

The Hitachi Metals Group Report **2017**

Integrated Report

Contents/Editorial Policy

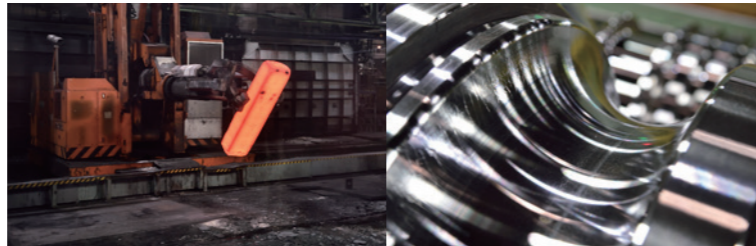
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Editorial Policy

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. In compiling the report, we referred to the International Integrated Reporting Framework, published by the International Integrated Reporting Council (IIRC). In addition to the Hitachi Metals Group Report (Integrated Report), we provide information to our various stakeholders as shown in the chart on page 3. We also periodically update our corporate website with the latest information, including detailed information and news releases.

Review Period

Fiscal 2016 (April 1, 2016–March 31, 2017)
Note: Where possible, the latest information is used at the time of publication.

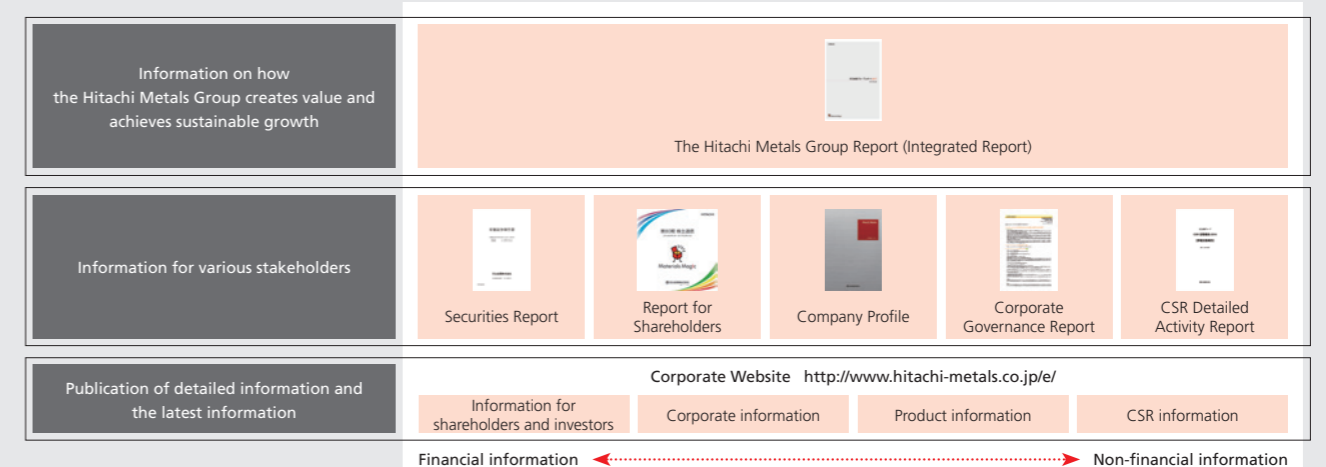
Relevant Entities

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.

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.

Information provided by the Hitachi Metals Group



Business Portfolio

The Hitachi Metals Group specializes in the development of high-performance materials. Leveraging this expertise, we supply materials and products mainly to customers in the industrial infrastructure-, automotive-, and electronics-related segments.

Highlights of FY2016

Revenues
¥910.5 billion

Adjusted operating income*1
¥66.0 billion

Adjusted operating margin
7.2%

ROE*2
9.8%

ROA*3
6.4%

Overseas sales ratio
56%

EBIT
¥68.5 billion

R&D expenses
¥18.0 billion

Number of employees
28,754

Specialty Steel Company*5

Revenues
¥234.7 billion

Adjusted operating income
¥23.5 billion

Percentage of revenues by segment*4
25.8%

Magnetic Materials Company

Revenues
¥99.8 billion

Adjusted operating income
¥9.3 billion

Percentage of revenues by segment*4
11.0%

Functional Components Company*5

Revenues
¥333.5 billion

Adjusted operating income
¥17.5 billion

Percentage of revenues by segment*4
36.6%

Cable Materials Company

Revenues
¥241.4 billion

Adjusted operating income
¥14.7 billion

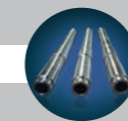
Percentage of revenues by segment*4
26.5%

Target segments

Industrial infrastructure-related

Automobile-related

Electronics-related



Engine shaft materials



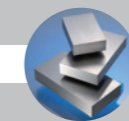
Rolls



Rolls for steel mills



Amorphous alloys Metglas®



Specialty steel

"SLD-MAGIC™" cold work tool steel



Sputtering target materials for LCD

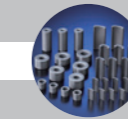


High-frequency low-loss soft ferrite core

Soft magnetic components and materials

Magnetic Materials Company

"NMF™" ferrite magnets



"NEOMAX®" neodymium magnets

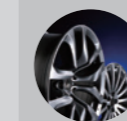
Magnets and applied products

Functional Components Company*5

Piping components



Polyethylene gas piping systems



"SCUBA™" fashionable aluminum road wheels



Cast iron products



"HERCUNITE™" heat-resistant cast components

Casting components for automobiles

Cable Materials Company



Wires and cables for rolling stock

Electric wires and cables

High-performance components



Harness for electric parking brake



Probe cables for ultrasound diagnostic equipment

*1 Adjusted operating income: Revenues – Cost of sales – Selling, general and administrative expenses

*2 ROE (return on equity) = Net income attributable to owners of the parent company ÷ Equity attributable to owners of the parent company (the average of the beginning and ending balances of the year) x 100

*3 ROA (return on assets) = Income before income taxes ÷ Total assets (the average of the beginning and ending balances of the year) x 100

*4 The percentage of revenues by segment is calculated based on sales to external customers.

*5 Effective April 1, 2017, the High-Grade Metals Company and the High-Grade Functional Components Company were renamed the Specialty Steel Company and the Functional Components Company, respectively. The new names are used in this report.

Global Expansion

The Hitachi Metals Group regards tightening environmental regulations and infrastructure projects in each nation and region as business opportunities and supplies products globally to achieve growth in each respective market. Our overseas sales account for 56% of total revenue, and we have solidified our position as a global high-performance materials company.

Scope of operations by region in fiscal 2016

Europe

Revenues **¥42.8 billion**

Number of employees **240**

Regional topics

Cable materials

- Introduced a harness assembly line for wires and cables for rolling stock in the Czech Republic to strengthen the solutions system for Europe, where railway network development is extremely active.

China

Revenues **¥62.7 billion**

Number of employees **3,294**

Regional topics

Specialty steel

- Developed soft ferrite core material with excellent temperature characteristics for automotive use, as well as a new soft ferrite core material with excellent high-frequency characteristics; production under way in Japan and at Hitachi Metals Hong Kong Ltd.'s Pan Yu Factory.
- Reinforced our production lines in Japan and Suzhou, China, to address growing demand for stainless steel piston ring materials for automobile engines; strengthened the global supply system for piston ring materials.

Magnetic materials

- Established Hitachi Metals San Huan Magnetic Materials (Nantong) Co., Ltd.; built an integrated system for neodymium magnets, ranging from raw materials procurement to production and sales, to deliver competitive products with the same quality as those produced in Japan.

Cable materials

- Introduced a new production line in Suzhou, China, to strengthen the rolling stock electric wire business.

Japan

Revenues **¥403.6 billion**

Number of employees **12,296**

Regional topics

Specialty steel

- Developed block core for 100kW ultra high-frequency power converters, using FINEMET® (nanocrystalline magnetic alloys) and Metglas® (amorphous alloys).
- Opened surface treatment plant for tool steel at Hitachi Metals Tool Steel, Ltd. and reinforced surface treatment equipment for Tribec™ (composite PVD technology) coating; accelerated reinforcement of solution sales structure for tool steel.
- Centralized and reinforced R&D functions at Hitachi Ferrite Electronics, Ltd. to strengthen R&D in soft magnetic components and materials business.
- Increased production capacity for precision casting turbine wheels at Hitachi Metals Precision, Ltd.; addressed rapidly growing demand for gasoline turbo engines.
- SH Copper Products Co., Ltd. to be integrated with Hitachi Metals Neomaterial, Ltd. in April 2018 to reinforce cladding materials business.

Magnetic materials

- Introduced innovative production line for neodymium magnets and ferrite magnets at the Kumagaya Works; relocated the Magnetic Materials Research Laboratory to the Kumagaya district, combining it with the production facility to accelerate development of technologies that reflect customer needs.

North America

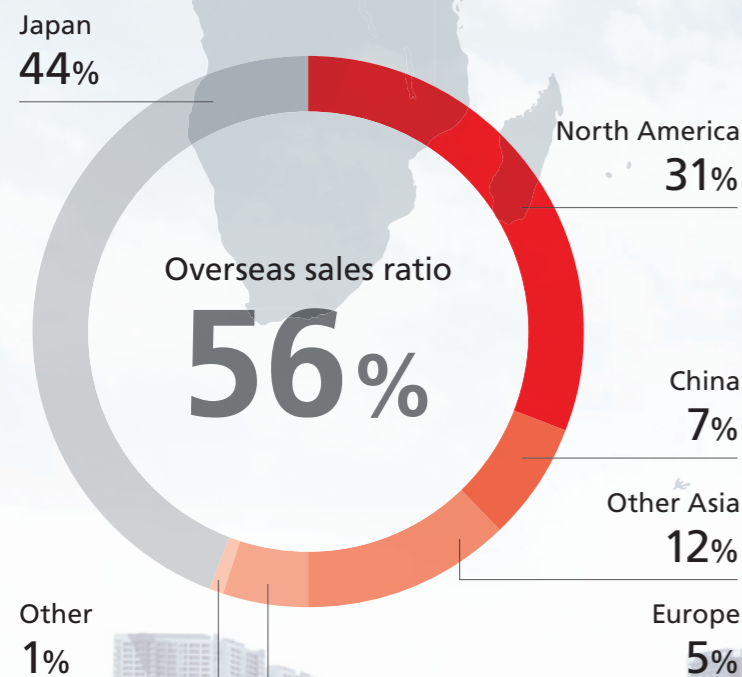
Revenues **¥276.8 billion**

Number of employees **6,774**

Regional topics

Functional components

- Merged Hitachi Metals Automotive Components USA, LLC with Waupaca Foundry, Inc. (surviving company) in April 2016 to expand synergies across North American automotive casting business; deployed strengths of both companies to optimally arrange production and bolster sales.
- Enhanced product quality and production efficiency by establishing dedicated factories for ductile cast iron and gray iron in Waupaca Foundry, Inc.



Other Asia

Revenues **¥111.5 billion**

Number of employees **5,325**

Regional topics

Specialty steel

- As part of measures to expand sales of our tool steel globally, we upgraded our cutting and processing capabilities at our various bases in South Korea, Thailand, and Taiwan, while strengthening our solution sales system in the Asian market.

Note: Regional topics pertain to the period from April 2016 to the end of June 2017.

High-Performance Materials Company Unparalleled in the World

Opportunity to demonstrate our uniqueness and make major strides

In its long history of more than 100 years, the Hitachi Metals Group has undertaken numerous M&As to build a diversified business portfolio. Responding to increasingly sophisticated market needs, we have consistently created distinctive products that are rich in variety by developing technologies and products that reflect changing social issues. Hitachi Metals is a high-performance materials company unparalleled in the world for its ability to continuously create these technologies and products, which may seem to be unconnected at first glance, and attract diverse human resources in a uniquely harmonious way.

Today, demand for environment-friendly products is growing worldwide, as symbolized by the emergence of xEV*1 in the automobile market, and development of new materials is accelerating year by year. This situation presents a major growth opportunity for the Hitachi Metals Group, which not only has numerous environment-friendly products but is also capable of consistently delivering new levels of value. The opportunity has truly arrived for Hitachi Metals to anticipate the changing market environment and social issues and demonstrate its unique strengths for making great strides.

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



Akitoshi Hiraki

Representative Executive Officer,
President and Chief Executive Officer

Expansion of organic growth

Under our Fiscal Year 2018 Medium-term Management Plan, we are increasing organic growth with the aim of expanding the business globally while improving profitability. At the same time, we are undertaking continuous portfolio remodeling, including through M&As.

In fiscal 2016, the first year of the plan, we got off to a good start building a base for growth. Specifically, we worked to improve Groupwide productivity through the *monozukuri* innovation project. We also took measures to expand our business globally, including by establishing a joint venture with a Chinese company in the magnet business and introducing a rolling stock harness assembly line in the Czech Republic. In addition, we undertook business structural reforms, including spinning off our information systems business and transforming a joint venture in the copper products business into a wholly owned subsidiary.

In fiscal 2017, it is time to focus on expansion of organic growth by catching the wave of opportunity to reinforce our distinctive attributes. To this end, we will strengthen *monozukuri* in factories and boost marketing in sales to reap the gains from increased production. At the same time, we will expedite R&D on new technologies and products based on medium- to long-term perspectives.

Reinforce production and marketing to reap gains from increased production

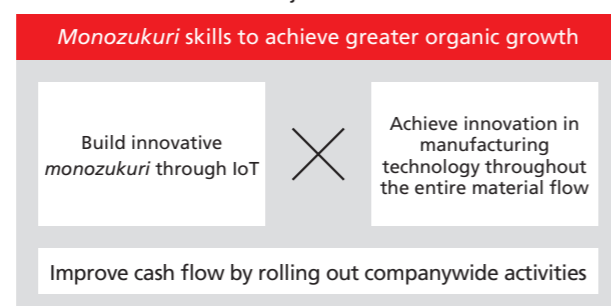
To make a company strong and expand its organic growth, the first prerequisite is to reinforce its factories (*monozukuri*) and marketing (sales) capabilities. Better *monozukuri* means increased production, the rewards of which can be reaped through stronger marketing.

Full deployment of our internal company system has enabled us to make speedy business decisions. However, a negative effect of the company system is that the Group has become too strongly aligned vertically, which limits our ability to mobilize Groupwide resources. Meanwhile, excessive reduction of fixed costs has had a restrictive effect even on necessary investments. As a result, the power of our factories (*monozukuri*), the source of our competitiveness as a manufacturer, has diminished slightly.

To strengthen our factories, our Technology, Research and Development Division, a corporate organization, spearheaded and launched the Corporate *Monozukuri* Innovation Project in fiscal 2016. Adopting cross-company, medium- and long-term perspectives, we are pursuing on-site reforms and manufacturing technology innovations, while actively introducing IoT*2 and other advanced technologies, with the aim of acquiring top world-class *monozukuri* capabilities. So far, we have rolled out the project at five domestic bases, and each is showing positive results. Going forward, we will expand coverage laterally to include overseas factories.

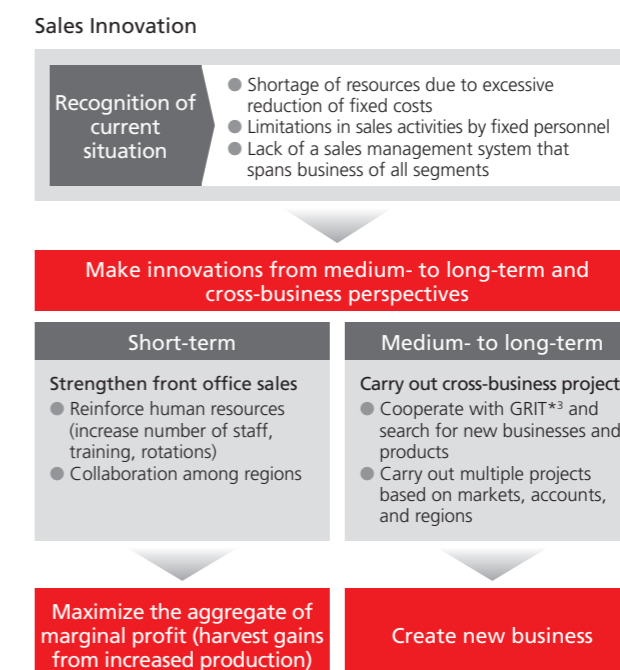
To strengthen marketing, the Business Activity & Marketing Division, also a corporate organization, led and launched the Business Activity Power Up Project in fiscal 2017. Under the internal company system, our sales and marketing teams also became too vertically aligned, making it difficult to offer cross-company proposals and ideas for developing new products that envisage future

Monozukuri Innovation Project



needs. Under the project, we will start by expanding orders, which is a current priority. To this end, we will implement mindset reforms at our sales divisions, reassess our sales organization

and systems, and review our pricing strategy. In the process, we will strengthen our frontline sales force (front office sales) and strive to attract new orders by connecting our increased production prowess, made possible through *monozukuri* improvement, to profits (maximizing the aggregate of marginal profit). Then, in the medium to long terms, we will deploy Groupwide resources that transcend internal company lines to develop new products, tap new markets, and create new business, which will enable us to formulate futuristic product portfolio strategies.



*2 IoT (Internet of things): Connecting various "things" (not just IT devices) to the Internet to establish mutual communication and thus enable automatic recognition, automatic control, remote measurement, and other tasks to be performed.
 *3 GRIT=Global Research & Innovative Technology center

R&D innovation to create newer and newer technologies and products

In addition to strengthening factories and marketing, to expand organic growth we have to properly address market needs by pursuing R&D initiatives based on medium- to long-term perspectives to enable the creation of newer and newer technologies and products.

Many of our offerings are specialized products with specific applications, including products

that pursue their function to the utmost, until they can become immediately obsolete when the market changes through a shift in a technological trend. Through R&D innovation, we will establish a business structure that can adapt even in the event of a technological paradigm shift, by replacing the old with the new and pursuing new product development themes while paying attention to technologies that pose a threat to existing products.

In April 2017, we established the Global Research & Innovative Technology center (GRIT) as the R&D arm of the entire Group to pursue creation of new business. Construction of buildings at GRIT in Kumagaya City, Saitama Prefecture, is scheduled for completion in April 2018. At that time, we will consolidate our R&D functions, which are currently dispersed across multiple bases, and integrate advanced materials development and process development. We also actively promote collaborations with external research institutions and customers as forums to advance open innovation. By spearheading R&D aimed at making Hitachi Metals a genuine development-driven company, GRIT will help shape the Group's business strategies.

Become a genuinely development-driven company

Realize R&D that leads the business strategy

Established GRIT (April 2017)

- Integrate advanced materials development and process development (Magnetic Materials Research Laboratory and Production System Laboratory located in the same building)
- Promote open innovation
- Enhance functions as a human resources development institution
- Promote new business creation themes

グローバル技術革新センター

GRIT

Global Research & Innovative Technology center



Acceleration of each company's action plan

Each of our internal companies will accelerate its action plan under the Fiscal Year 2018 Medium-term Management Plan in parallel with Groupwide initiatives.

The Specialty Steel Company, after implementing bold portfolio reforms under the previous medium-term management plan, is reinforcing its mainstay tool steel business. It has also established a system for generating stable earnings from environment-friendly products, such as piston ring materials and CVT belt materials. Under the Fiscal Year 2018 Medium-term Management Plan, it will promote the aircraft and energy businesses—earmarked as future growth drivers—while expanding its presence in the fields of electronics and batteries, notably cladding materials and soft magnetic components and materials, to respond to the emerging era of xEV.

Magnetic materials will become a new core business amid rapid growth in demand for xEV. In this context, the Magnetic Materials Company will introduce innovative production lines for neodymium magnets and ferrite magnets while expanding and upgrading its R&D system, to address customers' diversified needs. At the same time, it will generate synergies with battery materials (the Specialty Steel Company), enameled wire for high-efficiency motors (the Cable Materials Company), and other offerings.

Currently, revenue from our functional components is generated mainly by the cast iron business of Waupaca Foundry, Inc. in the United States. Going forward, the Functional Components Company will keep abreast of changing market needs, characterized by the trend toward lighter automobiles, while reinforcing its automobile casting components business and

developing new materials and composite materials.

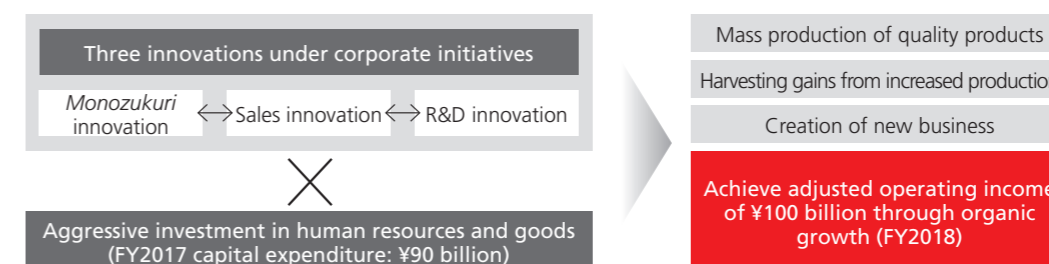
The Cable Materials Company will target business expansion in the three growth areas of rolling stock, medical devices, and automotive electronic components, while strengthening its foundation business, which accounts for a large share of revenue. In 2018, it will commission a new, high-efficiency continuous casting and rolling line using IoT technologies. By introducing new products that reflect technological innovations and changing needs, we will dramatically change the nature of this business.

Capital strategies and shareholder returns

Through the aforementioned initiatives, under the Fiscal Year 2018 Medium-term Management Plan, we are targeting organic growth that will deliver ¥1 trillion in revenues and ¥100 billion in adjusted operating income in fiscal 2018. Over the three years of the plan, we aim to generate a total of ¥290 billion in cash flows from operating activities, which we will actively deploy for future growth through M&As and other investments.

In fiscal 2017, we plan to make capital expenditure of ¥90 billion, which is 1.5 times the level of the previous year. We will also allocate ¥20 billion to R&D expenses.

With respect to shareholder returns, our basic policy is to deliver appropriate returns of profits to shareholders over the long term by maximizing corporate value and increasing the amount of profits that can be paid as dividends. For a start, we will make proactive investments based on our growth strategies to expand our business, ensuring that these results are reflected in returns to shareholders, with a dividend payout ratio target of 25%. In fiscal 2016, we paid annual dividends of ¥26.00 per share, and we currently plan to pay ¥26.00 again in fiscal 2017.



Creating new value and resolving social issues to improve corporate value

With its exceptional products, the Hitachi Metals Group aims to improve corporate value by delivering new levels of value for customers and helping resolve background social issues.

To this end, each and every employee will serve as a warrior fighting on the battle lines, as we foster a dynamic corporate culture as a “fighting group” (One Force for Change) able to demonstrate our strengths in tense situations. Taking advantage of our business diversity, we will achieve sustained growth by using innovation not found at other companies to create more and more distinctive products.

The Hitachi Metals Group will continue improving corporate value as a high-performance materials company unparalleled in the world. We ask that you look forward to that.



Akitoshi Hiraki

Representative Executive Officer, President and Chief Executive Officer

Joined Hitachi Metals because of a strong desire to “freely conduct research into new materials.” Assigned to the Metallurgical Research Laboratory after studying neodymium magnets and nanocrystal materials at the Magnetic Materials Research Laboratory. Conducted research into sputtering target materials, an unknown field at that time, and was entrusted with their commercialization. Got overseas production on track for the first time in the specialty steel business, where Hitachi Metals was struggling with market development, combining real action and a refined management sense to cultivate core products at the Yasugi Works. Appointed president of Hitachi Setsubi Engineering Co., Ltd. (current name: Hitachi Power Solutions Co., Ltd.), a subsidiary of Hitachi, Ltd., at age 47. Called back two years later to spearhead bold growth strategies in the specialty steel business. Appointed CTO of Hitachi Metals in April 2015, and in April 2016 took leadership of *monozukuri* innovation and R&D innovation projects for one year. Has an unbridled belief in and passion for corporate-driven innovation in *monozukuri*, sales, R&D, and work style reform.

Career highlights

- 1961 Born in Hyogo Prefecture
- 1985 Obtained Master's Degree, Graduate School of Metals and Materials Engineering, Osaka University
- 1985 Joined Hitachi Metals, Ltd.
- 1985 Conducted research into neodymium magnets and nanocrystal materials at the Magnetic Materials Research Laboratory
- 1988 Assigned to the Metallurgical Research Laboratory. Conducted research into sputtering target materials and entrusted with their commercialization
- 2001 Got overseas production on track for the first time in the specialty steel business, where Hitachi Metals was struggling with market development
- 2008 President and Director of Hitachi Setsubi Engineering Co., Ltd.
- 2010 Managing Officer, President of Specialty Steel Company, Deputy General Manager of Corporate Export Regulation Office of Hitachi Metals, Ltd.
- 2012 Vice President and Managing Officer, President of High-Grade Metals Company, General Manager of Specialty Steel Division, and Deputy General Manager of Corporate Export Regulation Office
- 2015 Vice President and Representative Executive Officer, President of High-Grade Metals Company, Deputy General Manager of Corporate Export Regulation Office, and Director
- 2016 Vice President and Representative Executive Officer, General Manager of Technology, Research & Development Division, General Manager of Corporate Quality Assurance Division, and Director
- 2017 Representative Executive Officer, President and Chief Executive Officer

Reforms and Progress Aimed at Expanding Organic Growth

Dedicated to “becoming the world’s leading high-performance materials company,” the Hitachi Metals Group is pursuing reforms aimed at expanding the business globally while improving profitability.

