Strategies

CONTENTS

Strategy and Vision—Message from the CEO

Becoming a high-performance materials company supporting sustainable societies

We began operating under the new Fiscal Year 2021 Medium-Term Management Plan (covering fiscal 2019 through fiscal 2021) from April 2019.

By strengthening and expanding our "Only 1, No. 1" businesses and products, increasing synergies across businesses, and deepening collaboration with customers, the Hitachi Metals Group aims to be a high-performance materials company supporting sustainable societies.

Koji Sato

Representative Executive Officer,
President and Chief Executive Officer

March 1986	Completed master's course in metallurgy at the Kyoto University Graduate School of Engineering
April 1987	Joined Hitachi Metals, Ltd.
August 2002	Completed doctoral course in materials science at the University of California, Berkeley, Department of Materials Science and Engineering
January 2011	President and Representative Director of Japan Aeroforge, Ltd.
October 2014	General Manager of Metallurgical Research Laboratory of Hitachi Metals, Ltd.
January 2016	General Manager of Yasugi Works
April 2017	Executive Officer, President of Specialty Steel Company
April 2018	Vice President and Executive Officer, President of Specialty Steel Company, General Manager of Technology, Research & Development Division
April 2019	Representative Executive Officer, President and Chief Executive Officer (current position)

Koji Sato is highly experienced in metal materials, having served as General Manager of the Metallurgical Research Laboratory, General Manager of the Yasugi Works, and President of the Specialty Steel Company. Since October 2018, on his own initiative, he has been a driving force in Japan's cutting-edge metal materials development, working with Shimane University on its "Creation of global advanced metallic material base – Next Generation TATARA Project," which was selected by the Cabinet Office as a recipient under its "Regional University and Local Industry Revitalization Grant Program." He has also collaborated with the University of Oxford in the development of innovative special steel components in the pursuit of further possibilities in materials. With an unwavering belief that "The results of pursuing challenges are always successes and good opportunities for learning. Failure only happens when we lose hope," our aim is to use "Only 1, No. 1" *monozukuri* to bring about social innovation through the resolution of customers' social issues, and for employees to perform their jobs with a sense of satisfaction, and to have Hitachi Metals share the dreams of its customers.

Management policies

We aim to be a company that meets the needs of society through innovation in materials.

Becoming a “best enterprise”

The Hitachi Metals Group aims to be a high-performance materials company supporting sustainable societies, and the Fiscal Year 2021 Medium-Term Management Plan lays out a vision of “Building People, Building Innovation, Building the Future.”

To achieve this vision, I consider it extremely important to provide employees, who are the foundation of the Company, with opportunities for both personal growth and rewarding social lives through participation in the management of the Company’s businesses. At the same time, we will use combinations of the Group’s creative technologies to strengthen our collaboration with customers, to create added value that leads to top market shares and high growth as we strengthen and expand our “Only 1, No. 1” businesses and products.

The integrated flow of combining creative technologies and strengthening collaboration with customers leads to innovation of new materials. Continuously repeating this process makes it possible to respond to the demands of society, a leading example of which are the Sustainable Development Goals (SDGs), and we believe that achieving a sustainable society will contribute to the creation of a future for all of society.

If the Hitachi Metals Group is able to continue to be a company where employees work with a sense of satisfaction and that customers believe shares their dreams, I am confident that we will be able to become the “best enterprise” as per our Corporate Creed regardless of various management indicators.

Wa sureba tsuyoshi

“Human resources” are of primary importance to a company. Hitachi Metals has a history of more than 100 years of bringing various companies together and accumulating unmeasurable expertise and challenges. Our Corporate Philosophy of “*Wa sureba tsuyoshi*” expresses our sense of value, and can be understood to mean that the diversity we have cultivated over our history is the source of our strength.

In 2017, the Hitachi Metals Group systematically incorporated its corporate culture and Good Practice Guidance as the Hitachi Metals WAY. Firmly instilling this

at Group companies around the world, carried out with vigor by every individual employee, will lead to our becoming the “best enterprise.” We will also continue to hire and employ female employees and non-Japanese employees in the pursuit of diversity in management, and will strive to ensure that diversity is further incorporated in our corporate DNA.

Steady progress in 12 steps, taking one at a time

Creating added value that is recognized by customers is the source of a company’s growth. The Fiscal Year 2021 Medium-Term Management Plan introduces management using ROIC as a new management indicator to improve asset efficiency. Approaching the plan’s three-year period as 12 quarterly steps, we will take one step at a time and steadily build up results. Then, as we create value that exceeds stakeholders’ expectations, we will gain their trust as a company that addresses the needs of society.

Recognition of issues as assumptions underlying the new Medium-Term Management Plan

Expanding collaborative relationships with customers in various business fields with “Only 1, No. 1” products and businesses

Looking beyond customers’ immediate needs

The Hitachi Metals Group believes that it can contribute to the global megatrend of society overall working toward a low-carbon society with environmentally friendly products in a variety of ways. In automotive materials, for example, in addition to having the top global share in products for internal-combustion engines, we have a diverse range of products to address the shift to xEVs*, including materials for drive motors, and are, therefore, addressing moves toward both clean engines and xEVs. We also have various materials and applied products that are contributing to smaller-sized, larger-capacity telecommunications equipment.

Even if the business unit for individual products is small, using the Hitachi Metals Group’s *monozukuri* capability to mass-produce “Only 1, No. 1” products enables us to provide diverse products across a wide range of industrial segments. We are collaborating more closely with customers in a range of business fields where we have similar perspectives, including developing products that will lead to the realization of a low-carbon society.

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

Selection and concentration

Changes in the external environment also present opportunities, but, at the same time, correct measures are needed in response to changes in demand from geopolitical risk and trade friction, and the decline and obsolescence of existing products from technological innovation. We have competitors around the world. We, therefore, consider it important to look constantly for selection and concentration in businesses and products, and, while thinking about how to grow in these areas, also considering the downsizing, withdrawal from, or spinning off of businesses that are deemed to be non-core.

