Hitachi High-Tech



Integrated Annual Report 2018 **®** Hitachi High-Technologies Corporation

Corporate Vision

To consistently aim to be Global Top in high-tech solutions

The Hitachi High-Tech Group is a cutting-edge technology company with dual manufacturing and trading functions.

It is our mission to serve our customers so that they can be the best creators of cutting-edge business, by providing society with the best solutions.

Basic Philosophy

Hitachi High-Technologies 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.

Editorial Policy

Hitachi High-Technologies Corporation 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 2018 has added an explanation on the process of identifying Materiality, reports on the progress of the Mid-term Management Strategy and provides more substantial non-financial information as well as describes the Company's awareness of both business and management bases and issues related to them. The report was produced with an awareness of raising understanding of the 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-Technologies Corporation, its 38 subsidiaries and 4 affiliated companies

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

Reporting Period

This report covers FY2017 (from April 1, 2017 to March 31, 2018). However, it includes descriptions of some activities that occurred before or after FY2017.

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 nonfinancial information being disclosed. Please refer to the CSR section of the corporate website for the "Independent Assurance Report."

Publication

September 2018

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.

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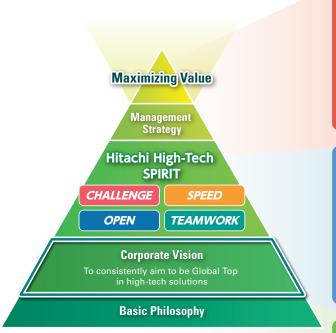
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History of Creating Value

Hitachi High-Technologies Corporation 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.

2001

Hitachi High-Tech WAY



The Hitachi High-Tech Group provides stakeholders, including customers, with maximized value through the practical application of the Hitachi High-Tech WAY (employees sharing and putting into practice the Group's philosophy, values and strategies).

Providing High-Tech

















Trajectory of the Hitachi High-Tech Group

October 2001

The Beginning

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

October 2001 -

Laying the Groundwork for Integration

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.

April 2004 -

Operational Reform and Rapid Growth

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.

April 2008 -

Responding to a Rapidly Changing Market

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.

Solutions

2017





ETHOS high-performance composite FIB-SEM system



Lumione BL-1000 analyzer for rapid testing of microbial content



Railway-related FVC services (collaboration with a Chinese interior manufacturer)



LS9300 Series wafer surface inspection system



CG6300 advanced CD-SEM

Hitachi High-Tech's Strengths are Improved through Provision of High-Tech Solutions Based on Sharing the Group's Vision, Philosophy and Values.

The Hitachi High-Tech Group continues in its pursuit to answer what it can do to become a cutting-edge, frontline business creation company for customers and how it can add unique value.

It is because employees share the philosophy and values of the Hitachi High-Tech WAY, including a spirit of "customers first," that has enabled our growth into a company with global top-class products and technologies capable of continuing to provide society with a variety of high-tech solutions.

The Hitachi High-Tech Group leverages its uniquely cultivated strengths of technological capabilities, global sales and procurement capabilities, through collaboration with customers and partners to be a company that is truly needed by society and to continue creating new value.



* Technological Capabilities: measurement and analysis technologies, automation and control technologies, manufacturing capabilities

April 2010 -

Business Restructuring for the Coming Decade

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."

April 2014 -

Toward a New Stage of Growth

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.

April 2016 -

The Next 15 Years and Beyond

Hitachi High-Tech formulated the 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.

Hitachi High-Tech's Strengths

The Hitachi High-Tech Group provides high-tech solutions through its continuously honed unique strengths of technological capabilities, global sales and procurement capabilities, collaboration with customers and partners, and the pursuit of creating high-tech solutions that maximize value for customers.







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 "observing, measuring, and analyzing" things are strengths at the heart of Hitachi High-Tech. And by using our world-class technological capabilities and R&D capabilities to raise our core technologies to a level capable of solving issues in cutting-edge domains at the time and customizing them for specific applications we have continually refined our technological capabilities. Moreover, the manufacturing capabilities fusing automation and contro 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 it 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, trade relationships, and personal connections we have established around the globe to stay abreast 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 19 locations in Japan. We procure components from around the world to meet the needs of our customers, and provide high value-added solutions by utilizing the personal connections, trade relationships, and know-how that we have developed at each location.

Our customer focused sales activities are a strength that enables us to accurately grasp what issues our customers face. And by providing the best solutions capitalizing on our engineering capabilities, the loT*, and solutions capabilities, we help our customers to become who they want to become. Further, 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 our approximately 4,200 suppliers to deliver high added-value 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. Also, in the Biotechnology and Medical Products Business we are going 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. Even from the standpoint of production component procurement, our solid partnerships with suppliers built up over many years enabling stable procurement of high-quality components is tied to the high levels of function, 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 robust relationships of trust.

Business Development Utilizing Hitachi High-Tech's Strengths

Healthea

In-Vitro Diagnostics

The 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 procurement capabilities and through 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.

New Materials
Security

Nanomaterials/ High-performance materials manufacturers

Chemical/Steel/Food/ Pharmaceutical manufacturers

Universities/Public offices Research institutes

Biotechnology companies

Scientific Systems

Science & Medical Systems

Reagent manufacturers

Business

Segment

Analytical instruments

Electron microscopes Measurement and analytical instruments

Hospital/Research institutes/ Clinical laboratories

Collaboration with Customers and

Partners

Biotechnology and Medical Products

Medical and life science products

Automated clinical chemistry
and immunodiagnostic analyzers
Genetic and bacterial testing
systems
DNA sequencers

Spectroscopic

Sansar tachnalagy

Core Technologies / Trading Company Strengths

Main Bases with Core Technologies

Naka Division (Hitachinaka-shi, Ibaraki Prefecture)

Business Fields



Electron beam technology

Spectroscopic analytical technology

Sensor 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)

Core Products /

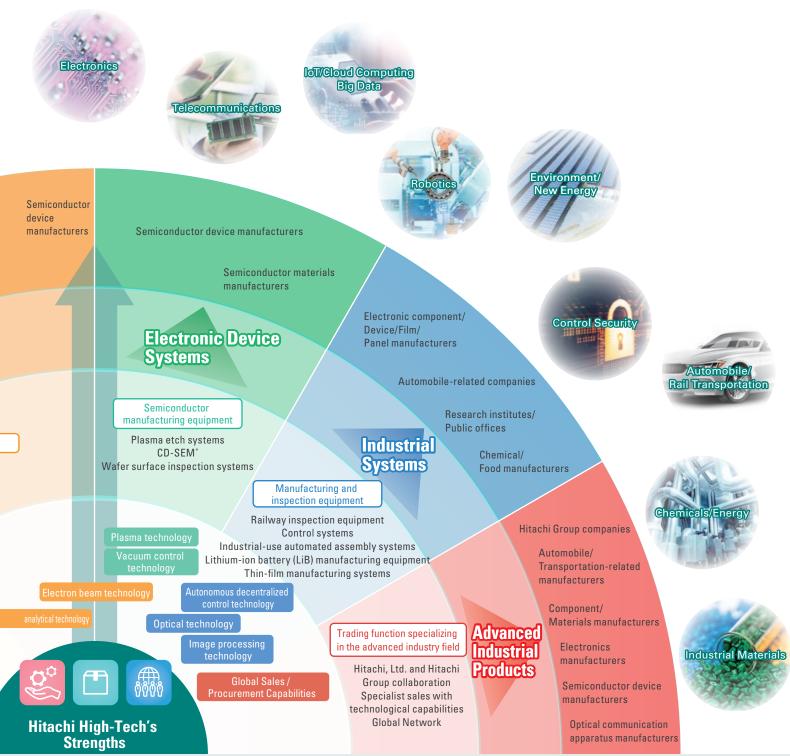
Trading Company Functions



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.



* 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

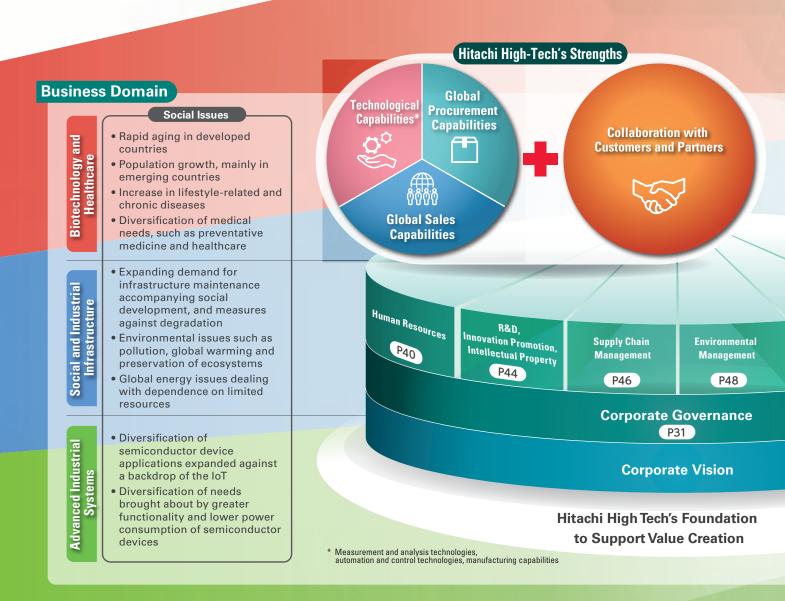
Image processing technology

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

The Hitachi High-Tech Group provides high-tech solutions through its unique strengths of technological capabilities, global sales and procurement capabilities, through collaboration with customers and partners, and through business development that anticipates customer evolution.

Furthermore, assisting our customers to realize their maximum value leads to the solution of social issues and increased corporate value, and we are working to strengthen our management infrastructure, such as Human Resources and R&D (Research and Development), in order to achieve this value creation.



Business **Development Anticipating Customer Evolution** Mid-Term Management Strategy) **Providing High-Tech Solutions** Finance Communications with Local P54 Communities P52 P18~29

Creating Value

Increasing Corporate Value

Helping Solve Social Issues

Maximizing Customer Value

- Provide accumulated technological capabilities to clinical chemistry and immunodiagnostic analyzers that carry out swift and accurate blood sample analysis
- Development of genetic and bacterial testing devices using the world-class analysis technologies
- Fusion of IoT technologies to build safer and more reliable and comfortable general control systems and railway inspection systems
- Dedicated testing equipment contributing to the environmental field
- Scientific instruments supporting cutting-edge technologies such as new materials development
- Provide value chain solutions supporting customers' production frameworks by leveraging global sales and procurement capabilities
- Respond to new domains and needs for semiconductor devices using electron beam, plasma and vacuum control technologies cultivated over many years
- Cutting-edge process technologies developed through collaboration with customers at overseas development bases

The Hitachi High-Tech Group's Materiality

"Materiality" refers to topics for important CSR initiatives that have been selected through a specific process. Incorporating materiality into business strategy is an essential management issue if companies are to help solve social problems and grow by continuously increasing corporate value.

The Hitachi High-Tech Group has defined Materiality to clarify how the Group can be of use in the world and what kind of social issues it can solve leveraging its business characteristics, business models, and so forth, in response to societal demands.

Process of Identifying Materiality

Step 1

Identifying Social Issues

Prepare a list of social issues taking into account the SDGs, ISO 26000*1 and results of in-house surveys, etc.

*1 ISO 26000: An international standard regarding the social responsibilities of organizations, published by the International Standards Organization (ISO) in 2010

Step 2

Evaluating the Importance of Social Issues

Prioritize social issues identified in Step 1 from the perspective of societal demands and their importance to business.

Step 2: Evaluating the Importance of Social Issues

Discussion sessions were held to validate both risks and opportunities related to the list of social issues drawn up in Step 1 from the perspective of societal demands and their importance to business. A "Materiality Evaluation Map" was then created.

Participants in the discussion sessions

The heads of each business group, planning and development divisions, and the general managers and managers of other relevant corporate divisions



Discussion session



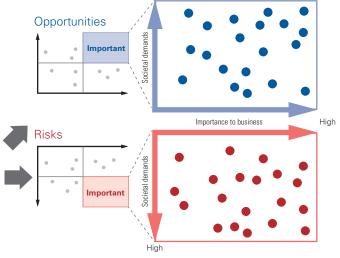
Examples of materiality evaluation maps organizing social issues made by groups in terms of opportunities and risks

Step 3: Preparing the Draft Materiality

Each of the social issues prioritized in Step 2 were reevaluated and discussed from the viewpoint of the Hitachi High-Tech Group as a whole, and the draft materiality prepared based on the materiality evaluation maps.

Participants in the discussion sessions

The general managers and managers of the strategy divisions of each business group and relevant corporate divisions



The materiality evaluation maps created in Step 2 were discussed again, with social issues identified as particularly important in terms of opportunities and risks serving as the base for preparing the draft materiality.

Context for Identifying Materiality

Global-level risks and social issues such as climate change, diminishing resources, as well as economic inequality, poverty and human rights problems, are having a significant impact on the stability of peoples' everyday lives, the economy and markets. At the same time, the effect of corporate activities on society has grown, and a company's environmental, social and governance (ESG) efforts have become the focus of attention in evaluating corporate behavior.

Given these circumstances, there is now a shared, global awareness that companies should take the initiative in working to solve social problems. The Hitachi High-Tech Group has developed its business to date based on the philosophy of contributing to social progress through our business activities.

In engaging in its ESG initiatives, the Hitachi High-Tech Group needed to have a solid understanding of current social changes and demands, and to clarify what we need to do as a company continually chosen by customers worldwide and needed by society. We thus began work to identify materiality, based on Sustainable Development Goals (SDGs*), a set of common international rules positioned as targets to be achieved.

* 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.

Step 3

Preparing the Draft Materiality

Collate and prioritize the social issues and prepare a draft of materiality that the Hitachi High-Tech Group should address, incorporating a social issue orientation and a view to what is optimal for the Group.

Step 4

Assessing the Validity of the Draft Materiality

To ensure objectivity of draft materiality, conduct an exchange of opinions with outside experts in assessing its validity.

Step 5

Identifying Materiality

Submit the draft materiality to the CSR Promotion Committee*2, in which management participates, and identify Materiality.

*2 CSR Promotion Committee: The committee responsible for discussing the Hitachi High-Tech Group's CSR activities in general and deliberating CSR measures.

Step 4: Assessing the Validity of the Draft Materiality

Outside experts were invited to join a discussion session with the CEO, the director in charge of CSR and others regarding the draft materiality created in Step 3. The discussions focused on adjustments to the relative importance of the social issues from the perspective of our stakeholders and on checking for any excesses or deficiencies. These were then reflected in the materiality evaluation maps as work proceeded on identifying and finalizing Materiality.



Discussion session with outside experts

Key opinions from the validity evaluation meeting with experts (excerpted)

- The process of identifying Materiality was based on discussions with key people across a wide range of divisions, a careful and commendable approach.
- Tying the Hitachi High-Tech Group's business fields with the SDGs will further deepen stakeholder understanding of the Group's corporate identity and its medium to long-term growth potential.

Step 5: Identifying Materiality

Five Materiality were identified following approval of management at a meeting of the Hitachi High-Tech Group's CSR Promotion Committee.

Materiality 1 Contributing to a sustainable global environment Materiality 2 Materiality 3 Contributing to Contributing to the sustained healthy, safe, development of secure lives science and industry Materiality 5 Materiality 4 **Developing and** Establishing a utilizing diverse sound management human foundation resources

Hitachi High-Tech's Materiality

Materiality identified over multiple discussion sessions clarify important areas in which utilizing the Hitachi High-Tech Group's strengths can contribute to achieving maximum value for our customers and to solving social issues, as we grow alongside society and our customers and continually increase our corporate value.

"Contributing to a sustainable global environment" was chosen in light of the growing seriousness of environmental problems, including climate change, dwindling resources, biodiversity and other issues. We believe that only by protecting the global environment can society and sound markets function, making our business and our daily lives possible.

"Contributing to healthy, safe, secure lives" and "Contributing to the sustained development of science and industry" both have a particularly strong focus on ties to our business. As the world works to form a sustainable society, there is a shared global awareness that international society should collaborate in that effort, and companies are also expected to take advantage of their particular business characteristics and strengths in making their own contributions. The Hitachi High-Tech Group's strength is its technological capabilities, which are indispensable across a wide range of fields, from biotechnology and medical, to telecommunications and the environment. We believe that further advancing those capabilities will not only contribute to society and our customers, but will lead to significant growth for the Group itself. This is why these two themes were selected.

Finally, "Establishing a sound management foundation" and "Developing and utilizing diverse human resources" were identified as key priorities because both efforts are indispensable to our sustained growth.



Relationship between Materiality, Activity Goals and SDGs

| | Materiality | Activity Goals | SDGs |
|---|---|---|---|
| 1 | Contributing to a sustainable global environment | Realize a low-carbon society Realize a recycling-oriented society Realize a society in harmony with nature | 13 ALMATE |
| 2 | Contributing to healthy, safe, secure lives | Expand access to preventive medicine Ensure the safety of water and food Ensure the safety of social infrastructure | 3 GOOD HEALTH 9 MOUSTLY ENGLANDING |
| 3 | Contributing to the sustained development of science and industry | Development of science and technology High-efficiency production sites Global development of production technology | 4 GUALITY DICATION 9 MOUSTRY INFOVATION ANOISFASTRICTURE |
| 4 | Establishing a sound management foundation | Realize sound governance Ensure product safety Realize a CSR-based supply chain | 12 RESPONSIBLE CONSUMPTION AND PRODUCTION TO PROTECT THE GOALS TO PROTECT THE GOALS |
| 5 | Developing and utilizing diverse human resources | Promote diversity management Promote diverse cultivation of human resources Ensure healthy, safe workplace environments | 5 GENDERY ROUNLITY 8 DECENT WORK AND ECONOMIC GROWTH |

Note: Of the 17 goals and 169 targets of the SDGs, we have selected those to which the activity goals of Materiality can contribute directly. We will also contribute indirectly to other goals.

