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.

Cover Design Concept

Coinciding with the formulation of the Mid-Term Management Strategy, the Hitachi High-Tech Group developed a new design concept for our corporate tools.

The symbol of our concept, the equilateral triangular pyramid, comprises four faces. The four colors of the faces represent the Hitachi High-Tech Group’s business segments, while also displaying the Group’s comprehensive strength by coming together to form a triangular pyramid. Thus, the triangular pyramid represents our ability to continue to provide new value to our customers.

Furthermore, the triangular pyramid looks like a triangle no matter which angle it is viewed from, and this represents our three business domains: Biotechnology and Healthcare, Social and Industrial Infrastructure, and Advanced Industrial Systems.

We hope that by allowing society and our customers to view the world through the various filters of the Hitachi High-Tech Group (triangular pyramid), we will expose you to new experiences and discoveries.

With this mindset, we will continue to challenge ourselves to build better relationships with society and our customers.
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 2017 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 33 subsidiaries and 2 affiliated companies
* Companies not applicable to the above reporting scope are noted as such in the text.

● Reporting Period
This report covers FY2016 (from April 1, 2016 to March 31, 2017). However, it includes descriptions of some activities that occurred before or after FY2016.

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

● Publication
September 2017

● Reference Guidelines
• International Integrated Reporting Council (IIRC), The International Integrated Reporting Framework
• Global Reporting Initiative (GRI), G4 Sustainability Reporting Guidelines

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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Cover Design Concept
Trajectory of the Hitachi High-Tech Group

On October 1, 2016, Hitachi High-Technologies Corporation celebrated the 15th anniversary of its establishment. Guided by our corporate vision “To consistently aim to be Global Top in high-tech solutions,” we have developed globally and maximized corporate value by putting customers first and realizing synergies between trading and manufacturing functions. These are highlights of our first 15 years.

The Beginning

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

① 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.

② 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.

③ 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.

④ 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 the Long-term Management Strategy (CS11: Corporate Strategy 2011) and Medium-Term Management Plan 2013 in October 2011, which marked its 10th anniversary of its founding. We set out to further reform and strengthen business as well as become “a company that embraces CSR in the true sense.”
Hitachi High-Technologies Integrated Annual Report 2017

6 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 autonomous and decentralized organization.” In October 2016, we celebrated our 15th anniversary since establishment.

5 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.


* Hitachi Electronics Engineering Co., Ltd. made a subsidiary in March 2004.
Chronology

October 2001
The Instruments Group and Semiconductor Manufacturing Equipment Group of Hitachi, Ltd., Nissei Sangyo Co., Ltd., and the Clinical Testing Systems Sales Group of Hitachi Medical Corp. are merged.

Establishment of Hitachi High-Technologies Corporation

March 2002
Awarded the 48th Okochi Memorial Grand Technology Prize for development of a capillary array DNA sequencer in collaboration with Hitachi, Ltd.

April 2003
SANYO High Technology Co., Ltd. and SANYO High-Tech Service Co., Ltd. made subsidiaries

December 2003
Corporate vision established: “To consistently aim to be Global Top in high-tech solutions”

March 2004
Hitachi Electronics Engineering Co., Ltd. shares acquired from Hitachi, Ltd. and made into a Group company

April 2005
Information equipment, components, system design and other manufacturing, sales, design, and service business split up among five domestic Group companies integrated into Hitachi High-Tech Solutions Corporation

Electron Microscope
Spread of FE Technology Honored with IEEE Milestone
In January 2012, we were awarded along with Hitachi, Ltd. the IEEE Milestone for developing the world’s first practical field emission (FE) scanning electron microscope (SEM) in 1972. The award is granted by the Institute of Electrical and Electronics Engineers (IEEE), the world’s largest professional association of electrical, electronic, information, and communications engineering fields. FE technology has spread to FE-TEMs*2 and CD-SEMs, playing a major role in scientific and technological verification and advancement, as well as contributing to a wide range of fields including medicine, industry, and education through the development of an array of products meeting market needs.

DNA Sequencers
Keeping Top Global Share and Contributing to Life Science
The Human Genome Project launched in 1991 led to dramatic advancements in DNA sequencers. The capillary array DNA sequencer using the detection technology of Hitachi, Ltd. was a groundbreaking product enabling high-throughput

*1 CD-SEM: Critical Dimension Scanning Electron Microscope  
*2 FE-TEM: Field Emission-Transmission Electron Microscope
April 2006
Hitachi High-Tech Electronics Engineering Co., Ltd. absorbed by Hitachi High-Technologies Corporation, Fine Technology Products Business Group newly established

March 2008
Awarded the 54th Okochi Memorial Production Prize for the development and practical application of CD-SEM for measuring ultra-fine semiconductor patterns

May 2009
Naka Division's manufacturing building starts operations

October 2009
Tokyo Technical Center opens as clinical analyzer training facility for customers

April 2010
Hitachi High-Tech Instruments Co., Ltd. takes over the die bonder business of Renesas Eastern Japan Semiconductor, Inc.

March 2011
Group sites damaged by the Great East Japan Earthquake

October 2011
Long-term Management Strategy (CS11: Corporate Strategy 2011) and Medium-Term Management Plan 2013 announced

November 2011
Completed the Naka Division Design Building

3.11 Overcoming the Great East Japan Earthquake (March 2011)

The Group sustained major damage from the Great East Japan Earthquake on March 11, 2011. Infrastructure facilities, buildings, production lines, and parts warehouses in our core production area of the Naka Division were hit especially hard. While paying attention to ensuring safety, Hitachi High-Tech established the Large-Scale Earthquake Countermeasures Headquarters (later renamed the Companywide Disaster Countermeasures and Recovery Headquarters) right after the earthquake. We channeled our energies into tasks such as supporting customers, assisting stricken business offices and suppliers, securing distribution, and restoring information infrastructure. Our efforts paid off, with production restored to about 90% of the former level as of April 1. We recognized anew the importance of continuing our business activities and fulfilling our social obligations to stakeholders.
Chronology

December 2011
Tokyo Solution Laboratory, a scientific instrument demonstration and equipment training facility, established

January 2012
IEEE Milestone for developing the world’s first practical field emission scanning electron microscope received from the IEEE

January 2013
SII Nano Technology Inc. share transfer procedures completed and name changed to Hitachi High-Tech Science Corporation

April 2013
Fine Technology Systems Business Group’s entire operations transferred to Hitachi High-Tech Engineering Service Corporation, which changed its name to Hitachi High-Tech Fine Systems Corporation

October 2013
Design and domestic sales functions of the analytical instruments businesses of Hitachi High-Tech Control Systems Corporation and Hitachi High-Technologies Corporation spun off and integrated into Hitachi High-Tech Science Corporation

October 2013
Naka Division Logistics and Manufacturing Building Completed

April 2014
Extension for 10 years of collaboration agreement with Roche Diagnostics GmbH announced

November 2014
New laboratory building at Naka Division “Metrology and Inspection Center Naka” completed

Optimized Production Systems for Customers’ Global Strategies
Since 1998, Hitachi High-Tech’s Industrial Solutions Business Division has worked together with the factory automation (FA) system developer Tohoku Pioneer EG Corporation to win orders from major Japanese auto parts manufacturers strengthening global development. We took on the challenge of starting from scratch and have steadily been building a track record and expanding the scale of operations through collaboration with various business partners.

Automated Clinical Chemistry and Immunodiagnostic Analyzers
Supporting Laboratories Worldwide via the Partnership with Roche
Since 1978, Hitachi High-Tech has collaborated with Roche Diagnostics GmbH (formerly Boehringer Mannheim) on medical systems business, mainly clinical chemistry and immunodiagnostic analyzers. Under this partnership, we led the world in developing an integrated, automated system for clinical chemistry and immunoassay analysis and have brought numerous other products to market as well. We maintain the top global market share in clinical chemistry and immunoassay automated analyzers.

Overall Management of the PA field with Collaboration at the Core
We have gained ample experience over many years in instrument systems for the measurement and control of production equipment in the process automation (PA) field. Hitachi High-Tech Solutions Corporation is taking the leading role in the business with collaboration inside and outside of the company, striving to fuse with ICT and IoT businesses, and developing widespread operations from Japan to overseas.
March 2015
Chip mounter business withdrawal and transfer of some of the business’s assets to Yamaha Motor Co., Ltd.

March 2015
Die bonder business of Hitachi High-Tech Instruments Co., Ltd. transferred to TY Holdings Co., Ltd.

April 2016
Mid-Term Management Strategy (FY2016-FY2018) established

Building a Contract Manufacturing Business in Optical Telecommunications-related Components

We worked to newly establish a contract manufacturing business for optical telecommunications-related components handled by the Electronic Materials Division.

For contract manufacturers possessing strong technological capabilities but requiring support with overseas plant operations, we realized a full turnkey contract manufacturing business including support for leading domestic and overseas manufacturers in areas including sourcing, production management, and overseas tax matters, as well as up-front investment in manufacturing facilities. This is contributing to sales and profit expansion in the overall value chain.

We will further develop this newly established contract manufacturing business model, aiming to maximize added value for customers and contract manufacturers.

Community Interaction through the Cougars

Our women’s basketball club, the Hitachi High-Tech Cougars was formed in 1951 at Hitachi, Ltd.’s Naka Factory (now Hitachi High-Tech Naka Division). The Cougars hold basketball classes at local nursery schools, mainly in Hitachinaka City, Ibaraki Prefecture where the team’s activities are based, and nationwide basketball clinics for elementary and junior high school students. The team actively participates in activities fostering exchange with people in the local community, and contributes to local sports development.
President’s Message

Aspiring to be a company continually chosen by customers around the world and always needed by society

Hitachi High-Technologies Corporation was created in October 2001 as a cutting-edge technology company with trading and manufacturing functions suited for the new era 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.

We have since overcome numerous difficulties including the Lehman Brothers collapse in September 2008 and the Great East Japan Earthquake of March 2011 to celebrate the 15th anniversary of our establishment. We owe this to the considerable patronage of our customers, cooperation of our business partners, and unwavering support of our shareholders and all our stakeholders, as well as the enduring efforts of all our employees along with the leaders who have supported our business expansion so far. We would like to express our gratitude to everyone involved.

Looking Back at the 15 Years Since Hitachi High-Tech’s Birth

The Group’s 15-year history since its establishment is one of fusions for true unification.

Hitachi High-Tech started out at the dawn of the 21st century, building before other companies a business framework for handling everything from development to manufacturing, sales, and services and delivering solutions that anticipate market needs. The Company’s main business arena is cutting-edge technology fields where competition is fierce and markets are global and change at breakneck speed. To beat the competition in that kind of market environment, business operations thoroughly uniting manufacturing, sales, and services was not enough. Integration of the entities that were realigned to form the Company was needed. Hitachi High-Tech’s initial top management priority upon establishment was thus to truly unite corporate cultures, climates, and value systems as well as organizations and people. It is not easy to bring together into one company a trading company and manufacturing operations with differing business structures, corporate cultures and the like. While some things took time, I believe steady unification of the organizations despite their long, differing histories was possible because we shared the language of doing things for the customer with the spirit of “Customers First” embedded into the DNA of all employees.

By coming together as one to leverage the trust, know-how, and technology amassed by the differing companies to date under the “Customers First” mindset, the Group acquired unique strengths of use worldwide.

We have also been able to grow into a company with world-class products and technology because we put customers first. Our sales, services, design, manufacturing, and other departments have continued to earnestly seek each day to enable our customers be the best creators of cutting-edge business by considering what we can do to help and what added value the Group is uniquely positioned to offer. As the times and society change, expressions for putting customers first differ. However, I believe that resolutely maintaining that attitude has enabled the Group to realize unique strengths—technological capabilities, global sales and procurement capabilities, and collaboration with customers and partners—and grow into an enterprise chosen by customers around the globe.
What’s Next for Hitachi High-Tech?

We will address society’s demands head-on to be a company that is truly needed by society.

Trends such as global economic development and an increasingly borderless society are enriching people’s lives. On the other hand, factors such as climate change, resource depletion, income disparity and poverty, and political uncertainty are intertwining in complex ways to give rise to global risks and social issues. Such issues cannot be overlooked as they not only threaten our everyday lives but also substantially affect the Group’s business operations. Such issues tend to be divided into business problems and social problems when discussed. However, we believe the global environment is the very foundation for sound societies and markets, which make business possible. In other words, we must give primary consideration to the environment, society, and so forth. Accordingly, we believe that it is our natural duty as an existing entity to sincerely address society’s demands and contribute to the resolution of social issues through our operations, and that such initiatives are indispensable.

The Group has developed operations guided by the basic philosophy of contributing to social progress through business activities, and looks to thoroughly respond to the needs of society after once again taking stock of them. To that end, we will vigorously debate anew key issues the Group should tackle, with one focal point being the Sustainable Development Goals (SDGs) adopted by the United Nations in September 2015, which establish targets to be achieved and common rules for international society in the 21st century.

We aim for the Group’s business models to include businesses that solve social issues and are of use to the world.

As previously noted, companies are being called upon to leverage their respective business characteristics and strengths to form a sustainable society. The Group has expertise in nanotechnology, which is vital to fields such as biotechnology and medicine, information and telecommunications, and the environment. By further cultivating this area of strength, we will contribute to society and customers as well as pave a path for our own major growth. Hitachi High-Tech aspires to be the kind of company that people cannot do without, in order to contribute to a future in which people are able to continue to lead healthy and fulfilling lives.

The ability to flexibly and deftly adapt to changes in the business environment is of utmost importance for business management going forward.

In the global market marked by dizzying change, customer needs are becoming more diverse and complex. For the Group to achieve sustainable growth in this climate it is becoming increasingly important to engage in a united effort by all employees to rapidly grasp what customers really want, consider how to leverage our strengths and what we can and should do, and ultimately to take action. That is what it means to immediately respond to the changing market, which is linked to realizing our aim at the time of our establishment to become a market-oriented company. There are definitely no safe havens for companies. Companies change every day, and they must evolve every day. We will keep striving to realize 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.

Hitachi High-Technologies Corporation
President and CEO
Masahiro Miyazaki
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.

Creating Value

* Aiming for the sustainable enhancement of corporate value by linking business activities with solutions for social issues, Hitachi High-Tech maintains awareness of SDGs* in identifying fields where it can make a contribution to social issues and focus fields and selecting materiality issues. (Selection is scheduled to be made in FY2017)

* Sustainable Development Goals (SDGs) as adopted by the UN Summit in September 2015

Hitachi High-Tech’s Foundation to Support Value Creation

Social Issues*

- Rapid aging in developed countries
- Population growth, mainly in emerging countries
- Increase in lifestyle-related and chronic diseases
- Diversification of medical needs, such as preventative medicine and healthcare

Business Domain

- Expanding demand for infrastructure maintenance accompanying social development, and measures against degradation
- Environmental issues such as pollution, global warming and preservation of ecosystems
- Global energy issues dealing with dependence on limited resources

Advanced Industrial Systems

- Diversification of semiconductor device applications expanded against a backdrop of the IoT
- Diversification of needs brought about by greater functionality and lower power consumption of semiconductor devices

Biotechnology and Healthcare

- • 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
- 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 R&D bases
- 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

Rapid aging in developed countries
- Population growth, mainly in emerging countries
- Increase in lifestyle-related and chronic diseases
- Diversification of medical needs, such as preventative medicine and healthcare
- Expanding demand for infrastructure maintenance accompanying social development, and measures against degradation
- Environmental issues such as pollution, global warming and preservation of ecosystems
- Global energy issues dealing with dependence on limited resources
- Diversification of semiconductor device applications expanded against a backdrop of the IoT
- Diversification of needs brought about by greater functionality and lower power consumption of semiconductor devices

Global Sales Capabilities

- Human Resources
- R&D and Intellectual Property
- Supply Chain Management

Hitachi High-Tech’s Strengths

Collaboration with Customers and Partners
Hitachi High-Tech’s Strengths

The technological capabilities that we have refined and accumulated over many years are the core of Hitachi High-Tech. We create a range of cutting-edge products based on the foundation of our core technologies: electron beam technology and spectroscopic analytical technology.