Making full use of prior invested equipment

Under the previous Medium-Term Management Plan, we turned from a long period of minimal investment to make a series of major investments in what we correctly identified as growth markets. Nevertheless, because we made rapid and diverse capital investments at the same time, resources were dispersed, the plan was overly optimistic, and, as a result, staffing shortages emerged in terms of production technology. There were also market effects, including the drop in China-related demand, and delays in deploying the equipment purchased meant that the effects of the investments were not achieved as planned, and we fell short of our earnings targets, which was one of the reasons for the weakening of cash flow.

“Selection and concentration” and “making full use of prior invested equipment” are priority issues carried over from the previous Medium-Term Management Plan that we recognize as continuing to take priority under the Fiscal Year 2021 Medium-Term Management Plan.

Basic policy and key measures of the new Medium-Term Management Plan

Implementing five action plans to achieve the Fiscal Year 2021 Medium-Term Management Plan

The Fiscal Year 2021 Medium-Term Management Plan seeks to make the Hitachi Metals Group a high-performance materials company supporting sustainable societies by pursuing management strategies and programs to enhance further our strength of “Only 1, No. 1” *monozukuri* and new products. The plan sets final fiscal year targets of revenues of ¥960.0 billion, with adjusted operating income of ¥80.0 billion (for an adjusted operating margin of 8.3%), and ROIC of 7.7%.

The five action plans we will implement are shown on the following pages.

1 Concentrating resources on high-growth and high-revenue areas

Through selection and concentration, we are concentrating resources in high-growth and high-revenue areas, and collaborating with customers to bring "Only 1, No. 1" products to market. Areas we are growing include electrification, electric power, power electronics, aircraft, amorphous materials for motors, and fine powders for 3D molding. At the same time, we are restructuring businesses including casting components for automobiles and magnetic materials. In casting components for automobiles, we are pursuing synergies with the melting and casting technologies developed in specialty steel. In magnetic materials, we are pursuing structure control technologies for magnets, while also offering solutions that combine soft magnetic material and cable material technologies. With regard to mergers and acquisitions, we are emphasizing the impact of being a trillion-yen company in terms of both size and synergies, and, at the same time, if there are businesses outside the Hitachi Metals Group that would be useful to society, we will carefully consider that course as well.

2 Maximizing synergies through organizational reforms

We are seeking to maximize synergies derived from organizational reforms. From fiscal 2019, we have transitioned our structure from four internal companies to two business divisions. With larger organizational units, we will use resources more efficiently and strengthen synergies between the specialty steel and functional components, and between the magnetic materials/power electronics and cable materials, and related materials businesses. At the same time, we are strengthening corporate functions which support the business divisions to reinforce both the strategic planning function and corporate governance. Corporate functions are carried out by cross-functional teams, and, by reflecting corporate intent in organizational management, we expect each business to create solid value.

Accelerate the growth strategy under the division system!

Create innovation by three organizations working as a unit to strengthen the management and collaborative creation with customers

Restructuring of portfolio

[Promote structural reforms]
- Promote sound management by introducing multilateral KPIs
- Downsize, withdraw from, and spin off low-profit, low-growth businesses and products

[Drastic buildup of *monozukuri*]
- Utilize cross-functional team

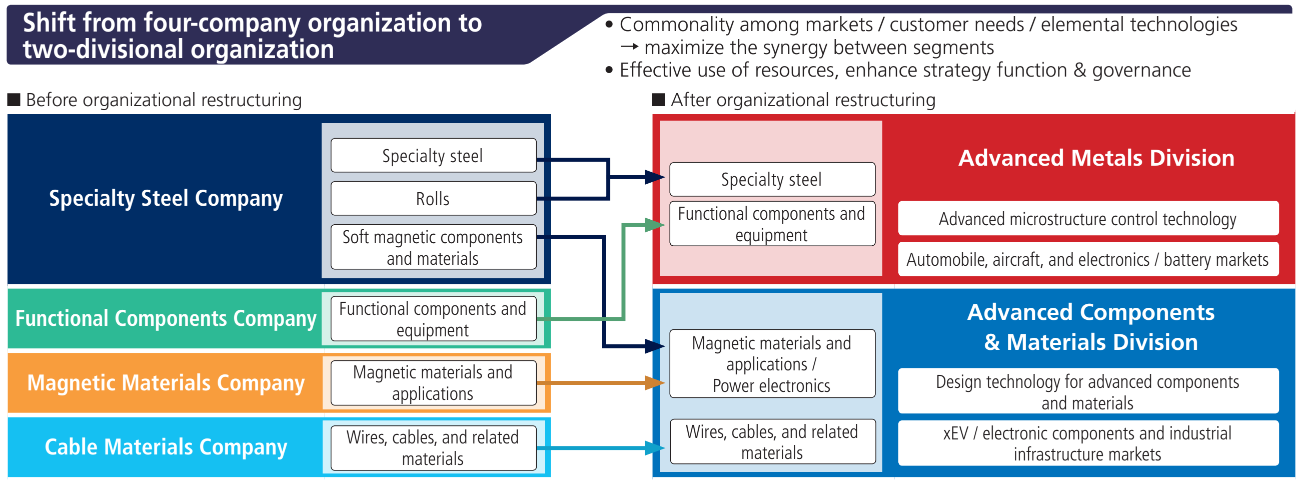
Promote the unity of "sales and marketing," "R&D," and "*monozukuri*"

"Go beyond customer needs!"

Talent development

- Thoroughly pursue diversity management
- Promote workstyle reforms

"One step ahead tomorrow of where you are today!"



3 Making full use of prior invested equipment

Making full use of prior invested equipment is an important issue. During the three years covered by the previous Medium-Term Management Plan, we made historically large investments totaling ¥251.0 billion. This upfront investment will generate solid cash flow and underpin our return to growth. At the same time, capital investment under the new Medium-Term Management Plan will be extremely selective. The amount of capital investment under the plan is ¥186.0 billion, of which ¥6.0 billion will be used to ensure intrinsic safety in work environments.

