery after being welded to the current-collecting foil.

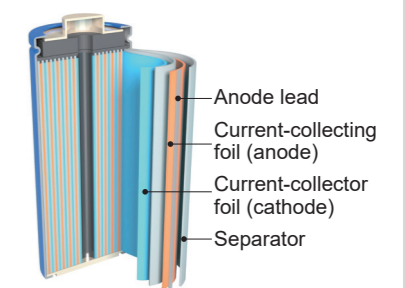
Hitachi Metals NeoMaterials has produced a number of clad materials that are made by joining two or more different metals, each with its own unique characteristics. To meet multiple requirements for anode leads, our Suita Plant has developed a three-layer clad material, consisting of nickel as the outer layers surface and copper as the inner layer, which is used in lithium-ion batteries for xEVs through various customers.

We have received many requests from customers to increase production, and we will strive to further improve production efficiency and contribute to solving environmental issues by providing materials for xEVs.

* xEV is a generic term for electric vehicles (EV), hybrid electric vehicles (HEV), and plug-in electric vehicles (PHEV).



Clad material for anode lead (Ni/Cu/Ni)



Anode lead for lithium-ion battery

About quality-assurance activities

In response to the inappropriate numerical values stated in an inspection report announced on April 27, 2020 (“quality-assurance problem” hereafter), we have devised measures to prevent recurrence of such a problem a top priority and are doing our utmost to implement those measures so that such a problem will never happen again. Based on the recognition that quality is an important management issue for Hitachi Metals Group to enhance its corporate value and

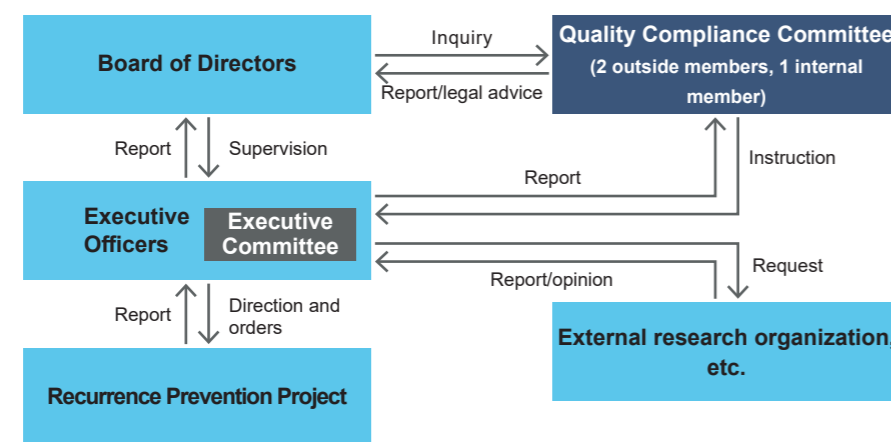
achieve sustainable growth over the medium to long term, the Group has set “Quality as a Strong Point” as one of our six materialities. Aiming to provide our customers with a stable supply of high-quality products, we will work together to thoroughly implement measures to prevent recurrence of quality assurance-problems and to make quality a strength of our group that differentiates us from our competitors.

Established the Quality Compliance Committee as an advisory body to the Board of Directors

On April 1, 2021, we established the Quality Compliance Committee, which consists of two external experts and our Chief Quality Officer (CQO), as an advisory body to the Board of Directors. Since its establishment, the Committee

has met 26 times as of March 31, 2022, and under the committee, measures to prevent recurrence of quality-assurance problems have been implemented and their effectiveness verified.

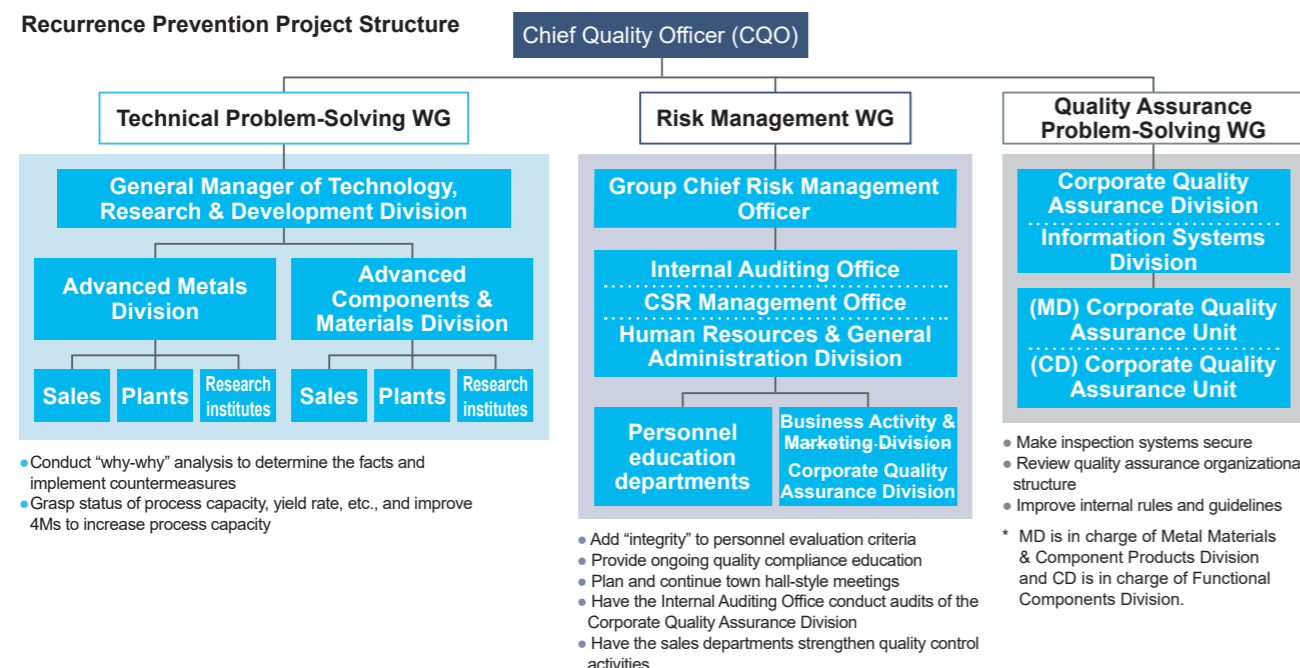
Relationships with Quality Compliance Committee



Progress of measures to prevent recurrence of quality-assurance problems

Under the direction and supervision of the Quality Compliance Committee, we have set up three working groups (WGs) to implement measures to prevent recurrence: Technical Problem-Solving WG, Risk Management WG, and Quality-Assurance Problem-Solving WG.

Recurrence Prevention Project Structure



Review of company-wide QMS (quality-management system)

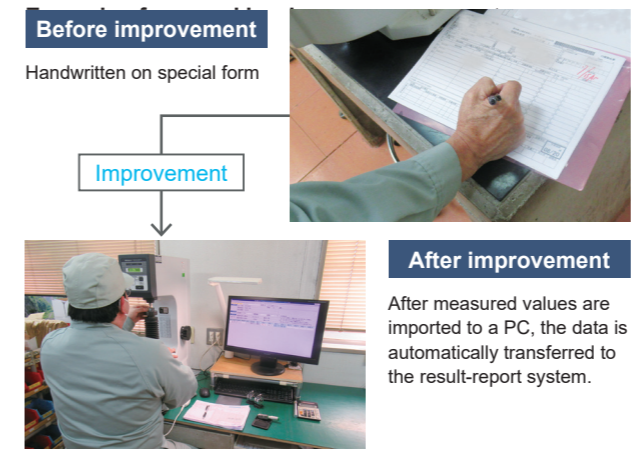
Quality-Assurance Problem-Solving WG

In an investigation report on quality-assurance problems released in January 2021, it was pointed out that “quality-assurance-related policies were inadequately established, and even in the case of those policies that were established, many of them were not functioning properly.” As for one of our countermeasures to address these quality-assurance inadequacies, we have developed a company-wide “quality-management system” (QMS) and established company-wide detailed regulations related to quality assurance, which form the basis of the QMS, to prevent quality-assurance problems from being repeated.

Securing the inspection system

Quality-Assurance Problem-Solving WG

“Securing the inspection system” means establishing a system that automatically imports measured values from measurement equipment to a PC, automatically determines whether a product passes or fails on the basis of that measurement data, and automatically prepares a report to be submitted to the customer. That automated system is in stark contrast to the conventional one that involves human intervention such as writing the measured values on a special form by hand or entering them into a PC during the inspection process. Moreover, it eliminates the need to write down the measured values and the occurrence of operational errors such as incorrectly writing or mis-typing the measured values. It also improves inspection efficiency by eliminating the need to write down the measured values on special paper or input them into a computer. While we have been sequentially completing the process of “making it unnecessary to rewrite data” since 2020, we will continue to improve the inspection system by incorporating the opinions of employees in its design in a manner that strengthens the inspection system even more.



Quality-compliance education Risk Management WG

Hitachi Metals Group designates April as “Quality Compliance Month” and April 27 as “Quality Compliance Day” every year, and in conjunction with “Quality Month” in November, which is a nationwide initiative, we take these opportunities to reaffirm our commitment to quality activities by all employees. In 2021, we conducted quality-compliance training and questionnaire surveys in April and October (and partially in November). More than 99% of the respondents to the surveys answered that they understood the content of the training in both April and October, and that result confirmed the effectiveness of the training.

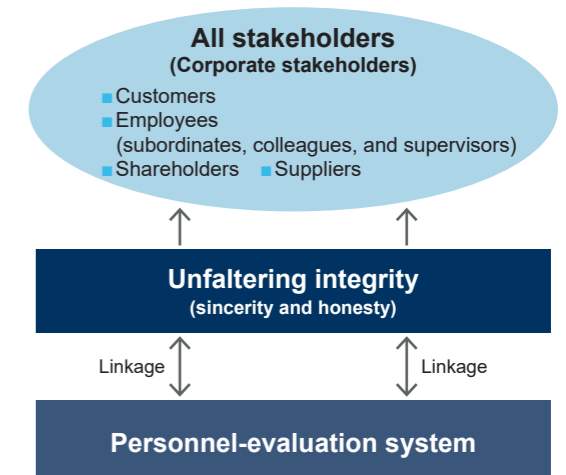
We will continue to improve the content of our training and repeatedly educate our employees on important topics so as not to dilute their awareness of quality compliance.

4M normalization activities Technical-Problem-Solving WG

“4M normalization activities” are daily activities to recognize, minimize, and control variations in the 4Ms: “Man” (manpower), “Machine” (equipment), “Materials,” and “Methods,” and we position them as particularly important quality-control activities in the Group. During 4M normalization activities, we place importance on collecting small “insights” about a process and making improvements to these small insights. The continuation of these small improvements will lead to a large improvement effect over time.

Changing Attitudes and Behaviors to Focus on Quality Risk-Management WG

To enhance our employees’ understanding of quality compliance and ensure the effectiveness of reform, the CEO, CQO, and other layers of management send out messages on quality compliance and hold town-hall style meetings on quality on an ongoing basis. At the same time, since 2021, we have been adding “integrity,” “sincerity,” and “honesty” as evaluation items in personnel evaluations of managers.



Holding International QA Meeting

Quality-Assurance Problem-Solving WG

On November 17 and 18, 2021, the first International QA Meeting of the Hitachi Metals Group was held. It was attended by more than 130 people, including quality-assurance managers from group companies around the world and employees involved in quality assurance in Japan. The meeting was divided into three blocks with the objectives of “stimulating communication,” “sharing information and best practices related to quality assurance and quality control,” and “discussing the establishment of a globally unified QMS system.” The session began with the sharing of the company-wide quality activity philosophy, followed by presentations of quality improvement and QMS enhancement case studies from the eight representative sites and a question-and-answer session. From 2022 onward, the International QA Meeting will be held twice a year as a forum for a global dialog on quality with the aim of invigorating the quality activities of the entire Hitachi Metals Group.

Hitachi Metals Group continuously invests in R&D on advanced materials that contributes to sustainable growth and social contribution, particularly in regard to strengthening the creation of new businesses and products that contribute to an environmentally friendly society. And we are shortening the development period by utilizing digital technologies such as AI and materials informatics.

In 2021, our group invested 12.4 billion yen in R&D, and our R&D activities produced the results listed below. As for our future R&D activities, we will contribute to environmental and social issues such as product-weight reduction, fuel efficiency and energy conservation, and decarbonization in industrial infrastructure and electronics-related fields as well as automotive-related fields, where the shift to electrification (xEV)*1 is expected to continue.

*1 The generic term for electric vehicles (EVs), hybrid electric vehicles (HEVs), and plug-in hybrid electric vehicles (PHEVs).

Special Steel Products

- As a copper alloy for relay terminals of batteries for xEVs, HZR150 has both high strength and excellent electrical conductivity. It suppresses heat generation due to electrical resistance when energized and reduces the risk during welding of movable and fixed terminals.
- As a clad material for power modules, Cu/36Ni-Fe/Cu clad metal has a low thermal-expansion coefficient and high thermal conductivity. It can be used in the parts such as leads, thermal-stress buffers, and heat spreaders in a manner that helps to improve the performance of next-generation power modules.
- L-Frex®H is a physical-vapor-deposition (PVD) coating for cold-aluminum-pressed products with excellent durability. Its maximum hardness is approximately 4000 HV, which is top class among hydrogen-containing diamond-like carbons (DLCs). It is expected to improve the mold life in aluminum-press applications such as door-panel peripheral parts that conventionally cannot be molded due to galling.
- DAC®-X, a die-casting mold steel with both high-temperature strength and toughness, combines an alloy design that produces high-temperature strength with a steel-grade-independent process for controlling microstructure. It has excellent heat-cracking resistance, which results in longer mold life. It also contributes to reduced work hours for die repair and improved productivity and quality even in the case of high-cycle casting of die-casting products.
- SLD®-f, a cold-die steel, achieves highly efficient machinability (about 3.5 times higher than that of SKD11 under standard cutting conditions) through a composition that generates belag*2 and refines coarse carbides. It helps our customers to increase cutting speed and reduce die-machining time.

*2 Oxide-based deposit formed on the rake face of a tool during cutting. Formation of belag provides lubrication and reduces tool wear.

Forged Products

- BU1FWBL-E is an explosion-proof, electrically operated segmented-ball valve, with variable open/close speed, that can be used in explosive atmospheres such as chemical plants. Timing of its opening and closing can be set individually, and it has a function for monitoring valve status. Thanks to these features, it contributes to lower construction and operating costs.

Magnetic Materials and Power Electronics

- Based on our newly developed microstructure-control technology, the NMX-G1NH series of rare-earth magnets achieves higher performance while using much lower amounts of heavy rare earths than conventional magnets. We expect it to contribute to scaling down of motors (including motors for xEVs) and increasing their efficiency while reducing the risk of procuring rare elements.

Electric-wire Materials

- An “wear-detection system with optical-fiber-equipped trolley wire” has been successfully commercialized in collaboration with Central Japan Railway Co., Ltd. Real-time monitoring of wear of a trolley wire helps prevent problems before they occur, and even if a wire breaks, it is easy to pinpoint the location of the breakage. This system reduces maintenance-work hours concerning railway infrastructure and helps to promote “smart infrastructure.”



Global Research & Innovative Technology center (GRIT)

Topics 1

2022 National Commendation for Invention “Invention Prize”
Awarded Invention
“Invention of ultra-fine copper-alloy wire and products applying it”



Inventor
Hiromitsu Kuroda and Huang, Yue Tian
Ryohei Okada

Advanced Components & Materials Division,
Wire & Cable Department Hitachi Metals, Ltd.
Electric Material Production Department



Probe cable for medical equipment

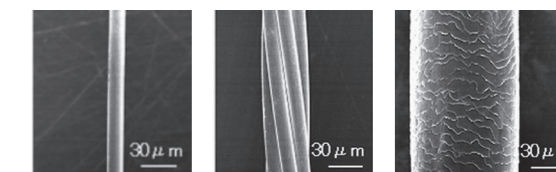
Ultrafine copper-alloy wire that combines high strength and high conductivity at a level not hitherto achievable

In general, when a wire becomes thin, it becomes easy to break, and it is difficult for electricity to flow. Based on a copper-silver alloy that contains 1 to 3% by weight of silver in copper, the developed ultra-fine copper-alloy wire is used in ultra-fine wire conductors. In particular, after the copper-silver alloy is drawn into an ultrafine wire, distortion of the metal structure is controlled by a special heat treatment. As a result, the wire combines high strength and high conductivity at level hitherto unachievable.

When this ultrafine copper-alloy wire is used in ultrafine coaxial cables, it makes it possible to reduce the cable diameter by approximately 20% (e.g., from 0.205 to 0.165 mm) compared to the diameter of conventional cables while maintaining high strength characteristics and electrical conductivity, and a multi-core cable using this ultrafine coaxial cable has an approximately 30% smaller diameter than conventional cables.