Expanding organic growth will be the key to achieving the targets of our Medium-term Management Plan. To this end, we are powerfully promoting the Corporate *Monozukuri* Innovation Project while expediting research and development.

In this section, we introduce specific examples of efforts to build innovative *monozukuri* skills through IoT technologies, carry out R&D innovation from medium- to long-term and cross-business perspectives, and develop a solution sales system that generates high added value.

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Building World-Class *Monozukuri* Skills

Drastic reforms for the future

Seeking to expand organic growth, we are engaging in GEMBA (workplace) and manufacturing technology innovations based on cross-organizational and medium- to long-term perspectives. The aim is to solidify our foundation as a manufacturer and reinforce our potential for sustained growth. Our goal is to build *monozukuri* skills that are among the best in the world by actively introducing advanced technologies in segments such as process technologies, CAE*, and IoT.

* CAE (computer-aided engineering): Using computer-based simulations to verify whether or not a designed structure would meet performance requirements, even before it is built.

Innovation

Deploying IoT technologies at business locations

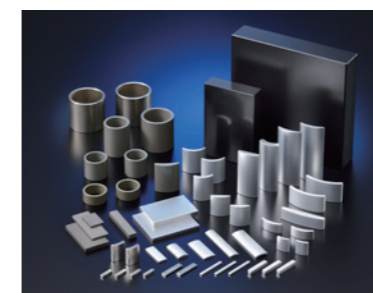
As the name (“Internet of things”) implies, IoT enables huge volumes of information to be collected from Internet-connected devices and converted to “big data,” then analyzed to create new knowledge and value. Even in the manufacturing sector, more and more companies are introducing IoT technologies to improve production efficiency. While Hitachi Metals is mainly involved in materials-based *monozukuri*, the adoption of technologies allowing real-time information visualization and traceability can lead to more stable manufacturing and improved product quality. Accordingly, we are actively adopting IoT technologies at each of our business locations.

Using sensors to visualize information enables data on the status of a device and processing conditions to be accumulated when a malfunction occurs, allowing the source of the problem to be identified and measures to be taken. For this reason, we are installing sensors in our equipment and introducing smart devices, while swiftly establishing an environment for acquiring and analyzing big data. Moreover, by deploying big data to develop our advanced *monozukuri* technologies globally, we will create systems allowing each location of business to mobilize IoT technologies at a high level, in our quest to become the world’s leading high-performance materials company.

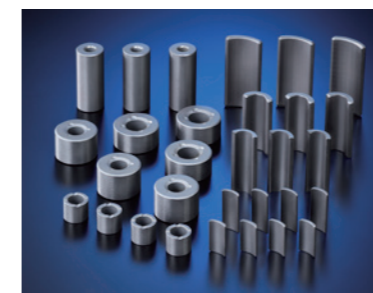
Initiatives

Location	Objectives	Methods
Kyushu Works	Improve product quality, pass rate, and traceability	Big data analysis
Ibaraki Works	Improve production efficiency	Big data analysis
Kumagaya Works	Improve product quality and pass rate	Sensing technologies; big data analysis
Yasugi Works	Eliminate waste; visualize work-in-process, lead time, product quality, and operational status	Use of smart devices (handsets, etc.); big data analysis

Innovative production line for neodymium magnets and ferrite magnets introduced



Neodymium magnets “NEOMAX®”



Ferrite magnets “NMF™”

To address the flourishing demand for drive motors for plug-in hybrid and electric vehicle motors, as well as other electric motors, we are building an innovative production line for neodymium magnets and ferrite magnets at the Kumagaya Works, with operation scheduled to begin in fiscal 2018.

The new production line is planned for installation in a new facility to be constructed within the Kumagaya Works. In addition to IoT technologies, it will feature new production technologies designed to optimize the magnet production process, enabling product quality and productivity to be maximized simultaneously. We will also use IoT technologies to share data on manufacturing quality globally.

At the same time, we will relocate the Magnetic Materials Research Laboratory to the Kumagaya district, bringing it together with the information system component business of the Magnetic Materials Company at the Kumagaya district.

Through these measures, we have positioned the Kumagaya Works as a “mother plant” where control of the neodymium magnet and ferrite magnet businesses is centralized. By bringing together the research laboratory and the plant, we will accelerate technological development and production to reflect customer needs.



Image of completed new magnetic materials facility at the Kumagaya Works

Develop innovative, environment-friendly, hot-processing techniques

At the Yasugi Works, we introduced new equipment after conducting a major review of hot-processing techniques used in forging mill production. Hot processing refers to the rolling of iron ingots taken from a heating furnace. Since it is an important process for delivering materials to the entire Yasugi Works, we revamped our large-scale facilities while operating existing equipment.

In addition to improving productivity, we paid attention to material flows and energy costs from this revamp, reducing CO₂ emissions and significantly improving yield. Specifically, the use of a new type of gas fuel in the heating furnace allowed materials to be heated uniformly, resulting in lower energy costs and CO₂ emissions. In the rectangular steel material manufacturing process, we improved product quality and shortened the processing time by optimizing the anvil shape and reviewing the manufacturing process. Furthermore, we made it possible to manufacture circular billets using a forging mill, leading to an improved working environment and more effective collection and recycling of waste material. In addition, we deployed IoT technologies to visualize shape measurement of hot steel and other factors, and used the resulting data to perform online automatic control and raise the level of quality control.

Three positive outcomes

1 Renewal of heating furnaces

Our heating furnaces used heavy oil, which emits large amounts of CO₂, and the furnaces themselves were aging, having been in operation for 30 years. For these reasons, we introduced a new type of furnace and changed the fuel to gas.



Achieved lower energy costs, significant reduction of CO₂ emissions, and uniform heating of materials.

2 Enhanced efficiency of rectangular steel processing

In the rectangular steel manufacturing process, we optimized the anvil shape and otherwise reviewed our manufacturing procedures. We also made our production line compatible with SLD-i™, a new steel type that is expected to be mass-produced in the future.



Achieved improved quality and shorter processing time, in addition to more uniform distortion.

3 Circular billet production

Conventional rectangular billets are ground with a grindstone, which is bad for the workplace environment and wasteful. For these reasons, we used a forging mill, which allows surface cutting, to make circular billets.



Improved working environment and more effective collection and recycling of waste material.



Innovation

Driving R&D to Open Up New Future Potential

Becoming a genuinely development-driven company

We are strengthening R&D in our quest to become a genuinely development-driven company. Innovative R&D plays an important role in reinforcing our competitiveness at the global level. Accordingly, in April 2017, we established our Corporate Research Lab, the Global Research & Innovative Technology center (GRIT), to spearhead medium- to long-term R&D topics focusing on advanced materials. In these and other ways, we have been working hard to enhance our R&D system with a view toward the next generation. By emphasizing innovative R&D and new business creation, we will expand organic growth to deliver sustained growth and contribute to society.



Carrying out new business creation from medium- to long-term perspectives

Creating new businesses is a key prerequisite to achieving improved profitability and steady business expansion at the global level. Due to advancements in chemistry and technologies, moreover, materials handled by Hitachi Metals are constantly threatened by the sudden appearance of alternative materials. For example, in the automotive sector, where weight reduction is a major priority, various materials may emerge to replace conventional cast iron, such as aluminum-based composite materials and carbon nanotube-reinforced aluminum alloys.

For new business creation, therefore, we examined the various threats and opportunities in each business field and identified medium- to long-term R&D themes, envisaging the next 10 to 20 years. We have set 15 specific topics—including metal materials, additive manufacturing, composite materials, new magnets, composite materials and multiple materials, aluminum conductors and compound conductors—and we will expedite innovation in the fields of automobiles, railways, aircraft, and energy. From fiscal 2016 through fiscal 2018, we plan to invest ¥12 billion in R&D aimed at new business creation.

Medium- to long-term R&D topics concentrated on threats and opportunities (examples)

Company	Current products	Development theme (based on perceived threats)
Metal Materials	Mold materials	Additive manufacturing
	Aircraft- and energy-related materials (ultra heat-resistant steel)	Composite materials
Magnetic Materials	Neodymium magnets	New magnets
Functional Components	Cast iron (NM)	Composite materials and multiple materials
Cable Materials	Copper wire	Aluminum conductors and compound conductors

Targeting innovation through a revolutionary research system

Under our current system, in which each internal company has its own research laboratory, we have consistently created products with distinctive characteristics unique to Hitachi Metals that meet the needs of customers. To realize new, high-performance materials with future potential, however, it is important to conduct cross-organizational R&D that transcends internal company lines.

In addition to leading-edge research sourced from perceived threats and opportunities, our new GRIT, established in April 2017, will actively spearhead cross-organizational R&D that goes well beyond internal company boundaries. It will also expedite open innovation through close collaboration with external institutions, such as Hitachi, Ltd. and universities. Moreover, we are positioning GRIT to fulfill an important mission as a place to foster research personnel. For this reason, we will accelerate exchanges with exceptional engineers around the world in an open environment to create innovations never seen before.

TOPICS

Open innovation initiatives

Establishing NIMS–Hitachi Metals Next-Generation Materials Development Center

In July 2016, we established NIMS–Hitachi Metals Next-Generation Materials Development Center in collaboration with the National Institute for Materials Science (NIMS), and started research into practical applications for next-generation ultra heat-resistant alloys. Using this research to develop metal materials for aircraft engines and gas turbines will help reduce CO₂ emissions and conserve resources.



Signing ceremony

Participation in IBM research consortium

Hitachi Metals participates as a founding member in the IBM Research Frontiers Institute, a research consortium established by IBM Corporation in 2016. The institute promotes research into materials development methods using neuromorphic computing*¹ and other cognitive technologies*², as well as MI*³, and is targeting dramatic progress in advanced materials research and development.

*¹ Neuromorphic computing: The use of computers to process signals in a way similar to that of the cranial nerve.

*² Cognitive technology: Technology that extracts and analyzes relevant information from huge amounts of data, learning from such information and past experiences to support human decision-making and actions.

*³ MI (materials informatics): Scientific method for solving various problems concerning matter and materials science by utilizing a vast and diverse amount of data related to computer science and the physical and chemical properties of matter and materials.

Patent Office Commissioner Prize received

Hitachi Metals received a Patent Office Commissioner Prize of the FY2016 National Invention Awards, hosted by the Japan Institute of Invention and Innovation, for its invention of a method for manufacturing maraging steel. Maraging steel is a type of steel with both high strength and high toughness. Hitachi Metals developed a technology for controlling to an extremely fine degree the inclusions generated in the steel ingot melting process, leading to dramatic improvement in maraging steel's fatigue strength.



CVT belt materials



Award ceremony

After in-house brainstorming, we decided on the name "Global Research & Innovative Technology center (GRIT)" for our new Corporate Research Lab. In English, "grit" means "fighting spirit and enthusiasm that prevail against all odds, the power to persevere," which embodies the philosophy of the new laboratory.

One attribute that greatly differentiates Hitachi Metals from other companies is the diversity of the materials it handles, resulting from its proactive development of materials other than metals. The medium- to long-term R&D topics for new business creation that we have launched are unlike those of other companies, and we will promote them without excluding any possibility.

Commitment is the key part of R&D. Simple images that anybody can conceive of and develop will inevitably be created by somebody. The goal of our R&D efforts is to provide impressive benefits to people, society, and the environment. Human beings are greatly interested in, and concerned about, what

Tackling disruptive innovation with open environments and free-thinking research

Kenichi Inoue

Head of Global Research & Innovative Technology center, Technology, Research & Development Division; General Manager of Strategic Innovation Department

they can easily visualize 10 and 20 years down the road, which is where the real seeds of innovation lie. I am aware that my mission as head of the center is to create an environment and provide motivation for uncovering these seeded ideas. I also believe in the importance of integrating the technologies of our internal companies. In addition to cross-organizationally mixing the technologies of all companies, we will actively incorporate MI and AI* techniques to innovate our process technologies.

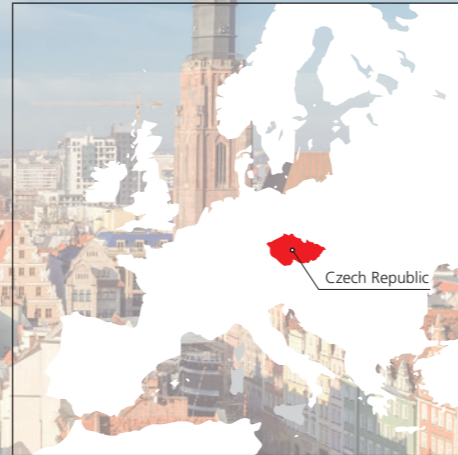
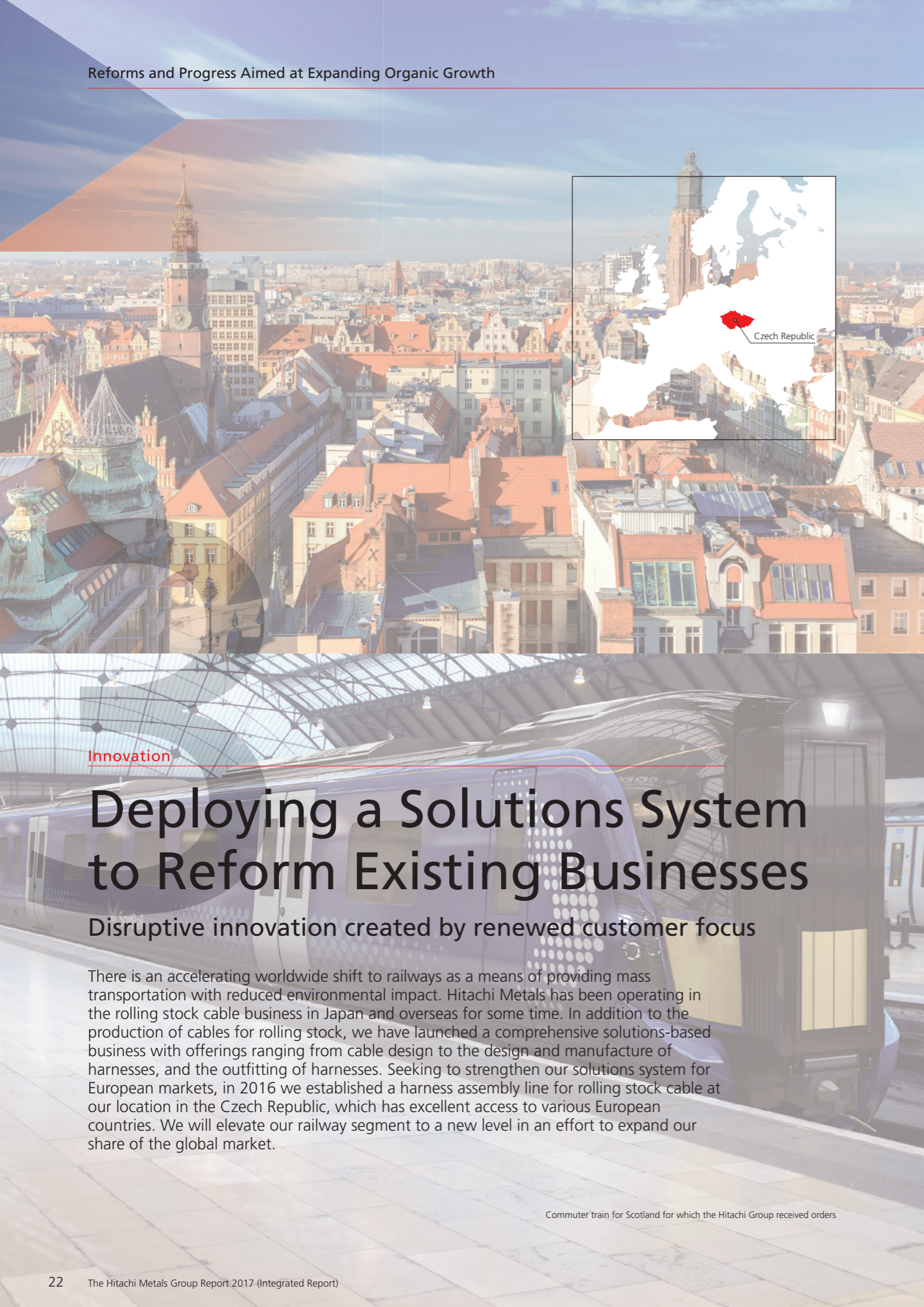
Other important missions of GRIT are the exchange of researchers and personnel development. In the new facility, we will emphasize a collaborative environment, including bringing together the Advanced Materials Development Department and the Process & Machine Development Department, while encouraging the growth of researchers through exchanges in open forums. Moreover, we plan to expand overseas operations in the next five years. In addition to quickly catching up with global trends, we hope to deepen exchanges and collaborations with overseas researchers who have different ideas and approaches.

*AI: artificial intelligence



Profile

Joined Hitachi Metals in 1993 and assigned to the Metallurgical Research Laboratory. Involved in the development of surface treatment (coating) technologies, which attracted attention of mold manufacturers and automakers. Launched the full-scale surface modification business in 2005 with the establishment of the Surface Modification Center (current name: Solution and Engineering Center in the Specialty Steel Company, Yasugi Works). Appointed General Manager of Technology at High-Grade Metals Company (current name: Specialty Steel Company) in 2016. Assigned to lead GRIT in 2017.



Innovation

Deploying a Solutions System to Reform Existing Businesses

Disruptive innovation created by renewed customer focus

There is an accelerating worldwide shift to railways as a means of providing mass transportation with reduced environmental impact. Hitachi Metals has been operating in the rolling stock cable business in Japan and overseas for some time. In addition to the production of cables for rolling stock, we have launched a comprehensive solutions-based business with offerings ranging from cable design to the design and manufacture of harnesses, and the outfitting of harnesses. Seeking to strengthen our solutions system for European markets, in 2016 we established a harness assembly line for rolling stock cable at our location in the Czech Republic, which has excellent access to various European countries. We will elevate our railway segment to a new level in an effort to expand our share of the global market.

Commuter train for Scotland for which the Hitachi Group received orders

Shift in emphasis from “goods” to “solutions and services”

Having reaffirmed the benefits of meeting the pent-up demand from global rolling stock manufacturers, we launched a comprehensive solutions-based business with offerings ranging from the design of cables for rolling stock and the design and manufacture of harnesses to the outfitting of harnesses, in addition to the production of cables. A harness is a modularized component in which multiple wires are bundled. In this way, we can combine around 1,000 wires into 50 harnesses for use in the first car of rolling stock. This allows a huge reduction in the number of components and helps improve outfitting, workability, and convenience for customers. To date, rolling stock manufacturers have designed cable and manufactured and fitted out harnesses in-house alongside rolling stock design, which entailed considerable time and cost for measurement and outfitting. In response, we deployed 3D CAD technologies to provide comprehensive one-stop solutions ranging from rolling stock cable manufacture and wire design to the design, manufacture, and outfitting of harnesses. In harness manufacturing technology, which is one of the solutions, we developed an innovative digital harness board, which we deployed in the Czech Republic in 2016.



Wires and cables for rolling stock



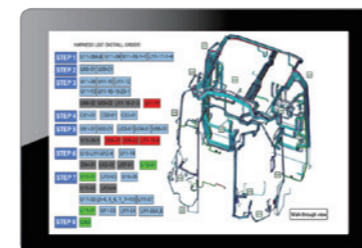
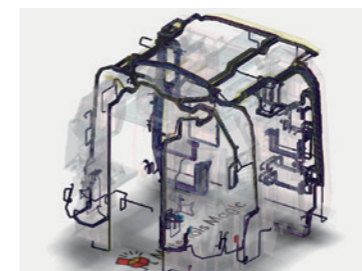
Class 800 train manufactured for the Intercity Express Programme (IEP) in the United Kingdom (order received by the Hitachi Group)

Innovative solutions and services based on original concepts

Here, we handled the cable design function on behalf of the rolling stock manufacturer, utilizing 3D design data provided by the manufacturer to create the wiring for each cable using 3D CAD. We designed a modularized harness that allows cable outfitting to be done easily and efficiently. We also reused 3D harness design data to develop an outfitting navigation system. In addition, we developed a series of instructional animations for a tablet or PC showing customers the correct way to connect and outfit the harness. In these solutions and services, we rigorously explore ways to enhance customer benefits and our own value, which leads to a win-win outcome.

By also using IoT technologies to develop a digital harness board, we enhanced the efficiency and quality of harness manufacturing, which was previously highly reliant on operators.

Since all of these are breakthrough solutions and services, including the related business model, we have applied for 35 patents in Japan and overseas, ranging from cable design methods to outfitting navigation and digital harness boards.



3D design data screens
Top: 3D wiring technology
Bottom: Outfitting wiring technology

Shifting emphasis from price competition to a powerful growth engine



Booth at InnoTrans 2016 trade fair

By providing comprehensive solutions and services, we have created added value that cannot be compared with our conventional cable sales business.

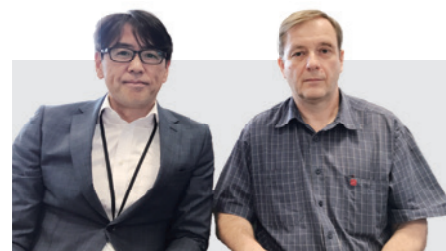
Using 3D in harness design greatly shortens the rolling stock design time for customers, and our outfitting navigation system has prevented outfitting error and lowered man-hours by 50%. This has greatly reduced lead times, from design to manufacture, for our rolling stock manufacturing customers. Furthermore, since the process can be simulated even without an actual vehicle, it is playing a positive role in the training of unskilled workers.

Enhancing the efficiency of harness manufacture and outfitting is a major issue for rolling stock manufacturers. Accordingly, Hitachi Metals received numerous specific inquiries when it exhibited these solutions and services at InnoTrans 2016, the International Trade Fair for Transport Technology, Innovative Components-Vehicles-Systems, held in September 2016, the largest of its kind. Some companies have already visited our harness assembly line at our location in the Czech Republic, and we look forward to attracting orders for new projects in the near future. Currently, we are the only company that provides comprehensive solutions, and this is attracting a great deal of interest because we are performing part of the manufacturer's role to deliver time and cost reductions.

With a new growth engine built on original comprehensive solutions, Hitachi Metals plans to increase sales in the railway segment by not only advancing its business laterally to domestic manufacturers but also expediting business growth on a global scale.

Comparison of Wire Usage for Rolling Stock

Type	Wire volume	Vehicle length
Commuter train (4 cars)	150 km	90 m
High-speed train (5 cars)	220 km	125 m



Innovative digital harness board developed from scratch

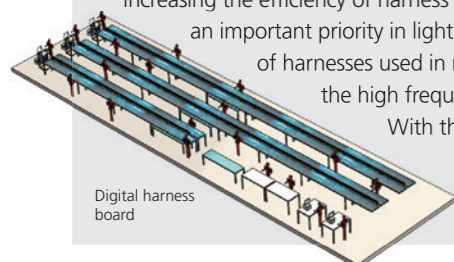
Kenji Kawase (left)
Manager, 1st Engineering Sec., 2nd Engineering Dept.
Electric Wire & Cable Business Unit, Cable Materials Company

Rostislav Varga (right)
IT Manager, IT Section, Hitachi Cable Europe, s.r.o.

In the past, harnesses were produced using wooden boards onto which design drawing printouts were affixed. However, increasing the efficiency of harness manufacturing became an important priority in light of the numerous types of harnesses used in rolling stock, as well as the high frequency of model changes.

With this in mind, we developed our own groundbreaking digital harness

board that directly projects the harness design drawing. Thus, we created a manufacturing environment that enables flexible responses to design changes, in addition to model changes. We also introduced IoT technologies to handle automatic distribution, collation, and disconnection of cables, as well as work navigation, and we adopted traceability to allow visualization of work records and progress. In the Czech Republic, we have introduced a long assembly line that can manufacture harnesses up to 30 meters in length.



Digital harness board

Value Creation at the Hitachi Metals Group

For us, creating value for our customers means providing help to solve social issues in various fields and leads to enhanced corporate value.