4 Strengthening front-line operations and create collaboratively with customers

To strengthen front-line operations, we are continuing with the Next-generation Automotive Components (NAC) Project, initiated in fiscal 2017 to address the growth of the xEV market. Part of this has been to strengthen cooperation across divisions by establishing an account marketing structure, and this has proven highly effective for making the most of our "Only 1, No. 1" products and expanding collaboration with customers. We have also launched a new Power Electronics Components (PEC) Project from fiscal 2019, and begun work to be sure to capture the growth in demand in the emerging area of power electronics materials.

In terms of research and development, we see the integration of materials development and process development becoming increasingly important. Each business division has two division labs, which work together and also cooperate with the Global Research & Innovative Technology center (GRIT), the global technological innovation center that is the Companywide research and development organization. Bringing these together as a Companywide technological development division leads to the sharing of information and reciprocal leveraging of underlying technologies, promoting qualitative and functional innovation and creating new products and businesses. GRIT is also the core entity for promoting collaboration with research and development institutions, universities, and companies.

In addition, we are enhancing synergies across manufacturing bases in Japan and around the world to reinforce *monozukuri*. We are making *monozukuri* capabilities at plants visible and creating indexes that can be compared, so that best practices can be implemented even when product groups or processes are different. We are also using Hitachi's Lumada platform to improve productivity. In addition, to pursue *monozukuri* with safety as the first priority, we are reemphasizing safety training and continuously making investments to ensure intrinsic safety.

*1. Next-generation Automotive Components Project: Cooperation in marketing of next-generation vehicles
*2. Power Electronics Components Project: Cooperation in marketing of power electronics and electronic materials

5 Implementation of structural reforms and measures to build a stronger business base

Continuing to be a company that creates value for society involves more than simply pursuing sales volume; we will also continue to renovate our business portfolio to match our strengths with society's needs. This means downsizing, withdrawing from, or spinning off low-profit businesses and products where sufficient improvement cannot be expected, while also working to concentrate management resources and use them effectively, and growing "Only 1, No. 1" businesses and products. We have introduced management using return on invested capital (ROIC) as a new management indicator, and are working to shorten the Cash Conversion Cycle (CCC) to reduce invested capital and reduce the risk of fluctuations in resource material prices, while at the same time working to understand our business results from multiple perspectives to improve cash flow and raise capital efficiency.

We are also working to promote diversity in management and workstyle reforms by hiring and training global human resources and promoting active participation by female employees, and, by making the most of the results of these programs, we will create a corporate culture with a strong sense of challenge through innovation.

Message to stakeholders

With each employee implementing the Hitachi Metals Group's Corporate Philosophy of "*Wa sureba tsuyoshi,*" we will contribute to the realization of a sustainable society.

I like to say, "Our own preconceived notions are an impediment to growth." Now that we have broken down internal company boundaries with the transition to a business division structure, we have become able to see many issues that currently exist. On the front lines of marketing and plants and at corporate divisions, we are overcoming traditional organizational boundaries, engaging in thorough exchanges of opinions involving different viewpoints, and beginning to work with a clear awareness of the current situation, and, as a result, a streamlined, appropriate structure is taking shape.

Another thing I like to say is, "In *monozukuri* and marketing, logic alone is not enough – inner passion is most important." In *monozukuri,* it is very important to balance passion, logic, and ethics, and through passionate *monozukuri,* I want to provide customers with products that have soul. I also recognize that one of a CEO's jobs is to create an environment where all employees feel comfortable acting on their own initiative. To do this, we need to "shake the tree" to make the fruit fall to the ground, and gather the wisdom of all employees on the table and from all of that wisdom extract the best solutions.

The Hitachi Metals Group has various different histories and backgrounds, and is a trillion-yen company that is a collection of diverse DNA. Currently, our business performance is struggling, but I see this as a period of preparing for new growth. Through "*Wa sureba tsuyoshi,*" we have many "Only 1, No. 1" businesses and products, and the passion and strength to use them. Senior management is taking the initiative in spreading the word inside and outside the Company about Hitachi Metals' value and the "Only 1, No. 1" technologies and products that are extensions of that value, and in making a greater contribution to society's sustainable development by stimulating innovation in materials as a company that is indispensable to society.

Overview of the Medium-Term Management Plan

Under the Fiscal Year 2021 Medium-Term Management Plan, we will build on our existing initiatives for continuous growth, while pursuing management strategies and programs that will further strengthen the "Only 1, No. 1" businesses and products that are our strength, under a vision of "Building People, Building Innovation, Building the Future," to become a high-performance materials company supporting sustainable societies.

FY2013–FY2015

FY2015 Medium-Term Management Plan

Shifted to profit-generating segments and built structures for sustainable growth

(1) Strengthened capabilities to create new products and develop new technologies
(2) Strengthened and accelerated global growth strategies
(3) Established a robust operational foundation

FY2015 results (1USD=¥120)

Revenues	¥1,017.6 billion
Adjusted operating income*1	¥76.1 billion
Adjusted operating margin	7.5%
Net income attributable to owners of the parent company	¥69.1 billion
D/E ratio	0.44 times
ROE	14.4%
Overseas sales ratio	56%

Three-year cumulative

Operating cash flow	+¥323.9 billion
Investing cash flow	-¥155.7 billion
R&D expenses	¥56.8 billion

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

FY2016–FY2018

FY2018 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

Action Plan

1. Continuous portfolio remodeling
2. Organic growth (from capital investment & R&D)
3. Growth through M&A

FY2018 results (1USD=¥111)

Revenues	¥1,023.4 billion
Adjusted operating income*1	¥51.4 billion
Adjusted operating margin	5.0%
EBIT	¥45.3 billion
Net income attributable to owners of the parent company	¥31.4 billion
Total assets	¥1,099.3 billion
Equity attributable to owners of the parent company	¥588.0 billion
D/E ratio	0.34 times
ROIC*2	4.1%
ROE	5.5%
CCC*3	90.7 days
Overseas sales ratio	56%
Employees	30,304

