Hitachi High-Tech

HITACHI
Inspire the Next

Integrated Annual Report 2019

Hitachi High-Tech Corporation

CONTENTS

Editorial Policy

Hitachi High-Tech issues this Integrated Annual Report for the broad range of stakeholders who support our Company, and we consider it to be a communication tool to facilitate understanding of our management policies and business strategies. This report introduces initiatives aimed at raising corporate value over the medium to long term through an editorial policy with awareness of the association between the Hitachi High-Tech Group's management strategies and management base (non-financial information).

Integrated Annual Report 2019 includes an explanation of the new Corporate Vision, Mission, and the newly-formulated 2021 Mid-Term Management Strategy. The report describes the Company's awareness and issues of both business and management bases including specific action plans and targets related to Materiality. The report was produced with an awareness of raising understanding of Hitachi High-Tech Group among more stakeholders. Furthermore, please refer to the corporate website for more detailed non-financial information that has not been compiled in this report.

Organizations Covered by This Report

Hitachi High-Tech, its 41 subsidiaries and 5 affiliated companies

* Companies not applicable to the above reporting scope are noted as such in the text.

Reporting Period

This report covers FY2018 (from April 1, 2018 to March 31, 2019). However, it includes descriptions of some activities that occurred before or after FY2018.

Third-Party Assurance

KPMG AZSA Sustainability Co., Ltd. provided an assurance engagement for some of the environmental data to attest to the reliability of the non-financial information being disclosed. Please refer to the CSR section of the corporate website for the "Independent Assurance Report."

Publication

October 2019

(On February 12, 2020, Hitachi High-Technologies Corporation changed its trade name to Hitachi High-Tech Corporation. Accordingly, this report was reissued in February 2020.)

Reference Guidelines

- International Integrated Reporting Council (IIRC), The International Integrated Reporting Framework
- Ministry of Economy, Trade and Industry, Guidance for Collaborative Value Creation
- Global Reporting Initiative (GRI), Sustainability Reporting Standards

Forward-Looking Statements

Statements made in this Integrated Annual Report with respect to the Company's plans, strategies and future performance are forward-looking statements based on management's assumptions and beliefs in light of the information currently available, and involve risks and uncertainties. Accordingly, actual performance may differ from expectations due to a range of factors including, but not limited to, changes in the Company's operating environment.

Corporate Vision

Basic Philosophy

Hitachi High-Tech Corporation aims to be a successful enterprise trusted by all our stakeholders and contributing to social progress through business activities that emphasize value creation through high-tech solutions. We are committed to open, transparent, and reliable business practices. As we continue to grow, we will value the environment and strive to build a prosperous community, fulfilling our social responsibility and contributing as a corporate citizen with passion and pride in our work.

Corporate Vision

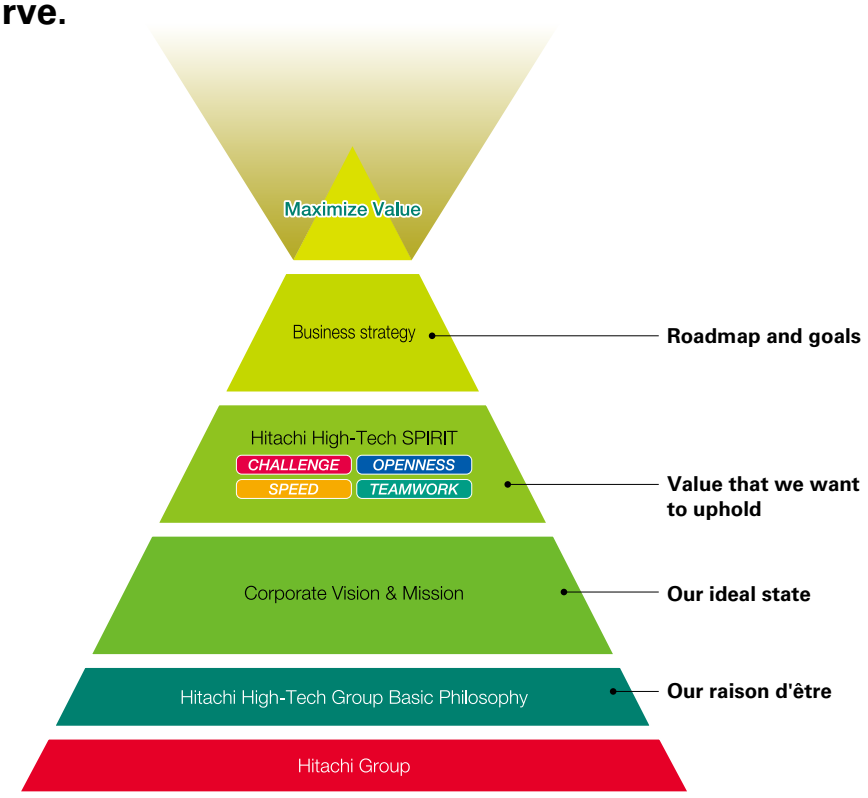
Simplify our customers' high-tech processes

Mission

Our mission is to help our customers be fast-moving, successful, cutting-edge businesses

Explanatory Phrase

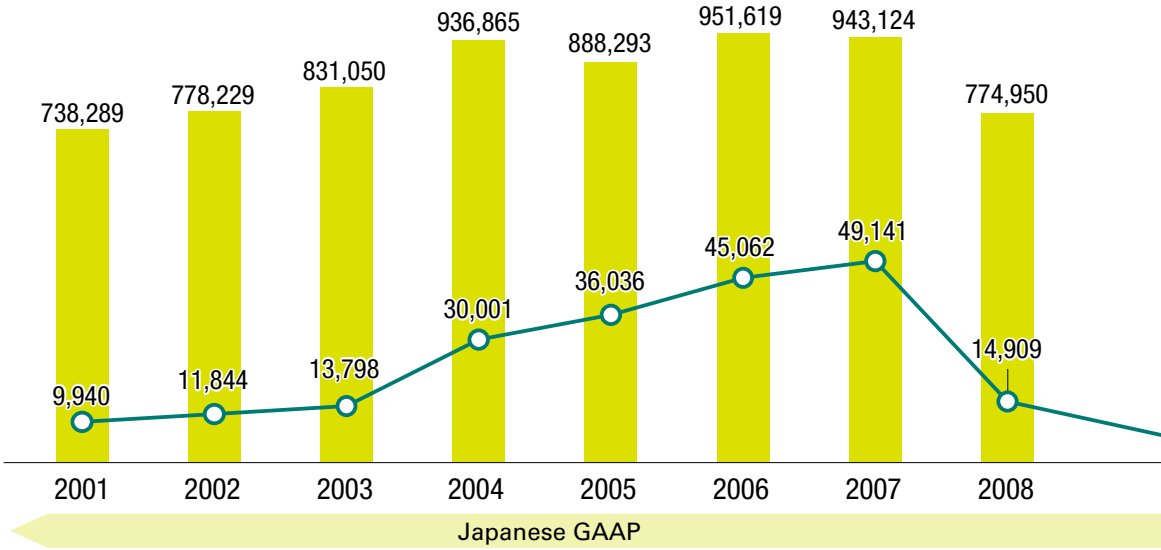
Our observation, measurement and analysis systems maximize yields while minimizing waste and safeguarding profit. Our processes, production systems, components and materials help our customers stay ahead of the curve.



History of Creating Value

Hitachi High-Tech aims to be a successful enterprise trusted by all our stakeholders and has contributed to social progress through business activities that emphasize value creation through high-tech solutions.

Changes in Hitachi High-Tech Group's net sales /revenues and operating profit/EBIT (Millions yen)



* FY2001–FY2012 figures are net sales/ operating profit. Figures from FY2013 are revenues/EBIT

Trajectory of Hitachi High-Tech Group

The Beginning (October 2001)

Hitachi High-Tech appeared on October 1, 2001 subsequent to Nissei Sangyo Co., Ltd., a trading company specializing in the field of advanced industry, absorbing the spun-off instruments and semiconductor manufacturing businesses of Hitachi, Ltd.

Laying the Groundwork for Integration (October 2001 –)

To possess world-class technologies and products and quickly provide technologies, products, and services boasting outstanding reliability in advanced technology fields, we consolidated development, manufacturing, sales, and services to establish a business structure capable of responding to market changes.

Operational Reform and Rapid Growth (April 2004 –)

Having entered the third year since its establishment, Hitachi High-Tech worked on putting the customer first and on-the-spot decision-making, creating a corporate culture characterized by aiming for high targets, and being a communicative, bright and open company, while forging ahead with the Operational Reform Project.

Responding to a Rapidly Changing Market (April 2008 –)

The Lehman Brothers collapsed in September 2008 and a global financial crisis and worldwide business slump spread. The Group's operating environment rapidly deteriorated. We thus launched business restructuring targeting a quick earnings turnaround, and took steps to accelerate growth.

Contribute to the Advancement of Society by Providing Value to Customers

LABOSPECT 008 clinical analyzer

Capillary electrophoresis (CE) DNA sequencer

Clinical Analyzers, DNA Sequencers

By measuring the components of blood, this equipment contributes to provision of medical treatment information related to people's health and diseases such as the condition of kidneys and liver as well as tumor markers and infections. Moreover, by analyzing the base sequence of DNA (deoxyribonucleic acid) that conveys living creatures' genetic information, it also contributes to progress in medical jurisprudence through the development of medicine, drug discovery and human identification.

9000 series conductor etch system

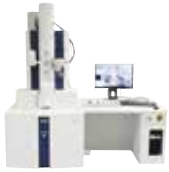
CG6300 advanced CD-SEM*

Etch Systems, CD-SEM

Semiconductors are indispensable for controlling the operation of electronic device. By contributing to the stable production of semiconductors through semiconductor manufacturing equipment for semiconductor device manufacturers, we support progress in digitization, such as IoT and AI, and help realize safe and convenient lives.

*CD-SEM: Critical Dimension Scanning Electron Microscope

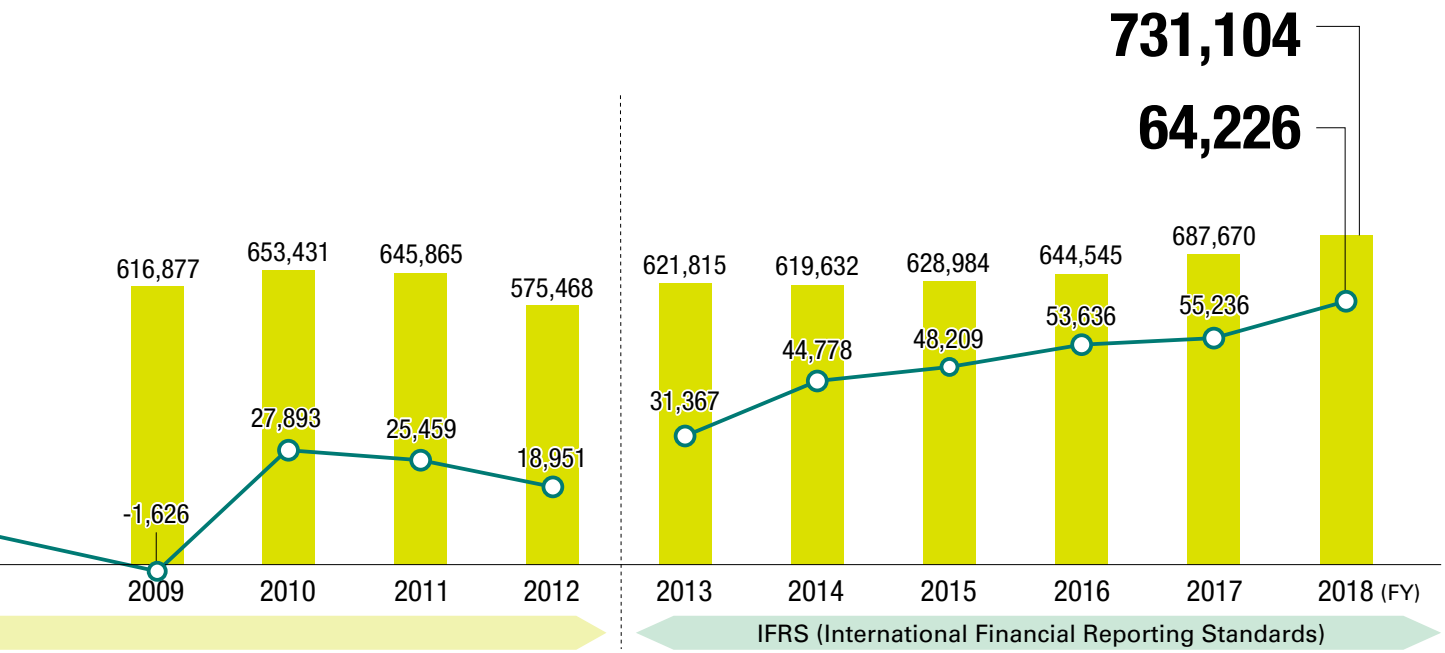
SU3900 scanning electron microscope



HT7800 series transmission electron microscope

Electron Microscopes

We contribute to the advancement of science and technology and the development of new materials by allowing researchers to see the fine structure of substances that cannot be seen with an optical microscope, and by supporting cutting-edge research and development at universities, research institutes and companies.



Business Restructuring for the Coming Decade (April 2010 –)

Major facilities and Group companies were damaged by the Great East Japan Earthquake of March 2011. Looking to get past the natural disaster and achieve growth over the next decade, Hitachi High-Tech announced Corporate Strategy 2011 (CS11), its long-term management strategy, and Medium-Term Management Plan 2013 in October 2011, which marked our 10th anniversary. We set out to further reform and strengthen business as well as become "a company that embraces CSR in the true sense."

Toward a New Stage of Growth (April 2014 –)

Hitachi High-Tech advanced business restructuring encompassing analytical instruments and semiconductor manufacturing equipment (for back-end processes) and stepped up global development. We bolstered our business portfolio by shifting resources to growth fields, accelerated global growth strategies, and reinforced our ability to create business.

The Next 15 Years and Beyond (April 2016 –)

Hitachi High-Tech formulated the 2018 Mid-Term Management Strategy (FY2016-FY2018). It positions the three years through FY2018 as an important period for the formation of the growth cycle leading up to 2020, and its basic policy is "Transform to more customer-centric organization" and "Transform to an autonomous and decentralized organization." In October 2016, we celebrated our 15th anniversary.

Toward a New Hitachi High-Tech - Revision of the Corporate Vision and Mission (April 2019 –)

In April 2019, we revised the Corporate Vision and Mission to clarify the new Hitachi High-Tech ideals, mission, and duties in response to changes in society, and to help solve social issues. In addition, to further evolve the growth cycle that has been formed so far, we launched the 2021 Mid-Term Management Strategy for FY2019 to FY2021.

EA8000 X-ray particle contaminant analyzer

HM1000A phthalates screening equipment

Analytical Instruments

Our analyzers contribute to quality inspection, environmental conservation, and safety management by measuring the content, characteristics, structure, reaction status, and other attributes of substances in various fields, including batteries, automobiles, electronic components, environment, metals, foods and pharmaceuticals.

Optical transceiver

Industrial/Advanced Materials

We contribute to the development of cutting-edge industries by providing solutions that support manufacturing in the manufacturing industry and meet customers' needs worldwide.

TOPICS

MODEL 705 AUTOMATIC ANALYZER was registered in the *Essential Historical Materials for Science and Technology* by the National Museum of Nature and Science in FY2018. This automated clinical chemistry (blood) analyzer features a compact size with high-precision analysis, and was highly acclaimed for supporting diagnoses by significantly contributing to widespread clinical testing since the 1980s.

MODEL 705
AUTOMATIC ANALYZER

Hitachi High-Tech's Strengths

Hitachi High-Tech Group provides high-tech solutions through its continuously honed unique strengths of technological capabilities, global sales and business finding capabilities and collaboration with customers and partners, and seeks to create high-tech solutions that maximize value for customers.

Technological Capabilities

(measurement and analysis technologies, automation and control technologies, manufacturing capabilities)

R&D Expenditure

30.8 **billion yen (+15%)**

*FY2018 results Figures in parenthesis indicate a year on year comparison

Patents Owned

8,140 **(+3%)**

*FY2018 results Figures in parenthesis indicate a year on year comparison

Number of Skills Competition medals won (cumulative total)

World Skills Competition: 7, **National Skills Competition:** 82

Global Sales and Business Finding Capabilities

Ratio of Overseas Revenues

61% *FY2018 results

Commercial Material Suppliers

4,200 **companies (Approx.)** *As of March 31, 2019

Overseas-based Personnel

2,723 *As of March 31, 2019

Collaboration with Customers and Partners

Production Component Suppliers

1,500 **companies (Approx.)** * As of March 31, 2019

(of which about 12% are overseas suppliers)

Main Global R&D Bases

20 *As of March 31, 2019

Our technological capabilities encompass the technological capabilities we have amassed by continuously providing high-tech solutions and the manufacturing capabilities underpinning them.

The core technologies* we have built up over many years for "Observation, Measurement, and Analysis" things are strengths at the heart of Hitachi High-Tech. We have continually refined our technological capabilities by using our world-class technological and R&D capabilities to raise our core technologies to a level capable of solving pressing issues in cutting-edge domains at the time and customizing them for specific applications. Moreover, the manufacturing capabilities fusing automation and control technologies with the master skills handed down from experienced technicians to young engineers, support construction of high-quality, highly efficient and flexible production frameworks.
Hitachi High-Tech boasts core technologies and manufacturing capabilities that enable us to provide products and services with outstanding reliability and added value to customers around the world.

* Core technologies: electron beam technology, spectroscopic analytical technology, sensor technology, plasma technology, vacuum control technology, optical technology, autonomous decentralized control technology, image processing technology

We leverage the know-how, business relationships, and personal connections we have established around the globe to stay ahead of market changes and provide our customers with solutions that anticipate market needs.

Hitachi High-Tech is a global company with locations in 26 countries and regions and 18 locations in Japan. Utilizing the personal connections, business relationships, and know-how that we have developed at each location, we provide high value-added solutions that meet the needs of our customers.
Our customer focused sales activities are a strength that enables us to accurately grasp the issues our customers face. By providing the best solutions capitalizing on our engineering capabilities, as well as IoT* and solutions capabilities, we help our customers become what they want to become. Furthermore, Hitachi High-Tech has a long history of supporting manufacturers as a trading company specializing in the field of advanced industry. In addition to the experience and know-how we have gained up to now, we capitalize on the strong relationships of trust we have with our customer base numbering some 2,200 companies worldwide and approximately 4,200 suppliers to deliver high value-added solutions that help customers solve issues.

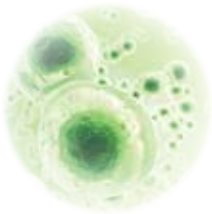
* IoT: Internet of Things

By providing high-tech solutions to our customers and partners, we have built strong relationships of trust with them and grow alongside them with an eye to solving social issues.

Along with keeping in close communication with customers and partners, Hitachi High-Tech is deepening collaboration by establishing demonstration and development bases near customers. We go beyond collaborating with partner companies on equipment development to forge comprehensive alliances in areas such as sales activities and service development to bring to our customers competitive systems that excel. In terms of production component procurement, our solid partnerships with suppliers built up over many years enable the stable procurement of high-quality components, which leads to the high levels of functionality, performance, and reliability offered by Hitachi High-Tech products.
Hitachi High-Tech grows alongside customers and partners by creating new products and solutions via collaboration rooted in strong relationships of trust.

Business Development Utilizing Hitachi High-Tech's Strengths

Hitachi High-Tech Group has continued to provide society with high-tech solutions through its unique and polished strengths of technological capabilities, global sales and business finding capabilities, and collaboration with customers and partners. By utilizing these strengths, Hitachi High-Tech has created global top-class products and innovative solutions in a variety of business fields to contribute to building a prosperous community.

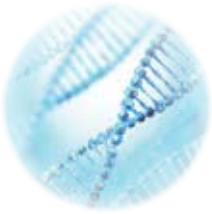


Biotechnology

Electronics

Security

New Materials



Life Sciences

Healthcare

In-Vitro Diagnostics

Biotechnology companies

Chemical/Steel/Food/ Pharmaceutical manufacturers

Universities/Public offices Research institutes

Nanomaterials/ High-performance materials manufacturers

Chemical/Steel/Food/ Pharmaceutical manufacturers

Universities/ Public offices Research institutes

Biotechnology companies

Reagent manufacturers

Hospital/ Research institutes/ Clinical laboratories

Analytical & Medical Solutions

Analytical instruments

- Analytical instruments

Medical and life science products

- Clinical chemistry and immunodiagnostic analyzers
- Genetic and bacterial testing systems
- DNA sequencers

Optical technology

Sensor technology

Fluid control technology

Automation technology

Main Bases with Core Technologies

Naka Division

(Hitachinaka-shi, Ibaraki Prefecture)

- Electron beam technology
- Sensor technology
- Spectroscopic analytical technology
- Optical technology

A Hitachi High-Tech Group core factory that develops and manufactures electron microscopes, CD-SEMs, defect inspection systems, clinical chemistry and immunodiagnostic analyzers and DNA sequencers based on electron beam technology and spectroscopic analytical technology.

Kasado Division

(Kudamatsu-shi, Yamaguchi Prefecture)

- Plasma technology
- Vacuum control technology

Develops and manufactures etch systems enabling low-damage processing with high-precision at the atomic and molecular level using plasma technology and vacuum control technology cultivated over many years.

Telecommunications

IoT/Cloud Computing
Big Data

Environment/
New Energy

Robotics

Automobile/
Rail Transportation

Control Security

Chemicals/Energy

Industrial
Materials

Nanomaterials/
High-performance
materials
manufacturers

Semiconductor
device
manufacturers

Semiconductor
materials
manufacturers

Electronic component/
Device/Film/
Panel manufacturers

Automobile-related companies

Research institutes/Public offices

Chemical/Food manufacturers

Automobile/
Transportation-related
manufacturers

Component/
Materials manufacturers

Electronics manufacturers

Semiconductor device
manufacturers

Optical communication
apparatus manufacturers

Hitachi Group companies

Nano-Technology Solutions

Semiconductor production equipment

- Plasma etch systems
- CD-SEM*
- Wafer surface inspection systems

Analysis equipment

- Electron microscopes
- Focused Ion Beam Systems

Electron beam technology
Plasma technology
Vacuum control technology
Optical technology
Ion beam technology

Industrial Solutions

Manufacturing and inspection equipment

- Railway inspection equipment
- Control systems
- Industrial-use automated assembly systems
- Lithium-ion battery (LiB) manufacturing equipment
- Thin-film manufacturing systems

Autonomous decentralized control technology
Optical technology
Image processing technology
Global Sales and Business Finding Capabilities

Trading function specializing in the advanced industry field

- Hitachi, Ltd. and Hitachi Group collaboration
- Specialist sales with technological capabilities
- Global Network

Hitachi High-Tech's Strengths

Core Technologies/
Trading Company Strengths

Core Products/
Trading Company Functions

Business
Segment

Collaboration with
Customers and
Partners

Business Fields

* CD-SEM: Critical Dimension Scanning Electron Microscope

Oyama Works, Hitachi High-Tech Science Corporation

(Sunto-gun, Shizuoka Prefecture)

- X-ray technology, ion beam technology, probe technology, temperature control technology, etc.