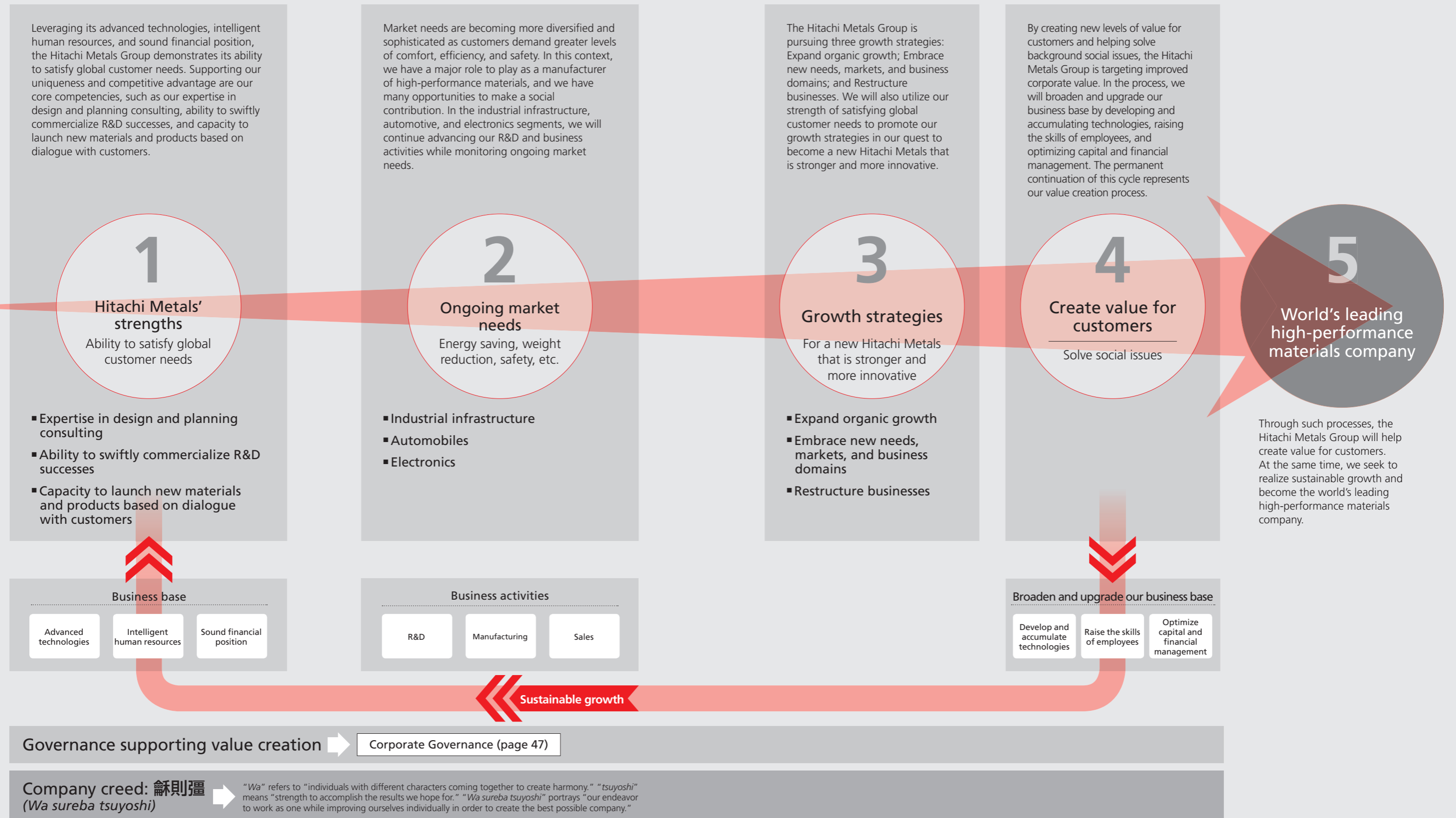
In this section, we explain the value creation process of the Hitachi Metals Group as a whole and describe our strengths—the source of value creation. We then introduce specific initiatives to address ongoing future needs and describe the progress of our materiality analysis.

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- 30 Ongoing Market Needs
- 34 TOPICS: Initiatives to Identify Social Issues

The Hitachi Metals Group's Value Creation Process

In these ever-changing times, the Hitachi Metals Group constantly monitors the requirements of customers and markets and supplies advanced new products and technologies that are at the forefront of their era. For us, creating value for our customers means providing help to solve social issues in various fields and leads to enhanced corporate value. Through this process of value creation, we embrace the challenge of becoming the world's leading high-performance materials company.



Business Bases Embodying the Hitachi Metals Group's Strengths

The keys to the Hitachi Metals Group's strengths are its "advanced technologies" and "intelligent human resources." Since our foundation, our widely knowledgeable personnel have maintained a commitment to quality. Rather than keeping pace with and following the competition, we develop a wide range of products brimming with creativity and backed by advanced technologies, to meet the needs of customers all over the world.

Business base 1

Advanced Technologies

In addition to exploiting our knowledge about the characteristics of various materials to pursue extremely high-quality core technologies and enhance quality, we have *monozukuri* skills that enable us to create and mass-produce items that meet customers' needs. We deploy these capabilities to achieve "mass production of quality" and support value creation at the Hitachi Metals Group.

By exhaustively targeting "mass production of quality" in this way, we have achieved the top market share in our fields of focus.

Mass production of quality

Core technologies

Technologies and ideas to extract materials' maximum performance

- Alloys and design technologies
- Manufacturing and processing technologies
- Analysis/evaluation technologies

Monozukuri skills

- Industry-leading production capacity
- Industry-leading cost competitiveness

Top market share achieved



Business base 2

Intelligent Human Resources

Human resources are central to the foundation of value creation. Sharing the Group's corporate creed of "*Wa sureba tsuyoshi*," each and every employee demonstrates unique attributes to achieve growth and harnesses strengths to overcome difficulties. In these ways, we are creating new levels of value globally.

和則強

Wa sureba tsuyoshi

Individual strengths

Diversity

Shared values

Initiatives focused on

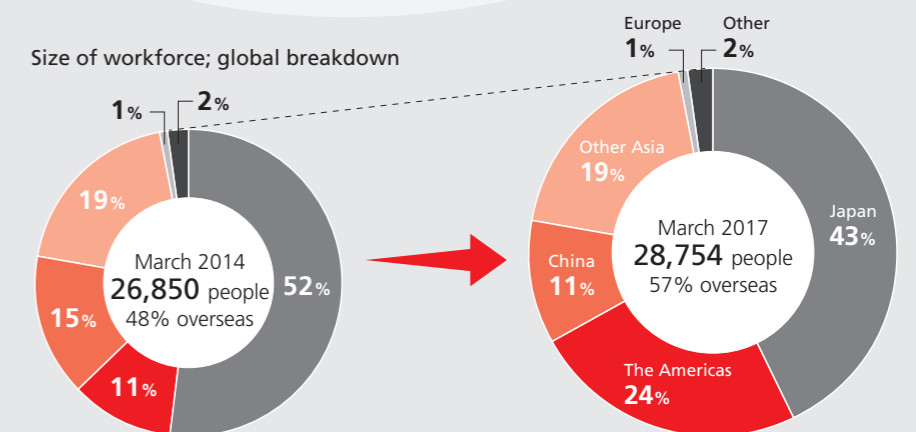
Promoting human resource management globally

Promoting human resource diversity and work style reforms

Sharing a common global philosophy

For more details about these initiatives, please refer to page 56.

Size of workforce; global breakdown



Contributing to innovation in xEV*

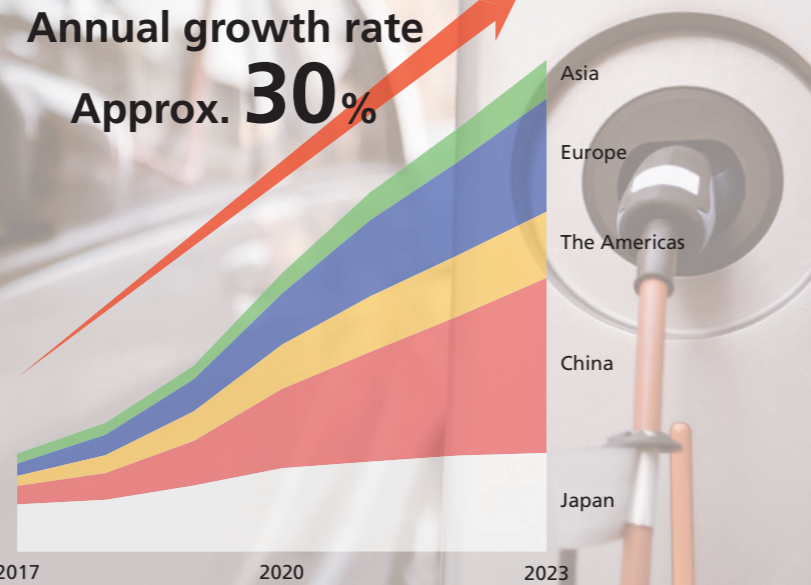
Magnetic Materials Company
Neodymium magnets NEOMAX®

Specialty Steel Company
Clad materials for lithium ion batteries

Functional Components Company
Battery cases

Cable Materials Company
Magnet wire

Projection of HEV and EV production
(As of March 31, 2016)



Source: Company estimates, based on various materials

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

Deploying advanced technologies and innovative production lines to address demand and expedite growth globally

Environmental regulations in various countries boosting demand for xEVs

The markets for xEVs are rapidly expanding in various nations amid tightening regulations governing CO₂ emissions and fuel efficiency. Due to significantly increasing demand in the Americas, Europe, and China, we expect the global market to grow around 30% per year until 2023.

The U.S. state of California has enacted regulations whereby a certain percentage of automobiles sold must be zero emission vehicles (ZEVs). Moreover, the state is expected to tighten those regulations in 2017. In conjunction with this, every automaker in the Americas is expected to expedite development of various models, including plug-in hybrid electric vehicles (PHEVs) and electric vehicles (EVs). In Europe, meanwhile, the UK and France have declared they will prohibit domestic sales of gasoline and diesel vehicles by 2040.

Even in China, the world's largest automobile market since 2009, the market is growing sharply because of subsidies for EV purchases. Moreover, that nation announced its "Energy-efficient and new-energy vehicles industry development plan," which targets xEV production of 5 million units by 2020.

Addressing vibrant demand through innovative production lines and products from our internal companies

NEOMAX®, a core product of the Magnetic Materials Company, has been highly acclaimed in the market as the

world's leading brand of neodymium magnets used in hybrid electric vehicles (HEVs) and EV drive motors. To address worldwide growth of the new-energy vehicle market, we are building innovative production lines and reinforcing our global production system with the start of mass production in a joint venture in China, in a plan to meet increasing customer needs. In building our innovative production lines, we are using IoT technologies to introduce real data management while strongly promoting quality consistency and high-efficiency production. We will also enhance competitiveness from the material flow perspective, by increasing technology to limit the use of heavy rare earth elements to significantly reduce use of those elements, as well as by using proprietary technologies to solidly establish recycling processes.

Further, the Specialty Steel Company offers soft magnetic materials, which are widely used in cladding materials for batteries—including use in current-collecting clad foils of lithium ion batteries to meet increasing capacity requirements—as well as use in electromagnetic compatibility (EMC) and noise-reduction parts. Meanwhile, the Functional Components Company offers battery cases, and the Cable Materials Company's products include magnetic wire incorporating proprietary technologies that contribute to advances in compactness and the longevity of motors. With abundant product lineups offered by our internal companies, we will meet the vibrant demand for xEV.

High value-added functions to enhance energy efficiency of gasoline-powered vehicles

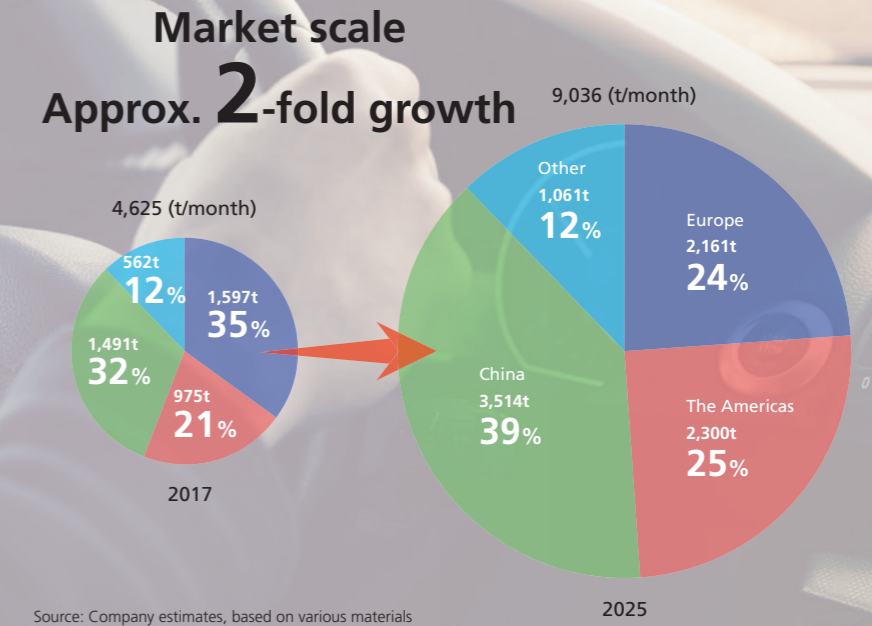
Functional Components Company
HERCUNITE™ heat-resistant cast components

Specialty Steel Company
Turbine wheels

Piston ring materials

CVT belt materials

Projection of market scale for heat-resistant cast components



Source: Company estimates, based on various materials

Diverse lineup and integrated design and processing system to satisfy increasingly sophisticated needs

Accelerating fuel saving of gasoline-powered vehicles through multifaceted approaches

To help realize a sustainable society, automakers are expediting efforts to save energy with multifaceted approaches. Even gasoline-powered vehicles, which have driven the motorization era to date, are showing good progress in improving environmental performance. These technologies are continuing to evolve and are mainly aimed at downsizing, materials-based weight reduction, enhanced thermal efficiency through engine combustion improvements, and reduction of friction loss in the drive train.

Cars with high environmental performance that achieve downsizing with turbochargers (turbo-engine cars) tend to have lower prices than xEVs. This can be one reason why the production volume of these cars is increasing rapidly worldwide, including in the Americas, Europe, and China.

HERCUNITE™ and other products making a contribution

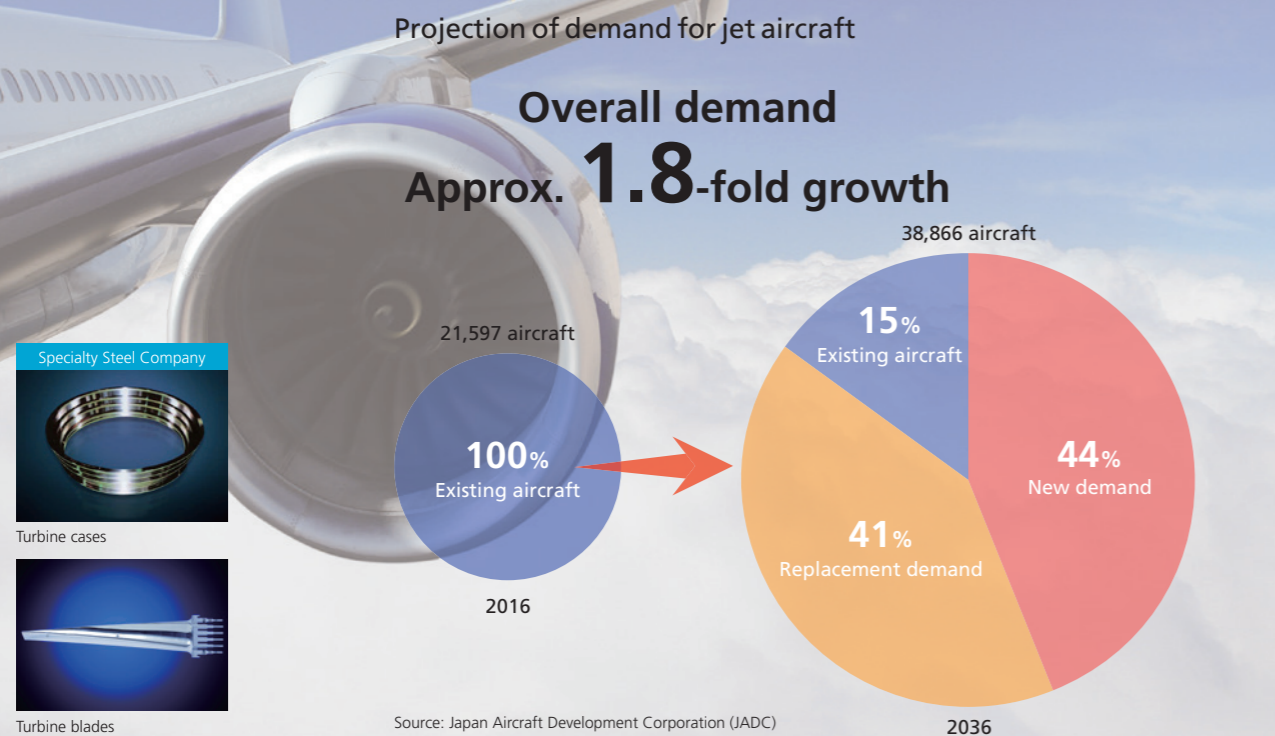
HERCUNITE™ heat-resistant cast components, the mainstay products of the Functional Components Company, are used in turbochargers. These products are frequently adopted in turbo-engine cars not only because of their high heat resistance, but also because they offer solutions backed by our

advanced processing technologies. Our outstanding capabilities in materials development reduce costs with designs that match the temperature ranges required by customers and through optimization of materials in line with the application. We also offer solutions through CAE*-based design support. Moreover, the Specialty Steel Company makes turbine wheels, which are key turbocharger components.

High-performance piston rings also contribute greatly to reducing friction loss in the entire engine. The Specialty Steel Company offers stainless steel piston ring materials that are highly effective in reducing friction loss. We also have a broad range of products that accurately reflects fuel-saving needs. These include CVT belt materials, which help reduce friction loss in power trains.

* CAE (computer-aided engineering): Using computer-based simulations to verify whether a designed structure would meet performance requirements, even before it is built.

Boldly using technological expertise in the aircraft industry, where demand is growing



Proprietary No. 1 technologies and synergies among the three companies address needs for fuel efficiency and cost reduction in aircraft

Demand to grow 1.8-fold in 20 years, driven mainly by small passenger aircraft

In the world aircraft market, annual demand for jet aircraft is projected to reach around 38,866 units by 2036. This represents 1.8-fold growth compared with the current demand, buoyed by flourishing passenger demand, which will rise around 5% per year until 2035, as well as by the introduction of new, highly economical models with good fuel economy.

Active investments and synergies among the three companies to address flourishing demand

Against this background, we have positioned the aircraft business as a new growth driver.

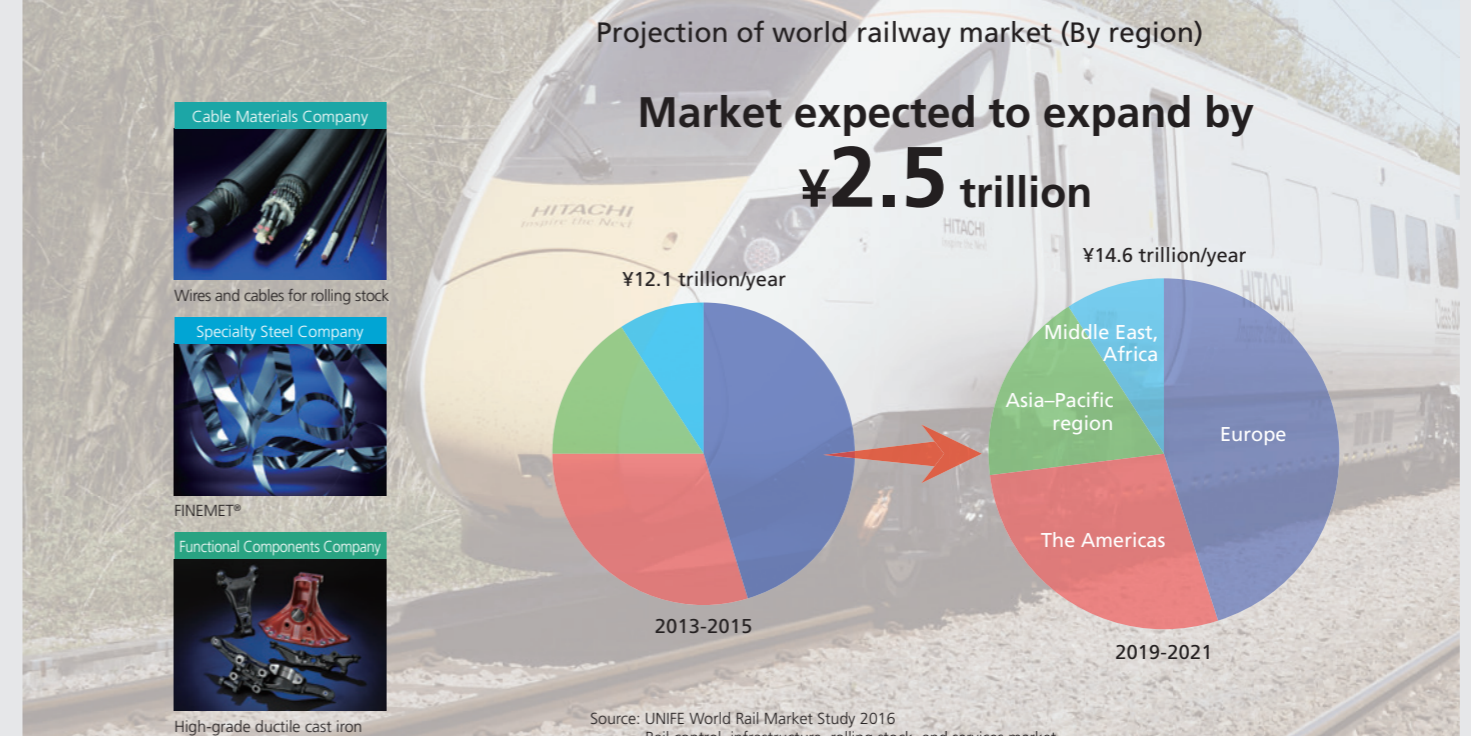
At our Yasugi Works, in addition to a 24-ton vacuum induction melting and casting (VIM) furnace that commenced operation in March 2015, we have made other major investments, including in a 10,000-ton free forging press and a high-speed radial forging machine. At Hitachi Metals MMC Super Alloy, Ltd., we have started operating a large 840-ton ring mill capable of pressure 2.5 times greater than before. In addition to these successful investments, we have formed an alliance with Japan Aeroforge, Ltd., which has a 50,000-ton forging press, the world's largest. Under the alliance, we are setting up a supply system that can handle large components.

In 2015, we acquired certification from customers for our engine shaft materials and made good progress in acquiring certifications that are essential in the aircraft and energy businesses. We will expedite these efforts in the future.

Going forward, we will create synergies among the three companies while making continuous capital expenditure and introducing CAE and other analysis technologies to accelerate the development of R&D and manufacturing technology.

We are striving to become one of the world's top four aircraft materials manufacturers. Our revenue targets for the aircraft and energy businesses are ¥37 billion in fiscal 2018 and over ¥60 billion in fiscal 2025, almost double the fiscal 2018 target.

Contributing to worldwide high-speed railway plans with technologies and ideas



Powerful backup for realization of high-speed railway through 3D harness design and manufacturing and reinforcement of Chinese operations

High-speed rail plans progressing in China, Europe, the Americas, and elsewhere

Plans are currently under way to build numerous high-speed railway systems around the world. In addition to global environmental problems and high oil prices, this reflects the economic growth of emerging countries, which has brought about population concentration and traffic congestion in urban areas. There is also pent-up demand in Europe, where high-speed railways are already well developed, and high-speed railways around the world are expected to grow at an average annual rate of 3% over the next 20 years.

Under the Chinese government's 13th five-year economic plan, investments totaling around 3.8 trillion yuan will be made to extend the nation's railway network to 30,000 kilometers from the current 20,000 kilometers. In the UK, the birthplace of railways, the High-Speed Two (HS2) railway plan is showing good progress, while large-scale high-speed railway plans are advancing in India, the U.S., Indonesia, Malaysia-Singapore, Vietnam, and elsewhere.

Original technology used in European and Chinese markets

High-speed railway networks will continue serving as important infrastructure because they are environmentally friendly and enable mass transportation. Positioning its railway-related business as a growth area, the Cable Materials Company will

forge ahead with active business expansion in Europe and China.

The Hitachi Group received orders from railway operator Abellio for Class 385 commuter trains for the global market. In response, our Cable Materials Company designed and built rolling stock harnesses using 3D design techniques, in addition to selling stand-alone rolling stock electric cable. In 2016, we also established a harness supply base for rolling stock in the Czech Republic. Starting by supplying rolling stock production bases in the UK, a business developed by the Hitachi Group, we will strongly target business entry and development with rolling stock manufacturers across Europe.

As for rolling stock manufacturers in China, we have strengthened our solution-based sales capabilities and increased production capacity at our supply base in Suzhou. We will continue contributing to railway development in China by introducing new products that are thinner, lighter, and longer-lasting.

Meanwhile, our Specialty Steel Company offers its FINEMET® series of material for noise control, and our Functional Components Company supplies high-grade ductile cast iron and other products. In these and other ways, Hitachi Metals as a whole continues making proposals to rolling stock manufacturers to address their needs with respect to factors such as weight reduction.

TOPICS: Initiatives to Identify Social Issues

At the Hitachi Metals Group, we believe we can address perennial market needs by seeking solutions for social issues through our core business operations. Choosing not to consider the entire Group collectively, we identify important social issues based on the characteristics of each of our four companies and have started reflecting these in various activities.

Materiality Analysis Approach

In light of future mega trends, we identified social issues that may impact the Group's sustainable growth and evaluated the importance of such issues from multifaceted perspectives.

STEP 1

Identify social issues

Looking at social issues and mega trends that will affect the future, such as the Sustainable Development Goals (SDGs), set by the United Nations, we pinpointed social issues pertaining to the Group.