. Outside Expert Comments

Kaori Kuroda, the executive director of CSO Network Japan, participated in the validity evaluation meetings. We asked her to assess Materiality identified in that process and her expectations going forward.

Because Materiality were identified through a careful approach that also involved key people both in and outside Japan, they reflect the company's strategies and business characteristics and are thus very convincing. The activity goals the Group has established are neither excessive nor deficient, and provide balanced coverage of the required items. The effort to offer goals that contribute directly to the SDGs is also commendable.

In terms of future expectations, cooperation with stakeholders, as noted in the Goal 17 of the SDGs, is one. There is a limit to what individual companies can do to achieve the SDGs on their own, and I think collaboration with a variety of stakeholders is crucial. From what I've seen, the Group's collaborations with its customers and partners are functioning effectively, but I hope to see the Group cooperate with other stakeholders going forward.



Kaori Kuroda, Executive Director, CSO Network Japan

Kaori Kuroda

Profile: Worked at the Center on Japanese Economy and Business at the Columbia University School of Business and at the Asia Foundation, a US-based NGO, before joining CSO Network Japan, which promotes the creation of a global network of civil organizations in the areas of international cooperation and development, in 2003. She also serves as the Japan NGO expert in drafting ISO 26000.

CSO Network Japan

To build a society in which the dignity of every individual, even the impoverished, is assured, CSO Network Japan participates in global campaigns to eradicate poverty, working in collaboration with civil society organizations (CSOs) in Japan and a diverse range of other stakeholders. In addition to conducting surveys and research into civil society, the organization works to promote corporate social responsibility (CSR), study private-sector development support, and encourage collaboration between divergent sectors including companies, NPOs and NGOs

Future Developments

Going forward, the Hitachi High-Tech Group will work to gain a solid understanding of the impact of its business on society, and to formulate a medium to long-term management strategy incorporating Materiality. In doing so, we will endeavor to create new markets and capture new business opportunities through the resolution of social issues, while aiming to continually enhance corporate value. The Hitachi High-Tech Group will play a proactive role in achieving the SDGs as we aim to be a company that is regarded as indispensable.

We work to address society's demands head-on to be a company continually chosen by customers worldwide and needed by society.

: Hitachi High-Tech's Raison d'Être

We provide value in the form of the best solutions for customers and society that capitalize on our strengths. And by continuously honing our strengths as we strive to maximize the value we deliver, the Hitachi High-Technologies Corporation will realize sustainable growth.

Hitachi High-Tech has progressed alongside the start of the 21st century as a cutting-edge technology company with trading and manufacturing functions. Hitachi High-Tech was created in October 2001 through the merger of the Instruments Group and Semiconductor Manufacturing Equipment Group of Hitachi, Ltd. with Nissei Sangyo Co., Ltd., a trading company specializing in the field of advanced industry.

The Group operates globally guided by its corporate vision "To consistently aim to be Global Top in high-tech solutions"

and mission "To serve our customers so that they can be the best creators of cutting-edge business," by providing society with the best solutions

Our core business domain is cutting-edge fields where competition is tough and markets are global and that change at breakneck speed. To evolve further as an enterprise with world-leading products and technologies and achieve our mission to a high degree, I believe we need to tirelessly refine our strengths-technological capabilities, global sales and procurement capabilities, and collaboration with customers and partners. We must also keep asking "What can we do to provide the best solutions to our customers and society?" While sincerely pursuing that theme, we aim to contribute to our customers' business creation and an abundant society.

... Fueling Hitachi High-Tech's Sustainable Growth

For us to keep growing, we need to keep building up and bolstering our ability to respond to society.

Global economic development and an increasingly borderless society are among trends that are enriching people's lives. Conversely, climate change, resource depletion, economic disparity, poverty, human rights issues, and other global risks and social issues are significantly affecting the stability of economies, markets, and our everyday lives.

I think that in this climate we need to have the ability to respond to society. That includes being able to swiftly and flexibly respond to changes in the business and economic environment, solve problems for customers and society through our operations, foresee societal change, examine things optimally overall, and create an organization enabling global business advancement and diverse work styles. It also encompasses the ability to meet society's demands and expectations as well as fulfil our social responsibilities. I believe that gaining and constantly building on such capabilities to respond to a changing society is crucial for us to grow sustainably as a company.

Hitachi High-Tech has steadily built on its growth since its establishment, employing its ability to respond to society to overcome numerous challenges along the way. However, I think our business environment is going to be marked by even more diverse and complex social issues moving forward. With societal frameworks dramatically changing, I believe the Group should now once again bolster its ability to respond to society to sustain growth and head for the next growth stage.

The Hitachi High-Tech Group has defined Materiality to clarify how the Group can be of use in the world and what kind of social issues it can solve leveraging its business characteristics, business models, and so forth.

The Hitachi High-Tech Group has identified material issues it should work on to solve social issues. The process entailed a series of discussions, not just with top management but also business department and site leaders, about what we should do to be a company continually chosen by customers worldwide and needed by society, taking into account the Sustainable Development Goals (SDGs), which establish targets to be achieved and common rules for international society in the 21st century.

In determining Materiality, we gave utmost consideration to resolving environmental issues from the perspective of the global environment being the foundation for a sound society and business. In addition, we further clarified a shift from CSR to CSV*, that is, we emphasized the development of business that is useful to the world and solving social issues. The 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 businesses in these fields, we will contribute to society and our customers while laying a path for our own substantial growth. I believe initiatives in five areas of Materiality that we have identified will be crucial for us to grow while continually enhancing our corporate value

Based on this Materiality, we will further demonstrate our ability to respond to society by maximizing the value we deliver to society while firmly grasping and managing the impact our business activities have on society, thereby also contributing to achievement of the SGDs.

* CSV (Creating Shared Value): A concept in which a company proactively undertakes initiatives towards resolving societal issues and others, creating value towards society that in turn generates economic value.

Hitachi High-Tech aspires to be a company that is regarded as indispensable.

The Hitachi High-Tech Group posted record-high revenues and EBIT two years in a row in 2016 and 2017, while actively investing to strengthen its operating foundation and realize sustainable growth. We will keep investing to bolster our growth and foundation, with the aim of providing returns to stakeholders.

I think the greatest key to sustainable growth is being a flexible, tenacious entity that is unswayed by economic or other circumstances. In other words, the ability to respond to society is crucial. There are still plenty of areas where we need to improve including in terms of establishing a sound management foundation and promoting diversity, and tackling those challenges is a top management priority.

I have constantly been saying internally that "Hitachi High-Tech aspires to be a company that is regarded as indispensable." The purpose of our existence in society is to be of use to society and to be regarded as necessary by society. It is to contribute to society and engage in business that changes society for the better. And sticking to that is important. We will keep working to build a prosperous community in keeping with our basic philosophy of aiming 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.

SUSTAINABLE GENERAL DEVELOPMENT





























Hitachi High-Technologies Corporation President and CEO

Masahiro Miyazaki

Status of Progress on the Mid-Term Management Strategy



Shinji Sato Senior Vice President and Executive Officer

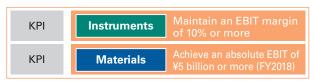
The Mid-Term Management Strategy designates the three years from FY2016 to FY2018 as an important period for the formation of the growth cycle leading up to 2020. It looks to secure a steady stream of earnings in core businesses in tandem with advancing investment and reinforcing resources leading to the next generation. Regarding the Mid-Term Management Strategy's KPI*1, revenues, profitability, and the service ratio are basically on track. But there are some items where progress is projected to fall short, so we will keep executing the growth strategy with the aim of achieving all KPI. We intend to make more R&D and capital expenditures than initially planned as we continue aggressively investing in the next generation of growth.

With globalization, the advance of IT, diversification, and acceleration of change further transforming the business landscape, the Hitachi High-Tech Group will stick with its "Challenge to Change" to accomplish its mission to make maximum contributions to turn its customers into the best creators of cutting-edge businesses. To help resolve social issues through our businesses by continuing to lead customers in providing value and maximizing customers' value, we will vigorously take on the challenge of achieving our Mid-Term Management Strategy.

KPI Achieve progress beyond market growth

| FY2015-FY2018 (CAGR) | Market*3 | Hitachi High-Tech Forecast |
|---|----------|-------------------------------|
| (1) Biochemistry & immunodiagnostic testing | 4%* | 3% |
| (2) Scientific instruments | 4% | 7% |
| (3) Front-end semiconductor manufacturing equipment | 13%** | 18% |

- * Equipment and reagents cumulative total
- *2 CAGR: Compound Average Growth Rate
- *3 Hitachi High-Tech estimates for market growth based on various reports



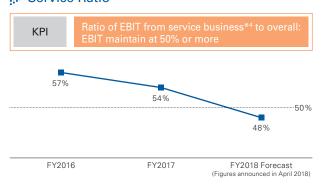
Instruments: Science & Medical Systems, Electronic Device Systems, Industrial Systems Materials: Advanced Industrial Products

- (1) Instruments (2) Materials ¥5.0 billion ¥5.0 billion ¥3.7 billion 14% ¥2.3 billion 13% 13% 10% FY2018 Forecast (Figures announced in April 2018)

- (1) In Instruments, KPIs look attainable as sales of CD-SEMs are brisk in Electronic Device Systems.
- (2) In Materials, KPIs look attainable as sales of components related to semiconductors and automobiles are solid in Advanced Industrial Products.

- Science & Medical Systems-related markets
- (1) Forecast progress slightly behind market growth in biochemical and immunodiagnostics testing (total for equipment and reagents)
- (2) Forecast progress well above market growth in scientific instruments
- Electronic Device Systems-related markets
- (3) Forecast progress well above market growth in front-end semiconductor manufacturing equipment

Service Ratio



In FY2018, the ratio of EBIT from service business is forecast to fall short of the KPI, as the overall ratio of EBIT from equipment expands

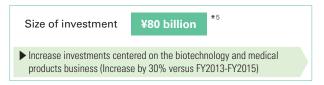
*4 Service business: Product maintenance services, IT solutions, trading services,

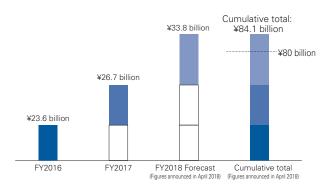
We will continue to execute our growth strategy and aim to achieve all KPIs.

^{*1} KPI: Kev Performance Indicator

*5 Size of cumulative investment for FY2016-FY2018

R&D Investment

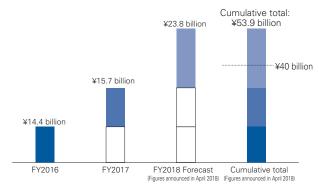




- In Science & Medical Systems, our focus is on developing new models of medium- and small-sized clinical analyzers, next-generation DNA sequencers, and automation technology related to electron microscopes, with an eye to strengthening existing operations, creating new core businesses, and developing high value-added dedicated equipment.
- In Electronic Device Systems, we will develop solutions to meet new needs arising from new materials, new structures, and miniaturization of semiconductor devices, as well as reinforce development of products for non-advanced semiconductors such as those used in automotive and IoT applications.

: Capital Expenditure





● In Science & Medical Systems and Electronic Device Systems, we will strengthen our manufacturing ability via increased use of automation, robotics, and IoT, in addition to investment to address increased production against the backdrop of a thriving market.

Business Investment

Biotechnology and **Social and Industrial** ¥30 billion Size of investment

 Continue aggressively investing in the top priority domains of Biotechnology and Healthcare as well as Social and Industrial Infrastructure

Main investment domains

- (1) Genetic and bacterial testing: Equipment, reagents, and software for cancer and infectious disease diagnosis
- (2) Electron microscopes and scientific instruments: Strengthen technology and sales channels

| Science & Medical Systems | Time period | Investment Case | Investment purpose | Size of investment |
|---|-------------------|--|--|---|
| | September 2016 | Co., Ltd. with a medical equipment sales agent in Chinese market | | Paid-in capital of joint venture: CNY 19.62 million |
| Biotechnology and Medical Products Business | May 2017 | Capital and business alliance with Precision System Science Co., Ltd. (PSS) | Sales of the conventional products of PSS, joint development of next-generation fully automated genetic testing systems | ¥0.9 billion |
| Dusiness | September 2017 | Capital participation in US company MagArray, Inc. | Entry into CLIA*6-accredited cancer diagnostic testing service business | ¥2.4 billion |
| | March 2018 | Capital participation in US company OmniSeq®, Inc. | Co-development of cancer diagnostic equipment and reagents | Undisclosed |
| Scientific Systems Business | July 2017 | Stock purchase and business acquisition of part of the business of Oxford Instruments plc Group of the UK (established Hitachi High-Tech Analytical Science Ltd.) | To enhance the lineup of atomic spectroscopy products, and strengthen the development, manufacturing, sales and service structures | ¥11.3 billion |

^{*6} CLIA (Clinical Laboratory Improvement Amendments) Law: US law establishing quality standards for laboratory testing

Science & Medical Systems

► Biotechnology and Medical Products Business Scientific Systems Business

Become a Global Player in All In-vitro Diagnostics Markets

Vision

Become a Global Major Player in Analytical Instruments Markets

Business Strategy Key Initiatives and Accomplishments in FY2017

Biotechnology and Medical Products Business

Expansion of Existing Business and Creation of Further Core Businesses

- Maintain Existing Business Scale (Maintain and Expand Sales Volume Share)
- Exchange rate impact from strong yen
- Decrease in market prices Demand growth in Chinese

Maintain leading market

- Continue Further Investment in New Businesses for Growth
- Pursue M&A and collaboration to expand business domains

* SCB: System Collaboration Business

Mid-Term Management Strategy

Existing Businesses

market

- Further cultivate SCB with partners
- Continue investments for strengthening the manufacturing platform, such as expanding production capacity

Initiatives and Accomplishments in FY2017

- Launched cobas e801 high-speed immunoassays analyzer module in the US
- Launched 3500 composite automated analyzer with functions for conducting clinical chemistry, immunoassay and blood coagulation testing in Japan
- Started new collaboration on in-vitro diagnostic testing analyzers and reagents with a major Chinese reagent
- Increased production capacity fourfold after expanding buildings at Hitachi High-Tech Kyushu Corporation

New **Businesses**

- Promote investment for developing a SCB with competitive reagent companies
- Start a genetic and bacterial testing
- Jointly developed compact CE* sequencer with US-based Promega Corporation
- Two clinical reagents for the VERIGENE® system became eligible for insurance
- Entered cancer diagnosis field through capital participation in US-based MagArray, Inc. and OmniSeq, Inc.

Scientific Systems Business

Strengthen Global Operation and Provide Solutions

- Promote Further Growth Investment (Enhance Product Lineups, etc.)
- Strengthen Global Sales and Marketing Functions
- Strengthen and reorganize the worldwide sales framework and promote globalization of web content
- Shift toward Solutions Business
- Strengthen lineup of multi-purpose analyzers and analytical instruments
- Deliver solutions based on development of field-specific applications and high value-added dedicated equipment

Mid-Term Management Strategy

- Continuously introduce competitive new products to the market
- Launched Regulus series of FE-SEM*1
- Launched ArBlade5000 ion milling system
- Launched Ethos NX5000 composite FIB*2-SEM*3 system

- Develop sales network
- Strengthen global marketing
- Expanded product development and sales network by establishing Hitachi High-Tech Analytical Science Ltd
- Expanded development bases with new Hitachi High-Tech Science Parks in the US, the UK and China

Initiatives and Accomplishments in FY2017

■ Held worldwide webinars*4 and remote demonstrations using IoT to strengthen digital marketing

- Provide solutions for each field
- Develop applications and move to dedicated equipment
- Development and sales of dedicated instruments with added value
- ▶ Increased sales of HM1000 screening equipment for phthalates, which is compliant with the revised RoHS Directive*5
- ▶ Increased sales of contamination inspection equipment (X-ray fluorescence particle contaminant analyzers) for fuel cells and LiBs*
- *5 RoHS Directive: A directive by the European Union (EU) for regulating the use of specified hazardous substances contained in electrical and electronic equipment
- *6 LiB: Lithium-ion Battery

^{*} CE: Capillary Electrophoresis

Outlook for FY2018 and Initiatives Focused on 2020

| Markets | External Environment (Risks and Opportunities) | Customer and Market Needs | Strengths | |
|---|---|---|--|--|
| Clinical Chemistry and Immunoassays | Acceleration in efforts at early discovery and treatment of diseases and personalized medicine alongside advances in medical technology Decline in market prices as governments move to reduce medical expenditures in industrialized countries Increase in investment to update healthcare infrastructure (emerging countries) | Aging society and rising medical expenditures Improve testing efficiency with emergency examination compatibility and amid increase in number of tests and tested items (high-throughput capabilities, non-stop operations) Decrease blood and reagent volume to lessen burden on patients when drawing blood and to lower cost of tests (highly sensitive analysis) Development of ultra-high sensitivity analyzers to measure trace elements Higher efficiency of clinical testing work (less space, higher efficiency in equipment and management) | Technological capabilities (core technologies) Electron beam technology (electron microscopes) Spectroscopic analytical technology (automated clinical chemistry and immunoassay analyzers, scientific instruments) Optical emission analytical technology, X-ray analytical technology (scientific instruments) Production & development foundation | |
| Genetic and Bacterial Testing | Larger impact from government policies to prioritize domestic production (China) Greater use of Al* Spread of infectious diseases | Utilization of genetic testing in infectious disease field Higher needs for personalized medicine in cancer treatments | and manufacturing capability Optimized production system (vertically integrated production) Highly efficient production (robotization and automation) | |
| Electron Microscope | Brisker demand for semiconductor devices in China and Asia Spread of IoT | Increase in demand for multipurpose analysis in the environment and new energy field and internal structural 3D analysis from high-performance materials High-magnification, high-resolution observation of microstructures | World-class human resources in manufacturing Collaboration with partners SCB in the Biotechnology and Medical Products Business Global laboratory system | |
| Scientific Instruments | Stronger demand related to environmental regulations around the world (revisions to RoHS Directives, new energy vehicle regulations in China, etc.) Growth on markets related to security and food safety | Development of dedicated equipment and systems for specific needs Better throughput and operability to improve work efficiency | (Hitachi High-Tech Science Parks) R&D capability Collaboration with research labs at Hitachi, Ltd. Proactively pursue open innovation with universities and research institutions | |

^{*} Al: Artificial Intelligence



Mikio Takaqi Vice President and Executive Officer, General Manager, Science & Medical Systems **Business Group**

In in-vitro diagnostics markets related to the Biotechnology and Medical Products Business, competition on prices continues amid reduced medical expenditures, especially in industrialized countries, but the overall market should remain strong. In electron microscope and scientific instrument markets related to the Scientific Systems Business, demand is likely to strengthen from greater needs for analysis and testing in the semiconductor, environmental and new energy fields. In Science & Medical Systems, our basic policy is to make active strategic investments in growth, including M&A, and to

reinforce business foundations with the aim of further development of scientific technologies and the realization of a healthier, safer and more reliable society. Based on this basic policy, Hitachi High-Tech moved to expand its product portfolio, enter new fields through TSS*, and strengthen collaboration and contact points with customers with the aim of expanding business scale and earnings.