Three-year cumulative

Operating cash flow	+¥195.1 billion
Investing cash flow	-¥207.2 billion
Capital expenditure	-¥251.0 billion
M&A and others	+¥43.8 billion
Free cash flows	-¥12.1 billion
Depreciation	¥140.0 billion
R&D expenses	¥54.3 billion

FY2019–FY2021

FY2021 Medium-Term Management Plan

A high-performance materials company supporting sustainable societies — building people, building innovation, and building the future —

Expand "Only 1, No. 1" businesses and products

1. Concentrate resources on high-growth and high-profit areas
2. Maximize the synergy derived from organizational reforms
3. Making full use of prior invested equipment
4. Strengthen front-line operations and collaborative creation with customers
5. Structural reforms and measures to build a stronger business base

FY2021 Plan (Projected exchange rate: 1USD=¥105)

Revenues	¥960.0 billion
Adjusted operating income*1	¥80.0 billion
Adjusted operating margin	8.3%
EBIT	¥77.0 billion
Net income attributable to owners of the parent company	¥55.5 billion
Total assets	¥1,030.0 billion
Equity attributable to owners of the parent company	¥655.0 billion
D/E ratio	0.5 times or less
ROIC*2	7.7%
ROE	8.9%
CCC*3	81.9 days
Overseas sales ratio	57%
Employees	28,500

Three-year cumulative plan

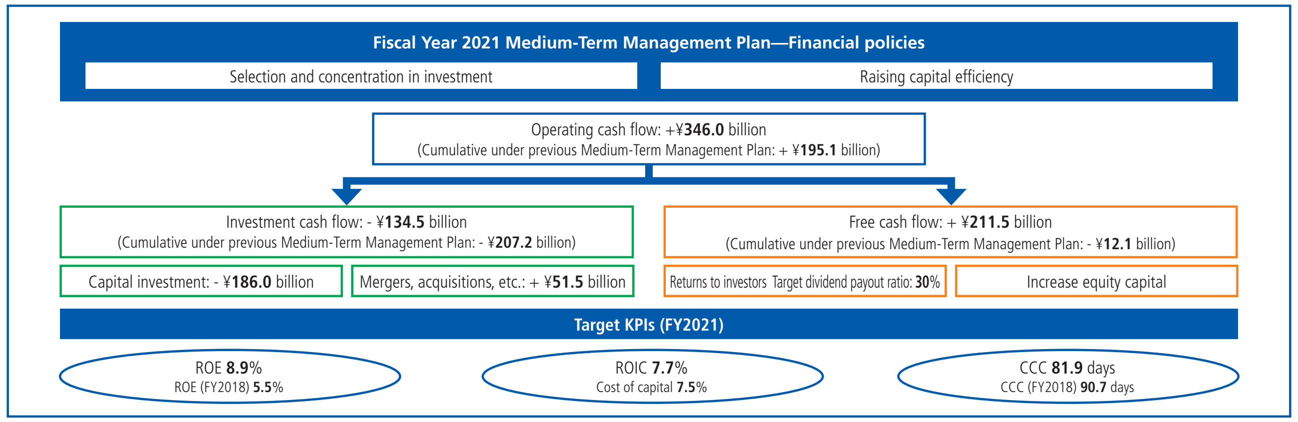
Operating cash flow	+¥346.0 billion
Investing cash flow	-¥134.5 billion
Capital expenditure	-¥186.0 billion
M&A and others	+¥51.5 billion
Free cash flows	+¥211.5 billion
Depreciation	¥182.5 billion
R&D expenses	¥59.0 billion

*2 Return on Invested Capital (ROIC) = Net income attributable to owners of the parent company / (Average of beginning and end-year interest-bearing debt + Average of beginning and end-year equity attributable to owners of the parent company)
*3 Cash Conversion Cycle (CCC) = Working capital (Trade receivables + Inventories - Trade payables) / Daily average revenues

Message from the General Manager of Finance Division

We are raising capital efficiency by making full use of prior invested equipment and investing selectively, while also emphasizing maximization of operating cash flow.

Hiroaki Nishioka
Vice President and Representative Officer
Chief Financial Officer
General Manager of Finance Division



Emphasizing selection and concentration in investment and raising capital efficiency

Under the Fiscal Year 2021 Medium-Term Management Plan, the Hitachi Metals Group will emphasize “selection and concentration in investment” and “raising capital efficiency.” In terms of investment, we will be extremely selective while also making full use of prior invested equipment purchased under the previous Medium-Term Management Plan. We have also introduced return on invested capital (ROIC)*[1] to raise capital efficiency, and will emphasize the maximization of operating cash flow.

The Fiscal Year 2021 Medium-Term Management Plan aims for a cumulative three-year operating cash flow of ¥346.0 billion (the cumulative result under the Fiscal Year 2018 Medium-Term Management Plan was +¥150.9 billion). On the other hand, we are forecasting roughly -¥134.5 billion (previous cumulative result: +¥72.7 billion) for investment cash flow, which includes ¥186.0 billion (- ¥65.0 billion) of highly selective investment in priority areas. As a result, we expect a significant improvement in cumulative free cash flow for the three-year period under the Fiscal Year 2021 Medium-Term Management Plan, to +¥211.5 billion (from +¥223.6 billion).

With regard to raising capital efficiency, we will continuously review our business portfolio by expanding high-value-added products and growth businesses and withdrawing from or spinning off low-profit, non-core businesses*[2], while also working to shorten the Cash Conversion Cycle (CCC)*[3] to 81.9 days (an 8.8-day reduction from fiscal 2018) and thoroughly implementing effective inventory management.

Through these measures, we are aiming for ROE*[4] of 8.9% and ROIC of 7.7%, above the 7.5% cost of capital*[5].

*1. Return on invested capital (ROIC): Net income attributable to owners of the parent company ÷ (Average of beginning and end-year interest-bearing debt + Average of beginning and end-year equity attributable to the parent company)
*2. Non-core businesses: Group businesses that are not sufficiently efficient
*3. Cash Conversion Cycle (CCC): Working capital (Trade receivables + Inventories -Trade payables) ÷ Daily average revenues
*4. Return on equity (ROE): Net income attributable to shareholders of the parent company ÷ Average of beginning and end-year equity attributable to shareholders of the parent company x 100
*5. Calculated using a capital asset pricing model and share price profit margin, and taking into consideration results at peers.