Develops and manufactures measurement and analytical instruments that contributes to a wide range of industrial fields, universities and research institutes through new technologies, product development, quality control, environmental preservation and more.

Hitachi High-Tech Fine Systems Corporation

(Kodama-gun, Saitama Prefecture)

- Optical technology
- Image processing technology

Develops and manufactures railway inspection equipment for accurate measurement of high speeds and automated assembly for industrial use and inspection equipment for automotive uses through core technologies such as optical technology and image processing technology.

Hitachi High-Tech's Mechanisms for Creating Value

Hitachi High-Tech Group provides high-tech solutions through its unique strengths of technological capabilities, global sales and business finding capabilities, collaboration with customers and partners, and through business development that anticipates customer evolution.
By developing solutions and initiatives for Materiality that Hitachi High-Tech Group must address to solve social issues, we help customers realize their maximum value and contribute to solving social issues, thereby enhancing corporate value.

Social Issues


Environment


Water scarcity


Energy


Lack of infrastructure


Economic disparity

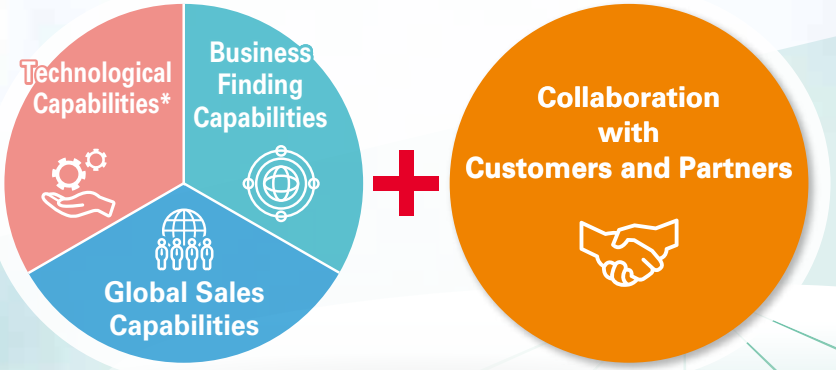

Human rights problems

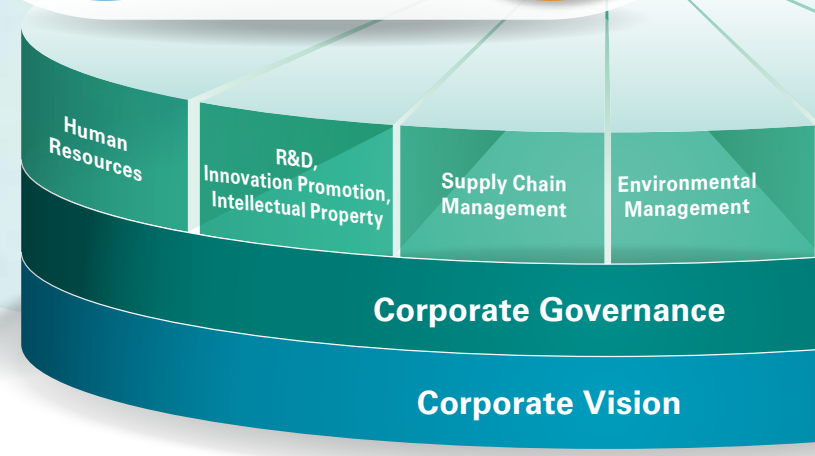

Rapid urbanization

Paradigm Shift

- Globalization ⇢ Multi-polarization
- Analog ⇢ Digital
- Scalable ⇢ Individualization
- Product-centric ⇢ Customer-centric
- Possession ⇢ Share
- Closed ⇢ Open

Hitachi High-Tech's Strengths





Hitachi High-Tech's Foundation to Support Value Creation

* Measurement and analysis technologies, automation and control technologies, manufacturing capabilities

Creating Value

Economic Value/Social Value

Increasing Corporate Value

Helping Solve Social Issues

Maximizing Customer Value

Hitachi High-Tech Group's Materiality
Key Initiatives

1 Contributing to a sustainable global environment

- Reduction of CO_2 emissions based on environmental investments, use of renewable energy, etc.
- Curbing electricity consumption, water consumption, and waste volume generated by enhancing production efficiency
- Developing and selling products that use low amounts of electricity

2 Contributing to healthy, safe, secure lives

- Provide automated clinical chemistry and immunodiagnostic analyzers that will contribute to expanded access to preventive medicine
- Provide dedicated analyzers that detect hazardous substances to water, food and the human body
- Sell components for optical communications that are the foundation of the telecommunications infrastructure.

3 Contributing to the sustained development of science and industry

- Provide solution services that enable high-efficient productivity
- Promote science education support activities using tabletop electron microscopes
- Support overseas production of Japanese manufacturing companies targeting the global expansion of production technology

4 Establishing a sound management foundation

- Improve corporate governance by increasing the effectiveness of Group Companies' Board of Directors
- Ensure the safety of products and firmly instill CSR in the supply chain

5 Developing and utilizing diverse human resources

- Create an organization where diverse human resources can actively participate and thrive, thereby leading to innovation
- Establish accident-free workplaces and enhance mental healthcare

We will continue to increase corporate value sustainably, aiming to be a company always chosen by customers worldwide and needed by society.

Hitachi High-Tech Corporation
President and CEO
Masahiro Miyazaki

Summary of 2018 Mid-Term Management Strategy

The Mid-Term Management Strategy from FY2016 to FY2018 designated those three years as an important period for the formation of the growth cycle leading up to 2020. It looked to secure a steady stream of earnings in core business in tandem with, advancing investment and reinforcing resources leading to the next generation. We generally achieved the KPI set for the period.

Under the 2018 Mid-Term Management Strategy, the management of each segment utilized an approach that classified business into "Instruments*1" and "Materials*2." A target of achieving progress beyond market growth (FY2015–FY2018 CAGR*3) was established, and Clinical Chemistry & Immunoassays, and scientific instruments achieved such growth, but front-end semiconductor manufacturing equipment was not achieved due to the rapid expansion of the market resulting from an increase in memory investment (Table 1). In terms of profitability, maintaining an EBIT*4 margin*5 of 10% or more in Instruments was achieved each fiscal year. On the other hand, in Materials, achieving an absolute EBIT of 5.0 billion yen or more was not achieved, but profitability improved steadily. In addition, the target of maintaining the ratio at 50% or more for EBIT from service business*6 was achieved each fiscal year (Table 2).

With regard to strategic investments for growth, R&D investment over the three-year period totaled 81.1 billion yen, exceeding the plan of 80.0 billion yen. We developed new products and related technologies in the biotechnology and medical fields, and advanced development in close contact with customers by increasing the number of engineers at engineering sites. Cumulative capital expenditure during the period was 54.6 billion yen, exceeding the plan of 40.0 billion yen. We promoted global open innovation by expanding demonstration and development bases for scientific instruments through the establishment of Hitachi High-Tech Science Parks. We also expanded development and demonstration systems at engineering sites, and enhanced responsiveness to higher production by expanding production facilities and production areas. Meanwhile, in business investment, total investment for the three years was 19.7 billion yen, which was less than the planned 30.0 billion yen. However, we succeeded in strengthening our product lineup and global sales network for scientific instruments by acquiring stock and partial business from Oxford Instruments plc Group in the UK. In addition, investments were made to enter the cancer diagnosis field, including capital participation in MagArray and OmniSeq® (Table 3).

Regarding shareholder returns, our policy was to maintain stable dividends and aimed for a dividend payout ratio of 30%. In FY2018, the dividend was 105 yen per share (20 yen per share year-on-year increase), resulting in a dividend payout ratio of 30%.

*1 Instruments: Science & Medical Systems, Electronic Device Systems, Industrial Systems

*2 Materials: Advanced Industrial Products

*3 CAGR: Compound Average Growth Rate

*4 EBIT: Earnings before interest and taxes

*5 EBIT margin: EBIT/Revenues. An indicator of profitability

*6 Service business: Product maintenance services, IT solutions, trading services, and others

(Table 1)

Revenues (FY2015–FY2018 CAGR)		Market Growth Rate*7	Hitachi High-Tech Results
Achieve progress beyond market growth	① Clinical Chemistry & Immunoassays	4%*	6%
	② Scientific instruments	4%	4%
	③ Front-end semiconductor manufacturing equipment	19%**	13%

* Equipment and reagents cumulative total ** Calendar Year
*7 Hitachi High-Tech's estimate based on various reports

(Table 2)

Profitability/Service Ratio		FY2016	FY2017	FY2018
Instruments	Maintain an EBIT margin of 10% or more	13%	13%	14%
Materials	Achieve an absolute EBIT of ¥5.0 billion or more (FY2018)	2.3 billion yen	3.7 billion yen	4.2 billion yen
EBIT from service business to overall	EBIT maintain at 50% or more	57%	54%	61%

(Table 3)

Strategic Investments for Growth Plan (FY2016–FY2018 cumulative)		Results
R&D investment	80.0 billion yen	81.1 billion yen
Capital expenditure	40.0 billion yen	54.6 billion yen
Business investment	30.0 billion yen	19.7 billion yen

Revision of the Corporate Vision and Mission

We must provide social value to respond to changes in public awareness and common sense since social issues are getting serious and the global paradigm shift is occurring. In other words, strengthening our ability to respond to society is the key for our sustainable growth. As such, we revised our Corporate Vision and Mission to clarify our future direction.

As the global economy continues to develop and people's lives become richer, global risks such as climate change and social issues have greatly affected our everyday lives as well as economic and market stability. These issues cannot be overlooked, as they have a great impact not only on our everyday lives, but also on the management of Hitachi High-Tech Group. We believe that a healthy global environment is the foundation for society, and ultimately the foundation for us to conduct business. Therefore, sincerely responding to the demands of society and helping to solve social issues through business is a natural responsibility for us to continue as a company, and unless we change our way of thinking and respond to such issues, the world will stop embracing us. In other words, to increase "corporate value" and be a company continually chosen by customers worldwide and needed by society, we must not only pursue "economic value" such as revenues and profits, but also provide "social value" that contributes to solving social issues. To this end, based on the SDGs*1, Hitachi High-Tech Group has identified Materiality that should be addressed to solve social issues, and we have established a specific action plan and targets to realize them.

Meanwhile, many customers in cutting-edge fields, where we mainly operate, are actively engaged in digitalizing their businesses using technologies such as AI*2, IoT, and big data analysis. We believe that digitalization has the impact of changing customers' values. Specifically, what customers want is not the value of the product itself, but the result of using the product. That is, customers now look for the "utility value" generated by the customer using the product. To provide new utility value that customers want, it is possible to automate customers' business processes by digitalizing objects (products) and things (services), and it is necessary to contribute to the creation of new business opportunities for customers by utilizing data from sensing and feedback.

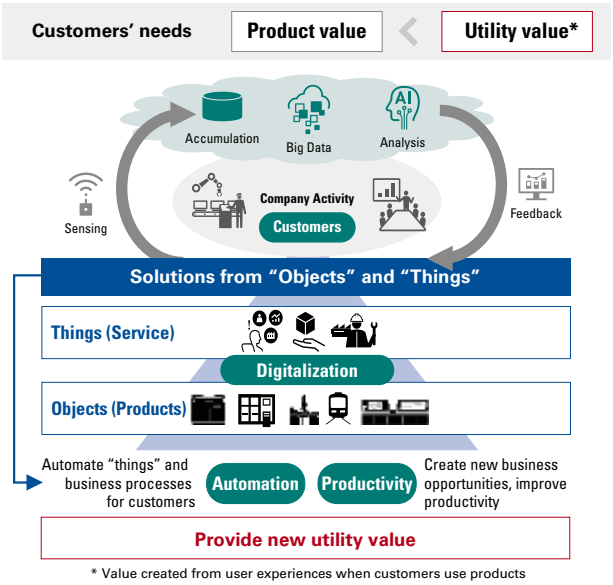
*1
SDGs (Sustainable Development Goals): Adopted by a September 2015 summit of the United Nations, the SDGs comprise 17 goals in different areas and 169 targets, global objectives for solving social issues to be achieved by 2030.

Please refer to P26–31 for information on identified Materiality and a specific action plans and targets to realize it

*2
AI: Artificial Intelligence

Response Required of the Company

Changes in Value Sought by Customers



* Value created from user experiences when customers use products

As the environment surrounding us has been changing dramatically, we redefined Hitachi High-Tech Group's raison d'être, and in April 2019 we revised our Corporate Vision to "Simplify our customers' high-tech processes" and revised our Mission to "Our mission is to help our customers be fast-moving, successful, cutting-edge businesses." In order to flexibly respond to changes in society, we must make difficult things easy, make complicated things simple, and change customers' processes into simple ones.
Going forward, we will strive to instill the new Corporate Vision and Mission among our employees, and move forward with initiatives to change the idea of solving problems with existing objects (products) to the idea of solving social issues and customer issues.

Please refer to P1 for the Corporate Vision and Mission

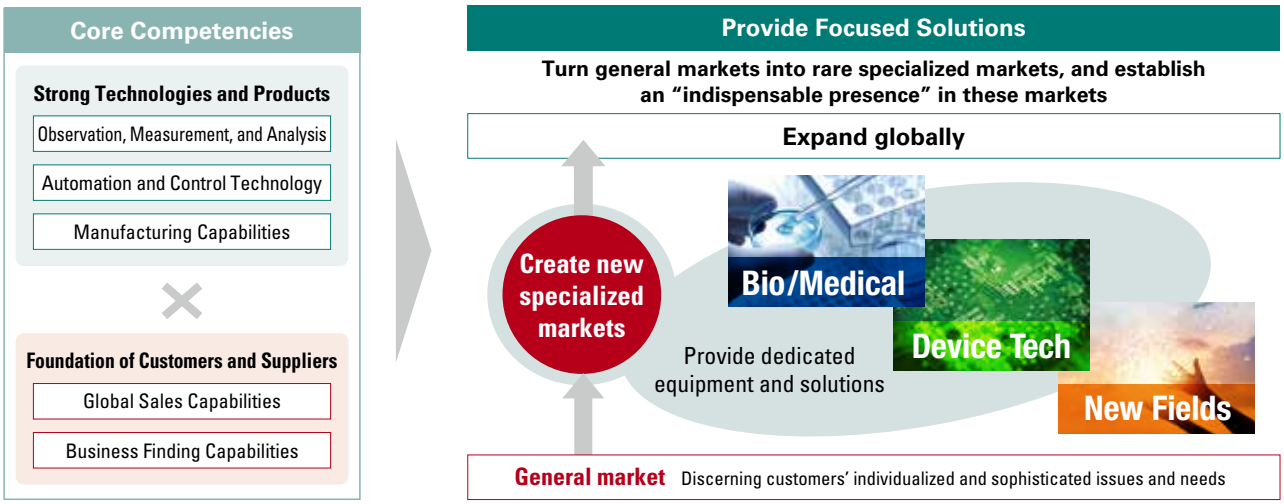
2021 Mid-Term Management Strategy

We have drawn up the 2021 Mid-term Management Strategy (2021 Strategy) for FY2019 to FY2021 with the aim of solving social problems and improving profitability by providing solutions through our technologies, products and services based on our core technologies in "Observation, Measurement, and Analysis" (measurement and analysis technologies), while continuing to aggressively invest in strategic growth based on our new corporate vision and mission.

Management Policy	Focused Solutions Company in Global Growing Markets
Basic Strategy	Focusing on customers' issues, providing solutions through its technologies, products, and services, based on our core technologies in "Observation, Measurement, and Analysis"

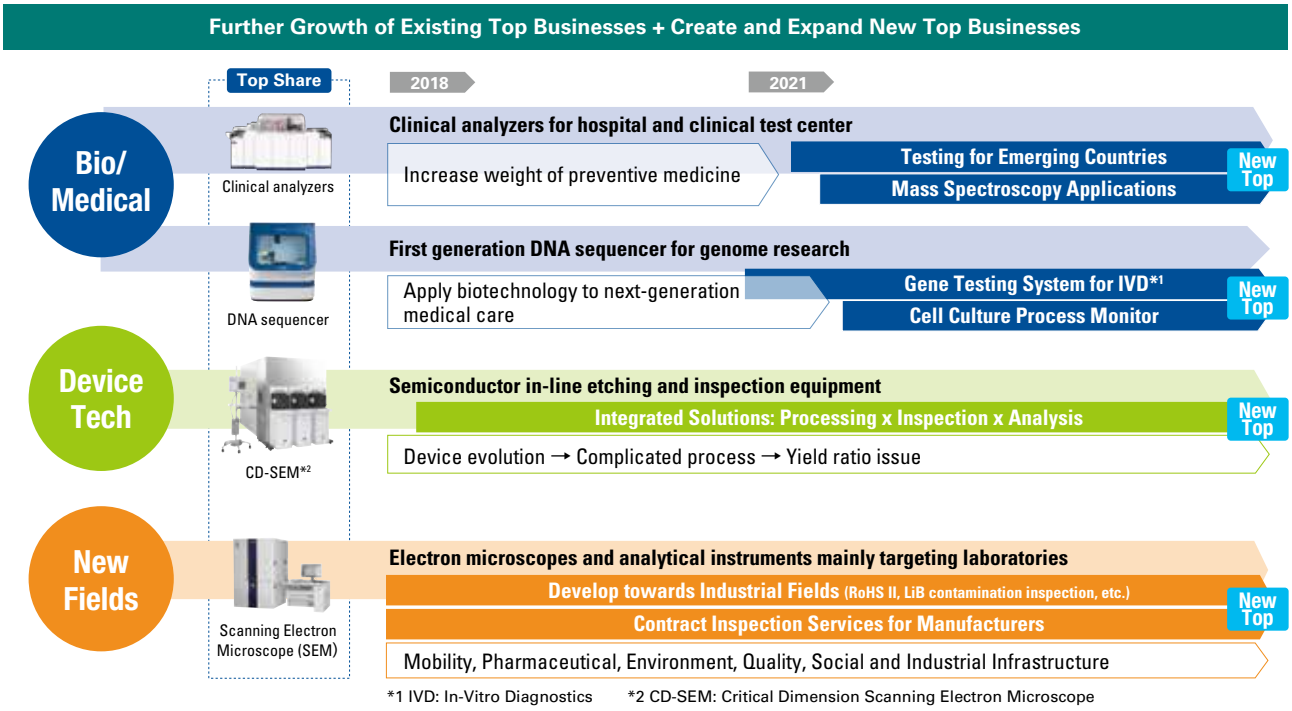
Under the 2021 Strategy, we will leverage our core competence in "Observation, Measurement, and Analysis" (Measurement and Control technologies), "Automation and Control Technologies", "Manufacturing Capabilities", and " Global Sales Capabilities and Business Finding Capabilities", which have been cultivated as a trading company specializing in the field of advanced industry. We will strive to understand the issues facing customers in general-use markets that are ever individualizing and advancing, and provide focused solutions that incorporate dedicated systems, services and business models that target specific problems. In this way, we intend to expand globally while creating rare and specialized markets. While striving for further growth in existing top businesses, we aim to create and expand new top businesses by providing focused solutions.

Basic Stance on Business Development



Size of rare, specialized markets is not necessarily large, but profitability is high. Over the next three years, Hitachi High-Tech Group will look towards the future and aim to improve profitability by further growing its existing top businesses and creating and expanding new global top businesses. In particular, we will create new top businesses by responding to customer needs and helping to solve social issues through our business in growth fields such as Bio/Medical, Device Tech, and diverse markets (new fields) such as mobility, pharmaceutical, environment, and social and industrial infrastructure.

Business Development in Growth Fields



*1 IVD: In-Vitro Diagnostics *2 CD-SEM: Critical Dimension Scanning Electron Microscope

TOPICS About "Observation, Measurement and Analysis"

- About Hitachi High-Tech's core technologies of "Observation, Measurement, and Analysis" -

	Main Products	Main Applications
Observation	 Defect Inspection systems  Wafer Surface Inspection systems  Electron microscopes	• Contribute to increasing the quality and productivity of semiconductor devices by investigating whether there are contaminants on semiconductor wafer surfaces • Contribute to the development of science and industry and safe and secure living by observing inorganic materials such as metals, ceramics, and semiconductors, and fine structures such as cells, drugs, cosmetics, foods, etc.
Measurement	 CD-SEM  Railway inspection equipment	• Contribute to improving the quality and productivity of semiconductor devices by measuring the dimensions of fine patterns formed on semiconductor wafers • Contribute to the safe operation of railways by detecting abnormalities such as rail warping and overhead wire wear
Analysis	 Clinical analyzers  Laboratory automation systems  Control systems	• Quantitative analysis of components in blood enables measurement of the state of people's health such as their kidneys and lungs, and the inspection and diagnoses of various types of illness. Early detection and identification of disease contributes to better health for people. • Contribute to ensuring safe and secure social infrastructure through supervision of the food, pharmaceuticals and chemicals manufacturing processes and operational control of trash incineration and water treatment facilities.

In the past, Hitachi High-Tech Group created new products and solutions via collaboration with customers and partners rooted in robust relationships of trust. Specifically, we have been providing solutions that combine devices and equipment with applications and services, such as adding new value, with the intent to not just provide customers with systems and instruments, but rather thinking about what customers want to achieve using such systems and devices. Going forward, we seek issues that have not yet been noticed by customers, and are more individualized and sophisticated, and propose new utility value rather than just products and solutions.

Specific management targets in the 2021 Strategy are an EBIT margin of 10% or more, ROE*1 of 10% or more, and ROA*2 of 7% or more in FY2021. We plan to invest 100.0 billion yen for R&D during the three-year period, and we will work to strengthen the foundation of measurement and analysis technologies and develop new businesses in the Bio/Medical fields. We intend to invest 80.0 billion yen for capital expenditure during the three-year period, including building smart factories that use digital technologies, and reinforcing the business foundation through digital transformation. In terms of business investment, as we plan to invest 100.0 billion yen during the three-year period, we will execute strategic investment for growth aggressively by strengthening bio and analysis-related businesses and obtaining cutting-edge technologies such as cancer diagnosis. With regard to shareholder returns, we have increased the dividend payout ratio to 40%, and designated a stable dividend of at least 100 yen per share annually to maintain a stable dividend.