This ultrafine copper-alloy wire will enable minimally invasive medical devices*, high-definition imaging, and improved operability in such a manner that contributes to reducing the burden on patients. And responding to social needs, we expect it will be used as a signal-transmission cable for information devices such as smart phones and wearable devices.

*Minimally invasive: reducing the physical burden and impact on the body.



Single wire (0.013-mm diameter) Stranded wire (0.013-mm diameter × 7 wires) Reference: human hair

Topics 2

2021 Cho-Monodzukuri Parts Grand Prize, Japan Strength Award



Award-winning Components
Medical Silicone Cable SiIMED®

The medical-use silicone cable SiIMED® developed by Hitachi Metals has improved sliding performance and chemical resistance while maintaining the mechanical and transmission characteristics and wipe resistance of conventional silicone cables thanks to its unique surface coating that creates an uneven surface. Its coefficient of static friction is reduced to approximately 20% of that of conventional cables to improve sliding performance. We commercialized it in 2020, and it has already been adopted as a probe cable for ultrasonic diagnostic equipment.

Demand for chemical resistance in regard to medical equipment has been increasing owing to the COVID-19 pandemic, and SiIMED® is being used in a variety of medical devices such as power cables for endoscopes and catheters.



At the Award Ceremony on November 26, 2021



Medical silicone cable SiIMED®

Topics 3

SIMTech and Hitachi Metals expand their joint laboratory, and they have started developing materials for metals 3D additive manufacturing.

(SIMTech), a research institute of the Agency for Science, Technology and Research of Singapore, and Hitachi Metals Singapore Pte. Ltd., (Hitachi Metals hereafter) will extend the period of their research and development at the SIMTech-Hitachi Metals Additive Manufacturing Lab for three years, expand the lab’s functions, and research and develop metal powders for additive manufacturing with the aim of providing a new solution for 3D additive manufacturing in Singapore.

Currently, commercial metal powders used for 3D additive manufacturing are not optimized for additive manufacturing. By customizing them for 3D additive manufacturing and developing metal powders for 3D additive manufacturing for fields such as aerospace, automobiles, energy, and semiconductors, we hope to significantly contribute to the rapid progress of 3D additive manufacturing of parts.

By combining Hitachi Metals’ expertise in materials with SIMTech’s advanced manufacturing-process technology, we have established manufacturing processes and quality-evaluation methods for mass production of parts by 3D additive manufacturing. Over the next three years, we will further develop the technology we have developed so far and improve the metal-powder-atomization process using metal-powder manufacturing equipment (i.e., gas atomizer) in a manner that improves the yield and quality of metal powder for 3D additive modeling and 3D-additive-modeled parts.

The Hitachi Metals Group positions the thorough pursuit of diversity and inclusion as an important management strategy and is working on various measures.

Hitachi Metals Basic Policy on Diversity Management

1. We regard differences in gender, nationality, culture, and so forth as unique qualities of the individual, and we ensure diversity through measures such as promoting the career development of women and utilizing global human resources. Such approaches allow us to promote innovation and enhance the flexibility and speed with which we respond to risks and changes.
2. We encourage the growth of the individual, enhance our ability to act as an organization, and reinforce the basis for sustained growth by engaging in active communication and the sharing of values.
3. We aim to become one of the world's top companies in the metal materials sector by designating diversity as a driver of growth, as we transform ourselves into a globally competitive business and challenge ourselves to meet new targets.



Hitachi Metals Action Policy on Diversity Management

Cultivate a structure and environment in which all human resources can broaden their potential and play active roles
 Recognizing that human resources are the source of our competitiveness, the Hitachi Metals Group has worked to enhance and strengthen its human resource development program, believing it is important to develop people able to take action at the global level at Hitachi Metals. Additionally, in our evaluation system, we are revising our seniority-based pay system and have incorporated "diversity management" as one of our manager evaluation metrics. We place great importance on the fact that our managers are responsible for providing the employees who report to them with equitable growth opportunities with an understanding of their values, restrictions they face due to life events and other causes, and their backgrounds, and for getting them actively involved in various measures and initiatives. In addition, we support exchanges among our diverse employees and the realization of diverse careers through human resource exchanges both inside and outside the Hitachi Group, the proactive hiring of experienced personnel, the utilization of the "My Challenge" internal free agent system which allows employees who want to expand their potential to transfer across business divisions or job categories, and the introduction of leave to allow employees to accompany spouses on overseas assignments.

Hitachi Metals is also promoting diversity at the management level. As of April 1, 2022, our 12 executive officers included one foreign national and one female executive. In addition, our Chief Financial Officer (CFO) and Chief Information Officer (CIO)/Chief Data Officer (CDO) were appointed to their roles from outside Hitachi in light of their track records and capabilities demonstrated to date, after being selected from a wide range of candidates who were optimal for the roles and responsibilities in question.

Human Resources as the Source of Competitiveness

The Hitachi Metals Group, which is moving ahead with global business expansion, recognizes human resources as the source of competitiveness. With this understanding, we will become a company where diverse human resources gather, test their opinions against others' views, and work with enthusiasm and pride.

Reflecting the Results of our Survey of Employees into Management Policies

We conduct a Survey of Employees each year, measure the percentage of positive evaluations given for indicators of engagement, and report the results at management meetings, as part of our aim of becoming a company where employees can work with enthusiasm and pride. After these results are discussed at the management meetings and elsewhere, the outcomes of these discussions are then reflected in improvement measures.

Human Resource Development Programs

The Hitachi Metals Group is striving to enhance and strengthen its human resource development programs linking OJT and OFF-JT, so that employees can develop their expertise, enabling them to actively seek out challenges and take actions to achieve success or solve problems, and to become shining examples for the Company who can make themselves indispensable to their organization.

■Nurturing the next generation of human resources

We identify at an early stage the human resources who will take responsibility for management in the next generation and enhance training programs for them. The training programs include crossdivisional personnel rotations and extra-challenging assignments, as well as OFF-JT which includes external training.

■Global recruitment and development of human resources

As our business rapidly globalizes, we are accelerating efforts at global regional headquarters in Europe, the U.S., China, and the rest of Asia, to employ and cultivate human resources who will be future executive candidates. We are also pushing ahead with the early cultivation of future executive candidates who can play active roles globally, through overseas business training and global training for employees in Japan, active hiring of foreign nationals, including international students, and promotion of locally hired staff at Group companies outside Japan into positions of responsibility.

Promoting the Participation and Advancement of Women in the Workplace

In August 2017, we announced that we would further promote the participation and advancement of women in the workplace, in support of the declaration of action by the "Male Leaders Coalition for Empowerment of Women," which is supported by the Cabinet Office. The President sent a message internally to the Hitachi Metals Group regarding our support. In his message, the President declared that developing the next generation of human resources was

a key issue for him as the head of top management, and to this end, he would work to promote the participation and advancement of women. Believing that without the participation and advancement of women it is not possible to create a strong company where diverse human resources work with enthusiasm, he also declared that he would take the lead in further promoting the participation and advancement of women.

Policy on Promoting the Participation and Advancement of Women in the Workplace

1. Achieved targets for the hiring ratio of women among newly hired graduates (career-track positions)

Technical positions: 10% or more

Administrative positions: 40% or more

2. Support for retention

- Career support to eliminate concerns (providing training, opportunities for exchange among women, etc.)
- Awareness-raising for those in management-level positions
- Enhancing systems relating to childcare and nursing care, and raising awareness of these
- Promotion of diverse workstyles through workstyle reform (a work-from-home system, satellite offices, etc.)

3. Promotion measures

- Achieved the target ratio of women in management-level positions: 2.0% in fiscal 2022
- Carried out individual development plans and training for selected employees

Main initiatives

- Held the Hitachi Metals Women's Forum (networking event for employees in career-track positions at Hitachi Metals)
- Corporate manager training and diversity training
- Survey and analysis of participation by women in the Hitachi Group
- Proactively dispatched employees to cross-industry exchange events and external seminars aimed at women managers
- Presented "papa aprons" to male employees and the spouses of female employees who have had children
- Held seminars for management-level employees who have female employees reporting to them
- Held seminars on women's health

Nadeshiko Brand

Each year, the Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange jointly select for the Nadeshiko Brand those companies with a management strategy of striving to promote at a high level the participation and advancement of women in the workplace. Companies are selected according to industry, and Hitachi Metals was named for the iron and steel category in fiscal 2017 and 2019.



Eruboshi Certification: Certification based on the Act on Promotion of Women's Participation and Advancement in the Workplace (Women's Participation Promotion Act)

The Eruboshi Certification is awarded by the Minister of Health, Labour and Welfare to companies that formulate and file action plans for the participation and advancement of women and carry out excellent initiatives to execute these plans.

Companies are evaluated on a three-level scale, in accordance with the number of evaluation criteria they satisfy. In May 2020, Hitachi Metals was certified for Stage 3, having met all evaluation criteria.



Promoting Workstyle Reform

We believe that it is essential to create an environment where diverse employees can share different values and ideas, pursue highly productive workstyles and approaches to their jobs, and realize a sense of fulfillment and personal growth in their work. Accordingly, we have continued to steadily improve operational efficiency and promote and establish work with no restrictions on time or location by pursuing ICT measures, allowing all employees to have real job satisfaction and feel truly comfortable at work.

In fiscal 2021, the total of annual actual working hours of back-office workers was 2,078, with the paid annual leave uptake rate standing at 76%, representing substantial improvements over the figures for fiscal 2016 (when annual actual working hours stood at 2,245 and the paid annual leave uptake rate at 48%) and highly productive workstyles are being instilled. In this way, the Group is working to instill workstyles with a high level of productivity.

Main initiatives

- Promoted satellite offices, mobile work, a work-from-home system, a discretionary work system, and flex work
- Introduced a work-from-home system that eliminates the need to send employees on remote assignments away from their families by enabling employees to mainly work from home, if they desire
- Set out working hours in visual form and provided workstyle training for managers
- Specified common Companywide rules for email and meetings, and enhanced ICT infrastructure such as file-sharing systems and communications tools
- Shared information related to operational improvements such as using RPA and shifting to paperless operations

Composition of Workforce (Non-consolidated)

	Fiscal 2017 (ending March 2018)	Fiscal 2018 (ending March 2019)	Fiscal 2019 (ending March 2020)	Fiscal 2020 (ending March 2021)	Fiscal 2021 (ending March 2022)
Number of employees	6,315	7,067	7,022	6,623	5,889
Male	5,654	6,277	6,215	5,826	5,068
Female	661	790	807	797	821
Ratio of female employees (%)	10.5	11.1	11.5	12.0	13.9
Average age (years)	44.1	43.2	43.4	43.4	44.2
Average service (years)	21.7	18.4	18.8	20.1	19.2
Number of female managers	14	19	19	19	20
Employment ratio of people with disabilities* (%)	2.31	2.21	2.26	2.27	2.36

*Including special subsidiaries

Based on the concept of “prioritizing safety and health above all else,” Hitachi Metals Group is pushing ahead the creation of safe workplaces at its manufacturing sites both in Japan and abroad, by instilling a culture of safety and improving facilities to ensure fundamental safety. Based on the “Health Management Declaration” that we promulgated in June 2019, we are stepping up efforts to build healthy workplaces throughout the Group.

Instilling a Culture of Safety

As part of the Group’s efforts to instill a culture of safety, we have held town hall-style meetings continuously since December 2018, where policies and views on safety are communicated by the President and feedback is received from the Group workplaces. Our town hall-style meetings, which our executives started participating in from fiscal 2020 onwards, are held to obtain a wide range of opinions to reflect in our management policies. Meanwhile, at our manufacturing sites, we have been expanding the scope of our “2S-3F” (Sort Out, Set in Order, Fixed Item, Fixed Quantity, and Fixed Location) activities as part of safety activities, and working to instill a culture of safety at the sites.

In addition, from November 2020 onwards we started specialized level-based safety training for key employees differentiated by level (directors, business/plant managers,

Group company presidents, production line managers, and staff in charge of safety) in order to cultivate human resources able to operate and manage health and safety activities in an organization-wide and systematic manner. As of June 2022, 30 specialized safety training sessions have been held, with 712 employees completing their training. Key employees involved in the training have got proactively involved in health and safety activities in their respective departments and have expanded on what they have learned during their specialized safety training. Through these efforts, we are carrying out continuous operation of our occupational health and safety management system that serves as our mechanism for instilling and re-establishing a culture of safety, and for operating and managing health and safety in an organization-wide and systematic manner.

Occupational health and safety management system



Health and safety audits

In addition to confirming activities regarding the Hitachi Metals Group’s key health and safety measures, as well as compliance with the Company’s rules and related laws and regulations, we provide health and safety training to supervisors. Through health and safety audits of our business offices, we confirm the status of key health and safety initiatives under our health and safety promotion plan, as well as the status of compliance with chemical-related laws and regulations, while also providing health

and safety training to supervisors on countermeasures for preventing human error and safety measures to prevent employees being caught in spinning machinery or crushed by machinery, drawing on recent accident-related trends. Although workplaces’ ability to respond to these measures was limited in fiscal 2021 in the wake of the COVID-19 pandemic, the number of audits implemented at workplaces has increased from fiscal 2022.

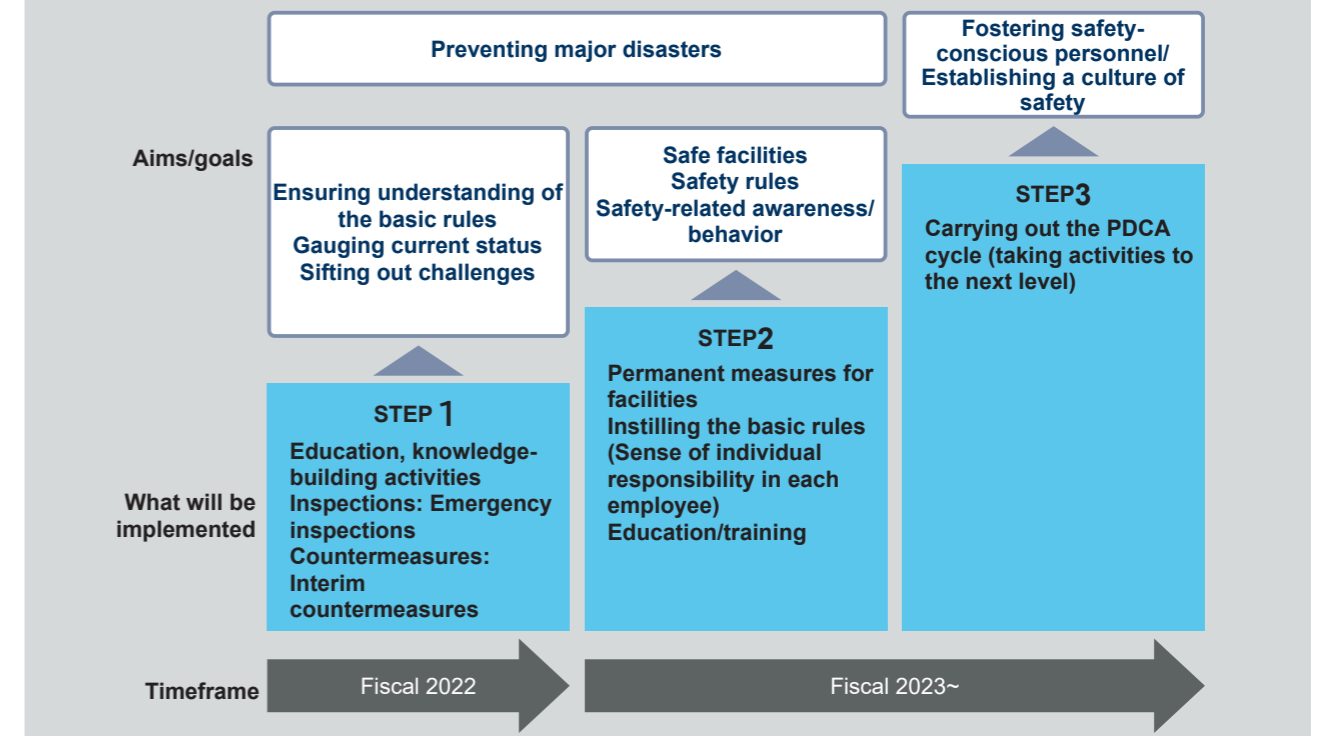
Improving Facilities to Ensure Fundamental Safety

We are pushing forward the improvement of facilities to ensure fundamental safety. In fiscal 2021, we gave top priority across the Group to safety measures to prevent employees being caught in spinning machinery or crushed by machinery.

In fiscal 2022, at the same time as continuing to prioritize safety measures to prevent employees being caught in/ crushed by machinery, we have implemented safety measures based on risk assessments, starting with high-risk operations.