STEP 2

Examine actions to address social issues

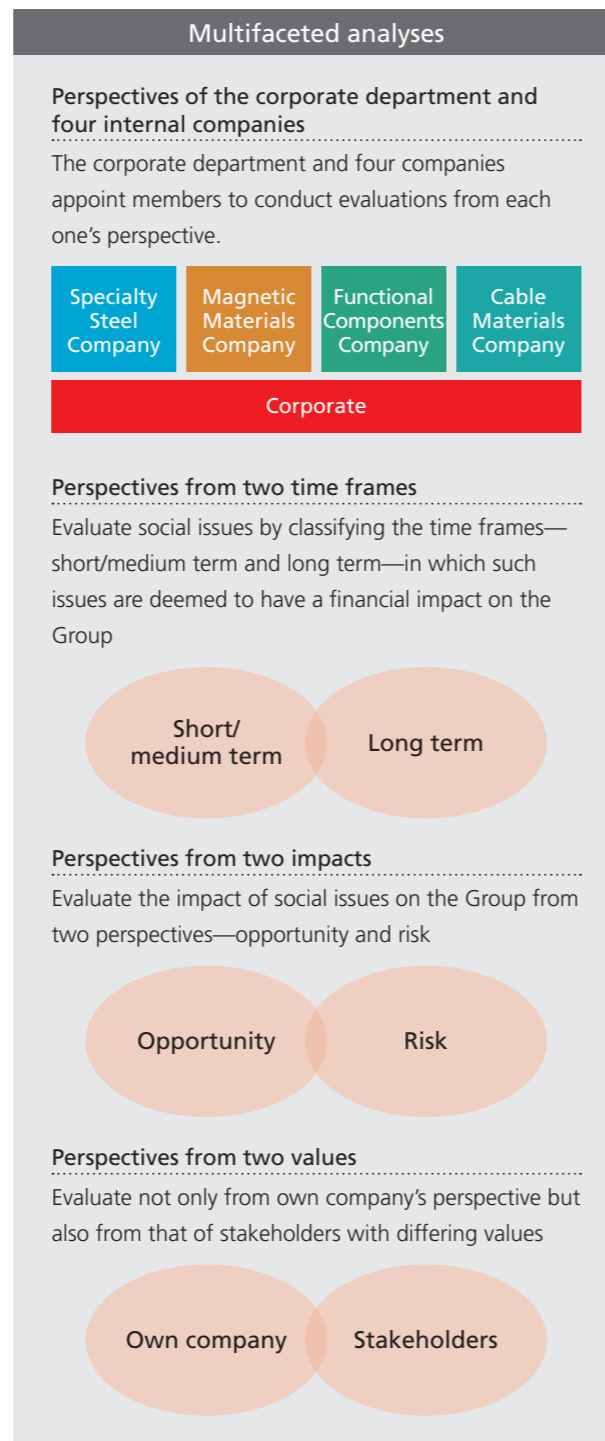
Our corporate department and our four internal companies considered actions to address the identified social issues, using assumed time frames.

STEP 3

Evaluate social issues

For each time frame, we assessed the size of the impact on the Group—from the perspectives of both risk and opportunity—and evaluated the social issues according to strategic priorities.

Dialogue with stakeholders conducted
 (Please refer to the next page.)



Dialogue with Stakeholders Conducted

We held a dialogue with stakeholders and outside experts to obtain opinions about social issues that the Hitachi Metals Group should prioritize from the perspective of stakeholders.

Date: February 27, 2017
Location: Conference Room, Hitachi Metals Head Office



Keisuke Takegahara
 Executive Officer, Deputy Chief Research Officer, the Development Bank of Japan Inc.



Makiko Akabane
 Country Director, Japan, CSR Asia Tokyo Office

For the stakeholder dialogue, we invited two outside experts—Mr. Keisuke Takegahara, Executive Officer, Deputy Chief Research Officer, the Development Bank of Japan Inc., and Ms. Makiko Akabane, Country Director, Japan, CSR Asia Tokyo Office—with participation by six members of our Materiality Analysis Project.

Discussions focused on social issues, which differ according to evaluation perspectives, namely, business perspectives of the project members and stakeholder perspectives put forward by the outside experts.

Mr. Takegahara praised the effectiveness of our materiality analysis, which this time was conducted for each internal company rather than the entire Group. He also emphasized the need to reaffirm the importance of resolving social issues through our core business, which as a matter of course is ensuring a stable supply of products from the perspective of long-term investors.

Ms. Akabane pointed out the importance of understanding social issues from the perspective of each country and region, stating that Hitachi Metals, as an entity that operates globally, should address issues that could arise in various countries and regions, such as fraud and resource-related problems, in addition to issues important to Japan. She also offered advice on the importance of efforts in areas that could become major social issues in the future, such as ethics and employees' health.

Our project members obtained feedback about the results of evaluations conducted from their own business perspectives. Through a Q&A session, they also gained a deeper understanding of social issues that Hitachi Metals should address.

VOICE | Opinion of project member

The Materiality Analysis Project has been promoted mainly by six members from the corporate management planning division and each internal company. They conducted evaluations of issues important to the Group from the perspectives of opportunity and risk, while considering the perceived scale of any impact on our business environment in light of SDGs and other future social issues and mega trends, as well as projected changes in the world over the medium and long terms.

Hitachi Metals provides highly functional materials to the automotive, industrial infrastructure, and electronics sectors. Due to the wide range of products handled by our four internal companies, however, it was very difficult for the project members to have the same thinking about materiality analysis. Still, although the discussion stalled at times, the project members used their collective, cross-lateral capabilities, with advice from outside experts, to gain a deeper understanding of social issues that the Group should address.

I hope that the project's activities can be used to formulate the Group's next medium-term management plan.



Mikio Kawai
 General Manager, Planning Department, Magnetic Materials Company

Strategies for Practicing Value Creation

The Hitachi Metals Group has formulated its Fiscal Year 2018 Medium-term Management Plan, which covers the three-year period through March 2019. Under the plan's basic policies, we will "change to be a competitive business" and "challenge ourselves to meet new targets" to become the world's leading high-performance materials company. By implementing the plan, we will create value for customers while also improving the corporate value of the Hitachi Metals Group.

In this section, we provide an outline of the plan, which represents a milestone in our quest to "become the world's leading high-performance materials company," and we describe the progress of our internal companies' respective medium-term plans.

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Progress of Fiscal Year 2018 Medium-term Management Plan

In fiscal 2016, the first year of the plan, we got off to a good start building a base for growth by implementing various measures, namely, expanding organic growth, remodeling the portfolio, growing through M&As, and strengthening the business base.

In fiscal 2017, the second year of the plan, we will pursue three innovations under corporate initiatives—*monozukuri* innovation, sales innovation, and R&D innovation—while aggressively making investments to expedite further expansion of organic growth.

Fiscal Year 2018 Medium-term Management Plan

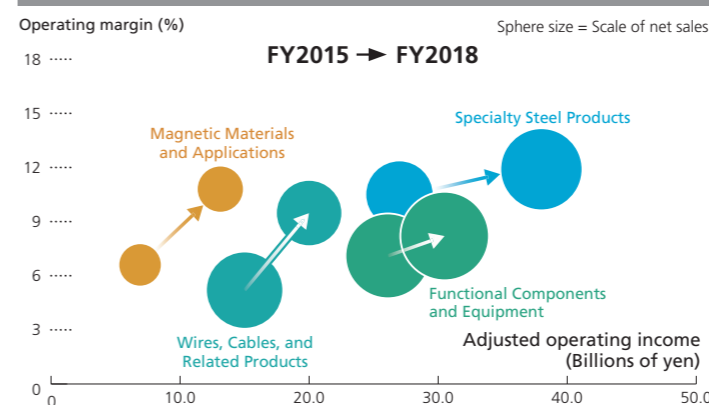
Expand the business globally while improving profitability

Change to be a competitive business; Challenge ourselves to meet new targets
Achieving our goal of becoming the world's leading high-performance materials company

- 1 **Continuous portfolio remodeling**
 - Concentrate on high-profit, high-growth segments
 - Use management resources efficiently
- 2 **Organic growth (from capital expenditure & R&D)**
 - Strengthen and accelerate the pace of R&D
 - Advance the Corporate *Monozukuri* Innovation Project
- 3 **Growth through M&As**
 - Generate synergistic benefits
 - Acquire human resources and achieve rapid commercialization

Business Portfolio Targets

Expand business scale and domains while improving profitability



- Specialty Steel Products** Strengthen the portfolio further as the core business. (Establish materials for industrial equipment as a cash cow, expand aircraft- and energy-related materials, strengthen battery materials.)
- Magnetic Materials and Applications** Enhance and expand business as the core business of the xEV era.
- Functional Components and Equipment** Reinforce casting components for the automobile business and develop new materials that address weight reduction.
- Wires, Cables, and Related Products** Expand the reinforcement of the three focus areas (rolling stock, medical devices, automotive electronic components). Create new business value through synergies with other companies.

Fiscal 2018 Plan (Projected exchange rate: 1USD=¥110)

Revenues	¥1,000.0 billion
Adjusted operating income	¥100.0 billion
EBIT	¥91.0 billion
Net income attributable to owners of the parent company	¥61.0 billion
ROA	More than 5%
ROE	More than 10%

Dividends

	Interim dividends	Year-end dividends	Annual dividends
FY2014	¥10	¥13	¥23
FY2015	¥13	¥13	¥26
FY2016	¥13	¥13	¥26
FY2017	¥13 (Forecast)	¥13 (Forecast)	¥26 (Forecast)

Three-year cumulative targets

Operating cash flow	¥290.0 billion
Investment amount (including M&As)	¥290.0 billion
R&D expenses	¥55.6 billion

The numerical targets for the fiscal 2018 plan are based on reviews of foreign exchange assumptions, raw materials prices, and demand trends. With respect to M&As, which involve numerous uncertainties, our targets, announced on April 28, 2017, are the result of conservative reviews.

Specialty Steel Company

Basic policy of medium-term management plan

Achieve growth internationally by focusing on "specialty steel"

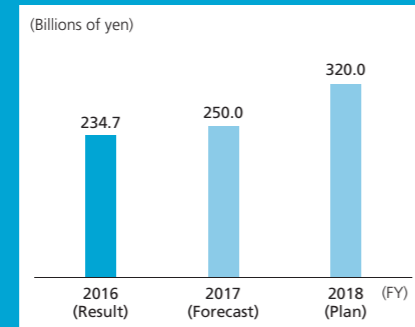
Monozukuri: Carry out "eye-opening" manufacturing

Sales abilities: Further enhance strength

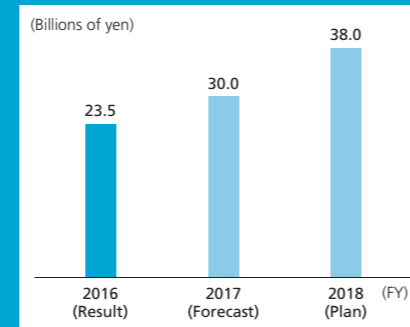
- Reap the benefits of major investments
- Strengthen international locations

Progress vis-à-vis numerical targets

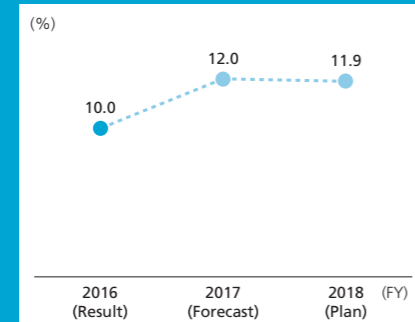
Revenues



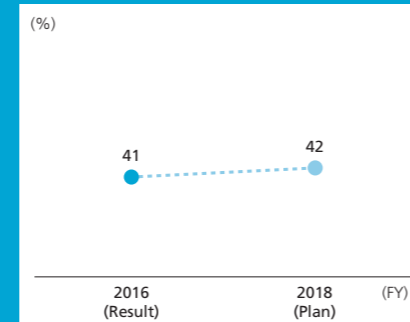
Adjusted operating income



Adjusted operating margin



Overseas sales ratio



Investment plans

Investment amount: ¥60.0 billion (cumulative total for FY2016–FY2018)

- Key investments in sources of competitiveness
- Strengthen the network for expanding international sales

Secure distribution location in Europe + Expand and strengthen processing locations in the U.S. and Asia



Koji Sato
President of the Specialty Steel Company

Progress of medium-term plan

Tool steel, aircraft-, and energy-related materials Progress

In tool steel, we acquired the U.S. firm Diehl Steel Company, Inc., centralized our operations, and expanded sales. We are also strongly promoting brand penetration and reinforcement of solution sales in the Americas, Europe, and across Asia, including China.

In aircraft- and energy-related materials, we made large-scale investments, including in a 10,000-ton free forging press and a high-speed radial forging machine. We also formed an alliance with Hitachi Metals MMC Superalloy, Ltd. and Japan Aeroforge, Ltd. Under the alliance, we are setting up a supply system that can handle large components.

Future priorities

In aircraft- and energy-related materials, we will promote acquisition of certification and mass production of aircraft engine large disk cases. We will also pursue development of ultra heat-resistant alloys as a new engine material. We have established a research center in collaboration with the National Institute for Materials Science (NIMS), which will work together with our Metallurgical Research Laboratory and GRIT in an organically coordinated manner to pursue R&D initiatives. In addition, we will develop state-of-the-art materials and explore specific applications for them.

Challenge the world's top three aircraft forging materials manufacturers, and establish a position as the fourth core

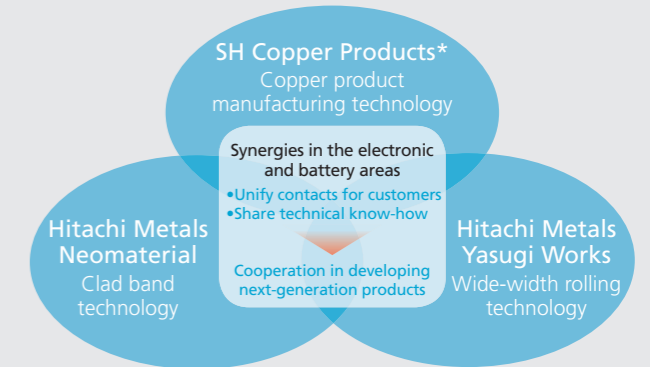
	2010	2015	2020
Generate synergy among three firms	Hitachi Metals Yasugi Works	▼24-ton VIM ▼Large VAR	▼10,000-ton free forging press ▼High-speed radial forging machine
	Japan Aeroforge	▼50,000-ton die forging press	
	Hitachi Metals MMC Superalloy	▼Made a consolidated subsidiary ▼840-ton ring mill	

xEV

Progress

To address the growing market for xEV, we shifted the business of SH Copper Products Co., Ltd. from the Cable Materials Company to the Specialty Steel Company. Through collaboration between our steel and copper operations, we accelerated development of thin foil, high-

Contribute to customers' increased trust in products and adding higher value



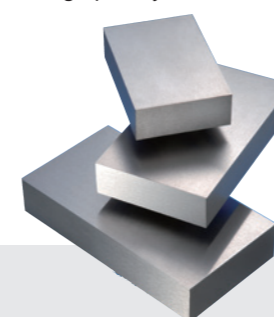
*SH Copper Products Co., Ltd. is scheduled to become Tsuchiura Works of Hitachi Metals Neomaterial, Ltd. in April 2018.

strength cladding materials for the battery components market. With respect to soft magnetic components and materials, such as ferrite core, FINEMET®, and Metglas®, we consolidated our materials and components businesses to promote development of xEV drive modules and other products to meet next-generation demand.

Future priorities

Seeking to become a core supplier to the xEV industry, we will focus on battery components, soft magnetic materials, and core materials. We will also invest around ¥7.5 billion in a new supply base for cladding materials at SH Copper Products (which will become the Tsuchiura Works of Hitachi Metals Neomaterial, Ltd. on April 1, 2018). We will also introduce an integrated product line covering everything from materials to processing. By fiscal 2020, we are targeting a threefold sales increase in our cladding materials business, compared with the fiscal 2016 level. To this end, we will implement various growth strategies, such as expanding our product lineup to meet customer needs, boosting production capacity, and strengthening our sales system. In addition, to meet demand for fuel savings in combustion engines, we will make large-scale capital expenditure in Japan and China aimed at increasing production of turbine wheels, piston ring materials, and CVT belt materials.

YSS
Yasugi Specialty Steel



Brand statement

YASUGI SPECIALTY STEEL

OUR HERITAGE, YOUR ADVANTAGE

By **OUR HERITAGE**, we mean the unique manufacturing wisdom and technology that Yasugi Specialty Steel has inherited over many generations, and that is the basis on which we will develop into the future.

By **YOUR ADVANTAGE**, we mean our determination to use our technologies, products, and solutions to bring value, innovation, and growth to our customers all over the world.

Note: YSS is a registered trademark of Hitachi Metals, Ltd.

Magnetic Materials Company

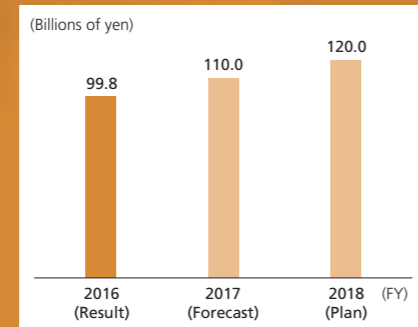
Basic policy of medium-term management plan

Innovate *monozukuri* system to pave the way for growth

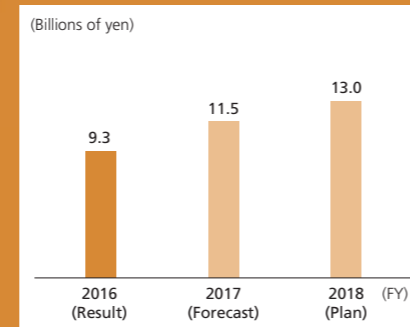
- Strengthen global production system
- Build innovative production lines

Progress vis-à-vis numerical targets

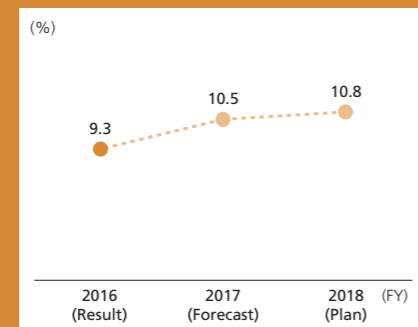
Revenues



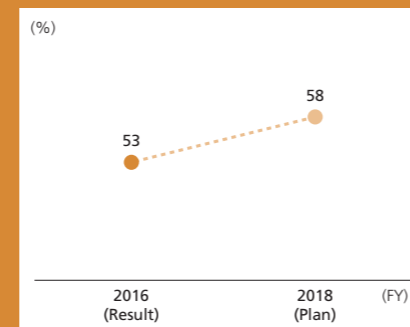
Adjusted operating income



Adjusted operating margin



Overseas sales ratio



Ryouji Akada
President of the Magnetic Materials Company

Investment plans

Investment amount: **¥48.0 billion** (cumulative total for FY2016–FY2018)

Strengthen global production system

- Enhance production capacity
- Integrate plant and research lab
- Introduce innovative production lines
- Optimize material flow

Progress of medium-term plan

Progress

In light of increasing environmental awareness, characterized by tightening regulations for CO₂ emissions and fuel efficiency in various nations and regions, we expect the production volume of xEV to expand dramatically in China and other countries around the world.

To address such demand, we established Hitachi Metals San Huan Magnetic Materials (Nantong) Co., Ltd., which commenced operations in April 2017. At the Kumagaya Works, meanwhile, we started construction of an innovative production line for neodymium magnets and ferrite magnets.

Future priorities

At our new innovative production line, we will deploy new production and IoT technologies to realize high production efficiency. At the same time, we will relocate the Magnetic Materials Research Laboratory from the Yamazaki district (Mishima-gun, Osaka) to the Kumagaya district, thus unifying our innovative production line and plant to expedite development of technologies that reflect customer needs.

Through these measures, we will position the Kumagaya Works as a "mother plant" in which the neodymium magnet business and the ferrite magnet business are centrally controlled.

The information system component business of the Magnetic Materials Company will also be centralized within the Kumagaya Works. By consolidating our production bases, we will innovate our *monozukuri* system and speed up development of new manufacturing technologies for our production facilities, including those overseas, and thus expand business.

In technology development, we will increase technology to limit use of heavy rare earth elements for neodymium magnets in an effort to significantly reduce use of heavy rare earth elements. In ferrite magnets, we will develop new compositions and deploy microstructure control technologies and grinding technology for thin products to achieve advances in performance and downsizing.

In addition, we will aggressively invest in magnet alloy manufacturing processes and recycling processes, with the aim of optimizing material flow.

Carry out *monozukuri* innovations: Innovative production lines

Improve quality and maximize productivity through thorough automation and use of IoT

Construct a new, innovative production line for neodymium magnets and ferrite magnets in the Kumagaya district

Respond to demand of the continuously growing automotive-related market with "quality and quantity"



Image of completed plant

Neodymium magnet plant (Started construction in Apr. 2017)

Adopt a new method in the heavy rare earth diffusion process

Ferrite magnet plant (Started construction in Feb. 2017)

Enhance production lines to address small and thin shapes

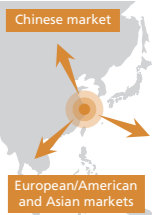
Expand China business

Create competitive products with the same quality as those made in Japan

Hitachi Metals San Huan Magnetic Materials (Nantong) Co., Ltd.

Location: Nantong, Jiangsu Province, China
Inv. ratio: Hitachi Metals: 51% Zhong Ke San Huan: 49%
Production capacity: 1,000 tons/year (FY2017) ⇒ 2,000 tons/year
Sales goal: ¥10.0 billion (FY2018)

Introduce proprietary heavy rare earth diffusion technology



Exterior of plant Opening ceremony Launch ceremony

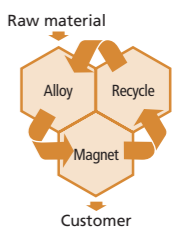
Optimize material flow

Conduct unified operation management of manufacturing and recycling process of magnet alloys

Improve efficiency with consistent process design for magnets

Achieve a smooth flow of effectively utilizing recycled materials

Improve quality management through all processes



Aggressive investment in the magnet alloy manufacturing process and recycling process

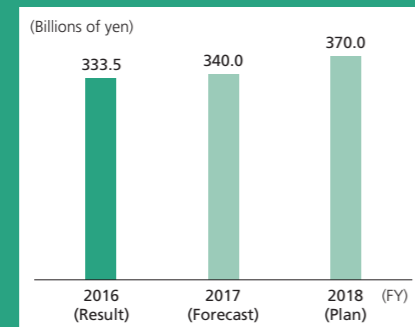
Functional Components Company

Basic policy of medium-term management plan

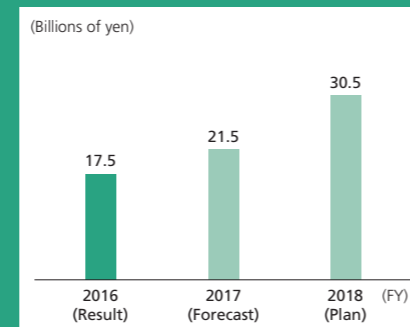
Accept the challenge of creating new value by improving the foundation of *monozukuri* to achieve global growth

Progress vis-à-vis numerical targets

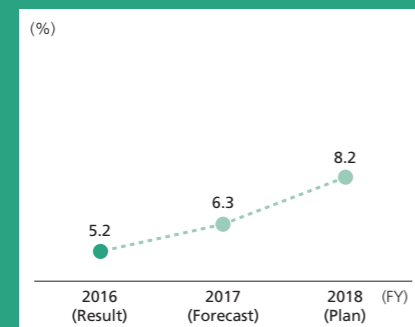
Revenues



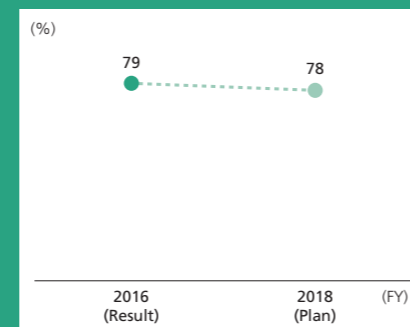
Adjusted operating income



Adjusted operating margin



Overseas sales ratio



Investment plans

Investment amount: ¥60.0 billion (cumulative total for FY2016–FY2018)

Cast iron products

- North America (Waupaca Foundry, Inc.)
 - Horizontal Molding line for large-size cast iron
 - Ductile cast iron and gray iron
- Asia (Japan, South Korea, India)
 - Global rollout of high efficiency casting line technology

Heat-resistant cast components

- Japan (Kyushu Works)
 - New casting line
 - New concept machining line
- North America (Waupaca Foundry, Inc.)
 - New machining line

Aluminum products

- Japan, North America
 - Accommodate sophisticated design and large components
 - Improved productivity and efficiency

Piping components

- Japan, North America
 - Enhance flexible piping system capacity
- Japan
 - High efficiency production line



Masato Hasegawa

President of the Functional Components Company

Progress of medium-term plan

Cast iron products

Progress

In the high-grade ductile cast iron field, we are meeting the need for advances in thinness and lighter weights by deploying our lightweight design, materials, and casting technologies while communicating closely with customers.

In the fields of general-purpose ductile cast iron and gray iron, we have a streamlined production line, thanks to the advanced technological prowess of Waupaca Foundry, Inc., enabling us to utilize distinctive, unique casting equipment to demonstrate our strong competitive edge.