In the clinical chemistry and immunoassays markets in the Biotechnology and Medical Products Business, sales have been brisk for cobas e801 high-speed immunoassays module, which was launched in Europe and Japan in FY2016 and in the US in FY2017. We plan to commence sales in China in FY2018. Hitachi High-Tech intends to expand sales by increasing partners for collaborating on in-vitro diagnostics equipment and reagents with major reagent companies in China. Through SCB, one of our strengths, we aim to deepen collaboration with partners and bring to market new competitive products and dedicated

equipment in a timely fashion in anticipation of market needs. We intend to strengthen our business foundation while achieving further growth in existing businesses. On genetic and bacterial testing markets where it is developing new businesses, Hitachi High-Tech is keen to create new core businesses by developing new products through external collaboration. In FY2018, Hitachi High-Tech will focus on expanding sales of new players, such as compact CE sequencers it jointly developed with Promega Corporation in the US, and accelerating the development of business in the cancer diagnosis field that it has recently entered. In the Scientific Systems Business, we will concentrate on developing and increasing sales of TSS in tune with the needs of each specific field, including semiconductors, the environment and new energy, security and new materials. Additionally, the sales volume of phthalates screening equipment launched in FY2017 is steadily increasing. Hitachi High-Tech Analytical Science Ltd., which was established from a partial business acquisition from the Oxford Instruments plc Group, offers handheld analyzers that are moving out of test labs and into work sites where analyzers are increasingly being used in quality management settings. We aim to grow sales of these handheld analyzers as dedicated equipment that anyone can use easily. Hitachi High-Tech Science Parks have been set up in nine locations in five countries for the purpose of facilitating R&D and collaboration near customers and partners. With an eye on 2020, we are using these bases to strengthen our marketing and sales capabilities in each region, while expanding collaboration with customers in a bid to create global leading products in new fields.

* TSS (Targed Solution Systems): High value-added dedicated equipment

Science & Medical Systems

Concrete Initiatives in FY2018

Biotechnology and Medical Products Business

- Secure earnings by expanding sales of new products
 - Continue sales expansion for cobas e801 high-speed immunoassays module
 - Open market by expanding sales of 3500 composite automated analyzer
- Collaboration with Chinese reagent companies
 - Expand business by offering solutions based on locally supplied Chinese clinical chemistry testing reagents
- Actively invest in technical development to reinforce existing operations and develop new growth markets
- Start sales of new products for the biotechnology field
 - Compact CE sequencer and genetic testing systems, etc.



Strengthen solutions development through collaboration with MagArray, Inc. and OmniSeq, Inc. in the US



3500 Composite Automated Analyzer

- Expand sales of Ethos NX5000 composite FIB-SEM system
- Develop and expand sales of high-value-added TSS (dedicated equipment)
 - ▶ Rechargeable battery testing equipment (X-ray fluorescence particle contaminant analyzers, SEM, etc.)
 - ► HM1000 phthalates screening equipment (for the revised RoHS Directive)
- Accelerate Global Development
 - Strengthen sales capabilities by maximizing Group synergies
 - Promote collaboration with customers through Hitachi High-Tech Science Parks



Ethos NX5000 composite FIB-SEM system

Entry into Cancer Diagnosis Field via Capital Participation in MagArray, Inc. and OmniSeq, Inc.

A key aspect of Hitachi High-Tech's Mid-Term Management Strategy is to proactively make strategic investments in growth with the aim of creating new businesses through M&A and collaboration. As a major investment in FY2017, Hitachi High-Tech bought stakes in MagArray, Inc. and OmniSeq, Inc. in the US, two companies engaged in the cancer diagnosis business field, and began collaborating with them.

Hitachi High-Tech began collaborating with MagArray, Inc. in September 2017 on the development of a new service for cancer diagnostic testing that utilizes high-sensitivity measurement technologies that can detect trace elements in the blood when cancer is present. In April 2018, we began working with OmniSeq, Inc. on providing cancer diagnostic testing methods that offer each patient with an optimized immunotherapies through a combination of genetic testing and pathological diagnosis.

In FY2018, Hitachi High-Tech will contribute to the realization of a healthy society through the development of cutting-edge cancer diagnostic equipment while collaborating with MagArray, Inc. and OmniSeq, Inc., utilizing their core technologies and expert knowledge in the field of cancer diagnosis.



Example of Creating Value

Commercialization of the cobas e801 high-speed immunoassays module: Contributing to Better Quality in Healthcare and Helping People Maintain Healthy Lifestyles

Customer (hospital, test center) needs

- Higher efficiency in testing amid increase in immunodiagnostic testing and tested items
- Reduce test costs and burden on patients when collecting blood samples
- Non-stop 24-hour operation that enables rapid diagnostics

Hitachi High-Tech Approach

- Improve test processing capability and test sensitivity
- Develop system that allows reagents to be cleared out during analysis

Hitachi High-Tech has commercialized the cobas e801 high-speed immunoassays module, which offers higher speed and sensitivity thanks to the flow cell* method the Company has used in previous immunoassay analyzer. Test processing capability is 1.75x better than conventional models, owing to a reduction in solution transfer time that resulted from shorter solution flow channels to the detector and improvements in the solution flow apparatus. Test sensitivity was improved by optimizing the solution flow channel geometry and controls, which resulted in a reduction in the amount of blood and reagent required for testing. In turn, this leads to lower testing costs and burdens on patients during blood draws. Moreover, we developed a system that allows test reagent to be refilled and cleared out during analysis. This makes it possible to rapidly analyze samples non-stop for 24 hours a day, while facilitating emergency testing.



The cobas e801 high-speed immunoassays module

Example of Creating Value

HM1000 Screening Equipment for Phthalates*1: Rapid and Simple Testing for Phthalates Newly Restricted Under the Revised RoHS Directive

- Customer (consumer electronics makers, communications equipment makers) needs
 - Rapid response to revised RoHS Directives*
 - Screening equipment able to rapidly and easily perform tests
- Hitachi High-Tech Approach
 - Improve throughput by simplifying test methods
 - Autosampler able to automatically measure up to 50 items in sequence
- *The EU revised the RoHS Directive to restrict the use of phthalates from July 2019, making it necessary to identify and manage products and parts that contain phthalates.

Hitachi High-Tech developed HM1000 screening equipment for phthalates. The HM1000 features a simpler testing method*2 than previous systems, making it possible to perform screening tests in under 10 minutes for each sample. Pre-processing work is simplified with the setting of samples clipped in the proper amount. Specialist software then automatically completes the analysis of sample components, detecting the amount and content percentage of each phthalate present. Moreover, the autosampler makes it possible to automate the sequential testing of up to 50 samples. The system simplifies and increases the efficiency of testing procedures necessary to comply with the revised RoHS Directive.



Phthalates screening equipment

- *1 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
- *2 Conventional methods include Soxhlet extraction via organic solvent and gas chromatograph mass spectrometry by thermal extraction and so forth, which generally take 30 minutes to several hours for each sample

^{*} Flow cell: A mechanism with a sensing station for detecting test objects in flow channels that transfer test object solution. It is possible to perform seguential measurements for different tests in a single flow cell because the test object solution is constantly in motion

Electronic Device Systems

Vision

Pursuit and Creation of New Value in Partnership with Customers

Business Strategy Key Initiatives and Accomplishments in FY2017

Create Global Top Products and Develop New Business Domains

(Business development into new fields) • Pattern shape evaluation (SEM) • Processing equipment for MRAN

- Respond to New Needs · Overlay measurement (SEM*1)

Grow Core Business

Expand Service Businesses

- Expanding CIP*4 menu
 Utilizing big data
 Providing solutions

- *1 SEM: Scanning Electron Microscope *2 MRAM: Magnetoresistive Random Access Memory *3 WLP: Wafer Level Package *4 CIP: Continued Improvement Program

Mid-Term Management Strategy

Business

- Strengthen development scheme to
- boost customer response capabilities Supply products in a timely manner through development in close contact

Initiatives and Accomplishments in FY2017

- 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

- Provide solutions to address new
- Developed the Enhanced Microwave ECR*1 Etching Module for next-generation semiconductor device manufacturing processes
- Increased sales of the CV5000 series (for high aspect ratios structures) and the CR6300 (high-speed, high-sensitivity defect review)

Business for the IoT Market

- Expand product portfolio
- Launched mirror electron inspection system Mirelis VM1000 for non-destructive inspection of crystal defects and process damage of SiC*2 wafer

Expand Service **Business**

- Expand service business in worldwide
- Created service solution using the ExTOPE, IoT service portal, for reducing difference among CD-SEMs

Example of Creating Value

Enhanced Microwave ECR Etching Module:

Contributing to the Development and Mass Production of Cutting-Edge Semiconductor Devices with High-Precision Processing

- Customer needs
- High-precision processing that addresses miniaturization, complex 3D structure formation and high aspect ratio patterning
- Ensure stable mass production by improving yields

- Hitachi High-Tech Approach
- Low-damage processing at the atomic level with high-precision plasma etching technology

Our customers require high-precision etching at the atomic and molecular level in order to keep up with miniaturization and increasingly complex structures in semiconductor devices.

Our recently developed Enhanced Microwave ECR Etching Module makes it possible to control dimensional variation across a wafer with high-precision down to the atomic level, while maintaining low-damage processing. Specifically, high-precision processing is realized with the use of a new structure that drastically improves capabilities for exhausting reactive products* that inhibit processing, as well as the optimal positioning of magnetic field coils to control processing of the layer to be removed down to the atomic and molecular level. These advances contribute to the development and mass production of cutting-edge semiconductor devices.



Conductor etch system 9000-Series

^{*1} ECR: Electron Cyclotron Resonance

^{*2} SiC: Silicon Carbide

^{*} Reactive products: By-products generated by chemical reactions between reaction gases used in etching and the materials to be etched

Outlook for FY2018 and Initiatives Focused on 2020

| Field | External Environment (Risks and Opportunities) | Customer and Market Needs | Strengths |
|-----------------------------------|--|--|---|
| Electronics and Semiconductors | Diversification of semiconductor applications FinTech, robotics, autonomous cars Expansion of utilization of big data Expansion of cloud computing, loT Spread of AI Growth of the Chinese market Acceleration of semiconductor industry expansion Growth at semiconductor manufacturers and SPE^{*1} providers | High-precision processing and measurement to deal with miniaturization, complexity of 3D structures and high aspect ratio of structures Reduce CoO*², improve productivity, yields and reliability Stable operation of production lines, reduce the difference among equipment, ensure reproducibility | Technological capabilities (core technologies) Electron beam technology (CD-SEM) High-precision plasma etching technology (etch systems) Optical technology (defect inspection tool) Manufacturing capabilities Greater use of IT, mechanization and Al in production processes World-class engineers in manufacturing Application development capabilities Joint creation with customers and partner companies Developed in conjunction with Hitachi Ltd., universities and consortium Collaboration between CD-SEM and etch systems |

^{*1} SPE: Semiconductor Production Equipment

^{*2} CoO (Cost of Ownership): The total cost necessary for installation, operation and management of facilities, equipment, and other hardware



Futoshi Ishiwa Vice President and Executive Officer, General Manager, Electronic Device Systems **Business Group**

The semiconductor production equipment market is projected to remain brisk in FY2018, as investment in memory stays strong from the previous fiscal year. Amid the inevitable changes in applications for semiconductors with the spread of IoT, customer needs are constantly reaching higher levels and the rapid pace of new requirements has become more challenging to meet, such as demand for higher performing production equipment that consumes less electricity to reduce environmental impact. Viewing these changes as

opportunities, Hitachi High-Tech aims to grow faster than the market based on its business strategy of expanding its service business and product lineup for the IoT market, while entering new fields to address new needs. Additionally, our company aims to increase the number of processes where Hitachi High-Tech is selected by providing world-class products in core businesses.

Hitachi High-Tech provides world-class products, including CD-SEM for miniaturization and increasingly complex 3D structures in high-end markets. Our company is also working to expand its product portfolio for the mid-range market, which includes sensors and power devices. Based on its

core technologies, such as electron beam technology and high-precision plasma etching technology, Hitachi High-Tech respond to emerging needs, while reinforcing core businesses in cutting-edge fields. Therefore, our company is spending actively on R&D while advancing R&D at engineering sites near customers inside and outside of Japan. Moreover, we aim to maximize value for our customers by providing them comprehensive solutions through collaboration with the electron microscopes and scientific instruments business. In addition, Hitachi High-Tech will execute measures in FY2018 to expand production facilities and increase production area, in light of growing needs at customers to increase output and satisfy robust demand for semiconductors. Hitachi High-Tech intends to build a production structure that is able to enhance production efficiency through the greater use of IT, automation and AI in production processes.

In the semiconductor market, where technologies are advancing and conditions are rapidly changing, Hitachi High-Tech must proactively invest in new fields and domains, while keeping an eye on trends for end products, in order to find unique ways to continuously create new value. For this reason, we aim to outperform the market growth by leveraging our cultivated strengths to the fullest extent. Hitachi High-Tech will continue to pursue and create new value along with its customers by developing business in line with the outlook for the semiconductor market in the future, while deepening collaboration inside and outside the Company.

Strengthen product portfolio in response to diversifying customer needs

- Conduct active R&D investment (+29% compared with FY2017)
- Further pursue early collaboration with customers
- Provide solutions through collaboration between CD-SEM and etch systems

Establish highly efficient production systems

- Increase production efficiency through module assembly format and automation
- Strengthen production facilities and extend production

Business Strategy Key Initiatives and Accomplishments in FY2017

Social Infrastructure Field

Mid-Term Management Strategy

- Strengthen product development of general control systems and industrial instruments
- Strengthen business overseas, particularly in Asia
- Railway Inspection
- Expand our inspection equipment business and promote overseas business development
- Renewable energy business expansion Strengthen the power systems

Initiatives and Accomplishments in FY2017

- Provided control systems and big data analysis (such as BD-CUBE predictive diagnostic systems) to meet needs for smart-process automation of plant equipment
- Expanded sales of the Lumione BL-1000 analyzer for rapid testing of microbial content for water used in pharmaceutical manufacturing
- Expanded sales of railway inspection equipment mounted on operating railcars
- Promoted activities to capture orders for overseas railway projects
- Proposed smart maintenance services that fuse together image processing and AI technologies

- business targeting emerging countries
- Advanced the mega-solar business (IPP*¹/EPC*²) (Completed project in Shizukuishi Town, Iwate Pref., started project in Komatsu City, Ishikawa Pref., and advanced project in Misawa City, Aomori Pref.)
- Promoted power modernization project for Cuba

Industrial Infrastructure Field

Assembly

- Strengthen dedicated marketing to expand sales of automobile component assembly systems
- Provide LiB production equipment solutions
- Deepened relationships with major customers and expanded sales of automobile components and LiB production equipment

- Develop new products and engineering methods in thin-film manufacturing systems
- Accelerated expansion of the thin-film equipment business by strengthening relationships with partners
- Expanded consulting-based sales in the flexible devices field, including highly functional film, in markets worldwide
- Realized optimal solutions through provision of system products

Ink-jet Printer for Industry

- Start businesses in collaboration with strategic partners
- Launched an ink-jet printing system business for applications requiring high-resolution printing capabilities (construction materials, housing equipment, and automotive interior materials, etc.)

ICT Solutions Field

- Strengthen the business foundation in collaboration with partners
- Provided solutions that use IoT to improve productivity and quality at production sites
- Signed strategic partnership agreement with and invested in Flutura Business Solutions Private Limited in India

Example of Creating Value

Helping to Ensure Safer Track Conditions with High-Frequency Measurement Data Acquisition without Dedicated Timetable for Track Inspection Railcars

- Customer (railway operators) needs
- Perform inspections without dedicated timetable for track inspection railcars
- Improve safety with high-frequency data acquisition (early discovery of rapidly deteriorating track conditions)
- Hitachi High-Tech Approach
- Make railway inspection equipment smaller and mount it on operating railcars
- High-speed, high-precision measurements with track and overhead wire inspection technologies

On railways, the weight and impact on rails can warp and distort the railway track, and the upward force of the pantograph (current collector) causes friction on the overhead wires. If left alone, this can adversely affect the safety, running stability and ride quality of railcars. In the past, inspections of railways were carried out by dedicated inspection railcars. The Hitachi High-Tech Group's railway inspection equipment mounted on operating railcars makes it possible to inspect tracks without interfering with train schedules. Moreover, it is possible to quickly detect any rapid deterioration in track conditions because measurement data is obtained with high frequency, allowing railway operators to quickly address any issues. Hitachi High-Tech has begun looking into providing cloud-based services that enable predictive diagnostics in the future by using AI to analyze data collected from this inspection equipment, while utilizing IoT and cloud technologies in the ICT solutions field.