Hitachi High-Tech is a global company with locations in 23 countries and regions. 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.

Hitachi High-Tech has built strong relationships of trust by continuing to provide our customers and partners with high-tech solutions. We grow alongside our customers and partners by creating new products and solutions through collaborations based on these solid relationships of trust.
Operating Results and Forecasts

FY2016 Results
In FY2016, the Hitachi High-Tech Group worked to bolster its business portfolio with an eye to realizing its corporate vision. In Science & Medical Systems, we established a joint venture in China in August 2016, looking to expand business in China’s in-vitro diagnostics market where growth continues, and began collaborating with two of China’s major reagent manufacturers. Further, in Europe, we acquired a Swedish distributor to strengthen electron microscope business. In Electronic Device Systems, we rolled out new products and reinforced the development framework for customers’ aggressive investments in next-generation cutting-edge processes and memory mass production. In Industrial Systems, we concentrated on expanding sales in businesses such as railway inspection equipment and automated assembly systems. In Advanced Industrial Products, we bolstered existing operations as well as selected business partners and examined business models with a view to quickly building a full value chain.

As a result, we attained revenue and profit growth. Revenues rose 2% year on year (the same applies hereinafter) to 644.5 billion yen, EBIT*1 increased 11% to 53.6 billion yen, and Net income attributable to Hitachi High-Technologies Corporation stockholders grew 12% to 40.2 billion yen.

*1 EBIT (Earnings Before Interest and Taxes): Earnings after the subtraction of interest income and interest expense from income before income taxes.

Business Environment and Forecasts for FY2017
In Japan, we anticipate modest economic recovery as consumer spending holds firm and companies increase capital investment. In the US, we expect economic recovery to be sustained by growth in employment, but the outlook is uncertain on future economic policy trends. In Europe, mild economic recovery is likely as corporate earnings improve, but the UK’s decision to leave the EU and the anti-euro faction’s rise are concerns. In addition, Chinese economic deceleration tendency and fiscal deterioration in emerging countries are concerns.

Regarding business conditions in each segment, the Science & Medical Systems market is likely to see growth in demand for Scientific Systems for applications related to electronic devices and the environment and renewable energy. In Biotechnology and Medical Products, we anticipate firm market trends overall but tough price competition. In the semiconductor manufacturing equipment market, we envision solid investment in advanced logic, foundries, and memory, although investment timelines for some customers are unclear. In the Industrial Systems market, capital investment in social and industrial infrastructure is likely to gain steam. In the Advanced Industrial Products market, formerly weak materials prices are picking up and automotive components and optical telecommunications-related components are expected to fare well.

By steadily executing our business strategies for each segment against such a backdrop, we forecast FY2017 Revenues will rise 6% year on year to 680 billion yen, but EBIT will decline 14% to 46 billion yen and Net income attributable to Hitachi High-Technologies Corporation stockholders will fall 13% to 35 billion yen. While we project EBIT will decline, this is because we will actively invest in growth strategies. Specifically, we plan to invest 8.8 billion yen more year on year in (1) Investments in new product development-related R&D; (2) Capital investment to enhance manufacturing capacity and production technology, strengthen collaboration with customers; and (3) Human resource investments to reinforce overseas staff. These investments will be focused on Science & Medical Systems and Electronic Device Systems. By investing in growth strategies, we aim to achieve our Mid-Term Management Strategy objective of forming a growth cycle for 2020.

Status of Progress on the Mid-Term Management Strategy
The Mid-Term Management Strategy established in April 2016 designates the three years from FY2016 to FY2018 as an important period for the formation of the growth cycle leading up to 2020. It targets aggressive innovation, advancing investment and reinforcement of resources leading to the next generation while securing a steady stream of earnings in core businesses. As we implement these measures, we will shift from traditional management by segment to an approach that classifies business into “Instruments”*2 and “Materials”*3 according to business model characteristics. We will establish value propositions and targets for both categories while advancing business in each area. This is designed to optimize management of each business, with the aim of delivering even greater value to our customers. Regarding our investment strategy, we will proactively make R&D, capital, and business investments targeting the next generation of growth, focusing on Science & Medical Systems and Electronic Device Systems.

In FY2016, sales were strong for both clinical analyzers in the Science & Medical Systems and process manufacturing equipment and inspection systems in the Electronic Device Systems. As a result, we achieved an EBIT margin*4 of 13% for “Instruments,” maintaining a level meeting the Mid-Term Management Strategy’s KPI*5 of 10% or more. EBIT for “Materials” came to 2.3 billion yen, but we will continue to actively make business investments and expand new projects in the value chain solutions business to grow earnings, aiming to reach the FY2018 KPI of absolute EBIT of 5 billion yen or more.

Revenues

<table>
<thead>
<tr>
<th>(Million yen)</th>
<th>FY2015</th>
<th>FY2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>628,984</td>
<td>644,545</td>
<td></td>
</tr>
</tbody>
</table>

EBIT

<table>
<thead>
<tr>
<th>(Million yen)</th>
<th>FY2015</th>
<th>FY2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>48,209</td>
<td>53,636</td>
<td></td>
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</tbody>
</table>

Net income attributable to Hitachi High-Technologies Corporation stockholders

<table>
<thead>
<tr>
<th>(Million yen)</th>
<th>FY2015</th>
<th>FY2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>35,989</td>
<td>40,170</td>
<td></td>
</tr>
</tbody>
</table>

Cash Dividend per share

<table>
<thead>
<tr>
<th>(yen)</th>
<th>FY2015</th>
<th>FY2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>65.00</td>
<td>80.00</td>
<td></td>
</tr>
</tbody>
</table>
Further, service business accounted for 57% of EBIT (service ratio), continuing to meet the KPI of 50% or more. Moving on to growth strategy investments, we are investing in R&D in Science & Medical Systems to enhance the product lineup and expand business, specifically in the development of next-generation model clinical analyzers, as well as the development of genetic testing systems and second-generation DNA sequencers as new businesses. In Electronic Device Systems, we are working to strengthen products for non-advanced semiconductors and 3D-NAND, given IoT market growth. Regarding capital investment, we expanded the buildings of Hitachi High-Tech Kyushu Corporation, which was established in September 2016, as part of steps to enhance manufacturing capacity and strengthen production technology capabilities. We also beefed up capacity at overseas engineering sites. Turning to business investment, in Advanced Industrial Products, we acquired a mold steel sales company in Brazil, a production area for European and US automakers, in October 2016 and newly established the operations as Hitachi High-Tech Steel do Brasil Ltda. in March 2017. Continuing to proactively invest in growth strategies, we entered into a capital and business alliance regarding genetic testing business with Precision System Science Co., Ltd. in May 2017. We also acquired the operations pertaining to atomic spectroscopy products among the industrial precision instruments business of the UK’s Oxford Instruments plc Group in July 2017. Regarding shareholder returns, the dividend payout ratio was 27.4% for FY2016. In line with our basic policy to return a suitable amount of profit to shareholders while strengthening our financial position and management base, we strive to pay stable dividends and target a dividend payout ratio of 30%. To achieve our mission to turn our customers into fast-moving, cutting-edge businesses in an operating environment that is changing every second of every day, the Hitachi High-Tech Group must “Challenge to Change.” We aim to be a corporate Group that accelerates transformation from the customers’ viewpoint and anticipates changes in the value customers seek, while continuing to lead customers in providing value. To lay a foundation for growth in 2020 and beyond, the Hitachi High-Tech Group will aggressively make strategic investments in resource bolstering and inorganic growth*6 as we take on the challenge of attaining our Mid-Term Management Strategy.

Shinji Sato
Vice President and Executive Officer

Mid-Term Management Strategy Targets

**KPI** Formulate and execute growth strategies to achieve targets

- **Revenues**
  - Achieve progress beyond market growth
  - Revenues CAGR*1 by business > Market growth rate

- **Profitability**
  - **Instruments**
    - Maintain an EBIT margin of 10% or more
  - **Materials**
    - Achieve an absolute EBIT of ¥5 billion or more (FY2018)

- **Service ratio**
  - Ratio of EBIT from service business*2 to overall: EBIT maintain at 50% or more

**Investment Strategy** Proactively make investments to execute growth strategies (FY2016-FY2018 cumulative)

- **R&D**
  - ¥80 billion
  - Increase investments centered on the biotechnology and medical products business (Increase by 30% versus FY2013-FY2015)

- **Capital investment**
  - ¥40 billion
  - Manufacturing ability expansion, and technology strengthening to support business
  - Strengthening collaboration with customers through demonstration facilities expansion

- **Business investment**
  - ¥30 billion
  - **Biotechnology and Healthcare**
  - **Social and Industrial Infrastructure**
  - Make additional business investments using cash on hand

**Shareholder Returns**
Maintain a stable dividend, targeting a dividend payout ratio of 30%

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*1 CAGR: Compound Average Growth Rate
*2 Service business: Product maintenance services, IT solutions, trading services, and others.
*3 Segment classified as “Materials”: Advanced Industrial Products
*4 EBIT margin: EBIT/Revenues; Indicator of profitability, derived from the formula.
*5 KPI: Key Performance Indicator
*6 Inorganic investment: Investment for the purpose of growth through alliance with other companies and M&As
Science & Medical Systems

Review of FY2016

Science & Medical Systems achieved record high revenues in FY2016. In the Scientific Systems Business, revenues declined, despite the launch of new products, due to the impact of the yen’s appreciation coupled with restrained investment on large scale projects in Europe and budget cuts by universities and public offices in Japan. Meanwhile, the Biotechnology and Medical Products Business saw revenues grow significantly atop firm demand in Asian markets, primarily China.

Based on the Mid-Term Management Strategy, Science & Medical Systems is proactively making strategic growth investments and strengthening its business base. In FY2016 the segment made steady progress in preparing for its next growth stage. In the Biotechnology and Medical Products business, we moved to expand our business in the growing Chinese in-vitro diagnostics market by establishing a joint venture in China. We also started collaboration with two major Chinese reagent companies. In other areas, we made headway in joint development with Qiagen N.V. of Germany and started a business alliance with Promega Corporation of the US.

In FY2016 we successfully upgraded our global sales structure, acquiring a Swedish sales agent to strengthen our electron microscope business in Europe, while strengthening our sales agent network in China, ASEAN, and other areas.

Toshiyuki Ikeda
Senior Vice President and Executive Officer,
General Manager, Science & Medical Systems Business Group

Priorities Going Forward and Realizing Growth Leading up to 2020

In both Biotechnology and Medical Products Business and Scientific Systems Business, although there are ongoing fluctuations in demand for equipment due to the economic conditions in each country, going forward, we anticipate that the need for high-precision analysis will increase in cutting-edge fields, such as the environment, new energy, new materials, and life sciences, resulting in market expansion in new fields of business.

In this situation, we have identified two priorities for realizing growth leading up to 2020.

First, in the Biotechnology and Medical Products Business we must expand aggressively in the genetic and bacterial testing markets. In our existing clinical chemistry and immunoassays business, we have established a business base for maintaining and expanding our leading market share, for example by working to cultivate further collaboration with strategic partners and strengthening our manufacturing platform to build a structure for continuously launching new products. Nevertheless, further growth will require the creation of further pillar businesses, and we have focused on the growing genetic and bacterial testing market to fulfill this role. We have been expanding our new business in this market by aggressively pursuing M&As and alliances. Looking ahead, we will further advance and develop the SCB* structure that we promoted in FY2016, while working swiftly to establish new businesses.

Second, in the Scientific Systems Business we must strengthen our global sales and marketing functions and increase our ability to respond to market and customer needs. In Japan, we have established development, sales, and support systems that can respond in detail to customers’ requirements. Globally, however, we have yet to set up an adequate system. In FY2016 we aimed to strengthen our systems in Europe, Asia, and other areas, and in June 2016 we established Hitachi High-Tech Science Park as our research and development base in the US. Going forward, we will expand into Europe and other areas, building a structure for research and development that is closer to our customers. This will lead to further improvement in customer satisfaction and business expansion. By adapting the core analytic technologies developed in the Scientific Systems Business into biotechnology and medical products, we aim to develop new products and create new businesses and solutions.

* SCB: System Collaboration Business
Biotechnology and Medical Products Business

**Vision**
Become a Global Player in All In-vitro Diagnostics Markets

**Business Strategy**
Initiatives and Accomplishments in FY2016

<table>
<thead>
<tr>
<th>Expansion of Existing Business and Creation of Further Pillar Businesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintain Existing Business Scale (Maintain and Expand Sales Volume Share)</td>
</tr>
<tr>
<td>• Exchange rate impact from strong yen</td>
</tr>
<tr>
<td>• Decrease in market prices</td>
</tr>
<tr>
<td>• Demand growth in Chinese market</td>
</tr>
<tr>
<td>Continue Further Investment in New Businesses for Growth</td>
</tr>
<tr>
<td>• Pursue M&amp;A/collaboration to expand business domains</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Mid-Term Management Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing Businesses</strong></td>
</tr>
<tr>
<td>Clinical Chemistry and Immunoassays Market</td>
</tr>
<tr>
<td>• Further cultivate SDB with partners</td>
</tr>
<tr>
<td>• Continue investments for strengthening the manufacturing platform, such as expanding production capacity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Initiatives and Accomplishments in FY2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Launched cobas e801 high-speed immunoassays module in Europe and Japan</td>
</tr>
<tr>
<td>• Expanded sales of the cobas c513 dedicated diabetes analyzer</td>
</tr>
<tr>
<td>• Established Hitachi High-Tech Diagnostics (Shanghai) Ltd. as a joint sales and service company for in-vitro diagnostic testing analyzers and reagents in China</td>
</tr>
<tr>
<td>• Started collaboration on in-vitro diagnostic testing analyzers and reagents with two major Chinese reagent companies</td>
</tr>
<tr>
<td>• Established Hitachi High-Tech Kyushu Corporation to expand production capacity and further increase business efficiency</td>
</tr>
<tr>
<td>• Constructed a total solutions structure in Europe and China by expanding the product portfolio and establishing a sales network, and steadily enhanced competitive advantage in existing businesses</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>New Businesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genetic and Bacterial Testing Market</td>
</tr>
<tr>
<td>• Promote investment for developing a SDB with competitive reagent companies</td>
</tr>
<tr>
<td>• Start a genetic and bacterial testing business</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Initiatives and Accomplishments in FY2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Promoted joint development in the genetic testing business with QIAGEN N.V. of Germany</td>
</tr>
<tr>
<td>• Started business alliance with Promega Corporation of the US in the compact CE sequencers field</td>
</tr>
<tr>
<td>• Started sales of simultaneous multiple gene testing reagents as in-vitro diagnostic products in Japan</td>
</tr>
<tr>
<td>• Aggressively expand business in the genetic and bacterial testing market, which is projected to continue growing</td>
</tr>
</tbody>
</table>

**Business Environment**

<table>
<thead>
<tr>
<th>Clinical Chemistry and Immunoassays Market (Total for Analyzers and Reagents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Mature markets – Biochemical testing: 2%, Immunodiagnostics: 5% (2015-2018 CAGR)</td>
</tr>
<tr>
<td>• Although China and emerging countries are expected to continue to grow, the competitive environment will intensify, particularly the immunodiagnostics analyzer market</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Genetic and Bacterial Testing Market (Total for Analyzers and Reagents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Stable growth market – Genetic testing: 10%, Bacterial testing: 7% (2015-2018 CAGR)</td>
</tr>
<tr>
<td>• In the field of genetic research and diagnostics, the analysis applications for capillary electrophoresis (CE) sequencers are expanding into DNA tests and other areas</td>
</tr>
</tbody>
</table>

**Concrete Initiatives in FY2017**

<table>
<thead>
<tr>
<th>Secure earnings by expanding sales of new products</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Worldwide launch of cobas e801 high-speed immunoassays module</td>
</tr>
<tr>
<td>• Higher domestic market share from increased sales of new LABOSPECT 008 α clinical chemistry analyzer</td>
</tr>
<tr>
<td>• Collaboration with Chinese reagent companies</td>
</tr>
<tr>
<td>• Expand business by offering solutions based on locally supplied Chinese biochemical testing reagents</td>
</tr>
<tr>
<td>• Actively invest in technical development to reinforce existing operations and develop new growth markets</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rapidly establish new businesses in growth markets</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Promote collaboration business with Promega Corporation of the US on a compact CE sequencer, and launch sales in Japan</td>
</tr>
<tr>
<td>• Expand sales in Japan of simultaneous multiple gene testing reagents for Verigene rapid bacterial testing systems</td>
</tr>
</tbody>
</table>

Hitachi Clinical Analyzer LABOSPECT 008 α  
Compact CE sequencer (completed image)
Scientific Systems Business

Vision

Aiming to Be a Global Major Player in Analytical Instruments Markets

Business Strategy  Initiatives and Accomplishments in FY2016

Strengthen Global Operation and Provide Solutions

- Strengthen Global Sales and Marketing Functions
  - Strengthen and reorganize the worldwide sales framework and promote globalization of web content
- Promote Further Growth Investment
  (Enhance Product Lineups, etc.)