Using ROIC as an index to raise capital efficiency

We calculate that the Group’s cost of capital is 7.5%, and, currently, the Companywide ROIC is below the cost of capital, so we need to raise ROIC by increasing profit and reducing invested capital.

To increase profit, we will continue to expand high-value-added products and growth businesses, improve product quality through *monozukuri* innovation using the Internet of Things (IoT), and reduce costs. In addition, we will use information technology to streamline administrative operations and thereby reduce fixed costs. We will also continuously review our business portfolio by downsizing, withdrawing from, and spinning off low-profit, non-core businesses.

We are working to reduce invested capital by formulating optimal production plans using the IoT to shorten the Cash Conversion Cycle and conducting personnel exchanges to share best practices. In addition, we have launched the Reformed Human Resource Training Program in cooperation with Hitachi’s IE Master system, to train human resources who will be *kaizen* (improvement) professionals, and implement thorough management from the plant floor to inventories and appropriate warehousing.

We aim to raise ROIC through these initiatives, but, currently, we have businesses where ROIC is significantly higher than the cost of capital, other businesses that are set for steady improvement, and other businesses requiring upfront investment where ROIC will be below the cost of capital over the short term. We, therefore, consider it important to instill management using ROIC by business division and main product group. Setting ROIC targets by business division and main product group based on the unit’s profit and invested capital will lead to Groupwide improvement in ROIC.

In addition, the Corporate Management Planning Division and Finance Division are jointly holding an ROIC awareness caravan, and, with the strong commitment of Board members, we are promoting an understanding of ROIC among all ground-level employees so that they can participate in raising ROIC through improvements in their daily operations.

Clarifying the investment decision-making process

We are reconstructing our processes and criteria for capital investment. For capital investment carried out by business divisions, corporate divisions participate from the advance study stage, with the advance screening process and responsibilities of the manager of the screening division clearly laid out.

In addition to equipment upgrades and streamlining, production capacity increases, establishment of new centers, and investments for safety, investments include mergers and acquisitions, and ordinary investment and strategic investment are separately defined and classified in terms of investment decision-making, recovery of investment, and other aspects. Proposals for strategic investment emphasize cash flow, and investment decisions are based on a current valuation using discounted cash flow (net present value [NPV]), ROIC, and the period for recovering the investment.

Balance sheet management

The new Medium-Term Management Plan includes the streamlining of the balance sheet to improve our financial position and raise capital efficiency. With structural reforms through the improvement of working capital by shortening the Cash Conversion Cycle, use of the Hitachi Group’s cash pooling system, and selection and concentration, we are forecasting total assets of ¥1,030.0 billion as of the end of fiscal 2021 (a 6.3% reduction from the end of fiscal 2018).

In addition, our basic policy is to cover the funds needed to invest for growth from cash generated by businesses and cash on hand. We have few apparent growth opportunities, however, we are looking to maintain our current debt-equity ratio of approximately 0.3x to 0.5x or less and our credit rating at A+, and will engage in flexible fund procurement.

Cash allocation

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

In terms of enhancing shareholder value, we look to increase total shareholder return (TSR) and aim to distribute profit with a balance between a higher share price through business growth and returns to shareholders. Under the new Medium-Term Management Plan, we will concentrate resources in high-profit, high-growth areas, carry out structural reforms, and strengthen the management base for business growth that leads to a higher share price, while maintaining a stable dividend with a target payout ratio of 30%.

In addition, we recognize that purchases of treasury stock are a useful way to provide returns to shareholders, but, at this time, we consider it rational to invest for strategic growth with high returns, and are, therefore, emphasizing business growth and expansion through strategic investments for growth in research and development and in high-value-added product areas.

Message from the General Manager of Advanced Metals Division

By integrating our specialty steel and functional components and equipment technologies, we will aim to become a "No. 1 high-performance business structure for advanced metals" through collaborative creation with customers.

Hiroshi Watanabe
Vice President and Executive Officer, General Manager of Advanced Metals Division

Fiscal Year 2021 Medium-Term Management Plan

		FY2018 Results	FY2021 Targets
Specialty Steel Products	Revenues	¥276.9 billion	¥320.0 billion
	Adjusted operating income [Profit margin]	[8.1%] ¥22.4 billion	[10.3%] ¥33.0 billion
	ROIC	6.3%	8.6%
Functional Components and Equipment	Revenues	¥367.6 billion	¥350.0 billion
	Adjusted operating income [Profit margin]	[2.9%] ¥10.5 billion	[6.9%] ¥24.0 billion
	ROIC	-0.6%	6.8%
Total*	Revenues	¥644.5 billion	¥670.0 billion
	Adjusted operating income [Profit margin]	[5.1%] ¥32.9 billion	[8.5%] ¥57.0 billion
	ROIC	2.7%	7.8%

* Simple sum before eliminating intersegment revenues

Capital investment (3-year cumulative) **¥107.0 billion**

Process innovation
- Promote automation
  Automate finishing at Waupaca, etc.

Investments to increase production
- Wide processing line for electronic materials at Yasugi Works
- Facility to increase the production capacity of turbine wheels

Initiatives of Fiscal Year 2018 Medium-Term Management Plan

In the growing aircraft and energy materials businesses, we started operations at Hitachi Metals' Okegawa Works following the merger with Hitachi Metals MMC Superalloy, Ltd. We also invested in melting and forging facilities, mainly at the Yasugi Works. In electronic materials, we invested to increase production capacity at the Tsuchiura Works of Hitachi Metals Neomaterial, Ltd., with the aim of expanding our business in clad materials. In addition, we decided to invest in a wide processing line for organic EL components and materials, for which the Group's global market share is nearly 100%, and started investment.