Future priorities

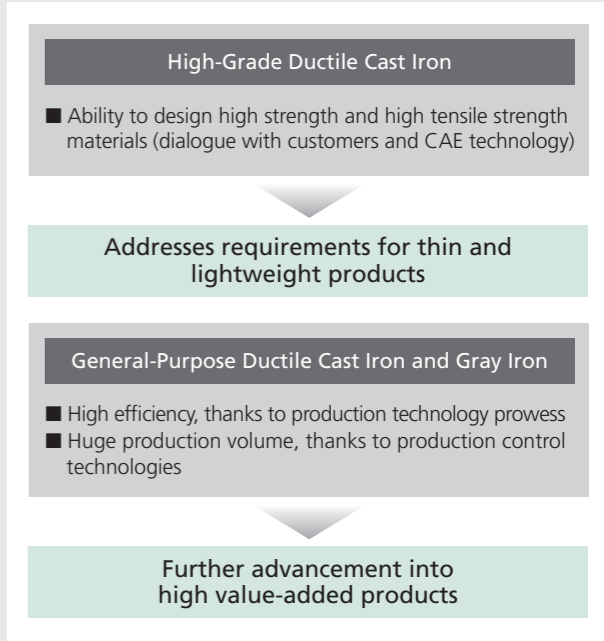
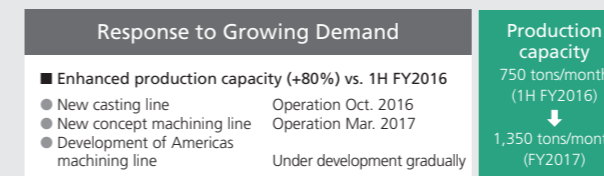
At Waupaca Foundry, Inc., we are reconfiguring our ductile cast iron and gray iron factories, transforming both into specialized facilities to achieve enhanced efficiency. We are also planning to introduce large-scale casting machines to strengthen our ability to address heavy-duty needs for commercial vehicles, construction machinery, and agricultural machinery. We will also expand our business domains to address the need for high value-added solutions.

Regarding machine processing technologies, in addition to our existing HERCUNITE™ heat-resistant cast components, we will address the need for materials other than cast iron to increase added value.

Heat-resistant cast components (HERCUNITE™)

Progress

Between 2017 and 2021, the global market for gasoline turbo-powered automobiles is expected to grow 10%, and we look forward to continued steady demand. To meet such



demand, we commissioned a new casting line at the Kyushu Works in October 2016. In March 2017, we commissioned a new-concept machining line to improve processing efficiency. We also started a machining line in the Americas.

Future priorities

Going forward, we will optimize casting conditions and deploy IoT-based analysis to enhance yields and product quality, targeting a 15% improvement in productivity and operating margin.

Aluminum products

Progress and future priorities

There is a growing need for aluminum components for use in xEV and other automobiles with exceptional environmental performance. To meet advanced market needs with respect to lighter weights, thinness, complex form, sophisticated design, high heat dissipation, and the like, we will focus on developing xEV components as part of a plan to expand our business. Here, we will deploy our high-precision CAE technologies and diverse casting methods, as well as our strengths in composite materials and bonding technologies derived through collaboration with GRIT.

Cable Materials Company

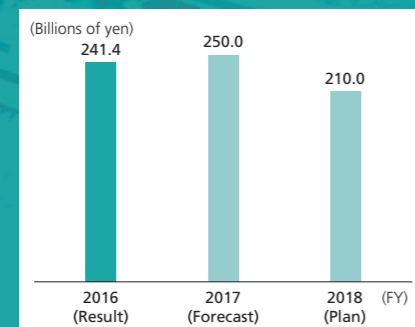
Basic policy of medium-term management plan

Change to a high-profit structure by strengthening core products and expanding growth areas

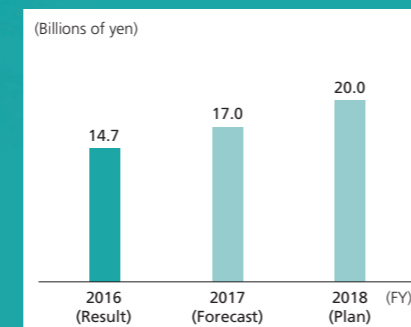
- Enhance competitiveness of core products through technical innovation
- Concentrate injection of managerial resources into three growth areas
- Seek synergies with other companies in the xEV and FA areas

Progress vis-à-vis numerical targets

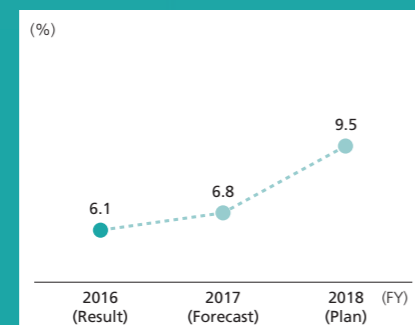
Revenues



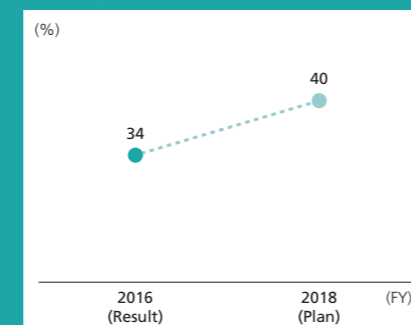
Adjusted operating income



Adjusted operating margin



Overseas sales ratio



Investment plans

Investment amount: ¥22.0 billion (cumulative total for FY2016–FY2018)

Investment in growth

- Strengthen the rolling stock and medical devices fields, also keeping M&As in mind
- Enhance an innovative wire and cable manufacturing line (Scheduled for operation in the 2H of FY2017)
- Strengthen global supply system for automotive electronic components

Strengthening core products

- Introduce a new continuous casting and rolling line (Scheduled for operation in Apr. 2018)
- Introduce an innovative production line for magnet wires (Scheduled for operation in the 1H of FY2018)



Kazuya Murakami
President of the Cable Materials Company

Progress of medium-term plan

Growth fields (rolling stock, medical devices, and automotive electronic components)

Progress

In the process of strengthening our profit structure through portfolio remodeling, we are concentrating injection of managerial resources in the three growth areas of rolling stock, medical devices, and automotive electronic components. In rolling stock, we expanded production facilities in China, commenced mass production of harnesses in the Czech Republic, and worked in other ways to reinforce our global supply system and solution sales system. In medical devices, we started mass production with the opening of a new plant at HTP-Meds, LLC, which we acquired in February 2016. In automotive electronic components, we introduced new production lines for sensors and harnesses in Japan and Mexico.

Future priorities

With multiple railway construction projects planned around the world, we expect the rolling stock market to grow an average of 3% annually over the next 20 years. In this field, we will strengthen our manufacturing bases for the global market while expanding sales by reinforcing our consulting capabilities centered on products and solutions. In medical devices, where we anticipate average annual market growth of 5% through 2021, we will expand our tube business and enhance cost competitiveness of probe cables by deploying the strengths of HTP-Meds, LLC in such areas as tubes with irregular forms and pressure-resistant braiding tubes. In

automotive electronic components, we will focus on electric parking brake (EPB) harnesses integrated with ABS, where we distinguish ourselves from the competition, while expediting development of new sensors. We will also actively strengthen our global supply system for electronic components by reinforcing bases in Mexico, Thailand, and China.

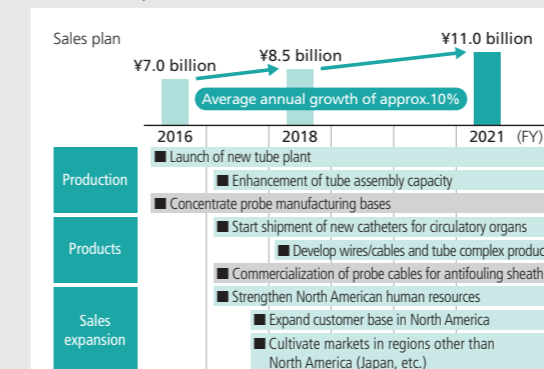
Core products

Progress and future priorities

Our core products include wires and cables for construction and electronics, as well as magnet wires and brake hoses. Seeking to strengthen competitiveness through manufacturing process innovation, we will introduce a new continuous casting and rolling line and an innovative magnet wire production line, both featuring the latest IoT-based control technologies.

The new continuous casting and rolling line, scheduled to start operation in April 2018, will enable full-scale mass production of HiFC™, our proprietary high-performance pure copper. It will also lead to significant improvements in energy efficiency and productivity. Meanwhile, we will exploit the features of magnet wire—which contributes to motors' higher voltage, smaller size, lighter weight, and longer life—to expand our business in the xEV market. In addition, we aim to generate synergies with the Magnetic Materials Company, which also targets the xEV market.

Business expansion in the medical devices field

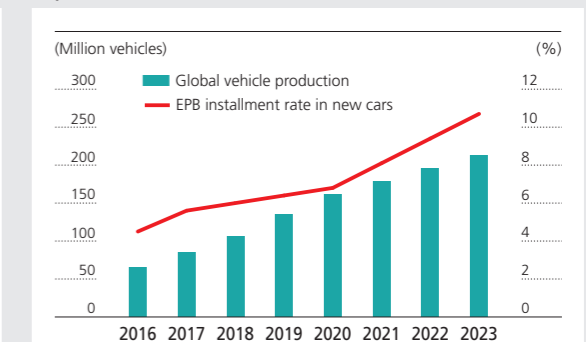


Characteristic technologies

Tubes with irregular forms



Expand the EPB harness business



Differential products

Inject EPB harness integrated with ABS



Comparison of sales between FY2016 and FY2018

Sales targets in growth fields (rolling stock, medical devices, and automotive electronic components)
¥44.5 billion (FY2016) ▶ ¥53.5 billion (FY2018)

Foundation Supporting Value Creation

The Hitachi Metals Group aims to be recognized as a “trustworthy partner” for society by taking responsibility for the impact of corporate activities on society and meeting the various demands of stakeholders.

This section introduces our corporate governance structure, promotion of diverse human resources, CSR activities, and environmental activities.

Contents

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- 58 CSR Basic Policy
- 60 CSR Initiative Results and Plans
- 62 CSR-Conscious Procurement
- 63 Respect for Human Rights and Compliance with International Norms
- 64 Environmental Activity Report and Results

Corporate Governance



Under the Fiscal Year 2018 Medium-term Management Plan, started in fiscal 2016, we aim to become the world's leading high-performance materials company and achieve long-term, sustainable development by pursuing both a stronger business base and our growth strategies. During fiscal 2016, the first year of the plan, we steadily carried out an action plan, including “continuous portfolio remodeling” and “organic growth,” to lay the foundation for growth.

Meanwhile, I would like to inform you that Akitoshi Hiraki assumed the position of President and Chief Executive Officer of the Company in April 2017. With the change of President and Chief Executive Officer and our other executives, we will make further changes and meet challenges, enabling Hitachi Metals to make even greater advances as a high-performance materials company. With his deep knowledge of technological trends, Mr. Hiraki has made achievements in cross-organizational activities as CTO, including innovations in *monozukuri* and R&D. He also has experience as a corporate manager, having served as a president of internal companies and of a Group Company, which makes him the best person to consolidate the collective capabilities of the companies and carry out the Fiscal Year 2018 Medium-term Management Plan. The Board of Directors therefore appointed him President and Chief Executive Officer.

Recognizing corporate governance as one of our important

management issues, we formulated and released our Corporate Governance Guidelines in December 2015. In accordance with those guidelines, we will continue to disclose high-quality information to all of our stakeholders in a timely manner and reflect in our corporate activities the objective evaluations and perspectives regarding our management that we receive through constructive dialogue, to achieve sustainable growth and increase our corporate value.

An analysis of the effectiveness of the Board of Directors conducted in May and June 2017 determined that the Board of Directors has open and vigorous discussions to ensure its effectiveness, that Directors have more opportunities to acquire the information necessary to fulfill their roles, and that discussions regarding business supervision are actively carried out. The Board of Directors currently comprises eight members, of which three are Outside Directors (including one woman). We are committed to making even greater use of the broad knowledge and diverse perspectives of Independent Outside Directors to enhance our corporate governance system with a view toward increasing the transparency and independence of management. We will deepen our collaboration with both Inside and Outside Directors, while striving to achieve sustainable growth and increase corporate value through vigorous discussions with our executives.

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. Consequently, our corporate activities go beyond mere compliance with laws and internal regulations: they are also based on laws and corporate ethics, and recognize our role as a member of society.

The Company established the Code of Conduct for actions that describe the above details as specific standards of conduct for Company executives and employees.

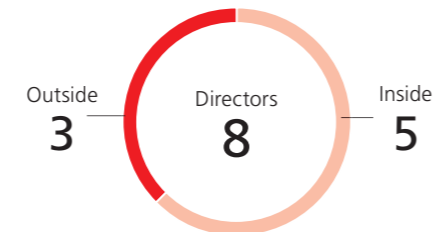
Overview of the Governance Structure

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
Chairperson of the Board	Chairperson (except when concurrently serving as President)
Number of Directors	Eight
Outside Directors	
Number of Outside Directors	Three
Number of Outside Directors designated as Independent Directors	Three
Committees	
Composition of Committees	The Nominating Committee, Compensation Committee, and Audit Committee
Number of Committee members	Four members on the Nominating Committee, five members on both the Compensation Committee and Audit Committee
Executive Officers	
Number of Executive Officers	13
Independent Directors	
Number of Independent Directors	Three

Measures aimed at the enhancement of corporate governance

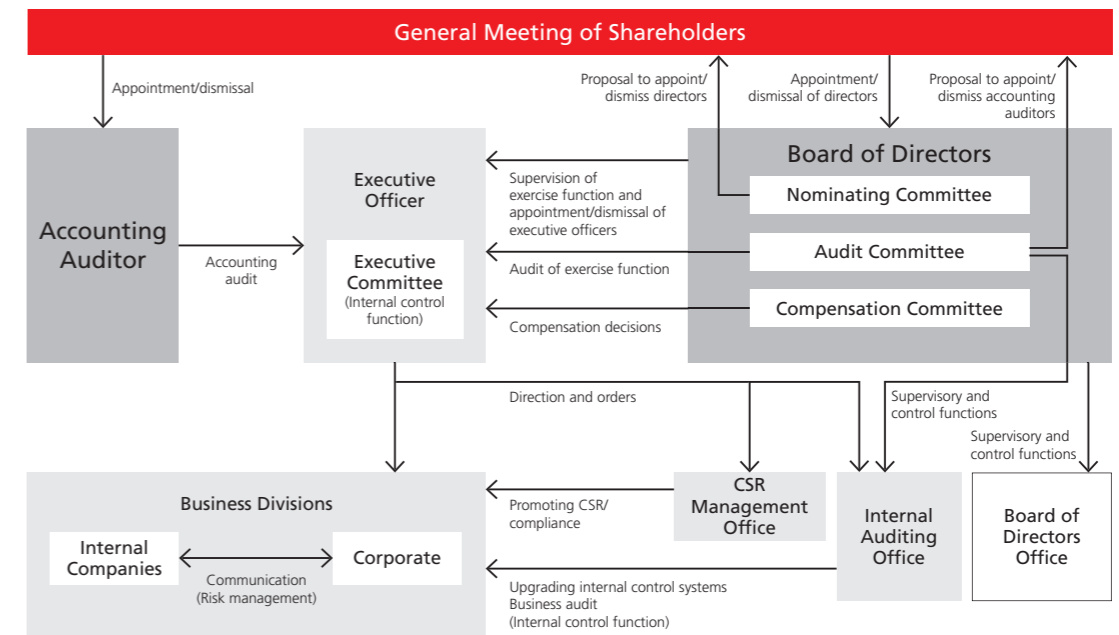
- Transition to a “company with a committee, etc.,” as defined in the Commercial Code (June 2003)
- Increase in the number of Outside Directors serving as Independent Directors from two to three (June 2016)

Ratio of Inside Directors and Outside Directors



Corporate Control System, etc., of the Company

Corporate Governance Structure



Membership composition of each committee and affiliations of chairpersons

Position	Name	Nominating Committee	Audit Committee	Compensation Committee
Chairperson of the Board	Hideaki Takahashi	◎		○
Outside Director	Masaru Igarashi	○	○	○
Outside Director	Toshiko Oka	○	○	○
Outside Director	Takashi Shimada	○	○	○
Director	Junichi Kamata		○	
Director	Toyoaki Nakamura			
Director	Toshitake Hasunuma		◎	
Director	Akitoshi Hiraki			◎

Note: ◎ Chairperson ○ Committee member

The Company has adopted the system of a company with a nominating committee, etc. Under this system, the Company elects eight Directors (one of whom is a woman) including three Outside Directors, and has established the Nominating Committee, Audit Committee, and Compensation Committee, in accordance with the provisions of the Companies Act. The Nominating Committee comprises four members (three of whom are Outside Directors). The Audit Committee and Compensation Committee each comprise five members (three of whom are Outside Directors). Each committee member is appointed by resolution of the Board of Directors.

The Nominating Committee is the body with the authority to determine the contents of proposals for the General Meeting of Shareholders regarding the appointment and

dismissal of Directors.

The Audit Committee audits the execution of duties by Directors and Executive Officers, and also has the authority to determine the content of proposals for the General Meeting of Shareholders regarding the appointment and dismissal of the Accounting Auditor.

The Compensation Committee has the authority to formulate policies to determine the content of compensation for Directors and Executive Officers, as well as the content of individual compensation based on policies.

In addition, the Board of Directors Office has been established to assist the Board of Directors and the committees in executing their duties, at which persons in charge of the Board of Directors and committees have been placed.

The Audit Committee as an Audit Organization

The Audit Committee is composed of five committee members. It is in charge of auditing violations of laws and regulations or the Articles of Incorporation by Directors or Executive Officers, the appropriateness of management's judgments, the adequacy of internal control systems, and auditing accounting. A person in charge of the Audit Committee at the Board of Directors Office assists the Audit Committee in the execution of its duties. To ensure his/her independence from Executive Officers, the person in charge of the Audit Committee shall not concurrently serve in

any position at any other business operating division. The Audit Committee formulates annual audit implementation plans and auditing policies, and performs audits based on said plans and policies by hearing reports on important items and having Audit Committee members visit each office, etc., and each Group Company to conduct audits as regular audits. In addition, special audits are conducted when any likelihood exists of violations of laws and regulations or the Articles of Incorporation by Directors or Executive Officers.

Accounting Auditors

The certified public accountants named in the table below conducted accounting audits for the Company. 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. Twelve certified public accountants and 33 other personnel assisted with the Company's accounting audit duties.

Name of certified public accountant, etc.	Auditing firm of certified public accountant
Takashi Ouchida, Engagement partner	Ernst & Young ShinNihon LLC
Seiji Kuzunuki, Engagement partner	Ernst & Young ShinNihon LLC

Note: All members have conducted audits for seven or fewer consecutive years. Accordingly, the years are not listed.

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 President 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 possess 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.

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 a company for

which Outside Director Masaru Igarashi formerly worked. However, the scale of the business is extremely small, and has been deemed to present no risk of impacting his independence under the standards of the Criteria for Independence of Outside Directors set forth in the Company's Corporate Governance Guidelines.

There are no items of note regarding Outside Directors Toshiko Oka and Takashi Shimada.

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.

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 (<http://www.hitachi-metals.co.jp/e/ir-csr.html>).

Career and Meeting Attendance of Directors (as of June 27, 2017)

Note: Information regarding attendance at meetings held between June 2016 and May 2017 is provided.



Hideaki Takahashi
Chairperson of the Board

Attendance at meetings during fiscal 2016
Board of Directors: 15 out of 15 meetings
Nominating Committee: 2 out of 2 meetings
Compensation Committee: 4 out of 4 meetings

Apr 1978 Joined Hitachi, Ltd.
Apr 2005 President and Representative Director of Hitachi Building System Co., Ltd.
Apr 2007 Vice President and Executive Officer of Hitachi, Ltd.
Apr 2011 Representative Executive Officer, President and Chief Executive Officer of Hitachi Cable, Ltd.
Jun 2011 Representative Executive Officer, President and Chief Executive Officer, Director of Hitachi Cable, Ltd.
Jun 2013 Director of Hitachi Metals, Ltd.
Jul 2013 Representative Executive Officer and Executive Vice President, Director of Hitachi Metals, Ltd.
Apr 2014 Representative Executive Officer, President and Chief Executive Officer, Director of Hitachi Metals, Ltd.
Apr 2017 Chairperson of the Board of Hitachi Metals, Ltd. (current position)

Reasons for appointment

The Company determined that Mr. Hideaki Takahashi will contribute to the strengthening of the decision-making and supervisory functions of the Board of Directors and enhancing its effectiveness as a Board member, by reflecting his abundant experience and in-depth knowledge obtained as a corporate manager at Hitachi, Ltd., as a president of Hitachi Group companies, and as the President of the Company; therefore, the Company appointed him as a Director.



Masaru Igarashi
Outside Director

Attendance at meetings during fiscal 2016
Board of Directors: 15 out of 15 meetings
Nominating Committee: 2 out of 2 meetings
Audit Committee: 16 out of 16 meetings
Compensation Committee: 4 out of 4 meetings

Apr 1973 Joined Bridgestone Tire Co., Ltd. (current name: Bridgestone Corporation)
Sep 1981 Visiting Assistant Professor at the University of Utah
Aug 1982 Joined Suzuki Motor Co., Ltd. (current name: Suzuki Motor Corporation)
Apr 2003 General Manager, Automobile Engineering Administration Division II of Suzuki Motor Corporation
Jun 2003 Director of Suzuki Motor Corporation
Dec 2008 Director of Asanuma Giken Co, Ltd.
Feb 2009 Corporate Advisor of KPIT Cummins Infosystems Ltd. (current name: KPIT Technologies Ltd.) (current position)
Jul 2010 Representative of Global Dynamics Research Lab. (current position)
Oct 2010 Director of KPIT Infosystems Inc. (current position)
Jun 2016 Outside Director of Hitachi Metals, Ltd. (current position)

Reasons for appointment

The Company determined that Mr. Masaru Igarashi 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 obtained as a corporate manager of an international manufacturing company in the automotive industry from a more objective standpoint as Independent Director; therefore, the Company appointed him as an Outside Director.



Toshiko Oka
Outside Director

Attendance at meetings during fiscal 2016
Board of Directors: 14 out of 15 meetings
Nominating Committee: 2 out of 2 meetings
Audit Committee: 15 out of 16 meetings
Compensation Committee: 4 out of 4 meetings

Apr 1986 Joined Tohmatsu Touche Ross Consulting (current name: ABeam Consulting Ltd.)
Jul 2000 Joined Asahi Arthur Andersen Ltd.
Jul 2002 Joined Deloitte Tohmatsu Consulting Co., Ltd. (current name: ABeam Consulting Ltd.)
Sep 2002 Principal of Deloitte Tohmatsu Consulting Co., Ltd.
Apr 2005 President and Representative Director of ABeam M&A Consulting Ltd.
Jun 2008 Outside Director of Netyear Group Corporation
Jun 2014 Outside Audit & Supervisory Board Member of Astellas Pharma Inc. (current position)
Jun 2015 Outside Audit & Supervisory Board Member of HAPPINET CORPORATION (current position)
Apr 2016 Partner of PwC Advisory LLC
Jun 2016 CEO of Oka & Company Ltd. (current position)
Outside Director of Hitachi Metals, Ltd. (current position)
Outside Director of Mitsubishi Corporation (current position)

Reasons for appointment

The Company determined that Ms. Toshiko Oka 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 her abundant experience and in-depth knowledge obtained as a corporate manager of major consulting firms from a more objective standpoint as Independent Director; therefore, the Company appointed her as an Outside Director.



Takashi Shimada
Outside Director

Attendance at meetings during fiscal 2016
Board of Directors: 15 out of 15 meetings
Nominating Committee: 2 out of 2 meetings
Audit Committee: 16 out of 16 meetings
Compensation Committee: 4 out of 4 meetings

Apr 1976 Joined The Boston Consulting Group
Oct 1987 Vice President of The Boston Consulting Group
Jan 1994 Vice President of Hilti Japan
Nov 1996 President of Walt Disney Television International Japan
Jul 1998 Vice President of A.T. Kearney
Oct 2005 Vice President of Medtronic, Inc. (current name: Medtronic plc)
Vice President of Medtronic Japan Co., Ltd.
May 2008 President of Medtronic Japan Co., Ltd.
President of Medtronic Sofamor Danek, Co., Ltd.
May 2015 President of Covidien Japan Inc.
President of Nippon Covidien Inc.
Jun 2015 Outside Director of Hitachi Metals, Ltd. (current position)
Jun 2017 Senior Advisor of Medtronic Japan Co., Ltd. (current position)

Reasons for appointment

The Company determined that Mr. Takashi Shimada 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 gained as a corporate manager at international companies in the medical device industry and other fields from a more objective standpoint as Independent Director; therefore, the Company appointed him as an Outside Director.