Shift toward Solutions Business

- Introduce new products for the volume zone, such as the FlexSEM 1000 scanning electron microscope and the AFM5000M scanning probe microscope
  - FlexSEM achieved record sales volume significantly outperforming initial forecasts

Mid-Term Management Strategy

<table>
<thead>
<tr>
<th>Step1</th>
<th>Complete Strategic Product Lineup</th>
<th>Step2</th>
<th>Strengthen Worldwide Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>● Continuously introduce competitive, new products to the market</td>
<td>● Strengthen the sales networks, particularly in Europe and South Korea (electron microscopes)</td>
<td>● Promoted provision of solutions in each field and development and sales expansion of dedicated instruments</td>
</tr>
<tr>
<td></td>
<td>Strengthen and reorganize the worldwide sales framework and promote globalization of web content</td>
<td>● Strengthen the sales agent networks, particularly in China and ASEAN (scientific instruments)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Promoted provision of solutions in each field and development and sales expansion of dedicated instruments</td>
<td></td>
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<table>
<thead>
<tr>
<th>Step3</th>
<th>Strategically Move into Each Field</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>● Provide solutions in each field</td>
</tr>
<tr>
<td></td>
<td>● Develop application and move to dedicated instruments</td>
</tr>
</tbody>
</table>

Electron Microscopes

- SEM: Scanning Electron Microscope
- SPM: Scanning Probe Microscope
- LiB: Lithium-ion Battery

Scientific Instruments Market

- 2015-2018 CAGR projected to continue at 2-3%
- Growing demand for high-precision, high-throughput dedicated instruments in cutting-edge new fields such as life science, environment and new energy, and new materials

Concrete Initiatives in FY2017

- Strengthen the global sales network and marketing functions
  - Expand sales, pursue development of research and new businesses by establishing applications labs (in US, UK and China)
  - Development and sales of high value-added, dedicated instruments
  - RoHS2-compliant phthalic acid bromide testers
  - Metal particle contamination inspection equipment for fuel cells and LiBs
  - Food testing equipment (fluorescence fingerprint, others)
  - Correlative Light and Electron Microscopy (CLEM*) systems
  - Development of solutions for growth markets in new materials/semiconductor and biotech fields

- CLEM (Correlative light and electron Microscopy): A microscopy method of observation using both light and scanning electron microscopes

Electron Microscope Market

- 2015-2018 CAGR projected at 2-3%
- Firm electronic device-related demand in China and the rest of Asia
- Increase in demand for multipurpose analysis in the environment and new energy field and internal structural 3D analysis from high-performance materials

Scientific Instruments

- HM1000

FlexSEM 1000

Phthalic acid screening tester HM1000

* CLEM (Correlative light and electron Microscopy): A microscopy method of observation using both light and scanning electron microscopes
Pick Up Topic (Science & Medical Systems)

Expanding the Product Lineup and Strengthening the Sales and Service Structure through the Stock Purchase and Business Acquisition of Part of the Business of Oxford Instruments plc Group

Hitachi High-Tech completed the purchase of the stock of a subsidiary of Oxford Instruments plc Group (OI) of the UK and the acquisition of a business from subsidiaries on July 3, 2017. The business is part of OI’s industrial precision instruments business engaged in atomic spectroscopy product businesses (X-ray fluorescence analyzers, magnetic induction measurement instruments (contact gauges), laser induced breakdown spectrometers, optical emission spectrometers). Through the acquisition of the business, Hitachi High-Tech will bolster its lineup by adding OI’s handheld atomic spectroscopy models, where OI is strong, to its own strong lineup of benchtop atomic spectroscopy products. In addition, Hitachi High-Tech will incorporate the sales network established by OI worldwide into its organization, enabling it to strengthen its sales network further.

Capital and Business Alliance in the Genetic Testing Business Using the PCR Method

On May 31, 2017, Hitachi High-Tech took an equity stake in Precision System Science Co., Ltd. (PSS) by receiving a private placement of new shares by PSS and started a business alliance relating to the genetic testing business using the PCR method*. In the Alliance, Hitachi High-Tech will use its sales network to sell not only PSS’s conventional products, but also fully automated compact genetic testing system and reagents which are under development. Hitachi High-Tech will also seek to expand the market through development of next-generation fully automated genetic testing system and equipment and reagent sales.

* PCR (Polymerase Chain Reaction) method: A method of amplifying minute amounts of DNA fragments obtained from cells.

Worldwide Research and Development Structure to Deepen Collaboration with Customers and Business Partners

On June 9, 2017, Hitachi High-Tech Science Park opened in California, US, as a research and development center for Science & Medical Systems. To meet the dramatically changing needs in the overseas market, Hitachi High-Tech is strengthening its global development, sales, and support structure by building a structure for working more closely with customers on research and development in the fields of electron microscopes and clinical analyzers. Looking ahead, Hitachi High-Tech plans to open application laboratories for electron microscopes in the UK and China to foster deeper collaboration with customers and business partners. In doing so, Hitachi High-Tech seeks to strengthen its capabilities for research and development and new business creation, and expand its business further.

Strengthening Sales and Service Capabilities in Step with the Expanding In-vitro Diagnostics Market in China

In August 2016, Hitachi High-Tech established Hitachi High-Tech Diagnostics (Shanghai) Ltd., as a joint venture with Shanghai Nichiwa Trading Co., Ltd. (Shanghai Nichiwa) and to commence joint marketing and servicing operations for in-vitro diagnostics (IVD) analyzers and reagents in China to expand its business in the steadily growing Chinese IVD market. Subsequently, Hitachi High-Tech started collaboration on analyzer and reagent sales with two major Chinese reagent companies. These initiatives opened the door for Hitachi High-Tech to sell local Chinese biochemical testing reagents, and it has now started providing total solutions covering sales and serving of analyzers and reagents throughout China.
Review of FY2016

As people’s social lifestyles change greatly due to the advance of an information-oriented society, customer needs are growing more diverse for the electronic devices that support social infrastructure, such as semiconductors. These include advanced performance and reliability optimized for the application and low energy products to reduce environmental impact, in addition to the scaling of semiconductor devices.

In this environment, in Electronic Device Systems we will maintain and expand our share in the field of miniaturization of semiconductor devices, which is our foundational business, and we will also promote our business taking business development for new needs and new markets as a pillar of our Mid-Term Management Strategy.

In FY2016 the semiconductor industry overall was very active, with brisk capital investment in next-generation cutting edge processes and mass production of memory, such as 3D-NAND. Hitachi High-Tech responded by strengthening its development structure around customer needs, launching new products, and so forth, to achieve higher results year on year.

Katsutaka Kimura
Senior Vice President and Executive Officer, General Manager, Electronic Device Systems Business Group

Business Strategy Initiatives and Accomplishments in FY2016

Create Global Top Products and Develop New Business Domains

Response to New Needs (Business development into new fields)
- Overlay measurement (SEM)
- Pattern shape evaluation (SEM)
- Processing equipment for MRAM*

Growth of Earnings Base (Provide top share products)
- CD-SEM
- Conductor etcher
- Defect inspection tool

Develop the IoT Market (Enhance the product lineup)
- CD-SEM for Small-diameter wafer
- Inspection tool for power devices
- Manufacturing tool for WLP**

Service Businesses
- Expand CIP*3 menu
- Utilize big data
- Provide solutions

Mid-Term Management Strategy Initiatives and Accomplishments in FY2016

Business Expansion in miniaturization of Semiconductor Devices
- Strengthened local development structures to boost customer response capabilities
- Supplied products in a timely manner through development in close contact with customers

Respond to Diverse Needs
- Provided solutions to address new needs

Develop Business for the IoT Market
- Upgrade product portfolio

Expand Service Business
- Expanded service business in worldwide

*MRAM: Magnetoresistive Random Access Memory  **WLP: Wafer Level Package  ***CIP: Continued Improvement Plan

*1 MRAM: Magnetoresistive Random Access Memory  **2 WLP: Wafer Level Package  ***3 CIP: Continued Improvement Plan

Business Expansion in miniaturization of Semiconductor Devices
- Reinforced the facilities of engineering sites around the world
- Increased the headcount of engineers at overseas engineering sites
- Steadily deepened early collaboration closely linked with customers, seamlessly from research to mass production

• Launched high voltage CD-SEM CV5000 series with functions for measuring three-dimensional device structure

• Launched CH9300 capable of high-speed high sensitivity defect review

• Released new products applying Hitachi High-Tech’s core electron beam technologies

• Customer Solutions Div. established as a new organization to propose new solutions such as upgrading previously delivered equipment and improving productivity

• Rolled out a series of service options such as new Continuous Improvement Plans (CIP) and solutions
Priorities Going forward and Initiatives for FY2017

The semiconductor manufacturing market is expected to continue performing strongly, mainly driven by capital investment in memory. However, the investment timing of some customers is uncertain. Nevertheless, the market is on a growth trend going forward, and we have lifted our projected CAGR for the market over 2015-2018 from 4.1% (April 2016 projection) to 8.5% (April 2017 projection). Meanwhile, the spread of the IoT is driving a steady increase in semiconductor applications. Customer needs around manufacturing equipment have become increasingly sophisticated, with requirements for higher performance combined with lower energy consumption from a perspective of reducing environmental load. The required speeds are also presenting a challenge. To provide a reliable, timely response to these changes, while ensuring that we can adapt progressively, we will bolster our development workforce and further strengthen our early collaboration with customers, working closely with them from the initial stage of device development. In doing so, we aim to continuously grow our business base.

We will invest even more heavily in R&D in peripheral markets and new fields, etc., to create innovative one-of-a-kind products. In order to do this, we will further strengthen relations with our customers, in addition to partnering with Hitachi Ltd.’s research laboratories and external research institutions to make maximum contributions to turn our customers into fast-moving, cutting-edge businesses.

Concrete Initiatives

- Increased R&D investment to upgrade product portfolio (YoY +2 billion yen)
- Strengthen human resources and capital expenditures at development bases in Japan and overseas
- Strengthen external collaboration, including with research institutions

Pick Up Topic

**New High-Speed Defect Review SEM CR6300**
- For Semiconductor Device Scaling and Multi-Layered Structure –
  To cope with finely structured logic devices and multi-layered memory devices, it is important to be able to quickly review and classify defects in the manufacturing process steps. The CR6300 is equipped with improved stage control system enabling a three-fold increase in speed compared to conventional models. The tool also enables sophisticated defect review with a newly designed column featuring multiple detectors and new functions for comparing captured defect images with pattern measurement data, which contribute to process optimization and yield enhancement.

**Mirror Electron Microscope Mirelis VM1000**
- For Non-Destructive Inspection of SiC Wafer Crystal Defects and Damage –
  SiC power devices are expected to be used in a wide range of industries going forward, including private-sector equipment and solar power generation. One challenge that needs to be overcome is to reduce the crystal defect density in the substrate. Mirelis VM1000 detects defects using the phenomenon of a change in electric potential on the substrate surface in places where the wafer has suffered process damage or where a crystal defect occurs. Since the unit can detect subsurface defects non-destructively, it can be used from the R&D stage right through to wafer shipment inspection, providing powerful support for SiC wafer development and quality management.
Review of FY2016

Aiming to strengthen and expand our business foundation in the social and industrial infrastructure business, we have newly established the Industrial Systems from FY2016 by combining Industrial & IT Systems and Fine Technology Systems. In FY2016, solar photovoltaic system EPC projects contributed to sales growth, and demand was firm for manufacturing equipment in the automobile components-related market and lithium-ion battery (LIB) manufacturing equipment for the EV*, PHV*2 and HV*3 related markets, which saw growing investment in environment and safety-related fields. Apart from this, in control systems, we achieved a solid track record of sales in smart-process automation systems, including smart-process instructions, automated tuning and preventive diagnostics spanning remote locations and multiple sites using IoT and big data, in addition to sales of DCS*4. In railway inspection systems, we pushed ahead with measures to deliver new value based on IoT. These measures included the launch of the trial operation of cloud systems to analyze inspection data for multiple tracks and integrated monitoring of the condition of inspection equipment.

FY2016 saw the new Industrial Systems commence business expansion initiatives based on the common theme of IoT solutions. These initiatives were driven by information sharing and cooperation between the relevant departments under the new framework. Structural reforms through business transfers and reorganization were mostly completed as planned. As a result, EBIT increased year on year.

*1 EV: Electric Vehicle  *2 PHV: Plug-in Hybrid Vehicle  *3 HV: Hybrid Vehicle  *4 DCS: Distributed Control System

Business Strategy

Initiatives and Accomplishments in FY2016

<table>
<thead>
<tr>
<th>Social Infrastructure Field</th>
<th>Initiatives and Accomplishments in FY2016</th>
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</thead>
<tbody>
<tr>
<td>Mid-term Management Strategy</td>
<td>Initiatives and Accomplishments in FY2016</td>
</tr>
</tbody>
</table>
| Control Systems | 1. Developed and launched the Lumione BL-1000 analyzer for rapid testing of microbial content, targeting the testing of water used in pharmaceutical manufacturing  
2. Commenced operation of smart-process automation systems based on IoT and big data analysis for plant equipment and other applications |
| Railway Inspection | 1. Expanded business by commencing full-scale operation of railway inspection equipment mounted on operating railcars  
2. Promoted activities to capture orders for overseas railway projects |
| Environment and Energy | 1. Expanded the mega-solar business (IPP/EPC*) (Completed project in Shizukuishi Town, Iwate Pref., and advanced projects in Komatsu City, Ishikawa Pref. and Misawa City, Aomori Pref.)  
2. Cultivated the Cuban market centered around power generation |

<table>
<thead>
<tr>
<th>Industrial Infrastructure Field</th>
<th>Initiatives and Accomplishments in FY2016</th>
</tr>
</thead>
</table>
| Automated Assembly | 1. Expanded business through sales growth in automobile component assembly systems  
2. Captured orders and commenced shipment of mass-production facilities for LIBs for electric vehicles |
| Thin-Film | 1. Expand consulting-based sales in the flexible devices field, including highly functional film, in markets worldwide |
| Ink-jet Printer for Industry | 1. Launched an ink-jet printing system business using the precision machinery technologies of Hitachi High-Tech for applications requiring high-resolution printing capabilities (construction materials, housing equipment, and automotive interior materials, etc.) |

<table>
<thead>
<tr>
<th>ICT Solutions Field</th>
<th>Initiatives and Accomplishments in FY2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>IoT / Cloud Computing</td>
<td>1. Supplied solutions to improve the factory productivity of manufacturers using IoT</td>
</tr>
</tbody>
</table>

IPP: Independent Power Producer  EPC: Engineering, Procurement and Construction

Hiroshi Tajima
Executive Officer,  General Manager, Industrial Systems Business Group
Priorities Going Forward and Initiatives in FY2017

In the social infrastructure field, we expect capital investment to remain firm. In control systems, we anticipate sustained capital investment to enhance quality, productivity and operational safety against the backdrop of shortages of human resources well versed in plant and related equipment in Japan. Also, in railway inspection systems, capital investment is projected to continue, following on from rail inspection equipment mounted on operating railcars entering service in FY2016.