Railway inspection equipment mounted on

^{*1} IPP: Independent Power Producer *2 EPC: Engineering, Procurement and Construction

Outlook for FY2018 and Initiatives Focused on 2020

| | External Environment (Risks and Opportunities) | Customer and Market Needs | Strengths |
|------------------------------------|---|---|--|
| Social Infrastructure Field | Ongoing investment to improve quality, increase productivity and ensure safe and stable operations Labor shortages in an aging population with low childbirth rates | Aging infrastructure and non-destructive, rapid diagnosis of roadways, tunnels, railways (overhead wires, track), etc. Insufficient numbers of veteran managers at domestic plants On-site inspections, prompt inspections Upgrades to electric power infrastructure in emerging countries | Image processing technology (railway inspection) OT⁻¹ x big data analysis (control systems) Utilization of Al technology (railway inspection, control systems) Prompt inspection technology Global sales capabilities |
| Industrial Infrastructure Field | Greater investments in electrification and automation of automobiles Strong growth in demand for automotive batteries Ongoing capital investment related to flexible devices (stronger demand for high-performance devices) | Automation, labor savings (robots, automated facilities) Reduce environmental load with next-generation batteries Address CASE⁻² in the automobile field Advances in flexible devices | Customer-facing sales capabilities Customer development capabilities Product development capabilities Collaboration with partners that have core technologies (thin-film production equipment) |
| ICT Solutions Field | Utilizing IoT and AI in the social and industrial infrastructure fields Insufficient human resources for data analysis, including systems engineers | Advance in digital transformation Needs for advanced security and control security Higher productivity with IoT | OT x Al know-how Global sourcing capabilities Various issue-solving solutions |



Takashi lizumi Executive Officer, General Manager, Industrial Systems Business

Brisk capital investment is likely to continue in the social and industrial infrastructure fields on Industrial Systemsrelated markets.

In the social infrastructure field, capital investment is projected to remain strong for improving quality, increasing production efficiency and ensuring safe operations amid a shortage of engineers with expert knowledge of manufacturing in Japan. In railway inspection systems, capital investment is likely to hold steady as the number of operating railcars with track inspection

equipment installed increases. In the industrial infrastructure field, capital investment should remain brisk in flexible device-related markets, including new types of displays, and in rapidly growing markets related to electric vehicles.

In IoT solutions, we anticipate rapid advances in the implementation of solutions that improve productivity and quality in a broad range of fields, from social infrastructure to industrial infrastructure.

To advance our Mid-Term Management Strategy under these circumstances, Hitachi High-Tech must accurately understand the increasingly diverse and complex issues and needs of its customers. Additionally, while keeping in mind ways to help solve forthcoming social issues, Hitachi High-Tech will leverage its strength in customer-focused sales to provide customers with an optimal combination of cuttingedge solutions that leverage its superior engineering, global sourcing, and IoT solutions capabilities.

In order to further refine our competitive advantages, we believe it is important to provide solutions while collaborating with partners.

In FY2017, Hitachi High-Tech entered into a strategic partnership agreement with Flutura Business Solutions Private Limited in India for the purpose of expanding its ICT solutions business further, including overseas markets.

By sharing its business strategies and core technologies, Hitachi High-Tech will create a stronger relationship with Flutura for providing issue-solving solutions that utilize its OT x Al technologies in the rapidly expanding IoT market.

While leveraging these strengths, we will build tight collaborative relationships with our partners and continue delivering creative and innovative forms of value unique to Hitachi High-Tech, in line with our aim of becoming a one-ofa-kind solutions provider in the industrial field.

Concrete Initiatives in FY2018

Social Infrastructure

Control Systems

Advance support for smart-process automation through control systems and big data analysis Railway Inspection

Provide railway inspection equipment mounted on operating railcars to public and private railway operators in addition to the JR Group

Industrial Infrastructure

Automated Assembly

Expand sales of high function equipment for LiB manufacturing

Thin-Film

Realize optimal solutions through provision of system products

ICT Solutions

Solve management issues in the manufacturing industry by combining OT and AI

Advanced Industrial Products

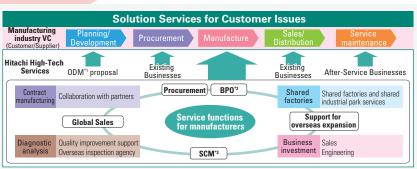
Vision

Become a Business Organizer that Offers a Full Value Chain (FVC) as a Product for Manufacturers

Business Strategy Key Initiatives and Accomplishments in FY2017

Active Investment and FVC Model Development

- Invest to establish new business
- Invest in FVC model development and build strategic partnerships
- Create Shared Services Base to **Support FVC**



- *1 ODM: Original Design Manufacturing *3 SCM: Supply Chain Management
- *2 BPO: Business Process Outsourcing

Mid-Term Management Strategy

Industrial Materials

- Expand the functional materials business targeting automobiles, construction machinery, and home appliances
- Expand business in sensors for transport systems, and in components for commercial vehicles and turbocharger
- Expand business in smartphones, displays, and optical

Initiatives and Accomplishments in FY2017

- Developed the Central and South American market
- ▶ Strengthened sales base for plastic molding and mold-die businesses and accelerate development of periphery businesses
- Contributed to production scale expansion through capital investment in alliance partner's turbocharger components process

Electronic Materials

- Expand business in the semiconductor and automobile field, and IC card components
- telecommunications-related components
- Collaborated with alliance partners and promoted provision of FVC services.
- Expanded business for the optical telecommunications module EMS business
- Additional investment expansion of production capacity responding to strong demand

VCS'

- Establish an FVC platform for manufacturers
- Expand the FVC platform exponentially by increasing sales to business partners
- Promoted establishment of shared factories
 - ▶ Supported Japanese SMEs expanding overseas through production management, shared equipment, and inventory control using IoT technology
 - As one of Japan External Trade Organization's Japan-ASEAN New Industry Generation Experimental Projects, experimented with a shared factory (smart factory) in Thailand
- Provided FVC service in the rail transportation field
- ▶ Collaborated with overseas partner companies to expand business

Fuel & Chemicals, Others

- Rebuild the energy business
- Create locally-oriented service businesses
- Started service business
 - ► Started mold-die management service business

*VCS: Value Chain Solution

Example of Creating Value

Electricity from Rooftop Solar Panels Starts Flowing to India Bases of Japanese Companies: Contributing to the Use of Safe and Inexpensive Clean Electricity

- Customer (Japanese company with base in India) needs
- Installation of safe and inexpensive rooftop solar panels
- Hitachi High-Tech Approach
- Global sales capability, global sourcing capability, Hitachi Group resources

Hitachi High-Tech and Clean Max Enviro Solution Pvt. Ltd. (Clean Max) teamed up to provide rooftop solar power generation equipment to the Indian base of a Japanese company in FY2017, amid expansion in the rooftop solar panel market in India*. As a leading company in rooftop solar panels in India, Clean Max is in charge designing, installing and managing the system. Hitachi High-Tech provided sales support for installing the solar power system for the Japanese companies, and helped with the procurement of highly dependable solar panels and related equipment.

While creating new business models, both companies intend to spur the proliferation of safe, inexpensive and clean rooftop solar power generation in India.

* In India, the Jawaharlal Nehru National Solar Mission (JNNSM) was updated in June 2015 with plans to install a total of 100GW of solar power generation capacity by 2022. Combined with wind power, the plans call for renewable energy to cover 16% of the country's electric power consumption. Under the JNNSM, rooftop solar panels make up 40% of all solar power generation equipment, and thanks to plentiful sunshine in India and the low cost of installation, solar power is cheaper to supply electricity than the power grid, which uses a base of coal, oil and gas-fired power stations. It is projected that the rooftop solar power generation market will expand strongly over the long term in India.

Outlook for FY2018 and Initiatives Focused on 2020

External Environment (Risks and Opportunities) **Customer and Market Needs** Strengths Growth in the semiconductor market Address varying business Materials & Strengthening optical-related Sales and sourcing capabilities practices, regulations and Electronics demand from buildout of nextaccumulated as a specialist production processes in each generation communications trading company country and region Shrinking domestic protocol (5G) market due to declining Diversification of resource population in Japan Partnering with a customer base procurement due to depletion Total management of of around 2,200 companies with Automobiles & value chain in production, of rare earths 4,200 suppliers around the world Mobility Increasing investments in procurement, logistics and vehicle electrification and finance The advance of automation globalization Global business network spanning 26 countries and Sourcing of high-quality parts Growing capital investment regions and 19 locations in and materials overseas Energy & due to expanding the Japan that enables cross-border Industry Shift to production and introduction of renewable transactions supply structures in tune Supply of parts and materials with local production for based on production plans local consumption Resources of the Hitachi Group (consulting functions, product Revisions to the Act Fuel & manufacturing know-how, IT Against Delay in Payment of Proper and efficient mold-die Chemicals, support infrastructure, etc.) Subcontract Proceeds, Etc. to management Others Subcontractors



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

production systems of businesses that aim to expand overseas are in the process of shifting away from low-cost export models of locating major manufacturing sites in emerging countries to local production and local consumption models of manufacturing and providing products in locations that are close to the destination markets. Meanwhile, global sales have been accelerated by using the IoT and optimization of production toward Industry 4.0. Against this backdrop, an urgent need has arisen for the total management of the value chain,

from production to procurement, logistics and financing, at overseas manufacturing sites. On the industrial products market, strong demand is anticipated, mainly for automobile-related and electronics-related parts and materials, thereby necessitating the creation of supply chains able to reliably deliver parts and materials.

Hitachi High-Tech aims to make full use of the resources of the Hitachi Group, including products, technology, services, and human resources to build an FVC platform that will provide comprehensive solutions required by customers that are expanding their businesses globally, including collaboration with partners outside the Hitachi Group. These range from planning and development through procurement, manufacturing, logistics, sales, and maintenance, and include information and investigation relating to partners and target markets, development and operation in new markets and for new businesses, as well as business and risk management, in addition to sourcing parts (business transactions), logistics, and finance

Starting in FY2018, with the aim of clarifying targeted domains and transforming into a customer-oriented organization, we underwent a reorganization and changed our subsegments to Materials & Electronics, Automobiles & Mobility, Energy & Industry, and Fuel & Chemicals, Others. We aim to enhance the value chain in businesses linked to each industry by more closely aligning ourselves with our customers in each field and concentrating our accumulated know-how in each domain. We will aggressively invest in businesses to accelerate the strengthening of collaboration with our partners. In the railway business, Hitachi High-Tech provides high-value-added solutions that go one step beyond trading to solve customer issues. Through an investment in a major railcar interior maker in China, for example, the Company gains access to engineering functions that allows it to propose a complete solution to customers, including interiors.

Based on our sales and sourcing capabilities accumulated as a specialist trading company, we will strengthen collaboration with partners to provide "product distribution × finance × logistics × IT" solutions, while maintaining and improving our competitive advantages over rivals. We aim to help solve social problems by maximizing the value we provide while solving issues faced by our customers in their value chains.

Concrete Initiatives in FY2018

- Expand FVC Service Related to Railroads Through **Collaboration with Overseas Partner Companies**
 - Promote parts and repair business (U.K.)
 - Start collaboration with interior manufacturer (China)
- Launched Shared Factory Service Business (Thailand)
 - Provide production base, facilities, infrastructure, and management services for Japanese manufacturers expanding overseas
- Develop Mold-Die Management Service Business
 - Provide one-stop service from mold-die check to storage and purchasing

At a Glance

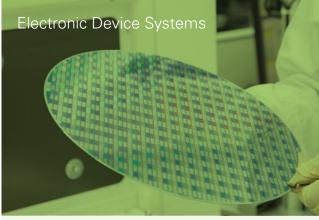
Revenues EBIT (million yen) (million yen) 53 636 687,670 644,545 48,209 628,984 (FY) (FY) 2015 2017





Cash Dividend per Share





Changes in Revenue and EBIT



Changes in Revenue and EBIT



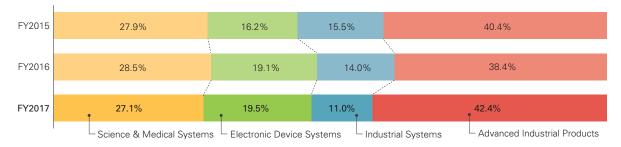
Review of Operations

In the Biotechnology and Medical Products Business, revenues declined year on year as clinical analyzers were affected by temporary inventory adjustments in the supply chain with customers. However, revenues increased in the Scientific Systems Business, reflecting stronger sales of electron microscopes and scientific instruments to Asia, as well as increased revenues from the acquisition of all of the shares in five subsidiaries of the UK's Oxford Instruments plc Group connected with its atomic spectroscopy product businesses and establishment of Hitachi High-Tech Analytical Science Ltd. in July 2017. As a result, overall segment revenues increased. Segment EBIT declined, owing to lower sales in the Biotechnology and Medical Products Business, along with R&D spending and other investments in growth strategies.

Review of Operations

Amid the overall shift towards a robust market in the semiconductor industry continuing on from FY2016, revenues held firm on investment in next-generation advanced processes and memory mass production in the Process Equipment Business despite some investment plans being postponed. In the Metrology & Inspection Equipment Business, revenues increased significantly, mainly reflecting brisk sales of CD-SEMs for investment in memory mass production, with cumulative shipments reaching five thousand units. Segment EBIT also increased due to growth in revenues.

Revenues Composition by Segment







Changes in Revenue and EBIT



Changes in Revenue and EBIT



Review of Operations

In the Industrial Infrastructure Business, revenues grew on solid sales of lithium-ion battery manufacturing equipment for electric vehicle-related markets as well as thin-film manufacturing systems for a flexible devices market, including highly functional film. However, declines in sales of control systems and solar photovoltaic system EPC projects in the Social Infrastructure Business resulted in lower revenues for the segment overall. Segment EBIT also declined due to lower revenues.

Review of Operations

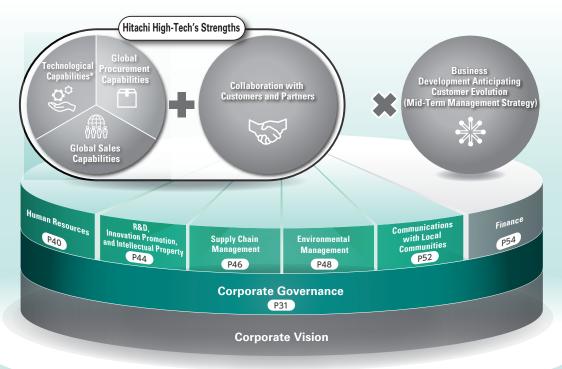
In the Industrial Materials Business, revenues rose substantially on more materials-related transactions and steady sales of automotive components for overseas, mainly China. In the Electronic Materials Business, revenues also increased significantly, reflecting brisk sales of semiconductor-related components amid healthy semiconductor business conditions. Accordingly, overall segment revenues and EBIT increased. Further, we commenced a field trial in Thailand for the shared factory business introducing smart factory technology to build a new business model.

Strengthening the Hitachi High-Tech Group's Foundation to Support Value Creation

The Hitachi High-Tech Group aims to contribute to social progress and development through a foundation of business activities that emphasize value creation through high-tech solutions."

Underpinning this value creation is our management infrastructure, such as Corporate Governance; Human Resources; R&D, Innovation Promotion, and Intellectual Property; Supply Chain Management; Environmental Management; and Communications with Local Communities.

By strengthening these elements of our management infrastructure, we will add to our strengths and further solidify the Hitachi High-Tech Group's framework for creating value to contribute to help solve social issues.



Hitachi High Tech's Foundation to Support Value Creation

Measurement and analysis technology, automation and control technology, manufacturing capabilities

| Hitachi High Tech's Foundation to Support Value Creation | Purpose of strengthening management infrastructure |
|--|---|
| Human Resources | To generate a steady stream of innovation, secure talented human resources with diverse feelings and perspectives and assign them roles to maximize their abilities Enhance both productivity and organizational strength by developing an environment responsive to various working styles and where employees can work safely and in good health |
| R&D, Innovation Promotion, and Intellectual Property | Bolster competitiveness by developing cutting-edge technologies and creating innovative business models Create new service solution business and bring innovation to existing business for future growth |
| Supply Chain Management | Aim to make competitive products by unifying global strategies, product strategies, and robust supply chain building Reinforce steps to ensure social responsibility throughout the supply chain to reduce economic, social, and reputational risks |
| Environmental Management | Aim to manufacture while reducing the burden on the environment to enhance the added value and competitiveness of products Strengthen environmental management to avoid damage to brand value from environmental pollution or legal violations |
| Communications with Local Communities | Build relationships of trust with important stakeholders and local communities when conducting business activities Raising recognition of the Company enhances brand value and securing of human resources |
| Corporate Governance | Increase supervision over the conduct of business in each segment to contribute to the Company's sustained growth and increased corporate value over the medium to long term Manage the Company with a strong awareness of our corporate social responsibility to gain the trust of shareholders and society as a whole as well as contribute to the progress and development of society through our business activities |

▶ Please see the inside of the front cover for details on the Corporate Vision.

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.



Ryuichi Kitayama Chairman of the Board

In June 2018, I was appointed Chairman of the Board. I look forward to fulfilling my role on the Board of Directors so it can contribute to enhancing governance and resolve the management issues needed to raise corporate value by accelerating growth.