Activities for Instilling Hitachi Metals’ Basic Rules (the “Ironclad Rules”) for Preventing Major Disasters

Hitachi Metals’ activities for instilling our basic rules (the “Ironclad Rules”), based on analysis of disasters, began in fiscal 2022. In fiscal 2022, as Step 1, we have been carrying out training and knowledge-building activities to ensure employees understand the basic rules. We are also carrying out inspections and putting in place countermeasures, gauging the current status and sifting out challenges. From fiscal 2023, while continuing to carry out the Step 1 initiatives, we will also put in place permanent measures for safety at facilities and work to instill the basic rules among employees, as Step 2. Finally, as Step 3, we will carry out the PDCA cycle for the abovementioned initiatives with the aim of fostering personnel who can behave safely at all times and establishing a culture of safety in which all employees encourage each other to be aware about safety.



Health Management

The Group is working to build better physical and mental health among its employees. For example, we conduct stress checks on all employees and take measures based on the results. We are also focused on creating a more dynamic working environment by eliminating overwork through workstyle reform.

Having promulgated the “Health Management Declaration” in June 2019, we regard our employees’ health management as a management issue and are reinforcing health management measures Groupwide, advancing initiatives such as prevention of lifestyle diseases and supporting efforts to quit smoking.

Health Management Declaration

The Corporate Creed of Hitachi Metals, Ltd. is to contribute to society by being a “best enterprise.” A “best enterprise” is a company that “every employee is motivated to work at.” If we are to be a company where every employee can make full use of their abilities with a positive attitude and a sense of dynamism every day and is able to perceive their own growth, it is first essential that each employee be healthy. Under our management policy of “Prioritizing safety and health above all else,” we hereby declare that we will promote activities focused on employees’ health, together with safety activities.

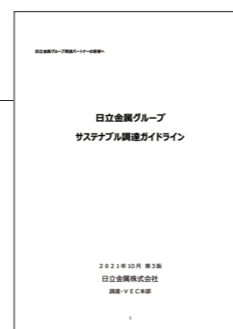
June 2019
Hitachi Metals, Ltd.

The Hitachi Metals Group procures materials from suppliers in countries and regions around the world. Conscious of social responsibility and its impact, we have formulated our procurement policy with the aim of practicing fair and impartial procurement activities and, with the cooperation of many suppliers, engage in procurement that takes CSR into consideration.

Issuance of the Hitachi Metals Group Supply Chain CSR Procurement Guideline

Hitachi Metals published the Hitachi Metals Group Supply Chain CSR Procurement Guideline on our website in October 2021. Following the publication of the previous version of the Hitachi Metals Group Supply Chain CSR Procurement Guideline, the contents of this Guideline have been updated based on the latest standards that have been acknowledged worldwide. The Guideline encompasses a wide range of CSR concepts recognized as a company's social responsibility, including respect for human rights, consideration of the environment, fair trading and ethics, occupational health and safety, product quality and safety, information security, and social contributions. When a clear violation is discovered among any procurement partner, the

Guideline stipulates that corrective measures must be taken. When starting a new business relationship, we request compliance with our Sustainable Procurement Guideline, and, at the same time, we conduct corporate surveys on bribery risks based on the Hitachi Metals Global Compliance Program (HMGCP) to strengthen our screening of suppliers.



Hitachi Metals Group Sustainable Procurement Guideline October 2021 Hitachi Metals, Ltd. Procurement & VEC Division,

Response to Globalization

Hitachi Metals Group is striving to establish a global procurement network while augmenting our procurement base. We are working to support the optimization of procurement activities overall while enhancing CSR risk management and increasing concentration and consolidation of purchasing across the Group. We have also set up Global Procurement Offices (GPOs) in four locations—Europe, the United States, Asia, and China—where we are promoting transparent procurement activities from optimal suppliers worldwide, at the same time as strengthening governance at our overseas Group companies. As part of this, since fiscal 2019 we have been pushing forward the standardization of procurement operation criteria for overseas Group companies, and in fiscal 2021 worked to embed these standards through auditing and guidance carried out by GPOs.

Responsible Mineral Procurement

In July 2010, the United States enacted the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act), out of concern that minerals mined in the Democratic Republic of the Congo (DRC) and surrounding countries could become fund sources for armed groups, designating the following four minerals (3TG) as conflict minerals: tantalum, tin, tungsten, and gold. The region covered by the EU Conflict Minerals Regulation, passed

in July 2021, was expanded to include Conflict-Affected and High Risk Areas (CAHRAs) when it came into force in January 2021.

In recent years, there have been growing concerns about other aspects including serious human rights violations and environmental pollution, in addition to conflict. In the wake of such developments, the Hitachi Metals Group announced the Conflict Minerals Procurement Policy in September 2013 and the Hitachi Metals Group's Policy for Responsible Supply Chain of Minerals in August 2021. The Hitachi Metals Group, in coordination with industry groups, has clarified that it is working to ensure responsible procurement that does not contribute to conflict and human rights violations, and is accelerating efforts in coordination with industry groups to enhance the transparency of its supply chain.

To carry out responsible procurement, we conduct activities including surveys using the Conflict Minerals Reporting Template (CMRT) and other tools published by the Responsible Minerals Initiative (RMI), to specify the countries of origin and smelters of the minerals used in the supply chain, and request suppliers to procure minerals from smelters that are compatible with the Responsible Minerals Assurance Process (RMAP). Up to now, no cases of armed groups being funded or problematic uses of minerals have been found.

Periodic Audits of Operations

Acquiring correct and legal knowledge of operations is indispensable during procurement transactions. We regularly assemble our procurement specialists at business offices for training about laws and regulations. Additionally, all offices and Group companies in Japan perform annual mutual audits of operations. The auditors are procurement managers from offices and Group companies, and executives from the Head Office.

In fiscal 2020 as well, despite restrictions on movement due to the COVID-19 pandemic, we performed most mutual audits remotely for all offices and Group companies to monitor whether operations were being conducted in accordance with laws and internal regulations, as well as with Company regulations.

Green Procurement

Hitachi Metals Group procures products with a minimal environmental footprint from procurement partners which are working proactively on environmental conservation activities. In 1998, Hitachi Metals issued the "Green Procurement Guidelines" to share with our suppliers our views on environmental considerations, including the prevention of global warming, the recycling of resources, and the conservation of biodiversity and ecosystems. Since then, we have repeatedly revised these guidelines in response to the latest laws and chemical regulations

and have notified our suppliers of the latest information. In addition, in June 2021, we endorsed the TCFD recommendations; going forward, we will take up initiatives on reducing our environmental footprint (reduced resource consumption, reduced energy consumption, recycling and appropriate management of various chemicals contained in products), keeping in mind not only compliance with the law and responding to demands from our customers but also the transition towards a low-carbon society.

Procurement BCP Initiatives

We engage in procurement BCP activities as preparation against risks that could halt our business, including earthquakes, wind and flood damage, and other natural disasters, as well as new infectious diseases, fires, and power outages. We are working to

minimize procurement risk by diversifying and decentralizing our sources of procurement, while asking our key suppliers to have their own BCP measures in place.

The Hitachi Metals Group stipulates respect for human rights in the Hitachi Metals Group Code of Conduct and the supplementary Hitachi Metals Group Human Rights Policy. Our basic stance is to respect the rights of all persons involved in our business operations, and make all possible efforts to avoid infringing such rights.

The Hitachi Metals Group Human Rights Policy in Practice

We formulated the Hitachi Metals Group Human Rights Policy in December 2013. This policy recognizes the human rights stated in the International Declaration of Human Rights and in the International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work as representing the minimum starting point for such rights. It clearly states that the Hitachi Metals Group pursues

measures to observe the international principles of human rights. Specifically, we will implement human rights due diligence and appropriate education on the basis of the UN Guiding Principles on Business and Human Rights, together with strictly observing the laws of the regions and countries in which we do business.

Initiatives on Human Rights Due Diligence

"Human rights due diligence" refers to defining and assessing impacts on human rights, taking action to prevent and redress negative impacts, and continually validating the effects of such actions. The Hitachi Metals Group will assess the actual and potential impact on human rights resulting from the business activities of the Company, our value chain, and develop countermeasures based on ranking human rights risks in terms of "seriousness" and the

"likelihood of occurring," and putting countermeasures in place based on level of priority.

Our participation in human rights due diligence is centered on Hitachi, Ltd. We study priorities and countermeasures, including assessments by the procurement divisions regarding the impact on human rights in our supply chain, and assessments by the human resources divisions regarding the impact on human rights of employees.

Human Rights Educational Activities and Harassment Prevention Efforts

We regularly use e-learning to conduct human rights education and training for each level of employee to systematically raise awareness of human rights (with 14,150 employees, on a consolidated basis, receiving human rights-related training in fiscal 2021; this includes employees who received harassment-related training). In addition, we established various harassment hotlines to incorporate the

Hitachi Metals Group Human Rights Policy into all of our activities.

As our business activities expand rapidly on a global basis, we will enhance human rights awareness and support measures to prevent abuses of human rights based on differences of religion or nationality, the presence or absence of disabilities, gender, or other factors.

Efforts to Strengthen Global Human Rights Risk Management

In April 2021, we established the Human Rights Risk Management Committee as part of our efforts to strengthen global human rights risk management. The Committee is conducting activities with a focus on its priority issues of forced labor and immigrant labor. We are currently surveying the status of labor management at our major

Group production bases in each country and plan to expand the scope of the survey to include business partners (suppliers). We will promote sound management of human rights risks by evaluating the results of the surveys and taking appropriate measures.

Foundation



Kenichi Nishiie
Chair of the Board of Directors

At its meeting on September 26, 2022, the Board of Directors expressed its approval of the tender offer for the Company's shares from a consortium of companies led by Bain Capital (hereinafter, the "New Partners"). It also resolved to recommend that our shareholders apply for the tender offer. Upon completion of the tender offer and a series of related transactions, the Company will separate from the Hitachi Group, and its common stock will be delisted.

At such an important time as this for the Group, the role of the Board of Directors is even more important. The current Board of Directors is composed of Directors who have a wealth of experience as directors of the Company and can direct and advise based on their deep understanding of the Company. The Board of Directors also recognize the importance of further strengthening corporate governance in order to increase corporate value. It seeks to do that by effectively implementing the supervisory and executive functions of management and building an organizational structure that balances the two.

In addition, we express our deepest apologies once again to shareholders and other stakeholders for the significant inconvenience caused by the quality assurance issues. The Company's executive component is improving and strengthening the quality assurance organizational structure, which includes its composition, operation, and audits, and we will closely monitor its progress and effectiveness.

To reliably execute the Group's efforts, including those described above, it critical to ensure that the Board of Directors have the ability to execute. At

the May 2022 meeting of the Board of Directors, the Board discussed and evaluated its effectiveness based on the evaluation and opinions of each Director obtained from surveys and interviews carried out in FY2021. The results confirmed that the Board is able to set agendas appropriately and deepen discussions on the direction of strategies, as well as that advanced reviews are being carried out for important matters. On the other hand, the Board recognized that there is room for further improvement on setting Company direction amid changing market and business environments, deliberating management strategies and setting processes for supervision of their execution, establishing a systematic risk management framework and supervision of its operation, and obtaining diversity in the Directors' skills. We also conducted an evaluation of the effectiveness of the Audit Committee, and confirmed its overall effectiveness. We thus note these evaluations in this Integrated Report from this fiscal year.

Going forward, we will continue to increase the effectiveness of the Board of Directors and the Audit Committee, improving and strengthening the Company based on evaluation results.

We, the Board of Directors, fully support the Group in its efforts to accelerate transformation and growth as a materials company that "leads sustainability by high performance" and further enhance its corporate value. We look forward to your continued support.

Basic Views on Corporate Governance

The underlying basis for corporate governance at the Company is to ensure transparent, sound, and efficient management, meet the needs of our stakeholders, and increase corporate value. We believe increasing corporate value to be one of our most important management challenges. Accordingly, it is imperative that we create an organizational structure in which management oversight and business operations function effectively and in balance. We also believe that timely, high-quality information disclosure contributes to the improvement of corporate governance. In pursuit of this philosophy, we go

beyond simple financial disclosure, regularly publishing the details of individual business segments and medium-term management plans. We acknowledge that compliance is the linchpin of corporate governance. Nonetheless, our corporate activities go beyond mere compliance with laws and internal regulations, extending to the role we must fulfill as a member of society, based on respect for social ethics and morality. The Company established the Hitachi Metals Group Code of Conduct for actions that describe the above details as specific standards of conduct for its executives and employees.

Overview of the Governance Structure

Organization System	
A Company with a nominating committee, etc.	
Directors	
Number of Directors stipulated in the Articles of Incorporation	10
Term of office of Directors stipulated in the Articles of Incorporation	One year
Chair of the Board of Directors	Other Director
Number of Directors	Five (no female Director)
Outside Directors	
Number of Outside Directors	Two
Number of Outside Directors designated as Independent Directors	Two
Committees	
Composition of Committees	The Nominating Committee, Audit Committee, and Compensation Committee
Number of Committee members	Three members each on the Nominating Committee, Audit Committee, and Compensation Committee
Executive Officers	
Number of Executive Officers	12
Independent Directors	
Number of Independent Directors	Two

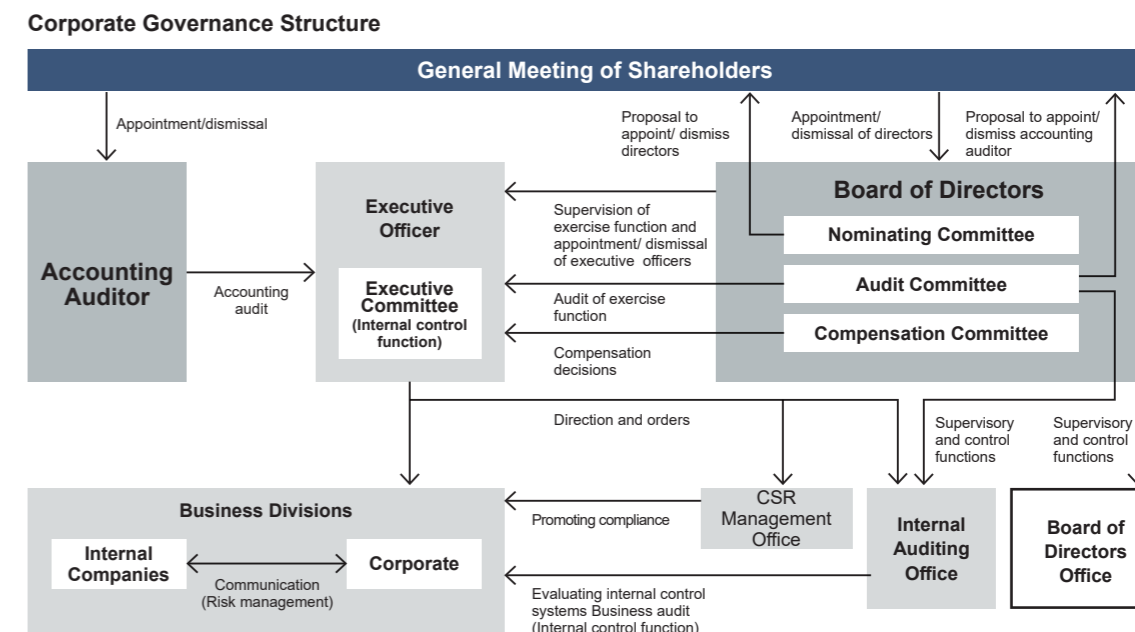
Measures aimed at the enhancement of corporate governance

- Transition to a “company with a committee, etc.,” as defined in the Commercial Code (June 2003)
- Increase in the number of Outside Directors serving as Independent Directors from two to three (June 2016)

Ratio of Inside Directors and Outside Directors



Overview of Corporate Governance System, etc.



Membership composition of each committee and affiliations of chairs

Position	Name	Nominating Committee	Audit Committee	Compensation Committee
Director	Kenichi Nishiie		○	
Director	Makoto Uenoyama	○	◎	○
Director	Koichi Fukuo	◎	○	◎
Director	Mitsuaki Nishiyama	○		○
Director	Mamoru Morita			

Note: ◎ Chair ○ Committee member

The Company has adopted the statutory organizational structure of a Company with a Nominating Committee, etc. This is because we concluded that this structure would contribute to the bold and speedy execution of measures relating to Groupwide management, such as business restructuring and strategic investments, and also that the transparency, soundness, and efficiency of management would be effectively improved through strengthening the decision-making and supervisory functions by Outside Directors, who are well versed in social norms and have a broader perspective, abundant experience, and in-depth knowledge, in the Nominating Committee, the Audit Committee, the Compensation Committee, and the Board of Directors. Under this system, five Directors (of whom two are Outside Directors) have been appointed, and the Company has established the Board of Directors, Nominating Committee, Audit Committee, and Compensation Committee pursuant to the provisions of the Companies Act. Furthermore, the Company has established the Board of Directors Office to assist with the execution of duties by the Board of Directors and each Committee. The Board of Directors Office has persons in charge of the Board of Directors and each Committee.

The purpose of the Nominating Committee is to make decisions on matters relating to items concerning appointment and dismissal of Directors to be submitted at a General Meeting of Shareholders. The Committee is authorized to decide such matters as well as to designate persons to be entitled to convene a Board of Directors meeting and persons to report about the status of the

Committee's execution of duties to the Board of Directors from among its Committee members.