In the industrial infrastructure field, although competition in the North American automobile market has intensified, demand is expected to grow in North America and China, and capital investment is likely to remain solid. Moreover, we expect capital investment to trend firmly in the fast-growing EV-related market and flexible device-related markets including innovative display sectors. Additionally, we anticipate that IoT solutions will be rapidly implemented in a wide range of fields spanning social infrastructure to industrial infrastructure.

In this environment, in order to steadily advance the Mid-Term Management Strategy, we believe that it will be crucial to accurately monitor issues faced by customers through customer-focused sales capabilities, which is one of our strengths, and to propose cutting-edge solutions by leveraging our own engineering, sourcing, and IoT solutions capabilities.

For example, the flexible devices market is projected to grow rapidly, reaching almost ¥2 trillion in 2020. At this time, Hitachi High-Tech has formed partnerships with leading manufacturers that possess core manufacturing technologies, and is jointly planning solutions ranging from building new production systems to ensuring stable operations in film formation, laser technologies for processing thin film, and related activities. We are promoting these solutions to customers around the world. By delivering creative and innovative forms of value unique to Hitachi High-Tech, we aim to become a one-of-a-kind solution provider in the industrial field.

Concrete Initiatives

- **Social Infrastructure**
  - **Control Systems**
    - Strengthen control systems and big data analysis (such as BD-CUBE predictive diagnostic systems) to meet “Smart-process automation” needs
  - **Railway Inspection**
    - Expand business in railway inspection equipment mounted on operating railcars
    - Propose smart maintenance to develop solutions business
  - **Environment and Energy**
    - Promote power modernization project for Cuba

- **Industrial Infrastructure**
  - **Automated Assembly**
    - Upgrade high-end products lineup for automobile components assembly equipment and LiB production equipment, and develop major customers

- **ICT Solutions**
  - **IoT**
    - Provide factory productivity and product quality improvement solutions

Creating Businesses with High Added Value

Expanding Solutions / Strengthening Infrastructure

Pick Up Topic

Growing Interest in LiB Manufacturing Equipment Driven by the Shift to Electric Vehicles

EVs and PHVs are attracting growing interest in line with heightened concerns about resource constraints and environmental issues. The global market for EVs and PHVs is expected to expand, as these vehicles increasingly penetrate the market.

EVs and PHVs run on lithium-ion batteries (LiB). Hitachi High-Tech sources the LiB assembly equipment and press equipment manufactured by its partner companies and sells these stocked products to major LiB manufacturers. Our customers are calling for lower cost and higher capacity LiBs, as well as greater stability with respect to quality. In response, Hitachi High-Tech will help to fulfill market needs and address issues by leveraging its strengths in terms of its global sales and sourcing capabilities, along with building strong collaborative relationships with its partner companies.
Advanced Industrial Products

Vision

Become a Business Organizer that offers a Full Value Chain (FVC) as a product for Manufacturers

Junichi Hashimoto
Vice President and Executive Officer, General Manager, Advanced Industrial Products Business Group

Review of FY2016

As the globalization of domestic customers advanced, demand for overseas procurement of high-quality materials is increasing even more. In this environment, building more competitive supply chains is the key to customers’ success. We will act strategically to propose and supply a full value chain (FVC) that combines the functions of a specialist trading company in the field of globally resilient materials, with planning, development, procurement, manufacturing, sales, and service in a value chain matrix, leveraging the sales and procurement capabilities we have developed up to this point.

In FY2016, we steadily executed measures to realize inorganic growth strategies. For example, we formed alliances with overseas partners to provide global FVC services in the rail transportation field acquired a Brazilian mold steel sales company and established Hitachi High-Tech Steel do Brasil Ltda. to develop the South American market. We also took concrete steps to support the building of smart factories to support customers expanding overseas.

Business Strategy

Initiatives and Accomplishments in FY2016

The production systems of businesses that aim to expand overseas are in the process of shifting away from low-cost export modes 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. 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. These range from planning and development through procurement, manufacturing, logistics, sales, and maintenance, and include information and investigation relating to suppliers and target customers, development and operation in new markets and for new businesses, and risk management, in addition to conducting product procurement (business transactions), logistics, and finance.

* BPO: Business Process Outsourcing

Functional Materials
- Expand the functional materials business targeting automobiles, construction machinery, and home appliances

Transport Systems
- Expand business in sensors for transport systems, and in components for commercial vehicles and turbocharger

Mid-Term Management Strategy

Initiatives and Accomplishments in FY2016

- In October 2016, acquired a Brazilian mold steel company and established Hitachi High-Tech Steel do Brasil Ltda.
- Expanded plastic molding business in Central America
- Contributed to production scale expansion through capital investment in alliance partner’s turbocharger components process
Priorities Going forward and Initiatives for FY2017

Over the past several years, we have gradually established a platform for FVC, which we have been strategically proposing, and this is now starting to produce results. To ensure our success, we believe that we must further enhance our four main strengths: partnering with our customer base numbering some 2,000 companies worldwide and our approximately 3,500 suppliers; our global business network that enables cross-border transactions covering 23 countries and regions and 19 bases within Japan; our human resources; and the resources of the Hitachi Group. In particular, we will leverage the Hitachi Group’s consulting functions, product manufacturing know-how, and IT support infrastructure, to realize a competitive edge over other companies. Whereas trading companies generally have the business model of “product distribution × finance × logistics,” we will provide solutions under the model of “evaluation × product distribution × finance × logistics × IT.” By effectively combining the Hitachi Group’s resources, global network, personnel, and other infrastructure, we will maintain and increase our edge over our competitors, aiming to provide maximum value to our customers.

Concrete Initiatives

- **Promote Establishment of Shared Factories**
  - Support Japanese SMEs expanding overseas through production management using IoT technology, shared equipment, and inventory control
- **Expand Business for the Optical Telecommunications Module EMS Business**
  - Additional investment for production equipment responding to peak demand
- **Provide Global FVC Service in the Rail Transportation Field**
  - Collaborate with overseas partner companies to expand business
- **Develop the Central and South American market**
  - Strengthen sales base for plastic molding and mold-die businesses and accelerate development of periphery businesses
- **Start Service Business**
  - Start mold-die management service business
- **Promote Provision of Solutions in the Fields of Chemistry, Energy, Electronics, and IT**

Initiatives for Construction of Smart Factories

As part of FVC services, Hitachi High-Tech is working to develop a “Shared Factory” business that helps to reduce the costs and risks associated with overseas expansion for Japanese manufacturers by enabling multiple companies to share production sites, facilities, infrastructure, and management services. We aim to build an FVC service business with an eye to realizing “Smart Factories,” where sensors, monitoring of production line equipment, remote technologies, and so forth will be driven by the IoT, enabling quality improvement of local production to be controlled from Japan.
A Foundation to Support Value Creation

The Hitachi High-Tech Group must address requests from society with integrity and help to solve social issues in order to attain sustained growth. The Hitachi High-Tech Group will continue to provide value to society in collaboration with all stakeholders, aiming to become an enterprise that remains trusted by and essential to society.

▶ Strengthening Hitachi High-Tech’s Foundation to Support Value Creation

The Hitachi High-Tech Group has embraced the Corporate Vision, “To consistently aim to be Global Top in high-tech solutions.” Guided by this vision, the Group has been contributing to society through its businesses. Under the Mid-Term Management Strategy running from FY2016 to FY2018, the Hitachi High-Tech Group aims to grow hand-in-hand with society and its customers by concentrating its management resources on its three business domains of Biotechnology and Healthcare, Social and Industrial Infrastructure, and Advanced Industrial Systems. In the process, we seek to contribute to a future in which people are able to continue to lead healthy and fulfilling lives. The foundation for executing this strategy is our management infrastructure, which encompasses elements such as Human Resources, R&D and Intellectual Property, Supply Chain Management, Environmental Management, and Communications with Local Communities. In conjunction with strengthening this infrastructure, we will hone Hitachi High-Tech’s strengths, such as its technological capabilities, global sales and procurement capabilities, and collaboration with customers and partners, and deliver high-tech solutions by executing strategies that integrate manufacturing, sales and services. In doing so, the Hitachi High-Tech Group will maximize customer value and help to solve social issues.

The Hitachi High-Tech Group’s strengths, such as its technological capabilities, also help to earn the trust of customers and generate profits, thereby forming a positive cycle that further reinforces the Group’s management infrastructure. Furthermore, the Hitachi High-Tech Group believes that it is crucial to ensure the proper functioning of corporate governance in order to increase corporate value over the long term. Based on this belief, the Group is working to enhance the effectiveness of corporate governance.

▶ 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 Committees System established by the Companies Act to build a highly transparent management framework.

In June 2017, I was appointed Chairman of the Board. While I have been involved in Hitachi High-Tech’s growth as a Board director since 2011, I look forward to fulfilling my role on the Board of Directors and contributing to sustainable value creation for the Hitachi High-Tech Group.

In FY2016, we achieved an increase in both revenues and profits. Our current business model was built on our technological capabilities, our global sales and procurement capabilities, through our collaboration with customers and partners, and through the strong relationships of trust we have with leading global companies. Our ability to achieve this continuous growth is evidence that our business execution is functioning properly, a fact also recognized by the Board of Directors. Still, to continue growing into the future rather than being satisfied with the status quo, I believe it is essential that we bring innovative ideas into our business, and develop further sources of revenue, by leveraging the resources and relationships of the Hitachi Group, and through open innovation and collaboration with our partners, which is a management issue for the future.

In 2003, we transitioned into a company with committees, etc. (currently known as a company with a nominating committee, etc.), and since then have focused our efforts on improving the effectiveness of our governance. Four of the eight members comprising our current Board of Directors are outside directors, and a female outside director was nominated and approved at our General Meeting of Shareholders in June of this year. At meetings of the Board of Directors, we conduct uninhibited debates, leveraging the experience and expertise of each individual director, and 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 long-term growth strategy.

Going forward, we will continue working to improve the effectiveness of corporate governance, as the Board of Directors acts 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

▶ Basic Approach
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. This will enable us 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.

▶ Supervisory Functions of Management and Business Execution Functions
In terms of our organizational system, we are a company with a nominating committee, etc., as defined in Article 2 (xii) of the Companies Act. A company with a 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, 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 the improvement of the internal control system, the Audit Committee monitors the execution of business. In addition, it draws up its own plans for the improvement of the internal control system, the Audit Committee monitors the execution of business. 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. FY2016 Evaluation
(1) Target: All seven of the Company’s directors as nominated and appointed at the 97th Ordinary General Meeting of Shareholders held on June 24, 2016.
(3) Overview of evaluation: Following a written questionnaire, the Board of Directors secretariat conducted individual interviews to re-verify the intent and background behind the responses. Results of the evaluation and policies for improvement were then discussed at meetings of the Board of Directors held on December 26, 2016 and January 27, 2017.
(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; operation of the Board of Directors; and relationships with investors and shareholders.

2. Results of FY2016 analysis and initiatives to enhance effectiveness
In FY2015, the operation of the Board of Directors was recognized as an area requiring improvement (including a greater focus on important management issues through a review of items submitted to the Board for discussion, and improvements in methods for providing directors with information). While those improvements were carried out appropriately, and while the effectiveness of the Board as a whole was seen as being ensured, the analysis also acknowledged that further improvements were needed in the areas noted below. As a result, the Company has formulated additional policies aimed at enhancing effectiveness, and will work toward ongoing improvement in the functioning and effectiveness of the Board of Directors as a whole.

(1) Ensuring Diversity in the Composition of the Board of Directors
The Company has arrived at the conclusion that improvements are needed to ensure a more diverse Board composition, with the issue to be taken under consideration by the Nominating Committee.
(2) Expanding Monitoring of Business Risk
As management conditions quickly change, and with further advancement of globalization, monitoring business risk has become extremely important, and the Board of Directors has worked to expand discussions in this area. Further, with regard to business investment, we worked to place particular emphasis on further strengthening verification of risks before investment, as well as post-investment monitoring.
(3) Expanding Discussion of Long-term Strategy
To expand discussion of long-term strategy for the Company as a whole, we worked to establish opportunities for such discussions with executive officers of the Board of Directors meetings.

Composition of the Board of Directors and Each Committee and Attendance at Meetings of the Board of Directors (FY2016)

<table>
<thead>
<tr>
<th>Name</th>
<th>Current Position</th>
<th>Nominating Committee</th>
<th>Audit Committee</th>
<th>Compensation Committee</th>
<th>Attendance at Board of Directors meetings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masao Hisada</td>
<td>Chairman of the Board</td>
<td>○</td>
<td>○</td>
<td>100% (14/14)</td>
<td></td>
</tr>
<tr>
<td>Masahiro Miyazaki</td>
<td>Representative Executive Officer, President and Chief Executive Officer, Board Director</td>
<td>○</td>
<td>○</td>
<td>100% (14/14)</td>
<td></td>
</tr>
<tr>
<td>Yoshikazu Dairaku</td>
<td>Board Director</td>
<td>○</td>
<td>○</td>
<td>100% (14/14)</td>
<td></td>
</tr>
<tr>
<td>Toyuki Nakamura</td>
<td>Board Director</td>
<td>○</td>
<td>○</td>
<td>100% (14/14)</td>
<td></td>
</tr>
<tr>
<td>Hideyo Hayakawa</td>
<td>Board Director (Outside/Independent Director)</td>
<td>○</td>
<td>○</td>
<td>100% (14/14)</td>
<td></td>
</tr>
<tr>
<td>Hironobu Toda</td>
<td>Board Director (Outside/Independent Director)</td>
<td>○</td>
<td>○</td>
<td>100% (14/14)</td>
<td></td>
</tr>
<tr>
<td>Yuji Nishimi</td>
<td>Board Director (Outside/Independent Director)</td>
<td>○</td>
<td>○</td>
<td>100% (14/14)</td>
<td></td>
</tr>
</tbody>
</table>
Business Execution Structure and Internal Control

▶ Basic Approach
In a company with a 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 Chief Executive Officer (CEO) shall consult with the Executive Committee, a consultative body, to engage in more in-depth debate and arrive at the optimal decisions.

Furthermore, the extent to which responsibility for the tasks entrusted to the President and CEO by the Board of Directors can be transferred to the executive officers to expedite decision-making is stipulated in the Decision-Making Standards, which are internal rules. For example, with regard to business investment proposals, the standards stipulate that the executive officer in the position of General Manager of the relevant Business Group is responsible for decision-making with discretion unless the proposed investment exceeds a certain amount.