Basic policy of Fiscal Year 2021 Medium-Term Management Plan

Two issues have remained unresolved at the completion of the Fiscal Year 2018 Medium-Term Management Plan: Increased inventories and a delay in reaping the benefits of the large-scale investments made at the production sites in Japan. Our new Fiscal Year 2021 Medium-Term Management Plan recognizes these issues. Under the plan, we will generate synergies between businesses and collaborate creation with customers with the aim of becoming a "No. 1 high-performance business structure for advanced metals."

Five-part action plan

The Advanced Metals Division will implement the following five-part action plan to resolve problems and achieve sustainable growth.

1 Reduce inventories

We will steadily execute our action plan by strictly monitoring the Cash Conversion Cycle (CCC) and other key performance indicators (KPIs) to reduce inventories at an early stage of fiscal 2019.

2 Create synergy between businesses

In addition to identifying needs in the overlapping markets of specialty steel products and functional components and equipment, we will propose materials and products that combine our technologies in these two areas. We will also strategically and functionally allocate management resources, including a workforce of more than 17,000, to growth fields.

3 Bring innovations to materials and processes

We will integrate and develop our technologies in the specialty steel and functional components and equipment field—namely, structural control technology, alloy design technology, and production technology—and deepen collaboration with the Global Research & Innovative Technology center (GRIT), customers, and external research institutes to develop new alloys and processes, in addition to providing powder materials for 3D printers and metal injection molding (MIM) products.

4 Ongoing restructuring of business portfolio

We will overhaul the portfolios of our core businesses. In automotive castings, for example, we will expand our presence in heavy-duty areas—commercial vehicles, agricultural machinery, construction machinery, rolling stock, and industrial equipment—while promoting process innovation for higher added value, in order to generate reliable earnings. Through these efforts, we plan to increase the sales ratio for heavy-duty automotive castings at Waupaca Foundry, Inc. in the United States to 54% by fiscal 2021, from 42% in fiscal 2018.

In the growth businesses of industrial equipment, aircraft and energy materials, and electronic materials, we will expand medium-term sales and increase the sales ratio.

5 Take the best advantage of large-scale investments

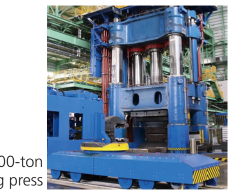
In our core businesses, we have made significant capital investments under the Fiscal Year 2018 Medium-Term Management Plan. As a result, in automotive castings, we increased productivity at Waupaca Foundry and expanded sales of DAC-i™, a new molds and tool steel product. There have been delays in reaping the benefits of these capital investments, but, going forward, we will engage engineers and other human resources to promptly take the best advantage of these investments.

In the growing business of aircraft and energy materials, we expect demand for passenger jet aircraft to increase in the future. To capture this demand, we will deepen three-way collaboration among the Okegawa Works, Yasugi Works, and Japan Aeroforge, Ltd. to build an integrated production system that covers melting, forging, and processing. We will also strengthen our business with engine manufacturers and deploy specialized technologies related to isothermal forging, MIM, and precision casting to introduce next-generation products. In the process, we will enter the market for engine core components, targeting ¥60 billion in annual sales of aircraft components and materials by fiscal 2025.

In electronic materials, another growing business, we look forward to high growth driven by electrification of automobiles and advances in smartphone performance. In organic EL components and materials, we will commission a wide processing line in fiscal 2020, thus taking the best advantage of our investments. The Group also boasts world-class technologies in clad materials, where multiple metals are combined to demonstrate unique properties. Bringing together the unique technologies of the Group's sites in Yasugi, Suita, Tsuchiura, Kitanihon, and Kagoshima will enable us to supply a wide variety of clad materials. In the electronic materials business, we are targeting a 14% increase in sales by fiscal 2021 compared with the fiscal 2018 figure.

Take the best advantage of large-scale investments

Core businesses	Molds and tool steel	Yasugi Works 10,000-ton forging press (started operation in May 2018)
		Respond to larger molds and expand the sales of new products such as DAC-i™
	Rolls	Increase production efficiency and capacity (started operation in the 2H of FY2018 at Hitachi Metals Wakamatsu, Ltd.)
		Expand sales of rolls for steel mills and structural steel castings
	Industrial equipment	Increase production capacity of piston ring materials (operation in the 1H of FY2018 in China; 2H at Yasugi Works)
		Responded to the needs for better fuel efficiency of internal-combustion engines
	Piping components	Increased the system capacity of flexible piping at Kuwana Works (started operation in the 2H of FY2018)
		Expanded sales in the Chinese and European markets
Growing businesses	Aircraft/Energy materials	Establish an integrated production system across the three sites (melting, forging, and processing)
		Increase production efficiency and accelerate acquisition of melting certification to enter world's Top 4 manufacturers
	Electronic materials	Increase production capacity of clad materials (operation in the 2H of FY2018 at Tsuchiura Works of Hitachi Metals Neomaterial)
		Increase capacity and integrate technologies of 5 sites to expand sales in new fields


10,000-ton forging press


Production site of piston ring materials in China


Clad terminal for a battery

Message from the General Manager of Advanced Components & Materials Division

Reaping the benefits of investments, we will concentrate resources and generate synergies aimed at expanding the growth areas.