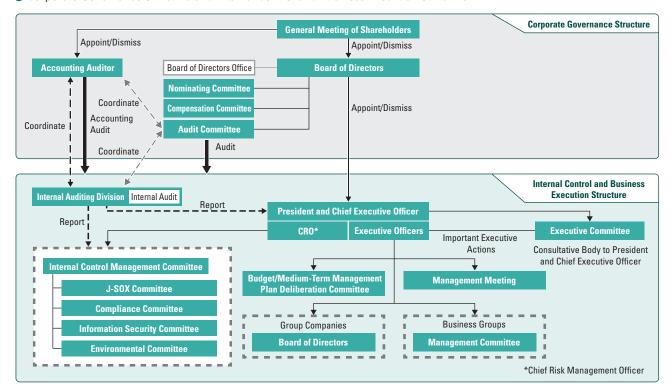
We transitioned early into a company with nominating committee, etc., and since then have focused our efforts on improving the effectiveness of our governance. Four of the seven members comprising our current Board of Directors are outside directors, and they are rich in experience and insight. At meetings of the Board of Directors, we conduct uninhibited debates, leveraging the experience and expertise of each individual director. While our assessment is that compliance and other areas of "defensive" governance are functioning adequately, I would like to see the Board work to enhance discussions of "offensive" governance in areas such as improving corporate value, particularly in terms of our medium to long-term growth strategy.

The Hitachi High-Tech Group has been able to grow as we utilized our cultivated strengths of technological capabilities, global sales and procurement capabilities, and collaboration with customers and partners to build strong relationships of trust with top global companies. However, management issues to realize further growth have become more diversified and complicated, requiring a greater level of speed to respond to the changes encompassing the management environment. To give examples, as companies move toward formation of a sustainable society, management is required to be conscious of

prioritizing SDGs, and there is a need to actively participate in resolving social issues toward realization of Society 5.0, a humancentered society with both economic development and resolution of social issues to connect to enhanced corporate value. Moreover, society's expectations and requirements have also changed, such as the revisions to the Corporate Governance Code, and there is a need to anticipate further ahead, establishing an effective governance framework and actively considering the environment and tackling global environment issues. My belief is that it is the role of the Board of Directors to resolve these management issues with conviction to realize enhanced corporate value.

Going forward, the Board of Directors will continue working to improve the effectiveness of corporate governance, as we act to support our corporate vision to "consistently aim to be Global Top in high-tech solutions," thus leading to further improvement in corporate value.

Corporate Governance Structure and Internal Control and Business Execution Structure



Corporate Governance Structure

Based on our corporate vision of "To consistently aim to be Global Top in high-tech solutions," we leverage our global network to bring our customers - who are leaders in their fields - the most advanced products and solutions, as befits a cutting-edge technology company that functions as both a manufacturer and a trading company. Moreover, we believe that it is vital to increase supervision over the conduct of business in each segment and to strive to improve the transparency of management by enhancing corporate governance, managing the Company with a strong awareness of our corporate social responsibility. We believe that 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 its 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 revises them as necessary.

▶ Refer to the website for the Corporate Governance Guideline.

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: a Nominating Committee, an Audit Committee, and a Compensation 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.

Roles and Responsibilities of the Board of Directors

With the aim of ensuring thorough corporate governance and greater management transparency, the Board of Directors includes four outside directors, all of whom have been submitted to the Tokyo Stock Exchange as independent directors. Working in collaboration with the Internal Auditing Division, 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 in question 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 Audit Committee and the Accounting Auditor.

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

In FY2015, the Company began conducting an evaluation of the effectiveness of its Board of Directors as a whole, with the goal of continually enhancing the functioning and effectiveness of the Board. Based on the results of this evaluation, the Company applies a repeated PDCA cycle designed to analyze any issues and lead to improvements.

- 1. FY2017 Evaluation
 - (1) Target: All eight of the Company's directors as nominated and appointed at the 98th Ordinary General Meeting of Shareholders held on June 23, 2017.
 - (2) Evaluation period: November 2016 through October 2017.
 - (3) Overview of evaluation: Following a written questionnaire, the Board of Directors secretariat conducted individual interviews to re-verify the intent of and background behind the responses.
 - (4) Questionnaire items: Included questions and space for comments regarding, among others: Composition of the Board of Directors; roles and responsibilities of the Board of Directors; relationships with investors and shareholders; and assessments of committees.
- 2. Results of FY2017 analysis and initiatives to enhance effectiveness

In FY2016, ensuring diversity in the composition of the Board of Directors and expanding the monitoring of business risk were recognized as areas requiring improvement. Those improvements were carried out appropriately, and the effectiveness of the Board as a whole was seen as being ensured. Moreover, for sustainable growth and enhanced corporate value over the medium to long-term, the Company strives to deepen discussions about the broad direction of the entire Company and medium to long-term strategies.

Further, the assessments of committees that started from the year under review will continue to verify the implementation status of better reporting on the executive officer training and selection process and compensation policies and systems to improve the functioning of the Nomination and Compensation

Composition of the Board of Directors and Each Committee and Attendance (Term of office following the 98th Ordinary General Meeting of Shareholders)

| Name | Current Position | Board of Directors | Nominating Committee | Audit Committee | Compensation Committee |
|-------------------|---|-----------------------|-------------------------|-----------------|---------------------------|
| Toyoaki Nakamura | Chairman of the Board | (13/13) | (4/4) | - | _ |
| Masahiro Miyazaki | Representative Executive Officer, President and Chief Executive Officer, Board Director | (13/13) | (4/4) | - | (4/4) |
| Ryuichi Nakashima | Board Director | (13/13) | _ | (15/15) | _ |
| Ryuichi Kitayama | Board Director | (11/13) | _ | _ | (3/4) |
| Hideyo Hayakawa | Board Director (Outside/Independent Director) | (13/13) | (4/4) | - | (4/4) |
| Hiromichi Toda | Board Director (Outside/Independent Director) | (13/13) | (4/4) | (15/15) | (4/4) |
| Yuji Nishimi | Board Director (Outside/Independent Director) | (13/13) | (4/4) | (15/15) | (4/4) |
| MayumiTamura | Board Director (Outside/Independent Director) | (13/13) | (4/4) | (15/15) | (4/4) |

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 mid- 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 decisionmaking 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.

∴ Decision-Making Process

We have implemented several steps to achieve more efficient operation in the business execution and decision-making process. The major steps are listed below.

Decision-Making Process

| Decision-Waking Frocess | | | |
|---|---|--|--|
| Classification | Characteristics | | |
| Executive Committee | The Executive Committee is a consultative body comprised of executive officers nominated by the President and CEO. Proposals are decided upon after deliberation by the committee. The Executive Committee is an accumulation of the wisdom of the Company, offering not only reciprocal checks and balances for the execution of business, but a place to promote individual proposals. As a rule, the committee convenes twice each month. | | |
| Budget/ Medium-Term Management Plan Deliberation Committee | The Budget/ Medium-Term Management Plan Deliberation Committee deliberates on single-year budgets and three-year medium-term management plans and their progress. Budgets and management plans are presented to the Budget/ Medium-Term Management Plan Deliberation Committee after first being formulated by the relevant business group and then reviewed by the Budget/ Medium-Term Management Plan Deliberation Committee meetings. Because it deliberates over content at the core of our management, matters that are deliberated by the Committee must be authorized by a resolution of the Board of Directors after receiving final approval by the Executive Committee. | | |
| Management Meetings | Management Meetings conduct in-depth discussions of company- wide management issues and other important matters for the purpose of summarizing issues and clarifying the direction in which we should go. Meeting participants are Executive Committee members, and as a rule, they convene twice each month. | | |
| Business Groups Management Committee | The Business Groups Management Committee is a decision-making committee that convenes once each month. It is made up of executive officers who are Business Group General Managers, and who make decisions within the scope of their authority. It also conducts advance consideration of matters to be put before the Executive Committee. Furthermore, Business Group General Managers formulate internal rules for their business groups and delegate authority to lower positions within the scope allowed for by the Decision-Making Standards to streamline work. | | |

In addition, to support the above, there is the Investment Committee, which provides support to departments at the review stage of making business investments such as M&As, and conducts phase-gate management after the investment has been made. There is also the Business Strategy Committee, which double-checks goals under the Medium-Term Management Plan (Company-wide portfolio strategy, performance targets, etc.) and

reviews the strategies and policies of business groups leading up to the formation of consensus and goals.

Operation of Group Companies

The Company has a governance framework of executive officers who supervise group companies. These executive officers attend the Shareholders Meetings of each company and exercise their voting rights as agents of the Company, which is the parent company, while also consulting with group companies and providing advice as necessary. Authorization by the Executive Committee of the Company, which is the parent company, and approval of the relevant Business Group General Manager are necessary to address important matters concerning group companies; however, the Decision-Making Standards and the internal rules of each business group stipulate the extent to which decision-making authority is delegated to each company to accelerate the decision-making process.

Furthermore, among overseas group companies, Hitachi High-Tech nominates a regional presiding company in each major region of the globe where it operates. The presidents of said companies represent the President of the parent company, while also providing oversight and support to group companies within their respective regions.

Overseas Regional Presiding Companies

| Region | Overseas Regional Presiding Company |
|---------------------------|---|
| North and Central America | Hitachi High Technologies America, Inc. |
| Europe | Hitachi High-Technologies Europe GmbH |
| ASEAN and India | Hitachi High-Technologies (Singapore) Pte. Ltd. |
| China | Hitachi High-Technologies (Shanghai) Co., Ltd. |

: Internal Control System

With regard to the legal requirement to develop an internal control system, the Board of Directors decides the internal control system to be established and the executive officers establish and operate the schemes and procedures composing the internal control system. The Board of Directors seeks liveliness and effectiveness of the internal control system. It receives reports from the executive officers concerning the operational status and results of the internal control system and issues instructions to improve the system if necessary. Alternatively, the executive officers may propose modification of the system in response to changes in the business environment, which the Board of Directors deliberates to adopt.

The Company has established an Internal Control Management Committee to oversee activities to strengthen and enhance the Group-wide internal control system. Furthermore, the Internal Control Management Committee oversees its four committees (the J-SOX Committee, the Compliance Committee, the Information Security Committee and the Environmental Committee), which issue instructions to responsible divisions on measures to address and prevent the respective risks for which each committee is responsible.

: Internal Auditing

The Company has placed the Internal Auditing Division, 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 Division 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 Division 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.

Compensation for Directors and Executive Officers

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 of its 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 his/her 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.

Compensation Structure for Directors and Executive Officers

| | Monthly Remuneration | Year-end allowance or Performance-based Compensation | Non-monetary reward |
|-----------------------|---|---|--|
| Directors | The monthly salary to be received by the Company's Directors will be fixed in amount considering that the directors' duties are to perform supervisory functions. The level of pay will be determined by distinguishing between full-time and part-time Directors, subject to variation depending on the Committees to which they belong and the nature of their respective duties. | The amount of year-end allowance paid will be capped at 1.5 times the monthly salary; however, the amount may be cut depending on the Company's business performance. | Positions (with duties) that have a significant impact on management shall be provided with health management services from a medical institution under contract with the Company, as a way of averting and reducing health risks as part of corporate risk management. |
| Executive Officers | The standard annual salary decided for each executive officer with consideration for the standard in the business world shall be paid monthly as a standard salary excluding bonuses. | The standard bonus amount shall be the performance-based compensation paid at the time standard targets are achieved, and shall fluctuate depending on the degree to which those targets are met. Evaluations are determined through a combination of Company-wide performance, division performance, and individual targets. | Those with duties that have a significant impact on management and business execution shall be provided with health management services from a medical institution under contract with the Company, as a way of averting and reducing health risks as part of corporate risk management. |

^{*} If a person serves concurrently as a director and an executive officer, compensation will be paid as either a director or an executive officer, depending on his/her main responsibilities.

Amount of Compensation to Directors and Executive Officers FY2017

| | | | Total Amount of Rei | Total Amount of Remuneration by Type | | | |
|--|--------------------|------------|----------------------|---|----------------------|----------------------|--|
| | | Monthly Re | | Year-end Allowance or Performance-linked Component | | Total | |
| | Number Amo | | Amount (million yen) | Number | Amount (million yen) | Amount (million yen) | |
| | Directors | 9 | 98 | 7 | 12 | 110 | |
| | Outside Directors | 4 | 44 | 4 | 6 | 50 | |
| | Executive Officers | 15 | 244 | 15 | 281 | 525 | |

Notes: 1. The number of Directors and monetary amounts do not include Directors who concurrently serve as Executive Officers.

2. The above monthly salary includes the monthly salary paid to two Directors who retired at the end of their terms of office at the close of the 98th Ordinary General Meeting of Shareholders held on June 23, 2017.

Risk Management System

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. 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

The Company is also moving forward with efforts to strengthen business continuity management (BCM).

: 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 (J-SOX Committee, the Compliance Committee, the Information Security Committee and the Environmental Committee) and the efficacy of responses by the departments in charge. The Committee also assesses and examines operational status of internal control systems, including important decisionmaking processes, and reports to the Board of Directors, as well as proposes revisions to the Board of Directors of the details of resolutions related to internal control systems in response to changes in the management environment.

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.

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.

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, and all from management to employees are united as one company in conducting a range of activities in accordance with the Three Principles to Prevent Leaks of Confidential Information.*

- * 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.

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, there are several subcommittees operating under the Environmental Committee that conduct environmental activities in a more detailed manner.

* Refer to page 49 for details on the Environment Risk Management System.

Business Continuity Plan (BCP)

To ensure that work to supply its products and services continues uninterrupted in the event of a natural disaster or other risk, and in the event that work is interrupted, to resume business activity as quickly as possible, the Group is working to enhance its BCP, which focuses primarily on important products and operations which have a significant social and economic impact.

The Group has established a BCM Committee, to maintain and enhance the Group's ability to respond to business continuity issues and strengthen collaboration within the Group, and to conduct virtual drills designed to enhance initial response, develop double-track manufacturing sites, and increase effectiveness in the event of an emergency. In the case of infectious diseases such as new strains of influenza, the Committee has published its Guidelines for Countermeasures Against New Strains of Influenza, which, based on its basic policies, outlines specific behavior standards in the event of a global pandemic.

To ensure manufacturing, sales and service are unified in an effective approach to business continuity, the Company is striving to continuously improve its BCM system, including drills, validation and other efforts, as it works to strengthen its ability to respond to risk.

Establishment of a Whistleblowing Hotline

The Group has established a whistleblowing hotline, available to full-time employees, temporary agency workers, casual workers and fixed-term employees, to detect and respond to illegal or unethical activities at the earliest stages. Overseas companies also operate whistleblowing hotlines in conformity with the legal system in each country and the business structure of each

Information provided to the whistleblowing hotline is reported to the Compliance Committee and the Internal Control Management

Since January 2016, the Company has been operating the Independent-from-Management Whistleblowing Hotline, which enables direct reporting to members of the Audit Committee if a whistleblower finds directors or executive officers violate laws or regulations in conduct of business. This further strengthens our whistleblowing system.

In operating the whistleblowing hotline, the Company very strictly protects the confidentiality of whistleblowers' identities, and accepts anonymous reports. Furthermore, the Company prohibits any negative treatment of a whistleblower for having made an internal report.

Note that while the Group endeavors to avoid or reduce the impact of risks related to its business activities and other business risk by establishing a risk management structure, in some cases we may not be able to completely avoid or reduce the impact of risks, which could affect operating results, share price, and financial position, etc. The 13 items listed below are the key risks that could affect the Group's operating results, share price, and financial position, etc.

| Major Risks | | | | | |
|-------------|--|--|--|--|--|
| 1 | Market trends | | | | |
| 2 | Technological innovation | | | | |
| 3 | Intensifying competition | | | | |
| 4 | Soaring materials costs | | | | |
| 5 | Risks arising from international activities and overseas expansion | | | | |
| 6 | Disasters | | | | |
| 7 | Pension benefit obligations | | | | |
| 8 | Changes in exchange rates | | | | |
| 9 | Intellectual property matters | | | | |
| 10 | Dependence on information systems | | | | |
| 11 | Management of confidential information | | | | |
| 12 | Litigation and other legal procedures | | | | |
| 13 | Faulty Pile Work | | | | |

▶ Please refer to the securities report for details concerning Major Risks.

Directors

(As of July 1, 2018)



Back row from the left; Yuii Nishimi, Hiromichi Toda, Ryuichi Nakashima and Mayumi Tamura Front row from the left; Hidevo Havakawa, Ryuichi Kitayama and Masahiro Miyazaki

Chairman of the Board Ryuichi Kitayama

Nominating 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 appointment to incorporate his experience and knowledge into the supervision of the Company's management and execution of operations.

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.

Vice President and Executive Officer, Hitachi, Ltd. 4/2010 Outside Director, Hitachi High-Technologies Corporation 6/2010

4/2014 Representative Executive Officer, Senior Vice President and Executive Officer, Hitachi, Ltd

Representative Executive Officer, Executive Vice President and Executive Officer, Hitachi, Ltd. 4/2015

Outside Director, Hitachi High-Technologies Corporation 6/2015 6/2016 Director, Hitachi Capital Corporation

Director, Hitachi High-Technologies Corporation 6/2017

6/2018 Chairman of the Board, Hitachi High-Technologies Corporation (to date)

Director

Masahiro Miyazaki

Nominating Committee

Compensation Committee

Reason for Selection

Mr. Miyazaki has led the management of Hitachi High-Technologies 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

General Manager, Electronics Sales Div., Hitachi High-Technologies Corporation Executive Officer, Hitachi High-Technologies Corporation 7/2004

4/2007 President & CEO, Hitachi High Technologies America, Inc. 4/2010

Senior Vice President and Executive Officer, Hitachi High-Technologies Corporation 4/2014

4/2015 Representative Executive Officer, President and Chief Executive Officer, Hitachi High-Technologies Corporation

6/2015 Representative Executive Officer, President, Chief Executive Officer and Director, Hitachi High-Technologies 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 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 appointment based on his experience and knowledge to appropriately supervise the Company's management and execution of operations.