▶ 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

<table>
<thead>
<tr>
<th>Classification</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Committee</td>
<td>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.</td>
</tr>
<tr>
<td>Budget/Medium-Term Management Plan Deliberation Committee</td>
<td>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.</td>
</tr>
<tr>
<td>Management Meetings</td>
<td>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.</td>
</tr>
<tr>
<td>Business Groups Management Committee</td>
<td>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.</td>
</tr>
</tbody>
</table>

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 streamline the decision-making process. Furthermore, among overseas group companies, Hitachi High-Tech nomimates 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 RegionalPresiding Companies

<table>
<thead>
<tr>
<th>Region</th>
<th>Overseas Regional Presiding Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>North and Central America</td>
<td>Hitachi High TechnologiesAmerica, Inc.</td>
</tr>
<tr>
<td>Europe</td>
<td>Hitachi High Technologies Europe GmbH</td>
</tr>
<tr>
<td>ASEAN and India</td>
<td>Hitachi High Technologies (Singapore) Pte. Ltd.</td>
</tr>
<tr>
<td>China</td>
<td>Hitachi High Technologies (Shanghai) Co., Ltd.</td>
</tr>
</tbody>
</table>

▶ Internal Control System
With regard to the establishment of a legally recognized internal control system, executive officers implement appropriate and specific systems and procedures on behalf of the Company, and operate on the basis of approval and resolutions by the Board of Directors. The Board of Directors receives reports from the executive officers concerning the operational status and outcomes of these systems, issuing instructions for their improvement if necessary. Alternatively, the executive officers may propose alterations in response to changes in the business environment, which may be approved and resolved by the Board of Directors.

Through these efforts, the Company strives to maintain the vitality and effectiveness of its internal control system. Furthermore, to strengthen the Group-wide internal control system, the Internal Control Management Committee acts as a structure for managing the activities of its four subcommittees (the J-SOX Committee, the Compliance Committee, the Information Security Committee and the Environmental Committee).

▶ 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. The Internal Auditing Division promotes sharing of information through cooperation with the Audit Committee and the Accounting Auditor, 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

▶ Basic Approach

Directors and executive officers in charge of the management of the Company will be paid compensation for executing management aimed at making it an enterprise trusted by all 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 the 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

<table>
<thead>
<tr>
<th>Monthly Remuneration</th>
<th>Year-end allowance or Performance-based Compensation</th>
<th>Non-monetary reward</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directors</td>
<td>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.</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Positions (with duties) that have a significant impact on management will 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.</td>
</tr>
<tr>
<td>Executive Officers</td>
<td>The standard annual salary decided for each director and executive officer with consideration for the standard in the business world shall be paid monthly as a standard salary excluding bonuses.</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Those with duties that have a significant impact on management and business execution shall be provided 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.</td>
</tr>
</tbody>
</table>

*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 FY2016

<table>
<thead>
<tr>
<th>Total Amount of Remuneration by Type</th>
<th>Monthly Remuneration</th>
<th>Year-end Allowance or Performance-linked Component</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Amount (million yen)</td>
<td>Number</td>
</tr>
<tr>
<td>Directors</td>
<td>7</td>
<td>115</td>
<td>6</td>
</tr>
<tr>
<td>Outside Directors</td>
<td>4</td>
<td>37</td>
<td>3</td>
</tr>
<tr>
<td>Executive Officers</td>
<td>15</td>
<td>237</td>
<td>15</td>
</tr>
</tbody>
</table>

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 one Director who retired at the end of his term of office at the close of the 97th Ordinary General Meeting of Shareholders held on June 24, 2016.
3. Of the amounts at left, monthly remuneration for Outside Directors includes the monthly salary paid to one Director who served as Outside Director until the close of the 97th Ordinary General Meeting of Shareholders of the Company held on June 24, 2016, for the period during which that Director served as Outside Director.

Risk Management System

▶ Basic Approach

The Group regards as risks any events or problems that may significantly interfere with achieving its business goals, and to improve corporate value, has put in place a system for appropriately understanding and managing risk. The Group works to prevent and manage risks involving its transactions, investments, M&A and other business activities through discussions by its Board of Directors, Executive Committee and other bodies, and through a decision-making system based on the Rules of the Board of Directors and the Decision-Making Standards, etc.

Further, the Company has established Risk Management Rules governing 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 (hereinafter, operational risk), and has built a system for departments responsible for each of these areas to appropriately understand and manage these risks. With regards to operational risk, the Internal Control Management Committee, chaired by the Chief Risk Management Officer (CRO), oversees subcommittees including the J-SOX Committee, the Compliance Committee, the Information Security Committee and the Environmental Committee, which issue instructions on measures to address the respective risks for which each committee is responsible.

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. It also evaluates the internal control system, including important decision-making processes, reviews the content of resolutions of the Board of Directors, and proposes revisions to those resolutions to address changes in the business environment.
The Group has established a Compliance Committee, which meets regularly to discuss, on a company-wide basis, the status of compliance risk, plans for countermeasures to address this, and the status of implementation of such measures. Responsibility for addressing each type of risk has been assigned to specific departments, each of which envisions and evaluates that risk, and reports to the Compliance Committee regarding risk status, plans for countermeasures, and the status of implementation of such plans. In addition, the heads of organizations including the business groups, branch offices, and Group companies manage compliance structures within each organization by appointing Compliance Managers for each organization, responsible for building compliance structures and systems within their respective organizations, and for 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 43 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 the Whistleblower Reporting Service**

The Group has established a whistleblower reporting service, available to full-time employees, temporary agency workers, casual workers and fixed-term employees, to uncover and address violations of the law and incipient fraud as early as possible. We also operate a whistleblower system at our overseas Group companies, according to the legal system in each country and the corporate structure of the company in question. Information provided to this reporting system is passed on to the Compliance Committee and the Internal Control Management Committee.

In January 2016, we established the Whistleblower Reporting Service Independent of Management, which enables direct reporting to members of the Audit Committee with regard to breaches of laws and regulations related to the conduct of business by directors and executive officers. This further strengthens our whistleblower system.

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.

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

*Please refer to the website for details concerning Major Risks.*
Directors

(As of July 1, 2017)

Chairman of the Board
Toyoaki Nakamura

Reason for Selection
Mr. Nakamura was selected for reappointment to incorporate his abundant experience in corporate management and his extensive knowledge and experience in the fields of accounting and finance into the supervision of the Company’s management and execution of operations.

Director
Masahiro Miyazaki

Reason for Selection
Mr. Miyazaki has led the management of Hitachi High-Technologies Group as the Company’s Representative Executive Officer, and at the 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.

Director
Ryuichi Nakashima

Reason for Selection
Mr. Nakashima has been involved in accounting work for a long time at Hitachi High-Technologies Corporation and has also worked as a General Manager of Internal Auditing Div. He has been 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 to incorporate his experience and knowledge into the supervision of the Company’s management and execution of operations.

Director
Ryuichi Kitayama

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 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.

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

Back row from the left: Mayumi Tamura, Ryuichi Nakashima, Hiromichi Toda, Yuji Nishimi, Ryuichi Kitayama  
Front row from the left: Masahiro Miyazaki, Toyoaki Nakamura, Hideyo Hayakawa
Outside Director’s Message

In my position as outside director, I am aware that Hitachi High-Tech has integrated the dual functions of a manufacturer and a trading company, and enhanced its corporate value, largely thanks to the technology and human resource capabilities it has accumulated to date. Going forward, I think we can expect to see further sustainable growth as the Company extends those technologies and human resource capabilities, applying its expertise to the task of resolving social issues.

In working toward that growth, it is important that the Outside Directors express their frank opinions regarding the various strategies proposed by management, from an independent position and from the standpoint of protecting the interests of general shareholders. Hitachi High-Tech currently has four Outside Directors, and I myself offer suggestions based on my experience and knowledge in the legal affairs and internal audit divisions of a general trading company. Hiromichi Toda, who has been involved in factory operations and corporate management, and Yuji Nishimi, who has commanded front-line sales in cutting-edge industries—primarily electronic components—also offer astute opinions based on their respective viewpoints. Decision-making by the Board of Directors emerges from these very vigorous discussions. In June 2017, the Board welcomed an additional Outside Director, Mayumi Tamura, who spent many years in charge of finance at foreign-owned and other companies. With this, we will bring an even greater level of diversity and effectiveness to our discussions.

That said, it has been 15 years since the Company’s start as Hitachi High-Tech, and as the number of employees and business sites has increased, we are aware of the need to review the internal controls and compliance and other management structures that have been built over that time, and to check the effectiveness of management, monitoring and reporting to the Board of Directors. These are issues I would like to see the Board discuss in greater depth. While business conditions continue to change rapidly, I hope to contribute to the decision-making of the Board of Directors as an Outside Director, and continue to support the sustainable growth of Hitachi High-Tech.

Hideyo Hayakawa
Outside Director
## Executive Officers

**As of April 1, 2017**

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Responsibilities</th>
<th>Reason for Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Representative Executive Officer, President, Chief Executive Officer</td>
<td>Masahiro Miyazaki</td>
<td>Overall management execution</td>
<td>During FY2016, they have performed their duties in a manner that satisfied the requirements set out in the Executive Officer Selection Policy. Therefore, they were reappointed as Executive Officers.</td>
</tr>
<tr>
<td>Representative Executive Officer, Senior Vice President and Executive Officer</td>
<td>Toshiyuki Ikeda</td>
<td>Science &amp; Medical Systems, Service, Export Control</td>
<td></td>
</tr>
<tr>
<td>Senior Vice President and Executive Officer</td>
<td>Katsutaka Kimura</td>
<td>Electronic Device Systems, R&amp;D, Intellectual Property, New Business Creation, CTO</td>
<td></td>
</tr>
<tr>
<td>Senior Vice President and Executive Officer</td>
<td>Shunichi Uno</td>
<td>Accounting and Finance, Trade Compliance Management, CFO</td>
<td></td>
</tr>
<tr>
<td>Vice President and Executive Officer</td>
<td>Shinji Sato</td>
<td>Corporate Planning &amp; Planning, Marketing &amp; Sales Strategy, Group Company Management, CMO</td>
<td></td>
</tr>
<tr>
<td>Vice President and Executive Officer</td>
<td>Junichi Hashimoto</td>
<td>Advanced Industrial Products</td>
<td></td>
</tr>
<tr>
<td>Vice President and Executive Officer</td>
<td>Joji Honda</td>
<td>Corporate Manufacturing, Procurement, Quality Assurance</td>
<td></td>
</tr>
<tr>
<td>Vice President and Executive Officer</td>
<td>Hisashi Horikoshi</td>
<td>Human Resources, CSR, Corporate Communications, Legal, Environment, Internal Control, Compliance &amp; Risk Management, CHRO and CRO</td>
<td></td>
</tr>
<tr>
<td>Executive Officer</td>
<td>Hiroshi Tajima</td>
<td>Industrial Systems</td>
<td></td>
</tr>
<tr>
<td>Executive Officer</td>
<td>Futoshi Ishiwa</td>
<td>Electronic Device Systems</td>
<td></td>
</tr>
<tr>
<td>Executive Officer</td>
<td>Akihiro Imanishi</td>
<td>Advanced Industrial Products</td>
<td></td>
</tr>
<tr>
<td>Executive Officer</td>
<td>Shinji Sakurai</td>
<td>IT Strategy, Smart Transformation Project Promotion, IR, CIO and CTIO</td>
<td></td>
</tr>
<tr>
<td>Executive Officer</td>
<td>Takashi Iizumi</td>
<td>Industrial Systems</td>
<td>Mr. Iizumi rendered distinguished service in designing and developing CD-SEM and has abundant experience in creating new business and developing business strategies for Science &amp; Medical Systems. He also worked positively and valiantly as Representative Director, President of Hitachi High-Tech Solutions Corporation to deal with management issues and showed strong leadership. Therefore, we consider that he satisfies the requirements set out in the Executive Officer Selection Policy, and he was appointed as Executive Officer.</td>
</tr>
<tr>
<td>Executive Officer</td>
<td>Sukehiro Ito</td>
<td>Science &amp; Medical Systems</td>
<td>Mr. Ito rendered distinguished service in designing and developing electron microscopes and has abundant experience as a leader. He also focuses on creating an open relationship with outside parties by, for example, introducing in a positive manner open innovations through collaboration with partner companies. Therefore, we consider that he satisfies the requirements set out in the Executive Officer Selection Policy, and he was appointed as Executive Officer.</td>
</tr>
<tr>
<td>Executive Officer</td>
<td>Mikio Takagi</td>
<td>Science &amp; Medical Systems</td>
<td>Mr. Takagi rendered distinguished service in sales of electron microscopes and general-purpose analyzers and has a wide variety of business experience accumulated by working at several branches in Japan and serving as Director of Hitachi High-Technologies Europe GmbH. Therefore, we consider that he satisfies the requirements set out in the Executive Officer Selection Policy, and he was appointed as Executive Officer.</td>
</tr>
</tbody>
</table>

CTO: Chief Technology Officer  CMO: Chief Marketing Officer  CIO: Chief Information Officer
CFO: Chief Financial Officer  CHRO: Chief Human Resources Officer  CTro: Chief Transformation Officer
CSO: Chief Strategy Officer  CRO: Chief Risk management Officer
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 executives 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 personally explains the results forecasts and management strategies. We also strive to build relationships 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. Note that IR Division actively promotes understanding of the Group, such as by holding approximately 280 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 dedicated exclusively to 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 deepen understanding of the Group’s business activities.

Main IR Activities in FY2016

<table>
<thead>
<tr>
<th>IR Activities Aimed at Institutional Investors</th>
<th>Number of Times Conducted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Results Briefing</td>
<td>4 (including 2 briefings by the President)</td>
</tr>
<tr>
<td>Overseas IR</td>
<td>3</td>
</tr>
<tr>
<td>(US, Europe, Hong Kong, Singapore)</td>
<td>3</td>
</tr>
<tr>
<td>Conferences Held by Securities Companies</td>
<td>2</td>
</tr>
<tr>
<td>Meetings with Analysts and Institutional Investors</td>
<td>Cumulative 276 briefings</td>
</tr>
</tbody>
</table>

Relationship with the Hitachi Group

Advantages 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 considered at meetings with the Hitachi Group’s CTO*, 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 by the Executive Committee, a consultative body in accordance with internal rules that is comprised of key executive officers. 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. While the Board, comprised of eight members, includes two members who concurrently serve as director or executive officer for Hitachi, Ltd., they do not represent a majority of the Board of Directors overall, and 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.

* CTO: Chief Technology Officer
Human Resources

The Hitachi High-Tech Group recognizes “human resources” as one of our most invaluable assets in the belief that it is necessary to adopt diverse perspectives and values that creates new ideas for our future growth.

Social Background

The Hitachi High-Tech Group draws its growth fields into three business domains of Biotechnology and Healthcare, Social and Industrial Infrastructure, and Advanced Industrial Systems. Each of these domains has an expanding base of cutting-edge and frontline global customers and markets. The Hitachi High-Tech Group is working to strengthen its portfolio by shifting resources to these domains. In these growth fields, we find that customer needs are becoming more diverse and sophisticated. The business environment and social conditions surrounding each field are also changing dramatically. Meanwhile, Japanese society has been experiencing structural changes driven by trends such as declining working-age population due to low birthrate, and an aging society with fewer children. In addition, the legal and regulatory environment surrounding companies has also been changing due to factors such as the enforcement of the Act on Promotion of Women’s Participation and Advancement in the Workplace and the Act on Advancement of Measures to Support Raising Next-Generation Children, along with the amendment of the Labor Standards Act.