*1
ROE (Return on Equity): Net income attributable to Hitachi High-Tech Corporation stockholders / Average total Hitachi High-Tech Corporation stockholders´ equity over the fiscal year x 100

*2
ROA (Return on Assets): Net income before deducting non-controlling interests / Total assets end of the fiscal year x 100

*3
KPI: Key Performance Indicator

Management Targets of the 2021 Strategy

KPI*3	FY2018 Results	FY2021 Target
EBIT margin	8.8%	10% or more
ROE	11.9%	10% or more
ROA	7.3%	7% or more

Investment Strategy	FY2016–FY2018 Results (cumulative)	FY2019–FY2021 Plan (cumulative)
R&D investment	¥81.1 billion	¥100.0 billion
Capital expenditure	¥54.6 billion	¥80.0 billion
Business investment	¥19.7 billion	¥100.0 billion

Shareholder Returns Policy	FY2018 Results	FY2019–FY2021 Target
Dividend payout ratio	30%	40%

Please refer to P18–23 for the management strategies of each segment

Please refer to P4–5 for Hitachi High-Tech's strengths

*1
FA: Factory Automation

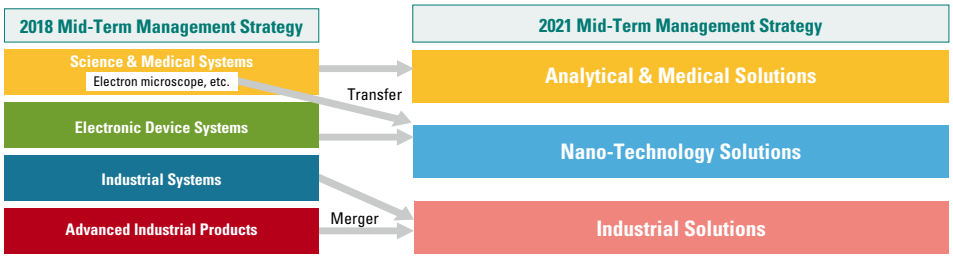
*2
PA: Process Automation

*3
FVC: Full Value Chain

*4
OT: Operational Technology

To steadily implement the 2021 Strategy, we reorganized the previous four business segments into the three segments of "Analytical & Medical Solutions," "Nano-Technology Solutions," and "Industrial Solutions," focusing on core competencies. Science & Medical Systems was converted into Analytical & Medical Solutions. In this segment, we will create new value in the fields of Bio/Medical and safety/security such as quality control, by utilizing "analysis technology". Electronic Device Systems was reorganized into Nano-Technology Solutions. In this segment, we will integrate and strengthen "electron beam technology" to provide integrated solutions for semiconductors and create new applications for new materials and Bio etc. We integrated Industrial Systems and Advanced Industrial Products into Industrial Solutions. In this segment, we will change to high value-added business focusing on OT*4, such as FA*1/PA*2, IoT, and FVC*3 solutions. We will bolster our profit-earning capability by simplifying the organization, and integrating Hitachi High-Tech Group's technological capabilities, global sales capabilities, and business finding capabilities.

Changes in Business Management System



Reinforcement of Business Foundation

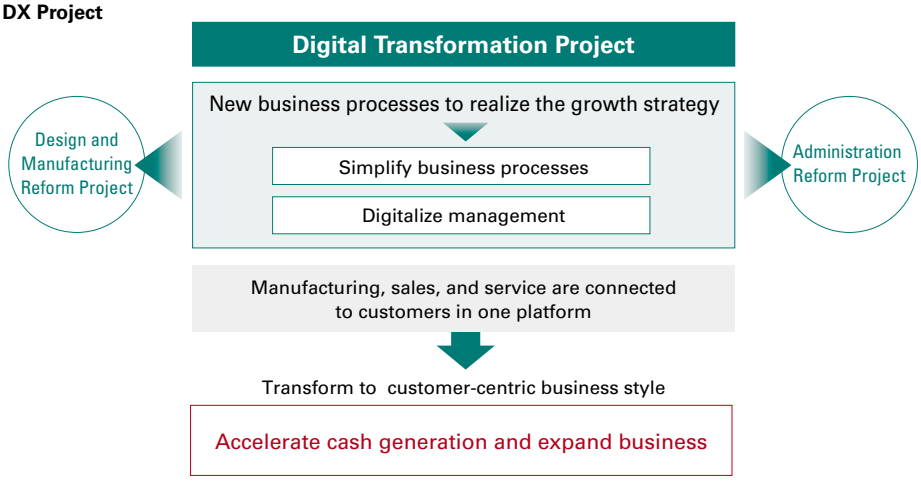
Building a flexible and robust management base is essential for sustainable growth. We are accelerating the formation of an organization that improves productivity and creates innovation through the promotion of the Digital Transformation Project (DX Project), diversity management and working style reforms, and the relocation of our headquarters.

I think Hitachi High-Tech Group can only continuously increase corporate value (economic value and social value) if we have a flexible and robust management foundation.

To enhance economic value such as revenues and profits, we must accelerate cash generation, but increasing complexity of internal business processes has been an issue for a long time. In today's society, in which digitalization is advancing rapidly, Hitachi High-Tech Group understands that if we do not digitalize management and add new functions within the organization, we may become less competitive as a company. We are advancing the DX Project to make our business processes simple and reliable. In addition to improving operational efficiency by simplifying business processes, manufacturing, sales and service divisions will be connected to customers on a single platform, leading to the integration and strengthening of customer contact points. Besides, we plan to

relocate our headquarters in FY2019, including the consolidation of domestic group company offices, to instill a mindset where each organization in Hitachi High-Tech Group is more closely linked and collaborates across divisions and functions. By having each organization work closely with others, we will improve our ability to gather information on social changes and industry trends, as well as our ability to build hypotheses to understand customers' issues and make proposals. We aim to accelerate cash generation and expand business by establishing a customer-first mindset and a customer-centric business style.

DX Project



Meanwhile, to create social value, it is important to respond to changes in society and enhance the organization's capabilities to enable global business development and diverse working styles for employees. Promoting diversity management and working reforms, which accept diverse values, sensibilities and cultures, and create an environment where employees find work to be rewarding, are important topics as well. Hitachi High-Tech Group has been working on these issues ahead of the times, but eyeing the next growth stage, we will foster a corporate culture that respects diversity and create an environment in which new ideas are generated. By creating social value through business, we will accelerate building a strong organization capable of winning against the global competition.

Please refer to P34-35 for human resources initiatives

Towards Sustainable Growth

We will execute the 2021 Strategy with the courage to change and be changed.

As we start the 2021 Strategy, we are making more changes than before, including amending the Corporate Vision and Mission, as well as promoting the DX Project. Furthermore, along with the headquarters relocation, we will change our company name to Hitachi High-Tech during FY2019. With these changes, we seek to simplify all types of processes and strengthen our ability to respond to society to achieve sustainable growth.

We will continue to execute the 2021 Strategy with the courage to change and be changed, and strive to improve corporate value through additional growth and contributions to society. We will continue to aim to be a successful enterprise trusted by all our stakeholders and contributing to social progress thorough business activities that emphasize value creation through high-tech solutions. We will continue to contribute to solving various social issues, as our raison d'être is to be a company that is regarded as indispensable, that is, to be a company that is both helpful and needed by society.

Analytical & Medical Solutions

Mikio Takagi
Vice President and Executive Officer,
General Manager, Analytical & Medical Solution Business Group

In Analytical & Medical Solutions, based on "analysis technology", we will create high-value-added FS (Focused Solutions) by understanding the cutting-edge needs of customers quickly in the field of Bio/Medical and safety/security, etc. We will also strengthen collaboration with strong partners through SCB* and actively pursue R&D and business investment to expand and strengthen our business and to acquire advanced core technologies.

* SCB (System Collaboration Business): A business model that provides the best solutions through equal business partnership with competitive reagent companies.

Needs in Focus Areas

Clinical Chemistry and Immunoassays
- Improve testing efficiency (high-throughput capabilities, non-stop operations)
- Reduction of blood and reagents volume (to help reduce burden on patients, lower testing costs)
- Development of ultra-high sensitivity analyzers
- Improve efficiency of clinical testing work

Molecular Diagnotics and Microbiology, etc.
- Utilization of genetic testing in infectious disease field
- Personalized medicine in cancer treatments

Analytical Instrumentation
- Development of dedicated equipment and solutions
- Improve throughput and operability
- Pursuit of basic performance for analysis (sensitivity, resolution)

Strengths

Technological Capabilities (core technologies)
- Optical technology (uv-visible, fluorescence, X-ray, etc.)
- Automation technology

Research and Development
- Collaboration with research labs at Hitachi, Ltd.
- Open innovation with universities and research institutions

Production & Development Foundation and Manufacturing Capabilities
- Balance both high-reliability and high-efficient productivity
- World-class engineers in manufacturing (Skills Competition)

Collaboration with Partners
- SCB in the Biotechnology and Medical products business
- Collaboration sites with global customers

Review of the 2018 Mid-Term Management Strategy

* Segments have been reorganized from FY2019, but the review of the 2018 Mid-Term Management Strategy is based on the former segments.

	2018 Mid-Term Management Strategy		Key Initiatives and Accomplishments from FY2016 to FY2018
Biotechnology and Medical Products Business	Clinical Chemistry and Immunoassays Market	• Further cultivate SCB with Partners • Continue investments for strengthening the manufacturing platform, such as expanding production capacity	• Launched cobas e801 high-speed immunoassay analyzer module and 3500 multi function analyzer (clinical chemistry, immunoassay and blood coagulation) • Established Hitachi High-Tech Diagnostics (Shanghai) Co., Ltd. and expanded solutions through collaboration with major Chinese reagent companies • Establishment of Hitachi High-Tech Kyushu Corporation and increased development and production capacity • Started local production of 3110 clinical chemistry analyzer in China for the Chinese market
	Molecular diagnotics and Microbiology Market, etc.	• Promote investment for developing SCB with competitive reagent companies • Start molecular diagnotics and Microbiology business	• Started the "Project of Precision Medicine and Molecular Diagnostics" with Keio University • Jointly developed compact CE*1 sequencer with US-based Promega Corporation • Business collaboration in genetic analyzer with QIAGEN N.V. in Germany • Capital participation in US-based MagArray, Inc. and OmniSeq, Inc.
Scientific Systems Business	Complete Strategic Product Lineup	• Continuously introduce competitive new products to the market	• Regulus 8100/8200 series of field emission-scanning electron microscope • SU7000, ultla-high-resolution schottky scanning electron microscope • Ethos NX5000, focused ion and electron beam system
	Strengthen Worldwide Structure	• Develop sales network • Strengthen global marketing strategy	• Establishment of Hitachi High-Tech Analytical Science Ltd. and expanded product lineup and global sales network • Acquisition of Spectral Solutions AB and enhanced sales platform in Europe • Promoted collaboration with customers through Hitachi High-Tech Science Parks
	Strategically Move into Each Field	• Provide solutions for each field • Develop applications and move to dedicated equipment	• Development and sales of dedicated instruments with high added value • Rechargeable battery testing equipment (X-ray fluorescence particle contaminant analyzers, SEM*2, etc.) • HM1000A screening equipment for phthalates*3, which is compliant with the revised RoHS Directive*4

Market Environment Surrounding Analytical & Medical Solutions

* CAGR: Compound Average Growth Rate

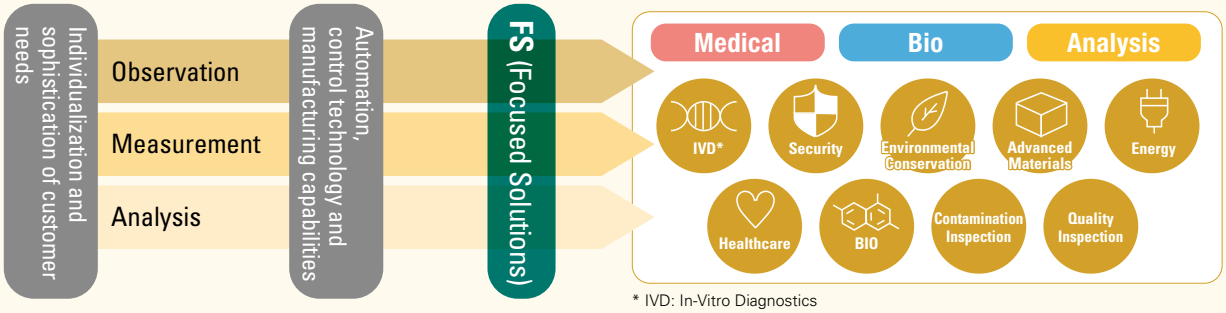
2021 Mid-Term Management Strategy

Basic Policy

Create Focused Solutions in the fields of Bio/Medical and Safety/Security by utilizing "analysis technology"

Develop general-purpose products into dedicated products to understand customer needs and create markets

General-purpose market → Provide dedicated equipment/solutions (FS) → Create niche markets



* IVD: In-Vitro Diagnostics

Business Strategy

Strengthen products, technologies, and sales networks through in-house development + alliances and M&A

1 Develop SCB in Existing Core Businesses

Develop SCB in the bio/medical field and expand the business scope into the new in-vitro diagnostics field in addition to the current clinical chemistry and immunoassay product business

2 Develop Solutions for New Markets

- In the biotechnology field, further promote the molecular diagnostics and microbiology business and launch the in-vitro diagnostics business with next-generation DNA sequencers
- Develop new business in the cancer diagnostic field

3 Strengthen Analytical Systems Business

Create dedicated solutions for specialized markets, including RoHS regulation compliance and contamination inspection for rechargeable battery and expand business globally

Initiatives in FY2019

Bio & Medical Systems Business

- Secure earnings by expanding sales
  - Expand sales of cobas e801 high-speed immunoassay analyzer module and cobas pro integrated clinical chemistry and immunoassay analyzer (medium-size)

cobas pro integrated clinical chemistry and immunoassay analyzer (medium-size)

- Start sales of new products for the biotechnology field
  - Compact CE sequencer/next-generation sequencer
- Promote the Solutions Business, including reagents and services

Analytical Systems Business

- Expand sales of high value-added dedicated equipment
  - Expand sales of phthalates screening equipment for the revised RoHS Directive
  - Sale of the EA8000 metal particle contaminant inspection equipment for automotive batteries

X-ray particle contaminant analyzer EA8000

*1 CE: Capillary Electrophoresis *2 SEM: Scanning Electron Microscope
*3 Phthalates are widely used as plasticizers for softening plastic and rubber in vinyl chloride products such as wire sheaths, electrical insulation tape, and packing films. These materials are contained in a wide range of items, including toys, household appliances, electronic devices, and other consumer goods.
*4 RoHS Directive: A directive by the European Union (EU) for regulating the use of specified hazardous substances contained in electrical and electronic equipment

Nano-Technology Solutions

Futoshi Ishiwa
Vice President and Executive Officer,
General Manager, Nano-Technology Solution Business Group

In Nano-Technology Solutions, we will contribute to customers' cutting-edge R&D and mass production and create new value through "Processing" in addition to "Observation", "Measurement", and "Analysis". In the semiconductor field, we will provide integrated solutions to respond to customers' diverse needs as the sole equipment manufacturer with processing, measurement and analysis. In materials and biotechnology fields, we will provide solutions by collaboration with partners in growth fields such as batteries and pharmaceutical application.

Needs in Focus Areas

Semiconductor Market

- High-precision processing and measurement to deal with miniaturization, complexity of 3D structures and high aspect ratio structures
- Reduce CoO*1, improve productivity, yields and reliability
- Stable operation of production lines, reduce the difference among equipment, ensure reproducibility

Materials and Bio Market

- Automation, 3D analysis, high-magnification/high-resolution observation
- Field-specific solutions in each application

Strengths

Technological Capabilities (core technologies)

- Electron beam technology (CD-SEM*2, electron microscopes)
- High-precision plasma etching technology (etch systems)
- Optical technology (defect inspection tool)

Manufacturing Capabilities

- Greater use of IT, mechanization, and AI in production processes
- World-class engineers in manufacturing

Application Development Capabilities

- Mutual collaboration between etch systems, CD-SEM, and electron microscopes
- Joint creation with customers and partner companies
- Collaboration with Hitachi Ltd., universities, and consortium

Contribution to Scientific Technology Research

- Contribution to scientific technology research in collaboration with universities and research institutes (academia) based on analytical technologies, such as electron microscopes

*1 CoO (Cost of Ownership): The total cost necessary for installation, operation and management of facilities, equipment, and other hardware
*2 SEM: Scanning Electron Microscope

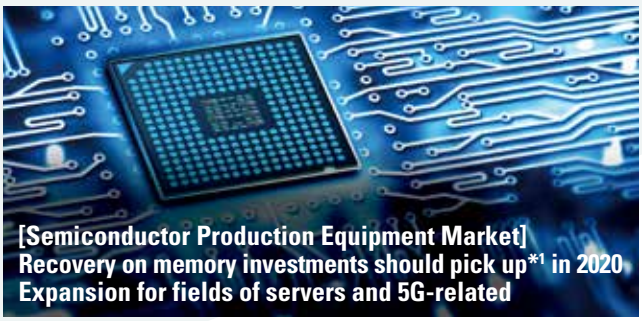
Review of the 2018 Mid-Term Management Strategy

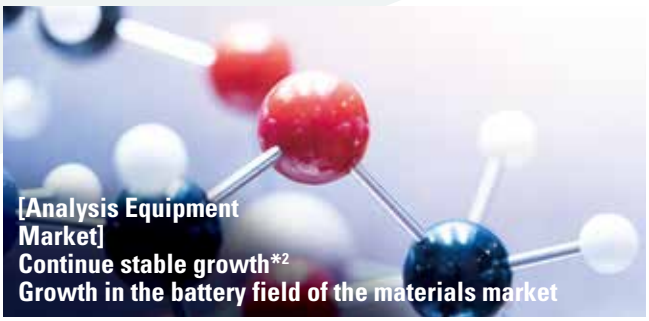
* Segments have been reorganized from FY2019, but the review of the 2018 Mid-term Management Strategy is based on the former segments.

	2018 Mid-Term Management Strategy	Key Initiatives and Accomplishments from FY2016 to FY2018
Business Expansion in Miniaturization of Semiconductor Devices	• Strengthen development scheme to boost customer response capabilities • Supply products in a timely manner through development in close contact with customers	• Increased demonstration and development systems at engineering sites, and increased engineers. • Set up the Tokyo Branch Office to advance the development of technologies and cutting-edge applications • Launched a joint research program for core technologies of next-generation SEM with the University of Tsukuba
Respond to Diverse Needs	• Provide solutions to address new needs	• Launched and increased sales of the Enhanced Microwave ECR*1 Etching Module for next-generation semiconductor device manufacturing processes • Launched and increased sales of high voltage CD-SEM CV5000 series with functions of measuring 3D device structure • Launched and increased sales of CR6300 realizing high-speed, high sensitivity defect review • Launched and increased sales of LS9300A-EG wafer surface inspection system, which allows high-sensitivity, high throughput inspections on both sides of a wafer
Develop Business in the IoT Market	• Expand product portfolio	• Launched and increased sales of the CS4800 advanced FEB CD-SEM for 4~8 inch wafer sizes • Launched mirror electron inspection system Mirelis VM1000 for non-destructive inspection of crystal defects and process damage of SiC*2 wafer
Expand Service Business	• Expanded service business worldwide	• Established Customer Solutions Div. as a new organization to propose new solutions such as upgrading delivered equipment and improving productivity • Created service solution using ExTOPE, IoT service portal for reducing difference among CD-SEMs

*1 ECR: Electron Cyclotron Resonance
*2 SiC: Silicon Carbide

Market Environment Surrounding Nano-Technology Solutions





*1 Estimated by Hitachi High-Tech based on data from Gartner, VLSI-Research
*2 FY2019 (¥146.7 billion) → FY2021 (¥150.0 billion)

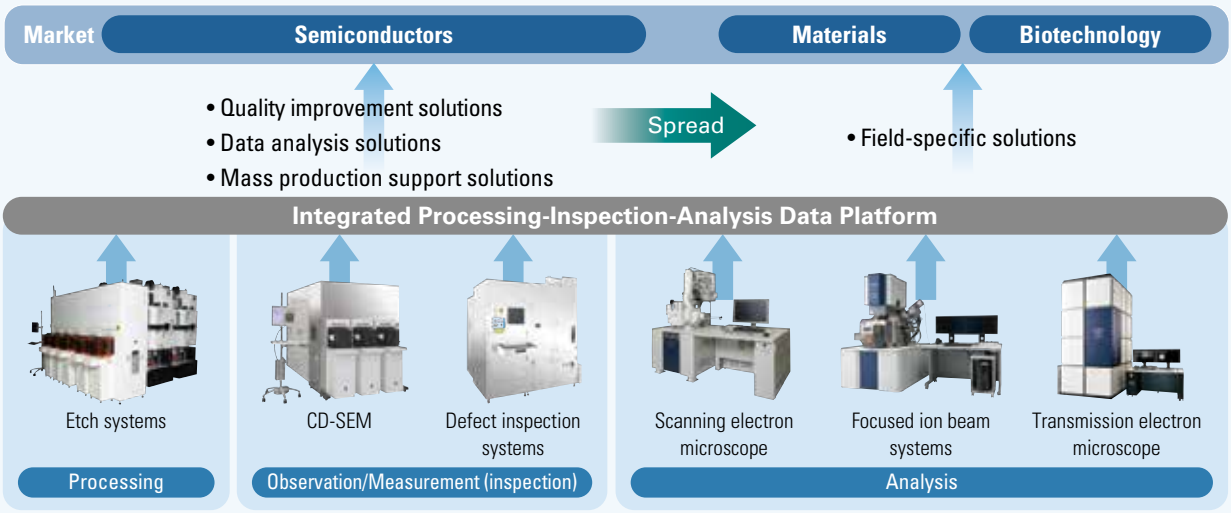
2021 Mid-Term Management Strategy 2021

Basic Policy

Contribute to customers' cutting-edge R&D and mass production through "Processing" in addition to"Observation, Measurement, and Analysis"

Provide integrated solutions and field-specific solutions

Value provided to customers: "Shorter development time, "Lower costs," "Higher productivity"



Business Strategy

1 Integrate and Strengthen "Electron Beam Technology"

Consolidate CD-SEM and electron microscopes (both of which have electron beam technology as a core technology) in the same segment, and enhance competitiveness by combining measurement/automation technology and analytical technology

2 Provide Integrated Solutions for Semiconductor

Provide integrated solutions to address customers' needs, such as shorter development time, lower cost, and higher productivity as the only equipment manufacturer with processing, inspection, and analytical equipment

3 Develop Business in Materials and Biotechnology Fields

Expand business scope in growth fields such as batteries and pharmaceutical application by expanding semiconductor integrated solutions into the fields of materials and biotechnology, and through collaboration with partners

Initiatives for FY2019

Segment Overall

- Provide solutions through collaboration with etch, measurement, and analysis

Process Systems Business

- Strengthen engineering sites in Japan and overseas
- Increase production capacity by expanding production facilities

Metrology and Analysis Systems Business

- Strengthen product portfolio in response to diversifying customer needs
- Expand sales of new SEM to address needs in each application in the fields of materials and biotechnology

Industrial Solutions

Hiroshi Tajima
Vice President and Executive Officer,
General Manager, Industrial Solution Business Group

We integrated the previous business groups of Industrial Systems and Advanced Industrial Products into Industrial Solutions as an organizational reform and started the 2021 Mid-Term Management Strategy. We will enhance and fuse customer-facings and engineering capabilities of both segments to provide solutions that contribute to resolving the issues facing our customers in the manufacturing sector.