4/1979 Joined Hitachi High-Technologies Corporation

General Manager, Accounting Dept., Accounting Div., Hitachi High-Technologies Corporation 10/2001 General Manager, Accounting Dept., Nanotechnology Systems Div., Hitachi High-Technologies 4/2004 Corporation

4/2008 General Manager, Sales Administration Dept., Accounting & Finance Div., Hitachi High-Technologies Corporation

General Manager, Accounting Dept., Accounting & Finance Div., Hitachi High-Technologies 10/2010 Corporation

4/2011 General Manager, Internal Auditing Div., Hitachi High-Technologies Corporation

Executive Officer, Hitachi High-Technologies Corporat 4/2013

Vice President and Executive Officer and CIO*2 and CTrO*3, Hitachi High-Technologies Corporation 4/2015

6/2017 Director, Hitachi High-Technologies 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 10/1984 Joined Mitsui & Co., Ltd.

Registered as attorney of New York State Bar Association 4/2006

Managing Officer and General Manager of Legal Division, Mitsui & Co., Ltd. Executive Managing Officer, and General Manager of Internal Auditing Division, Mitsui & Co., Ltd. 4/2008

Outside Director, Hitachi High-Technologies 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

The Board of Directors of Hitachi High-Tech has seven directors, with a majority of four outside directors. I consider that this leads to well balanced, lively discussion, and effective supervision function. Moreover, the outside directors are highly diverse in terms of career history and expertise, and they draw from their abundant experience in various fields to contribute to the discussion. Based on my own experience and insight in the finance division of a global company, I offer opinions from an objective viewpoint. In giving unreserved opinions, I strive to maintain a certain level of tension with the executive side, while ensuring that I can keep good communication and build good relationships.

In addition to its supervisory function, the Board of Directors is required to contribute to increasing corporate value. Amid rapid diversification in customer needs and changes in the market environment, the Board needs to have even deeper discussions about medium- to long-term growth strategies. Hitachi High-Tech has advanced technological capabilities and a global network, and I feel that it is an open and autonomous organization. I hope to promote discussion in the Board of Directors that will enable the Company to utilize these strengths to achieve continuous growth.

Furthermore, looking ahead, management will need to incorporate an awareness of the SDGs, tying them into corporate strategies, making employees aware of their importance, and acting on them as a united group. Sustainable diversity management is another essential measure. As the Company's business fields and geographical coverage expand, I would like to use my involvement as an outside director to encourage an environment where diverse personnel can participate globally with diverse workstyles.

Looking ahead, I will support continuous improvement in Hitachi High-Tech's corporate value as an outside director by discerning risks and issues with a view to future growth and monitoring them.



Mayumi Tamura Outside Director

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

Senior Vice President, and General Manager of Measurement Business Center, Anritsu Corporation 4/2004 6/2004 Director and Senior Vice President, Anritsu Corporation

Director and Executive Vice President, Anritsu Corporation 4/2005

6/2005 Representative Director and President, Anritsu Corporation

4/2010 Representative Director and Chairman of the Board, Apritsu Corporation

Director and Chairman of the Board, Anritsu Corporation 6/2010

6/2013 Outside Director, Hitachi High-Technologies 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.

Senior Executive Vice President, AGC Inc. 1/2009 3/2011

Representative Director, Senior Executive Vice President, AGC Inc. Outside Director, Hitachi High-Technologies Corporation (to date) 6/2015

Outside Director Mayumi Tamura

Nominating Committee

Audit Committee

Compensation Committee

Reason for Selection

Ms. Tamura was selected for appointment 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 Jonson 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 Executive Officer, Johnson Diversey, Co., Ltd. (now CxS Corporation)

7/2002 12/2004 CFO*4, adidas Japan K.K.

Executive Officer and Senior Vice President and CFO, Seivu K.K. (now Seivu GK.) 6/2007

5/2010 Executive Officer and Senior Vice President and CFO, Wal-mart 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.

Outside Director (Audit and Supervisory Committee Member), Honda Motor Co., Ltd. (to date) 6/2017

Outside Director, Hitachi High-Technologies Corporation (to date)

Executive Officers



Masahiro Miyazaki Representative Executive Officer, President and Chief Executive Officer Overall management execution



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

Export Control Officer, and CTO



Shunichi Uno Senior Vice President and Executive Officer Accounting & Finance, Trade Compliance Management and CFO



Shinji Sato
Senior Vice President and
Executive Officer
Corporate Strategy, Marketing &
Sales Strategy, Group Company
Management, and CSO / CMO



Hisashi Horikoshi Senior Vice President and Executive Officer Human Resources, CSR, Corporate Communications, Legal, Environment, Internal Control, Compliance Risk Management, and CHRO / CRO



Joji Honda
Vice President and
Executive Officer
Manufacturing, Procurement, and
Quality Assurance



Futoshi Ishiwa Vice President and Executive Officer Electronic Device Systems



Shinji Sakurai Vice President and Executive Officer Digital Strategy, Smart Transformation Promotion, IR, and CIO / CTrO



Mikio Takagi Vice President and Executive Officer Science & Medical Systems



Hiroshi Tajima
Vice President and
Executive Officer
Advanced Industrial Products



Takashi lizumi Executive Officer Industrial Systems



Sukehiro Ito
Executive Officer
Science & Medical Systems



Hitoshi Kato Executive Officer Korea Area



Yasukuni Koga Executive Officer EMEA Area



Keita Miyoshi Executive Officer Advanced Industrial Products

CTO: Chief Technology Officer
CFO: Chief Financial Officer
CSO: Chief Strategy Officer
CMO: Chief Marketing Officer
CMO: Chief Marketing Officer

CHRO: Chief Human Resources Officer
CRO: Chief Risk Management Officer
CIO: Chief Information 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 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 against the backdrop of the increased proportion of shares of the Company held by overseas investors. The IR Division actively promotes understanding of the Group, such as by holding approximately 300 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.

Main IR Activities in FY2017

| IR Activities Aimed at Institutional Investors | Number of Times Conducted |
|---|--|
| Financial Results Briefing | 4 (including 2 briefings by the President) |
| Overseas IR (US, Europe, Hong Kong, Singapore) | 3 |
| Conferences Held by Securities Companies | 2 |
| Meetings with Analysts and Institutional Investors | Cumulative 294 briefings |

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 CTOs, 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.

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.



Social Background

In the Hitachi High-Tech Group's three core business domains—Biotechnology and Healthcare, Social and Industrial Infrastructure, and Advanced Industrial Systems, business and social conditions are changing at a dizzying rate and customer needs are becoming more diverse and sophisticated.

This climate calls for the review of Japan's domestic social environment to accommodate diverse working styles. Meanwhile, international society recognizes the correction of inequalities between men and women in labor markets as a task in keeping with "Goal 5: Gender equality: Achieve gender equality and empower all women and girls" of the SDGs adopted by the UN Summit.

Hitachi High-Tech's Targeted Direction

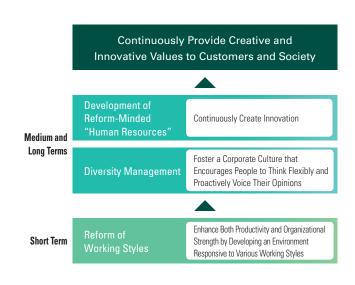
⇒ Develop and Foster Reform-Minded "Human Resources" Who Will Help to Increase Corporate Value

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 and long terms, the 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.





Working Style Reforms

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 organizational strength and productivity.

Greater productivity makes it easier for employees to secure time for things like self-improvement, facilitating the growth of both employees and the company, thereby creating a virtuous cycle.

Since FY2015, we have been conducting the "20-20" Project*1 to achieve a highly productive working style and enhance productivity based on a commitment from top management. Under this project, each worksite is taking creative steps to effectively utilize regular work hours and implement wellmodulated working styles.

In FY2017, ongoing 20-20 Project initiatives paid off with substantial improvement in terms of overtime hours and the use of paid leave, but not enough to reach our targets.

Gaps in progress and initiatives among departments and individuals are among issues that have been brought up. In FY2018, we will therefore extend the 20-20 Project's span by one year with the goal of the project becoming a success. We will strive for even higher productivity through business reforms tailored to each workplace, including business process-specific improvements.

In terms of programs, in FY2017 we focused on creating a work environment to accommodate various working styles including by expanding eligibility for teleworking and introducing satellite offices.

In FY2018, we intend to further enhance programs and measures including by introducing policies for minimum daily rest periods and leave of absence for volunteering purposes.

We will work to establish an environment where employees' personal growth also ties to business, aiming to "increase opportunities for broadening horizons and experiences by promoting the planned use of annual paid leave" as stipulated in the Hitachi High-Tech Group's "Working Style Reform Declaration."

Additionally, we have been taking steps to build a corporate culture that encourages the use of programs and invigorates the workplace. Specific examples include program information sessions as well as PC skill and defined contribution pension plan study sessions. These ongoing measures are designed to spur employees to take the initiative to improve ways of working.

*1 "20-20" Project: Activities that aims 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 month, and the use of paid leave of 20 days or more per year

20-20 Project programs and initiatives

| Category | FY2015 | FY2016 | FY2017 | FY2018 Plan |
|-------------------------------|--|---|--|--|
| Program | Teleworking program (childcare and home nursing care) | Teleworking program (employees on monthly salary) Annual paid leave in hourly units Core-free flextime program Established Overtime Guidelines | Expanded leave of absence for family nursing care purposes Paid leave of absence for childcare purposes Allowance for balancing childcare and work Leave of absence for spouse transfers Expanded eligibility for teleworking program Introduced satellite offices | Introduce minimum daily rest period system Introduce leave of absence for volunteering purposes |
| Fostering a corporate culture | Lecture meetings with outside experts Presentation sessions for sharing the initiatives and good examples of various departments | Working Style Reform Declaration Action declaration by business group general manager 20-20 (overtime hours/paid leave) system targets set Like! and Help! lunch meetings | Distributed Work-Life Balance Guidebook "Premium Friday" networking events 20-20 Award | Telework promotion week Working Style Reform Guidebook Strive to go paperless Lectures on the effective use of tools including PCs |
| Other initiatives | Organized the Working Style Reform Committee (discussions between the labor union and management) | Joined the Ikuboss Alliance*2 | | |

^{*2} Ikuboss Alliance: "Ikuboss" refers to supervisor (management executives and management-level personnel) who is able to maintain outstanding business performance and contribute to the company, enjoy both his/her work and private life, and also provide support to team members' work-life balance and their careers and lives. The Ikuboss Alliance is a network of companies who recognize the need for "Ikuboss" managers in their organizations and are committed to developing ideal "Ikuboss" managers for a new era by proactively transforming the mindset of their management-level personnel

Please refer to the website for more details on activities and achievement related to our "human resources."

Topics

2018 Certified Health and Productivity Management Organization (White 500)* Recognition

On February 20, 2018, Hitachi High-Tech was recognized under the 2018 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.



2018 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

Globalized Professional Development and Recruitment

The Hitachi High-Tech Group believes that people are one of the greatest assets of a company. We believe that enhancing the value of each and every individual as a "human resource" leads directly to sustainable value creation throughout the Group.

Based on this view, we have adopted "the development of personnel with a global outlook and fostering a corporate culture that drives global growth" as the main policy for our human resource development initiatives. Guided by this policy, we are working to undertake human resource development encompassing all employees.

Through our training programs, we are focused on developing personnel who can contribute globally. We systematically conduct our training programs in the following categories—cluster-specific training (including sales training), engineering training, and manufacturing skills training. Furthermore, we endeavor to ensure ongoing verification and improvement of our human resources development initiatives via the Management Education Committee.

Recruitment of Human Resources Supporting **Business Growth**

As a step to retain human resources to achieve its growth strategies, Hitachi High-Tech strives to employ talented people, irrespective of their gender or nationality. Among the 91 new hires recruited as regular employees in April 2018, 33% were women, and 5% were non-Japanese.

We also believe that it is vital to recruit experienced talent with advanced technical capabilities and expertise. In FY2017, we hired a total of 71 experienced talent, mainly in the Science &Medical Systems and Electronic Device Systems segments.

: Human Resource Development in Tune with Management Policies and Businesses/ **Development of Highly Skilled Professionals**

As for cultivating leadership, we have in place programs to rapidly train and put the right people in key positions. In FY2017, we expanded these programs' scope from domestic operations to overseas Group companies.

Going forward, we will continue to develop personnel with an eye to globally-oriented training, aiming to strengthen development of management leaders at the global level.

We are also focusing on self-directed human resource development including career development. In FY2017, we clarified the roles of highly skilled professionals and expanded on our career tracks and development programs. We will keep concentrating on fostering specialist talent.

: Cultivating Talent with a Global Outlook

We actively post young employees overseas with a view to cultivating personnel capable of doing business with a global perspective. Young employees are trained overseas via a oneyear 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.

: Introducing Global Performance Management (GPM)

In FY2016, the Hitachi High-Tech Group introduced Global Performance Management (GPM) to achieve an autonomous, distributed organization. GPM links company targets, divisional targets, and individual performance targets. It requires individuals to set activity targets for the actions and processes they must implement to achieve the targets at each level. In the "Coaching & Feedback" process, an important communication tool for advancing GPM, supervisors monitor the degree of accomplishment of their subordinates, and provide advice designed to encourage autonomous improvements and steps to achieve targets. In FY2017, we held evaluator and coaching skills training, and introduced GPM at some overseas Group companies. Moving ahead, we will bring GPM to more overseas Group companies while stepping up work to entrench the measures.

: Career Development Support

Hitachi High-Tech provides career development support so that each employee is able to develop his or her career to the fullest. In the process, Hitachi High-Tech emphasizes the significance and meaning of work for each employee and their values.

Specifically, we provide career training and have established a career consultation office staffed by professionals. As a measure to enhance opportunities for career advancement, we also offer a Career Development Allowance so that each employee can improve themselves by developing their career. Through such initiatives, we aim to support employees in their diverse career progressions and add more value to our workforce.

Diversity Management

: Implementing Diversity Management

The Hitachi High-Tech Group respects diverse sensibilities and values and is working to incorporate them as one of its major initiatives to achieve growth. Placing "diversity management" at the core of our management practices is essential to producing a dynamic organization.

In FY2017, the Hitachi High-Tech Group's activities to promote diversity included lecture meetings on diversity with outside experts as well as diversity management workshops with the themes of women and LGBT. These events provided opportunities for employees to gain exposure to and think deeply about diversity. In addition, we advanced the development of female leaders by holding events such as "role model cafes" for female assistant-managers and managers as well as executive round tables with the CEO and the Company's female board member, sending employees to networking events to encourage interaction with people in different industries, and providing human skills training for general office employees.

In FY2017, we made solid headway on major KPIs, with women accounting for 4% of managerial positions and 33% of new graduate recruits as well as one female board member. In FY2018, we will focus on encouraging greater understanding of diversity and putting it into practice, including by developing female leaders to add diversity to Hitachi High-Tech's decision-making executives and offering early career development opportunities that give consideration to women's life events.

In addition, the Hitachi High-Tech Group actively employs people with disabilities. In FY2017, we held seminars to increase understanding among workplaces that will accept people with disabilities. Going forward, we will focus on efforts including an expansion of the scope of applicable jobs and support for settling in to work.



Female leader meeting



Female leader workshop



Open seminar on employing people with disabilities

Topics

Nadeshiko Brand 2018 Selection and "Eruboshi" Certification

Hitachi High-Tech was selected as a Nadeshiko Brand*1 enterprise for excellence in encouraging women's success in the workplace by the Ministry of Economy, Trade and Industry and Tokyo Stock Exchange, Inc. for a second consecutive year. Our selection in 2018 recognized our varied initiatives throughout the organization with diversity management at the core of operations, as well as our working style reforms led by top management striving to realize a good work-life balance for employees

Further, on November 29, 2017, Hitachi High-Tech earned the top Stage 3 "Eruboshi" 2 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



Please refer to the website for more details on activities and achievement related to our "human resources."



R&D Strategy

The 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, especially focusing on our proprietary product businesses in Science & Medical Systems and Electronic Device Systems. Targeting major trends such as IoT and AI, we are also working to strengthen our existing technologies and to create new service solution businesses.

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, 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 13% year on year to 26.7 billion yen in FY2017. Owing to ongoing initiatives in various business fields, we also plan on investing more than targeted in our Mid-Term Management Strategy, which calls for total R&D investment of about 80 billion yen over the three years from FY2016. Through aggressive R&D investment, we will stay focused on pursuing domains and technologies that can support business creation over the longer term.

Innovation Promotion Strategy

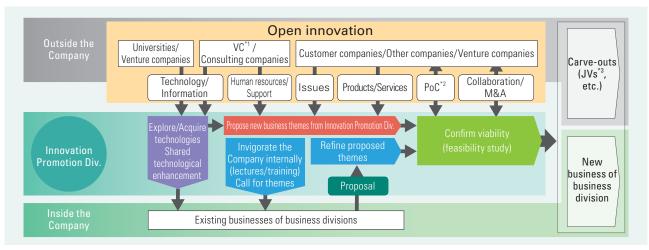
In this era, business conditions are changing at a spectacular rate and consumption trends for individuals and companies are clearly shifting from the possession of objects to the use of services. Amidst this change, the Hitachi High-Tech Group is leveraging integration of other companies' businesses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

New Business Creation and Existing Business Innovation

In April 2016, the Hitachi High-Tech Group established the Innovation Promotion Div. to encourage innovation throughout the organization looking to global new business creation. We have subsequently been working to lead in discovering and acquiring technologies and to advance the development of enhanced technologies shared by all group companies, while 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 research institutions, 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. 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 of new projects from the ideas. Regarding commercialization, we have in place flexible frameworks enabling complex business formats such as carve-outs (business separated as a new company) as necessary. Moreover, we have begun investing in venture capital to establish a channel for gaining information on promising venture companies as soon as possible.