The purposes of the Audit Committee are to audit the execution of duties by Directors and Executive Officers and resolve issues such as matters relating to items concerning appointment, dismissal, and non-reappointment of the Accounting Auditor to be submitted at a General Meeting of Shareholders, in order for the Company's business to be operated lawfully and properly. The Committee is authorized to resolve such issues as well as to conduct policies for determination to dismiss or not to reappoint the Accounting Auditor or nominate persons to be entitled to convene a Board of Directors meeting from among its Committee members. Moreover, under the Article 405 of the Companies Act of Japan, the Audit Committee is also authorized to request reports about the business and matters relating execution of duties of the Company or its subsidiaries, and to investigate the status of their business operations and assets.

The purpose of the Compensation Committee is to determine the compensation and its details received by each Director and Executive Officer. The Committee is authorized to decide such matters as well as to policy on the determination of compensation and its details received by each Director and Executive Officer; also, it designates persons to be entitled to convene a Board of Directors meeting and persons to report about the status of the Committee's execution of duties to the Board of Directors from among its Committee members.

Directors' Skill Set

	Committees to which the Director belongs			Experience and Expertise								
	Nominating Committee	Audit Committee	Compensation Committee	Corporate management	Manufacturing/Technology/Quality control	R&D	Sales/Marketing	Accounting/Finance/M&As	IT/Digitalization	Legal affairs/Risk management	Global management	Environment/Society/Human resources
Kenichi Nishiie		○						○		○	○	○
Makoto Uenoyama Outside Director	○	Chair	○					○		○	○	
Koichi Fukuo Outside Director	Chair	○	Chair	○	○	○	○				○	
Mitsuaki Nishiyama	○		○	○				○			○	
Mamoru Morita							○	○			○	

For nominations of candidates for the position of Director, to ensure the effectiveness of the management-supervision and decision-making functions of the Board, factors to be considered are the diversity in experience, expertise, etc., of the candidates, the composition ratio between Outside Directors and other Directors (Directors concurrently serving as Executive Officers and others), and other such matters.

The Audit Committee as an Audit Organization

The Audit Committee is composed of three committee members. The Audit Committee is in charge of auditing business execution by Directors or Executive Officers in accordance with laws and regulations or the Articles of Incorporation, the appropriateness of management's judgments, the adequacy of internal control systems, and accounting audit. The execution of duties by the Audit Committee is assisted by a person in charge of the Audit Committee at the Board of Directors Office. To ensure independence from Executive Officers, the person in charge of the Audit Committee does not concurrently serve in any

position at any other business operating division. The Audit Committee formulates annual auditing policies and audit implementation plans, and performs audits based on said policies and plans by hearing reports on important items and having Audit Committee members visit each facility, etc., and each subsidiary to conduct audits as regular audits. In addition, the Audit Committee conducts special audits if it finds possibility of violations of laws and regulations or the Articles of Incorporation by the Directors or the Executive Officers.

Accounting Auditor

The Company's Accounting Auditor is Ernst & Young ShinNihon LLC. Audits have been continuously conducted for 54 years. The certified public accountants named in the table below conducted accounting audits. Under the direction of said certified public accountants, as necessary, certified public accountants, certified public accountant

assistants, and other personnel from Ernst & Young ShinNihon LLC assisted with the execution of accounting audit duties. Seven certified public accountants and 35 other personnel assisted with the Company's accounting audit duties.

Name of certified public accountant, etc.	Auditing firm of certified public accountant
Teruyasu Omote, Engagement partner	Ernst & Young ShinNihon LLC
Hiroki Morimoto, Engagement partner	Ernst & Young ShinNihon LLC

Matters Relating to Directors and Executive Officers

Functions and Roles of Directors

The items to be resolved by the Board of Directors are defined by the Board of Directors Rules. They consist of items that are solely to be decided by the Board of Directors under the Companies Act (decisions regarding basic management policies, basic policies related to the maintenance of internal control systems and other policies, appointment and dismissal of Executive Officers, appointment and dismissal of the

Representative Executive Officer, etc.), as well as items concerning dividends from surplus, issuance of new shares and subscription rights to shares, the acquisition, loan, and disposal of assets in excess of a specified amount, debt guarantees, reorganization, etc. Decisions on items other than those mentioned above have been delegated to the Chairperson and Chief Executive Officer.

Outside Directors' Functions, Roles, and Their Relationship with the Company

Outside Directors act as members of the Board of Directors and members of the Nominating Committee, Audit Committee, and Compensation Committee. They have extensive experience and advanced knowledge, are well versed in the general norms of society, and use their broad perspectives to contribute to the enhancement of decision-making and auditing functions, and efficiency of the Company's management.

In addition, with the decision to implement a series of transactions related to a tender offer by a consortium of companies led by Bain Capital for the Company's common stock, Outside Directors act as members of the Special Committee. The committee was established to eliminate arbitrariness in the Company's decision-making process, and examine and determine the pros and cons of the transactions, the appropriateness of the terms and conditions, and the fairness of the procedures, including the process for selecting

the purchaser (partner), etc.

The Company considers each Outside Director to be fully independent from the Company, and has registered all of these Directors with the Tokyo Stock Exchange as Independent Directors.

The Company has business dealings with the companies for which Mr. Makoto Uenoyama and Mr. Koichi Fukuo formerly worked. However, the transaction amounts with these companies during fiscal 2021 are substantially less than 1% of the consolidated revenues of the Company and each of those. Therefore, their former employment status is deemed to have no impact on their independence as Outside Directors.

With respect to relationships between each Outside Director and the Company, the independence of each Outside Director is judged according to the Criteria for Independence of Outside Directors, mentioned below.

Business Execution System

Regarding business execution, the Board of Directors delegates a great deal of decision-making authority concerning business execution to Executive Officers to achieve prompt decision-making. The Company has established the Executive Committee to ensure that the Chairperson and Chief Executive Officer makes decisions on and executes business operations

in compliance with laws and regulations and the Articles of Incorporation, as well as more efficiently. The Chairperson and Chief Executive Officer decides on important matters regarding decisions of business delegated by the Board of Directors to the Chairperson and Chief Executive Officer after deliberation at the Executive Committee.

Analysis and Evaluation of the Effectiveness of the Board of Directors

The Company conducted a survey and interviews with Directors regarding the effectiveness of the Board of Directors in fiscal 2021. The main items on the survey included the composition of the Board, decision-making process, level of contributions, and operation and support systems.

At the Board of Directors meeting held in May 2021, the effectiveness of the Board of Directors was discussed and evaluated based on the results of surveys and interviews conducted for each Director.

As a result, the Board of Directors has verified that its effectiveness as a whole is ensured, as agendas are appropriately set, discussions about the strategic direction are deepened, and important agendas are reviewed in advance.

On the other hand, the Company has recognized room for further improvement in the following matters:

- 1) Process for deliberation of corporate direction and management strategy amid changing market and business environments and supervision of its execution
- 2) Establishment of a systematic risk management system and supervision of its operation
- 3) Diversity in the Directors' skills

We will use the above findings for operation of the Board of Directors to further enhance its effectiveness in the future. In addition, the executive component is improving and strengthening the quality assurance organizational structure, which includes its composition, operation, and audits. The Board of Directors will continue to closely monitor its progress and effectiveness.

The Company conducted a survey and interviews with members of the Audit Committee regarding the committee's

effectiveness in FY2021. At the May 2022 meeting of the Audit Committee, the committee discussed and evaluated its effectiveness based on the evaluation and opinions of each member obtained from the surveys and interviews.

The results confirmed that the effectiveness of the Audit Committee as a whole has been secured. Continuing from the previous fiscal year, tripartite auditing (by the Audit Committee, Internal Auditing Office, and the Accounting Auditor) has been fundamentally performing well, with important discussions on quality assurance issues and internal controls being actively carried out and the methods of discussing internal audit findings with the executive side improving. On the other hand, we confirmed that there is room for further improvement as follows, including auditing functions in the area of overseas relationships and ways to strengthen in those relationships.

- 1) Ideal audit functioning, including in the Audit Committee Concerning information gathering, business management, and auditing of overseas subsidiaries, the Auditing Committee will strengthen supervision by closely exchanging information and collaborating with the Internal Auditing Office and the Accounting Auditor.
- 2) Follow-up of audits

Auditing will continue to monitor corrective measures and measures taken by the executive component to prevent reoccurrence of quality assurance issues.

With an emphasis on the areas above, the Audit Committee will continue to focus on the progress and effectiveness of the measures to address them and increase the effectiveness of the committee.

The Criteria for Independence of Outside Directors are provided in Article 15, Criteria for Independence of Outside Directors of the Corporate Governance Guidelines of Hitachi Metals, Ltd. The guidelines are posted on our corporate website (<https://www.hitachi-metals.co.jp/e/ir/ir-csr.html>).

Career and Meeting Attendance of Directors (as of June 21, 2022)

Note: Information regarding attendance at meetings held between April 2021 and March 2022 is provided.



Kenichi Nishiie
Director

Attendance at meetings
Board of Directors:
15/15 meetings
Audit Committee:
13/13 meetings

Apr 1979 Joined Hitachi Metals, Ltd.
Apr 2012 General Manager of Internal Auditing Office
Apr 2013 Deputy General Manager of Magnetic Materials Company and General Manager of Planning Dept.
Apr 2015 Representative Executive Officer, General Manager of Procurement Center and Corporate Export Regulation Office
Jan 2016 Representative Executive Officer, General Manager of Human Resources & General Administration Division, Procurement & Value Engineering for Customers Division and Corporate Export Regulation Office
Apr 2016 Vice President and Executive Officer, General Manager of Human Resources & General Administration Division and Procurement & Value Engineering for Customers Division
Apr 2017 Representative Executive Officer, Senior Vice President and Executive Officer and General Manager of Corporate Management Planning Division
Apr 2018 Representative Executive Officer, Senior Vice President and Executive Officer and General Manager of Corporate Management Planning Division and Group Company Auditing Office (resigned in March 2019)
Jun 2019 Director
Jun 2020 Chair of the Board of Directors (current position)

Reasons for appointment

The Company determined that Mr. Nishiie will contribute to the strengthening of the decision-making and monitoring functions of the Board of Directors and enhancing their effectiveness as a board member, by leveraging his abundant experience and in-depth knowledge in finance, accounting, and other areas obtained as General Manager of the Audit Division, the head of Procurement, Human Resources & General Administration Division, and Corporate Management Planning Division of the Company, as well as his thorough knowledge in the Group's operations.



Makoto Uenoyama
Outside Director

Attendance at meetings
Board of Directors:
15/15 meetings
Nominating Committee:
4/4 meetings
Audit Committee:
13/13 meetings
Compensation Committee:
5/5 meetings

Apr 1975 Joined Matsushita Electric Industrial Co., Ltd. (currently Panasonic Corporation)
Apr 2006 Executive Officer (in charge of Accounting)
Jun 2007 Director (in charge of Accounting and Finance)
Apr 2010 Managing Director (in charge of Accounting and Finance)
Jun 2012 Managing Executive Officer (resigned in March 2013)
Apr 2013 Corporate Adviser (resigned in March 2015)
Jun 2013 Outside Audit & Supervisory Board Member of SOHGO SECURITY SERVICES CO., LTD. (Standing Audit & Supervisory Board Member until June 2017) (current position) (scheduled to resign in June 2021)
Jun 2019 Outside Director of Hitachi Metals, Ltd. (current position)

Reasons for appointment

The Company determined that Mr. Uenoyama will contribute to the management of the Company as well as the strengthening of the decision-making and monitoring functions of the Board of Directors and enhancing their effectiveness, by reflecting his abundant experience and in-depth knowledge in finance and accounting areas obtained through his experience in the finance and accounting operations of Panasonic Corporation over the years as well as the experience as Director in charge of accounting and finance, from a more objective standpoint as Outside Director. He will continue to play suitable roles as a member of the Nominating Committee, Audit Committee, and Compensation Committee from an objective standpoint in order for these committees to perform their functions. As the Chairperson of the Audit Committee, he is expected to lead the committee.



Koichi Fukuo
Outside Director

Attendance at meetings
Board of Directors:
15/15 meetings
Nominating Committee:
4/4 meetings
Audit Committee:
13/13 meetings
Compensation Committee:
5/5 meetings

Apr 1978 Joined Honda Motor Co., Ltd.
Jun 2005 Operating Officer (in charge of quality and certification)
Jun 2010 Managing Officer
Apr 2014 Senior Managing Officer
Nov 2014 Executive Vice President and Director of Honda R&D Co., Ltd.
Apr 2015 President and Representative Director (resigned in March 2016)
Jun 2015 Senior Managing Officer and Director of Honda Motor Co., Ltd. (resigned in June 2016)
Jun 2018 Outside Director of Seven Bank, Ltd. (current position)
Jun 2019 Outside Director of Hitachi Metals, Ltd. (current position)

Reasons for appointment

The Company determined that Mr. Fukuo will contribute to the management of the Company as well as the strengthening of the decision-making and monitoring functions of the Board of Directors and enhancing their effectiveness, by reflecting his abundant experience and in-depth knowledge in the automobile industry, to which our products are mainly supplied, obtained as the head of quality and certification of Honda Motor Co., Ltd. and as a corporate manager of the company and its group companies, from a more objective standpoint as Outside Director. He will continue to play suitable roles as a member of the Nominating Committee, Audit Committee, and Compensation Committee from an objective standpoint in order for these committees to perform their functions. We expect him to lead the Nominating Committee and the Compensation Committee by becoming the Chairperson of both committees.



Mitsuaki Nishiyama
Director

Attendance at meetings
Board of Directors:
15/15 meetings
Nominating Committee:
4/4 meetings
Compensation Committee:
5/5 meetings

Apr 1979 Joined Hitachi, Ltd.
Apr 2008 General Manager of Finance Department I
Apr 2011 Executive Officer and CFO of Hitachi Cable, Ltd.
Jun 2012 Executive Officer, CFO, and Director
Apr 2013 Vice President and Executive Officer, CFO, CPO, and Director (resigned in June 2013)
Jul 2013 Vice President and Managing Officer, President of Cable Materials Company, and Deputy General Manager of Corporate Export Regulation Office of Hitachi Metals, Ltd.
Apr 2014 Vice President and Executive Officer, Chief Financial Officer, and General Manager of Finance Center, Human Resources & General Administration Center and Information Systems Center (resigned in March 2015)
Apr 2015 Vice President and Executive Officer of Hitachi, Ltd.
Jun 2015 Outside Director of Hitachi Transport System, Ltd. (resigned in June 2016)
Apr 2016 Representative Executive Officer, Senior Vice President and Executive Officer, and CFO of Hitachi, Ltd. (resigned in March 2020)
Apr 2020 Representative Executive Officer, Chairperson and Chief Executive Officer of Hitachi Metals, Ltd.
Jun 2020 Representative Executive Officer, Chairperson, President and Chief Executive Officer, General Manager of Advanced Metals Division and Director
Apr 2021 Representative Executive Officer, Chairperson, President and Chief Executive Officer and Director (current position)

Reasons for appointment

The Company determined that Mr. Nishiyama will contribute to the strengthening of the decision-making function of the Board of Directors and enhancing its effectiveness as a board member, by having him share information of business execution divisions with the Board of Directors and by leveraging his abundant experience and in-depth knowledge obtained as head of finance division at Hitachi Ltd., as head of finance division and the Cable Materials business at the Company, and at the helm of executive management of the Company as Chairperson from April 2020 and Chairperson and President from June 2020.



Mamoru Morita
Director

Attendance at meetings
Board of Directors:
15/15 meetings

Apr 1983 Joined Hitachi, Ltd.
Apr 2013 Board Director of Hitachi Industrial Equipment Systems Co., Ltd. (current position)
Apr 2015 General Manager of Strategy Planning Division of Hitachi, Ltd.
Director of Hitachi Asia Ltd. (resigned in March 2018)
Apr 2016 Vice President and Executive Officer of Hitachi, Ltd.
Director of Hitachi Research Institute (current position)
Apr 2019 Board Director of Hitachi Industrial Products, Ltd. (resigned in March 2020)
Jun 2019 Director of Hitachi Chemical Company, Ltd. (currently Showa Denko Materials Co., Ltd.) (resigned in June 2020)
Apr 2020 Senior Vice President and Executive Officer of Hitachi, Ltd. (current position)
Director of Hitachi Global Life Solutions, Inc. (current position)
Jun 2020 Director of Hitachi Metals, Ltd. (current position)

Reasons for appointment

The Company determined that Mr. Morita will contribute to the strengthening of the decision-making and monitoring functions of the Board of Directors and enhancing their effectiveness, by having his abundant experience obtained as an executive manager at Hitachi Ltd. and its group companies and his in-depth knowledge related to management strategy reflected in the management of the Company.