Needs in Focus Areas (Manufacturing Industry)

Industrial Infrastructure
- Automation, labor savings (robots, automated facilities)
- Advanced security and control security
- Utilizing of digital technologies
- Advances in flexible devices

Social Infrastructure
- Non-destructive, rapid diagnosis of roadways, tunnels, railways (overhead wires, track), etc.
- On-site inspections, prompt inspections
- Upgrades to electric power infrastructure in emerging countries

Mobility
- Address CASE*1 in the automobile field
- Reduce environmental impact with next-generation batteries

Strengths

- Issue-solving solutions
- Digital solutions that improve automation and productivity
- Analytical evaluation services business
- Global sales capabilities/customer base of around 2,200 companies
- Global suppliers of around 4,200 companies
- OT*2 x IT x big data analytical know-how
- Collaboration with partners that have core technologies
- Image processing technology, optical/laser testing technology, prompt inspection technology

*1 CASE: Connected, Autonomous, Shared, Electric
*2 OT: Operational Technology

Review of the 2018 Mid-Term Management Strategy

	2018 Mid-Term Management Strategy	Key Initiatives and Accomplishments from FY2016 to FY2018
Social & Industrial Infrastructure Business	• Provide LiB*1 production equipment solutions, develope new products and engineering methods in thin-film manufacturing systems, and promote collaboration with strategic partners • Provide solutions for general control systems • Strengthen the power systems business targeting emerging countries • Strengthen ICT solutions through collaboration with partners	• Bolstered system proposals, including adding to the product lineup for environmental systems through the capital and business alliance with Seibu Giken Co., Ltd. • Provided control systems and big data analysis (such as BD-CUBE predictive diagnostic systems) to meet needs for smart-process automation systems of plant equipment • Started collaboration with Asia Clean Capital in China on distributed solar power project development • Expanded issue-solving solutions through investment in Flutura Business Solutions Private Limited in India
Automobile & Mobility Business	• Expand inspection equipment business and promote overseas business development • Establish FVC*2 platform for manufacturers • Expand FVC platform exponentially by increasing sales to business partners	• Expanded sales of railway inspection equipment mounted on operating railcars and received orders for overseas railway projects • Started shared factory services · Established joint venture Hitachi High-Tech Amata Smart Services Co., Ltd. in Thailand · Supported Japanese SMEs*3 expanding overseas through production management, shared equipment, and inventory control using IoT technology • Provided FVC service in the rail transportation field
Materials, Fuel, Chemicals & Others	• Expand the functional materials business targeting automobiles, construction machinery, and home appliances • Expand business in the semiconductor and automobile field, and IC card components • Create locally-oriented service businesses	• Established Hitachi High-Tech Steel do Brasil Ltda. by acquiring Brazilian mold-die steel sales company to develop Central and South American market • Signed agency contract for R&D assessment outsourcing service with JAPAN TESTING LABORATORIES, Inc. • Acquired all shares of Applied Physics Technologies, Inc., a U.S. manufacturer of electron sources

*1 LiB: Lithium-ion Battery
*2 FVC: Full Value Chain
*3 SMEs: Small and medium-sized enterprises

Market Environment Surrounding Industrial Solutions

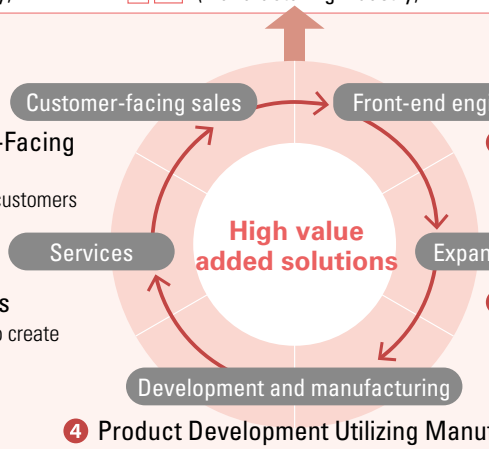
*1 EV: Electric Vehicle
*2: 5th generation mobile telecommunications system

2021 Mid-Term Management Strategy

Basic Policy

Create high value added business based on resolving customers' issues through OT

Industrial infrastructure market (manufacturing industry)
Social infrastructure market (manufacturing industry)
Mobility market (manufacturing/services industries)



1 Utilize Global Customer-Facing Capabilities
- Sales capabilities based on customers and suppliers expanding worldwide

2 Solution Proposals
- Identify customers' issues and propose solutions through collaboration with sales/engineers + partners

3 Business Findings
- Invest aggressively in finding and expanding new business opportunities originating with solving issues

4 Product Development Utilizing Manufacturing Capabilities
- Utilize our manufacturing capabilities + increase internal production by business investment and collaborate with partners

→ work with customer-facing sales to develop products that will enter the market

5 Create Service Business
- Utilize digital technologies to create solutions(product + service)

Business Strategy

1 Transform into an Industrial Solutions Provider

Bolster and merge customer-facing capabilities and engineering capabilities to transform into a solutions provider leveraging high levels of expertise

2 Strengthen Digital Solutions/Analytical Evaluation Services

Strengthen digital solutions and analytical evaluation services that will help with automation and productivity improvements at manufacturing companies

3 Develop Focused Solutions

Strengthen collaboration with partners, including for business investment, and develop focused solutions through original technologies

Initiatives for FY2019

Strengthen and Expand Digital Solutions
- BD-CUBE predictive diagnostic systems
- Automated machine learning modeling product "Darwin™"

Expand Sales of EV-use LiB and Flexible Device Manufacturing Systems

Develop Focused Automated Systems Using Robotics, etc.

Strengthen and Expand the Solutions Business for Manufacturing Companies
- Outsourcing analytical evaluation service
- Smart factory and mold-die management services

R&D, Innovation Promotion, and Intellectual Property

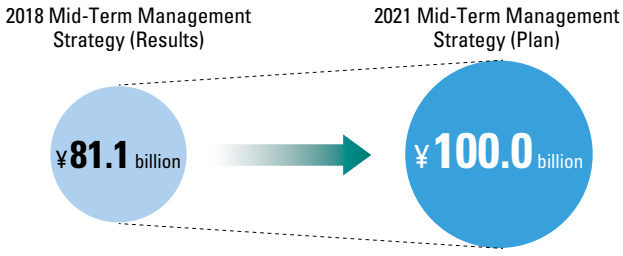
Hitachi High-Tech's activities related to R&D and intellectual property (IP) integrate the three aspects of business strategy, R&D strategy, and IP strategy under the overarching management strategy of "Customers First."

R&D Strategy

Hitachi High-Tech Group's value creation and competitiveness arises from the continuous development of cutting-edge technology and innovative business models. Based on our Mid-Term Management Strategy, we are promoting the development of cutting-edge technology for both hardware and applications in anticipation of market and industry trends over the medium and long term, especially focusing on our proprietary product businesses in Analytical & Medical Solutions and Nano-Technology Solutions. Targeting major trends such as IoT and AI, we are also working to strengthen our existing technologies and create new service solution businesses.

Approach to R&D Investment

To address complex, evolving customer needs, we are aggressively investing in R&D not only to strengthen our core technologies but also to develop technologies needed to grow operations and create business looking to the future. On top of in-house development, we are collaborating closely with Hitachi, Ltd.'s Research & Development Group to develop leading technologies having synergies within the Hitachi Group. In order to anticipate needs and lead in important technological sectors, we are promoting participation in global consortiums*1, joint research with universities and research laboratories, and stronger partnerships with venture companies that have high levels of technology and expertise. As a result of these initiatives, R&D expenditure rose 15% year on year to 30.8 billion yen in FY2018. Owing to ongoing initiatives in various business fields, we invested 81.1 billion yen in the three-year period from FY2016 through FY2018, which exceeded the total amount targeted in our 2018 Mid-Term Management Strategy that called for total R&D investment of about 80 billion yen over the three years. Under the 2021 Mid-Term Management Strategy, we plan to invest 100 billion yen in R&D over the upcoming three years. Going forward, we will bolster our measurement and analysis technology foundations through aggressive R&D investment, and stay focused on pursuing domains and technologies that can support business creation over the longer term.



*1 Consortium: A group or body comprised of two or more individuals, corporations, or organizations

Innovation Promotion Strategy

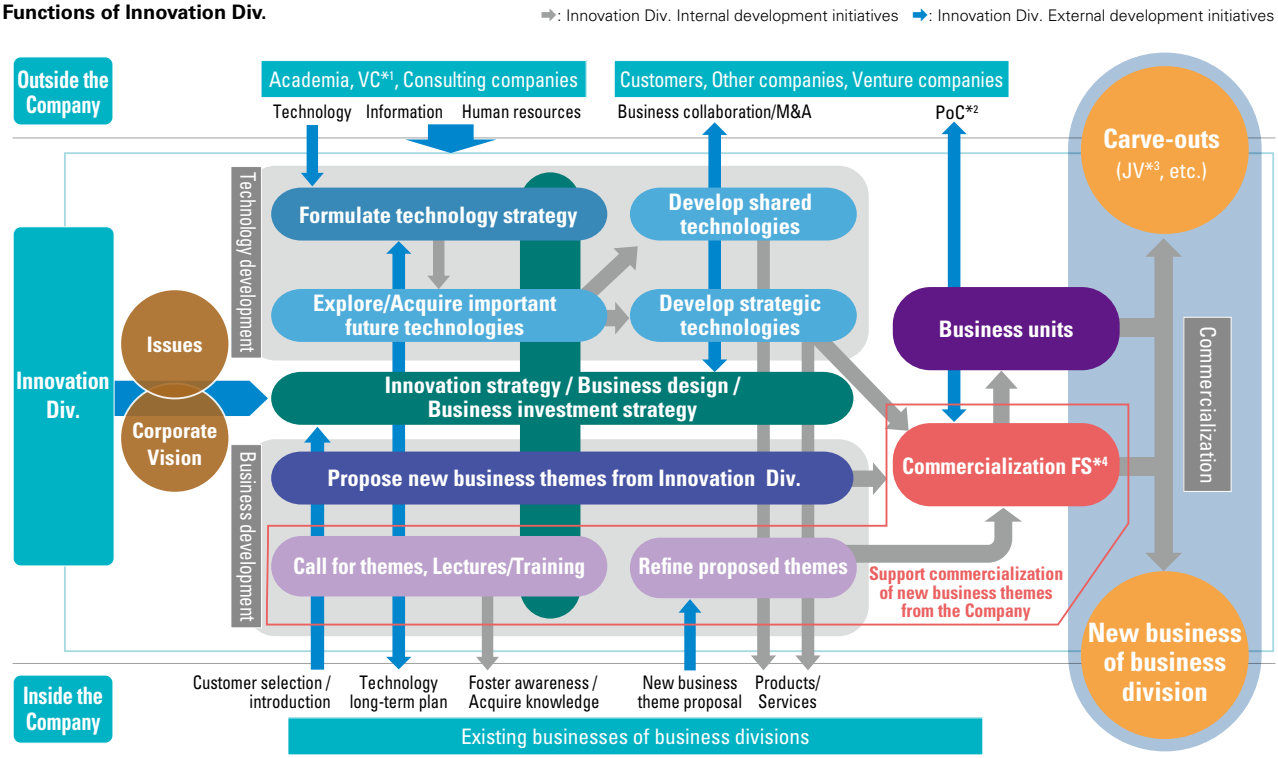
In this era, business conditions are changing at a spectacular rate and consumption trends for individuals and companies are clearly shifting from the possession of objects to the use of services. Amidst this change, Hitachi High-Tech Group is creating new businesses and revolutionizing existing businesses by leveraging integration of other companies' businesses and technologies through global open innovation to quickly generate service solution businesses and drive growth into the future.

New Business Creation and Existing Business Innovation

In April 2016, Hitachi High-Tech Group established the Innovation Div. to encourage innovation throughout the organization looking to global new business creation. We are looking to acquire and develop base technologies to be shared by all Group companies as well as important technologies that will help differentiate us in the future. Furthermore, we are collaborating broadly with an array of external organizations to promote the creation of new business and innovation of existing businesses.

Open innovation is the foundation for these activities. We are capitalizing on links with overseas academia*2 and venture companies, partner companies, and customers to speed up the generation of ideas targeting business creation and business innovation, while increasing originality and adding more value. We are also working to acquire insight and know-how by investing in venture capital*3 and startup companies.*4 Internally, we are holding lecture meetings and training to invigorate the organization, along with extensively inviting ideas for new business and pressing forward with the establishment

Functions of Innovation Div.



*1 VC: Venture Capital *2 PoC (Proof of Concept): A simple demonstration to verify that new concepts or ideas have the potential for realization *3 JV: Joint Venture
*4 FS (Feasibility Study): A study to verify the possibilities for a new business

of new projects from the ideas. We have commercialized several of the ideas. Regarding commercialization, we have in place flexible frameworks enabling complex business formats such as carve-outs*5 as necessary.

*2 Academia: Universities, research institutions
*3 Venture capital: A company that invests in venture companies, etc.
*4 Startup companies: Venture companies that cultivate markets with new business models
*5 Carve-out: Separation of a business as a new company

Key Examples of Commercialization/Number of Cases of Commercialization: 12 (FY2009–FY2018)

- BD-CUBE predictive/diagnostic system
- Lumione BL-1000 analyzer for rapid testing of microbial content for water used in pharmaceutical manufacturing
- Establishment of NeU Corporation, an applied brain science company
- IoT service portal ExTOPE for Hitachi High-Tech systems

Intellectual Property Strategy

With the development of IoT technology, the scope of intellectual property (IP) has expanded to include data and other information assets obtained from devices. In addition, there are now questions about who information assets belong to, or whether secondary use is allowed. In open innovation that utilizes external resources, such as collaboration with other companies and M&A, companies must also evaluate partners and M&A candidates in terms of IP. To respond to such changes in the business environment, Hitachi High-Tech established IP Strategy Dept. in April 2019, and together with the existing Intellectual Property Dept., we now have a system in place to support business activities as Intellectual Property Div.

With the basic aim of promoting IP activities that contribute to the Hitachi High-Tech Group's business development, the Intellectual Property Div. works with business divisions to formulate and implement our IP strategy, including our core activities of patent acquisition, utilization, and clearance as well as activities enhancing our ability to respond to changes in the business environment. Furthermore, we encourage training to produce staff who have high level professional skills and are able to respond to the globalization of business, in order to promote the enhancement of IP activities. The Intellectual Property Div. has 12 in-house patent attorneys and 2 PhD holders. Moreover, to support the globalization of our businesses, we are strengthening our overseas IP activities and supporting IP activities by overseas group companies.

Hitachi High-Tech's Semiconductor Measurement Technology Won Patent and Technology Awards

- "Minister of Education, Culture, Sports, Science, and Technology Award" and "Implementation Achievement Award" at the FY2018 Kanto Region Invention Awards
- "Promotion Award for Electrical Science and Engineering" and "Minister of Education, Culture, Sports, Science, and Technology Award" at the 66th Promotion Awards for Electrical Science and Engineering

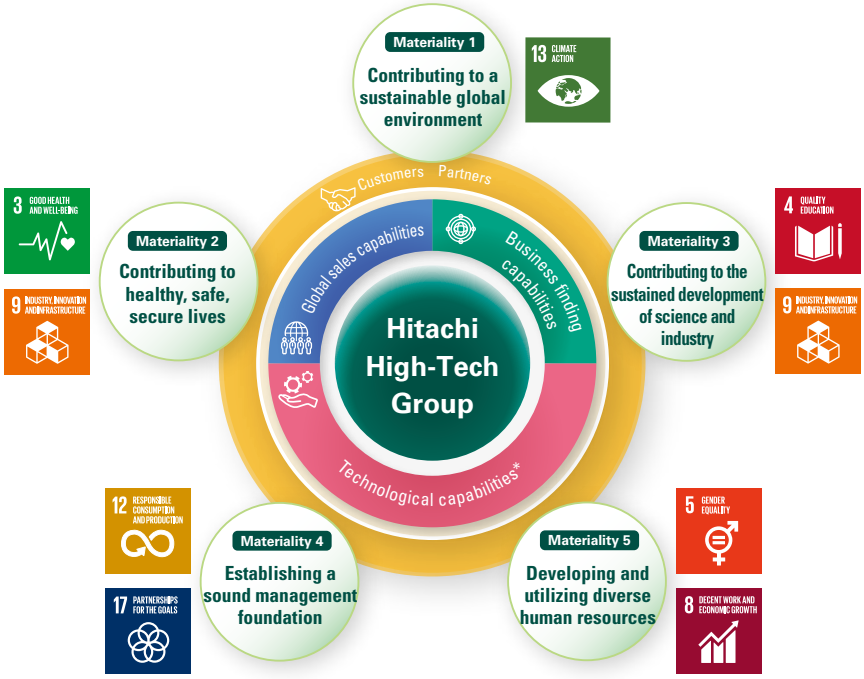
As a technology that increases measurement precision in the manufacturing process for semiconductor devices, in which miniaturization is progressing, the Company's semiconductor measurement technology is installed in devices such as CD-SEM, and was recognized for contributing to the development, stable supply and higher yields of cutting-edge semiconductor devices, and for supporting the development of Japanese industry and improving people's lives.

Hitachi High-Tech Group's Materiality

Hitachi High-Tech Group has identified five themes of Materiality, which are important issues to address in order to solve social issues. Our Materiality topics are based on the SDGs, a set of international common rules and targets to be achieved in the 21st Century.
Under the 2021 Mid-Term Management Strategy, Hitachi High-Tech group sets specific action plans and targets to achieve these Materiality topics, and we will develop business activities.

Significance of Identifying Materiality

In identifying Materiality, there is utmost consideration to resolving environmental issues from the perspective of the global environment being the foundation for a sound society and business. Hitachi High-Tech Group provides products and services that are crucial to an array of fields including the environment, biotechnology and healthcare, information and communications, and social infrastructure. By continuing to expand our business in these fields, we will contribute to society and our customers while laying a path for our own substantial growth. Initiatives in five areas of Materiality that we have identified are crucial for us to grow while continually enhancing our corporate value.



* Measurement and analysis technologies, automation and control technologies, manufacturing capabilities

FY2017 — **STEP1** Identifying Materiality

FY2018 — **STEP2** Include in mid-term management strategy

From FY2019 — **STEP3** Create new businesses and markets originating from social issues

STEP2 Set targets for Materiality in the 2021 Mid-Term Management Strategy period

In formulating the 2021 Mid-Term Management Strategy that started in FY2019, we aim to create new markets and acquire business opportunities by solving social issues, based on the identified Materiality.
In addition, in order to promote specific activities through businesses by formulating basic ideas, visions, action plans, and targets for each Materiality, we established targets for FY2019 and FY2021 with respect to business value (revenues, profits, corporate image) and social/environmental value (addressing social issues).

STEP3 Apply a PDCA cycle and create new businesses and markets originating from social issues

Going forward, we will apply a PDCA cycle to achieve the targets set in the action plan. Thereafter, we will consider establishing quantitative KPI in order to more precisely understand the effects of business value and social/environmental value. Furthermore, by instilling the philosophy within the Hitachi High-Tech Group that providing products and solutions with an outside-in (originating from social issues) approach through the PDCA cycle, we aim to create new businesses and markets that will help solve social issues.

WEB Please refer to our website for details regarding the process for identifying Materiality.

13 CLIMATE ACTION

Materiality 1

Contributing to a sustainable global environment

Basic Ideas and Visions

Corporate management in harmony with the global environment plays an important role in the sustainable development of society and companies. In addition to reducing resource and energy consumption as well as the environmental impact associated with business activities, the Hitachi High-Tech Group aims to achieve sustainable consumption and production through the provision of environmentally-conscious products and services as well as initiatives throughout the value chain.

Action Plan/Targets

1 Realize a low-carbon society

In order to reduce CO_2 emissions arising from energy consumption associated with business activities, we will systematically make environmental investments that have a significant impact on reducing CO_2 emissions and promote the proactive use of renewable energy. In providing products and services, we will also work to contribute through our business, such as selling LiB* production equipment that will help reduce CO_2 emissions.

Specific Actions

Draft and execute CO_2 emissions reduction plan

1. Environmental investments
2. Use renewable energy
3. Enhance electricity visualization monitoring function

2 Realize a recycling-oriented society

We will make efforts to effectively use water resources, conserve resources, and reduce waste in business activities. Specifically, we will work to reduce the amount of water used by using the equipment cooling water in our factories more efficiently. In addition, we will introduce environmentally conscious design (eco-design) for our products and work to reduce the resources used to manufacture our products, and thereby reduce the amount of waste generated and recycle resources.

Specific Actions

1. Reduce water consumption by using equipment cooling water more efficiently
2. Curb the volume of waste generated by using eco-design for our products

3 Realize a society in harmony with nature

We will endeavor to conserve and restore biodiversity, such as returning the green space on our premises to local native vegetation. In addition, we will investigate and examine new activity bases and work to expand the scope of coverage.

Specific Actions

Ecosystem conservation activities: Secure activity bases (forests, islands)

<table>
<tr><th rowspan="2"></th><th colspan="2">Targets for FY2019</th><th colspan="2">Targets for FY2021</th></tr>
<tr><th>Business Value</th><th>Social/Environmental Value</th><th>Business Value</th><th>Social/Environmental Value</th></tr>
<tr><td>1</td><td rowspan="3">• Boost image as contributing to the environment
• Increase efficiency and reduce costs of the production process
• Strengthen competitiveness with products using eco-design</td><td>CO_2 emissions: 42.6 thousand tons-CO_2</td><td rowspan="3">• Boost image as contributing to the environment
• Increase efficiency and reduce costs of the production process
• Strengthen competitiveness with products using eco-design</td><td>CO_2 emissions: 30.1 thousand tons-CO_2 (29% reduction compared to FY2019)</td></tr>
<tr><td>2</td><td>• Water consumption: Unit consumption improvement 43%
• Waste volume generated: Unit consumption improvement 13%</td><td>• Water consumption: Unit consumption improvement 45%
• Waste volume generated: Unit consumption improvement 16%</td></tr>
<tr><td>3</td><td>Investigate and examine new activity bases</td><td>• Decide activity bases
• Draft action plan</td></tr>
</table>

*LiB: Lithium-ion Battery

Materiality 2

Contributing to healthy, safe, secure lives

Basic Ideas and Visions

"Healthy, safe and secure lives" is a common desire for all people. By further mastering the "Observation, Measurement, and Analysis" (measurement and analysis technology) that we have cultivated up until now, the Hitachi High-Tech Group will contribute to a future where people can continue to live healthy and fulfilling lives, centered on three fields of medicine, water/food, and social infrastructure.

Action Plan/Targets

1 Expand access to preventive medicine

By developing and providing testing systems that enable highly-efficient diagnoses, we will help to shorten testing times, increase the number of people who receive health checkups, and reduce testing fees. In addition, by developing and providing clinical analyzers and genetic analysis systems, we will respond to the higher needs for personalized medicine and contribute to the promotion of preventive medicine and to curbing medical expenditures.

Specific Actions

Provide devices and services to reduce the amount of specimens and reagents and speed up testing: Contribute to an increase in the number of people who receive health checkups

2 Ensure the safety of water and food

We will help prevent the accumulation of hazardous substances in water, food, the human body, and elsewhere by developing and providing testing systems specialized for specific markets. In addition, we will supply safe water and support people's safe lives by providing measurement systems for filtered water and drainage in water and sewage systems.

Specific Actions

Manufacturing and sales of equipment that detect hazardous substances to water, food and the human body

3 Ensure the safety of social infrastructure

By realizing non-destructive rapid diagnosis and predictive diagnosis for structures such as roadways, tunnels, railways, and airports, we will contribute to ensuring the safety of social infrastructure and support the safe lives of people.