Junichi Kamata
Director

Attendance at meetings during fiscal 2016
Board of Directors: 15 out of 15 meetings
Audit Committee: 16 out of 16 meetings

Apr 1978 Joined Hitachi Metals, Ltd.
Jan 2005 General Manager of Human Resources & General Administration Dept. of Corporate Business Center of Hitachi Metals, Ltd.
Apr 2008 Managing Officer, General Manager of Corporate Management Planning Office of Hitachi Metals, Ltd.
Apr 2011 Managing Officer, President of Piping Components Company of Hitachi Metals, Ltd.
Apr 2012 Managing Officer, General Manager of Piping Components Division of Hitachi Metals, Ltd.
Apr 2014 Vice President and Managing Officer of Hitachi Metals, Ltd. President & CEO of Hitachi Metals America, Ltd.
Apr 2015 Vice President and Managing Officer, Assistant to President of Hitachi Metals, Ltd.
Jun 2015 Director of Hitachi Metals, Ltd. (current position)

Reasons for appointment

The Company determined that Mr. Junichi Kamata 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 reflecting his conversance and in-depth knowledge obtained through his experience in the human resources, financing, and corporate management planning of the Company as well as the experience as a head of business divisions and president of U.S. subsidiaries; therefore, the Company appointed him as a Director.



Toyoaki Nakamura
Director

Attendance at meetings during fiscal 2016
Board of Directors: 15 out of 15 meetings

Apr 1975 Joined Hitachi, Ltd.
Jan 2006 General Manager of Finance Department I of Hitachi, Ltd.
Apr 2007 Representative Executive Officer, Senior Vice President and Executive Officer of Hitachi, Ltd.
Jun 2007 Representative Executive Officer, Senior Vice President and Executive Officer, and Director of Hitachi, Ltd.
Jun 2009 Representative Executive Officer, Senior Vice President and Executive Officer of Hitachi, Ltd.
Jun 2010 Outside Director of Hitachi Metals, Ltd. (resigned in June 2012)
Jun 2011 Director of Hitachi High-Technologies Corporation (Outside Director until June 2016) (current position)
Apr 2012 Representative Executive Officer, Executive Vice President and Executive Officer of Hitachi, Ltd.
Jun 2012 Outside Audit & Supervisory Board Member of Sompo Japan Insurance Inc. (current name: Sompo Japan Nipponkoa Insurance Inc.)
Apr 2013 Director of Hitachi Consumer Electronics Co., Ltd. Director of Hitachi Appliances, Inc.
May 2013 Director of Hitachi Consumer Marketing, Inc.
Jun 2015 Director of Hitachi Metals, Ltd. (Outside Director until June 2016) (current position)
Dec 2015 Board Director, Chairperson of Hitachi Metals, Ltd.
Apr 2016 Associate of Hitachi, Ltd.
Jun 2016 Director of Hitachi, Ltd. (current position), Chairperson of the Board of Hitachi Metals, Ltd.

Reasons for appointment

The Company determined that Mr. Toyoaki Nakamura 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 enhancement of their effectiveness, by reflecting his abundant experience and in-depth knowledge obtained as a corporate manager at Hitachi, Ltd. and its group companies, and working to build closer ties with other Hitachi Group companies; therefore, the Company appointed him as a Director.



Toshitake Hasunuma
Director

Attendance at meetings during fiscal 2016
Board of Directors: 15 out of 15 meetings
Audit Committee: 16 out of 16 meetings

Apr 1977 Joined Hitachi, Ltd.
Apr 2004 General Manager of Finance Division of Information & Telecommunication Group of Hitachi, Ltd.
Jul 2006 Executive Audit Manager of Internal Auditing Office of Hitachi, Ltd.
Apr 2010 General Manager of Internal Auditing Office of Hitachi, Ltd.
Apr 2016 Corporate Chief Manager of Internal Auditing Office of Hitachi, Ltd.
Jun 2016 Director of Hitachi Metals, Ltd. (current position)

Reasons for appointment

The Company determined that Mr. Toshitake Hasunuma 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 reflecting his conversance and in-depth knowledge obtained through his experience in the finance operations of Hitachi Ltd. over the years as well as the experience as a head of the Internal Auditing Office; therefore, the Company appointed him as a Director.



Akitoshi Hiraki
Director

Attendance at meetings during fiscal 2016
Board of Directors: 15 out of 15 meetings

Apr 1985 Joined Hitachi Metals, Ltd.
Jun 2008 President and Director of Hitachi Setsubi Engineering Co., Ltd.
Apr 2010 Managing Officer, President of Specialty Steel Company, Deputy General Manager of Corporate Export Regulation Office of Hitachi Metals, Ltd.
Apr 2012 Vice President and Managing Officer, President of High-Grade Metals Company, General Manager of Specialty Steel Division, and Deputy General Manager of Corporate Export Regulation Office of Hitachi Metals, Ltd.
Apr 2015 Vice President and Representative Executive Officer, President of High-Grade Metals Company, and Deputy General Manager of Corporate Export Regulation Office of Hitachi Metals, Ltd.
Jun 2015 Vice President and Representative Executive Officer, President of High-Grade Metals Company, Deputy General Manager of Corporate Export Regulation Office, and Director of Hitachi Metals, Ltd.
Jan 2016 Vice President and Representative Executive Officer, General Manager of Technology, Research & Development Division, General Manager of Corporate Quality Assurance Division, and Director of Hitachi Metals, Ltd.
Apr 2017 Representative Executive Officer, President and Chief Executive Officer, Director (current position)

Reasons for appointment

The Company determined that Mr. Akitoshi Hiraki will contribute to the strengthening of the decision-making functions of the Board of Directors and enhancing their effectiveness, by sharing the information of business execution divisions at the Board of Directors as a Board member and reflecting his abundant experience and in-depth knowledge obtained as a president of Hitachi Group companies and General Manager of the Company's business divisions, and since April 2015, as Vice President and Executive Officer, and since April 2017, as President and Chief Executive Officer responsible for the management of the Company; therefore, the Company appointed him as a Director.

Analysis and Evaluation of the Effectiveness of the Board of Directors

The Company conducted a survey of Directors regarding the overall effectiveness of the Board of Directors in fiscal 2016. The main items on the survey included the composition of the Board, decision-making process, level of contributions, and operation and support systems. At its meetings in May and June 2017, the Board of Directors carried out an analysis and evaluation based on the assessments and opinions of individual Directors obtained from the survey. As a result, it was deemed that the effectiveness of the entire Board of Directors has been

ensured, that Directors have more opportunities to acquire the information necessary to fulfill their roles, and that discussions regarding business supervision are actively carried out.

We will make use of these results in operations of the Board of Directors with the aim of increasing the awareness of our long-term vision and portfolio in discussions and making more qualitative improvements in supervisory functions to further enhance effectiveness in the future.

Main Items Discussed by the Board of Directors in Fiscal 2016

- M&As, business restructuring, and reorganization of each business division
 - Integration of the holding company in North America
 - Transfer of the information systems business
 - De-integration of the copper product and lead frame businesses
- Capital expenditure in key businesses
 - Introduction of innovative production lines for neodymium magnets
 - Introduction of innovative production lines for ferrite magnets
 - Construction of the Corporate Research Lab

- Measures to achieve the Fiscal Year 2018 Medium-term Management Plan
- Report on the North America's business strategy
- Response to the Corporate Governance Code
- Implementation, interim reporting, and review of the evaluation of the effectiveness of the Board of Directors
- Measures to strengthen global compliance
- Roles and functions of the global regional headquarters
- Project to reinforce the "Basics and Ethics"

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. With the aim of ensuring that Executive Officers execute their duties efficiently and in compliance with laws and regulations and the Articles of Incorporation, Executive Officers organize the Executive Committee. This committee holds

discussions on certain important management matters that impact on the Company or the Group, and Executive Officers with sufficient authority make decisions. The Company has adopted an internal company system based on the decision that such a system is a good fit for the particular nature of the Company, which engages in multiple businesses with diverse products and markets.

Executive Officers (As of June 1, 2017)

<p>Akitoshi Hiraki Representative Executive Officer President and Chief Executive Officer Overall Operations General Management</p>	<p>Ryouji Akada Executive Officer In charge of Business President of Magnetic Materials Company Deputy General Manager of Corporate Export Regulation Office</p>	<p>Koji Sato Executive Officer In charge of Business President, Specialty Steel Company Deputy General Manager of Corporate Export Regulation Office</p>	<p>Eiji Nakano Executive Officer In charge of Technology General Manager of Technology, Research & Development Division</p>
<p>Kenichi Nishiie Representative Executive Officer Senior Vice President and Executive Officer In charge of Corporate Administration General Manager of Corporate Management Planning Division</p>	<p>Masahiro Otsuka Executive Officer In charge of Business Chairperson and President, Hitachi Metals (China), Ltd.</p>	<p>Shigekazu Suwabe Executive Officer In charge of Corporate Administration and Technology General Manager of Information Systems Division General Manager of Corporate Quality Assurance Division Deputy General Manager of Technology, Research & Development Division</p>	<p>Tomoyuki Hatano Executive Officer In charge of Business Director & President & CEO of Hitachi Metals America, Ltd.</p>
<p>Hiroaki Nishioka Representative Executive Officer Executive Officer In charge of Corporate Administration Chief Financial Officer General Manager of Finance Division</p>	<p>Katsuro Sasaka Executive Officer In charge of Corporate Administration and Sales and Marketing Deputy General Manager of Corporate Management Planning Division General Manager of Group Company Auditing Office</p>	<p>Naohiko Tamiya Executive Officer In charge of Corporate Administration General Manager of Human Resources & General Administration Division Chief Compliance Officer</p>	<p>Kazuya Murakami Executive Officer In charge of Business President of Cable Materials Company Deputy General Manager of Corporate Export Regulation Office</p>
<p>Masato Hasegawa Vice President and Executive Officer In charge of Business President of Functional Components Company Deputy General Manager of Corporate Export Regulation Office</p>			

Compensation for Directors and Executive Officers, etc.

The Policies Concerning the Determination of Compensation, etc., for Directors and Executive Officers state that “(1) 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; (2) 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 compensation shall be paid for outstanding achievements; (3) Compensation paid by the Company consists of base compensation and a term-end bonus; and (4) To share interests with shareholders by holding treasury stock and thereby promote sustainable growth and the enhanced corporate value of the Company over the medium to long term, Directors and Executive Officers shall, as a general rule, contribute part of their compensation to the

officers’ shareholding association and acquire treasury stock until such stock reaches a certain number. The acquired stock shall be held continuously during the terms of office of Directors and Executive Officers and, as a general rule, one year after retiring from their posts.” The policy on base compensation is that it is to be “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.” The policy on a term-end bonus is that it is to be “Linked to the business performance of the Company.”

The total amount of compensation, etc., for each category of Director or Executive Officer, the total amount of compensation, etc., by type, and the number of Directors and Executive Officers who received compensation, etc., are as indicated in the table below.

Compensation, etc., for Directors and Executive Officers

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)	67	61	6	4
Executive Officers	492	330	162	11
Outside Directors and Officers	49	43	6	6

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

Relationship with the Parent Company

In principle, the business operations and transactions of the Company are conducted on an autonomous basis and are independent of Hitachi, Ltd., the parent company, and its group companies. In the implementation of its business operations, however, and as a member of the Hitachi Group, the Company has a close collaborative relationship with Hitachi, Ltd. and its group companies through joint research and development and other initiatives. Based on the effective use of shared management resources, the Company aims to provide high-quality products and services.

As for personnel relationships with Hitachi, Ltd., one Director of that company also serves as a 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. 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.

Internal Controls

Internal Audit Organization

The Company has an Internal Auditing Office that is in charge of internal audits. This Office formulates annual audit implementation plans and audit policies, and regularly conducts audits regarding the status of business execution and management of each office and Group Company based on said plans and policies. Furthermore, it may conduct special audits when necessary, and issues recommendations for

improving operations, etc. It also notifies the President and Chief Executive Officer and the Audit Committee of audit implementation plans in advance, and reports the audit results to them. If necessary, it also carries out audits in collaboration with individual divisions in charge of the environment, safety, and systems within the Company.

Coordination among the Audit Committee, Accounting Auditor, and Internal Audit Division

The Audit Committee (1) receives explanations from the Accounting Auditor regarding audit implementation plans, and engages in consultation and adjustments when necessary; (2) receives audit result reports and engages in an exchange of opinions; and (3) in the event that the Accounting Auditor, during the course of executing its duties, discovers misconduct or material facts in violation of laws and regulations or the Articles of Incorporation regarding the execution of duties by Executive Officers, receives reports on these matters. The Audit Committee receives reports from the Internal Audit division on its audit implementation plans and regularly examines reports. Furthermore, to promote collaboration between the Internal Audit division and the Audit Committee in auditing, the committee can instruct the Internal Audit division to (1) conduct a special audit of certain divisions deemed to be

required by the Audit Committee, and (2) decide on critical audit items in audits conducted by the Internal Audit division. Regarding matters required for the Audit Committee to execute its duties, as specified by the Board of Directors, the Internal Auditing Office of the Internal Audit division assists the execution of duties by the Audit Committee in accordance with the committee’s instructions and orders. The Internal Audit division is also in charge of maintaining and verifying internal controls, and reports the status of internal controls to the Audit Committee. Corporate divisions, etc., other than the Internal Audit division, in charge of finances, compliance, risk, and other areas also play a certain role in the Company’s internal controls, and report the status of the execution of their duties to the Audit Committee.

Risk Management

With respect to risk management, each Executive Officer identifies and analyzes business risks including changes in political, economic, and social situations, currency fluctuations, rapid technological innovations, as well as changes in customer needs, examines measures against such risks, and reviews these measures whenever necessary through discussions at the Board of Directors, the Audit Committee, the Executive Committee, and other meeting bodies. In addition, each corporate administrative division has prepared internal rules, guidelines, etc., conducts education and enlightenment activities, preliminary checks, audits on business operations, etc., and cooperates with the relevant internal company’s business divisions to avoid, prevent, and manage risks relating to compliance, antisocial forces, finance, procurement, the environment, disasters, quality, information management, export control, legal affairs, etc. Furthermore, with regard to business continuity plans (BCPs), the Company has not only prepared the plans but also implements business continuity management (BCM) that periodically and continually improves BCPs in response to changes in the business structure or risks. During the fiscal year under review, BCP training has been implemented jointly by domestic sites and overseas subsidiaries, and an investigation about risk management has been conducted with the aim of facilitating BCP promotion activities at overseas subsidiaries.

The main risks that could possibly impact the management performance and financial status of the Hitachi Metals Group are as follows:

- Risks involving economic circumstances in the market, related to product demand
- Risks involving fluctuations in raw material prices
- Risks involving financing
- Risks involving fluctuations in exchange rates
- Risks involving fluctuations in securities prices
- Risks involving business expansion outside Japan
- Risks involving competitive advantage and the development and commercialization of new technologies and products
- Risks involving intellectual property rights
- Risks involving environmental regulations, etc.
- Risks involving product flaws and defects
- Risks involving legal and official regulations
- Risks involving earthquakes and other natural disasters, etc.
- Risks involving information security
- Risks involving pension payment liabilities
- Risks involving relations with the parent company
- Risks involving M&A
- Risks involving the Medium-term Management Plan

Promotion of Diverse Human Resources

With the management philosophy of “contributing to society by being the best enterprise,” the Hitachi Metals Group believes it is vital to “develop people of action with global perceptions at Hitachi Metals” to grow as a global company, focusing on cultivating and empowering diverse human resources.



Composition of Employees (Non-consolidated)

	FY2012	FY2013	FY2014	FY2015	FY2016
Number of Employees	4,675	6,362	6,306	5,966	5,858
Male	4,239	5,720	5,660	5,339	5,241
Female	436	642	646	627	617
Ratio of Female Employees	9.3	10.1	10.2	10.5	10.5
Average Age (years)	43.0	42.1	43.0	43.5	43.9
Average Service (years)	21.8	19.2	20.0	20.6	21.0
Number of Female Managers	6	10	10	11	12
Employment Ratio of People with Disabilities	2.16	2.26	2.08	2.30	2.43

Human Resources Strategy Aimed at New Global Growth Through Change and Challenges

The Hitachi Metals Group, which is vigorously moving ahead with global business expansion, promotes a global human resources strategy based on the recognition that human resources are the source of competitiveness.

Under the basic policy of the Fiscal Year 2018 Medium-term Management Plan, we have set out the following four themes for our human resources strategy: “management reform aimed at instilling a globally shared ‘philosophy’ (the basic values to be held by all Group employees) and changing our corporate culture”; “diversity and inclusion that promote participation of diverse human resources and work style reform”; “realization of safe and healthy workplaces”; and “promotion of global human resources management.”

By vigorously pushing ahead with growth through M&As in addition to organic growth, the Hitachi Metals Group will steadily put these themes into action and foster an innovative corporate culture in which various types of people can thrive, with the aim of promoting the sustainable development of the Company.

Human Resources Development Programs

Our communications symbol, “Materials Mag!c,” incorporates the determination of each and every employee to be a key driver of growth. Guided by our basic approach to human resources development, we strive to enhance and strengthen our human resources development programs so that employees expand their expertise and become an efficient workforce that can actively seek out challenges and take action to achieve success or solve problems, as well as become shining examples for our company. In 2012, we carried out a broad reform of our education and training systems. We plan and implement a wide range of training and education programs linking OJT and

OFF-JT, such as training that includes education specific to job levels and job skills, and global education.

■ 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. We complete systematic personnel rotations and tough assignments, as well as training such as OFF-JT.

■ Hiring and cultivating local personnel for management positions at each overseas base

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 cultivating locally hired personnel at Group companies outside Japan, and promoting them to positions of responsibility. In combination with the overseas trainee program for employees in Japan, we are promoting globalization simultaneously with the localization of overseas bases.

Promoting Diversity and Inclusion

Our basic policy on human resources is to create an innovative corporate culture based on diversity, with the aim of increasing corporate value. As our business expands globally, it has become critically important to strengthen our human resources base by securing diverse employees, assigning them strategically, and encouraging their active participation. Hitachi Metals therefore established the Diversity Promotion Department with dedicated staff members in fiscal 2015, and put in place a system that can implement integrated measures on hiring, training, and retention under the Human Resources Development and Diversity Promotion Department in fiscal 2017. In addition to holding seminars for those in



Roundtable discussions for foreign employees were organized under the leadership of the Human Resources Development and Diversity Promotion Department.

management positions to raise awareness, we have set numerical targets for the diversity employment rate and are working on proactive hiring and training. The diversity employment rate in fiscal 2016 was 48%, and we aim to maintain a rate of 50% or higher in fiscal 2017 and onward.

■ Initiatives aimed at promoting diversity

We are carrying out a range of initiatives to create a workplace where diverse human resources can work with enthusiasm. In fiscal 2016, we conducted interviews with over 80% of young female employees (in career-track positions) to understand their situations. In addition, we organized roundtable discussions with employees of foreign nationality working in Japan and covered the event in the Company’s in-house journal to raise awareness and promote diversity from aspects close to employees. We will make use of the opinions gathered through such activities in future initiatives such as developing mentoring systems and various support systems.

Work Style Reform

To respond to changes of the times and to achieve sustainable growth, it is vital to embrace new challenges and continue to reform. To do that, we believe it is indispensable to create an environment where diverse human resources can pursue highly

productive work styles and approaches to the job while sharing different values and ideas, and realize a sense of fulfillment and personal growth in their work. The Hitachi Metals Group therefore positions “work style reform” as an important management issue, and seeks to achieve both sustainable development of the Company and a work-life balance for individuals by realizing efficient work styles and focusing on higher value-added work.

■ Companywide “work style reform” project

With the launch of the companywide “work style reform” project in May 2016, we began efforts toward “work style reform” that will generate new value. Awareness-raising and education, the reduction of total working hours, enhanced efficiency of back-office operations, and support for diverse work styles were set as the main objectives of the project, and detailed discussions got under way. We are implementing companywide initiatives with set numerical targets. As one example, we have formulated common companywide rules for e-mail and meetings, and have produced results by ensuring that basic manners and rules are thoroughly followed. Business offices with different working environments and conditions are also pursuing their own initiatives by launching full-scale “work style reform” projects.

■ Promoting work-life balance

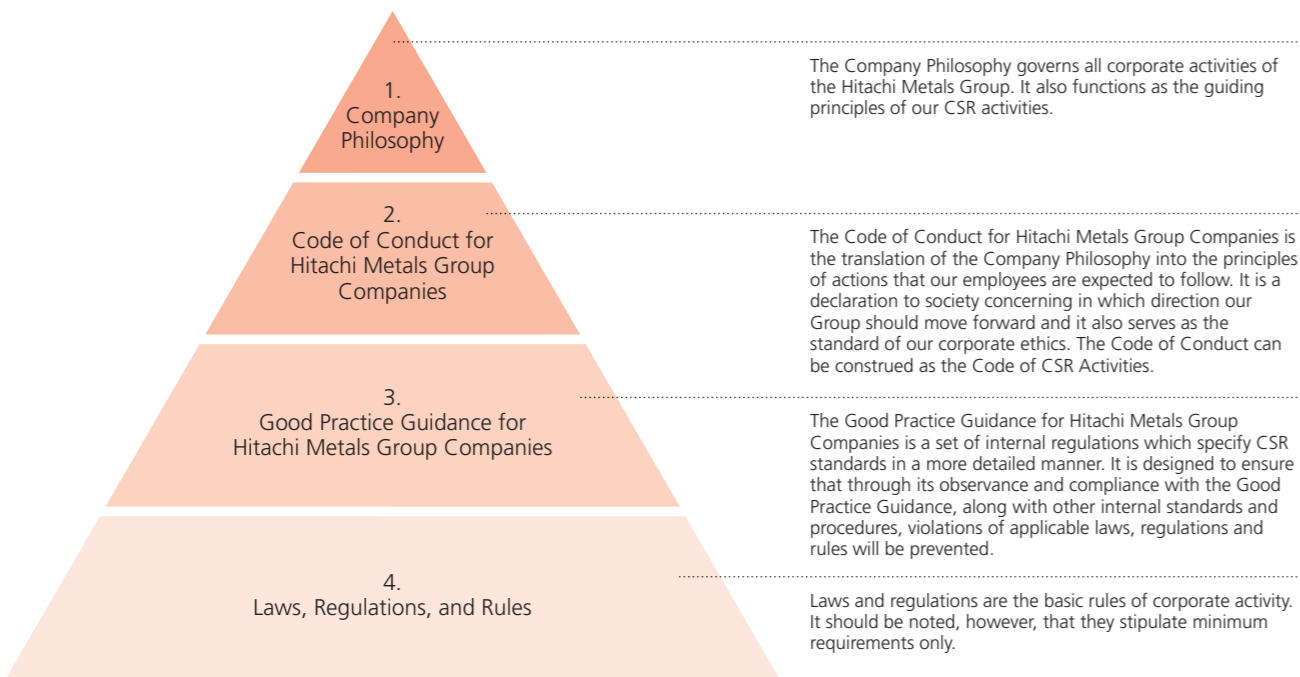
We are reinforcing our initiatives and systems to support active participation by employees to realize work-life balance. For example, we have enhanced our system for child care and nursing care leave and shorter working hours to a level beyond that mandated by the Child and Family Care Leaves Act to create an environment where employees can continue their careers at various stages of life. In addition, we are promoting the development and operation of new systems, including the introduction of a telecommuting system at our Head Office from September 2016.



The Hitachi Metals Group aims to carry out its social responsibility and realize its management philosophy through the observance, by all Directors and employees, of laws and regulations and the Hitachi Metals Group Code of Conduct, and their implementation of the Hitachi Metals Group Corporate Principles, in their daily duties. Furthermore, the Company promotes CSR activities with the aim of contributing to society through its business operations, based on its belief of calling on corporations not only to pursue profitability but also to meet stakeholders' expectations and contribute to the development of society.

Guidelines for CSR Activities

The Hitachi Metals Group systematically established guidelines for CSR activities as follows:



Outside Assessment

Hitachi Metals has been added to the world's leading social responsibility investment indices.

The FTSE4Good Index Series is calculated by the FTSE Group, which is owned by the London Stock Exchange. An important gauge providing criteria for investment choices, the FTSE4Good Index Series selects stocks according to five ESG (environmental, social, and governance) themes: environmental management, mitigating climate change, human rights and workers' rights, supply chain labor standards, and the prevention of bribery.

Hitachi Metals has also been included in all three ESG investment indices newly selected by the Government Pension Investment Fund (GPIF), namely, the MSCI Japan ESG Select Leaders Index, the MSCI Japan Empowering Women Index (WIN), and the FTSE Blossom Japan Index. Hitachi Metals has also been selected for the SNAM Sustainability Index, which invests in companies with high ESG evaluations.