Executive Officers (as of June 21, 2022)

Mitsuaki Nishiyama

Representative Executive Officer
Chairperson
President and Chief Executive Officer

Naohiko Tamiya

Representative Executive Officer
Vice President and Executive Officer
General Manager of Human Resources & General Administration Division

Tony I. Cha

Vice President and Executive Officer
Chief Financial Officer
General Manager of Finance Division

Kazuya Murakami

Vice President and Executive Officer
General Manager of Advanced Components & Materials Division
Deputy General Manager of Corporate Export Regulation Office

Ryoichi Aita

Executive Officer
Chief Quality Officer

Yoshie Asaki

Executive Officer
General Manager of Procurement & Value Engineering for Customers Division
Chief Risk Management Officer

Yoshihiro Anmo

Executive Officer
CIO (Chief Information Officer) & CDO (Chief Digital Officer)

Toru Taniguchi

Executive Officer
General Manager of Advanced Metals Division
Deputy General Manager of Corporate Export Regulation Office

Hisaki Masuda

Executive Officer
General Manager of Corporate Management Planning Division

Kenji Minegishi

Executive Officer
Deputy General Manager of Advanced Components & Materials Division
General Manager of Magnetic Materials Business Unit

Hajime Murakami

Executive Officer
General Manager of Technology, Research & Development Division
General Manager of Global Research & Innovative Technology Center

Toru Yamamoto

Executive Officer
General Manager of Business Activity & Marketing Division

Compensation for Directors and Executive Officers, etc.

① Details of the policy on the determination of the amounts of compensation, etc., for Directors and Executive Officers and the calculation methods thereof, and the determination method

The Compensation Committee, in accordance with the provisions of the Companies Act, sets forth the "Policies Concerning the Determination of Compensation, etc., for Directors and Executive Officers." The amounts of compensation, etc. for each Director and Executive Officer are determined by resolution of the Compensation Committee based on this policy.

A summary of how compensation is determined for Directors and Executive Officers is as follows.

1. Basic policy on determination of individual compensation for Directors and Executive Officers

- (1) Directors and Executive Officers assuming the management of the Company are compensated for executing management that enhances the Company's corporate value and the benefits of stakeholders such as shareholders by determining management policies from a long-term perspective, and formulating and executing medium-term management plans and annual business budgets.
- (2) The compensation system shall be commensurate with roles and responsibilities of each Director and Executive Officer. Compensation for Directors shall be such that it enables them to exercise functions of supervision of management effectively. Compensation for Executive Officers shall reflect the Company's short-term and medium- to long-term business performance. Appropriate compensations shall be paid for outstanding achievements to motivate Executive Officers to exercise their respective management capabilities, management know-how, and skills to achieve satisfactory results.
- (3) To secure appropriate human resources for the positions of Director and Executive Officer, compensation levels should be comparable to those of other companies. The Compensation Committee utilizes expert outside organizations to gain professional advice and objective viewpoints, if necessary, for studying the details and amounts of compensation.

2. Summary of Compensation, etc.

(1) Directors

Compensation for Directors is comprised of a base compensation, which is a fixed compensation. This amount reflects factors such as their full-time or part-time status, committee memberships, and roles (positions). For Directors who also serve as Executive Officers, compensation as a Director is not paid.

(2) Executive Officers

- (a) Compensation for Directors is comprised of a base compensation, which is a fixed compensation, and a term-end bonus, which is a performance-linked compensation.
- (b) Base compensation of Executive Officers is determined individually in consideration of the degree of responsibility for Company management and for the performance of duties

utilizing their extensive experience, knowledge, insight, and specialized management skills, etc., acquired from past experience.

- (c) The term-end bonus for Executive Officers shall be linked to business results. A standard amount shall be set in accordance with factors such as the Executive Officer's position.
- (d) Executive Officers shall be required to return compensation as necessary when it is determined they are involved in misconduct during their term of office.

The policy for determining compensation described above was established after a review conducted in May 2021 for the purpose of integrating the term-end bonus for Directors into the base compensation from the compensation, etc., of Directors to be elected at the Ordinary General Meeting of Shareholders to be held in June 2021. A summary of the policy before this review is as follows.

- (i) Directors and Executive Officers assuming the management of the Company are compensated for executing management that enhances the Company's corporate value and benefits stakeholders such as shareholders by determining management policies from a long-term perspective, and formulating and executing medium-term management plans and annual business budgets.
- (ii) To motivate Directors and Executive Officers to exercise their respective management capabilities, know-how, and skills to achieve satisfactory results, the compensation system shall reflect the Company's short-term and medium- to long-term business performance and appropriate compensations shall be paid for outstanding achievements.
- (iii) Compensation paid by the Company consists of a base compensation and a term-end bonus.

- (a) Base compensation: Determined individually in consideration of the degree of responsibility for Company management as a Director and/or Executive Officer and for the performance of duties utilizing their extensive experience, knowledge, insight, and specialized management skills, etc., acquired from past experience. To secure appropriate human resources for the positions of Director and Executive Officer, compensation levels should be comparable to those of other companies.
- (b) Term-end bonus: Linked to the business performance of the Company.

In determining individual base compensation and term-end bonuses for Executive Officers, etc., for the term, the Compensation Committee comprehensively considers consistency with the policy by referring to market data on executive compensation to determine if it is in line with the policy.

② Total amount of compensation, etc., for each category of Directors or Executive Officers, total amount of compensation, etc., by type, and the number of Directors and Executive Officers who received compensation, etc.

Director/Executive Officer category	Total amount of compensation, etc. (millions of yen)	Total amount of compensation, etc., by type (millions of yen)		Number of Directors and Executive Officers who received compensation, etc.
		Base compensation	Term-end bonus	
Directors (excluding Outside Directors)	39	38	1	2
Executive Officers	486	318	168	11
Outside Directors and Officers	46	44	2	3

Notes: 1. Directors with concurrent post as Executive Officers are compensated as Executive Officers but not as Directors.

The total amount of compensation, etc., of persons whose total amount of compensation, etc., is 100 million yen or more is shown in the table below.

Name	Total amount of compensation, etc. (million yen)	Director/Executive Officer category	Company category	Total amount of compensation, etc., by type (millions of yen)	
				Base compensation	Term-end bonus
Mitsuaki Nishiyama	108	Executive Officers	Submitting company	60	48

- (Notes) 1. Representative Executive Officer, Chairperson, President, and CEO Mitsuaki Nishiyama concurrently serves as a Director, but does not receive compensation as a Director.
2. The column "Term-end bonus" includes a 39 million yen provision of term-end bonuses carried over from the reserve for the current fiscal year. In addition, it shows the difference of 9 million yen between the provision of term-end bonus reserve for the previous fiscal year and the term-end bonus for the previous fiscal year that was actually paid during the current fiscal year.

③ Policy on the determination of proportion of payments as performance-linked compensation and other types of compensation, etc.

Compensation for Directors and Executive Officers of the Company is comprised of a base compensation, which is a fixed compensation, and a term-end bonus, which is a performance-linked compensation. For performance-linked compensation for Executive Officers, the standard amount is set in a way that the percentage of performance-linked compensation of the total amount of compensation falls within a range of the ratios specified below according to the ranks of each Executive Officer to

Rank	Fixed compensation	Standard amount of performance-linked compensation	Total
Chairperson, President, and CEO	60%	40%	100%
Senior Vice President and Executive Officer, and Vice President and Executive Officer	67%~68%	32%~33%	
Executive Officer	70%	30%	
Director	100%	—	

strengthen the link between the business performance of the Company, considering the degree of the responsibility of each Executive Officer for business execution. Compensation for Directors is only base compensation, which is fixed compensation, to contribute to the full execution of the management-supervision function. For Directors who also serve as Executive Officers, compensation as a Director is not paid.

④ Indicators for performance-linked compensation and reasons for the selection of the indicators

The indicators for performance-linked compensation are "revenues," "adjusted operating income," "return on invested capital," and "cash conversion cycle" on a consolidated basis as we focus on growth, profitability, and management

efficiency in the Fiscal 2021 Medium-Term Management Plan. In addition, non-financial indicators (integrity, health and safety, energy conservation, etc.) are included in the targets for each employee.

⑤ Method for the determination of the amount of performance-linked compensation and target of the indicators for performance-linked compensation and actual results

The amount of the term-end bonus, which is performance-linked compensation, etc., is determined by the Compensation Committee. A base amount* is set for each position and the amount to be paid individually is calculated according to the following formula.

Amount of term-end bonus to be paid to each Director and Executive Officer = Standard amount of performance-linked compensation × ((Corporate performance factor*1 × Weight assigned for corporate performance factor) + (In-charge business factor*2 × Weight assigned for in-charge business factor) + (Individual target factor*2 × Weight assigned for individual target factor))

*1 The "corporate performance factor" is the sum of the degrees of achievement of corporate performance-related indicators multiplied by the weight assigned for each indicator (0.3 for revenues, 0.4 for AOI, 0.15 for ROIC, and 0.15 for CCC), where the degree of achievement of each corporate performance-related indicator is predetermined by the Company with a range from 0 to 2 so that the target for each indicator related to corporate performance is set as 1. The target and actual results of the "corporate performance factor" for the current fiscal year are as follows. However, for fiscal 2020, even if the targets are achieved, the amount paid will be 70% of the standard amount.

Index (consolidated)	FY2020		FY2021	
	Target	Actual	Target	Actual
Revenues (Billions of yen)	756.7	761.6	850.0	942.7
AOI (Billions of yen)	4.4	(5.0)	34.0	26.8
ROIC (%)	△0.5%	△0.7%	3.9%	3.0%
CCC (Number of days)	86.3	89.1	85.8	82.9

(Note) ROIC = {Adjusted operating income × (1 - tax rate of 25%) + Equity Income in Affiliates} ÷ (Average favorable liabilities at the end of the period + Average capital at the end of the period)

*2 Each "in-charge business factor" and "individual target factor" is the sum of the degrees of achievement of the targets set for each Director and Executive Officer multiplied by the weight assigned for each target, where the degree of achievement of each target is predetermined by the Company with a range from 0 to 2 so that the target for each Director and Executive Officer is set as 1.

⑥ Name of the person with the authority to decide the compensation for Directors and Executive Officers, the details of such authority and the extent of its discretion, and an overview of the procedures of the Compensation Committee

As the Company is a company with nominating and other committees, it sets forth the policy on the determination of compensation, etc., for each Director and Executive Officer in the Compensation Committee, with a majority of the members being independent Outside Directors, and determines the amount of individual compensation based

on the policy. In determining the compensation amounts, the Compensation Committee comprehensively considers consistency with the policy by referring to market data on executive compensation to determine if it is in line with the policy.

⑦ Activities of the Compensation Committee

During fiscal 2021, the Compensation Committee held a total of five meetings and determined a policy on the determination of compensation, etc., for Directors and Executive Officers, and details of their individual compensation based on the policy. In terms of the meeting

attendance of the Committee members, Directors who had been in service during the fiscal year under review attended all meetings of the Compensation Committee held during their terms of office.

Relationship with the Parent Company

The Company is a member of the Hitachi Group, centered around Hitachi, Ltd., the parent company. The parent company and its listed subsidiaries share the goal of increasing the value of the Group as a whole by strengthening the competitiveness of each company. Listed subsidiaries benefit from participating in measures that enhance their management bases. With regard to the management of listed subsidiaries, the autonomous creativity of each company is respected, and the involvement of the parent company is limited, except for matters resolved at the General Meeting of Shareholders. Each company makes management decisions by following its own decision-making procedures. For this reason, regarding the relationship with Hitachi, Ltd., while the business operations and transactions of the Company are conducted autonomously and independently of Hitachi, Ltd. and its Group companies, the Company has a close collaborative relationship with Hitachi, Ltd. and its Group companies through joint research and development and other initiatives. Effectively using shared management resources, the Company aims to provide high-quality products and services.

As for personnel relationships with Hitachi, Ltd., one Executive Officer of that company also serves as Director of the Company. By expressing opinions and voting at meetings of the Company's Board of Directors, Hitachi, Ltd. could influence management policies and other aspects of the Company. Nevertheless, the Company perceives

that it is in a position to make independent management judgments, because it has appointed two Outside Directors who are designated as Independent Directors, based on the stipulations of the stock exchange on which the Company is listed, so that a wide variety of opinions can be reflected in the discussions of the Company's Board of Directors. No Executive Officers of the Company who perform executive duties are also Directors or Executive Officers of Hitachi, Ltd.

The Company also conducts a range of transactions with Hitachi, Ltd. based on the Hitachi Group's pooling system. These include borrowing and lending as well as other activities. The Company remains convinced, however, that its business activities are not significantly dependent on transactions with Hitachi, Ltd. The Company has adopted a policy that regulates transactions with Hitachi, Ltd. so that they are carried out in a fair manner, based on market prices.

As announced on April 28, 2021, a tender offer, etc., for the common stock of the Company by K.K. BCJ-52 (hereinafter referred to as the "Tender Offer") is scheduled in the future, and the Company expressed its opinion, as of the same date, in favor of the Tender Offer, if it is initiated. K.K. BCJ-52 intends to make the Company its wholly owned subsidiary through the Tender Offer and a series of transactions to be conducted thereafter. As a result, the Company will be separated from the Hitachi Group and its common stock will be delisted.

Policies Concerning Holding Shares of Other Companies as Cross-Shareholdings

In principle, the Company shall not hold the shares of other companies as cross-shareholdings. The exception is if the Company believes these holdings contribute to the Company's corporate value. The Company would comprehensively take into consideration objectives of such holdings such as maintenance and strengthening of business relations, capital tie-ups, business alliances and joint development as well as associated returns and risks. The Company has been reducing such holdings through conducting an annual review of holding objectives by the

Board of Directors on the significance of holding and the cost of capital of such individual stock from qualitative and quantitative aspects. For other policies on our strategic shareholdings, please refer to Article 7. Policies Concerning Holding Shares of Other Companies as Strategic Shareholdings in the Corporate Governance Guidelines. As of March 31, 2022, the number of strategic shareholdings was 12. The number has decreased from 42 as of March 31, 2015, when the corporate governance code had yet to be implemented.

Internal Controls

Internal Audit Organization

The Company has the Internal Auditing Office (with ten dedicated staff members), which is in charge of internal audits. The Internal Auditing Office formulates annual audit policies and audit implementation plans for internal audits on the Group. Based on these policies and plans, the office conducts on-site audits on the status of execution of the Company's offices and subsidiaries in Japan and overseas and business management over the course of three years in principle and also collaborates with the Audit Committee and the Accounting Auditor to promote tripartite cooperation in tripartite audit function. In addition to these audits, a special audit may be conducted upon special request, etc., of the

Chairperson and Chief Executive Officer. The Internal Auditing Office also reports to the Chairperson and Chief Executive Officer and the Audit Committee its audit implementation plans in advance, and reports the audit results mostly once a month. In addition, the Internal Auditing Office holds an audit report meeting mostly once a month with the person in charge of business at the respective business division and each department of the corporate division, and instructs those departments to implement improvements. If necessary, it also carries out on-site audits in collaboration with divisions in charge of the environment, safety, information system, and risk compliance within the Company.

Coordination in Internal Audits, Audits by the Audit Committee and Accounting Audits, and the Relationship of These Audits with the Internal Audit Division

The Audit Committee (a) receives explanations about audit implementation plans from the Accounting Auditor and has a discussion on and makes adjustments to the details as needed, (b) receives reports on audit results and engages in

an exchange of opinions with the Accounting Auditor, and (c) receives reports from the Accounting Auditor in cases where, as for the performance of duties by Executive Officers, they find any significant evidence of wrongful act or violation of

related laws and regulations, or the Articles of Incorporation in the course of performing their duties. The Audit Committee also receives reports on audit implementation plans and periodic reports from the Internal Audit division. In addition, to promote coordination with audits performed by the Audit Committee, the Audit Committee may instruct the Internal Audit division to (a) conduct a special audit for any division that the Audit Committee deems necessary and (b) set key audit items for audits performed by the Internal Audit division. As specified by the Board of Directors, for matters required for the Audit Committee to execute its duties, the Internal Auditing Office of the Internal Audit division shall assist the Audit Committee in executing its duties in accordance with the Committee's instructions. Furthermore, the Internal Auditing Office is also in charge of assessment of internal control and reports the status to the Audit Committee. Moreover, besides the Internal Audit division, the corporate divisions, etc., in charge of finance, compliance, risks, and other areas also play certain roles in internal control and report the status of performance of their duties to the Audit Committee. The Company regards "promotion of tripartite audit function" as a paramount theme for the audit and supervision functions. The Audit Committee, the Accounting Auditor, and the Internal Audit division share information on issues detected by each of them, and the Company promotes a "mutual check and balance system and mutual evaluation," taking a step further from a one-way evaluation from the

Risk Management

With respect to risk management, each Executive Officer identifies and analyzes business risks including changes in political, economic, and social conditions, currency fluctuations, rapid technological innovations, as well as changes in customer needs. At the Risk Management Committee, chaired by the Group Chief Risk Management Officer, a comprehensive review of the risks is conducted. Then, through discussions as appropriate at the Board of Directors, the Audit Committee, the Executive Committee, and other meeting bodies, measures against such risks are examined. The Risk Management Committee identifies and examines the Group's risks, identifies risks that may become management issues, and regularly monitors the conditions of the risks. In addition, each of the Group's sites has established a system to promptly share information that has become known regarding risks relating to compliance, antisocial forces, finance, procurement, the environment, disasters, quality, information security, export control, legal affairs, etc., with each business division. Meanwhile, each corporate business division has prepared internal rules, guidelines, etc.; conducts education and enlightenment activities, preliminary checks, audits on business operations, etc.; and cooperates with the relevant business divisions to avoid, prevent, and manage risks.