Specific Actions

1. Manufacturing and sales of equipment that detect hazardous materials such as explosives and harmful gases, etc.
2. Sales of optical telecommunications components that serve as the foundation of communications infrastructure

	Targets for FY2019		Targets for FY2021	
	Business Value	Social/Environmental Value	Business Value	Social/Environmental Value
1	Number of analytical instruments sold	Increase in number of people who can be tested: Approximately **60** million more people than the former product	Number of analytical instruments sold (**10**% increase compared to FY2019)	Increase in number of people who can be tested due to higher test throughput capabilities: Approximately **72** million more people than former product
2	Number of detection devices sold	Contribute to preventing the accumulation of hazardous substances in water and people's bodies in Europe by detecting hazardous substances	Number of detection devices sold (**40**% increase compared to FY2019)	Contribute to preventing the accumulation of hazardous substances in water and people's bodies in Europe by detecting hazardous substances
3	Strengthen Analytical Systems Business	Contribute to ensuring the safety of airports, etc. by detecting hazardous materials	Strengthen Analytical Systems Business	Contribute to ensuring the safety of airports, etc. by detecting hazardous materials
	Revenues from the sales of components	Contribute to the development of, and ensuring the safety of communications infrastructure	Revenues from the sales of components (**40**% increase compared to FY2019)	Contribute to the development of, and ensuring the safety of communications infrastructure

Materiality 3

Contributing to the sustained development of science and industry

Basic Ideas and Visions

To develop science and industry, advanced technology that supports them is essential. The Hitachi High-Tech Group supports the improvement of R&D and production sites productivity, as well as higher product quality by fully utilizing and advancing our "measurement and analysis technology", "automation and control technology", "manufacturing capabilities", thereby contributing to the sustainable development of science and industry. In addition, we help develop the next generation by carrying out social contribution activities utilizing our products.

Action Plan/Targets

1 Development of science and technology

By developing and providing electron microscopes that enable high-precision observation and analysis, we will contribute to materials and device engineering and the advancement of testing and research of scientific theory. In addition, through science education support activities using tabletop electron microscopes, we will stimulate children's interest in science and technology through the activity and will contribute to resolution of social issues such as the loss of interest in science and the advancement of science and technology.

Specific Actions

Contribute to resolving the social issue of loss of interest in science, developing future scientists, and the advancement of science and technology

2 High-efficiency production sites

By providing digital solutions utilizing AI and IoT technologies and analytical and evaluation services, we will contribute to productivity improvement by helping manufacturers save labor and boost efficiency at their production sites.

Specific Actions

Provide solutions utilizing cutting-edge digital engineering technologies: Realize business process reforms at manufacturers

3 Global development of production technology

Leveraging IoT technology and our extensive overseas business experience cultivated as a specialized trading company, we will support the overseas production of Japanese manufacturing companies, thereby contributing to the local and global deployment of production technology.

Specific Actions

Leveraging cutting-edge IoT technology and extensive overseas business experience, we will contribute to the local deployment of production technology by supporting overseas production of Japanese manufacturing companies

	Targets for FY2019		Targets for FY2021	
	Business Value	Social/Environmental Value	Business Value	Social/Environmental Value
1	Generate future customers by early building a brand image	Provide classes to **16,000** people	Generate future customers by early building a brand image	Provide classes to **18,000** people
2	Revenues from provision of solutions	Contribution to automation and productivity improvements at manufacturing companies	Revenues from provision of solutions (**20**% increase compared to FY2019)	Contribution to automation and productivity improvements at manufacturing companies
3	Business development combining manufacturing capabilities and trading functions.	Stable employment of local employees and enhancement of manufacturing skills	Expansion of manufacturing solutions business leveraging IoT technology	Stable employment of local employees and enhancement of manufacturing skills

Materiality 4

Establishing a sound management foundation

Basic Ideas and Visions

Establishing a sound management foundation is essential for the sustainable growth of a company. In order to increase corporate value over the long-term, Hitachi High-Tech Group will strive to improve the effectiveness of corporate governance and aim to be a company that is trusted and needed by society.

Action Plan/Targets

1 Realize sound governance

We will strive to improve the effectiveness of corporate governance by bolstering the effectiveness of the Board of Directors and strengthening and enhancing internal controls. In addition, we will endeavor to achieve sustainable growth and increase society's trust in us by implementing initiatives such as compliance risk prevention measures and conducting education, and fostering a corporate culture that is open and compliant with laws.

Specific Actions

Improve corporate governance by increasing the effectiveness of Group companies' Board of Directors and reviewing the Group's overall system of rules

2 Ensure product safety

Providing customers with safety and peace of mind is a corporate social responsibility. By providing products that comply with laws and regulations and by working to eliminate product accidents, the Group aims to provide highly-safe products and thereby enhance competitiveness and increase the level of trust from society.

Specific Actions

Firmly instill a safety-first mentality through activities to further enhance product safety

1. Implement S>>Q>D>C*
2. Pick out and remove product safety accident risks and product-related legal violation risks

3 Realize a CSR-based supply chain

By encouraging business operations with a strong awareness of corporate social responsibility, not only for the Group, but also for our partners and the entire supply chain, we aim to reduce environmental and human rights risks in the supply chain.

Specific Actions

1. Hold briefings for business partners (2 times/year)
2. Self-evaluations of new business partner using checklists

	Targets for FY2019		Targets for FY2021	
	Business Value	Social/Environmental Value	Business Value	Social/Environmental Value
1	Enhance corporate governance by appropriate attendance of directors and formulation of Group rules	Contribute to the maintenance of a healthy and orderly society by ensuring fair trading based on the laws, regulations and business practices of each country	Enhance corporate governance by holding effective Board of Directors	Contribute to the maintenance of a healthy and orderly society by ensuring fair trading based on the laws, regulations and business practices of each country
2	Strengthen competitiveness by enhancing product quality	Eliminate product safety accidents through activities to improve required quality and prevent accidents	Strengthen competitiveness by enhancing product quality	Eliminate product safety accidents through activities to improve required quality and prevent accidents
3	• **No** CSR-related accident • Reduce impact for procurement/production/sales, avoid human rights risks	Protect human rights in the supply chain	• **No** CSR-related accident • Reduce impact for procurement/production/sales, avoid human rights risks	Protect human rights in the supply chain

* S: Safety, Q: Quality, D: Delivery, C: Cost

Materiality 5

Developing and utilizing diverse human resources

Basic Ideas and Visions

It will be crucial to continuously provide creative and innovative values to customers and society in order to succeed against competitions in the global market while realizing sustainable growth. Hitachi High-Tech Group recognizes human resources responsible for providing value as one of the most invaluable management resources, and aims to foster reform-minded human resources who are able to create continuous innovation.

Action Plan/Targets

1 Promote diversity management

We enhance productivity and organizational strength by promoting reforms in working styles and increasing operational efficiency. In addition, by promoting female workplace participation and development and utilization of diverse human resources, we will secure and train talented human resources who have flexible ideas and advanced technical abilities and skills.

Specific Actions

Create an organization where diverse human resources can actively participate and thrive, thereby leading to innovation

1. Further reforms in working styles
2. Reform actions and mindset encouraging female workplace participation
3. Train and utilize diverse human resources

2 Promote diverse cultivation of human resources

We will aim to train human resources to compete in the global market by expanding diverse education and training systems and continuing to carry out education and training.

Specific Actions

Continue to carry out diverse education and training to develop human resources

1. Develop global human resources
2. Maintain and improve the education system in order to develop human resources

3 Ensure healthy, safe workplace environments

We strive to ensure a healthy, safe and comfortable working environment by working on occupational safety and health with the highest priority on workplace safety and maintaining and promoting the health of each employee.

Specific Actions

Establish an accident-free workplace

1. Eradicate accident risk through risk assessments
2. Enhance mental healthcare
3. Further promote health management

	Targets for FY2019		Targets for FY2021	
	Business Value	Social/Environmental Value	Business Value	Social/Environmental Value
1	Create innovation by diverse human resources • Ratio of women in managerial positions: **5**% • Female board members: **1** • New graduate recruits (Ratio of women: **30**%, Ratio of overseas: **5**%)	Offer comfortable working environment to people with time or location restrictions due to childcare, family nursing care, etc.	Create innovation by diverse human resources • No more than **20** hours per person per month of overtime work • At least **20** days per person per year of paid leave taken • Ratio of women in managerial positions: **5**% • Female board members: **2** • New graduate recruits (Ratio of women: **30**%, Ratio of overseas: **5**%)	Offer comfortable working environment to people with time or location restrictions due to childcare, family nursing care, etc.
2	Early development of global human resources: **50**% of employees have overseas experience within 7 years of joining the company	Employees contribute to mutual understanding of cultures by working in different regions	Early development of global human resources: **50**% of employees have overseas experience within 7 years of joining the company	Employees contribute to mutual understanding of cultures by working in different regions
3	Ensure business continuity: • **No** accident that require time off work • **100**% stress check implementation • Reduce the mental illness ratio	Contribute to maintaining a healthy society as a member of society by having employees who are both physically and mentally healthy	Ensure business continuity: • **No** accident that require time off work • **100**% stress check implementation • Mental illness ratio (**5**% improvement compared to FY2019)	Contribute to maintaining a healthy society as a member of society by having employees who are both physically and mentally healthy

Environmental Management

Hitachi High-Tech Group strives to enhance the added value and competitiveness of products through manufacturing that aims to reduce environmental impact. In addition, we are working to strengthen environmental management and avoid damage to brand value from environmental pollution or legal violations.

Hitachi High-Tech´s Targeted Direction

We are focusing on the impact from climate change as a global environmental challenge, and promoting activities linked to our business processes that give top priority to reducing greenhouse gas emissions. Restricting emissions of CO_2, the principal greenhouse gas, involves reducing energy usage, but any expansion in business scale tends to increase emissions. We are therefore working to improve energy efficiency by promotion of switching to low-carbon options (renewable energy, etc.) for electricity used at our business sites, as well as through production process reforms and capital investments for facility rationalization. We are also targeting opportunities to expand our business by supplying eco-friendly products based on new product development processes built around the principles of eco-design and life cycle assessment. This contributes to reduced CO_2 emissions through the value chain by helping customers to cut energy consumption at the product usage stage and so forth.

From FY 2018, we started working to not only identify climate change risks and opportunities based on climate scenarios but also promote their countermeasures. In particular, we will actively promote to instill management strategies and risk management to address climate change risks.

In addition, we will work to realize a recycling-oriented society based on the effective use of resources, and to realize a society in harmony with nature based on activities aimed at minimizing impacts on natural capital.

Realizing a Low-Carbon Society

Promoting Energy Conservation with Environmental Investment and Process Reforms, and Promoting the Introduction of Internal Carbon Pricing*

Hitachi High-Tech Group established the Environmental Investment Guidelines in FY2016 to improve the ease and efficiency of environmental investment. Since the investments made in FY2017, these guidelines have contributed to the growth of environmental investment and improvement in the reduction effect in the amount of electricity consumed versus investment. In FY 2018, the amount of environmental investment declined 10% versus the previous fiscal year, but the reduction effect in electricity consumption versus investment was 4.4 times greater than that of the previous year. We are shifting to investments in initiatives with high cost-effectiveness. Graph 1

In addition, starting in FY 2019 we work to introduce Internal Carbon Pricing aimed at further encouraging environmental investment. We will apply it to the investments to be made after FY 2020.

We are also actively working to conserve energy in conjunction with our rationalization of manufacturing processes.

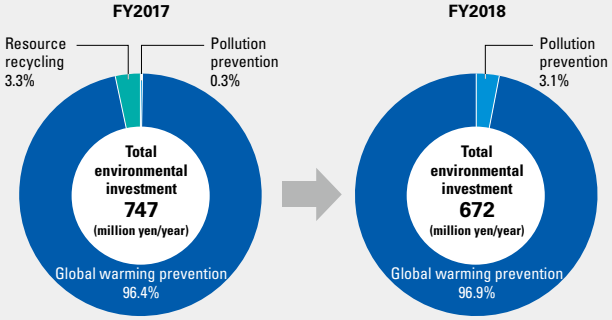
* Internal Carbon Pricing: A system in which a company places a price on its own carbon emissions in order to quantitatively clarify the impact on current and/or future business activities and to facilitate strategic decision-making, based on the premise that addressing climate change will present both costs and opportunities.

Promoting the Shift to Low-Carbon Contracted Electricity at Sites

Electricity used at its domestic manufacturing sites accounts for approximately 70% of the energy that Hitachi High-Tech Group consumes in its business activities. In order to reduce CO_2 emissions efficiently, we launched a program with the highest priority to switch to renewable energy or a renewable energy mix for electricity supplied to domestic manufacturing bases, and we will continue these efforts in the future, including at overseas sites. Graph 2

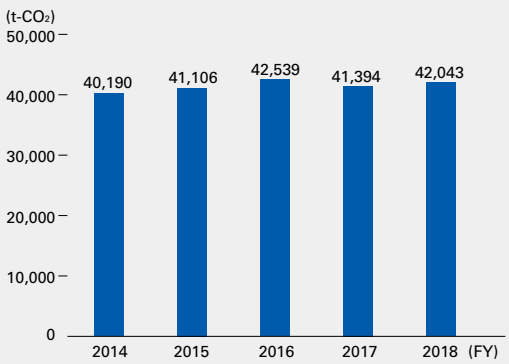
Graph 1

Environmental Investment Costs



Graph 2

Changes in Volume of CO_2 Emissions in Japan



* Reporting boundary: Manufacturing sites of Hitachi High-Tech and group manufacturing companies in Japan
* Calculation method: Conforms to the Manual for Calculation and Reporting of Greenhouse Gas Emissions (Ministry of the Environment and Ministry of Economy, Trade and Industry)

Initiatives to Reduce CO_2 Emissions during Product Usage

Hitachi High-Tech Group strives to reduce its own environmental impact, develop eco-friendly products, and provides customers with products that have a reduced impact on the environment.

Example of Product Developed Using Environmentally Conscious Design Approach (Launched in FY 2018)

Lumione BL-2000 analyzer for rapid testing of microbial content

This product uses the ATP bioluminescence method*1 and proprietary analysis technology to detect the presence of microorganisms in water used in pharmaceutical manufacturing in as little as one hour. In addition to being much faster than the conventional culture method for which testing takes 2–14 days, this method uses approximately 47% less electricity*2 than conventional types.

*1 ATP bioluminescence method: A method in which the ATP in living organisms is extracted, a special reagent containing enzymes is used to cause the ATP to give off light, and the amount of ATP is measured from the luminescence (determine the existence of microorganisms from the amount of ATP). ATP (Adenosine triphosphate) is the energy molecule found in the cells of plants, animals, and microorganisms.

*2 Compared to the Company

Realizing a Recycling-oriented Society

Enhancing Resource and Water Usage Rates

Hitachi High-Tech Group makes efforts to reduce the volume of waste generated through business activities as well as to promote recycling of resources by maximizing the recycling of generated waste. In FY 2018, the volume of waste generated improvement rate per unit was reduced by 43.7% (base year: FY 2005), thereby meeting the target. Graph 3

Hitachi High-Tech Group is working to utilize water effectively. These measures include reducing the volume of water used through initiatives including productivity improvements and upgrading to water-conserving equipment. In FY 2018, the target was 45.1% improvement in water use per unit (base year: FY 2005), but the activities undertaken resulted in 40.2% improvement. The target was not met due to water leaks accompanying equipment degradation. Also, water stress and water risk assessments are conducted each year. No business sites were found to have high stress or risk. Going forward, we will strive to avoid risks by periodically conducting such assessments. Graph 4

Realizing a Society in Harmony with Nature

Activities at the Woodland of Hitachi High-Tech Science

Surrounding the R&D facility on the site of the Oyama Works (Sunto-gun, Shizuoka Prefecture) is a natural area called the Woodland of Hitachi High-Tech Science. We are using the area, which covers approximately 44,000m^2, to carry out biodiversity conservation activities using plants that are native to the region. These include efforts to convert from artificial forests to broadleaf forest and a zebra grass field where native grasses bloom, as well as eradicating invasive plants. In October 2018, we held a tree-planting festival in which 97 people participated at the Woodland of Hitachi High-Tech Science, including interested Hitachi High-Tech Group employees, their family members, and elementary and junior high school students from the local town of Oyama.

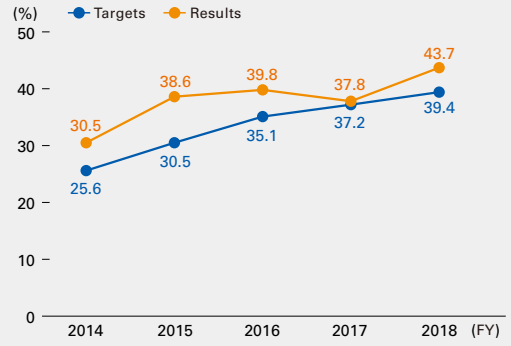
The Woodland of Hitachi High-Tech Science tree-planting festival (October 2018)

Please refer to the website for details about activities and results related to Environmental Management

Please refer to P52 for main figures related to Environmental Management

Graph 3

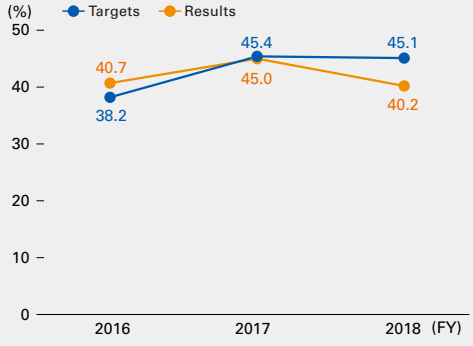
Changes in Volume of Waste Generated in Japan –Improvement Rate per Unit



* Reporting boundary: Hitachi High-Tech and Group companies in Japan

Graph 4

Changes in Volume of Water Consumption in Japan – Improvement Rate per Unit



* Reporting boundary: Hitachi High-Tech and Group companies in Japan

Human Resources

To create continuous innovation, we strive to secure talented human resources with diverse sensibilities and perspectives, and maximize their abilities by assigning them to the proper positions. In addition, we enhance both productivity and our organizational strength by developing an environment accommodative to various working styles and where employees can work safely and in good health.

Hitachi High-Tech's Targeted Direction

A workforce where people with differing sensibilities and perspectives flourish is important for quickly grasping and responding to various risks and opportunities as the business and social landscapes change. It is also becoming increasingly vital for the Hitachi High-Tech Group with cutting-edge fields as its main business arena to retain and develop highly skilled talent with robust knowledge and experience.

It will be crucial for the Hitachi High-Tech Group to continuously provide creative and innovative values to customers and society in order to succeed against competitions in the global market. Therefore, we aim to foster reform-minded human resources who are able to create continuous innovation.

Over the medium- to long-term, Hitachi High-Tech Group will foster a corporate culture which will enable employees to think flexibly and share their opinions proactively. To do so, we will implement measures to train employees to compete in the global market, along with respecting diverse sensibilities and values and promoting "diversity management" to invigorate our organization. In the short term, we will promote reforms in working styles, as well as work to enhance productivity and organizational strength by developing an environment responsive to various working styles. In parallel, we will focus on retaining talented human resources who have flexible ideas and advanced technical abilities and skills.

Globalized Professional Development

Development of Human Resource with a Global Outlook

We actively post young employees overseas with a view to cultivating personnel capable of doing business with a global perspective. Employees are trained overseas via a one-year overseas training program and a short-term overseas posting program. In addition, we are striving to enhance our efforts to cultivate overseas subsidiary employees, so that they can play an active role in our businesses. To this end, we also offer various global management training courses, which bring together participants from a variety of countries and regions.

Cultivating Human Resource in Manufacturing

The group's high-tech products such as semiconductor production equipment and analyzers are backed by our continuous development of cutting-edge technology and the highest standard of engineering skills that make those products a reality. For many years, as part of our proactive endeavors to cultivate engineers, we have taken on the challenge of entering the annual National Skills Competition and have produced many medalists, both at the national and the world competition.

Please refer to P4 related to the number of Skills Competition medals we have acquired (cumulative total)

Initiatives to Reform Working Styles

An environment where people with diverse values can maximize their potential increases employee satisfaction and generates strong relationships of trust, which can be expected to boost productivity and organizational strength. Greater productivity creates a virtuous cycle in which employees can more easily secure time for things like self-improvement, which facilitates growth for both employees and the Company. Since FY2015, we have been conducting the "Challenge 20-20*1" to achieve highly productive working styles. Based on a commitment from top management, each worksite is taking creative steps to effectively utilize regular work hours and implement well-modulated working styles. Following four years of efforts, improvements are evident. Overtime work hours declined to 25.6 hours per person per month in FY2018, versus 30.5 hours per person per month in FY2014. Similarly, the number of days of paid leave used increased to 17.5 days per person per year in FY2018, versus 14.6 days per person per year in FY2014. We launched the "Active 20-20*2" in FY2019, and going forward we will carry out initiatives with a focus on increasing employee happiness.

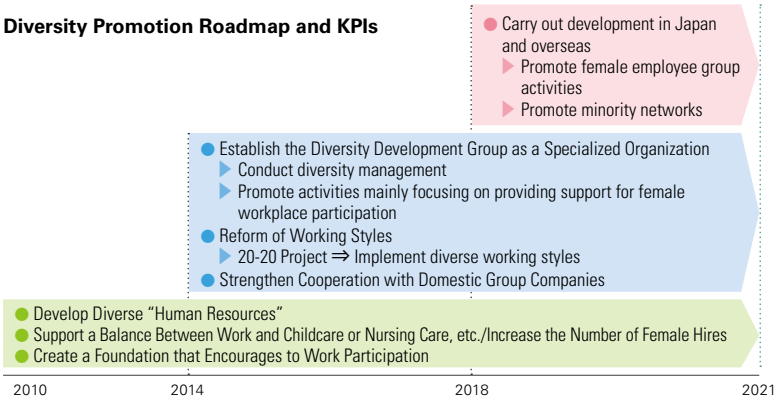
Key Initiatives in FY2018

- Lunch meetings with the president and management to exchange views and solve problems
- Promoted use of systems through work style consultation meetings and hands-on satellite office tours
- 20-20 Award, which celebrates favorite examples of working style reform
- Shared information via the internal reports and the intranet

*1 Challenge 20-20: Activities that aim to maximize potential of individuals and organizational strength by designing effective utilization of regular work hours and working styles. The project targets average overtime work of 20 hours or less per person per month, and the use of paid leave of 20 days or more per person per year

*2 Active 20-20: Initiatives that aim to realize the Company growth by leveraging the diversity of individuals to allow each person to demonstrate his or her talents and actively participate

Diversity Promotion Roadmap and KPIs



Major KPIs

2021 Targets Working Style Increase Employees' Happiness

Overtime Hours: Average of 20 hours per person per month or less

Use of Paid Leave: 20 days per person per year or more

2021 Targets Female Workplace Participation

Women in Managerial Positions	New Graduate Female Recruits	Female Board Members
5%	30%	2

Please refer to P51 for main figures related to Employee Diversity and Working Styles Situation

Promoting Diversity Management

Hitachi High-Tech Group respects diverse sensibilities and values. Placing "diversity management" at the core of our management practices is essential to producing a dynamic organization, and based on the commitment of top management, we work to incorporate this as a key initiative targeting growth. We regard gender, age, nationality, race, disability, personality, values, sexuality (LGBT), and all other external and internal differences as part of a person's individuality. We are actively striving to foster a culture as well as enhance mechanisms within the Group to ensure that each and every employee can make the most of his or her abilities.