Hitachi High-Tech’s Targeted Direction

▶ Develop and Foster Reform-Minded “Human Resources” Who Will Help to Increase Corporate Value

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 and measures to improve business efficiency, 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.
Reform of Working Styles and Measures to Increase Business Efficiency

Since FY2015, we have been conducting the “20-20” Project* to achieve a highly productive working style and to enhance productivity. Under this project, each worksite takes their own creative steps to effectively utilize regular work hours and implement well-modulated working styles. In addition, we also conduct events such as lecture meetings with outside experts, training program for facilitation skills, or presentation sessions which introduce good internal case examples received from each department.

In March 2016, we organized the “Working Style Reform Committee.” Through this committee, we have held continuous discussions between the labor union and management to achieve more flexible and efficient working styles. In September 2016, Hitachi High-Tech’s management executives announced the Hitachi High-Tech Group “Working Style Reform Declaration.” We held the “Like! Lunch Meeting” and “Help! Lunch Meeting” to provide opportunities for the President and other management executives to directly convey their aspirations for reform of working styles to employees. (Events led by the President: 8 sessions, attended by 89 individuals; Events led by other management executives: 37 sessions, attended by 374 individuals). By enhancing the implementation of our activities through these events, we have been working to accelerate and deepen working style reforms throughout the Hitachi High-Tech Group.

In terms of programs, from February 2017, we have expanded eligible persons for the teleworking program to not only for those employees engaging in child raising and home nursing care but also to all management level personnel. As a result, the number of beneficiary from the program has significantly increased. From FY2017, we have introduced a flex-time program that no longer observes core working hours. Apart from these, we have also enabled employees to take annual paid leave on an hourly basis for up to four days. As described above, we are trying to make a better work environment that matches for each employees’ various preference for working style by providing more flexibility to their working hours and workplace.

There are still remaining issues, for instance, the number of male applicants for child-care leave is less compared to that of female applicants. In October 2016, Hitachi High-Tech joined the Ikuboss Alliance* and pledged to advance the development of “Ikuboss” managers, who serve as role models to support the reform of working styles and the success of diverse human resources.

* “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.

* 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.
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, sales training, engineering training, and manufacturing skills training. Furthermore, we endeavor to ensure ongoing verification and improvement of our human resource development initiatives via the Management Education Committee.

▶ Recruitment of Human Resources Supporting Business Growth

Hitachi High-Tech is pushing ahead with human resource initiatives directed at achieving its growth strategies. Specifically, we strive to employ talented people, irrespective of their gender or nationality. Among the 63 new hires recruited as regular employees in April 2017, 30% were women, and 3% were non-Japanese. We also believe that it is crucial to recruit experienced talent with advanced technical capabilities and expertise to strengthen our businesses. In FY2016, we hired a total of 59 experienced talent, primarily in the Science & Medical Systems and Electronic Device Systems segments.

We seek to convert the capabilities of our diverse “human resources” into organizational strengths, improving our corporate competitiveness. To do so, we will strive to proactively reform working styles and to build a corporate culture that takes full advantage of diversity within the company.

▶ Cultivating Talent with a Global Outlook

We actively post young employees overseas and have set a goal of ensuring that at least 50% of employees have gained some overseas experience within seven years of joining the company with a view to cultivating personnel capable of doing business with a global perspective. Young employees are trained overseas via a one-year overseas training program and a short-term overseas posting program. In addition, we are striving to enhance our efforts to cultivate overseas subsidiary employees, so that they can play an active role in our businesses. To this end, we also offer various global management training courses, which bring together participants from a variety of countries and regions. In other areas, we have implemented training of selected overseas subsidiary employees from FY2016. We are training overseas subsidiary employees so that they can be appointed to executive-level positions in the future, along with promoting retention.

▶ Introducing Global Performance Management (GPM)

In FY2016, the Hitachi High-Tech Group introduced Global Performance Management (GPM) to achieve an autonomous, distributed organization capable of swiftly addressing changes in the global markets and business environment. GPM links company targets, divisional targets, and individual performance targets, and requires individuals to set activity targets in advance for the actions and processes they must implement to achieve the targets at each level. In the “Coaching & Feedback” process implemented year-round by supervisors, supervisors monitor the degree of accomplishment of their subordinates, and provide advice on measures to achieve targets and make improvements. From now on, we will work to enhance the quality of coaching.

▶ 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. We will foster strong individuals who are able to think and act independently (individual self-reliance and autonomy) and will encourage mutual understanding between the organization and individuals. By doing so, we will foster a corporate culture that respects each individual’s determination and motivation, thereby contributing to the growth of the entire organization.

TOEIC® Score Incentive Bonus Program

The Hitachi High-Tech Group has established a TOEIC® Score Incentive Bonus Program as a temporary two-year initiative. This program is part of efforts to invest in “human resources” in order to accelerate the development of English language skills needed by employees to undertake global business and our transformation into a corporate culture befitting a global enterprise. The program pays incentive bonuses to employees who have achieved a TOEIC® score of 800 or above. Currently, Hitachi High-Tech has 319 employees who have obtained a TOEIC® score of 800 or higher. As a result of this initiative, the average TOEIC® score for the entire company has increased by 35 points.

* TOEIC® is a registered trademark of Educational Testing Service (ETS). This publication has not been reviewed or approved by ETS.
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 FY2016, the Hitachi High-Tech Group designated October as “Diversity Month” and hosted presentations based on various themes such as “health management” and “creating innovation,” thereby providing many different opportunities for employees to gain exposure to and consider diversity intensively.

In addition, as measures to promote the participation of women in the workplace, we strengthened the development of female leaders through measures including diversity management training, as well as holding events such as “role model cafes” for female assistant-managers and managers, networking events to encourage interaction between female technical staff in different industries, and human skills training for core career positions.

Furthermore, we hold the “Hitachi High-Tech Group Diversity Promotion Committee” for sharing information on various initiatives with Group companies and having a positive impact on one another. In March 2017, Hitachi High-Tech was selected as a Nadeshiko Brand* enterprise for FY2016 for excellence in encouraging women’s success in the workplace based on positive recognition of its various diversity management initiatives.

In addition, the Hitachi High-Tech Group actively employs people with disabilities. In FY2016, we held presentations to increase understanding among workplaces that will accept people with disabilities. Going forward, we will focus on measures to promote the retention of employees with disabilities, including providing the care needed to facilitate the long-term employment of these workers.

* Nadeshiko Brand: An initiative jointly undertaken by the Ministry of Economy, Trade and Industry (METI) and Tokyo Stock Exchange, Inc. (TSE) to select and publicize listed enterprises that are exceptional in encouraging women’s success in the workplace (conducting career support for women and supporting women in balancing work and family) as attractive stocks for investors who emphasize “medium to long-term corporate value appreciation.”

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

Topics

Ms. Mayumi Tamura Appointed as New Director

One of Hitachi High-Tech’s major KPIs for human resources management is to appoint one female officer by 2020. The appointment of Ms. Mayumi Tamura was approved by a resolution of the 98th Ordinary Meeting of General Shareholders held on June 23, 2017. We expect Ms. Tamura to supervise the Company’s management and execution of operations based on not only her experience in corporate management but also on her considerable insight in promoting diversity and cultivating female leaders.
R&D and Intellectual Property

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

R&D Strategy

The source of the Hitachi High-Tech Group’s value creation and competitiveness is the development of cutting-edge technology and innovative business models. Based on our Mid-Term Management Strategy, we are focusing on our proprietary product businesses in Science & Medical Systems and Electronic Device Systems with an eye to promoting the development of cutting-edge technology for both hard and soft applications in anticipation of market and industry trends over the medium and long term. Targeting major trends such as IoT and AI, we are also working to strengthen our existing technologies and to create new service solution businesses.

R&D expenditure rose 17% year on year to 23.6 billion yen in FY2016. We have been investing aggressively to upgrade existing core technologies in response to our customers’ complex and evolving needs. We are also investing in technological and business developments to expand operations and secure a presence in areas with future revenue growth potential.

Under the Mid-Term Management Strategy that started in FY2016, we plan to increase total R&D investment by 30% over the preceding three-year period to around 80 billion yen. We also plan to target third-party technologies and business ideas through an aggressive business investment program.

▶ Promotion of Open Innovation

The foundation of the Hitachi High-Tech Group’s manufacturing is entirely reliant on improving technology through R&D. Not only must we further enhance the core technologies and foundational technologies that we have fostered up to this point, we must also promote integration with other companies’ technologies and business models through open innovation, to rapidly produce next-generation technology and solutions.

Hitachi High-Tech has ties with research institutions of Hitachi, Ltd. that are conducting globally cutting-edge R&D, and we aim to conduct R&D to produce solutions to the issues faced by our customers through collaborative innovation with them, displaying the synergistic benefits of being part of the Hitachi Group.

▶ Approach to R&D and Business Investment

In order to anticipate needs, work to lead in important technological sectors, and work to create exceptional business models, 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. Through this aggressive approach to R&D and business investment, we are focused on identifying and securing a greater presence in domains and technologies that can support business creation over the longer term.

▶ Initiatives for Enhancing Business Creation Capabilities

In April 2014, the Hitachi High-Tech Group established the New Business Development Div. for the purpose of enhancing our new business creation activities. By creating a dedicated organization, we have enhanced and promoted marketing and project management to commercialize strategic top-down themes in different business domains to our existing businesses, as well as bottom-up themes, which are based on proposals from our employees. In April 2016, we restructured this division, as well as the Research & Development Div., to create the Innovation Promotion Div. This division promotes the creation of technological solutions and service businesses, in addition to high-level product technology that is constantly growing in complexity, by playing a role as an incubator for R&D.

In April 2016, we established the Service Solution Business Promotion Div. to help promote development of new service businesses in each business group. In August 2017, we launched ExTOPE as a new IoT services portal for the cloud-based collection and analysis of various data from Hitachi High-Tech equipment installed at customers’ premises. This new platform will accelerate development of remote maintenance and other new service businesses linked to our products. The ExTOPE portal allows users in widely separated locations to share instrument data and related analyses, making data analysis more efficient and supporting new discoveries. In the future, we plan to upgrade and expand our solution-based business services that combine IoT technology with our products.
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.

► 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 built, 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 2017), and is working to improve the dependability of IP activities.

Furthermore, we are working to increase the motivation of employees who work on the front lines of research and development to make inventions by establishing a well-developed invention incentive program, as well as an IP award program.

► Enhancing Overseas IP to Support the Globalization of Our Business

61% of the Hitachi High-Tech Group’s Revenues in FY2016 came from overseas, which focused on Asia. In order to adapt to this kind of 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. Furthermore, we are working to improve cost efficiency. For instance, depending on business trends, we do not automatically apply for Japanese patents, something that had been done as a matter of course until now. Also, in FY2016, overseas applications accounted for 70% of our total applications.

■ IP Data

<table>
<thead>
<tr>
<th>FY</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patent Applications</td>
<td>1,349</td>
<td>1,169</td>
<td>1,002</td>
<td>927</td>
</tr>
<tr>
<td>Domestic</td>
<td>589</td>
<td>402</td>
<td>327</td>
<td>278</td>
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<tr>
<td>Overseas</td>
<td>760</td>
<td>767</td>
<td>675</td>
<td>649</td>
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<tr>
<td>Patents Owned</td>
<td>7,672</td>
<td>7,115</td>
<td>7,400</td>
<td>7,469</td>
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<tr>
<td>Domestic</td>
<td>4,232</td>
<td>3,735</td>
<td>3,758</td>
<td>3,698</td>
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<tr>
<td>Overseas</td>
<td>3,440</td>
<td>3,380</td>
<td>3,642</td>
<td>3,771</td>
</tr>
</tbody>
</table>

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

Topics

Strategic Top-down R&D Theme Accomplishment: Development of Rapid Microbe Tester

On August 30, 2016, Hitachi High-Tech Solutions Corporation launched the Lumione BL-1000 analyzer for rapid testing of microbial content. The product can test water used in pharmaceutical manufacturing*1 in just one hour*2, reducing the time usually required from at least a week.

This product was developed as a corporate project independently from the business divisions. This allowed faster definition of the project direction and technological review than existing projects, resulting in more timely product commercialization.

The Lumione BL-1000 is being marketed mainly to the QC departments of drug manufacturers and research institutions conducting microbe-related research. Designed to comply with the new rapid testing methodology for microbes as stipulated in the Japanese Pharmacopoeia that lists standards for drug manufacturing, the unit will help cut lead times and in-process inventory for a wide range of processes within pharmaceutical manufacturing and quality control.

*1 Water used in pharmaceutical manufacturing must meet the standards for microbial content laid down in the Japanese Pharmacopoeia.

*2 Time required in internal tests for one 100ml sample from preparation to measurement.
Supply Chain Management

The Hitachi High-Tech Group builds a strong supply chain by promoting collaboration with partners who are mindful of Corporate Social Responsibility (CSR), in addition to creating positive partnerships with suppliers.

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. With this in mind, companies will need to select their suppliers by evaluating not only their own activities but also those of their suppliers. This will enable companies to provide customers with products manufactured in line with social priorities. The Hitachi High-Tech Group has also received increasingly strong requests from customers to undertake activities to address its social responsibilities throughout the supply chain.

Hitachi High-Tech’s Targeted Direction

Maintain Procurement and Strengthen Cost Reduction to Prevail against Global Competition, Based on Partnerships with Suppliers

The Hitachi High-Tech Group has adopted “Maintain Procurement and Strengthen Cost Reductions to Prevail against Global Competition, Based on Partnerships with Suppliers” as a key basic policy of its procurement strategy. The Group has identified three themes for this policy: “Strengthen procurement risk management,” “Strengthen cost reduction capabilities,” and “Rigorously enforce procurement compliance.” Whether in Japan or overseas, the Hitachi High-Tech Group uses proper, fair, and impartial procedures to select suppliers based on the Hitachi Group’s common procurement policy, conducting a full assessment of the quality, delivery schedule, and price of the item to be procured, the supplier’s technology development capabilities, and whether or not the supplier fulfills their social responsibility (environmental conservation, protection of human rights, contribution to society, etc.).

Key Basic Policy

- Maintain Procurement and Strengthen Cost Reductions to Prevail against Global Competition, Based on Partnerships with Suppliers
- Strengthen procurement risk management
- Strengthen cost reduction capabilities
- Rigorously enforce procurement compliance

Strengthen Procurement Risk Management

Hitachi High-Tech enters into agreements on quality control items to undertake procurement quality risk management at suppliers. The Company monitors the quality levels of suppliers by performing quality level checks based on assessments. In addition, the recommendability of suppliers is reviewed by item every year and compiled into a database. By sharing this database with the design departments, we put this information to good use in managing the quality and risk of suppliers at the product development stage.

The database contains information on the manufacturing locations of each supplier. 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 that are able to continue production even during disasters by securing inventories at our suppliers and within the Company.
Strengthen Cost Reduction Capabilities

Hitachi High-Tech is pushing ahead with measures to build costs into products by undertaking cost design together with suppliers, 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 supplier, we achieve our targeted cost by the start of mass production, thereby successfully optimizing the functionality and performance of Hitachi High-Tech products and strengthening its cost reduction capabilities.

Rigorously Enforce Procurement Compliance

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 suppliers 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 suppliers. By doing so, we will strive rigorously to prevent all manner of misconduct and enforce legal compliance.

Supplier Briefings at Each Manufacturing Base

It is essential to establish a shared awareness of CSR through the dissemination of information to suppliers and two-way communication with them, so we hold regular briefings for the suppliers of our product manufacturing divisions. We hold briefings at the Company’s manufacturing bases twice each year to explain the Hitachi Group’s initiatives aimed at promoting green procurement activities and supply chain CSR activities. From FY2013, we have positioned the Supply-Chain CSR Deployment Guidebook issued by the Hitachi Group (revised in January 2017) to be the common standard for evaluating suppliers. Based on this, we are seeking to deepen mutual understanding and promote CSR procurement activities.