Functions of Innovation Promotion Div.



^{*1} VC: Venture Capital *2 PoC: Proof of Concept *3 JV: Joint Venture

Intellectual Property Strategy

With the basic aim of promoting IP activities that contribute to the Hitachi High-Tech Group's business development, the Intellectual Property Dept. formulates and implements our IP strategy in partnership with the business divisions, based on our R&D Roadmap. In addition to our core IP activities—patent acquisition, utilization, and clearance, we are reinforcing efforts to encourage new business creation and to support service solution business expansion. Specifically, we are engaging in IP evaluation and providing support from an IP perspective in the examination of business schemes in collaboration with external parties.

Patent Creation and Development Activities and Respecting IP

Based on our R&D strategy, we devise activity plans to help stimulate innovation and construct a patent portfolio to protect proprietary technology and secure IP rights over the results of development projects.

Furthermore, based on the patent portfolio that we have constructed, our basic policy is not to use the IP of other companies and not to allow other companies to use our IP. We seek to ensure that others respect our IP rights while respecting the IP rights of others.

Enhancing Professional Development and Ensuring an IP Incentive and Award Program

At Hitachi High-Tech, 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 Dept. is a group of specialists, including 10 in-house patent attorneys and 2 PhD holders (total figures as of April 2018), and is working to improve the dependability of IP activities.

Moreover, we have a robust invention incentive program designed to encourage employees who work on the front lines of research and development to make inventions, as well as an IP award program we are revising according to business changes with the aim of further increasing the motivation of inventors.

Enhancing Overseas IP to Support the Globalization of **Our Business**

The Hitachi High-Tech Group generates the majority of its revenues from sales overseas, primarily in Asia. To adapt to such globalization in our business, we are strengthening our patent applications and acquisition of grants in the West and Asia, while also continuing our measures against counterfeit products, particularly in Asia. We are also working to improve cost efficiency. For instance, depending on business trends, we no longer automatically apply for Japanese patents, something that had been done as a matter of course until now. In FY2017, overseas applications accounted for about 64% of our total applications. In addition, we are responding to the shift in development to overseas group companies by providing support in matters such as drafting IP policy and securing IP rights.

IP Data

| FY | 2014 | 2015 | 2016 | 2017 |
|---------------------|-------|-------|-------|-------|
| Patent Applications | 1,169 | 1,002 | 927 | 980 |
| Domestic | 402 | 327 | 278 | 350 |
| Overseas | 767 | 675 | 649 | 630 |
| Patents Owned | 7,115 | 7,400 | 7,469 | 7,930 |
| Domestic | 3,735 | 3,758 | 3,698 | 3,820 |
| Overseas | 3,380 | 3,642 | 3,771 | 4,110 |

^{*} Data for each fiscal year is collated in May of the following fiscal year



Social Background

In order to strengthen business competitiveness, it is essential for companies to take steps to enhance product quality, reduce costs, shorten lead times, establish business continuity plans (BCP), and so forth throughout their supply chains. In addition, companies are being called upon to fulfill their social responsibilities to address social priorities such as ethical conduct, respect for human rights, labor practices, and environmental issues. Moreover, companies are being called upon to ensure that the products they provide to customers are manufactured in line with social priorities by not just evaluating their own activities but also those of their partners including during the process of selecting them.

The Hitachi High-Tech Group is also receiving growing requests from customers to undertake activities to address its social responsibilities throughout the supply chain, and strengthening supply chain management is a means of minimizing economic, social, and reputational risks.

Shift of resources to global customers

Heightened demand for companies to address their social responsibilities

Hitachi High-Tech's Targeted Direction

🔛 Maintain Procurement and Strengthen Product Cost Competitiveness to Prevail against Global Competition, Based on Collaborative Relationships with Partners

The 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

Hitachi High-Tech enters 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

Maintain Procurement and Strengthen Product Cost Competitiveness to Prevail against Global Competition, Based on Collaborative Relationships with Partners Strengthen procurement risk management Strengthen product cost Rigorously enforce competitiveness procurement compliance

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. In FY2017, we switched to paperless order forms via electronic data and promoted rapid sharing within the Group of information related to items to be procured. The database contains information on the manufacturing

locations of each partner. We strive to spread out the manufacturing locations of our suppliers by securing multiple suppliers for each item. We also work to build supply chains capable of continuing production even when there is damage from natural disasters, including by securing inventories of components within the Company and externally.

Strengthen Product Cost Competitiveness

Hitachi High-Tech is 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.

In FY2017, we established a central purchasing system by consolidating the purchasing functions of our Naka Division (including three group companies) and Kasado Division into one. In FY2018, we will shore up our collaborative relationships with partners by expanding the scope of items purchased centrally and deploying the central purchasing system to manufacturing sites at domestic group companies.

⇒ Rigorously Enforce Procurement Compliance

The Hitachi High-Tech Group positions the rigorous enforcement of compliance as the foundation of all of its corporate business activities. As with procurement activities, we will endeavor to build good partnerships with all of 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. By doing so, we will strive rigorously to prevent all manner of misconduct and enforce legal compliance.

From FY2018, we will conduct internal audits utilizing outside auditing services to step up monitoring of procurement activities. In addition, members of Hitachi High-Tech's Procurement Division will participate in domestic and overseas group companies' self-audits on procurement by conducting compliance checks and providing guidance for improvement.



Hitachi High-Tech's Supply Chain Management

We created the Hitachi High-Technologies Guidelines for Procurement Activities in FY2011, and released English and Chinese editions of the guidelines in FY2015 to facilitate their global application.

When we start working with a new partner, we use the Hitachi Group Supply Chain CSR Deployment Guidebook issued by Hitachi Ltd. (revised in January 2017) as the basis for ascertaining the status of their activities related to social responsibility (ethical behavior, respect for human rights, labor practices, environmental issues, quality, safety, etc.) and confirming whether they are in line with the Group's procurement and selection policies.

Supplier Briefings at Each Manufacturing Base

We hold regular briefings for the partners of our product manufacturing divisions, with the goal of establishing a shared awareness of CSR through the provision of information to our partners and mutual communication with them. We hold briefings at the Company's manufacturing bases twice each



Supplier briefing (Naka Division)

year to explain the Hitachi Group's initiatives aimed at promoting green procurement activities and supply chain CSR activities. We have positioned the Hitachi Group Supply Chain CSR Deployment Guidebook as the common standard for evaluating partners since FY2013 to deepen verification and mutual understanding. We provide our partners with feedback on the results of our evaluations, and ask them to make improvements and offer assistance with such as necessary.

Promoting Environmentally CSR Compliant Procurement

The Group practices green procurement, prioritizing environmentally friendly items in our procurement of products, components, and materials. With legislation such as the RoHS Directive becoming increasingly stringent, we manage the chemical substances contained in our products and respond to the extension of regulations governing chemical substances via the Hitachi Group's A Gree' Net green procurement system. In addition, we promote the Hitachi Group's Environment and CSR-Based MONOZUKURI activities, while our Naka Division provides encouragement and support to ensure that all partners actively engage in environmental conservation activities.



Social Background

At the COP21 meeting held in Paris in December 2015, nations agreed to adopt a target of limiting the increase in average global temperatures compared with pre-industrial revolution level to 2°C in the second half of this century. The Paris Agreement came into force on November 4, 2016. Japan has set greenhouse gas emissions-reduction targets for both the medium term (26% reduction from FY2013 levels by FY2030) and long term (80% reduction by 2050).

Further, addressing environmental issues is recognized as a shared global undertaking as embodied by "Goal 13: Take urgent action to combat climate change and its impacts" of the SDGs, which establish targets to be achieved and common rules for international society in the 21st century.

From a business perspective as well, it is crucial for companies to appropriately respond to climate change and other environmentalrelated social priorities, while helping to reduce environmental impact.

Hitachi High-Tech's Targeted Direction

. Contributing to a Sustainable Global Environment

Based on our belief that the global environment is the very foundation for sound societies and markets, which make ongoing business possible, the Hitachi High-Tech Group has established "Contributing to a sustainable global environment" as one of the Materiality

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 CO₂, 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 via production process reforms and capital investments for facility rationalization, while also introducing renewable sources of energy to help lower our emissions per unit of sales. 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 CO₂ emissions through the value chain by helping customers to cut energy consumption at the product usage stage and so forth.

From FY2018, we have also been pressing ahead with the analysis of scenarios pertaining to opportunities and risks associated with the transition to a low-carbon society. From a long-term view, we look to further link our initiatives aimed at realizing a low-carbon society with our business processes.



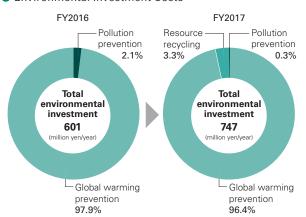
Promoting Environmental Management

☼ CO₂ Emissions-Reduction Plan Formulation and Promotion of Planned Environmental Investment

For environmental investments that bring about significant reductions in CO2 emissions, we are using the environmental investment guidelines covering the entire Group that we formulated in December 2016 to make such investments more manageable and more effective as we work to achieve our CO2 emissions-reduction target.

Based on the guidelines, we increased the Group's environmental investment in FY2017 by 24% from FY2016 in overall value terms, and reduced CO₂ emissions at domestic manufacturing sites by

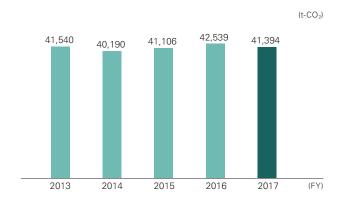
Environmental Investment Costs



2.7%. In addition, we are promoting ways to monitor energy usage (visualization) so that we can confirm the investment effect more precisely.

To that end, we are adopting IoT technology to improve production processes while developing systems to monitor power consumption. Since FY2018, we have also been actively promoting the use of renewable energy through steps such as additional solar power introduction and electricity contract

● CO₂ Emissions from Domestic Manufacturing Sites



Reinforcing Global Environmental Management and Risk Management

* Thorough Response to Global Environmental Risk and Compliance Issues

We work toward compliance by dividing domestic divisions and Group companies, including those located overseas, into business blocks, and creating internal standards for each company that are more stringent than the regulations in that country or region. In addition, we endeavor to prevent environmental accidents by identifying latent environmental risks and checking our compliance with environmental legislation through reciprocal environmental audits.

As for risk management for product manufacturing and services, we conduct periodic provision of information, on-site instruction, and auditing through the Environmental Strategy Subcommittee. In FY2017, we held environmental activity networking events at overseas manufacturing sites, aiming to raise the level of environmental management. In FY2018, we will strive to further reduce legal risks by making improvements and identifying business processes with a high degree of legal risk at divisions and Group companies.

With regard to environmental laws to which our domestic bases are subject, since FY2014 we have been managing the distribution of information on revisions and compliance assessment thorough the Environmental Legislation Management System, which was developed in-house. From FY2018, we will endeavor to reinforce legislation management by adding features to the system such as ordinance management and incident alerts, while striving to make more efficient use of the system.

Regarding risk management for sales transactions by overseas Group companies, we are working to reduce risk by sharing and disseminating information at the Global Environment Sales Subcommittee, which is a corporate function. In FY2017, we met in Japan with employees from overseas Group companies to share compliance-related issues and strengthen our ties.

The Hitachi High-Tech Group will keep endeavoring to buttress environmental management throughout the Group, aiming to avoid and mitigate business risks as we accelerate global business development including through M&A.

In FY2017, there were no serious legal violations related to the environment

Environment Committee and Affiliated Subcommittees



Supply of Eco-Friendly Products

Initiatives to Reduce CO₂ Emissions During Product Usage

The Hitachi High-Tech Group introduced environmentally conscious design (eco-design) in FY2016 with an eye to realizing a low-carbon society. We have worked accordingly to reduce CO2 emissions during product usage, which accounts for a large share of CO₂ emissions throughout the value chain.

In addition, these activities incorporate design and development processes based on the international standard IEC62430*2, which translates to added value for products. That leads to reduced environmental impact and greater competitive advantages.

In FY2017, the second year of eco-design introduction, we reduced CO₂ emissions by 29%, exceeding our target for a 25% improvement. We are also working on information disclosure, including by presenting more information on our eco-friendly products on the Company website.

The Hitachi High-Tech Group will continue to develop ecofriendly products and provide products that are even easier on the environment to customers.

- *1 CO₂ emissions during product usage: CO₂ emissions calculated from electricity consumption during product usage
- *2 International Electrotechnical Commission Standard: This standard covers environmentally conscious design for electrical and electronic products

: Introduction of Assessments

We have introduced eco-design and life cycle assessments into our product development processes to help lower the environmental impact of products over their life cycle.

We set a reduction in environmental impact as a development target, and evaluate this using an eco-design assessment tool. We conduct a quantitative evaluation to compare the environmental impact of a development product against existing products, considering all aspects of this over the respective product life cycles.

Topics

Products Developed Using Environmentally Conscious Design Approach (Launched Since FY2017) HM1000 phthalates screening equipment

In July 2019, an amendment to the EU RoHS Directive will add four phthalates to the list of restricted substances. These four chemicals are used in insulated coating materials, electrical insulation tapes and packing films for products such as consumer electronics and toys. The HM1000 is dedicated equipment for fast, easy, on-site screening of phthalates. It is easy to use and realizes high-throughput testing—automated analysis of 50 samples in about eight hours.



Eco-friendly aspects

- 1 Reduces waste as it does not use organic solvent, a chemical substance
- 2 Reduces waste by not using a separation column
- 3 Reduces electricity consumption by shortening the screening time for one sample from roughly 30 minutes to less than 10 minutes via a change in analytical principle

Change in analytical principle

This enables phthalate analysis without the trap and separation steps.

Conventional method: GC/MS*1 Heating or a solvent is used to extract Ionization (EI*2) Mass analysis Trap Component Separation Present method: Thermal Desorption Mass Spectrometry (HM1000)



the phthalates from the sample

- *1 GC/MS: Gas Chromatography Mass Spectrometry
- *2 El: Electron Ionization
- *3 APCI: Atmospheric Pressure Chemical Ionization

Biodiversity Conservation

Our everyday lives are supported by numerous benefits (nature's bounty) stemming from biodiversity. However, the progression of economic development is being accompanied by direct threats to our planet's biodiversity such as overuse of resources as well as destruction and pollution of the natural environment. At the Hitachi High-Tech Group, we are formulating action plans for each business site based on the central menu of 116 ecosystem conservation activities established for the entire Hitachi Group to advance new activities throughout the organization. Aiming for a society in harmony with nature in all its abundance, we will cooperate and collaborate with a variety of stakeholders as we continue to undertake biodiversity conservation activities.

Activities at the Woodland of Hitachi High-Tech Science

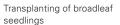


Surrounding the R&D facility on the site of the Oyama Works (Suntogun, Shizuoka Prefecture) is a natural area called the Woodland of Hitachi High-Tech Science. We are using the area, which covers approximately 44,000 m², to carry out biodiversity conservation activities using plants that are native to 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 December 2015, the Hitachi High-Tech Science R&D lab at Oyama became the first R&D facility in Japan awarded the AA+ rank under the JHEP certification system* administered by Ecosystem Conservation Society-Japan.



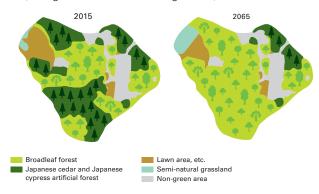




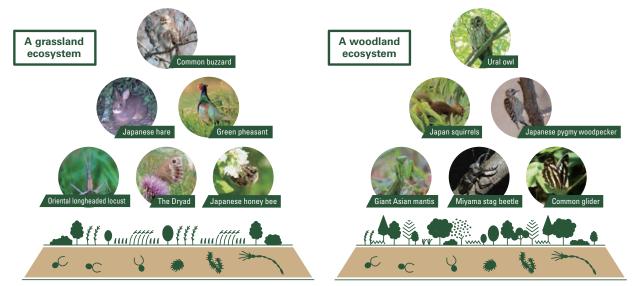
Employees taking part in transplanting seedlings

In FY2017, we continued with the division of zebra grass roots for replanting and efforts to eradicate invasive plant species such as Canadian goldenrod. In addition, we transplanted some of the seedlings grown from acorns from native oak trees collected onsite to the part of the artificial forest that was cleared for later replanting with broadleaf tree varieties. Through ongoing activities along these lines, we will work to restore the area to its true natural environment.

- * JHEP system: JHEP system compares biodiversity values for a habitat "in the past before a project" and "in the future after a project." It then performs an evaluation and assigns a rank based on the difference between the two values and certifies habitats. JHEP is the only certification system in Japan to demonstrate that a project either does not reduce the amount and quality of natural habitat (suffers no net loss of habitat value) or improves the habitat (provides a net gain of habitat value)
- Vision for the Woodland of Hitachi High-Tech Science (changes in distribution of vegetation)



Vision for the Woodland of Hitachi High-Tech Science (ecosystem pyramid)
 Source: Ecosystem Conservation Society-Japan



▶ Please refer to our website for more details about our environmental management activities.



Social Background

One common social issue faced by developed countries is that many children have few opportunities to develop an interest in science, making it difficult to nurture human resources with a background in science. The loss of interest in science among children and students leads to difficulties for corporations in securing personnel to conduct R&D and to reduced corporate competitiveness. This issue has the potential to impede and delay the development of science and technology for society as a whole. The United Nations SDGs are a common priority for the international community. Goal 4 of the SDGs is "Quality Education." This goal calls upon the international community to ensure inclusive and quality education for all and promote lifelong learning.

