


Shimadzu Integrated Report 2021






Year Ending March 2021

The cover features a collage of images representing various aspects of Shimadzu's contributions: a forklift operator in a warehouse, a family smiling together, a woman in a lab coat interacting with a patient, and an airplane on a tarmac. The collage is overlaid with a blue geometric pattern of hexagons and lines.

Contributing to Society
through Science and
Technology

Editorial Policy

The Shimadzu Integrated Report 2021 is a summary of corporate strategies, business activities, and financial and non-financial information, which is provided to help stakeholders better understand the measures being implemented to increase the Shimadzu Group's medium- and long-term corporate value. The report is revised whenever necessary, not only to maintain a dialogue with stakeholders, but also as a basis for accommodating their valuable opinions and requests to the extent possible.

Financial Information	Non-Financial Information
 Information for investors https://www.shimadzu.com/ir/index.html 	 Sustainability https://www.shimadzu.com/sustainability/index.html 
<p>Please refer to the our company website listed above for the latest information.</p> <p>Shimadzu Integrated Report 2021</p> 	
<p>Earnings reports and financial position presentation documents</p> <p>Fact Book</p> <p>Marketable securities reports</p>	<p>Reports related to corporate governance</p>

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Reporting Periods	From April 1, 2020 to March 31, 2021 (Also includes certain important information for periods other than indicated to the above.)
Reporting Organizations	Shimadzu Corporation and Shimadzu Group companies
Disclosure Policy	This report is provided in an effort to disclose information in a timely manner, in accordance with the Disclosure Policy specified by Shimadzu. For more details, refer to the website. https://www.shimadzu.com/sustainability/approach/stake_holder/disclosure.html



Notes about Future Prospects

The business plans, strategies, and forecasts stated in this report are based on currently available information and are subject to risks and uncertainties. Please note that actual results may differ substantially from projected results, due to changes in economic conditions, market trends, or other factors.

Recognition from Outside Shimadzu



Shimadzu is included in the JPX-Nikkei Index 400, which was started by the Japan Exchange Group (JPX), Tokyo Stock Exchange, and Nikkei in 2014 for the purpose of selecting companies that satisfy the various conditions required by global investment standards.



Shimadzu is included in the S&P/JPX Carbon Efficient Index, which is an indicator for selecting companies with low carbon emission levels per net sales and that disclose sufficient information about carbon emission quantities. The index is also used for evaluation by the Government Pension Investment Fund (GPIF).



Shimadzu Corporation has been selected for inclusion in the MSCI Japan ESG Select Leaders Index and MSCI Japan Empowering Women Index (WIN), which are used as indicators for evaluation by the Government Pension Investment Fund (GPIF).



For the fifth consecutive year, Shimadzu Corporation has been recognized jointly by the Japanese Ministry of Economy, Trade and Industry and the Nippon Kenko Kaigi as a "White 500" company, which recognizes large corporations with outstanding health and productivity management practices.

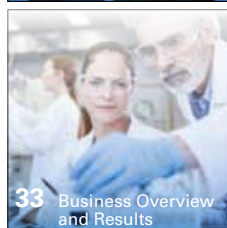


For the first time, Shimadzu Corporation had been selected by the Japanese Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange as a "Health and Productivity Management Brand," based on employee health management practices implemented strategically from a management perspective.

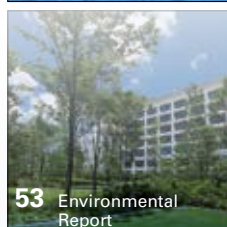
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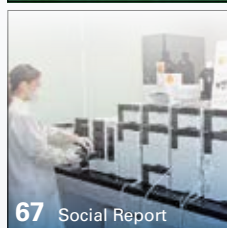
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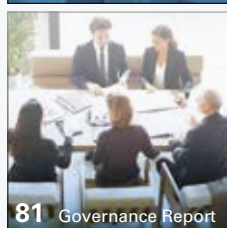
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Shimadzu is included in the Diversity Management Selection 100 list, which is a list of companies selected by the Japanese Ministry of Economy, Trade and Industry to publicize advanced measures by companies that use diversity to achieve better management results.