Initiatives to promote diversity include holding diversity management training, workshops by global employees for the overall group, an executive roundtable led by the president and the Company's female board member, as well as career training for women assistant managers. These initiatives are part of our effort to develop female leaders.

Career training for female assistant managers

Promoting Employment of People with Disabilities

We approach the employment of people with disabilities from the perspectives of both diversity among our human resources and corporate social responsibility. Recognizing that satisfying the statutory requirement for the employment of people with disabilities is the absolute minimum level of social responsibility that we should fulfill as a Group, we have gained approval for Hitachi High-Tech Support Corporation to be designated as a special subsidiary company. We are achieving figures exceeding the statutory employment rate (2.53% as of March 31, 2019), while striving to further expand the scope of duties of employees with intellectual disabilities or psychological disorders. The Hitachi High-Tech Group strives to not only subdivide and review work but also create a good workplace environment so that employees with and without disabilities can respect and demonstrate their individual abilities to work on respective projects together as a team.

We are actively endeavoring to enhance the skills of our employees with disabilities. Three of our employees participated in the 38th National Abilympics (vocational skills contest for person with disability) held in FY2018, and earned medals in all of the events they took part in.

WEB Please refer to the website for details about activities and results related to Human Resources.

TOPICS

2019 Certified Health and Productivity Management Organization (White 500)* Recognition

After being recognized the previous year, Hitachi High-Tech was once again recognized under the 2019 Certified Health and Productivity Management Organization Recognition Program jointly conducted by the Ministry of Economy, Trade and Industry and the Nippon Kenko Kaigi, in the large enterprise category (White 500). We received high grading on criteria pertaining to the evaluation of programs and actions including awareness and response to health issues, and assessment and improvement including barometers for gauging health.

* 2019 Certified Health and Productivity Management Organization (White 500): Launched in FY2016, the Certified Health and Productivity Management Organization Recognition Program aims to create an environment fostering social recognition of "organizations engaging in strategic health and productivity management program efforts for maintaining their employees' health from a management perspective" by showcasing such outstanding enterprises working to tackle health-related challenges in communities, promote health-conscious activities led by the Nippon Kenko Kaigi, and so forth.

TOPICS

"Eruboshi" Certification

On November 29, 2017, Hitachi High-Tech earned the top Stage 3 "Eruboshi"* certification based on the Act on Promotion of Women's Participation and Advancement by meeting all of the criteria in the five categories evaluated—recruitment, continued employment, working hours, ratio of women in managerial positions, and diverse career paths.

*2 "Eruboshi": Certification granted by the Minister of Health, Labour and Welfare to companies that have created and submitted an action plan for promoting women's participation and advancement and demonstrated good progress on those initiatives. Three stages of certification are awarded according to the number of criteria met in the five categories that are evaluated

Supply Chain Management

Hitachi High-Tech Group builds positive collaborative relationships with partners (suppliers), while working to maintain and enhance mutual understanding and relationships of trust. We also reinforce steps to ensure social responsibility throughout the supply chain to reduce economic, social, and reputational risks.

Hitachi High-Tech´s Targeted Direction

Hitachi High-Tech Group has adopted "Maintain Procurement and Strengthen Product Cost Competitiveness to Prevail against Global Competition, Based on Collaborative Relationships with Partners" as a key basic policy of its procurement strategy. To this end, we are focusing on "Strengthening procurement risk management," "Strengthening product cost competitiveness," and "Rigorously enforcing procurement compliance." We aim to make products that are competitive by unifying global strategies, product strategies, and robust supply chain building.

Strengthen Procurement Risk Management

We enter into agreements on quality control items to undertake procurement quality risk management at partners. The Company monitors the quality levels of partners by performing quality level checks based on assessments. In addition, the extent to which suppliers are recommended is reviewed by item every year and compiled into a database, which is shared with the design departments. We put this information to good use in managing the quality and risk of partners at the product development stage.

Strengthen Product Cost Competitiveness

We are pushing ahead with measures to build costs into products by undertaking cost design together with partners, beginning with the product conception stages, from planning to prototype development. The goal is to focus resources on product development and continuously launch new products ahead of competitors at all times. Based on the cutting-edge technologies and product proposals of each partner, we achieve our targeted cost by the start of mass production, thereby successfully optimizing the functionality and performance of Hitachi High-Tech products and strengthening its cost reduction capabilities.

Rigorously Enforce Procurement Compliance

We position the rigorous enforcement of compliance as the foundation of all its corporate business activities. As with procurement activities, we will endeavor to build good partnerships with all our partners by adopting the principle of putting right and wrong over profit and loss as our decision-making criteria, striving to maintain and enhance mutual understanding and relationships from a long-term perspective. We will also respect fair trading relationships with partners and not only fulfill social responsibilities such as excluding child labor and the purchase of conflict materials, but also strive rigorously to prevent all manner of misconduct and enforce legal compliance in procurement activities.

Supplier Briefings at Each Manufacturing Base

It is essential to establish a shared awareness of CSR through the provision of information to our suppliers and mutual communication with them, so we hold regular briefings for the suppliers of product manufacturing divisions. We hold briefings at the Company's manufacturing bases twice each year to explain the Hitachi Group's initiatives aimed at promoting green procurement activities and supply chain CSR activities.

Supplier briefing (Naka Division)

CSR Audit and Monitoring

Hitachi High-Tech Group sent guidance to partners concerning the revised (in January 2017) Hitachi Group Supply Chain CSR Deployment Guidebook and collected written confirmation of Hitachi's approach to CSR supply chain management from them, aiming to share issues on CSR supply chain management and to minimize risk.

In addition, since July 2012, we have been working with Hitachi Group's Procurement Division, and have been visiting the manufacturing bases of existing partners in China and other Asian countries and conducting CSR audit to evaluate these suppliers and identify high-risk partners. During an audit, auditors with RBA* certification check the status of the partner's efforts, mainly with respect to labor and human rights, safety, environment, and ethics, based on the SA8000 international certification standard for work place environment evaluation established by Social Accountability International, a U.S.-based CSR certification body.

Hitachi High-Tech has evaluated one company per year since FY2015, and has audited six companies (five in China, one in Malaysia) as of the end of FY2018, and no major violations have been founded. We also require partners to submit a plan for improvement measures, and continually follow up with them until improvements based on the plan have been completed.

* Responsible Business Alliance: An industry body composed mainly of large electronics and IT companies

WEB Please refer to the website for details about activities and results related to Supply Chain Management.

Communications with Local Communities

Hitachi High-Tech Group continues to build relationships of trust with stakeholders and local communities, which is important to conduct business activities and work to raise the recognition of the Company, thereby enhancing brand value and helping to secure human resources.

Hitachi High-Tech's Targeted Direction

Hitachi High-Tech Group has identified Materiality based on changes in social conditions and the business environment, such as SDGs, which are common rules of the international community and positioned as targets to achieve. In promoting social contribution activities, based on this Materiality we will aim to realize activities linked to businesses that address social issues.
In carrying out our activities, we will help to solve various social issues such as the loss of interest in science and changes in the ecosystem, and contribute to local culture by supporting science education leveraging our technology and products that we have cultivated through our business, and through unique social contribution activities which leverage the skills and knowledge of our employees. That, in turn, will lead to building relationships of trust with our stakeholders, and over the long term, an increase in corporate value and the ability to secure talented human resources.

Three Priority Areas for Social Contribution Activities

Local Contribution

Community Interaction through Sports

Our women's basketball team, the Cougars, hold basketball lessons at local nursery schools, mainly in Hitachinaka City, Ibaraki Prefecture where the team's activities are based, and nationwide basketball workshops for elementary and junior high school students. The team actively participates in activities fostering exchange with people in the local community.
These activities contribute to promoting children's health and supporting for community sports, and lead to building relationships of trust with educational institutions while also offering a good opportunity for people to learn about the Company, thereby increasing corporate visibility.

Human Resource Development: Supporting Science Education

Support Children's Science Education Activities Using Electron Microscopes

We conduct activities to support science education, using Hitachi High-Tech Group's own tabletop electron microscopes. We support a range of educational events, such as special lessons for elementary and junior high schools as well as displays at science museums and exhibitions, with the aim of stimulating children's interest in science and technology through the experience of observing familiar specimens on a microscopic scale and contributing to resolution of issues in the school education field such as the "loss of interest in science."
Overseas, Hitachi High-Tech America is partnering with distributors in North America, South America, and Australia to enhance activities. Also, group companies in Asia and the ASEAN region are conducting on-site classes at local Japanese schools in China (Shanghai, Dalian, and Suzhou), South Korea, Taiwan and Thailand, while national staff are conducting on-site classes at local schools. In addition, in FY2018, we held a science event as part of the "Year of Japan in Russia" to foster international exchange between Russian and Japanese junior high school students in Moscow. These kinds of activities that utilize our products contribute to resolving issues in the field of education, and also provide a chance for people in countries and regions around the world to learn about what we produce, which we believe will lead to new business opportunities.
Looking ahead, we will build cooperative ties with various relevant organizations and strategically implement our programs as we look to firmly establish our activities in all regions. Thereby contributing to the development of the next generation of scientific researchers.

In the event of "Year of Japan in Russia"

WEB Please refer to the website for details about activities and results related to Communications with Local Communities.

Corporate Governance

We are striving to create a company that inspires trust by putting in place an internal control system, as well as adopting the Company with Nominating Committee, etc. established by the Companies Act to build a highly transparent management framework.

Message from Chairman of the Board

Ryuichi Kitayama,
Chairman of the Board

Since its establishment in 2001, the Company has worked to improve the effectiveness of governance, such as by transitioning to a Company with Nominating Committee, etc. in 2003. The current Board of Directors comprises seven directors, four of whom are outside directors including one female director. The Board comprises members with extensive management experience and knowledge in various fields. At Board of Directors meetings, when deciding on basic management policies such as the Mid-Term Management Strategy and important business investments such as M&A, we conduct uminhibited discussions leveraging the experience and expertise of each individual, and I am confident that we are sufficiently supervising the execution of business by executive officers. In particular, in the process of formulating the 2021 Mid-Term Management Strategy (2021 Strategy) that started in April 2019, we discussed not only the basic policies and strategies of the 2021 Strategy, but also a new Corporate Vision and Mission and we decided the medium- to long-term targeted direction. Going forward, the Board of Directors will continue to monitor and verify the 2021 Strategy with the aim of ensuring its steady execution and the achievement of its targets.

The environment surrounding corporate management is changing even faster than before, and business issues for achieving additional growth have become increasingly diverse and complex. For example, companies need to practice management based on the SDGs aiming to form a sustainable society, and it is necessary to improve corporate value while actively addressing social issues. By identifying Materiality that should be addressed in order to solve social issues and incorporating them into our business strategies, we aim to help customers achieve maximum value and seek to contribute to solving social issues. As society's expectations and demands change, the role of the Board of Directors for all stakeholders is to establish a governance system that looks ahead to the future, to steadily solve various management issues including Materiality, and to increase corporate value.

Going forward, the Board of Directors will strive to improve the effectiveness of corporate governance while continuously making efforts to contribute to the resolution of management issues aimed at improving corporate value.

Corporate Governance Structure

Basic Approach

Based on our corporate vision of "Simplify our customers' high-tech processes," we execute our mission of "To help our customers be fast-moving, successful, cutting-edge businesses" and increase supervision over the conduct of business in each segment and strive to improve the transparency of management and enhance corporate governance. By managing the Company with a strong awareness of our corporate social responsibility, we believe it is important to gain the trust not only of our shareholders, but also of the whole of society, and to contribute to the progress and development of society through our business activities. The Company has formulated and publicly disclosed its Corporate Governance Guideline to indicate our corporate governance framework. The Board of Directors and Nominating, Audit and Compensation committees continuously verify the appropriateness and effectiveness of the guideline, and the Board of Directors makes revisions as necessary.

WEB Please refer to the website related to the Corporate Governance Guideline.

Status of Response to Corporate Governance Code

As of April 2019, the Company is implementing all principles stipulated in the Tokyo Stock Exchange's Corporate Governance Code.

Supervisory Functions of Management and Business Execution Functions

In terms of our organizational system, since 2003 we have been a Company with Nominating Committee, etc., as defined in Article 2 (xii) of the Companies Act. A Company with Nominating Committee, etc. is obliged to establish three committees: Nominating Committee, Compensation Committee, and Audit Committee. This allows authority over the nomination of candidates for positions on the Board of Directors, audits of the legality and appropriateness of business administration, and decision-making concerning the remuneration of directors and executive officers to be separated from the executive side of the business. Matters of business execution important to corporate management are deliberated and approved by the Executive Committee, the consultative body to the President and Chief Executive Officer (CEO), who then makes the final decisions, ensuring reciprocal checks and balances among executive officers.

Business Execution Structure and Internal Control

Basic Approach

In a Company with Nominating Committee, etc., matters concerning the basic framework of the company such as medium- to long-term management strategy and formulation of the fiscal year budget are decided by the Board of Directors. However, decision-making concerning day-to-day operations for the execution of Board resolutions, etc. is the responsibility of the executive officers. As a rule, when making decisions regarding the execution of business, the President and CEO shall consult with the Executive Committee, a consultative body, to engage in more in-depth debate and arrive at the optimal decisions.
Furthermore, the extent to which responsibility for the tasks entrusted to the President and CEO by the Board of Directors can be transferred to the executive officers to expedite decision-making is stipulated in the Decision-Making Standards, which are internal rules. For example, with regard to business investment proposals, the standards stipulate that the executive officer in the position of General Manager of the relevant Business Group is responsible for decision-making with discretion unless the proposed investment exceeds a certain amount.

Risk Management System

Basic Approach

The Group regards as risks any events or problems that may significantly interfere with achieving its business goals. To increase its corporate value, the Company has developed a system to detect and control the risks appropriately.
The risks involving the Group's transactions, investments, M&A and other business activities are prevented and controlled through deliberations by its Board of Directors, Executive Committee and other bodies, and through the approval process based on the Rules of the Board of Directors and the Decision-Making Standards, etc. Further, the Company has established Risk Management Rules governing operational risks and has developed a system where responsible divisions detect and control operational risks appropriately. Operational risks are risks involving regulatory compliance, including prevention of bribery, antitrust laws, and prevention of antisocial transactions, as well as risks involving labor, intellectual property, imports and exports, procurement, sales, information security, financial reporting, the environment, quality and safety etc. With regards to operational risks, the Internal Control Management Committee, chaired by the Chief Risk management Officer (CRO), oversees its subcommittees, namely, the J-SOX Committee, the Compliance Committee, the Information Security Committee and the Environmental Committee. And the subcommittees issue instructions to responsible divisions on measures to address and prevent the respective operational risks for which each committee is responsible.
The Company is also moving forward with efforts to strengthen business continuity management (BCM).

1 Board of Directors

To continually increase corporate value and enhance shared interests with shareholders, the Board of Directors decides the basic policy for the Group's management, and has the authority to supervise the execution of duties by directors and executive officers. With the aim of ensuring thorough corporate governance and greater management transparency, the Board of Directors comprises seven members, of whom four are outside directors who have been submitted to the Tokyo Stock Exchange as independent directors.

2 Nominating Committee

The Nominating Committee possesses the authority to decide the content of proposals to be submitted to the General Meeting of Shareholders concerning the appointment and dismissal of directors to ensure the fairness, objectivity, and transparency of the process for nominating directors. The Nominating Committee comprises six directors, four of whom are outside directors.

Please refer to P42 for the Company's philosophy related to the appointment and independence of outside directors.

3 Compensation Committee

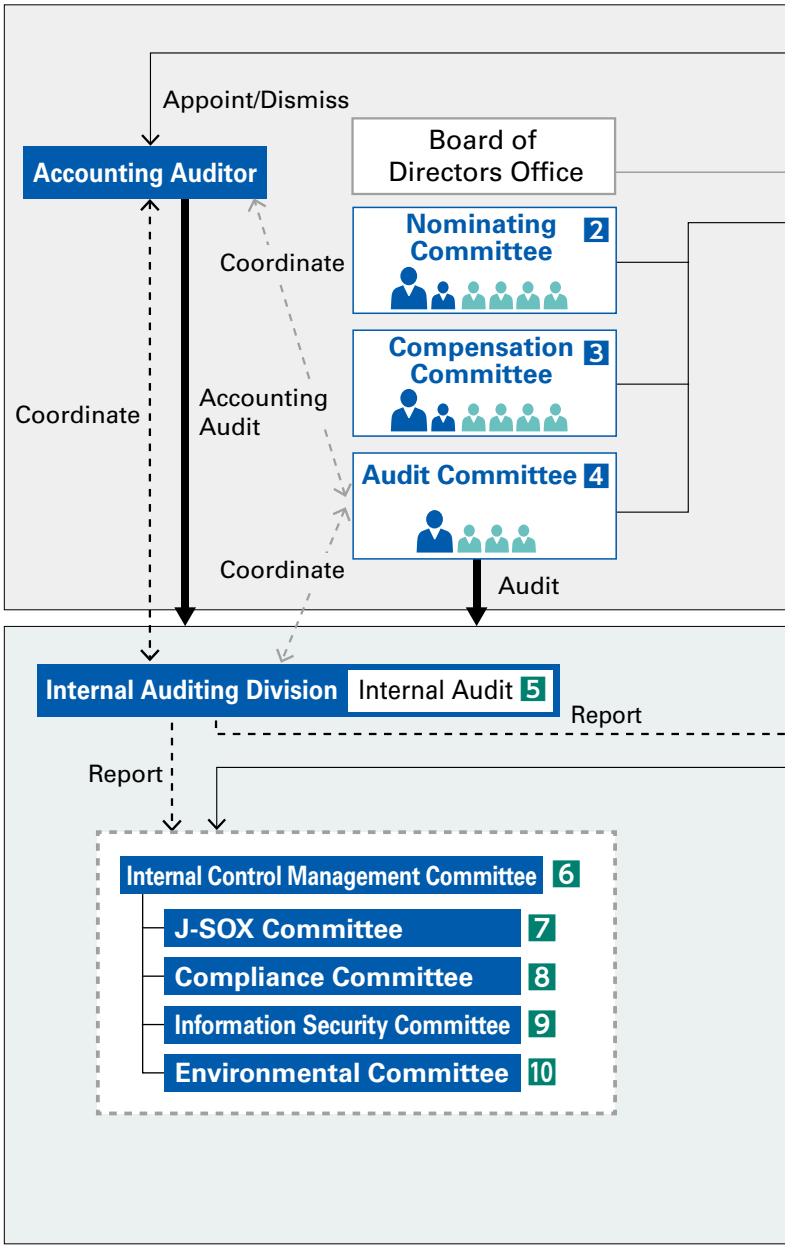
The Compensation Committee possesses the authority to decide the policy for determining the compensation for executive officers and directors as well as the compensation for individual executive officers and directors based on this policy, to ensure the fairness, objectivity, and transparency of the process for determining compensation. The Compensation Committee comprises six directors, four of whom are outside directors.

4 Audit Committee

The Audit Committee audits the execution of duties by executive officers and directors, and prepares audit reports to establish a high-quality corporate governance system that allows Hitachi High-Tech Group to meet the trust society places in us. The Audit Committee has the authority to decide the content of proposals submitted to the General Meeting of Shareholders concerning the appointment, dismissal and non-reappointment of the Accounting Auditor, and comprises four directors, three of whom are outside directors.

Working in collaboration with the Internal Auditing Div., part of the internal control system, the Audit Committee monitors the execution of business. In addition, it draws up its own plans for and conducts audits, after which the Audit Committee member responsible for the audit reports on the results to the Audit Committee and the Board of Directors. Furthermore, we ensure the appropriateness of non-consolidated and consolidated financial statements as a whole via close coordination with the Accounting Auditor.

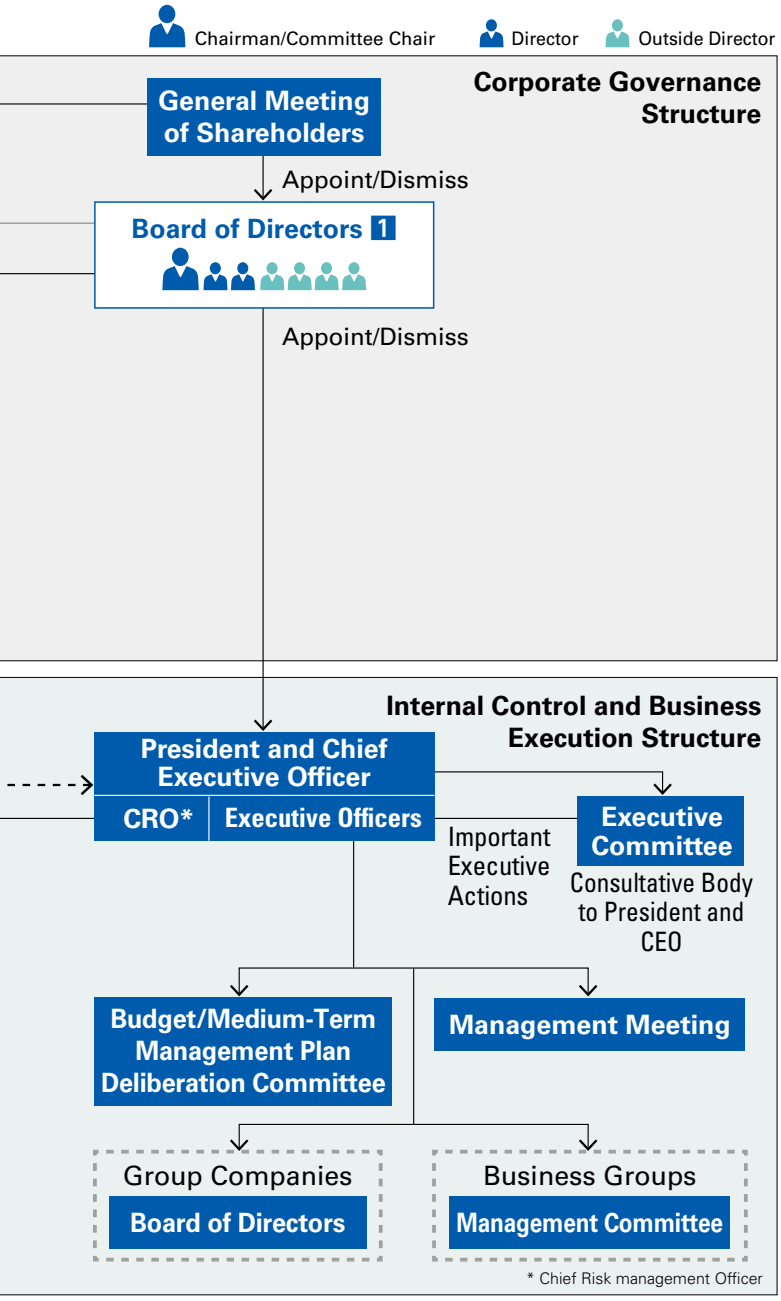
Corporate Governance Structure and Internal Control and Business Execution Structure



* The number of people comprising the Nominating, Compensation and Audit committees is as of July 1, 2019.