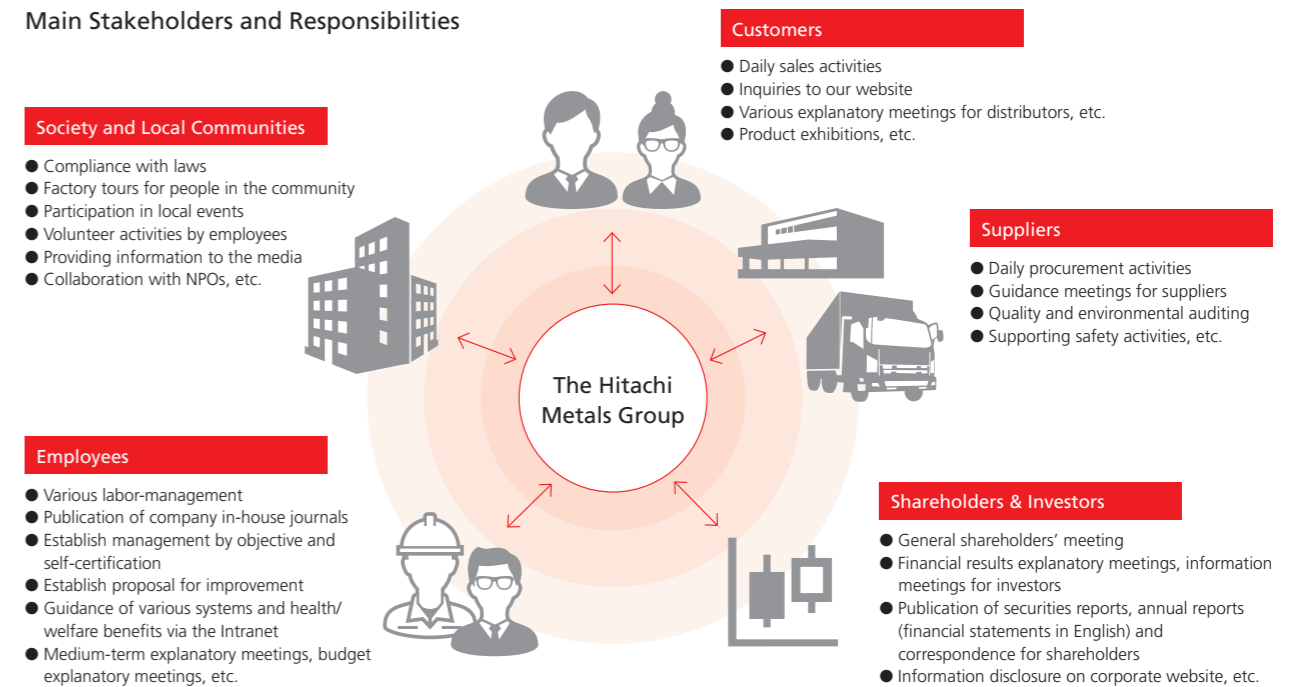


Hitachi Metals Group Stakeholders

The business of the Hitachi Metals Group is materialized through engagement with stakeholders. The Hitachi Metals Group considers stakeholders strongly associated with its business activities as "customers," "shareholders and

investors," "suppliers," "employees," and "society and local communities," and develops its CSR activities by responding to requests and expectations from those stakeholders and contributing to society's sustainability.

Main Stakeholders and Responsibilities



Framework for CSR Activities

The Hitachi Metals Group is continuously enhancing its management quality based on a framework in accordance with international standards.

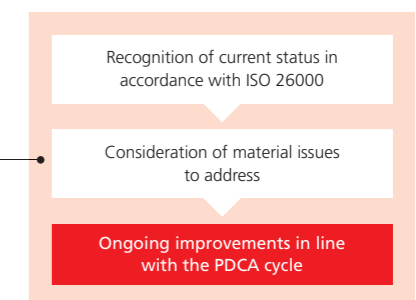
Every year since fiscal 2015, the Hitachi Metals Group has evaluated its activity results, set targets and measures for the upcoming fiscal year, and integrated the evaluation results into

a road map in accordance with the Hitachi Group CSR Policy formulated and based on ISO 26000, the global standard for corporate social responsibility. By repeating this cycle of road map setting and implementation, the Group is continuously enhancing the quality of management.

CSR Management Framework for the Hitachi Group



Hitachi Metals Group Initiatives



CSR Initiative Results and Plans

The Hitachi Group has defined the Hitachi Group CSR Policy, based on ISO 26000, the global standard for corporate social responsibility, with the aim of furthering the integration of management and CSR. In accordance with this policy, the Company uses the PDCA cycle to further reinforce its activities, by steadily implementing CSR activities and continually improving its management quality.

CSR Initiative Results and Plans

FY2016 Measures (Planned)	FY2016 Measures (Results)	Self-assessment	Measures Planned for FY2017
1. Recognition of Social Responsibility			
• Seek advice on/assessment of the Company's CSR activities from outside experts (ongoing)	• Received advice on/assessment of the Company's CSR activities from a professor in Hosei University's Faculty of Sustainability Studies	★★★	• Seek advice on/assessment of the Company's CSR activities from outside experts (ongoing)
• Perform materiality analysis, identify key issues specific to the Company's business from the perspectives of medium- to long-term risk and opportunity, and begin to integrate CSR viewpoints into management	• Identified social issues that impact the Group's sustainable growth in light of future mega trends (SDGs), and evaluated the significance of opportunities and risks from an ESG perspective	★★	• Implement measures to use materiality analysis in various activities of the Group
2. Organizational Governance			
• Compliance Management Committee meets quarterly to analyze social and environmental risks, formulate preventative measures, and share information (ongoing)	• Engaged in companywide projects to further ensure thorough compliance and formulated preventative measures and shared information, etc., through steering committee meetings, etc.	★★★	• Hold regular meetings regarding compliance, formulate preventative measures, and share information (ongoing)
• Conduct CSR and compliance training at the Company and subsidiaries in Japan and overseas (ongoing)	• Conducted CSR and compliance training (at the Company and 65 subsidiaries in Japan and overseas)	★★★	• Conduct CSR and compliance training at the Company and subsidiaries in Japan and overseas (ongoing)
• Conduct environmental education at the Head Office and each company (ongoing)	• Conducted environmental e-learning (100% of employees) and environmental auditor development training (once)	★★★	• Conduct environmental e-learning (100% of employees) and environmental auditor development training (once)
• Ongoing implementation of Hitachi Insights, the Hitachi Group employee satisfaction survey targeting all back-office workers	• Conducted Hitachi Insights, the Hitachi Group employee satisfaction survey targeting all back-office workers in September (7,114 employees responded on a consolidated basis)	★★★	• Ongoing implementation of Hitachi Insights, the Hitachi Group employee satisfaction survey targeting all back-office workers
3. Human Rights			
• Carry out human rights due diligence according to Hitachi Group policies at the human resources & general administrative division	• Made all employees aware of the Hitachi Metals Group Human Rights Policy through training, etc., held at Group companies	★★★	• Identify measures to deal with high-priority human rights risks and study how to firmly establish associated processes through the human rights due diligence workshops of the Hitachi Group's human resources & general administrative division, and prepare to implement human rights due diligence within the Company
• Deepened understanding of the relationship between Business and Human Rights and the human resources & general administrative division, and strengthened the skills of the staff responsible, by participating in human rights due diligence workshops of the Hitachi Group's human resources & general administrative division	• Deepened understanding of the relationship between Business and Human Rights and the human resources & general administrative division, and strengthened the skills of the staff responsible, by participating in human rights due diligence workshops of the Hitachi Group's human resources & general administrative division	★★★	• Further promote "work style reform" through awareness-raising for those in management positions, measures to improve operational efficiency (reduce paperwork and meetings, etc.), a reduction in total annual working hours, and providing support through systems
• Conduct human rights training systematically throughout the entire Hitachi Metals Group (ongoing)	• Systematically conducted human rights training throughout the entire Hitachi Metals Group (5,108 employees in total)	★★★	• Conduct human rights training systematically throughout the entire Hitachi Metals Group (ongoing)
4. Labor Practices			
• Set KPIs and work to achieve them through the project "work style reform" (reduction in total annual back-office working hours), the foundation of the Company's diverse human resources	• Launched the companywide "work style reform" project in May 2016, set KPIs, implemented measures to reduce total annual working hours companywide and improve productivity, etc.	★★★	• Further promote "work style reform" through awareness-raising for those in management positions, measures to improve operational efficiency (reduce paperwork and meetings, etc.), a reduction in total annual working hours, and providing support through systems
• Set a diversity employment target rate (the Company's own indicator) of 50% or more and actively hire diverse human resources	• Mostly achieved the diversity employment target rate	★★★	• Continue to set a target rate of 50% or more for diversity employment
• Establish an intranet dedicated to diversity promotion	• Set up a dedicated website for diversity management on the intranet	★★★	• Formulate an action plan integrating the Act for Measures to Support the Development of the Next Generation and the Act on Promotion of Women's Participation and Advancement in the Workplace, and proactively disclose related figures to the public
• Formulate an action plan integrating the Act for Measures to Support the Development of the Next Generation and the Act on Promotion of Women's Participation and Advancement in the Workplace, and announce the plan to the public. Also, disclose related figures	• Formulated an integrated action plan and announced it to the public. Related figures were also disclosed as widely as possible	★★	• Increase the ratio of women in management positions
• Create opportunities for coordination and information exchange for women in career-track positions	• Creation of opportunities for coordination and information exchange for women in career-track positions was limited in scope	★★	• Create opportunities for information exchange among women in career-track positions and strengthen coordination among them
• Exceed the legal employment rate of employees with disabilities, and maintain the current employment rate of 2.3%	• The actual figure for FY2016 was 2.4%, achieving the target	★★★	• Exceed the legal employment rate of 2.0% and maintain the current employment rate of 2.4%
• Perform routine and non-routine risk assessments, including risk assessments that have not yet been performed, and continue to review improvements	• Performed routine and non-routine risk assessments; 3,569 items were assessed (36 business offices)	★★	• Perform risk assessment of work that can lead to major accidents or serious injuries
• Continue implementing health and safety training. As the risk assessment of 640 chemical substances has been made mandatory, add health-related education	• Implemented health and safety training for foremen and supervisors; 359 people were trained (19 business offices)	★★	• Enhance introductory education and OJT for inexperienced workers
• Domestic business offices assess the applicable conditions of the Hitachi Group's minimum safety standards through health and safety audits, etc.	• Took actions in response to the mandatory risk assessment of chemical substances	★★	• Check that the risk assessment of chemical substances is in compliance with the Organic Solvent Ordinance and the Specified Chemical Ordinance
• Oversee business offices aim for three offices to assess the local applicable conditions of the Hitachi Group's minimum safety standards (including overseas Group companies)	(i) Carried out training on risk assessment methods at companywide meetings for persons in charge of health and safety (ii) Completed companywide introduction of Hitachi Group risk assessment methods for chemical substances in June 2016	★★	• (New) Participate in the Hitachi Group's interactive safety inspection activities
• Formulate a human resources development plan for employees representing the next generation and conduct systematic personnel rotation and training programs	• Confirmed that business offices subject to health and safety audits met the Hitachi Group's minimum safety standards	★★	• Conduct safety inspections of manufacturing bases at overseas business offices to check safety standards
	• (New) Carried out information exchanges with the Hitachi Group's business offices with high potential	★★	• Examine and implement a selective development program for management candidates, targeting human resources at the general manager level
	• Assessments were carried out at only one overseas business office (South Korea)	★★	• In addition to securing a certain number of human resources by hiring new graduates, continue to conduct midcareer hiring in the interest of personnel rotation and to adjust the age composition

★★★ Achieved ★★ 90% Achieved ★ Not Achieved

FY2016 Measures (Planned)	FY2016 Measures (Results)	Self-assessment	Measures Planned for FY2017
5. The Environment			
• Increase the sales ratio of key environmentally conscious products*1 (to 17% or more)	• Increased the sales ratio of key environmentally conscious products (20.8%)	★★★	• A sales ratio of key environmentally conscious products of 19%
• Reduce active mass per production unit of energy consumed 10% (compared to base year FY2005)	• Reduced active mass per production unit of energy consumed 6.5% (compared to base year FY2005)	★★★	• Reduce active mass per production unit of energy consumed 11.5% (compared to base year FY2005)
• Reduce active mass per production unit of waste/valuables generation 7% (compared to base year FY2005)	• Reduced active mass per production unit of waste/valuables generation 8.3% (compared to base year FY2005)	★★★	• Improvement ratio of waste generation per production unit of 7.5% (compared to base year)
• Increase the recycling rate (to 70%)	• Increased the recycling rate (to 76%)	★★★	• Recycling rate of 72%
• Reduce active mass per production unit of VOC emissions 22% (compared to base year FY2006)	• Reduced active mass per production unit of VOC emissions 18.2% (compared to base year FY2006)	★	• Reduce chemical substance emissions per production unit by 30% (compared to base year)
6. Fair Operating Practices			
• Conduct extraordinary compliance (Anti-Monopoly Act) audit (ongoing)	• Conducted extraordinary compliance (Anti-Monopoly Act) audit (document review, hearing with sales department managers)	★★★	• Continue to conduct audits related to compliance (including compliance with the Anti-Monopoly Act)
• Issue a revised version of the Hitachi Group's CSR procurement guidelines and plan to extend said guidelines to suppliers	• Issued a revised version of the Hitachi Group's CSR guidelines	★	• Plan to survey the status of CSR efforts by the Company's suppliers based on the Hitachi Group's CSR procurement guidelines
• Conduct Corporate Ethics Month in October (ongoing)	• Carried out various measures to ensure thorough legal compliance and ethical behavior, such as the training of management executives by external instructors, during Corporate Ethics Month in October	★★★	• Conduct Corporate Ethics Month in October (ongoing)
• Audit the compliance status of corruption-related laws and regulations	• Confirmed the compliance status of compliance-related laws and regulations during an internal audit	★★★	• Audit the compliance status of compliance-related laws and regulations (ongoing)
	• Enhanced compliance rules in line with global standards, including the revision of the Rules on the Prevention of Corruption	★★	• Conduct information security education (ongoing)
• Conduct information security education (ongoing)	• Conducted information security education	★★	• Conduct information security self-audits (ongoing)
• Conduct information security self-audits (ongoing)	• Conducted information security self-audits	★★	• Confirmed that business information had been erased from privately owned computers
• Confirm that business information has been erased from privately owned computers (ongoing)	• Confirmed that business information had been erased from privately owned computers	★★	• Conduct targeted e-mail attack simulations (ongoing)
• Conduct targeted e-mail attack simulations (ongoing)	• Conducted targeted e-mail attack simulations	★★	• Implemented measures against missent e-mails and expanded said measures throughout the Group
• Consider measures against missent e-mails and expand said measures throughout the Group (ongoing)	• Implemented measures against missent e-mails and expanded said measures throughout the Group	★★	• Conduct a survey and analysis of the status of virus elimination and disclose the information
7. Customers (Consumer Issues)			
• Conduct gleaming meetings*2 at consolidated companies (ongoing)	• Conducted gleaming meetings at consolidated companies as planned	★★★	• Conduct gleaming meetings at consolidated companies (ongoing)
• Expand company-sponsored mini gleaming meetings at business offices in Japan and overseas (ongoing)	• Held company-sponsored mini gleaming meetings at three additional locations	★★★	• Expand company-sponsored mini gleaming meetings at business offices in Japan and overseas (ongoing)
• Implement tasks for the creation of new business	• Implemented tasks for the creation of new business (16 themes, continued implementation in the first half of 2017)	★★★	• Implement tasks for the creation of new business (ongoing)
• Expand new product sales ratio and develop strategic new products (new product sales ratio: 30% or higher) (ongoing)	• Expanded new product sales ratio and developed strategic new products (new product sales ratio: 31%)	★★★	• Expand new product sales ratio (new product sales ratio: 30% or higher) (ongoing)
• Update technological development medium-term road map in light of technological mega trends	• Updated our technological development medium- to long-term road map in light of technological trends (updated in 2016)	★★★	• Promote cooperation and collaboration with customers and research institutions in Japan and overseas (carry out open innovation)
8. Community Involvement and Development			
• Consider social contribution activities enabling a closer relationship with regional citizens and culture (ongoing)	• Conducted regional contribution activities mainly in regions where offices and factories are located (social contributions amounting to 390 million yen)	★★★	• Consider social contribution activities enabling a closer relationship with regional citizens and culture (ongoing)
• Contribute to material science technical research through support of Hitachi Metals - Materials Science Foundation (ongoing)	• Contributed to material science technical research through support of Hitachi Metals - Materials Science Foundation (4 million yen)	★★★	• Contribute to material science technical research through support of Hitachi Metals - Materials Science Foundation (ongoing)
• Support <i>tatara</i> method of iron manufacture (ongoing)	• Supported <i>tatara</i> method of iron manufacture (operations and personnel) conducted by the Society for Preservation of Japanese Art Swords at <i>Nittoho Tatara</i> in Okuizumo, Shimane Prefecture	★★★	• Support <i>tatara</i> method of iron manufacture (ongoing)
9. Review and Improvement of CSR Activities			
• Improve management quality using CSR research (ongoing)	• Provided feedback from the CSR research results to relevant divisions. Implemented measures to improve management quality in each division based on these results	★★★	• Improve management quality using CSR research (ongoing)
• Develop activities conforming to international standards for CSR and requests from various research and assessment institutions (ongoing)	• Applied the PDCA cycle to CSR activity issues based on ISO 26000, social responsibility guidance of the International Standard for Organization (ISO)	★★★	• Develop activities conforming to international standards for CSR and requests from various research and assessment institutions (ongoing)
• Improve responses to carbon disclosure project (CDP)*3	• Improved scope of disclosure in accordance with sustainability reporting international guideline GRI-G4	★★★	• Improve responses to carbon disclosure project (CDP) (ongoing)
	• Provided responses to carbon disclosure project (CDP)	★★★	

*1 Products targeted for growth based on a management strategy that makes a significant contribution to resolving environmental issues such as climate change and resource recycling.

*2 Meetings conducted from the customers' perspective to determine the primary causes of product accidents and deliberate preventative measures.

*3 Project in which institutional investors request information about climate change from major corporations.

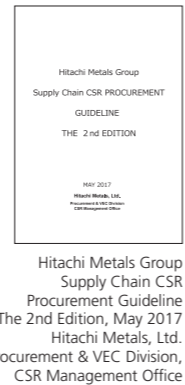
CSR-Conscious Procurement

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 considers CSR.

Issuance of Hitachi Metals Group Supply Chain CSR Procurement Guideline

Recognizing that companies are members of society, the Hitachi Metals Group aims to work with its suppliers to ensure social responsibility. To that end, the Hitachi Metals Group created the Hitachi Metals Supply Chain CSR Guidebook in fiscal 2013 and since then has operated under the guidebook. Furthermore, due to increasing concern about the adverse impacts of transactions on human rights and the environment, we issued the revised Hitachi Metals Group Supply Chain CSR Procurement Guideline in May 2017. This version emphasizes the elimination of forced labor and human trafficking, as well

as environmental measures and fair transactions, in accordance with the EICC (Electronic Industry Citizenship Coalition, an electronics industry CSR alliance) Code of Conduct Ver. 5.1. We will continue to work with our suppliers to promote procurement activities that consider CSR in the supply chain.



Response to Globalization

The Hitachi Metals Group strives to establish a global procurement network across Europe, North America, and Asia, while expanding its procurement base. We are working to support the optimization of procurement activities overall and reinforcement of *monozukuri*, while enhancing CSR risk management and increasing concentration and consolidation of purchasing across the Group.

We are promoting local procurement activities by cultivating optimal suppliers in various parts of the world. Through the establishment of four Global Procurement Offices (GPOs), in Europe, the U.S., Asia, and China, we are finding excellent suppliers and providing various forms of support while exercising procurement governance within the regions.

Furthermore, with regard to conflict minerals (minerals extracted in war zones), the Hitachi Metals Group is working to improve the transparency of its supply chains in cooperation with suppliers to maintain responsible procurement. We will continue striving for procurement activities that do not benefit groups that engage in human rights abuses.



Information regularly exchanged between the Procurement & VEC Division in the Head Office and GPOs

Compliance

Believing that thorough obedience to laws, regulations, and social proprieties in our transactions with suppliers is essential, we call together our procurement specialists at business offices on a regular basis for education regarding laws and regulations. In addition, we have established and follow internal rules for self-regulation regarding compliance with the Act against Delay in Payment of Subcontract Proceeds, Etc., to Subcontractors, and conduct regular self-auditing with regard to legal compliance.

Green Procurement

Our green procurement policy gives priority to suppliers who are actively engaged in environmental conservation efforts, and we are expanding this initiative to include office equipment and more. All of our business offices have adopted the use of common Hitachi Group Internet-based procurement, allowing us to select and purchase indirect materials that conform to the Law on Promoting Green Purchasing or are otherwise environmentally friendly, and we are working to expand green procurement across the entire Hitachi Metals Group.

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 strains of influenza, fires, and power outages. We are working to minimize procurement risk by creating an emergency contact system and diversifying our sources of procurement, while asking our key suppliers to have their own BCP measures in place.

Respect for Human Rights and Compliance with International Norms

In our Code of Conduct, the Hitachi Metals Group declares, "We build relationships of mutual confidence with people in society, and pursue corporate activities that are in good faith and free of discrimination," and our fundamental stance is to respect the human rights of all stakeholders in our business activities. In addition to implementing the Hitachi Metals Group Human Rights Policy, we engage in ongoing efforts including educational activities for officers and employees and the establishment of hotlines, with the aim of promoting the creation of a corporate culture in which human rights abuses do not occur.

Formulation of the Hitachi Metals Group Human Rights Policy

We formulated the Hitachi Metals Group Human Rights Policy in December 2013 as a supplement to the Code of Conduct for Hitachi Metals Group Companies and the Good Practice Guidance for Hitachi Metals Group Companies. This policy recognizes the human rights stated in the International Declaration of Human Rights and in the ILO (International Labour Organization) Declaration on Fundamental Principles and Rights at Work as the minimum levels of those 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 that action. 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."

We have participated in human rights due diligence centered on Hitachi, Ltd. The procurement division assessed impacts on human rights in the supply chain in fiscal 2015, and the human resources division assessed impacts on employee human rights in fiscal 2016. The issues were ranked in terms of priority, and countermeasures were studied.

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 5,108 employees, on a consolidated basis, receiving human rights-related training in fiscal 2016).

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.

Environmental Activity Report and Results

Recognizing the importance of protecting the environment, we will ensure effective and environmentally conscious utilization of limited natural resources in order to bestow a clean environment to the next generation. Through creation of new products and businesses that bring new value to society, we will base our sustainable growth on the provision of high quality products in harmony with the environment.

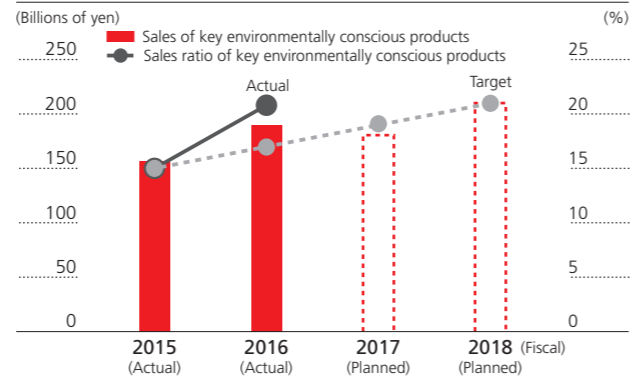
1 Key Environmentally Conscious Products

● **Increasing sales of key environmentally conscious products**
 "Key environmentally conscious products" are products targeted for growth based on management strategy. Those products contribute significantly to resolving environmental issues such as climate change and efficient use of resources.

In fiscal 2016, we succeeded in raising the actual sales ratio of key environmentally conscious products to 20.8%, well above the target ratio of 17%. This achievement is attributable to the expansion of applicable products along with sales growth.

We will continue to expand sales of these products in line with our management strategy, while seeking to contribute to the resolution of society's environmental issues.

Sales and Sales Ratio of Key Environmentally Conscious Products



● Main key environmentally conscious products

SLD-i™, a new type of cold-rolled die steel
 Specialty Steel Company
 Realizes reduced heat treatment dimensional change, less aging, and improved abrasion resistance, compared to standard cold-rolled die steel (SKD11, etc.).

HERCUNITE™ heat-resistant cast components for engine and exhaust systems
 Functional Components Company
 The high temperature resistance of these components helps increase engine fuel efficiency and clean emission.

NEOMAX® neodymium magnets for hybrid and electric vehicles
 Magnetic Materials Company
 The world's best magnetic properties of these magnets help improve the fuel efficiency of hybrid and electric vehicles. We have developed magnets with higher heat resistance and magnetic force, while reducing the use of heavy rare earth elements (dysprosium, etc.).

POLYENEX™ series of wires and cables for rolling stock
 Cable Materials Company
 Lightweight products that have been certified under the world's major international standards, including an EN standard, with superior flame resistance, low smoke emission, and low toxicity.

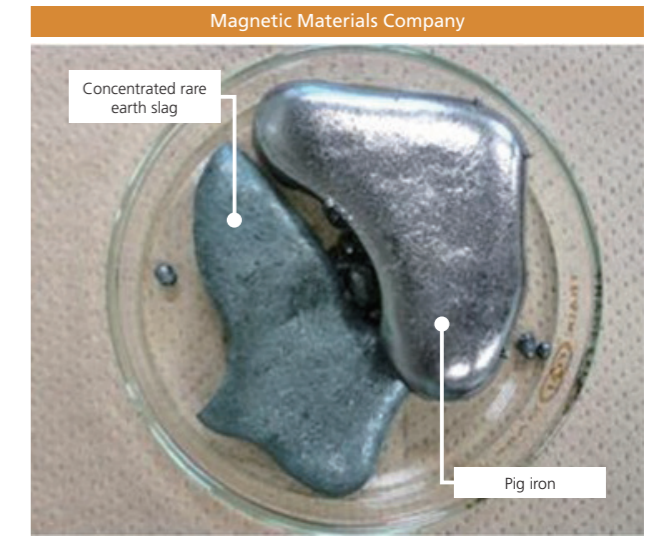
2 Waste Reduction and Resource Recycling Measures

● Process for using the carbothermal reduction method to recycle rare earth materials from sludge produced in the magnet manufacturing process

Recycling of sludge*¹ produced in the manufacture of neodymium magnets traditionally used large amounts of acid and alkali, and the residue was disposed of as industrial waste in landfills. We have developed a carbothermal reduction method*² that treats sludge as iron ore, thus setting up a resource recycling process that makes it possible to reuse not only the magnets' rare earth elements but also iron elements as pig iron*³, while also minimizing the use of acid and alkali.