Shimadzu has been selected as a Nadeshiko brand in recognition of being a company that actively promotes the role of women in the workplace. Nadeshiko

brands are selected from respective industries by the Japanese Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange from the approximately 3,600 companies listed on the exchange, based on their practices that actively promote the roles of women, including providing a work environment where women are free to continue working.



Shimadzu has been certified by the Eco-First Program established by the Ministry of Environment as an Eco-First Company, in recognition of Shimadzu's environmental conservation measures.

Shimadzu Participation in Key Initiatives



Shimadzu endorses the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and is a participant in the TCFD Consortium.



In September 2019, Shimadzu became a signatory to the United Nations Global Compact (UNGC) proposed by the United Nations and became a member of Global Compact Network Japan, the local UNGC network in Japan.



In November 2019, the Shimadzu Group's CO₂ emissions reduction target levels were certified by the Science Based Targets (SBT) initiative as having a valid scientific basis.



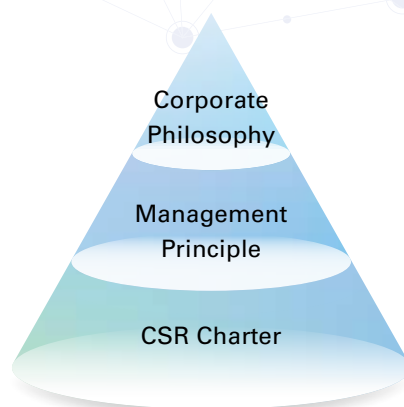
In March 2021, Shimadzu Corporation joined the RE100 global initiative and declared a commitment to use 100% renewable energy for all worldwide Shimadzu Group business activities by 2050.

The following web page includes information about the topics listed below.
<https://www.shimadzu.com/sustainability/evaluation.html#06>



Current Initiative Participation by Shimadzu

Shimadzu's Values



Corporate Philosophy

**Contributing to Society through
Science and Technology**

Management Principle

**Realizing Our Wishes for the Well-being of
Mankind and the Earth**

CSR Charter

Create a Brighter Future

**—Solve societal challenges while working towards harmony
between the earth, society, and people—**

Based on Shimadzu's corporate philosophy "Contributing to Society through Science and Technology" and management principle "Realizing Our Wishes for the Well-being of Mankind and the Earth," Shimadzu is committed to supplying products and services that meet the requirements and solve the progressively more diversified and complex challenges of society and to achieving harmony with the global society, by utilizing the extensive wealth of technologies and expertise cultivated over many years of conducting business.

To earn the trust of customers, shareholders, business partners, employees, local communities, and other stakeholders and achieve sustainable growth and development for Shimadzu businesses and society, Shimadzu will engage in company activities and fulfill social responsibilities based on two principles—solve the challenges of society through business operations and engage in activities as a responsible member of society.

Corporate Governance To achieve sustainable growth and increase the corporate value in the medium and long term, we shall establish and improve corporate management systems that ensure management transparency and fairness, and that enable quick and bold decision-making and implementation of measures.