(1) Risks associated with product demand and market conditions

■ Major potential risks by market segment

The Group conducts business in a wide range of market segments, including the automobile, industrial infrastructure, and electronics-related sectors. In addition, its businesses span many regions, including Japan, as well as the United States, China, the rest of Asia, and Europe. For these reasons, the Group's operating results and financial situation may be affected by trends in these markets and regions. Recently in particular, the slowdown of the European economy due to the situation in Ukraine, the impact of semiconductor shortage on automobile

Company to the Accounting Auditor based on the evaluation standards for Accounting Auditors. Notably, the Company considers the function of detecting risks by the Accounting Auditor as an external agency to be particularly important in the entire risk detecting process of the Group. To strengthen the said function, the mutual evaluation is implemented between the Accounting Auditor and the Company's finance division or the Internal Audit division or the Audit Committee, respectively. Specifically, based on the evaluation standards for accounting auditors defined by the Audit Committee, the Audit Committee performs a comprehensive evaluation considering the following major factors evaluated by the Company: the Accounting Auditor's communications with the Audit Committee, the senior management, the Internal Audit division and others; audit quality control system; audit plans; audit team; audit reports and quarterly review reports; and consistency between audit plans and audit hours as a basis of determining the amount of auditing compensation. The Accounting Auditor, on the other hand, evaluates basic operations of the finance division, the Internal Audit division, and the Audit Committee of the Company, handling of audit requirements, cooperation, risk recognition, activity status, resources and other factors, and reports the results to the relevant counterparties. The Company utilizes the above feedback to strengthen the Company's functions. In addition, the Company has started the mutual evaluation system between the finance divisions of the Company's facilities or subsidiaries and the Accounting Auditor.

production, and logistics disruptions, such as a shortage of containers caused by a rapid recovery in the international movement of goods and the prolonged supply chain disruption due to the COVID-19 pandemic, may cause a global economic slowdown. Such a development could affect demand for the Group's products. Presented below is a non-exhaustive list of the major potential risks, by market segment.

Automobile-related segment

- The Company offers a wide range of products in the automobile segment. While our plans incorporate the effects of slowdown in automobile production due to factors including the global shortage of semiconductor, further cutbacks or prolonged production slowdown by automobile manufacturers could impact the Group's operating results or financial situation. The automobile industry is also currently undergoing a period of transition from conventional internal combustion engines (ICE) to electrification (xEV*). To meet market needs, the Group is reinforcing its manufacturing lines, expanding product lineups, and taking other measures. However, if the shift to electrification (xEV) rapidly accelerates or is slower than expected, the operating results or financial situation of the Group may be affected.

* xEV refers to electric vehicles (EVs), hybrid electric vehicles (HEVs), and plug-in hybrid electric vehicles (PHEVs).

- With regard to molds and tool steel, manufacturers in China and emerging countries have been gaining power and are expected to enter the Japanese market. If competition intensifies, the operating results or financial situation of the Group may be affected. The Group is responding with efforts at differentiation from other companies, such as by launching high-performance products and strengthening its supply chain.

Industrial infrastructure segment

- Among aircraft and energy-related materials, the business for aircraft-related materials tends to depend on supplying specific customers and providing specific products. If demand in the aircraft industry has a long-term slump, the operating results or financial situation of the Group may be affected. The Group is responding by strengthening its business with engine manufacturers and introducing new next-generation products using specialized technologies.
- With regard to fittings for piping components, the Group mainly supplies products to gas-company customers. The liberalization of the gas industry is increasing competition, and if this competition further intensifies, the operating results or financial situation of the Group may be affected. The Group is responding with efforts at differentiation from other companies, including the early introduction of new types of fitting products.
- Regarding wires and cables, the Group is moving to local production of electric wires for rolling stock and is expanding its product lineup, etc., to increase business in the rolling stock segment, one of the Group's growth segments. If demand in the railway segment experiences a long-term slump as railway investments by China, the largest market, stagnate, the operating results or financial situation of the Group may be affected.

Electronics-related segment

While the Company offers a wide range of products in the electronics-related segment, customer needs and technologies in this segment are quickly changing. If rapid technological innovations occur and our response is delayed, the operating results or financial situation of the Group may be affected. In this regard, the Group is striving to respond promptly by grasping customer needs and technological innovations at an early stage, developing new products, and taking other measures.

(2) Risks associated with competitiveness, and the development and commercialization of new technologies and products

Each of the Group's businesses has competitors that supply the same type of products as the Group. The markets for the Group's existing products may shrink due to changes in technology or the maturation of the market for some of the Group's products. As a result, the Group's competitiveness is affected by its competitive advantage in terms of price, quality, and delivery, and its ability to develop and commercialize new technologies and products. Consequently, an inability to respond appropriately to changes in technology or customer needs, and delays in developing or commercializing new technologies and products would have a negative impact on the Group's growth and revenue and may affect the operating results or financial situation of the Group. In addition, as part of environmental measures centered on reducing CO₂ emissions, society is demanding the development of environmentally friendly technologies and products with lower environmental impact. Amid such circumstances, an inability to respond appropriately to these demands and delays in developing or commercializing environmentally friendly technologies and products may affect the operating results or financial situation of the Group. The Group will respond to these risks by striving to develop and commercialize new technologies and products to maintain

its competitive advantage and by doing its utmost to respond to changes in market conditions and customer needs by rapidly introducing new products to the market through co-creation with customers, while strategically advancing the development of technologies and products aimed at environmental measures.

(3) Risks associated with raw materials procurement

The Group utilizes a variety of raw materials in its production activities, including iron scrap and copper. These raw materials include many rare metals, which are produced in limited areas and by a limited number of suppliers. The prices of these raw materials vary greatly according to international supply and demand, as well as by the resource policies and other conditions in the producing countries, and by social upheaval, such as conflicts between many countries. If the Group is unable to transfer high market prices to its sales prices in a timely manner, the operating results or financial situation of the Group may be affected. In addition, if the supply of these raw materials becomes tight or is delayed due to issues in the producing country, such as not only major natural disasters, strikes, deterioration of the political situation, or failure in its logistics capabilities, but also including social upheavals such as conflicts between many countries, the Group could be prevented from acquiring the necessary volume of raw materials. In addition, if it is confirmed that conflict minerals, child labor, or other problems lie behind the raw materials procured, it may be necessary to change raw materials or suppliers, affecting the production and supply of products. The Group is responding with efforts to reduce these risks by making procurement more stable by such measures as diversifying procurement sources. Our efforts also include sharing the "Hitachi Metals Group Sustainable Procurement Guidelines" with our procurement sources.

(4) Risks associated with securing talent

To stay competitive, the Group must continually secure the talented human resources needed to execute its businesses, but the pool of such talented human resources is limited. If the Group is unable to hire or retain such talent, or if the development of its human resources does not proceed according to plan, a shortage of the talent required to execute its businesses may result, thereby affecting the operating results or financial situation of the Group. The Group responds to this risk by striving to secure talent by restructuring its human resource system to enable diverse human resources to work actively at the Group and by promoting the development of talent by further enhancing and strengthening its human resource development program.

(5) Risks associated with product quality

① Effects of the misconduct at issue

In April 2020, the Company identified cases of misconduct, including the misrepresentation of test results in inspection reports submitted to customers. Since then, the Company has examined the facts and causes of the misconduct. The results of the investigation confirmed that misconduct, such as rewriting the inspection results of the characteristics stated in the specifications agreed to with customers and the delivery to customers of products that did not meet the specifications agreed upon with the customer, had occurred

with magnet products, specialty steel products, automotive casting products, etc., manufactured by the Company and its subsidiaries. For affected products, we are currently verifying their performance by analyzing the correlation between our actual inspection methods and the inspection methods agreed upon with our customers, confirming performance under the observation of our customers, and re-inspecting product samples stored by the Company. At present, no performance defects or safety issues have been found.

In April 2021, the Company established the Quality Compliance Committee as an advisory body to the Board of Directors to monitor the steady implementation of various measures to prevent recurrences of incidents, fundamentally review our quality assurance system, and further strengthen compliance. The committee is working with full commitment to prevent the recurrence of misconduct and restore the trust of customers, shareholders, and other stakeholders. However, depending on the progress of cases in question, the Group's operating results may be affected by a decline in confidence in the Group's products, the need for additional responses if new cases of misconduct are uncovered, losses including compensation for customers, and increase in expenditure to strengthen the quality control system.

② Non-compliant products and defective products

The Group's products include those requiring high credibility such as key safety components. The Group has established a strict quality control system for product manufacturing to prevent sending to the market products that do not meet the specifications agreed upon with customers (non-compliant products) or defective products. However, if non-compliant or defective products flow into the market and costs are incurred in the repair, replacement, recall, compensation for damages, or legal actions of the Group's products, the operating results or financial situation of the Group may be affected.

(6) Risks associated with environmental regulations

The Group's business is also subject to a wide range of environmental laws and regulations, as well as laws and regulations related to the Industrial Safety and Health Act, covering areas such as air pollution, water pollution, the use and handling of hazardous substances, reasonable use of energy, waste disposal, and soil and groundwater contamination. These regulations have continued to become stricter over the years. Moreover, in addition to compliance with conventional environmental laws and regulations, recently there has been growing social demand for companies to take initiatives to respond to the risk of climate change. Included are calls for decarbonized management, such as using non-greenhouse gas-producing renewable energy and managing greenhouse-gas emissions throughout the entire value chain, not just for business relationships with customers and suppliers. The Group has been working to reduce CO₂ emissions, including omitting excess processes, promoting the introduction of energy efficient equipment, and converting to natural gas and LPG fuel. Moreover, in June 2021, the Group set the long-term goal of achieving carbon neutrality by 2050 (with the medium-term goal of reducing CO₂ emissions by 38% by FY2030 compared with FY2015). To achieve this goal, in addition to even greater efforts to reduce CO₂ emissions, the Group is considering efforts that go beyond emission reduction, such as recycling emitted CO₂. The Group also

endorses TCFD recommendations and is committed to evaluating and disclosing the impact of climate change. Amid these major changes in the environment, the costs of procuring the materials, parts, and energy that the Group uses to manufacture its products may rise, and the costs of R&D investment and capital investment related to these initiatives may increase. The Group strives to mitigate these environmental risks by complying with environmental laws and regulations within its environmental management structure, in accordance with the environmental management system ISO 14001:2015, and strives to recognize and reduce the financial impact of environmental compliance.

(7) Risks associated with changes in foreign exchange rates

Since the Group imports raw materials from abroad and exports products manufactured in Japan overseas, fluctuations in exchange rates affect its transactions, assets, and liabilities denominated in foreign currencies. For this reason, if a major change in exchange rates occurs, the operating results or financial situation of the Group may be affected. In this regard, the Group strives to reduce the risk from exchange fluctuations in imports and exports denominated in foreign currencies through means such as foreign-exchange contracts and currency options. In addition, when preparing its consolidated financial statements, the Group converts the financial statements of its overseas subsidiaries to yen, and fluctuations in exchange rates may affect the operating results or financial situation of the Group.

(8) Risks associated with M&As and business reorganization

The Group may acquire other companies, establish joint ventures, form strategic partnerships, sell businesses, or take other such measures to develop new technologies and products in its business areas, become more competitive, or expand its business areas, etc. These measures include complex issues that require time and money for business operations and the incorporation of technologies, products, and personnel, and time may be required to achieve synergies. If such measures do not proceed according to plans, the initially anticipated effects may not be achieved. In addition, the effects of business partnerships may be adversely impacted by the decision-making and capabilities of the partner, which the Group cannot control, as well as by market trends. Furthermore, integration, restructuring of acquired businesses, post-acquisition operations, etc., related to these measures could incur large expenses for the Group and may affect its operating results or financial situation. The Group responds to these risks by employing outside advisers to analyze M&As, business reorganization, etc., from various perspectives, including market trends, strategies, acquisition price, the PMI process, and latent risks, as well as deliberations by the Executive Committee and the Board of Directors.

(9) Risks associated with information security

The usage and importance of information systems in the Group's business activities are increasing. The Group retains and manages personal information obtained from its customers, as well as confidential information regarding the technologies, R&D, manufacturing, sales, and operating activities of the Group and its customers, in a variety of

formats, including the use of external service providers. The Group works to strengthen its information security in order to protect this confidential information. However, if (1) external cyberattacks or other threats impede the functioning of these information systems, (2) services from an external service provider are interrupted, or (3) email is mis-sent or theft of equipment, etc., occurs, such confidential information may be disclosed through data breach or leak without authorization. Therefore, the Group may be held liable for compensation for damages or be exposed to legal action, and the Group's operating results, financial situation, reputation, or trust may be affected.

The Group responds to these risks by taking security measures based on the severity and frequency of the risk, under the assumption that cyberattacks cannot be completely prevented. The scope of strengthening information security has been expanded from the office automation environment to a wide range of business environments, including the production and manufacturing floors, and the Group is enhancing its Information Security Committee system by further strengthening participation by relevant divisions. In addition, the Group conducts security training every year through e-learning to deepen employees' understanding of the Group's information security measures. The Group has also taken out insurance against information leaks, including cyberattacks. This insurance covers claims for compensation for damages in the event of an information leak.

(10) Risks associated with the global expansion of businesses

To respond to the maturation of the Japanese market and the increase of customers overseas, the Group is expanding its businesses aggressively, including expanding into and exporting products to the United States, China, the rest of Asia, Europe, and other overseas markets.

To newly expand a business overseas requires the Group to make a large initial investment in manufacturing equipment and other capital, and, in most cases, substantial time is needed before operations commence. Developing a business overseas involves a number of inherent risks: (i) changes in laws and tax regulations; (ii) underdeveloped social systems and infrastructure; (iii) social turmoil, such as war, terrorism, riots, and the spread of infectious disease; and, (iv) other obstacles to overseas business activities caused by the economic, social, or political situation, such as trade-related tariffs, import restrictions, and protectionism. If these issues occur, they could form an obstacle to the Group's overseas business activities and may affect the operating results or financial situation of the Group. The Group responds to this risk by continuously monitoring the political, economic, and social conditions of each region, analyzing the impact on the Group's business, and implementing measures for the Group as a whole.

(11) Risks associated with health and safety

Following the view that "prioritizing safety and health is above all else," the Group is pushing ahead the creation of safe and healthy workplaces at its manufacturing sites both in Japan and abroad, by instilling a culture of safety, creating safe organizations, and improving facilities to ensure fundamental safety. However, when an incident such as a work-related accident or violation of labor laws and regulations that affects employees, facilities, or equipment due to unforeseen circumstances occurs,

not only could that cause serious damage to the lives or bodies of workers, but could also result in interruption of the Group's business activities, compensation for victims, or administrative penalties for labor law violations. Such results could affect the Group's operating results or financial situation. In response, the Group has established the Safety & Health Management Department as the organization to manage the health and safety of the Group. In addition, the Group continually implements health and safety education to improve employees' awareness of risks and managers' awareness of health and safety issues. The Group also invests in the implementation of essential safety measures for facilities, and promote Group-wide health management measures, such as prevention of lifestyle-related diseases and support for smoking cessation.

(12) Risks associated with earthquakes and other natural disasters

The Group's business activities may be interrupted if its facilities are directly damaged or destroyed by a major earthquake or other major natural disasters, such as storms and floods due to climate change. Even if the Group's facilities are not affected directly, its distribution, supply, or communications network could be thrown into turmoil. Furthermore, an outbreak of a previously unknown infectious disease, such as COVID-19, could result in a disruption of the Group's business activities. Direct or indirect disruption of the execution of the Group's businesses due to such natural disasters or events could impede the Group's business activities and affect its operating results or financial situation. The Group responds to these risks by formulating a Business Continuity Plan (BCP) that accounts for major earthquakes and other disasters, and by continuously revising this plan and providing training on it. It has also established a safety confirmation system that verifies the safety of its employees and their families via the Internet, in the event of a disaster. In addition, to prevent the spread of COVID-19 infections among employees, the Company is working on initiatives including working from home, thorough adherence to mask-wearing in the office, maximum limits on attendance rates for each division, and regular management of employees' health.