Ongoing communication with local communities and other stakeholders leads to increased corporate visibility and fosters its brand, and is an important asset in attracting customers, students and employees over the long term. With the spread of social networking services, the ways we communicate have also diversified, which has further increased the importance of communication with our communities and the public in general.

Hitachi High-Tech's Targeted Direction

> Promote Activities that Contribute to Sustained Growth and Increased Corporate Value over the Medium and Long-Terms

We believe that measures addressing sustained social contribution activities are essential to increasing corporate value over the medium and long terms. Based on this belief, the Hitachi High-Tech Group has designated "human resource development," "environmental conservation," and "local contribution" as focus areas for its social contribution activities and is taking action in each of these areas in anticipation of conditions 10 and 20 years from now.

We are pursuing activities while remaining mindful of CSV. Under the CSV approach, value is created through activities closely linked to our core business and by applying the resources we have cultivated in that business to the resolution of social issues. We will help to solve social issues such as the loss of interest in science by supporting science education, which leverages our technology and products including scientific instruments to the maximum

Three Priority Areas for extent possible, and through unique social contribution activities, which leverage the skills and knowledge of our employees. That, it turn, leads to building relationships of trust with our stakeholders, and over the long term, an increase in corporate brand recognition and visibility and the ability to secure talented human resources.

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

support for community sports, and lead to building relationships trust with institutions while also offering a good opportunity for people to learn about the Company, thereby increasing corporate visibility.



Human Resource Development: Supporting Science Education

- Objectives of Science Education Support Activities
- 1. Seek to help resolve the social issue of the loss of interest in science by leveraging Hitachi High-Tech's products, technologies and knowledge.
- 2. Encourage Hitachi High-Tech Group employees to clearly appreciate how the Hitachi High-Tech's products and their knowledge are serving society, thereby increasing their affinity for the Company. Foster even stronger confidence among employees in themselves and their work.
- 3. Increase the number of the Hitachi High-Tech Group's supporters and enhance the Group's presence by helping to build lasting, strong relationships with the school education field, science and technology museums, customers, and local communities.



Support Children's Science Education Activities Using Electron Microscopes

We conduct activities to support science education, using Hitachi High-Tech'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. Our

Support for Science Education Spreads Worldwide





Special lesson held by subsidiary in Taiwan



Event for middle school students held in Russia



Local employees participating as instructors (Aichi Prefecture)

efforts to support science education involve not only Hitachi High-Tech Corporation, but activities in partnership with our Group companies worldwide. One of those companies, Hitachi High-Tech Support, conducts on-site classes for special needs schools, and was recognized by the Tokyo Metropolitan Board of Education for those efforts.

Activities using our own products contribute to resolving issues in the school education field, and also provide a chance for people in countries and regions around the world to learn about our products, which leads to new business opportunities.

Support for Super Science High Schools* (SSH)

Hitachi High-Tech lends its tabletop electron microscopes to schools designated as Super Science High Schools (SSH) by the Ministry of Education, Culture, Sports, Science and Technology. How they are used is left up to each school, providing an environment for unrestricted research while contributing to science learning and research for individuals interested in a future in math and science. This not only supports the growth of science and technology in Japan, but is a good opportunity to build name recognition among students who, in the near future, may become customers or employees of Hitachi High-Tech as scientists or researchers.

Super Science High Schools (SSH): High schools designated by the Ministry of Education, Culture, Sports Science and Technology that offer advanced science and

: Looking Ahead

Previously, science education support activities had been undertaken primarily by the members of the CSR Div. Since FY2017, ordinary employees have also begun participating in these activities as instructors and assistants. By increasing the number of instructors we are able to offer a wider range of activities. At the same time, this provides participating employees an opportunity to reexamine their own work from the perspective of resolving social issues, thus contributing to a reinvigorated workplace and improved productivity.

Looking ahead, we will continue to expand the areas covered by these activities, in conjunction with building cooperative ties with various relevant organizations. At the same time, we will strategically implement these programs and contribute to the development of the next generation of human resources who will undertake scientific research, thereby delivering value to society.

Please refer to the website for details concerning activities and results related to communications with local communities.

Financial Highlights

Hitachi High-Technologies Corporation and Consolidated Subsidiaries

| IFRS | | | | | (Millions of ye |
|---|----------|----------|----------|----------|-----------------|
| | FY2013 | FY2014 | FY2015 | FY2016 | FY2017 |
| or the year: | | | | | |
| Revenues | 621,815 | 619,632 | 628,984 | 644,545 | 687,670 |
| Science & Medical Systems | 150,308 | 164,264 | 176,997 | 186,120 | 188,087 |
| Electronic Device Systems | 103,184 | 105,893 | 102,711 | 124,483 | 135,651 |
| Industrial Systems*1 | - | - | 98,549 | 91,612 | 76,498 |
| Fine Technology Systems | 16,677 | 11,354 | - | - | - |
| Industrial & IT Systems | 93,722 | 84,869 | - | - | - |
| Advanced Industrial Products | 263,983 | 258,110 | 256,822 | 250,204 | 294,330 |
| Others & Adjustments | (6,059) | (4,857) | (6,094) | (7,874) | (6,896) |
| EBIT (Earnings before interest and taxes) | 31,367 | 44,778 | 48,209 | 53,636 | 55,236 |
| Net income attributable to Hitachi High- Technologies Corporation stockholders | 19,860 | 31,093 | 35,989 | 40,170 | 40,882 |
| Cash flow from operating activities | 35,533 | 34,426 | 18,541 | 60,519 | 29,221 |
| Cash flow from investing activities | (24,250) | (9,277) | 6,107 | (28,908) | (12,993) |
| Free cash flow | 11,283 | 25,149 | 24,648 | 31,612 | 16,228 |
| Cash flow from financing activities | (4,482) | (5,662) | (7,120) | (10,464) | (12,742) |
| Capital expenditure | 18,921 | 14,453 | 12,030 | 14,363 | 15,711 |
| Depreciation | 9,289 | 10,574 | 10,527 | 10,525 | 11,830 |
| Research and Development | 20,092 | 19,556 | 20,163 | 23,581 | 26,693 |
| t the year-end: | | | | | |
| Total assets | 494,703 | 536,705 | 531,032 | 587,751 | 623,335 |
| Total Hitachi High-Technologies Corporation stockholders' equity | 270,696 | 301,378 | 320,790 | 356,913 | 390,063 |
| Cash and cash equivalents | 132,923 | 153,942 | 169,375 | 189,783 | 192,361 |
| Number of employees (Persons) | 10,504 | 10,012 | 9,902 | 10,317 | 10,898 |
| er share data (¥): | | | | | |
| Earnings attributable to Hitachi High- Technologies Corporation stockholders | 144.39 | 226.08 | 261.68 | 292.08 | 297.27 |
| Total Hitachi High-Technologies Corporation stockholders' equity | 1,968.19 | 2,191.32 | 2,332.50 | 2,595.18 | 2,836.26 |
| Cash dividend | 30.00 | 45.00 | 65.00 | 80.00 | 85.00 |
| latio: | | | | | |
| Income before income taxes ratio to revenues (%) | 5.1 | 7.3 | 7.7 | 8.4 | 8.1 |
| Total Hitachi High-Technologies Corporation stockholders' equity ratio (%) | 54.7 | 56.2 | 60.4 | 60.7 | 62.6 |
| Return on equity (ROE)*2 (%) | 7.7 | 10.9 | 11.6 | 11.9 | 10.9 |
| Return on assets (ROA)*3 (%) | 6.8 | 8.8 | 9.1 | 9.6 | 9.2 |
| Price-earnings ratio (Times) | 16.6 | 16.2 | 12.1 | 15.5 | 17.0 |

^{*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-Technologies Corporation stockholders / Total Hitachi High-Technologies Corporation stockholders (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 | FY2013 | FY2014 | FY2015 | FY2016 | FY2017 |
| Non-consolidated employees | | Person | 3,809 | 3,768 | 3,711 | 3,811 | 3,964 |
| Male | | Person | 3,267 | 3,213 | 3,161 | 3,236 | 3,354 |
| Female | | Person | 542 | 555 | 550 | 575 | 610 |
| Overseas | | Person | 37 | 34 | 32 | 39 | 40 |
| Average age | | Age | 41.6 | 42.4 | 42.5 | 42.8 | 43.1 |
| Male | | Age | 41.9 | 42.6 | 42.7 | 43.0 | 43.3 |
| Female | | Age | 40.3 | 41.3 | 42.3 | 42.5 | 42.4 |
| Years of employment | | Year | 18.9 | 19.3 | 19.7 | 19.8 | 19.6 |
| Male | - | Year | 19.3 | 19.6 | 20.1 | 20.2 | 20.1 |
| Female | - | Year | 16.7 | 17.1 | 18.4 | 18.4 | 17.7 |
| Managers | Male | Person | 1,007 | 1,029 | 1,046 | 1,027 | 1,043 |
| | Female | Person | 23 | 27 | 36 | 41 | 44 |
| Managers at the level of department chief or above | Male | Person | 221 | 228 | 239 | 236 | 250 |
| asparament siner or above | Female | Person | 5 | 5 | 6 | 6 | 6 |
| Ratio of women in manage | erial | % | 2.2 | 2.6 | 3.3 | 3.8 | 4.0 |
| Ratio of employees with di | sabilities ^{*2} | % | 2.06 | 2.19 | 2.36 | 2.57 | 2.66 |
| New employees hired for r | egular | Person | 48 | 53 | 45 | 62 | 91 |
| Women included in above figure | | Person | 8 | 12 | 12 | 22 | 30 |
| Overseas included in above figure | | Person | 1 | 0 | 2 | 8 | 5 |
| New employees hired for req positions <experienced pers<="" td=""><td></td><td>Person</td><td>5</td><td>5</td><td>17</td><td>33</td><td>71</td></experienced> | | Person | 5 | 5 | 17 | 33 | 71 |
| Number of employees leav Company*3 | | Person | 82 | 59 | 58 | 40 | 39 |

| Work Style Situation*1 | | | | | | | | |
|--|------------|--------|--------|--------|--------|--------|--|--|
| | Unit | FY2013 | FY2014 | FY2015 | FY2016 | FY2017 | | |
| Reduced working hours | Person | 85 | 90 | 84 | 80 | 77 | | |
| Leave of absence for childcare purposes (Men included in above figure) | Person | 41 (0) | 41 (1) | 38 (0) | 43 (3) | 46 (2) | | |
| Rate of return after leave of absence for childcare purposes | % | 96.0 | 93.0 | 94.7 | 100.0 | 91.0 | | |
| Leave of absence for nursing care purposes | Person | 1 | 4 | 1 | 2 | 2 | | |
| Number of vacation days taken | Day | 14.1 | 14.6 | 15.8 | 16.6 | 18.0 | | |
| Ratio of vacation taken | % | 58.3 | 62.5 | 65.0 | 69.0 | 75.0 | | |
| Hours of overtime (averaged among labor union members) | Hour/Month | 22.8 | 29.4 | 28.7 | 27.7 | 25.7 | | |

| Local Community | | | | | | | | | |
|--|-------------|--------|--------|--------|--------|--------|--|--|--|
| | Unit | FY2013 | FY2014 | FY2015 | FY2016 | FY2017 | | | |
| CSR expenditures*4 | Million Yen | 41 | 51 | 48 | 77 | 98 | | | |
| Science classes in Japan ^{*5} | Person | 2,422 | 1,969 | 2,948 | 8,007 | 11,069 | | | |

^{*1} Results for Hitachi High-Technologies Corporation (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 in FY2017 include equipment users during visits to Super Science High Schools

| Environment | | | | | | |
|--|------------------------------------|---------|---------|---------|---------|----------------------|
| | Unit | FY2013 | FY2014 | FY2015 | FY2016 | FY2017 |
| Volume of CO ₂ emissions from domestic manufacturing sites | t-CO2 | 41,540 | 40,190 | 41,106 | 42,539 | 41,394 |
| Volume of CO ₂ emissions outside Japan | t-CO2 | 5,266 | 9,601*1 | 7,403 | 8,871 | 9,614 |
| CO ₂ emissions per unit of revenues from domestic manufacturing sites | t-CO ₂ / Million Yen | 0.165 | 0.165 | 0.158 | 0.141 | 0.133 |
| Reduction of CO_2 emissions from the manufacture of purchased or procured materials and parts etc. | Million t-CO ₂ | 0.20 | 0.22 | 0.28 | 0.29 | 0.30 |
| Energy usage in Japan (Crude oil equivalent) | kl | 18,119 | 17,658 | 18,829 | 19,876 | 21,336 ^{*1} |
| Energy usage improvement rate per unit of sales in Japan (Crude oil equivalent) compared to FY2005 | % | 36.0 | 36.0 | 34.6 | 42.9 | 45.3 |
| Energy usage outside Japan (Crude oil equivalent)* | ² kl | _ | _ | 3,086 | 3,730 | 4,118 |
| Volume of waste generated from domestic manufacturing sites | t | 1,931 | 1,882 | 2,013 | 2,445 | 2,519 |
| Waste disposal ratio in Japan | % | 0.05 | 0.03 | 0.02 | 0.01 | 0.02 |
| Volume of waste generated outside Japan | t | 150 | 210*1 | 154 | 168 | 46 ^{*3} |
| Water consumption from domestic manufacturing sites | m³ | 383,614 | 344,309 | 392,366 | 403,333 | 436,736 |
| Water consumption outside Japan | m ³ | 22,163 | 30,514 | 35,517 | 39,908 | 39,400* ⁴ |
| Volume of VOC*5 emissions in Japan | t | 6.3 | 5.7 | 4.4 | 4.2 | 3.8 |
| Environmental conservation costs in Japan*6 | Million Yen | 2,347 | 2,603 | 2,411 | 2,824 | 3,303 |
| Environmental conservation effects in Japan (Economic effects)*6 | Million Yen | 56 | 85 | 51 | 60 | 83 |
| Environmental investment costs in Japan*7 | Million Yen | 194 | 579 | 533 | 601 | 747 |

^{*1} Increase in applicable sites *2 Data collation started from FY2015

Selected for ESG Index (as of July 2018)

In July 2018, the Government Pension Investment Fund (GPIF)* selected Hitachi High-Technologies Corporation as one of the three constituent stocks for the ESG Index (a share price index for ESG investments). 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.



September 28, 2018 — Hitachi High-Technologies 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.

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* 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.

^{*3} From FY2017, data collation is for harmful waste from manufacturing sites only. Until FY2016, data collation had been for waste generated by 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} VOC: Volatile organic compounds

^{*6} 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

^{*7} Environmental Investment Costs in Japan: Environmental conservation costs relating to capital investment for complying with environmental laws and regulations and reducing environmental impact

Company Data/Stock Information (As of end of March 2018)

Company Data

Date of Establishment April 12, 1947 ¥7,938 million Paid-in Capital Number of Employees Consolidated: 10,898

Non-consolidated company: 3,964

Stock Information

Number of Shares Authorized Number of Issued Shares Ordinary General Meeting of

350,000,000 shares 137,738,730 shares June every year

Shareholders Stock Exchange Listings Accounting Auditor

Tokyo Stock Exchange, 1st Section Ernst & Young ShinNihon LLC

Shareholders Composition (Share Ownership)



Shareholders Composition (Number of Shareholders)



10 Largest Shareholders

| Name | Shareholdings (Shares) | Shareholdings Ratio (%) |
|---|---------------------------|----------------------------|
| Hitachi, Ltd. | 71,135,619 | 51.72 |
| Japan Trustee Services Bank, Ltd. (Trust Account) | 5,289,300 | 3.85 |
| The Master Trust Bank of Japan, Ltd. (Trust Account) | 4,879,500 | 3.55 |
| GOLDMAN, SACHS & CO. REG | 2,024,184 | 1.47 |
| Japan Trustee Services Bank, Ltd. (Trust Account 9) | 1,588,900 | 1.16 |
| Hitachi High-Technologies Corp.'s Shareholding Association | 1,430,649 | 1.04 |
| CHASE MANHATTAN BANK GTS CLIENT ACCOUNT ESCROW | 1,359,187 | 0.99 |
| STATE STREET BANK WEST CLIENT – TREATY 505234 | 1,342,548 | 0.98 |
| GOLDMAN SACHS INTERNATIONAL | 1,330,878 | 0.97 |
| Japan Trustee Services Bank, Ltd. (Trust Account 5) | 1,307,300 | 0.95 |

^{*} Shareholding ratio is calculated by deducting treasury stock (211,217 shares).

Group Companies (As of March 2018)

Japan Hitachi High-Technologies 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-Technologies Europe GmbH Hitachi High-Technologies RUS Limited Liability Company

Hitachi High Technologies 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 Technologies America, Inc.

Hitachi High-Technologies Science America, Inc. Hitachi High-Tech Analytical Science America, Inc.

Hitachi High-Technologies Canada, Inc. Hitachi High-Tech AW Cryo, Inc. MagArray, Inc.

Asia

Hitachi High-Technologies (Singapore) Pte. Ltd. Hitachi High-Technologies IPC (Malaysia) Sdn. Bhd.

Hitachi High-Technologies (Thailand) Ltd. PT. Hitachi High-Technologies Indonesia

Hitachi High-Technologies India Private Limited Hitachi High-Technologies (Shanghai) Co., Ltd. Hitachi High-Tech Diagnostics (Shanghai) Co., Ltd. Hitachi High-Technologies Hong Kong Limited Hitachi High-Technologies (Shenzhen) Co., Ltd.

Hitachi High-Tech Analytical Science Shanghai Co., Limited Hitachi High-Technologies Korea Co., Ltd.

Hitachi High-Technologies Taiwan Corporation

Hitachi Instrument (Suzhou), Ltd. Hitachi Instruments (Dalian) Co., Ltd. Hitachi Instruments (Shanghai) Co., Ltd.

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

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