5 Internal Auditing

The Company has placed the Internal Auditing Div., which conducts auditing of the operation of business execution under the direction of the President and CEO. Group companies are also subject to auditing. Through audits, the Internal Auditing Div. also gives direction about the need for rectification and improvements, and conducts periodic follow-ups. With the cooperation of the Audit Committee and the Accounting Auditor, the Internal Auditing Div. promotes three-pillar audits, and plays an important role in the Group's internal control system, such as the secretariat of the J-SOX Committee.



6 Internal Control Management Committee

The Internal Control Management Committee manages the risks facing the Group through the reports of the activities of its four subcommittees (the J-SOX Committee, the Compliance Committee, the Information Security Committee and the Environmental Committee) and the result of responses by the departments in charge. The Committee also assesses and examines operational status of internal control systems, including important decision-making processes, and reports to the Board of Directors, as well as proposes revisions of the details of resolutions related to internal control systems to the Board of Directors in response to changes in the management environment.

7 J-SOX Committee

The Group confirms the effectiveness of internal controls on a consolidated basis by implementing the assessment system by management based on policy decisions of the J-SOX Committee, in accordance with the Internal Control Reporting System (J-SOX) established by the Financial Instruments and Exchange Act, to ensure the reliability of financial reporting.

8 Compliance Committee

The Group has established the Compliance Committee, which meets regularly to discuss, on a Company-wide basis, the status of compliance risks, plans for countermeasures to reduce the risks, and the status of implementation of such measures. The Group categorizes those risks into several types, and assigns specific divisions to envisage and evaluate the risks accordingly. Each division reports the status of assigned risks and plans for countermeasures to the Compliance Committee. If a compliance related incident occurs, the Company will hold an ad hoc meeting to determine the facts, trace the causes, take corrective measures and discuss how to prevent recurrence. In addition, the heads of business groups, branch offices, and Group companies appoint Compliance Managers for their respective organizations. The Compliance Managers manage the compliance system of their respective organizations by constructing compliance systems within their respective organizations, implementing compliance measures and reporting to the Compliance Committee.

9 Information Security Committee

The Group is aware that efforts to maintain information security are a high priority, and has developed regulations to facilitate such efforts, while also ensuring awareness among all of its employees. The Information Security Committee was established to promote information security management systems. It is conducting a range of activities in accordance with the Three Principles to Prevent Leaks of Confidential Information* as a united company, from management to employees.

* Three Principles to Prevent Leaks of Confidential Information
1. As a rule, it is forbidden to take confidential information outside the Company.
2. Approval must always be received from a confidential information manager before confidential information is taken outside the Company due to business necessity.
3. If confidential information is taken outside the Company due to business necessity, necessary and appropriate measures must be implemented to prevent the leaking of information.

10 Environmental Committee

The Group established the Environmental Committee to conduct operational management and improvement throughout the environmental sector. It also aims to minimize environmental risks and risks related to chemical substances contained in products. In addition, the Environmental Strategy Subcommittee and the Global Environment Sales Subcommittee operate under the Environmental Committee, creating a system in which we can conduct and manage overall environmental activities more precisely.

Approach Regarding the Appointment and Independence of Outside Directors

In appointing outside directors, the Nominating Committee strives to select people who, in addition to satisfying legal requirements, requirements for being an independent director as stipulated in the Tokyo Stock Exchange's regulations, and the criteria for determining independence noted below, have excellent personality and perception, have a strong ability to both make proper management decisions and supervise, have extensive experience in corporate management, administration, legal affairs, accounting, and other relevant fields and have made outstanding achievements, and are capable of providing proper advice and supervision in consideration of enhancing shareholder value as well as protecting the interests of minority shareholders. An outside director is considered to be independent when none of the following apply.

(1) Any close relative of the outside director, within the second degree of kinship, is currently serving or has served in the last three years as an executive director, executive officer or an employee of the Company or its subsidiaries

(2) A company for which the outside director is currently serving as an executive director, executive officer or employee receives payments from the Company or makes payments to the Company in consideration of provision of products or services, and the average amount of such transactions in the last three fiscal years exceeds 2% of the consolidated gross sales of either company

(3) Compensation received by the outside director directly from the Company as a legal, accounting or tax professional or consultant (excluding compensation as a director of the Company) for any single fiscal year in the last three fiscal years exceeds 10 million yen

(4) Contribution made by the Company to a non-profit organization for which the outside director serves as an officer who executes business exceeds 10 million yen and 2% of gross revenue or ordinary income of such organization for any fiscal year in the last three fiscal years

Status of Activities of Outside Directors

Outside directors endeavor to deepen their understanding of the Company's businesses by holding discussions with executives and visiting business sites.

Examples of Key Initiatives

- Regularly confirm with executive officers at Board of Directors meetings about reported themes related to the strategies for the entire company or individual businesses (including issues identified in the Board of Directors' effectiveness evaluation)
- Hold discussions with each business division to promote an understanding of, and confirm the course of action for, the business environment and medium- to long-term strategies of each business division
- Visit sites in Japan and overseas and attend Board of Directors meetings held at sites besides the headquarter
- Attend key internal meetings regarding budgets and Company-wide strategies

The Company established Board of Directors Office to support the smooth management of Board of Directors meetings and all committees, as well as the activities of outside directors.

Composition of the Board of Directors and Each Committee and Attendance (Term of office following the 99th Ordinary General Meeting of Shareholders)

Name	Current Position	Board of Directors	Nominating Committee	Audit Committee	Compensation Committee
Ryuichi Kitayama	Chairman of the Board	(12/12)	(5/5)	–	–
Masahiro Miyazaki	Representative Executive Officer, President and Chief Executive Officer, Board Director	(12/12)	(5/5)	–	(6/6)
Ryuichi Nakashima	Board Director	(11/12)	–	(13/13)	–
Hideyo Hayakawa	Board Director (Outside/Independent Director)	(12/12)	(5/5)	–	(6/6)
Hiromichi Toda	Board Director (Outside/Independent Director)	(12/12)	(5/5)	(13/13)	(6/6)
Yuji Nishimi	Board Director (Outside/Independent Director)	(12/12)	(5/5)	(13/13)	(6/6)
Mayumi Tamura	Board Director (Outside/Independent Director)	(12/12)	(5/5)	(13/13)	(6/6)

Summary of the Analysis and Evaluation of the Overall Effectiveness of the Board of Directors

Starting from FY2015, the Company has assessed the effectiveness of the Board of Directors as a whole to make continuous improvement of its functions and effectiveness by repeating PDCA Cycle by which issues are analyzed from the assessment result and the result of analysis is utilized for the improvement.

Details of Assessment Conducted in FY2018

(1) Persons subject to assessment: All seven directors of the Company who were elected at the 99th Ordinary General Meeting of Shareholders held on June 22, 2018 and assumed the position
(2) Period of assessment: From November 2017 to December 2018.
(3) Outline of assessment process: After conducting a questionnaire survey, each director was interviewed by the secretariat of the Board of Directors to confirm the intent, background, etc. of his/her responses.
Discussions were made regarding the assessment results and improvement policies at the meetings of the Board of Directors held on March 2019 and April 2019.
(4) Items in Questionnaire: Questions including "Structure of the Board of Directors," "Role and Responsibilities of the Board of Directors," "Operation of the Board of Directors," "Relationship with Investors and Shareholders" and "Committee Assessment" and Comments section for free comments. Opinions that are not included in the question items were checked in the free entry field and individual interviews.

Results of Analysis of FY2018 Assessment and Efforts for Improvement of Effectiveness

With regard to the items requiring improvement in FY2017, namely enhancing discussions on the major directions to be taken by the Company as a whole and medium- to long-term strategies for the purpose of ensuring sustained growth and the medium- to long-term improvement of corporate value, improvement of reports on the status of development of Executive Officers and their selection process, and continuous examination of the compensation policy and compensation system, the result of the assessment was that the Board of Directors has performed its functions in a proper manner and that the Board of Directors was functioning effectively as a whole.
Meanwhile, the Board of Directors has determined through this assessment of effectiveness that the priority issues to be addressed would be "continuous examination of medium- to long-term growth strategy" and "improvement of information delivery to stakeholders" and decided to address those issues for the purpose of ensuring sustained growth and the medium- to long-term improvement of corporate value of the Group.

Compensation for Directors and Executive Officers

Basic Approach

Directors and executive officers in charge of the management of the Company will be paid compensation for executing management aimed at making it an enterprise trusted by all our stakeholders and contributing to social progress and development through business activities that emphasize value creation through high-tech solutions. The standard level of compensation for Directors and Executive Officers of the Company will be determined in consideration of each individual's duties commensurate with their position, the Company's business performance including its Group companies, business environment, the average rate in the business world, and other such factors, based on the Policy on Determining the Nature of the Compensation Received by each Individual Director and Executive Officer by the Compensation Committee.

WEB Pleas refer to the website related to the compensation structure for directors and executive officers.

Amount of Compensation to Directors and Executive Officers in FY2018

-	Total Amount of Remuneration by Type				Total
	Monthly Remuneration		Year-end Allowance or Performance-linked Component		
	Number	Amount (million yen)	Number	Amount (million yen)	Amount (million yen)
Directors	7	120	6	16	136
Outside Directors	4	47	4	6	53
Executive Officers	15	289	15	237	526

Notes: 1. The number of Directors and monetary amounts do not include Directors who concurrently serve as Executive Officers.
2. The above monthly compensation includes the monthly compensation paid to one director who retired at the end of his term of office at the close of the 99th Ordinary General Meeting of Shareholders held on June 22, 2018.

Directors

As of July 1, 2019

Back row from the left: Yuji Nishimi, Hiromichi Toda, Ryuichi Nakashima and Mayumi Tamura
Front row from the left: Hideyo Hayakawa, Ryuichi Kitayama and Masahiro Miyazaki

◎ Committee Chair

Chairman of the Board
Ryuichi Kitayama

Chairman of the Board
Nominating Committee ◎
Compensation Committee ◎

Reason for Selection
Mr. Kitayama has abundant experience in corporate management and considerable insight in management in general, as well as in-depth professional knowledge related to overall marketing and sales, and group company management. Therefore, Mr. Kitayama was selected for reappointment to incorporate his experience and knowledge into the supervision of the Company's management and execution of operations.

4/1976	Joined Hitachi, Ltd.
10/2009	CMO*1 and General Manager of Sales Management & Accounting Division, Information & Telecommunication Group, Information & Telecommunication Systems Company, Deputy General Manager of Domestic Marketing Division, Corporate Marketing Group, Hitachi, Ltd.
4/2010	Vice President and Executive Officer, Hitachi, Ltd.
6/2010	Outside Director, Hitachi High-Technologies Corporation (now Hitachi High-Tech Corporation)
4/2014	Representative Executive Officer, Senior Vice President and Executive Officer, Hitachi, Ltd.
4/2015	Representative Executive Officer, Executive Vice President and Executive Officer, Hitachi, Ltd.
6/2015	Outside Director, Hitachi High-Technologies Corporation (now Hitachi High-Tech Corporation)
6/2016	Director, Hitachi Capital Corporation
6/2017	Director, Hitachi High-Technologies Corporation (now Hitachi High-Tech Corporation)
6/2018	Chairman of the Board, Hitachi High-Technologies Corporation (now Hitachi High-Tech Corporation) (to date)

Director
Masahiro Miyazaki

Nominating Committee
Compensation Committee

Reason for Selection
Mr. Miyazaki has led the management of Hitachi High-Tech Group as the Company's Representative Executive Officer, and at Board meetings he has properly explained and reported the execution of operations as his duty to supervise the management of the Company. In addition, Mr. Miyazaki has played an important role in supervising the management and execution of operations of the Company as a Director as well as an Executive Officer. Therefore, Mr. Miyazaki was selected for reappointment.

4/1977	Joined Hitachi High-Technologies Corporation (now Hitachi High-Tech Corporation)
7/2004	General Manager, Electronics Sales Div., Hitachi High-Technologies Corporation (now Hitachi High-Tech Corporation)
4/2007	Executive Officer, Hitachi High-Technologies Corporation (now Hitachi High-Tech Corporation)
4/2010	President & CEO, Hitachi High Technologies America, Inc. (now Hitachi High-Tech America, Inc.)
4/2014	Senior Vice President and Executive Officer, Hitachi High-Technologies Corporation (now Hitachi High-Tech Corporation)
4/2015	Representative Executive Officer, President and Chief Executive Officer, Hitachi High-Technologies Corporation (now Hitachi High-Tech Corporation)
6/2015	Representative Executive Officer, President, Chief Executive Officer and Director, Hitachi High-Technologies Corporation (now Hitachi High-Tech Corporation) (to date)

Director
Ryuichi Nakashima

Audit Committee ◎

Reason for Selection
Mr. Nakashima was involved in accounting work for a long time at Hitachi High-Technologies Corporation (now Hitachi High-Tech Corporation) and also worked as a General Manager of Internal Auditing Div. He was in charge of promoting IT Strategies and Smart Transformation Project as an Executive Officer, and has extensive experience and advanced knowledge of management in general. Therefore, Mr. Nakashima was selected for reappointment based on his experience and knowledge to appropriately supervise the Company's management and execution of operations.

4/1979	Joined Hitachi High-Technologies Corporation (now Hitachi High-Tech Corporation)
10/2001	General Manager, Accounting Dept., Accounting Div., Hitachi High-Technologies Corporation (now Hitachi High-Tech Corporation)
4/2004	General Manager, Accounting Dept., Nanotechnology Systems Div., Hitachi High-Technologies Corporation (now Hitachi High-Tech Corporation)
4/2008	General Manager, Sales Administration Dept., Accounting & Finance Div., Hitachi High-Technologies Corporation (now Hitachi High-Tech Corporation)
10/2010	General Manager, Accounting Dept., Accounting & Finance Div., Hitachi High-Technologies Corporation (now Hitachi High-Tech Corporation)
4/2011	General Manager, Internal Auditing Div., Hitachi High-Technologies Corporation (now Hitachi High-Tech Corporation)
4/2013	Executive Officer, Hitachi High-Technologies Corporation (now Hitachi High-Tech Corporation)
4/2015	Vice President and Executive Officer and CIO*2 and CTrO*3, Hitachi High-Technologies Corporation (now Hitachi High-Tech Corporation)
6/2017	Director, Hitachi High-Technologies Corporation (now Hitachi High-Tech Corporation) (to date)

Outside Director
Hideyo Hayakawa

Nominating Committee
Compensation Committee

Reason for Selection
Mr. Hayakawa was selected for reappointment, since he can be expected to supervise the Company's management and execution of operations from an independent perspective of protecting the interests of the general shareholder, based on his experience at a major international company and his extensive knowledge and experience in the legal field.

4/1973	Joined Mitsui & Co., Ltd.
10/1984	Registered as attorney of New York State Bar Association
4/2006	Managing Officer and General Manager of Legal Division, Mitsui & Co., Ltd.
4/2008	Executive Managing Officer, and General Manager of Internal Auditing Division, Mitsui & Co., Ltd.
6/2011	Outside Director, Hitachi High-Technologies Corporation (now Hitachi High-Tech Corporation) (to date)

*1 CMO: Chief Marketing Officer *2 CIO: Chief Information Officer *3 CTrO: Chief Transformation Officer *4 CFO: Chief Financial Officer

Outside Director's Message

Hiromichi Toda,
Outside Director

Six years have passed since I was appointed outside director of Hitachi High-Tech, and I believe that the Board of Directors is now more effective than when I first took office. The number of independent outside directors has increased to four, compared to two when I took office, and independent outside directors now comprise a majority of the Board. Each member has a high level of expertise and abundant knowledge in fields such as legal affairs, internal audit, accounting and finance, and advanced industrial fields, and everyone provides their frank opinions from various perspectives. Personally, I work to enhance my understanding of the frontlines by visiting business sites and offices in Japan and overseas, and keep in mind to state critical and objective opinions based on my experience and knowledge in the field of engineering.

I recognize the need to continuously discuss medium- to long-term growth strategies. From this fiscal year Hitachi High-Tech has started the 2021 Mid-Term Management Strategy (2021 Strategy), but further globalization of the Company's businesses is necessary for sustainable growth. The global market changes faster than in Japan, so the key to globalization is how flexibly we can respond to changes. In addition, as symbolized by the Fourth Industrial Revolution involving technologies such as IoT and AI, current technological innovation is advancing at a remarkable pace, and social changes accompanying such innovation are expected to become even bigger. As outside directors, in addition to our duty to examine risk more closely than before, we recognize that encouraging the Company to take on challenges targeting further growth is also an important responsibility. Moreover, I want the Board of Directors to fulfill its supervisory function by monitoring and deepening discussions to see if measures taken by the executive side of the business, including the 2021 Strategy and the action plans and targets based on Materiality, are consistent with the medium-to long-term perspective and trends in society, and how they will be implemented.

Going forward, as a member of the Board of Directors rich in diversity, I want to embrace new perspectives as well as a medium- to long-term view, and contribute to Hitachi High-Tech's sustainable growth and enhancement of corporate value.

Outside Director
Hiromichi Toda

Nominating Committee
Audit Committee
Compensation Committee

Reason for Selection
Mr. Toda was selected for reappointment since he can be expected to supervise the Company's management and execution of operations from an independent perspective of protecting the interests of the general shareholder, based on his abundant experience in corporate management in general and his deep insight into technology trends.

4/1971	Joined Anritsu Electric Corporation (now Anritsu Corporation)
7/2002	Vice President and President of Wireless Measurement Solutions, Anritsu Corporation
4/2004	Senior Vice President, and General Manager of Measurement Business Center, Anritsu Corporation
6/2004	Director and Senior Vice President, Anritsu Corporation
4/2005	Director and Executive Vice President, Anritsu Corporation
6/2005	Representative Director and President, Anritsu Corporation
4/2010	Representative Director and Chairman of the Board, Anritsu Corporation
6/2010	Director and Chairman of the Board, Anritsu Corporation
6/2013	Outside Director, Hitachi High-Technologies Corporation (now Hitachi High-Tech Corporation) (to date)

Outside Director
Yuji Nishimi

Nominating Committee
Audit Committee
Compensation Committee

Reason for Selection
Mr. Nishimi was selected for reappointment since he can be expected to supervise the Company's management and execution of operations from an independent perspective of protecting the interests of the general shareholder, based on his abundant experience and considerable insight into corporate management and his deep insight in cutting-edge industries centered on electronic materials.

4/1970	Joined Asahi Glass Co., Ltd. (now AGC Inc.)
6/2001	Director, AGC Inc.
3/2005	Senior Executive Officer, AGC Inc.
3/2008	Executive Vice President, Display Company President, AGC Inc.
1/2009	Senior Executive Vice President, AGC Inc.
3/2011	Representative Director, Senior Executive Vice President, AGC Inc.
6/2015	Outside Director, Hitachi High-Technologies Corporation (now Hitachi High-Tech Corporation) (to date)

Outside Director
Mayumi Tamura

Nominating Committee
Audit Committee
Compensation Committee

Reason for Selection
Ms. Tamura was selected for reappointment since she can be expected to supervise the Company's management and execution of operations from an independent perspective of protecting the interests of the general shareholder, based on her long experience in corporate management at global corporations, extensive knowledge in accounting and financial areas, and deep insight in promoting diversity and cultivating female leaders.

4/1983	Joined Sony Corporation
9/1991	Joined Johnson Company, Limited
7/1998	Senior Department Manager of Finance, Financial Support and IS, Johnson Professional Co., Ltd. (now CxS Corporation)
7/2000	Director and Senior Department Manager of Finance and Financial Support Division, CxS Corporation
7/2002	Executive Officer, Johnson Diversey, Co., Ltd. (now CxS Corporation)
12/2004	CFO*4 , adidas Japan K.K.
6/2007	Executive Officer and Senior Vice President and CFO, Seiyu K.K. (now Seiyu GK.)
5/2010	Executive Officer and Senior Vice President and CFO, Walmart Japan Holdings GK. (now Walmart Japan Holdings K.K.) Executive Officer and Senior Vice President and CFO, Seiyu GK.
6/2015	Outside Corporate Auditor, Honda Motor Co., Ltd.
6/2017	Outside Director (Audit and Supervisory Committee Member), Honda Motor Co., Ltd. (to date) Outside Director, Hitachi High-Technologies Corporation (now Hitachi High-Tech Corporation) (to date)
6/2019	Outside Director, SHIMIZU CORPORATION (to date)

Executive Officers

As of April 1, 2019

Masahiro Miyazaki
Representative Executive Officer, President and Chief Executive Officer
Overall Management Execution

Shinji Sato
Representative Executive Officer, Executive Vice President and Executive Officer
Assistant to the President

Toshiyuki Ikeda
Representative Executive Officer, Senior Vice President and Executive Officer
Service Business, R&D, Intellectual Property, New Business Creation, Export Control Officer and CTO

Joji Honda
Senior Vice President and Executive Officer
Manufacturing and Quality Assurance

Futoshi Ishiwa
Vice President and Executive Officer
Nano-Technology Solution Business

Shinji Sakurai
Vice President and Executive Officer
Accounting & Finance, Trade Compliance Management and CFO

Mikio Takagi
Vice President and Executive Officer
Analytical & Medical Solution Business

Hiroshi Tajima
Vice President and Executive Officer
Industrial Solution Business

Takashi Iizumi
Vice President and Executive Officer
Digital Strategy, Investor Relations and CDO

Hitoshi Kato
Executive Officer
Corporate Strategy, Group Company Management and CSO

Yasukuni Koga
Executive Officer
EMEA Area

Keita Miyoshi
Executive Officer
Industrial Solution Business

Akira Ietsugu
Executive Officer
Human Resources, CSR, Corporate Communications, Legal, Environment, Internal Control, Compliance Risk Management and CHRO / CRO

Kazuo Karasawa
Executive Officer
Sales Strategy and CMO

Atsushi Takane
Executive Officer
Manufacturing, Procurement, Smart Transformation Promotion and CTrO

Masahiro Taniguchi
Executive Officer
Industrial Solution Business

Yoshito Nejime
Executive Officer
New Business Creation

CTO: Chief Technology Officer
CFO: Chief Financial Officer
CDO: Chief Digital Officer
CSO: Chief Strategy Officer
CHRO: Chief Human Resources Officer
CRO: Chief Risk management Officer
CMO: Chief Marketing Officer
CTrO: Chief Transformation Officer
EMEA: Europe, the Middle East and Africa

Dialogue with Shareholders and Investors

Philosophy Behind Dialogue with Shareholders and Investors

We proactively engage in constructive dialogue with our shareholders and investors to achieve sustainable corporate growth and medium- to long-term increases in corporate value. To promote dialogue with shareholders and investors, we engage in direct discussions, led by the executive in charge of Investor Relations (IR), in conjunction with our IR Division. The IR Division has also formed an IR Information Disclosure Committee, chaired by the President and CEO, which discusses IR activities in general, while also working to collect information through participation in information exchanges and meetings, etc. with each division in the Company, and ensuring timely and appropriate transmission of information. The opinions, etc. of shareholders and investors are periodically provided as feedback to management and otherwise within the Company, and are reflected in management strategies.