(13) Risks associated with impairment losses on property, plant, equipment, and goodwill

To maintain and grow its businesses, and acquire new business opportunities, the Group must continuously make capital investments. In addition, it acquires the businesses of other companies and the like, as necessary. In particular, the Group makes full use of large-scale capital investments to reap early effects. At the same time, when making new capital investment, the Group implements selective capital investment that focuses on high-growth, high-revenue areas. In addition, the Group holds large amounts of fixed assets from previous capital investments and acquisitions of businesses from other companies, etc. Therefore, the Group could record an impairment loss on its current or future fixed assets, if it is unable to recover its investments due to changes in the external environment, etc. This may affect the operating results or financial situation of the Group. The Group responds to this risk by having the Investment Committee review major investments beforehand and subsequently having the Executive Committee and the Board of Directors deliberate, from a multifaceted and whole-company perspective that includes conformity with

business strategies, market and other trends, business risks, the appropriateness of technology and productivity improvement plans, and the appropriateness of investment amounts and investment plans. In addition, after an investment decision is made, the Group performs regular follow-ups, accelerating and changing investment plans, while tracking the market environment and internal situation.

(14) Risks associated with the relationship with the parent company

As of March 31, 2022, Hitachi, Ltd., the Company's parent company, held 53.4% of the Company's voting shares and has listed subsidiaries including the Company as well as a large number of affiliates in its corporate group. It carries out a wide range of business including the manufacture and sales of products and services across the fields of green energy and mobility, digital systems and services, and connective industries. As of the date of submission of this Integrated Report, one of the five members of the Company's Board of Directors was concurrently serving as an Executive Officer of Hitachi, Ltd. The Company and Hitachi, Ltd. have ongoing transactions that include the trading of products and the provision of services, technology, and loans. It is the basic policy of the Company to participate actively in Hitachi, Ltd.'s operations within the Hitachi Group while maintaining the independence of its management, and to make maximum effective use of the Hitachi Group's R&D capabilities, brand, and other management resources among the Group. However, the Group's business development, etc., can be affected by the management strategies, etc., of Hitachi, Ltd.

(15) Risks associated with financing activities

The Group's basic policy is to cover the funds needed to invest for growth with cash generated by businesses and cash on hand. However, to avoid missing growth opportunities, the Group also borrows from financial institutions and raises long-term financing from the capital markets. Therefore, if financing cannot be obtained under favorable terms due to a deterioration of the financial markets, if financing costs rise or cash flow worsens, or if it becomes infeasible to obtain funds flexibly due to a deterioration of the Group's performance, etc., the operating results or financial situation of the Group may be affected. The Group strives to obtain stable financing through means such as concluding lending commitment agreements with financial institutions.

(16) Risks associated with laws and regulations, and official regulations

The Group is subject to economic laws, related laws and regulations, and official regulations, including systems for commerce, trade, currency exchange, and taxation, in Japan and the countries where the Group does business. The Group strives to comply with these laws, regulations, and official regulations by maintaining and improving its internal control systems. However, if the Group is deemed to have violated such laws or regulations, it will be subject to administrative sanctions and could be held liable for compensation for damages in a civil lawsuit, etc., due to such violations. In addition, if these laws, regulations, or official regulations are amended, the cost of compliance could increase. Such administrative sanctions, compensation for damages, increases in compliance costs, etc., may affect the operating results or financial situation of the Group. The Group has responded to these risks by

formulating the Hitachi Metals Group Code of Conduct, which stipulates rules and principles intended to assist officers and employees in making decisions and taking actions. This Code of Conduct was formulated to cultivate an awareness of compliance among all officers and employees and to ensure thorough legal compliance, and the Group is conducting its business activities based on the principle "obey the law and walk the path of virtue." Furthermore, the Hitachi Metals Global Compliance Program, which stipulates regulations for matters such as compliance with competition laws and bribery prevention, is in place at all companies throughout the Group. The Group prepares and distributes the CSR Guidebook to enhance understanding and works continuously to provide education through means such as training and e-learning.

(17) Risks associated with intellectual property rights

The Group holds a large number of intellectual property rights, exercises these rights, and grants licenses to other companies in accordance with its business strategy. Meanwhile, the Group respects the intellectual property rights of other companies and obtains their licenses when it is deemed necessary. If the exercise of rights or the granting or acquisition of licenses does not proceed as planned, the business execution or competitiveness of the Group could be affected. In addition, although the Group responds appropriately to legal action or other disputes relating to intellectual property rights by such means as coordination with outside attorneys or other experts, costs related to dispute settlements could be incurred and may affect the operating results or financial situation of the Group. In order to curb these risks, the Group investigates the patents of other companies in advance when conducting research, development, design, etc., and implements preventive measures and countermeasures. To deepen understanding of such risks, the Group also provides continuing education to its employees through various training programs.

(18) Risks associated with retirement benefit obligations

The Group bears large retirement benefit costs and obligations, which are determined by actuarial calculations. Evaluations of these costs include key assumptions on estimating pension costs, such as mortality rates, separation rates, retirement rates, changes in salary, discount rates, and expected rates of return on pension assets. The Group must estimate the major assumptions used in this assessment, taking into account many factors, such as the conditions of its workforce, current market conditions, and trends in future interest rates. Although we believe that the estimation of these major assumptions, based on underlying factors, is reasonable, there is no guarantee that the assumptions will match the actual results. Financial market downturns may reduce the expected rate of return due to reduced valuation of plan assets. Depending on circumstances, additional contributions to plan assets may be required. Reductions in the discount rate will increase the actuarial retirement benefit obligations. For this reason, changes to the major assumptions may affect the operating results or financial situation of the Group. In response, the Group's Retirement Benefits Committee meets regularly to deliberate and decide on appropriate investments based on advice from investment advisory firms on matters such as asset allocation and selection of investment projects.

As part of our aim to become “a high-performance materials company that supports a sustainable society,” we will build a business structure capable of generating investment funds for future growth.

In October 2020, we announced a business plan in which we will, by fiscal 2022, implement another round of cost structure reforms to improve our business performance at an early stage, while transforming our earnings foundation with the aim of securing resources for future growth investments.

Based on this business plan, in fiscal 2021 we implemented a number of measures aimed at ensuring future growth, under the slogan “Set to Grow.” In particular, we focused on reforming our cost structure and lowering our break-even point for profitability, while establishing a new earning structure that will be more robust in the face of fluctuating demand. As a result of this, our operations regained profitability in our business performance for fiscal 2021, thanks to this bolstering of our earning structure in addition to the recovery of demand in relation to the automotive and semiconductor sectors.

In fiscal 2022, we plan to focus on the following areas, under the slogan of “Accelerating Transformation and Growth.”

- Establishing a culture of safety
- Putting integrity (sincerity and honesty) into practice
- Strengthening our operational foundation for growth
 - Improving profitability and securing our cash flow
 - Strengthening monozukuri and improving capital efficiency
- Promoting environmental management

Through the above initiatives, the Group will build a business structure capable of generating investment funds for future growth, and make progress towards becoming “a high-performance materials company that supports a sustainable society,” our medium- to long-term commitment.

In addition, a tender offer, etc., for the common stock of the Company by K.K. BCJ-52 (hereinafter referred to as the “Tender Offer”) is scheduled in the future. K.K. BCJ-52 intends to make the Company its wholly owned subsidiary through the Tender Offer and a series of transactions to be conducted thereafter. As a result, the Company will be separated from the Hitachi Group and its common stock will be delisted. We believe this separation will enable the Group to set out its own independent growth strategy without being constrained by the portfolio strategy of Hitachi, Ltd. Moreover, by becoming a non-listed company, we can plan strategies from a long-term perspective, carry out major investments and implement bold reforms promptly. We believe we can respond more quickly and more professionally to rapid market changes by utilizing the global knowledge and networks of our New Partners to explore investment opportunities, obtain funding, and develop and implement growth strategies, enabling us to restore our competitiveness and profitability and thus achieve sustainable growth and increase corporate value.

Improving capital efficiency

The Group’s cost of capital is calculated at 7.5%, but ROIC is currently below that figure. We will therefore move swiftly to improve our ROIC by lowering our break-even point through reducing costs, and by expanding profits while reducing investments, in order to build an earnings structure that is resilient to demand.

To increase profits, we will raise sales prices in response to soaring material costs, while continuing to expand sales of high-value-added products, expand growth businesses, and deliver monozukuri innovations utilizing IoT technologies to improve quality and reduce costs. In addition, we will use information technology to streamline administrative operations and thereby decrease fixed costs. We will also continuously review our business portfolio by downsizing, withdrawing from or spinning off low-profit, non-core businesses.

To reduce the amount of capital invested, we are working to shorten the cash conversion cycle (CCC) by formulating optimal production plans using IoT and sharing best practices within the Group. Under the Group’s inventory management system, responsibilities are divided into different areas, with manufacturing sites and procurement departments being responsible for material inventories, manufacturing sites and business divisions being responsible for production inventories of work in process and products, and domestic and overseas sales companies and business divisions being responsible for distribution inventories. Going forward, we will strengthen our cross-lateral corporate functions to build a system for swift and accurate inventory management based on sales forecasts, and will make every effort to squeeze inventories further with the aim of further shortening the CCC. The actual CCC value as of the end of fiscal 2021 was 82.9 days (down 6.2 days from the actual CCC value of fiscal 2020).

In addition, with a tender offer by K.K. BCJ-52 for the Company’s common stock being scheduled, there will be changes to the structure of the Company’s capital and borrowings as a result; however, considering its efforts to instill ROIC-based management in all our business divisions a matter of high importance, the Company will continue as before in its efforts to improve the capital efficiency of the working capital, fixed assets and other invested capital used in various businesses. Currently, with targets for ROIC being set based on profits and invested capital in each business segment, ROIC is improving rapidly across the whole group.

Improving cash flows

We are working to boost free cash flow by expanding profits, improving working capital efficiency, and making highly selective investments in priority areas.

In fiscal 2021, net cash provided by operating activities amounted to ¥29.9 billion. This was due primarily to the fact that while net income stood at ¥11.9 billion and depreciation and amortization at ¥46.5 billion, ¥19.1 billion was paid out due to the increase in working capital and ¥6.1 billion on costs related to business structural reforms. Meanwhile, the cash flow provided by investing activities fell to ¥6.4 billion. This was due primarily to the fact that while we earned ¥16.6 billion from sales of tangible fixed assets, we also paid out ¥27.3 billion to acquire tangible fixed assets as well. Our free cash flow stood at ¥23.5 billion as a result.

Clarifying the investment decision-making process

For capital investments made by business divisions, corporate divisions participate from the preliminary review stage, when the screening process before decision-making and responsibilities of the screening division manager are clearly laid out, and will review and strengthen management of the decision-making process for small investments, whose decisions have traditionally been delegated to business units.

In addition to upgrading equipment and streamlining, increasing production capacity, establishing new centers, and investing in safety, investment also includes investment in mergers and acquisitions and the like. Ordinary investments and strategic investments are separately defined and classified in terms of investment decision-making, recovery of investment, and other aspects. As a measure to prevent recurrence of inappropriate quality practices, moreover, we will invest around ¥10 billion to build a system that can automatically generate and manage inspection data appropriately with minimal human involvement. We will introduce the system sequentially at each manufacturing site by around 2024.

Proposals for strategic investments emphasize cash flow, and investment decisions are based on a current valuation using discounted cash flow (net present value or NPV), ROIC, and the investment recovery period.

Balance sheet management

We are streamlining our balance sheet to improve our financial position and raise capital efficiency. During the year, we promoted structural reform (including liquidation of receivables, increasing factoring and improving manufacturing lead times) by shortening the CCC to reduce working capital, using the Hitachi Group’s cash pooling system (CPS) to consolidate surplus funds and borrowings across the Group, and adopting a selection and concentration policy; however, due to the low yen and an increase in working capital brought about by rising raw material prices, total assets at the end of fiscal 2021 stood at ¥1,069.7 billion, up 10% year on year.

Our basic policy is to source funds needed for growth-oriented investments from cash generated by businesses and cash on hand. To avoid missing growth opportunities, however, we will engage in flexible fund procurement with a view toward maintaining or reducing our debt-equity ratio (currently in the 0.4–0.5 times range) and retaining our A+ credit rating from Rating and Investment Information, Inc. (R&I).

Cash allocation

The Group’s basic policy for determining the distribution of profits to shareholders is to comprehensively take into account the operating environment, business results and expansion of the business in the future, together with the need to retain internal reserves for medium- and long-term growth.

For enhancing shareholder value, we aim to distribute profits with a balance between shareholder returns and share price increases through business growth, with a view toward increasing total shareholder return (TSR). Under the new Medium-Term Management Plan, we will strive to boost shareholder value through business growth, by carrying out measures aimed at concentrating resources in high-profit, high-growth areas, implementing structural reforms, and strengthening our operational foundation.

In addition, at its meeting on April 28, 2021, the Board of Directors resolved not to pay a year-end dividend for fiscal 2020 and interim and year-end dividends for fiscal 2021, in light of the planned Tender Offer for the Company’s common stock by K.K. BCJ-52.

1 USD = ¥122.39 1 EUR = ¥136.70
(Thousands of U.S. dollars) (Thousands of Euros)

	(Millions of yen)							(Thousands of U.S. dollars)			(Thousands of Euros)	
	FY2021	FY2020	FY2019	FY2018	FY2017	FY2016	FY2015	FY2014	FY2013	FY2012	FY2021	
	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	JGAAP	IFRS	
For the period												
Operating results:												
Revenues	¥942,701	¥761,615	¥881,402	¥1,023,421	¥988,303	¥910,486	¥1,017,584	¥1,004,373	¥807,794	¥535,779	\$7,702,435	€6,896,130
Cost of sales	807,516	666,246	755,947	851,029	803,607	731,153	819,433	793,517	637,081	440,684	6,597,892	5,907,213
Selling, general and administrative expenses	108,376	100,346	111,072	120,965	119,566	113,350	122,090	126,446	106,851	74,016	885,497	792,802
Adjusted operating income	26,809	△ 4,977	14,383	51,427	65,130	65,983	76,061	84,410	—	—	219,046	196,116
Other income	18,018	9,726	8,599	10,667	5,401	14,070	36,416	21,303	5,844	—	147,218	131,807
Other expenses	18,132	53,962	62,108	19,652	24,205	11,786	12,523	21,306	16,278	—	148,149	132,641
Operating income	26,695	△ 49,213	△ 39,126	42,442	46,326	68,267	99,954	84,407	53,428	21,079	218,114	195,282
Income before income taxes	32,740	△ 50,588	△ 40,614	43,039	46,985	66,016	96,233	86,391	55,820	17,230	267,506	239,503
Net income attributable to shareholders of the parent company	12,030	△ 42,285	△ 37,648	31,370	42,210	50,593	69,056	70,569	48,133	12,955	98,292	88,003
Cash flows:												
Cash flows from operating activities	29,851	52,586	105,958	66,582	39,133	89,391	115,742	108,983	99,171	62,975	243,901	218,369
Free cash flows	23,479	54,777	49,540	△ 29,665	△ 35,947	53,527	83,595	△ 4,767	89,339	34,257	191,838	171,756
Increase (decrease) in cash and cash equivalents	25,306	56,986	1,255	△ 13,814	△ 84,499	19,111	41,271	△ 7,443	61,765	6,136	206,765	185,121
Capital expenditure	34,349	28,806	53,019	95,389	91,786	63,843	59,602	51,474	31,987	26,688	280,652	251,273
Depreciation and amortization	46,531	50,407	55,180	50,901	46,138	43,039	42,927	39,917	33,762	24,219	380,186	340,388
Research and development	12,404	14,475	15,918	18,604	17,749	17,971	19,121	20,903	16,814	11,076	101,348	90,739
At the end of the period:												
Total assets	¥1,069,695	¥972,249	¥977,766	¥1,099,252	¥1,058,832	¥1,040,390	¥1,033,311	¥1,083,450	¥848,772	¥541,286	\$8,740,052	€7,825,128
Interest-bearing debt	196,909	195,318	187,586	202,098	160,844	194,457	220,376	255,350	177,195	145,935	1,608,865	1,440,446
Equity (net assets)	531,118	492,118	522,853	595,211	570,192	548,746	504,675	476,176	382,840	259,865	4,339,554	3,885,282
Number of shares outstanding (thousands of shares)	427,554	427,563	427,566	427,569	427,572	427,576	427,579	427,601	427,657	365,420	—	—
(Yen)												
Earnings per share ^{*1}	¥28.14	¥ △ 98.90	¥ △ 88.05	¥73.37	¥98.72	¥118.32	¥161.50	¥165.02	¥116.79	¥36.20	\$0.23	€0.21
Dividends per share	0.00	0.00	26.00	34.00	26.00	26.00	26.00	23.00	17.00	14.00	0.00	0.00
Net assets per share ^{*2}	1,233.91	1,145.26	1,216.92	1,375.16	1,316.08	1,254.89	1,159.70	1,090.64	870.36	684.96	10.08	9.03