Kazuya Murakami
Vice President and Executive Officer,
General Manager of Advanced Components & Materials Division

Fiscal Year 2021 Medium-Term Management Plan

		FY2018 Results	FY2021 Targets
Magnetic Materials and Applications/ Power Electronics	Revenues	¥137.0 billion	¥175.0 billion
	Adjusted operating income [Profit margin]	[2.9%] ¥4.0 billion	[12.6%] ¥22.0 billion
	ROIC	3.9%	8.2%
Wires, Cables, and Related Products	Revenues	¥240.1 billion	¥245.0 billion
	Adjusted operating income [Profit margin]	[5.2%] ¥12.5 billion	[7.8%] ¥19.0 billion
	ROIC	8.2%	11.3%
Total*	Revenues	¥377.1 billion	¥420.0 billion
	Adjusted operating income [Profit margin]	[4.4%] ¥16.5 billion	[9.8%] ¥41.0 billion
	ROIC	5.5%	9.3%

Capital investment (3-year cumulative) **¥69.0 billion**

Power electronics
- Enhance the global production system for soft magnetic components and materials
- Increase the production capacity of ceramic products

Automotive components
- Increase the production capacity of harnesses for EPB at the production sites in Thailand and Vietnam

* Simple sum before eliminating intersegment revenues

Initiatives of Fiscal Year 2018 Medium-Term Management Plan

Targeting organic growth, we introduced innovative production lines, established Hitachi Metals San Huan Magnetic Materials (Nantong) Co., Ltd., and introduced a new continuous casting and rolling line. We also transferred our information system business and lead frame business as part of our continuous portfolio restructuring efforts. In addition, we pursued various M&A activities, with Santoku Corporation, a magnet alloy manufacturer, and HTP-Meds, LLC, a U.S. maker of medical products, becoming subsidiaries.

Basic policy of Fiscal Year 2021 Medium-Term Management Plan

Under the Fiscal Year 2021 Medium-Term Management Plan, we will work to address the megatrends of urbanization, declining birthrate and aging population, serious environmental problems, and technological advances. Specifically, we will focus on reaping the benefits of investments, concentrating our resources, and generating synergies between businesses. We have identified the following growth areas: automobiles, factory automation (FA) and robots, medical devices, and rolling stock.

Expansion into growth areas

Automobiles

The Advanced Components & Materials Division offers a wide range of products in the automotive area, including soft magnetic components and materials for power electronics, magnets, and magnet wires for wires, cables, and related products. Leveraging our advanced functional material design technology, we will generate synergies between businesses and meet the rapidly expanding needs of electrification and emerging xEV[*1] vehicles.

In soft magnetic components and materials, where demand is growing, we commissioned a FINEMET® Ribbon production line at the Metglas Yasugi Works in April 2019. This will quadruple our production capacity, establishing Hitachi Metals as the world's No. 1 manufacturer. In order to increase the production capacity of soft ferrite, meanwhile, we are scheduled to start mass production in the Philippines in January 2020. Our aim is to achieve a 1.4-fold increase in sales of soft magnetic components and materials by fiscal 2021 compared with the fiscal 2018 level.

In ceramic components, there is a growing need for silicon nitride substrates and other substrates that combine high thermal conductivity and mechanical strength as well as contribute to advances in power module cooling mechanisms in terms of compactness and cost reductions. We are increasing our domestic production capacity for silicon nitride substrates and started mass production of high-thermal-conductivity products. We are also reinforcing our polishing technologies for silicon carbide (SiC) substrates to expand business. Our aim is to achieve a 2.2-fold increase in sales of ceramic products by fiscal 2021 compared with the fiscal 2018 level.

Seeking to improve the efficiency of xEV drive motors, we developed a motor that uses amorphous metals as part of its core (see page 39 for details). Together with German research organization Fraunhofer IISB, we also developed a high-power-density technology that contributes to advances in output and compactness of on-board xEV chargers. We plan to use the outcomes of these activities to expand our business in high-performance soft magnetic components and materials.

In automotive electronic components, we will increase the production capacity for electric parking brake harnesses in Thailand and Vietnam. We will also expand our Feed Assy[*2] business in Japan and China while focusing on the development of new sensors. Our aim is to achieve a 1.7-fold increase in sales of automotive electronic components by fiscal 2025 compared with the fiscal 2018 level.

In magnet wires, we have commenced mass production in Japan and Thailand in response to strong xEV demand. Going forward, we will step up sales of differentiated products, such as high-PDIV (partial discharge inception voltage) wires and surge-resistant wires.

In magnetic materials, we brought production of magnet alloys 100% in-house, expanded our lineup of less heavy rare earth magnets to reduce resource risk, and installed new production lines for neodymium magnets and ferrite magnets. Going forward, we will improve the productivity of our new production lines and optimize our global production system in order to enhance profitability and expand orders. We are targeting an adjusted operating margin of 10% for magnetic materials in fiscal 2021.

*1 xEV: A generic term for electric vehicles (EVs), hybrid electric vehicles (HEVs), and plug-in hybrid electric vehicles (PHEVs).
*2 Feed Assy: Wiring parts for xEV motors

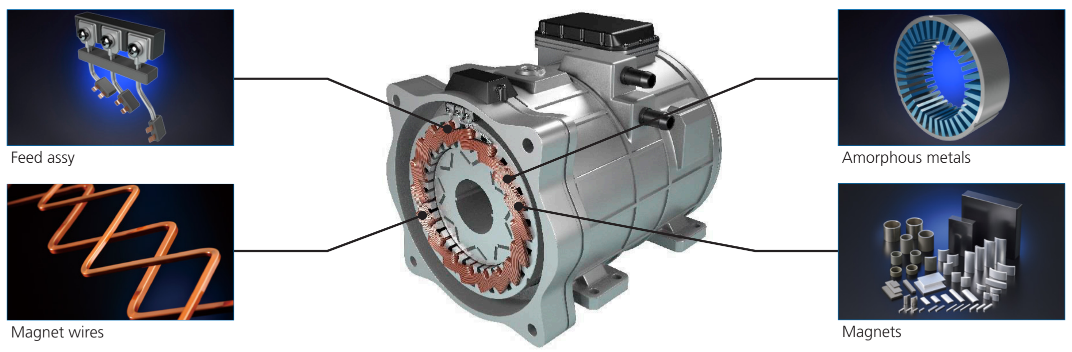
FA/robots, medical devices, rolling stock

In electric wires and cables for FA/robots, we will strive to increase our market share, deploying our unique technologies that feature thinner and lighter design and longer-life performance. With production in Japan, China, and Vietnam, we will make flexible investment decisions in response to market fluctuations. We are targeting ¥10 billion in sales of electric wires and cables for FA/robots in fiscal 2021.