Promoting Understanding for Analysts and Institutional Investors

As a means of promoting dialogue with analysts and institutional investors, the President and CEO attends the second quarter and year-end financial results briefings, and explains the results forecasts and management strategies in person. We also strive to conduct direct dialogue through periodic visits to Japanese institutional investors by either the President and CEO or the executive officer responsible for IR, as well as individual visits to overseas investors in the US, Europe, Hong Kong and Singapore. The IR Division actively promotes understanding of the Group, such as by holding approximately 250 meetings per year, including telephone conferences, with Japanese and foreign institutional investors.

Communication with Individual Investors

We work to promote understanding of the Company through a section of our website exclusively for individual investors, which introduces our Corporate Vision and business content. We also work to include substantial non-financial information on the website, in addition to financial information, to enable investors to gain a deeper understanding of the Group's business activities.

Relationship with the Hitachi Group

Advantages of Being Part of the Hitachi Group

The Group actively leverages the R&D capabilities, brand power and other management resources of the companies in the Hitachi Group. The Hitachi brand already has high added-value, both domestically and abroad, and it is used throughout our product lineup. Furthermore, by leveraging the Hitachi Group's R&D capabilities and network, the Group is able to take advantage of its superiority over market competition.

With regard to the Hitachi Group's R&D activities, the direction of the entire Group is discussed at meetings with the Hitachi Group's CTO*s, etc. and the Company also obtains information with high added-value, such as technological trends, through these activities. Also, in addition to providing for-profit outsourced R&D for the companies in the Hitachi Group, the Company receives ownership of the results of research by Hitachi Group companies, which are put to effective use.

Membership in the Hitachi Group has the above benefits, without the Group's business activities being greatly dependent on Hitachi, Ltd. or its Group companies.

*CTO: Chief Technology Officer

Securing a Certain Amount of Independence from the Parent Company

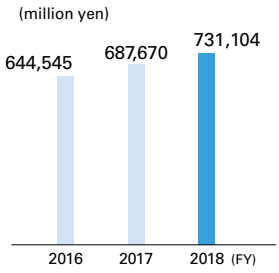
The Company executes business without restrictions from Hitachi, Ltd. Executive Officers have the authority to execute the business of the Company in individual areas, and more important decision-making issues are dealt with by order of the President and CEO after deliberation and approval by the Executive Committee, a consultative body comprised of key executive officers in accordance with internal rules. In this way, the Company ensures the independence of its decisions concerning the execution of business.

Furthermore, the Company's Board of Directors formulates basic policies and decides on particularly important matters. The Board, comprised of seven members, has no member who concurrently serves as director or executive officer for Hitachi, Ltd. In addition, we have appointed four Outside Directors who have been submitted to the Tokyo Stock Exchange as Independent Directors. In this way, we have a system in place to ensure the independence of management.

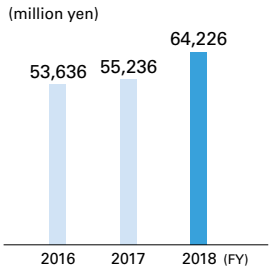
Note that, with regard to important transactions with Hitachi, Ltd., similarly to other regular transactions, we work to protect minority shareholders by monitoring fairness and appropriateness through checks by not just the relevant division, but by multiple divisions including the sales administration and accounting divisions.

At a Glance

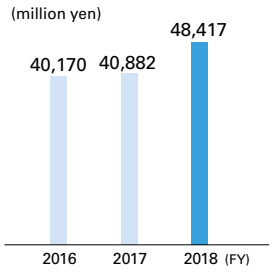
Revenues



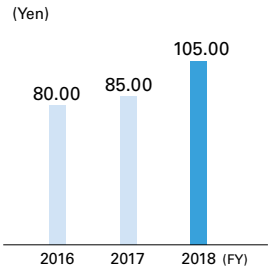
EBIT



Net Income Attributable to Hitachi High-Tech Corporation stockholders

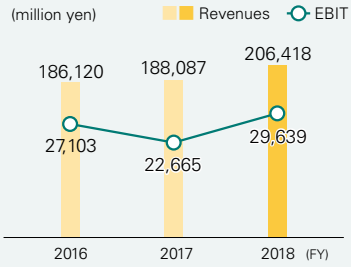


Cash Dividend per Share

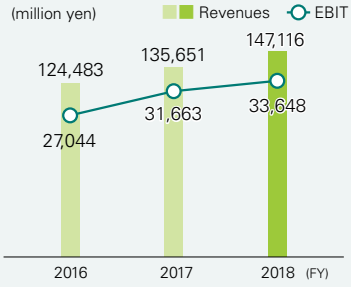


Segment	Changes in Revenues and EBIT

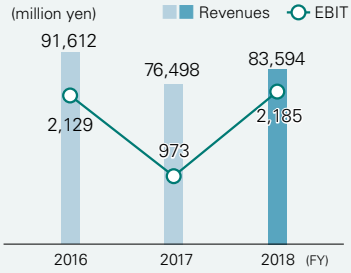
Science & Medical Systems



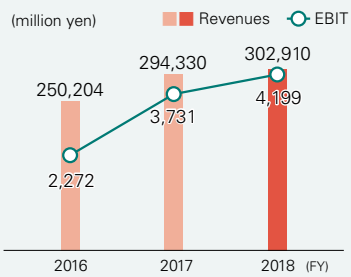
Electronic Device Systems



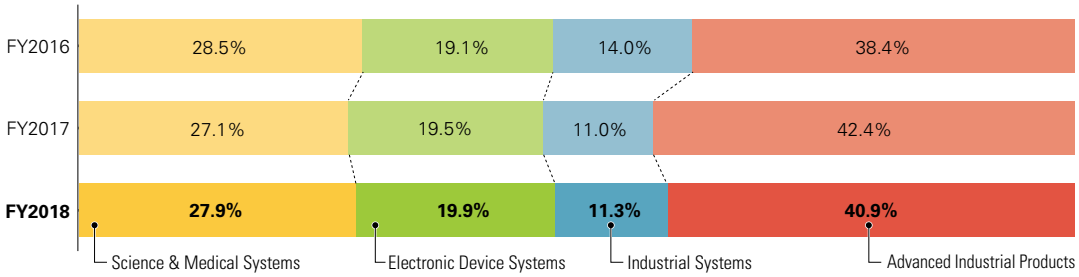
Industrial Systems



Advanced Industrial Products



Revenues Composition by Segment



Review of Operations

In the Biotechnology and Medical Products Business, revenues increased significantly year on year due to the completion of the temporary inventory adjustments for clinical analyzers in the supply chain with customers, as well as steady demand in the Asian market, especially China. In the Scientific Systems Business, revenues increased slightly due to the establishment of Hitachi High-Tech Analytical Science Ltd. in July 2017 following the acquisition of partial businesses' stock of Oxford Instruments plc Group in the UK, as well as steady sales of electron microscopes for semiconductor devices and batteries. Segment EBIT increased due to the growth in revenues.

In FY2018, amid the postponement of some investment plans by memory customers in the semiconductor manufacturing equipment market, in the Process Equipment Business revenues increased significantly due to robust sales for investment in mass production and next-generation cutting-edged processes. In the Metrology & Inspection Equipment Business, despite the impact from the slowdown in the memory, brisk sales of CD-SEMs and defect inspection systems resulted in a small increase in revenues. Segment EBIT increased due to growth in revenues.

In the Social Infrastructure Business, revenues held firm, as the increase in sales of control systems was offset by the decline in solar photovoltaic system EPC large projects. Increased sales of automobile component assembly systems and the capturing of a large project for liquid crystal display exposure systems in the Industrial Infrastructure Business resulted in an increase in revenues for the segment overall. Segment EBIT increased due to growth in revenues.

In the Energy & Industry Business, revenues declined significantly due to the decline in sales of optical communications related components and other factors, but as a result of brisk sales of both the Materials & Electronics Business and the Automobiles & Mobility Business, the overall segment revenues and EBIT increased.
Also, as a new initiative, we signed an agency agreement with JAPAN TESTING LABORATORIES, Inc. for "outsourcing technical service," where we will perform high-precision assessment of the reliability of products in the R&D stage.

Financial Highlights Hitachi High-Tech and Consolidated Subsidiaries

IFRS

(Millions of yen)

	FY2014	FY2015	FY2016	FY2017	FY2018
For the year:					
Revenues	619,632	628,984	644,545	687,670	**731,104**
Science & Medical Systems	164,264	176,997	186,120	188,087	**206,418**
Electronic Device Systems	105,893	102,711	124,483	135,651	**147,116**
Industrial Systems*1	–	98,549	91,612	76,498	**83,594**
Fine Technology Systems	11,354	–	—	—	**—**
Industrial & IT Systems	84,869	—	—	—	**—**
Advanced Industrial Products	258,110	256,822	250,204	294,330	**302,910**
Others & Adjustments	(4,857)	(6,094)	(7,874)	(6,896)	**(8,933)**
EBIT (Earnings before interest and taxes)	44,778	48,209	53,636	55,236	**64,226**
Net income attributable to Hitachi High-Tech Corporation stockholders	31,093	35,989	40,170	40,882	**48,417**
Cash flow from operating activities	34,426	18,541	60,519	29,221	**42,773**
Cash flow from investing activities	(9,277)	6,107	(28,908)	(12,993)	**(30,625)**
Free cash flow	25,149	24,648	31,612	16,228	**12,148**
Cash flow from financing activities	(5,662)	(7,120)	(10,464)	(12,742)	**(12,532)**
Capital expenditure	14,453	12,030	14,363	15,711	**24,500**
Depreciation	10,574	10,527	10,525	11,830	**13,154**
Research and Development	19,556	20,163	23,581	26,693	**30,797**
At the year-end:					
Total assets	536,705	531,032	587,751	623,335	**666,394**
Total Hitachi High-Tech Corporation stockholders' equity	301,378	320,790	356,913	390,063	**425,037**
Cash and cash equivalents	153,942	169,375	189,783	192,361	**191,478**
Number of employees (Persons)	10,012	9,902	10,317	10,898	**11,482**
Per share data (¥):					
Earnings attributable to Hitachi High-Tech Corporation stockholders	226.08	261.68	292.08	297.27	**352.06**
Total Hitachi High-Tech Corporation stockholders' equity	2,191.32	2,332.50	2,595.18	2,836.26	**3,090.59**
Cash dividend	45.00	65.00	80.00	85.00	**105.00**
Ratio:					
Income before income taxes ratio to revenues (%)	7.3	7.7	8.4	8.1	**8.9**
Total Hitachi High-Tech Corporation stockholders' equity ratio (%)	56.2	60.4	60.7	62.6	**63.8**
Return on equity (ROE)*2 (%)	10.9	11.6	11.9	10.9	**11.9**
Return on assets (ROA)*3 (%)	8.8	9.1	9.6	9.2	**10.0**
Price-earnings ratio (Times)	16.21	12.11	15.53	17.02	**12.88**

*1: From FY2016, Fine Technology Systems and Industrial & IT Systems were merged into Industrial Systems. In conjunction, Revenues for FY2015 are restated figures

*2: Return on equity (ROE) =Net income attributable to Hitachi High-Tech Corporation stockholders /Total Hitachi High-Tech Corporation stockholders´ equity (average of beginning and end fiscal year)

*3: Return on assets (ROA) =Income before income taxes /Total assets (average of beginning and end fiscal year)

Non-Financial Highlights

Employee Diversity*1

		Unit	FY2014	FY2015	FY2016	FY2017	FY2018
Non-consolidated employees		Person	3,768	3,711	3,811	3,964	**4,134**
Male		Person	3,213	3,161	3,236	3,354	**3,452**
Female		Person	555	550	575	610	**682**
Overseas		Person	34	32	39	40	**49**
Average age		Age	42.4	42.5	42.8	43.1	**43.1**
Male		Age	42.6	42.7	43.0	43.3	**43.2**
Female		Age	41.3	42.3	42.5	42.4	**42.1**
Years of employment		Year	19.3	19.7	19.8	19.6	**19.2**
Male		Year	19.6	20.1	20.2	20.1	**19.7**
Female		Year	17.1	18.4	18.4	17.7	**17.0**
Managers	Male	Person	1,029	1,046	1,027	1,043	**1,057**
	Female	Person	27	36	41	44	**51**
Managers at the level of department chief or above	Male	Person	228	239	236	250	**265**
	Female	Person	5	6	6	6	**8**
Ratio of women in managerial positions		%	2.6	3.3	3.8	4.0	**4.6**
Ratio of employees with disabilities*2		%	2.19	2.36	2.57	2.65	**2.53**
New employees hired for regular positions <Graduates>		Person	53	45	62	63	**91**
Women included in above figure		Person	12	12	22	19	**30**
Of the women those who majored in science		Person	5	7	11	10	**9**
Overseas included in above figure		Person	0	2	8	2	**5**
New employees hired for regular positions <Experienced personnel>		Person	5	17	33	71	**92**
Number of employees leaving the Company*3		Person	59	58	40	39	**57**

Working Styles Situation*1

	Unit	FY2014	FY2015	FY2016	FY2017	FY2018
Reduced working hours	Person	90	84	80	77	**76**
Leave of absence for childcare purposes (Men included in above figure)	Person	41 (1)	38 (0)	43 (3)	46 (2)	**47 (3)**
Rate of return after leave of absence for childcare purposes	%	93.0	94.7	100.0	91.0	**90.7**
Leave of absence for nursing care purposes	Person	4	1	2	2	**4**
Male	Person	2	1	0	1	**2**
Female	Person	2	0	2	1	**2**
Number of vacation days taken	Day	14.6	15.8	16.6	18.0	**17.5**
Ratio of vacation taken	%	62.5	65.0	69.0	75.0	**72.9**
Hours of overtime (averaged among labor union members)	Hour/Month	30.5	28.7	27.7	25.7	**25.6**

Local Community

	Unit	FY2014	FY2015	FY2016	FY2017	FY2018
CSR expenditures*4	Million Yen	51	48	77	98	**90**
Science classes in Japan*5	Person	1,969	2,948	8,007	11,069	**12,388**

*1 Results for Hitachi High-Tech (non-consolidated) *2 Results for consolidated domestic companies
*3 Not including transfers and other (voluntary retirement, involuntary retirement)
*4 Total expenditures on operation of voluntary programs, as well as employee participation, dispatch, and donations to CSR activities
*5 Participants from FY2016 include equipment users during visits to Super Science High Schools

Environment

	Unit	FY2014	FY2015	FY2016	FY2017	FY2018
Volume of CO_2 emissions from domestic manufacturing sites	t-CO_2	40,190	41,106	42,539	41,394	**42,043**
Volume of CO_2 emissions outside Japan	t-CO_2	9,601	7,403	8,871	9,614	**8,911**
CO_2 emissions per unit of revenues from domestic manufacturing sites	t-CO_2/ Million Yen	0.165	0.158	0.141	0.133	**0.124**
Amount of decrease in CO_2 emissions from products	Million t-CO_2	0.22	0.28	0.29	0.30	**0.31**
Energy usage in Japan (Crude oil equivalent)	kl	17,658	18,829	19,876	21,336*1	**22,162**
Energy usage improvement rate per unit of sales in Japan (Crude oil equivalent) compared to FY2005	%	36.0	34.6	42.9	45.3	**45.6**
Energy usage outside Japan (Crude oil equivalent)*2	kl	—	3,086	3,730	4,118	**4,598**
Amount of raw materials used	t	—	2,126	2,742	2,919	**2,293**
Volume of waste generated from manufacturing sites in Japan	t	1,882	2,013	2,445	2,519	**2,632**
Waste disposal ratio in Japan	%	0.03	0.02	0.01	0.02	**0.02**
Volume of waste generated outside Japan	t	210	154	168	46*3	**46**
Water consumption from domestic manufacturing sites	m^3	344,309	392,366	403,333	436,736	**446,696**
Water consumption outside Japan	m^3	30,514	35,517	39,908	39,400*4	**49,993***5
Volume of VOC*6 emissions in Japan	t	5.7	4.4	4.4*7	4.0*7	**3.8**
Environmental conservation costs in Japan*8	Million Yen	2,603	2,411	2,824	3,303	**3,594**
Environmental conservation effects in Japan (Economic effects)*8	Million Yen	85	51	60	83	**62**
Environmental investment costs in Japan*9	Million Yen	579	533	601	747	**672**

*1 Due to an expansion of the boundary *2 Data collection started from FY2015

*3 Figures from FY 2017 include hazardous waste generated from manufacturing sites only. Figures up to FY2016 include waste generated from manufacturing and non-manufacturing sites

*4 From FY2017, for water consumption at sales bases where water consumption is not measurable, water consumption is estimated based on the calculation of sales bases where water consumption is measureable and the number of employees

*5 Due to an increase in the number of sites and that of sales offices that measure the actual amount of water, rather than relying on estimations

*6 VOC: Volatile organic compounds

*7 Figures for FY2016 and FY2017 have been revised from 4.2 and 3.8, respectively, as a result of correcting erroneous data for some sites

*8 Environmental Conservation Costs in Japan, and Environmental Conservation Effects in Japan (Economic Effects): Amount invested in, and costs arising in relation to, prevention, minimization, and avoidance of environmental impact, clean-up, recovery after accidents, and initiatives that contribute to such, as well as economic effects of such

*9 Environmental Investment Costs in Japan: Environmental conservation costs relating to capital investment for complying with environmental laws and regulations and reducing environmental impact

Selected for ESG Index (as of July 2019)

In July 2019, Hitachi High-Tech was selected three years in a low for inclusion in all ESG investment index (a share price index for ESG investments) adopted by the Government Pension Investment Fund (GPIF)*. ESG investment focuses on selecting and investing in companies that take Environment, Social and Governance issues into consideration. ESG investing has been in focus recently as an approach that promotes sustainable growth and medium- to long-term earnings, as well as effectively eliminating risks that are not easily discernable through financial statements.

In addition, the Company has also been selected as a component stock of the following ESG and sustainability indexes.

FTSE4Good

FTSE Blossom Japan

MSCI 2019 Constituent MSCI ESG Leaders Indexes

MSCI MSCI Japan ESG Select Leaders Index

MSCI MSCI Japan Empowering Women Index (WIN)

October 10, 2019 – Hitachi High-Tech Corporation announces it has been included in the FTSE Blossom Japan Index. Created by the global index company FTSE Russell, the FTSE Blossom Japan Index is designed as an industry neutral benchmark that reflects the performance of companies demonstrating strong environmental, social and governance (ESG) practices in Japan. FTSE Russell evaluations are based on performance in areas such as Corporate Governance, Health & Safety, Anti-Corruption and Climate Change. Businesses included in the FTSE Blossom Japan Index meet a variety of environmental, social and governance criteria.

*Government Pension Investment Fund: An independent fund under the Ministry of Health, Labour and Welfare that manages and operates pension funds accumulated through employees' pensions and the national pension.

Company Data/Stock Information (As of end of March 2019)

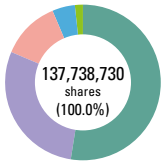
Company Data

Date of Establishment	April 12, 1947
Paid-in Capital	¥7,938 million
Number of Employees	Consolidated: 11,482 Non-consolidated company: 4,134

Stock Information

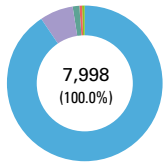
Number of Shares Authorized	350,000,000 shares
Number of Issued Shares	137,738,730 shares
Ordinary General Meeting of Shareholders	June every year
Stock Exchange Listings	Tokyo Stock Exchange, 1st Section
Accounting Auditor	Ernst & Young ShinNihon LLC

Shareholders Composition (Share Ownership)



Domestic corporations, etc.	72,490,994 shares	52.6%
Foreign investors	39,623,344 shares	28.8%
Financial institutions	16,930,600 shares	12.3%
Individuals	6,691,039 shares	4.9%
Securities firms	2,002,753 shares	1.4%

Shareholders Composition (Number of Shareholders)



Individuals	7,255	90.7%
Foreign investors	560	7.0%
Domestic corporations, etc.	110	1.4%
Financial institutions	42	0.5%
Securities firms	31	0.4%

10 Largest Shareholders

Name	Shareholdings (Shares)	Shareholdings Ratio (%)
Hitachi, Ltd.	71,135,619	51.73
Japan Trustee Services Bank, Ltd. (Trust Account)	4,622,200	3.36
The Master Trust Bank of Japan, Ltd. (Trust Account)	4,532,600	3.30
GOLDMAN, SACHS & CO. REG	4,146,970	3.02
SSBTC CLIENT OMNIBUS ACCOUNT	1,627,673	1.18
Hitachi High-Technologies Corp.'s Shareholding Association	1,483,669	1.08
STATE STREET BANK AND TRUST COMPANY 505001	1,250,085	0.91
Japan Trustee Services Bank, Ltd. (Trust Account 7)	1,228,100	0.89
Japan Trustee Services Bank, Ltd. (Trust Account 5)	1,177,000	0.86
STATE STREET BANK WEST CLIENT – TREATY 505234	1,081,917	0.79

* Shareholding ratio is calculated by deducting treasury stock (212, 550 shares).

Group Companies (As of February 2020)

Japan

Hitachi High-Tech Corporation

Domestic Group Companies
Hitachi High-Tech Solutions Corporation
Hitachi High-Tech Materials Corporation
Hitachi High-Tech Support Corporation
Hitachi High-Tech Fielding Corporation
Hitachi High-Tech Fine Systems Corporation
Hitachi High-Tech Manufacturing & Service Corporation
Hitachi High-Tech Science Corporation
Hitachi High-Tech Kyushu Corporation
Giesecke & Devrient Kabushiki Kaisha
Chorus Call Asia Corporation
NeU Corporation

Europe

Hitachi High-Tech Europe GmbH
Hitachi High-Tech RUS Limited Liability Company
Hitachi High-Tech Ireland Limited
Hitachi High-Tech Analytical Science Ltd.
Hitachi High-Tech Analytical Science GmbH
Hitachi High-Tech Analytical Science Finland Oy

North America

Hitachi High-Tech America, Inc.
Hitachi High-Tech Science America, Inc.
Hitachi High-Tech Analytical Science America, Inc.
Applied Physics Technologies, Inc.
Hitachi High-Tech Canada, Inc.
MagArray, Inc.

Asia

Hitachi High-Tech (Singapore) Pte. Ltd.
Hitachi High-Tech IPC (Malaysia) Sdn. Bhd.
Hitachi High-Tech (Thailand) Ltd.
Smart Factory & Services Holdings (Thailand) Co., Ltd.
Hitachi High-Tech Amata Smart Services Co., Ltd.
PT. Hitachi High-Tech Indonesia
Hitachi High-Tech India Private Limited
Hitachi High-Tech (Shanghai) Co., Ltd.
Hitachi High-Tech Diagnostics (Shanghai) Co., Ltd.
Hitachi High-Tech Hong Kong Limited
Hitachi High-Tech (Shenzhen) Co., Ltd.
Hitachi High-Tech Analytical Science Shanghai Co., Limited
Hitachi High-Tech Korea Co., Ltd.
Hitachi High-Tech Taiwan Corporation
Hitachi Instrument (Suzhou), Ltd.
Hitachi Instruments (Dalian) Co., Ltd.

Other Regions

Hitachi High-Tech Mexico, S.A. de C.V.
Hitachi High-Tech do Brasil Ltda.
Hitachi High-Tech Steel do Brasil Ltda.
H.H.T.A. Semiconductor Equipment Israel, Ltd.

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