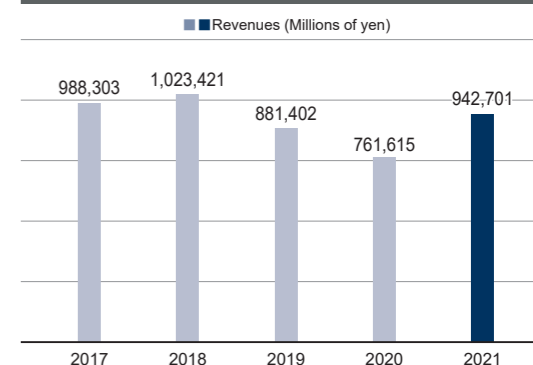
*1 Basic earnings per share
*2 Equity per share attributable to shareholders of the parent company

	(Millions of yen)							(Thousands of U.S. dollars)			(Thousands of Euros)	
	FY2021	FY2020	FY2019	FY2018	FY2017	FY2016	FY2015	FY2014	FY2013	FY2012	FY2021	
	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	JGAAP	IFRS	
Reference information:												
Total market value of stocks	¥872,639	¥779,021	¥486,999	¥549,855	¥537,886	¥667,874	¥496,420	¥788,924	¥628,228	¥321,935	\$7,129,984	€6,383,604
Enterprise value (EV)	944,903	875,000	632,232	710,855	643,818	722,920	596,496	965,245	712,512	433,768	7,720,424	6,912,236
EBITDA	80,633	1,159	16,634	96,116	94,864	111,299	141,644	128,212	90,979	42,818	658,820	589,854
EBITDA margin (%)	8.6	0.2	1.9	9.4	9.6	12.2	13.9	12.8	11.3	8.0	—	—
EV/EBITDA ratio (times)	11.72	754.96	38.01	7.40	6.79	6.50	4.21	7.53	7.83	10.13	—	—

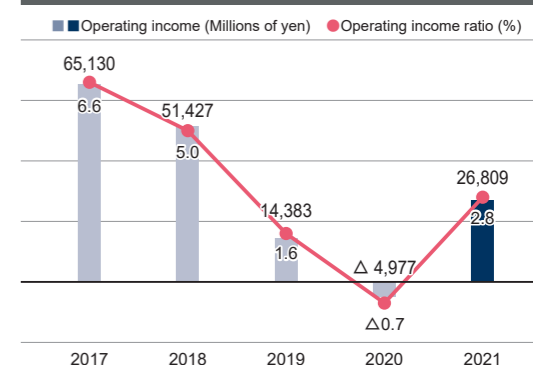
	(Millions of yen)							(Thousands of U.S. dollars)			(Thousands of Euros)	
	FY2021	FY2020	FY2019	FY2018	FY2017	FY2016	FY2015	FY2014	FY2013	FY2012	FY2021	
	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	JGAAP	IFRS	
Key financial indicators:												
Operating income ratio (%)	2.8	△ 6.5	△ 4.4	4.1	4.7	7.5	9.8	8.4	6.6	3.9	—	
Operating cash flow margin (%)	3.2	6.9	12.0	6.5	4.0	9.8	11.4	10.9	12.3	11.8	—	
ROS (%)	1.3	△ 5.6	△ 4.3	3.1	4.3	5.6	6.8	7.0	6.0	2.4	—	
ROA (%)	3.2	△ 5.2	△ 3.9	4.0	4.5	6.4	9.1	8.9	8.0	3.1	—	
ROIC (%)	3.0	△ 0.7	1.7	5.3	5.8	7.0	9.6	11.1	6.8	3.2	—	
ROE (%)	2.4	△ 8.4	△ 6.8	5.5	7.7	9.8	14.4	16.8	15.6	5.5	—	
Total assets turnover (times)	0.88	0.78	0.90	0.93	0.93	0.88	0.98	0.93	0.95	0.99	—	
Ratio of equity attributable to shareholders of the parent company (%)	49.3	50.4	53.2	53.5	53.1	51.6	48.0	43.0	43.9	46.2	—	
D/E ratio (times)	0.37	0.40	0.36	0.34	0.29	0.36	0.44	0.55	0.48	0.58	—	
Ratio of operating cash flow to debt (times)	6.60	3.71	1.77	3.04	4.11	2.18	1.90	2.34	1.79	2.32	—	

Notes: 1. The Company has adopted the International Financial Reporting Standards (IFRS) for the Consolidated Financial Statements in the Annual Securities Report since the fiscal year ending March 31, 2015.
2. The conversion of Japanese yen amounts into U.S. dollars and euros for the year ending March 31, 2022 has been conducted at the rates of ¥122.39 = \$1 and ¥136.70 = €1, the exchange rates as of March 31, 2022.
3. Diluted earnings per share is not provided as Hitachi Metals, Ltd. had no dilutive common stock outstanding.
4. Interest-bearing debt represents the total of short-term debt, long-term debt and corporate bonds.
5. Earnings per share is calculated by dividing net income attributable to shareholders of the parent company (net income) by the average number of shares issued during the term, and equity per share attributable to shareholders of the parent company is calculated by dividing equity, which is total equity minus non-controlling interests, by the number of shares outstanding at the end of the period.
6. EV represents the sum of total market value of stocks and net interest-bearing debt.
7. and is calculated by adding income before income taxes, interest charges, depreciation and amortization.
8. EBITDA margin refers to EBITDA divided by revenues.
9. ROS refers to net income attributable to shareholders of the parent company divided by revenues.
10. ROA is computed as the income before income taxes divided by the average total assets (the average of the beginning and ending balance of the year).
11. Rate of ROIC [until FY2017] = Net income attributable to shareholders of the parent company / (average of beginning and end-year interest-bearing debts + average of beginning and end-year equity attributable to shareholders of the parent company)
Rate of ROIC [from FY2018] = (Adjusted operating income × (1 - tax rate of 25%) + (equity in earnings affiliates) / (average of beginning and end-year interest-bearing debts + average of beginning and end-year capital)
12. ROE is computed as the net income attributable to shareholders of the parent company divided by the average total equity excluding non-controlling interests (the average of the beginning and ending balance of the year).
13. On July 1, 2013, the Company merged with Hitachi Cable, Ltd. On November 10, 2014, the Company acquired all shares of Waupaca Foundry Holdings, Inc., which held a 100% stake in Waupaca Foundry, Inc., making both companies its consolidated subsidiaries.

Revenues

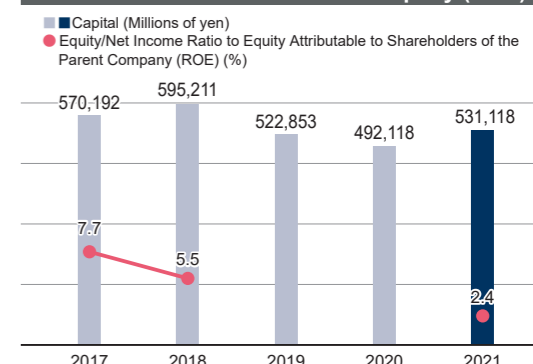


Operating Income/Operating Income Ratio

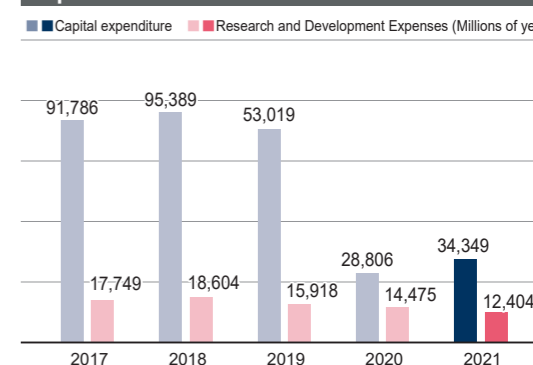


Note: Adjusted operating income is provided

Equity/Net Income Ratio to Equity Attributable to Shareholders of the Parent Company (ROE)



Capital expenditure/Research and Development Expenses



	FY2021	FY2020	FY2019	FY2018	FY2017
Environmental e-learning attendance rate (%)	97	92	—	100	100
Environmental auditor development training sessions (times)	1	1	2	1	3
Sales of key environmentally conscious products (millions of yen)	200,121	163,004	178,479	213,980	207,002
Sales ratio of key environmentally conscious products (%)	21.2	21.4	20.2	20.9	20.9
Energy consumption converted into crude oil (kl/year)	1,011,641	915,129	1,035,053	1,109,813	1,121,565
CO ₂ emissions (thousands of tons of CO ₂ /year) *1	2,216	1,995	2,319	2,630	2,778
CO ₂ emissions per production unit (tons of CO ₂ /million yen)	2,351	2,619	2,631	2,570	2,811
Total waste and valuables generated (thousands of tons/year)	824	761	879	1,004	985
Waste and valuables generated per production unit (thousands of tons/million yen)	0.824	0.999	0.974	0.981	0.997
Recycling rate (%)	77.4	76.7	74.6	78.2	78.1
Recycling volume (tons)	615,212	568,586	641,068	768,687	766,454
Final disposal volume (tons)	180,075	172,688	218,456	214,763	214,827
Number of business offices achieving zero emissions (final disposal rate below 0.5%)*2	14	19	17	14	15
Water consumption (thousands of m ³)	11,602	11,349	12,186	13,391	13,849
Water consumption per production unit (thousands of m ³ /million yen)*3	12.307	14.901	13.826	13.085	14.013
Amount of chemical substances released into the atmosphere (tons)	86	88	235	268	217
Percentage of positive engagement indicator evaluations in employee awareness surveys (%)*4	56	59	53	59	58
Diversity in recruitment ratio (%)*5	50	11	34	57	62
Ratio of women among newly hired graduates (career-track positions) (technical positions) (%)*6	7	8	10	12	10
Ratio of women among newly hired graduates (career-track positions) (administrative positions) (%)*6	60	33	36	38	50
Ratio of women in management positions (%)*7	1.8	1.5	1.4	1.5	1.4
Ratio of women in career-track positions (non-consolidated; full-time) (%)	6.3	5.3	4.8	4.7	—
Number of women in career-track positions (persons)	112	106	101	99	—
Total annual working hours (hours)*8	2,078	2,028	1,980	2,049	—
Occupational accident frequency*9	0.30	0.23	0.27	0.42	0.55
Number of employees (persons)	27,771	28,620	29,805	30,304	30,390
Number of employees (non-consolidated) (persons)	5,889	6,623	7,022	7,067	6,315
Number of employees (non-consolidated; male) (persons)	5,068	5,826	6,215	6,277	5,654
Number of employees (non-consolidated; female) (persons)	821	797	807	790	661
Average age (non-consolidated) (age)	43.9	43.4	43.4	43.2	44.1
Average years of service (non-consolidated) (years)	20.8	20.1	18.8	18.4	21.7
Number of female managers (non-consolidated) (persons)	20	19	19	19	14
Employment ratio of people with disabilities (non-consolidated) (%)	2.36	2.3	2.3	2.2	2.3
Investment in new safety-related construction for facilities (thousands of yen)	1,161,402	1,044,988	864,910	1,255,201	—
Attendance at human rights-related training (persons)	14,150	6,623	7,022	5,892	—
Number of Directors (persons)	5	5	6	9	8
Number of female directors (persons)	0	0	1	1	1
Number of outside directors (persons)	2	2	3	3	3
Number of independent directors (persons)	2	2	3	3	3

*1. In Japan, the power company CO₂ emissions coefficient is based on the "power supplier emissions coefficient," announced by the Ministry of the Environment, while outside Japan, it is based on the 2008 IEA "country-specific conversion coefficient."
 *2. As of fiscal 2011, the definition of "zero emissions" is a final disposal rate below 0.5%.
 *3. Water per production unit = (Water consumption) ÷ (Volume of activity: Numerical values indicating the scale of business activities, such as sales volume and production volume)
 *4. The percentage of positive engagement indicator evaluations in employee awareness surveys represents the non-consolidated figures up to fiscal 2019
 *5. The diversity recruitment ratio represents the rate of foreign nationals, women and mid-career hires among all hires for planning roles (non-consolidated)
 *6. Ratios of newly hired graduates show the year of hiring activity for each fiscal year. (For example, the hiring ratio for fiscal 2020 generally shows hiring activity targeting March 2021 graduates.)
 *7. The ratio of women in management positions is the percentage of women in management and those working as professionals (non-consolidated; currently working as managers or professionals).
 *8. Total annual working hours are the average annual working hours of back-office workers (non-consolidated; including managers and professionals).
 *9. Occupational accident frequency = Number of casualties due to occupational accidents / Total actual working hours x 1,000,000 (calendar year)



Included in the MSCI Japan ESG Select Leaders Index, a fundamental index for ESG investment.




The FTSE4Good Index is an index of companies recognized for their environmental and social sustainability, and is used by various market participants when structuring sustainable investment products.



Included in the FTSE Blossom Japan Index, an index of companies that demonstrate strong environmental, social, and governance practices.



Included in the new S&P/JPX Carbon Efficient Index, which focuses on the "E" (Environment) in ESG.



The MSCI ESG Leaders Indexes comprise companies from various sectors that are evaluated highly in terms of ESG.



Selected as a Nadeshiko Brand by the Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange as a company that "encourages women's success in the workplace."

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FTSE Russell (the trading name of FTSE International Limited and Frank Russell Company) confirms that Hitachi Metals, Ltd. has been independently assessed according to the FTSE4Good criteria, and has satisfied the requirements to become a constituent of the FTSE4Good Index Series. Created by the global index provider FTSE Russell, the FTSE4Good Index Series is designed to measure the performance of companies demonstrating strong Environmental, Social and Governance (ESG) practices. The FTSE4Good indices are used by a wide variety of market participants to create and assess responsible investment funds and other products.

Stock Status

(As of March 31, 2022)

Total number of shares issued	428,904,352
Total number of shares authorized	500,000,000
Number of shareholders	16,463 (including holders of shares less than one unit)

Shareholder Composition

(As of March 31, 2022)

Segment	Number of shareholders	Number of shares held (hundreds of shares)	Percentage of shares held (%)
Financial institutions	33	476,319	11.12
Financial instruments business operators	30	212,501	4.96
Other domestic corporations	447	2,344,449	54.71
Foreign nationals	519	1,025,207	23.93
Individuals and others	12,539	226,367	5.28

Major Shareholders

(As of March 31, 2022)

Shareholders	Number of shares held (thousands of shares)	Percentage of shares held (%)
Hitachi, Ltd.	228,221	53.38
The Master Trust Bank of Japan, Ltd. (Trust account)	31,031	7.26
Mizuho Securities Co., Ltd.	11,801	2.76
J.P. MORGAN SECURITIES PLC FOR AND ON BEHALF OF ITS CLIENTS JPMSP RE CLIENT ASSETS-SETT ACCT	8,735	2.04
MSIP CLIENT SECURITIES	8,157	1.91
Custody Bank of Japan, Ltd. (Trust account)	6,063	1.42
JP Morgan Chase Bank 385632	4,320	1.01
JP Morgan Chase Bank 380072	3,807	0.89
STATE STREET BANK WEST CLIENT-TREATY 505234	3,643	0.85
UBS AG LONDON ASIA EQUITIES	3,326	0.78

Listed stock exchange

(As of March 31, 2022)

1st Section, Tokyo Stock Exchange (Prime market since April 4, 2022) Securities Identification Code: 5486

Credit Rating

(As of March 31, 2022)

Rating and Investment Information, Inc. (R&I) Issued Rating: A+

Shareholders' Memo

- Fiscal year: April 1 of each year to end March of the following year
- Record date for dividend: End March and end September of each year
- Method of public notices: Electronic public notice
- Number of shares per one unit: 100 shares
- Administrator of shareholder registry: Tokyo Securities Transfer Agent Co., Ltd. (Head Office)
NMF Takebashi Building 6F
3-11 Kanda Nishikicho, Chiyoda-ku, Tokyo, Japan

Corporate Data

Company name: Hitachi Metals, Ltd.
 Head Office address: Toyosu Prime Square, 5-6-36 Toyosu, Koto-ku, Tokyo 135-0061
 TEL 0120-603-303
 Established: 1956
 Listed stock exchange: Tokyo Stock Exchange Prime Market
 Securities code: 5486
 URL: <https://www.hitachi-metals.co.jp/e/>

Stock Price Chart



	FY2017	FY2018	FY2019	FY2020	FY2021
Total Shareholder Return	82.2%	86.2%	78.4%	122.2%	136.2%
(Comparative index: TOPIX Total Return Index)	(115.9%)	(110.0%)	(99.6%)	(141.5%)	(144.3%)

Disclaimer regarding forward-looking statements

This report contains forward-looking statements about the Company and the Group, such as business plans, predictions, strategies, assumptions, and results forecasts. All such statements are based on analyses and judgments using information available when this report was prepared, and thus may include risks and uncertainties due to changing economic circumstances, market conditions, and the like. Please note the possibility that actual results may differ from the Company's forecasts. This report was compiled based on information deemed reliable by the Company. Accordingly, such information's accuracy and integrity cannot be guaranteed.

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 **Hitachi Metals, Ltd**