In medical devices, we will increase the performance of scintillator materials for CT equipment, expand our line of combination products of catheters and cable for catheter testing and treatment equipment, and promote mass production of new probe cables for ultrasound diagnostic equipment. Our aim is to achieve a 1.3-fold increase in sales of medical devices by fiscal 2021 compared with the fiscal 2018 level.

In electric wires and cables for rolling stock, we aim to increase our market share in China, where demand for high-speed rail is growing. In Europe, we will propose cable navigation and other solutions, in addition to supplying products. We are targeting ¥14 billion in sales of electric wires and cables for rolling stock in fiscal 2021.

Automotive area
Seek synergy between magnetic materials, power electronics, and wires, cables, and related products



Deeply cultivate the automotive and industrial infrastructure markets with the design technology for advanced components and materials at the core

Message from the General Manager of Human Resources & General Administration Division

We strive to be a company with a diverse workforce, where individual employees can fully demonstrate their abilities with rewarding jobs in worker-friendly environments.

Naohiko Tamiya
Vice President and Executive Officer,
General Manager of Human Resources & General Administration Division

Rigorous pursuit of diversity-oriented management

A company's business growth is tied directly to its human resource strategy. The wellspring of business growth lies in people—and no matter which era or sector, this will never change. The corporate vision of the Hitachi Metals Group's Fiscal Year 2021 Medium-Term Management Plan is "Building People, Building Innovation, Building the Future." We will rigorously pursue diversity-oriented management as our human resource strategy to underpin this vision. With our "Only 1, No. 1" products, we have made positive contributions to customers and society. To continue generating innovation, we aim to be a company with a diverse workforce, where individual employees can fully demonstrate their abilities with rewarding jobs in worker-friendly environments.

Attract diverse human resources with diverse values

The Hitachi Metals Group will strive continuously to attract diverse human resources in terms of gender, nationality, age, and the like, including new graduates and mid-career hires. When fostering human resources, we will focus on independence and work to implement effective human resource development that is suitable for their individual characteristics. This is embodied in our Corporate Philosophy: *Wa sureba tsuyoshi,* which portrays our endeavor to work as one while improving ourselves individually in order to create the best possible company.

Effective fiscal 2019, we have shifted our company's structure to two business divisions. We will also promote the dynamic utilization, development, and allocation of human resources from a whole-company perspective that transcends lines between business divisions. We aim to provide employees with varying opportunities that do not impede individual potential, while deploying the various skills and knowledge of each person across business divisions to generate new innovations.

For employee engagement, we conduct an annual employee awareness survey called Hitachi Insights. Based on survey results, we identify and implement necessary measures to take, such as workplace communication improvements, and use the plan, do, check, and act (PDCA) cycle to increase employee engagement.

Rewarding work

In addition to good work content and clear workplace instructions, motivating individual employees requires proper communication between superiors and subordinates. We strive to improve communication by conducting regular interviews between superiors and subordinates based on our belief that serious and deep discussions will lead to job satisfaction. These discussions cover such matters as career choice suited to individual aptitude, employee satisfaction related to treatment and evaluation, and proper sharing of company management information.

With regard to workstyle reforms, we have made tangible progress in reducing working hours thanks to top-down initiatives over a three-year period from fiscal 2016. For true workstyle reforms, however, individual independence is a key. Going forward, we will encourage individual employees to take the initiative in enhancing work efficiency and superiors to embrace a deep commitment to improving the business. This will lead to increased productivity, which is our original purpose.

Enabling individual employees to fully demonstrate their abilities in worker-friendly environments

Under our Corporate Creed, we aspire to be the "best enterprise." This means being the best company not only for customers and society, but for employees as well. Under our management policy of "Safety always comes first," we are working to create safe and healthy environments where employees can work with peace of mind every day. Moreover, good workplaces with health and safety lead to better productivity. In our Fiscal Year 2021 Medium-Term Management Plan, therefore, we will plan to make specific safety-related investments every year and also emphasize health-oriented management.

By having diverse human resources perform rewarding jobs in worker-friendly environments, we hope to be a company in which individual employees can achieve future self-fulfillment, one step at a time, and fully demonstrate their capabilities.

Fostering management personnel

To achieve sustainable corporate growth, it is very important to adopt long-term perspectives in line with our Corporate Creed, and foster management personnel accordingly.

The Hitachi Metals Group embraces the concept of diversity-oriented management when selecting and developing management personnel. Once a year, we select and make a list of future executive candidates. We share this with the Board of Directors for discussion about ways to develop those candidates. To ensure diversity, we endeavor to include women and foreigners in our candidate lists.

Some candidates are subject to a training program for manager-level personnel. Others are sent to external training programs and given tough assignments in overseas locations and differing fields. In these ways, we strive to develop competent management personnel.

By fostering diverse management personnel with wide-ranging experiences, the Hitachi Metals Group aims to realize its "best enterprise" aspiration and achieve sustainable development.

* For more details, see page 52 for diversity-oriented management and page 54 for safety and health.

Human resources: Strategic KPIs

	Initiatives	KPI	FY2018 result	FY2021 plan (target)
1	Employee engagement (Hitachi Insights)	Engagement index*1	59%	62%
2		Overall positive response rate (non-consolidated)	57%	60%
3	Diversity-oriented management	Diversity recruitment ratio*2	56%	50%
4		Ratio of women in management positions*3	1.5% (19 people)	2.0% (26 people)
5		Ratio of women in career-track positions (non-consolidated; full-time)	4.7% (99 people)	5.6% (138 people)
6	Workstyle reforms	Total annual working hours*4	2,049 hours	14 days (average annual leave to be taken)
7	Safe and healthy workplaces	Occupational accident frequency*5	0.42	0

*1 Number of positive engagement indicators in the Hitachi Insights survey (non-consolidated)
*2 Percentage of foreign nationals, women, and mid-career hires in planning divisions' hires (non-consolidated)
*3 Percentage of women in managers and professionals (non-consolidated; currently working as manager or professional)
*4 Average annual working hours of back-office workers (non-consolidated; including managers and professionals)
*5 Occupational accident frequency = Number of casualties due to occupational accidents ÷ Total actual working hours × 1,000,000 (calendar year)