Received the Rare Metal Recycling Award of the FY2016 Awards for Resources Recirculation Technologies and Systems

*1 Sludge: Magnet processing involves pouring water (grinding fluid) over the magnets, resulting in sludge that is a mixture of processing scraps and water.
 *2 Carbothermal reduction method: A method in which sludge, treated as iron ore, is heated along with carbon, allowing rare earth elements to be recovered as slag (material that rises to the surface of sludge).
 *3 Pig iron: Iron that is extracted from iron ore reduced in a blast furnace or electric furnace.



Slag (left) and pig iron (right) refined by the carbothermal reduction method

3 Consideration for the Preservation of Ecosystems

The Hitachi Metals Group promotes ecosystem preservation measures that include tree planting and forest conservation activities, cleanup activities in areas surrounding factories, and environmental education.

1. Examples of major tree planting and forest conservation activities

Tohoku Rubber Co., Ltd., Kitanihon Sales Office of Hitachi Metals, Ltd., and Hitachi Metals Trading, Ltd. planted trees in the 2016 Millennium Hope Hills Tree Planting Festival, organized by the city of Iwanuma, Miyagi Prefecture, which was affected by the Great East Japan Earthquake.



Participated in the Millennium Hope Hills Tree Planting Festival
 Trees for disaster prevention were planted in an area hit by the tsunami in the Great East Japan Earthquake as a measure to weaken the effects of tsunamis and secure evacuation sites. (Tohoku Rubber Co., Ltd., Kitanihon Sales Office, Hitachi Metals Trading, Ltd.)

2. Ecosystem preservation activities

As an initiative to protect the ecosystem of Kasumigaura, SH Copper Products Co., Ltd. planted floating heart, a water plant, to help restore the habitat of small fish. Waupaca Foundry, Inc. created an ecopark and carried out tree planting activities. We will continue making efforts to protect the ecosystems in surrounding areas.



Participated in activities to protect the ecosystem of Kasumigaura (SH Copper Products Co., Ltd.)

Carried out ecopark (ecosystem preservation) activities (Waupaca Foundry, Inc.)

The Hitachi Group's Environmental Vision

The Hitachi Metals Group promotes a Low-Carbon Society, Resource Efficient Society, and Harmonized Society with Nature as the three key pillars of the Hitachi Group's Environmental Vision. We aim to realize both higher quality lifestyles and a sustainable society by resolving environmental issues through the social innovation business in collaboration with our stakeholders. In addition, we will fulfill our required role to achieve Hitachi's long-term environmental targets called Hitachi Environmental Innovation 2050.

URL for Hitachi Environmental Vision and Environmental Innovation 2050
<http://www.hitachi.com/environment/vision/index.html>



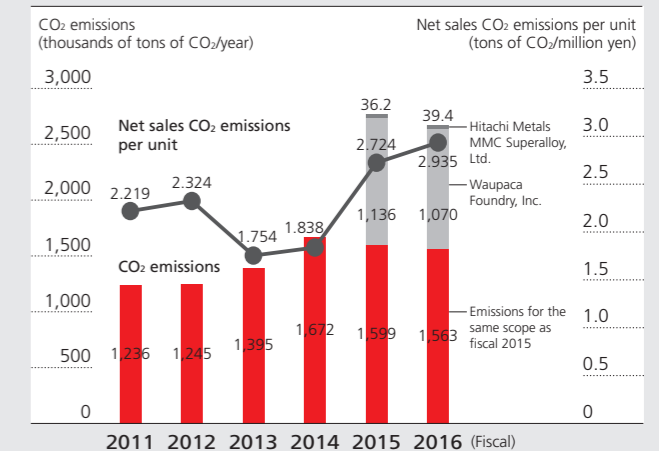
Prevention of Global Warming

In fiscal 2016, CO₂ emissions from the Hitachi Metals Group's business activities decreased by 98 thousand tons year on year, to 2,633 thousand tons.* Meanwhile, net sales CO₂ emissions per unit increased 7.7%. The primary reason for the increase was that the impact from a 10.5% decrease in net sales became greater.

The Hitachi Metals Group carries out energy-saving activities coordinated with its *monozukuri* to reduce CO₂ emissions. Specifically, these activities include omitting excess processes, improving efficiency, obtaining higher yield rates, and introducing energy-saving equipment.

*Electricity accounts for 62% of the Hitachi Metals Group's CO₂ emissions, followed by coke and town gas, respectively. In Japan, the power company CO₂ emissions coefficient is based on the "power supplier emissions coefficient" announced by the Ministry of the Environment; outside Japan, it is based on the 2008 IEA "country-specific conversion coefficient."

Trends in CO₂ Emissions and CO₂ Emissions Per Unit



Financial/Non-Financial Highlights

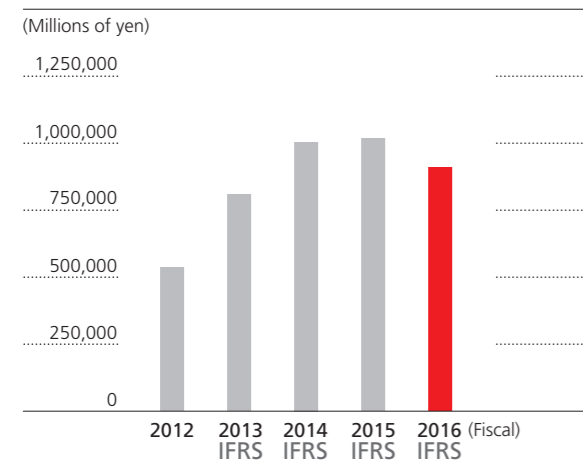
Fiscal	Millions of yen					Thousands of U.S. dollars	Thousands of Euros
	2016	2015	2014	2013	2012	2016	
	IFRS	IFRS	IFRS	IFRS	J-GAAP	IFRS	
For the period							
Operating results:							
Revenues	¥910,486	¥1,017,584	¥1,004,373	¥807,794	¥535,779	\$8,115,572	€7,600,685
Cost of sales	731,153	819,433	793,517	637,081	440,684	6,517,096	6,103,623
Selling, general and administrative expenses	113,350	122,090	126,446	106,851	74,016	1,010,340	946,239
Adjusted operating income	65,983	76,061	84,410	—	—	588,137	550,822
Other income	14,070	36,416	21,303	5,844	—	125,412	117,456
Other expenses	11,786	12,523	21,306	16,278	—	105,054	98,389
Operating income	68,267	99,954	84,407	53,428	21,079	608,495	569,889
Income before income taxes	66,016	96,233	86,391	55,820	17,230	588,430	551,098
Net income attributable to owners of the parent company	50,593	69,056	70,569	48,133	12,955	450,958	422,347
Cash flows:							
Cash flows from operating activities	89,391	115,742	108,983	99,171	62,975	796,782	746,231
Free cash flows	53,527	83,595	(4,767)	89,339	34,257	477,110	446,840
Increase (decrease) in cash and cash equivalents	19,111	41,271	(7,443)	61,765	6,136	170,345	159,538
Capital expenditure	63,843	59,602	51,474	31,987	26,688	569,061	532,958
Depreciation and amortization	43,039	42,927	39,917	33,762	24,219	383,626	359,287
Research and development	17,971	19,121	20,903	16,814	11,076	160,184	150,021
At the end of the period:							
Total assets	¥1,040,390	¥1,033,311	¥1,083,450	¥848,772	¥541,286	\$9,273,465	€8,685,116
Interest-bearing debt	194,457	220,376	255,350	177,195	145,935	1,733,283	1,623,316
Equity (net assets)	548,746	504,675	476,176	382,840	259,865	4,891,220	4,580,900
Number of shares outstanding (thousands of shares)	427,577	427,579	427,601	427,657	365,420	—	—
Earnings per share (yen)*1	¥ 118.32	¥ 161.50	¥ 165.02	¥ 116.79	¥ 36.20	\$ 1.05	€ 0.99
Dividends per share (yen)	26.00	26.00	23.00	17.00	14.00	0.23	0.22
Net assets per share (yen)*2	1,254.89	1,159.70	1,090.64	870.36	684.96	11.19	10.48

*1 Basic earnings per share

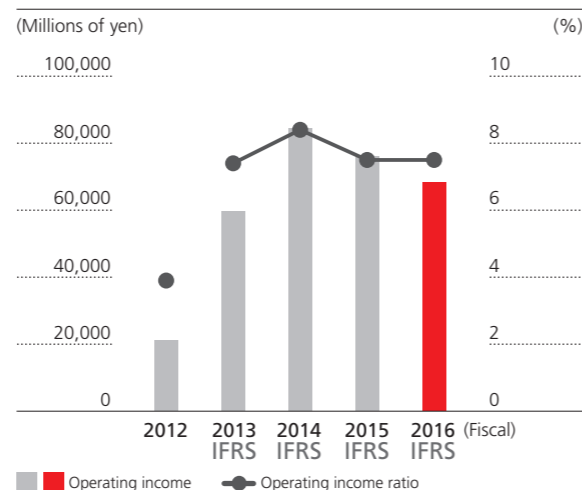
*2 Equity per share attributable to owners of the parent company

Reference information:	Millions of yen					Thousands of U.S. dollars	Thousands of Euros
	2016	2015	2014	2013	2012	2016	
	IFRS	IFRS	IFRS	IFRS	J-GAAP	IFRS	
Total market value of stocks	¥ 667,874	¥496,420	¥788,924	¥628,228	¥321,935	\$5,953,065	€5,575,377
Enterprise value (EV)	722,920	596,496	965,245	712,512	433,768	6,443,715	6,034,898
EBITDA	111,299	141,644	128,436	90,968	42,818	992,058	929,118
EBITDA margin (%)	12.2	13.9	12.8	11.3	8.0	—	—
EV/EBITDA ratio (times)	6.50	4.21	7.52	7.83	10.13	—	—

Revenues



Operating Income/Operating Income Ratio



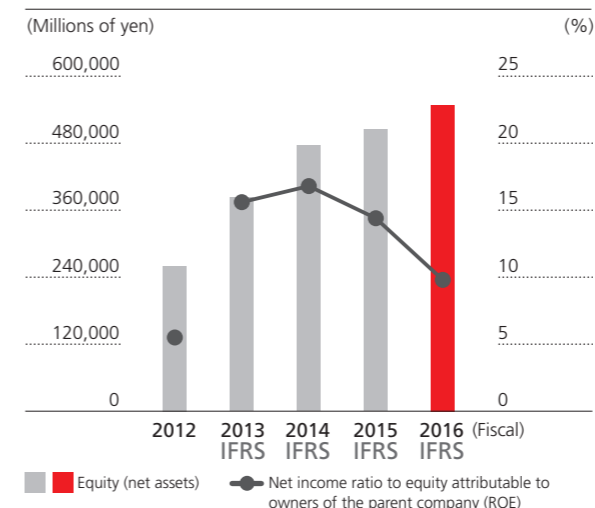
Notes: 1. For fiscal 2012, operating income based on the generally accepted accounting principles in Japan is provided.
2. For fiscal 2013 through 2016, adjusted operating income is provided.

Fiscal	2016	2015	2014	2013	2012
	IFRS	IFRS	IFRS	IFRS	J-GAAP
Key financial indicators:					
Operating income ratio (%)	7.5	9.8	8.4	6.6	3.9
Operating cash flow margin (%)	9.8	11.4	10.9	12.3	11.8
ROS (%)	5.6	6.8	7.0	6.0	2.4
ROA (%)	6.4	9.1	8.9	8.0	3.1
ROIC (%)	6.5	8.3	8.0	6.8	3.2
ROE (%)	9.8	14.4	16.8	15.6	5.5
Total assets turnover (times)	0.88	0.98	0.93	0.95	0.99
Equity attributable to owners of the parent company ratio (%)	51.6	48.0	43.0	43.9	46.2
D/E ratio (times)	0.36	0.44	0.55	0.48	0.58
Ratio of operating cash flow to debt (times)	2.18	1.90	2.34	1.79	2.32

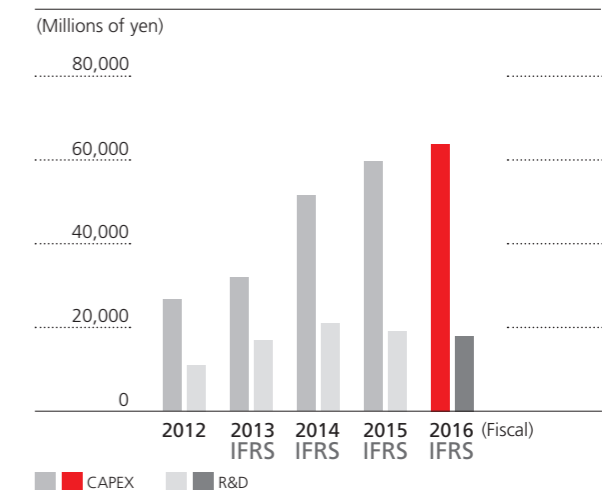
Fiscal	2016	2015	2014	2013	2012
	Non-financial information:				
Sales of key environmentally conscious products (million yen)	189,573	156,213	—	—	—
Sales ratio of key environmentally conscious products (%)	20.8	15.0	—	—	—
Energy consumption converted into crude oil (kl/year)	1,077,309	1,091,936	705,808	707,640	588,834
Net sales energy consumption ratio per production unit (kl/million yen)	1.18	1.07	0.78	0.79	1.10
CO ₂ emissions (thousands of tons of CO ₂ /year)	2,672	2,771	1,672	1,572	1,245
Net sales CO ₂ emissions per production unit (thousands of tons of CO ₂ /million yen)	0.0029	0.0027	0.0018	0.0018	0.0023
Number of employees	28,754	29,157	30,278	26,850	17,308

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 ended March 31, 2015. Accordingly, the amounts stated on pages 66 and 67 of this report were accounted for and presented in accordance with the generally accepted accounting principles in Japan for fiscal 2012, and in accordance with IFRS for fiscal 2013 through 2016.
2. The translation of Japanese yen amounts into U.S. dollars and euros for the year ended March 31, 2017, has been made at the rates of ¥112.19=\$1 and ¥119.79=€1, the approximate exchange rates as of March 31, 2017.
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 owners of the parent company (net income) by the average number of shares issued during the term, and equity per share attributable to owners of the parent company is calculated by dividing equity, which is total equity minus non-controlling interests/minority interests, by the number of shares outstanding at the end of the period.
6. Enterprise value (EV) represents the sum of total market value of stocks and net interest-bearing debt.
7. Earnings before interest, taxes, depreciation and amortization (EBITDA) refers to income before income taxes before deducting interest charges, depreciation and amortization.
8. EBITDA margin refers to EBITDA divided by revenues.
9. Return on sales (ROS) refers to net income attributable to shareholders of the parent company divided by revenues.
10. Return on assets (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. Return on invested capital (ROIC) is computed as the net operating income after tax divided by the sum of the average total equity attributable to owners of the parent company, the average total other comprehensive income and the average total interest-bearing debt (the average of the beginning and ending balance of the year).
12. Return on equity (ROE) is computed as the net income attributable to owners of the parent company divided by the average total equity excluding non-controlling interests/minority interests (the average of the beginning and ending balance of the year).
13. In Japan, the power company CO₂ emissions coefficient is based on the "power supplier emissions coefficient" announced by the Ministry of the Environment; outside Japan, it is based on the 2008 IEA "country-specific conversion coefficient."

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



Capital Expenditure/Research and Development Expenses



Financial Management

1. Financial Policy

Hitachi Metals makes growth investments and delivers appropriate returns of profits to shareholders over a long-term period to generate sustainable long-term growth. Management maintains a financial policy that aims to ensure a healthy and firm financial platform.

The Company thus builds on the reach of its diverse and distinctive businesses across various industries to invest strategically and flexibly, and to enhance investment and financial efficiency as well as profitability. At the same time, the Company accords top priority to accelerating the cash generation cycle to ensure a balanced financial position.

2. Shareholder Returns Policy

The Company's basic dividend policy is to determine profit distributions to shareholders and internal reserves by comprehensively assessing the business environment, future business developments, and business performance. Management's primary commitment is to generate robust growth over a medium- to long-term period, by strengthening international competitiveness and enhancing the corporate value of the Company, to deliver appropriate returns of profits to shareholders over a long-term period in a business environment with evolving customer needs, technology, and globalization.

Furthermore, the Company's basic policy is to pay out dividends from retained earnings twice a year as interim dividends and year-end dividends. The Company's Board of Directors retains explicit decision-making control over dividend payments.

The internal reserves are to be used for the development and commercialization of new materials, incubation of new businesses, and expansion and streamlining of competitive product lines by examining future business developments. The Company purchases treasury stock as appropriate to implement an agile capital policy in accordance with its needs, financial condition, stock price levels, and other factors.

Using this policy as a base, in fiscal 2016, we declared annual dividends of ¥26.00 per share, taking our business performance and other factors into consideration.

Management currently plans to pay annual dividends of ¥26.00 per share in fiscal 2017.

In the years ahead, Hitachi Metals will endeavor to enhance earnings and profitability while deploying financial strategies to boost capital efficiency, thereby increasing shareholder value.

3. Funding

In principle, the Company covers funding for growth investments with operating cash flows generated during the normal course of business and liquid funds. For other financing on a larger scale, Hitachi Metals implements reliable and flexible methods to minimize opportunity losses for its growth, including accessing financial and capital markets.

In addition, we increased our authorized corporate bond issuance registration limit from ¥50.0 billion to ¥100.0 billion (effective January 6, 2017).

In the fiscal year ended March 31, 2017, the funds generated by an increase in earnings or changes in working capital were primarily allocated to capital expenditure aimed at strengthening the platform to achieve further growth. During the fiscal year, the Company made certain repayments of long-term debt to ensure its funding stability.

4. Liquidity

Liquidity is a key component of Hitachi Metals' overall financial management policy. For short-term obligations that have maturities of 12 months or less, Hitachi Metals maintains sufficient liquidity to flexibly address unforeseen circumstances.

As of March 31, 2017, total liquid funds of the Company stood at ¥139.4 billion.

5. Interest-Bearing Debt

As of March 31, 2017, interest-bearing debt stood at ¥194.5 billion, a decrease of ¥25.9 billion from the previous year. Short-term interest-bearing debt was ¥61.8 billion, and long-term interest-bearing debt was ¥132.7 billion. The debt-to-equity ratio fell by 0.08 percentage point from the previous year, to 0.36 percentage point, as of March 31, 2017.

6. Ratings

Hitachi Metals recognizes that maintaining a high, stable credit rating is essential for its management goal of maintaining adequate liquidity and flexibility in its financing policies and to reduce financing costs. Each year, the Company acquires a credit rating for long-term corporate bonds from Rating and Investment Information, Inc., a major credit agency in Japan. As of March 31, 2017, the Company received the rating "A+" for its long-term corporate bonds and unsecured corporate bonds.

7. Cash Flows

Hitachi Metals aims to generate cash by increasing operating income, enhancing the profit rate, and reducing working capital.

With respect to net working capital (accounts receivable, inventories, accounts payable, and advances received), we have set the "working capital turnover period" as a performance indicator for enhancing capital efficiency, and we are striving to shorten it.

The Company pays particular attention to managing and reducing inventories. To that end, Hitachi Metals clarified responsibilities for each inventory category. While manufacturing departments and procurement divisions control materials, manufacturing departments and internal companies oversee manufactured products, including work-in-process and finished products. Domestic and overseas sales companies collaborate with internal companies to look after transit inventories. Thus, the Company maintains a structure to optimally control and reduce inventories in consideration of future trends over the medium to long term. The Group strives

to further cut back on inventories by properly and promptly managing inventories, based on accurate consolidated revenue forecasts, with the aim of reducing the number of working capital turnover days.

Hitachi Metals adopted a Group cash pooling system to help manage its own working capital and that of its subsidiaries. In principle, consolidated subsidiaries in Japan procure funds through this system, rather than taking on external debt. By consolidating surplus funds and debts across the Group, Hitachi Metals has better positioned itself to become more financially efficient. Group companies in the U.S. and China also use this cash pooling system, through which funds are centrally managed to enhance financial efficiency.

8. Investment Efficiency

Hitachi Metals invests flexibly in key businesses to drive sustainable growth. Activities include mergers and acquisitions, upgrading and streamlining of plants and equipment, increasing production capacity, establishing new bases, and investments in employee welfare benefits. In this context, Hitachi Metals differentiates between regular and strategic investments by taking investment decisions, returns, and other factors into account.

Hitachi Metals places emphasis on cash flow in formulating strategic investment proposals, making decisions by using the present value based on the discounted cash flow method and internal rates of return.

Stock Information

Stock Status

(As of March 31, 2017)

Total number of shares issued	428,904,352
Total number of shares authorized	500,000,000
Number of shareholders	25,302 (including holders of shares less than one unit)

Shareholder Composition

(As of March 31, 2017)

Segment	Number of shareholders	Number of shares held (hundreds of shares)	Percentage of shares held
Governments and local public entities	1	10	0.00
Financial institutions	64	551,003	12.87
Financial instruments business operators	43	27,249	0.64
Other domestic corporations	557	2,350,926	54.89
Foreign nationals	520	1,026,784	23.97
Individuals and others	21,109	326,821	7.63

Notes: 1. Not including shares representing less than one unit.
2. Treasury shares (13,279 hundred shares) are included in "Individuals and others."

Major Shareholders

(As of March 31, 2017)

Shareholders	Number of shares held (thousands of shares)	Percentage of shares held
Hitachi, Ltd.	226,233	52.75
Japan Trustee Services Bank, Ltd. (Trust Account)	14,078	3.28
The Master Trust Bank of Japan, Ltd. (Trust Account)	8,845	2.06
JPMorgan Chase Bank 385632	6,948	1.62
JPMorgan Chase Bank 385078	5,740	1.34
Japan Trustee Services Bank, Ltd. (Trust Account 5)	3,914	0.91
GOVERNMENT OF NORWAY	3,279	0.76
State Street Bank West Client - Treaty 505234	3,036	0.71
Japan Trustee Services Bank, Ltd. (Trust Account 1)	2,968	0.69
Japan Trustee Services Bank, Ltd. (Trust Account 7)	2,932	0.68

Listed Stock Exchange

(As of March 31, 2017)

Tokyo (First Section, Code 5486)

Credit Rating

(As of July 2017)

Rating and Investment Information, Inc. (R&I)	Long-term Debt A+
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Shareholders' Memo

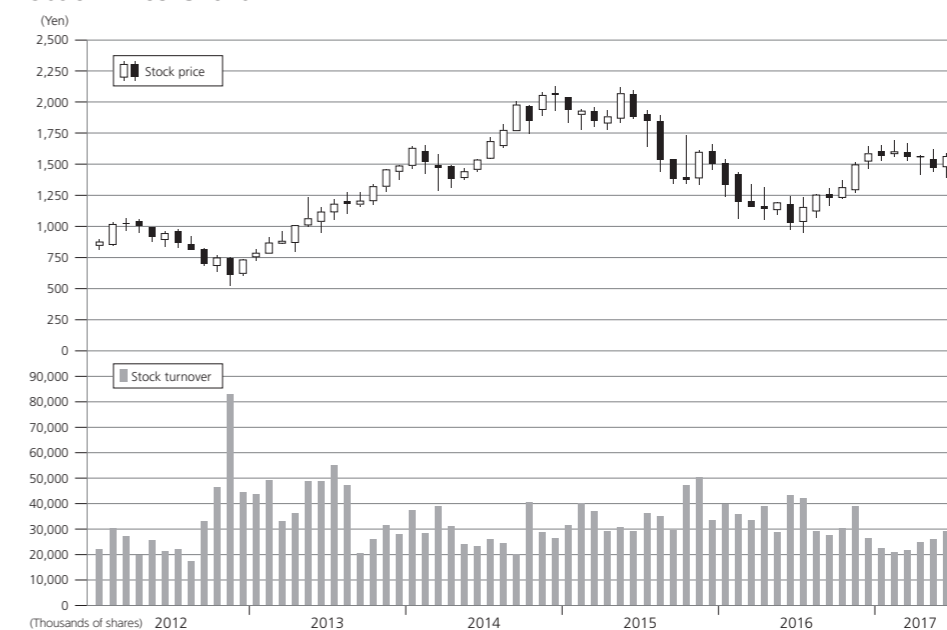
- Fiscal year-end: March 31
- Record date for dividend: March 31 and September 30
- Method of public notices: Electronic public notice
- Number of shares per one unit: 100 shares
- Administrator of shareholder registry: Tokyo Securities Transfer Agent Co., Ltd. (Head Office)
NMF Takebashi Building 6F,
3-11 Kanda Nishikicho, Chiyoda-ku, Tokyo, Japan

Corporate Data/Stock Price

Corporate Data

Company name	Hitachi Metals, Ltd.
Head Office address	Shinagawa Season Terrace, 2-70, Konan 1-chome, Minato-ku Tokyo 108-8224, Japan
	Tel.: +81-3-6774-3001, Toll-free: 0800-500-5055 (in Japan)
Established	1956
Listed stock exchange	Tokyo (First Section)
Securities code	5486
URL	http://www.hitachi-metals.co.jp/e/

Stock Price Chart



 **Hitachi Metals, Ltd.**