Promoting Procurement Tailored to Environmental CSR

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 has provided encouragement and support to ensure that all suppliers actively engage in environmental conservation activities. As a result, as of FY2016, almost 90% of the 1,100 or so companies supplying the Naka Division were verified and registered as Green Suppliers (suppliers whose environmental management systems have been verified and registered).
Environmental Management

Our policy is to realize a sustainable society in harmony with the environment through Hitachi High-Tech Group products and services. We are committed to fulfilling our social responsibilities as an enterprise by promoting manufacturing that aims to reduce environmental impact at every stage of the product life cycle.

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. The COP22 meeting held in November 2016 began formulating detailed rules to help regulate the Paris Agreement. In response, 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). We expect stricter environmental regulations in the future.

Hitachi High-Tech’s Targeted Direction

▶ Fulfilling our Social Responsibilities as a Manufacturer by Helping to Realize a Low-Carbon Society

Companies are required to be capable of responding appropriately to the risks and opportunities presented by changes in business conditions as this is important for ensuring the long-term sustainability of business. The Hitachi High-Tech Group, recognizes that climate change will have an environmental impact on a planetary scale, and viewing the reduction of greenhouse gas emissions in “risk and opportunity” terms, we are promoting activities linked to our business processes.

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 by helping customers to cut energy consumption at the product usage stage and so forth.

Themes for Environmental Management Initiatives

- Promoting Environmental Management
- Biodiversity: Quantitative Evaluation, Certification, Improvement
- Global Environmental Management
- Supply of Eco-Friendly Products
- Environmental Risk Mitigation
Promoting Environmental Management

We consider it necessary to link the CO₂ emissions-reduction activities of the Hitachi High-Tech Group to the target established by the Japanese government of a 26% reduction in emissions from FY2013 levels by FY2030. We regard greater environmental investment as a critical factor in achieving significant reductions in CO₂ emissions to help meet this target. In December 2016, we formulated environmental investment guidelines covering the entire Group to make such investments more effective. We are highly focused on achieving our CO₂ emissions-reduction target for FY2030.

Based on the guidelines, we plan to increase the Group’s environmental investment in FY2017 by 50% from FY2016 in terms of the number of projects and by 80% in overall value terms. We expect the investments to generate major results, and we are promoting ways to monitor energy usage (visualization) so that we can confirm the investment effect more precisely. This entails adopting IoT technology to improve production processes while developing systems to monitor power consumption.

Reinforcing Global Environmental Management and Risk Management

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.

In particular, with regard to risk management for products dealt by overseas group companies, we are working to increase the accuracy of information that is produced and shared, and to reduce risk through the Global Environment Sales Subcommittee, which is a corporate function. Similarly, at manufacturing sites, we conduct periodic provision of information, on-site instruction, and auditing with regard to legislation management through the Production Group Subcommittee and the Environmental Strategy Subcommittee. In FY2016, there was one case in which an overseas site did not complete procedures properly. Local regulations were tightened to prevent recurrence and to enable more precise risk mitigation measures.
Introduction of Eco-design/Supply of Eco-friendly Products

Evaluation of Development Target Attainment at Each Stage of Product Life Cycle

At the Hitachi High-Tech Group, we launched new initiatives for environmentally conscious design (eco-design) in FY2016. Eco-design is not just limited to reducing the environmental impact of operations. Based on the international standard IEC62430*, it enables us to reflect global trends in the development process of Group products. This demands the reform of internal Group processes, and is also expected to boost the environmental awareness of engineers and other parties involved. In FY2016, the first year of the eco-design initiatives, we conducted information sessions and discussion meetings at each site to promote their penetration within organizations. The Hitachi High-Tech Group is working to reduce environmental burdens by not just reducing our own impact on the environment but also providing customers with eco-friendly 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.

Eco-design assessment framework

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.

Life cycle assessment framework

Introduction of Eco-design/Supply of Eco-friendly Products

Products Developed Using Eco-design Approach (Launched Since FY2016)

FlexSEM1000 Scanning Electron Microscope
The newly developed electron optical column and high-sensitivity detector provide 4 nm image resolution at an accelerating voltage of 20 kV. This SEM also features high-speed automatic adjustment of brightness and focus to enable rapid acquisition of high-quality images.

Clinical Analyzer LABOSPECT 008α
This clinical analyzer can perform up to 2,000 clinical tests per hour. The modular assembly design also expands potential capacity to 8,000 tests per hour, with each module independently controlled for more flexible operation.
Biodiversity Conservation

The progress of economic development, and various other developments such as urbanization underway in many regions of the world, has worsened the destruction and pollution of the natural environment and promoted excessive use of resources. The Hitachi High-Tech Group actively engages in biodiversity conservation activities in collaboration and cooperation with local communities and environmental NPOs, etc.

Activities at the Woodland of Hitachi High-Tech Science

Surrounding the R&D facility on the site of the Oyama Works (Sunto-gun, Shizuoka Prefecture) is a natural area called the Woodland of Hitachi High-Tech Science. We are using the area, which covers approximately 44,000 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 facility in Japan awarded the AA+ rank under the JHEP certification system* administered by Ecosystem Conservation Society-Japan. Activities in FY2016 included the division of zebra grass roots for replanting in April, efforts to eradicate invasive plant species such as Canadian goldenrod in September, and in October 2016 employees volunteered to plant acorns from native oak trees. Signage was installed to show where we have cleared the artificial forest for later replanting with broadleaf tree varieties. We also conducted the research of vegetation and bird habitats in the Woodland of Hitachi High-Tech Science in cooperation with the NPO Fujisan no Mori wo Mamoru Hoshigarasu no Kai. This research revealed the local existence of rare species such as the golden orchid (Cephalanthera falcata), which is listed as Threatened (VU) on the Ministry of the Environment Red List of endangered wildlife.

Going forward, we plan to conduct further inhabitation research to help promote long-term biodiversity conservation activities in the Woodland of Hitachi High-Tech Science.

* 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).

Looking to the Future

At Hitachi High-Tech, we aim to promote biodiversity conservation activities across our Group. Under a three-year plan that we have formulated for the period 2016–2018, each Hitachi High-Tech Group site is free to choose from the central menu of 116 ecosystem conservation activities established for the entire Hitachi Group. Aiming for a future where humankind coexists with nature in its rich variety, we will continue to promote activities to conserve and restore biodiversity.
Communications with Local Communities

We fulfill our CSR as a corporate citizen through proactive engagement in social contribution activities that leverage the business characteristics of the Hitachi High-Tech Group.

Social Background

▶ Loss of Interest in Science among Children and Students in Developed Countries

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.

* SDGs: Sustainable Development Goals

Social Background

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 extent possible, and through unique social contribution activities, which leverage the skills and knowledge of our employees.

*CSV: Creating Shared Value

Three Priority Areas for Social Contribution Activities

Topics

Supporting the Production of Educational Materials for Children in Bangladesh

—A Social Contribution Activity Leveraging the Skills and Knowledge of Employees in Collaboration with an NPO—

In collaboration with the non-profit organization (NPO) Education Sponsorship in Asia (ESA), Hitachi High-Tech has carried out an event to produce English-language educational materials used in schools by children in Bangladesh. The event was attended by employee volunteers. By harnessing the English-language skills of Hitachi High-Tech employees who use English in the course of their daily duties, we were able to produce clearer and more user-friendly educational materials for children.
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 schools and classrooms, 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 tabletop electron microscopes that are manufactured and sold by Hitachi High-Tech. 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.

In Japan, we enabled approximately 8,000 children to experience the microscopic world in FY2016, mostly through special lessons conducted in Tokyo and Fukushima Prefecture. We conduct these activities not only in Japan but also overseas. In North and South America, we are attempting to expand the number of activities and areas by collaborating with our distributors and establishing a dedicated website. In Taiwan, we held special lessons at a local private school led by our local employees. In China (Shanghai and Dalian) and South Korea, we held special lessons at local Japanese schools.

**Collaboration with Group Companies**

Support for science education is provided not only by Hitachi High-Tech, but also in collaboration with Group companies, in order to expand activities to broader areas and fields. Since 2001, Hitachi High-Tech Fielding Corporation has continuously held support programs for a local elementary school. These programs convey the importance of nature to schoolchildren, allowing them to experience and learn about the wonders of the natural world and the outstanding advances made possible by science and technology.

Additionally, in FY2016, we held a special lesson at Eifuku Gakuen Special Needs School in Tokyo, Japan in collaboration with our designated special subsidiary Hitachi High-Tech Support Corporation. Besides science education, we conducted activities that could pave the way for expanding our worksites that employ people with disabilities. For example, we asked Eifuku Gakuen graduates who had joined Hitachi High-Tech Support to brief the students on the details of current work duties. In recognition of this activity, we received a Certificate of Appreciation for our science education support activities at the 10th founding anniversary ceremony of Eifuku Gakuen.

**Looking Ahead**

Previously, science education support activities had been undertaken primarily by the members of the CSR Div. Future plans call for ordinary employees, including managers at Head Office and branches, to participate in these activities as instructors and assistants. These activities will give the participating employees the opportunity to explain matters from their listeners’ points of view and to consider how their own duties are related to society as a whole. Participation will thus help employees to reexamine their own duties through the lens of social issues. Moreover, employees will be able to participate as instructors and assistants in social contribution activities that leverage the business characteristics of the Hitachi High-Tech Group. We believe that this will lead to even stronger motivation among employees and help to reenergize workplaces and boost productivity.

Meanwhile, we also believe that it is essential to develop systems and programs that facilitate participation by even more employees, and to foster a corporate culture that makes it easier for employees to participate in such social contribution activities. 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

<table>
<thead>
<tr>
<th>IFRS</th>
<th>FY2013</th>
<th>FY2014</th>
<th>FY2015</th>
<th>FY2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>For the year:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenues</td>
<td>621,815</td>
<td>619,632</td>
<td>628,984</td>
<td>644,545</td>
</tr>
<tr>
<td>Science &amp; Medical Systems</td>
<td>150,308</td>
<td>164,264</td>
<td>176,997</td>
<td>186,120</td>
</tr>
<tr>
<td>Electronic Device Systems</td>
<td>103,184</td>
<td>105,893</td>
<td>102,711</td>
<td>124,483</td>
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<tr>
<td>Industrial Systems*1</td>
<td>–</td>
<td>–</td>
<td>98,549</td>
<td>91,612</td>
</tr>
<tr>
<td>Fine Technology Systems</td>
<td>16,677</td>
<td>11,354</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Industrial &amp; IT Systems</td>
<td>93,722</td>
<td>84,869</td>
<td>–</td>
<td>–</td>
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<tr>
<td>Advanced Industrial Products</td>
<td>263,983</td>
<td>258,110</td>
<td>256,822</td>
<td>250,204</td>
</tr>
<tr>
<td>Others &amp; Adjustments</td>
<td>(6,059)</td>
<td>(4,857)</td>
<td>(6,094)</td>
<td>(7,874)</td>
</tr>
<tr>
<td>EBIT (Earnings before interest and taxes)</td>
<td>31,367</td>
<td>44,778</td>
<td>48,209</td>
<td>53,636</td>
</tr>
<tr>
<td>Net income attributable to Hitachi High-Technologies Corporation stockholders</td>
<td>19,860</td>
<td>31,093</td>
<td>35,989</td>
<td>40,170</td>
</tr>
<tr>
<td>Cash flows from operating activities</td>
<td>35,533</td>
<td>34,426</td>
<td>18,541</td>
<td>60,519</td>
</tr>
<tr>
<td>Cash flows from investing activities</td>
<td>(24,250)</td>
<td>(9,277)</td>
<td>6,107</td>
<td>(28,908)</td>
</tr>
<tr>
<td>Free cash flows</td>
<td>11,283</td>
<td>25,149</td>
<td>24,648</td>
<td>31,612</td>
</tr>
<tr>
<td>Cash flows from financing activities</td>
<td>(4,482)</td>
<td>(6,662)</td>
<td>(7,120)</td>
<td>(10,464)</td>
</tr>
<tr>
<td>Capital expenditure</td>
<td>18,921</td>
<td>14,453</td>
<td>12,030</td>
<td>14,363</td>
</tr>
<tr>
<td>Depreciation</td>
<td>9,289</td>
<td>10,574</td>
<td>10,527</td>
<td>10,525</td>
</tr>
<tr>
<td>Research and Development</td>
<td>20,092</td>
<td>19,556</td>
<td>20,163</td>
<td>23,581</td>
</tr>
<tr>
<td><strong>At the year-end:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total assets</td>
<td>494,703</td>
<td>536,705</td>
<td>531,032</td>
<td>587,751</td>
</tr>
<tr>
<td>Total Hitachi High-Technologies Corporation stockholders’ equity</td>
<td>270,696</td>
<td>301,378</td>
<td>320,790</td>
<td>356,913</td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>132,923</td>
<td>153,942</td>
<td>169,375</td>
<td>189,783</td>
</tr>
<tr>
<td>Number of employees (Persons)</td>
<td>10,504</td>
<td>10,012</td>
<td>9,902</td>
<td>10,317</td>
</tr>
<tr>
<td><strong>Per share data (¥):</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Earnings attributable to Hitachi High-Technologies Corporation stockholders</td>
<td>144.39</td>
<td>226.08</td>
<td>261.68</td>
<td>292.08</td>
</tr>
<tr>
<td>Total Hitachi High-Technologies Corporation stockholders’ equity</td>
<td>1,968.19</td>
<td>2,191.32</td>
<td>2,332.50</td>
<td>2,595.18</td>
</tr>
<tr>
<td>Cash dividend</td>
<td>30.00</td>
<td>45.00</td>
<td>65.00</td>
<td>80.00</td>
</tr>
<tr>
<td><strong>Ratio:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income before income taxes ratio to revenues (%)</td>
<td>5.1</td>
<td>7.3</td>
<td>7.7</td>
<td>8.4</td>
</tr>
<tr>
<td>Total Hitachi High-Technologies Corporation stockholders’ equity ratio (%)</td>
<td>54.7</td>
<td>56.2</td>
<td>60.4</td>
<td>60.7</td>
</tr>
<tr>
<td>Return on equity (ROE)*2 (%)</td>
<td>7.7</td>
<td>10.9</td>
<td>11.6</td>
<td>11.9</td>
</tr>
<tr>
<td>Return on assets (ROA)*3 (%)</td>
<td>6.8</td>
<td>8.8</td>
<td>9.1</td>
<td>9.6</td>
</tr>
<tr>
<td>Price-earnings ratio (Times)</td>
<td>16.6</td>
<td>16.2</td>
<td>12.1</td>
<td>15.5</td>
</tr>
</tbody>
</table>

*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’ equity (average of beginning and end fiscal year)
*3: Return on assets (ROA) = Income before income taxes / Total assets (average of beginning and end fiscal year)
### At a Glance

#### Revenues Composition by Segment

<table>
<thead>
<tr>
<th>Segment</th>
<th>FY2015</th>
<th>FY2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science &amp; Medical Systems</td>
<td>27.9%</td>
<td>28.5%</td>
</tr>
<tr>
<td>Electronic Device Systems</td>
<td>16.2%</td>
<td>19.1%</td>
</tr>
<tr>
<td>Industrial Systems</td>
<td>15.5%</td>
<td>14.0%</td>
</tr>
<tr>
<td>Advanced Industrial Products</td>
<td>40.4%</td>
<td>38.4%</td>
</tr>
</tbody>
</table>

*Others & adjustments are not included in total.

#### Science & Medical Systems

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenues (million yen)</th>
<th>EBIT (million yen)</th>
<th>YoY</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2015</td>
<td>176,997</td>
<td>26,571</td>
<td></td>
</tr>
<tr>
<td>FY2016</td>
<td>28.1%</td>
<td>19.1%</td>
<td></td>
</tr>
</tbody>
</table>

In the Scientific Systems Business (electron microscopes and scientific instruments), sales decreased despite launching new products due mainly to the strong yen as well as restraint on investments in major projects in Europe and budget cuts by universities and public offices in Japan. In Biotechnology and Medical Products Business, sales significantly increased thanks to strong growth in demand in Asian markets, mainly China.

#### Electronic Device Systems

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenues (million yen)</th>
<th>EBIT (million yen)</th>
<th>YoY</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2015</td>
<td>102,711</td>
<td>15,307</td>
<td></td>
</tr>
<tr>
<td>FY2016</td>
<td>21.2%</td>
<td>76.7%</td>
<td></td>
</tr>
</tbody>
</table>

In the Process Equipment Business, sales increased significantly due to strong investments in next generation advanced processes and memory mass production. In the Metrology & Inspection Equipment Business, sales increased significantly due to the growth in sales of CD-SEMs* and metrology equipment.

*SEM: Scanning Electron Microscope

#### Industrial Systems

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenues (million yen)</th>
<th>EBIT (million yen)</th>
<th>YoY</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2015</td>
<td>99,549</td>
<td>1,130</td>
<td></td>
</tr>
<tr>
<td>FY2016</td>
<td>21.2%</td>
<td>88.6%</td>
<td></td>
</tr>
</tbody>
</table>

In the Social Infrastructure Business, sales steadily increased due to the launch of solar photovoltaic system EPC* projects, among other things. In the Industrial Infrastructure Business, sales slightly decreased mostly due to the drop in sales of automobile component assembly, despite strong growth in sales of lithium-ion battery manufacturing equipment. In the ICT Solutions Business, sales fell drastically due to the decrease in sales of hard-disk drive equipment for automobiles.

*EPC: Engineering, Procurement and Construction

#### Advanced Industrial Products

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenues (million yen)</th>
<th>EBIT (million yen)</th>
<th>YoY</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2015</td>
<td>256,822</td>
<td>3,457</td>
<td></td>
</tr>
<tr>
<td>FY2016</td>
<td>28.5%</td>
<td>40.4%</td>
<td></td>
</tr>
</tbody>
</table>

In the Industrial Materials Business, sales decreased slightly due to a downturn in material prices despite steady sales of automotive components for the US and China. In the Electronic Materials Business, sales also decreased due to the decrease in sales of smartphone-related components despite steady sales of semiconductor-related and optical telecommunications-related components.
## Non-Financial Highlights

### Employee Diversity*1

<table>
<thead>
<tr>
<th></th>
<th>Unit</th>
<th>FY2012</th>
<th>FY2013</th>
<th>FY2014</th>
<th>FY2015</th>
<th>FY2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-consolidated employees</td>
<td>Person</td>
<td>4,351</td>
<td>3,809</td>
<td>3,768</td>
<td>3,711</td>
<td>3,811</td>
</tr>
<tr>
<td>Male</td>
<td>Person</td>
<td>3,762</td>
<td>3,267</td>
<td>3,213</td>
<td>3,161</td>
<td>3,236</td>
</tr>
<tr>
<td>Female</td>
<td>Person</td>
<td>589</td>
<td>542</td>
<td>555</td>
<td>550</td>
<td>575</td>
</tr>
<tr>
<td>Overseas</td>
<td>Person</td>
<td>35</td>
<td>37</td>
<td>34</td>
<td>32</td>
<td>39</td>
</tr>
<tr>
<td>Average age</td>
<td>Age</td>
<td>41.3</td>
<td>41.6</td>
<td>42.3</td>
<td>42.5</td>
<td>42.8</td>
</tr>
<tr>
<td>Years of employment</td>
<td></td>
<td>18.6</td>
<td>18.9</td>
<td>20.1</td>
<td>19.7</td>
<td>19.8</td>
</tr>
<tr>
<td>Managers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,027</td>
</tr>
<tr>
<td>Male</td>
<td>Person</td>
<td>1,158</td>
<td>1,007</td>
<td>1,029</td>
<td>1,046</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>Person</td>
<td>18</td>
<td>23</td>
<td>27</td>
<td>36</td>
<td>41</td>
</tr>
<tr>
<td>Managers at the level of department chief or above</td>
<td></td>
<td>249</td>
<td>221</td>
<td>228</td>
<td>239</td>
<td>236</td>
</tr>
<tr>
<td>Male</td>
<td>Person</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Female</td>
<td>Person</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ratio of women in managerial positions</td>
<td>%</td>
<td>1.5</td>
<td>2.2</td>
<td>2.6</td>
<td>3.3</td>
<td>3.8</td>
</tr>
<tr>
<td>Ratio of employees with disabilities*2</td>
<td>%</td>
<td>2.02</td>
<td>2.06</td>
<td>2.19</td>
<td>2.36</td>
<td>2.57</td>
</tr>
<tr>
<td>New employees hired for regular positions &lt;Graduates&gt;</td>
<td>Person</td>
<td>68</td>
<td>48</td>
<td>53</td>
<td>45</td>
<td>62</td>
</tr>
<tr>
<td>New employees hired for regular positions &lt;Experienced personnel&gt;</td>
<td>Person</td>
<td>11</td>
<td>8</td>
<td>12</td>
<td>12</td>
<td>22</td>
</tr>
<tr>
<td>New employees hired for regular positions &lt;Overseas in above figure&gt;</td>
<td>Person</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Number of employees leaving the Company*3</td>
<td>Person</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>17</td>
<td>33</td>
</tr>
<tr>
<td>Number of employees leaving the Company*3</td>
<td>Person</td>
<td>118</td>
<td>82</td>
<td>59</td>
<td>58</td>
<td>40</td>
</tr>
<tr>
<td>Global human resources (rate young employees with overseas experience)*4</td>
<td>%</td>
<td>28</td>
<td>24</td>
<td>61</td>
<td>52</td>
<td>63</td>
</tr>
</tbody>
</table>

### Work Style Situation*1

<table>
<thead>
<tr>
<th></th>
<th>Unit</th>
<th>FY2012</th>
<th>FY2013</th>
<th>FY2014</th>
<th>FY2015</th>
<th>FY2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced working hours</td>
<td>Person</td>
<td>81</td>
<td>85</td>
<td>90</td>
<td>84</td>
<td>80</td>
</tr>
<tr>
<td>Leave of absence for childcare purposes</td>
<td>Person</td>
<td>38</td>
<td>41</td>
<td>41</td>
<td>38</td>
<td>43</td>
</tr>
<tr>
<td>Rate of return after leave of absence for childcare purposes</td>
<td>%</td>
<td>96.9</td>
<td>96.0</td>
<td>93.0</td>
<td>94.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Leave of absence for nursing care purposes</td>
<td>Person</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Ratio of vacation taken</td>
<td>%</td>
<td>61.1</td>
<td>58.3</td>
<td>62.5</td>
<td>65.0</td>
<td>69.0</td>
</tr>
<tr>
<td>Hours of overtime (averaged among labor union members)</td>
<td>Hour/Month</td>
<td>27.5</td>
<td>22.8</td>
<td>29.4</td>
<td>28.7</td>
<td>27.7</td>
</tr>
</tbody>
</table>

### Local Community

<table>
<thead>
<tr>
<th></th>
<th>Unit</th>
<th>FY2012</th>
<th>FY2013</th>
<th>FY2014</th>
<th>FY2015</th>
<th>FY2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR expenditures*5</td>
<td>Million Yen</td>
<td>40</td>
<td>41</td>
<td>51</td>
<td>48</td>
<td>77</td>
</tr>
<tr>
<td>Science classes in Japan</td>
<td>Person</td>
<td>1,510</td>
<td>2,422</td>
<td>1,969</td>
<td>2,948</td>
<td>8,007</td>
</tr>
</tbody>
</table>

---

*1 Individual results for Hitachi High-Technologies Corporation
*2 Consolidated domestic results
*3 Not including transfers and other (voluntary retirement, involuntary retirement)
*4 Rate of overseas experience among employees up until their seventh year of employment
*5 Total expenditures on operation of voluntary programs, as well as employee participation, dispatch, and donations to CSR activities
Environment

<table>
<thead>
<tr>
<th></th>
<th>Unit FY2012</th>
<th>FY2013</th>
<th>FY2014</th>
<th>FY2015</th>
<th>FY2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume of CO₂ Emissions from Domestic Manufacturing Sites</td>
<td>t-CO₂</td>
<td>39,804</td>
<td>41,540</td>
<td>40,190</td>
<td>41,106</td>
</tr>
<tr>
<td>Volume of CO₂ Emissions outside Japan</td>
<td>t-CO₂</td>
<td>4,742</td>
<td>5,266</td>
<td>9,601</td>
<td>7,403</td>
</tr>
<tr>
<td>Volume of CO₂ Emissions per Unit of Revenues from Domestic Manufacturing Sites</td>
<td>t-CO₂/ Million Yen</td>
<td>0.198</td>
<td>0.165</td>
<td>0.165</td>
<td>0.158</td>
</tr>
<tr>
<td>Reduction of CO₂ emissions from the manufacture of purchased or procured materials and parts etc.</td>
<td>Million t-CO₂</td>
<td>0.10</td>
<td>0.20</td>
<td>0.22</td>
<td>0.28</td>
</tr>
<tr>
<td>Energy Usage in Japan, including from Domestic Sales Sites (Crude Oil Equivalent)</td>
<td>kl</td>
<td>18,638</td>
<td>18,119</td>
<td>17,658</td>
<td>18,829</td>
</tr>
<tr>
<td>Energy Usage Improvement Rate per Unit of Sales in Japan, including from Domestic Sales Sites (Crude Oil Equivalent)</td>
<td>%</td>
<td>26.1</td>
<td>36.0</td>
<td>36.0</td>
<td>34.6</td>
</tr>
<tr>
<td>Volume of Waste Generated from Domestic Manufacturing Sites</td>
<td>t</td>
<td>1,897</td>
<td>1,931</td>
<td>1,882</td>
<td>2,013</td>
</tr>
<tr>
<td>Waste Disposal Ratio in Japan</td>
<td>%</td>
<td>0.04</td>
<td>0.05</td>
<td>0.03</td>
<td>0.02</td>
</tr>
<tr>
<td>Volume of Waste Generated outside Japan</td>
<td>t</td>
<td>97</td>
<td>150</td>
<td>210</td>
<td>154</td>
</tr>
<tr>
<td>Water Consumption in Japan</td>
<td>m³</td>
<td>422,570</td>
<td>383,614</td>
<td>344,309</td>
<td>392,366</td>
</tr>
<tr>
<td>Water Consumption outside Japan</td>
<td>m³</td>
<td>13,617</td>
<td>22,163</td>
<td>30,514</td>
<td>35,517</td>
</tr>
<tr>
<td>Chemical Substances Emitted into the Atmosphere</td>
<td>t</td>
<td>4.7</td>
<td>6.3</td>
<td>5.7</td>
<td>4.4</td>
</tr>
<tr>
<td>Environmental Conservation Costs in Japan</td>
<td>Million Yen</td>
<td>2,326</td>
<td>2,347</td>
<td>2,603</td>
<td>2,411</td>
</tr>
<tr>
<td>Environmental Conservation Effects in Japan (Economic Effects)</td>
<td>Million Yen</td>
<td>29</td>
<td>56</td>
<td>85</td>
<td>51</td>
</tr>
<tr>
<td>Environmental Investment Costs in Japan</td>
<td>Million Yen</td>
<td>299</td>
<td>194</td>
<td>579</td>
<td>533</td>
</tr>
</tbody>
</table>

Topics

Selected for ESG Index (as of July 2017)

In July 2017, 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.
Business Composition

Global Network (As of the end of March 2017)

Group Companies (As of March 2017)

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 Cali Asia Corporation

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

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-Technologies Korea Co., Ltd.
- Hitachi High-Technologies Taiwan Corporation
- Hitachi Instrument (Suzhou), Ltd.
- Hitachi Instruments (Dalian) Co., Ltd.
- Hitachi Instruments (Shanghai) Co., Ltd.

North America
- Hitachi High Technologies America, Inc.
- Hitachi High-Technologies Science America Inc.
- Hitachi High-Technologies Canada, Inc.
- Hitachi High-Tech AW Cryo, Inc.

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.
Company Data/ Stock Information  (As of the end of March 2017)

### Company Data
- **Date of Establishment**: April 12, 1947
- **Paid-in Capital**: ¥7,938 million
- **Number of Employees**: 10,317

### Stock Information
- **Number of Shares Authorized**: 350,000,000 shares
- **Number of Issued Shares**: 137,738,730 shares
- **Ordinary General Meeting of Shareholders**: June Every Year
- **Stock Exchange Listings**: Tokyo Stock Exchange, 1st Section
- **Accounting Auditor**: Ernst & Young ShinNihon LLC

#### Shareholders Composition (Share Ownership)
- Domestic corporation, etc.: 72,652,785 shares (52.7%)
- Foreign investor: 40,017,451 shares (29.1%)
- Financial institution: 16,337,300 shares (11.9%)
- Individual: 6,527,888 shares (4.7%)
- Securities firm: 2,203,526 shares (1.6%)

#### Shareholders Composition (Number of Shareholders)
- Individual: 6,185 (89.8%)
- Foreign investor: 509 (7.4%)
- Domestic corporation, etc.: 111 (1.6%)
- Financial institution: 46 (0.7%)
- Securities firm: 36 (0.5%)

### 10 Largest Shareholders

<table>
<thead>
<tr>
<th>Name</th>
<th>Shareholding (shares)</th>
<th>Shareholding Ratio (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hitachi, Ltd.</td>
<td>71,135,619</td>
<td>51.72</td>
</tr>
<tr>
<td>Japan Trustee Services Bank, Ltd. (Trust Account)</td>
<td>4,318,400</td>
<td>3.14</td>
</tr>
<tr>
<td>The Master Trust Bank of Japan, Ltd. (Trust Account)</td>
<td>3,752,100</td>
<td>2.73</td>
</tr>
<tr>
<td>Chase Manhattan Bank GTS Client Account Escrow</td>
<td>2,768,318</td>
<td>2.01</td>
</tr>
<tr>
<td>Hitachi High-Technologies Corp.’s Shareholding Association</td>
<td>1,469,093</td>
<td>1.06</td>
</tr>
<tr>
<td>JP Morgan Chase Bank 380634</td>
<td>1,337,043</td>
<td>0.97</td>
</tr>
<tr>
<td>THE BANK OF NEW YORK, NON-TREATY JASDEC ACCOUNT</td>
<td>1,284,408</td>
<td>0.93</td>
</tr>
<tr>
<td>Japan Trustee Services Bank, Ltd. (Trust Account S)</td>
<td>1,256,900</td>
<td>0.91</td>
</tr>
<tr>
<td>State Street Bank and Trust Company 505225</td>
<td>1,116,302</td>
<td>0.81</td>
</tr>
<tr>
<td>State Street Bank and Trust Company 505001</td>
<td>1,103,014</td>
<td>0.80</td>
</tr>
</tbody>
</table>

*Shareholding ratio is calculated by deducting treasury stock (209,841 shares).*

### Stock Price and Stock Turnover  (April 2016–March 2017)

![Graph showing stock price and stock turnover](image)
This report was printed using the waterless printing method, which contributes to reduced output of solutions from the printing process that contain organic compounds.

Only environmentally-friendly, zero-VOC (Volatile organic compounds) 100% vegetable oil inks were used in the printing of this report.

Printed on paper made with wood from forest thinning. “Morino Chonai-kai” (Forest Neighborhood Association)—Supporting sound forest management.

Only environmentally friendly printing materials and printing methods were used to produce this report.

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