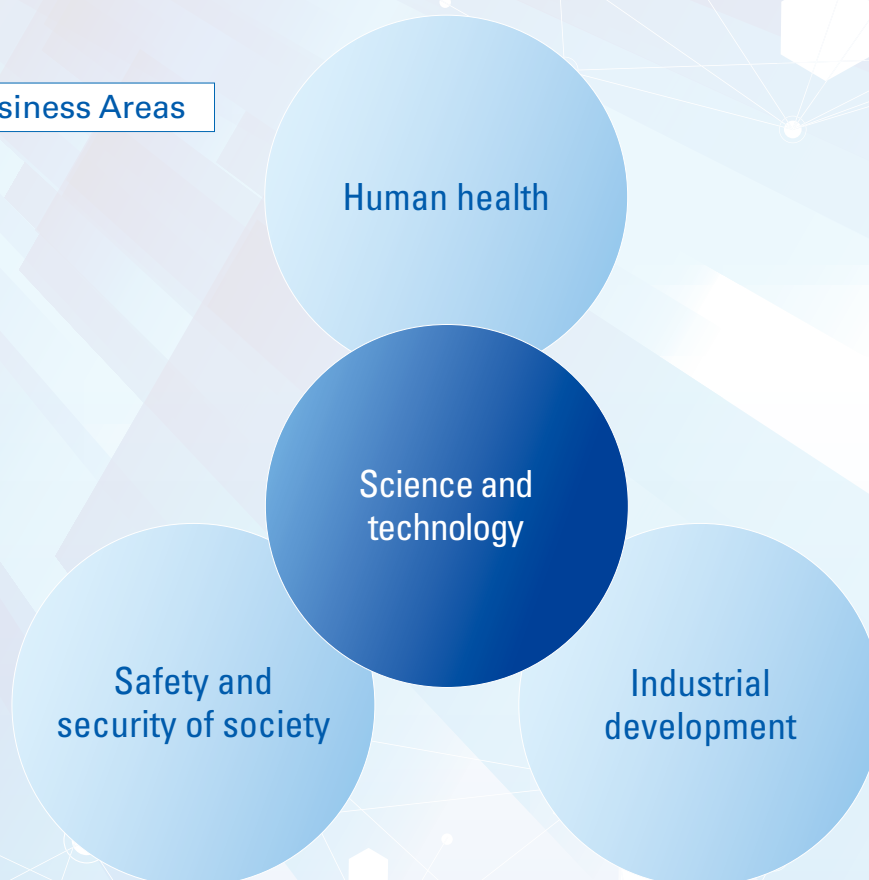
Practicing Corporate Social Responsibility Shimadzu shall practice the following: 1. contribute to society, 2. ensure actions are fair and transparent, 3. respect human rights, 4. protect the global environment, and 5. maintain and build relationships with stakeholders (customers, shareholders, business partners, employees, and local communities).

Accountability Shimadzu shall disclose information about company activities in a timely, appropriate, and fair manner and cultivate a deeper mutual understanding through dialogue with stakeholders.

Striving to “Become a Company that Builds the Foundation for a Prosperous, Safe, and Secure Society and is Needed by Society”

Throughout the over 145 years since Shimadzu was founded in 1875, the challenges of society have become progressively more diversified and complex. Shimadzu, however, has remained steadfastly dedicated to solving those challenges, building the foundations for a prosperous, safe, and secure society, and achieving a society needed by stakeholders, based on our corporate philosophy and management principle.

Business Areas



History of Shimadzu

Shimadzu Contributes to the Realization of a More Convenient, Safe, and Secure Society through Science and Technology

Shimadzu has continued to grow and develop by constantly satisfying the challenges faced by customers and solving the challenges of society underlying those needs. We remain committed to achieving sustainable growth and progress for society and increasing medium- and long-term corporate value for Shimadzu by continuously using science and technology to address challenges in society head-on.



First in Japan

1877

Challenge of Starting from Zero
Successfully launched the first manned balloon flight in Japan



1896

Early Radiograph
Successfully produced X-ray photographs



1882

Widespread Use and Advancement of Physics and Chemistry Instruments
Supplied state-of-the-art educational equipment



First in Japan

1957

Advancement of the Petrochemical Industry
Successfully commercialized a general-purpose gas chromatograph



First in Japan

1909

Advancement and Widespread Use of Medical Devices
Completed a medical X-ray device

Formation of Limited Company

Founded

1875 1917 1945 1950 1955 1960 1965 1970 1975 1980

Net Sales

Note: Values are indicated on an unconsolidated basis until FY 1999 and on a consolidated basis from FY 2000.

First in
Japan**1978****Safety and Efficacy of
Pharmaceuticals**

Completed a modular liquid chromatograph (LC) system

**1967****Improved Automobile Safety**

Manufactured our first fatigue testing machine, which was delivered to an automobile manufacturer

First in
the world**1961****Reduction of Radiation
Exposure**

Developed a remote-controlled X-ray fluoroscopy system

First in
Japan**2010****Development of Testing Instruments
for Clinical Samples**

Developed Japan's first triple quadrupole high-performance liquid chromatograph mass spectrometer

First in
the world**2003****Improved Healthcare Quality**

Developed the world's first cardiovascular diagnostic X-ray system equipped with a direct-conversion flat panel detector (FPD)

2002**Koichi Tanaka Awarded the Nobel
Prize in Chemistry****1985****Improved Semiconductor
Manufacturing Productivity**

Completed a magnetically levitated turbomolecular pump. It was even adopted by the world's largest semiconductor manufacturing equipment manufacturer, expanding Shimadzu's market share throughout the world.

**2020****Preventing the Spread of the COVID-19
Pandemic**

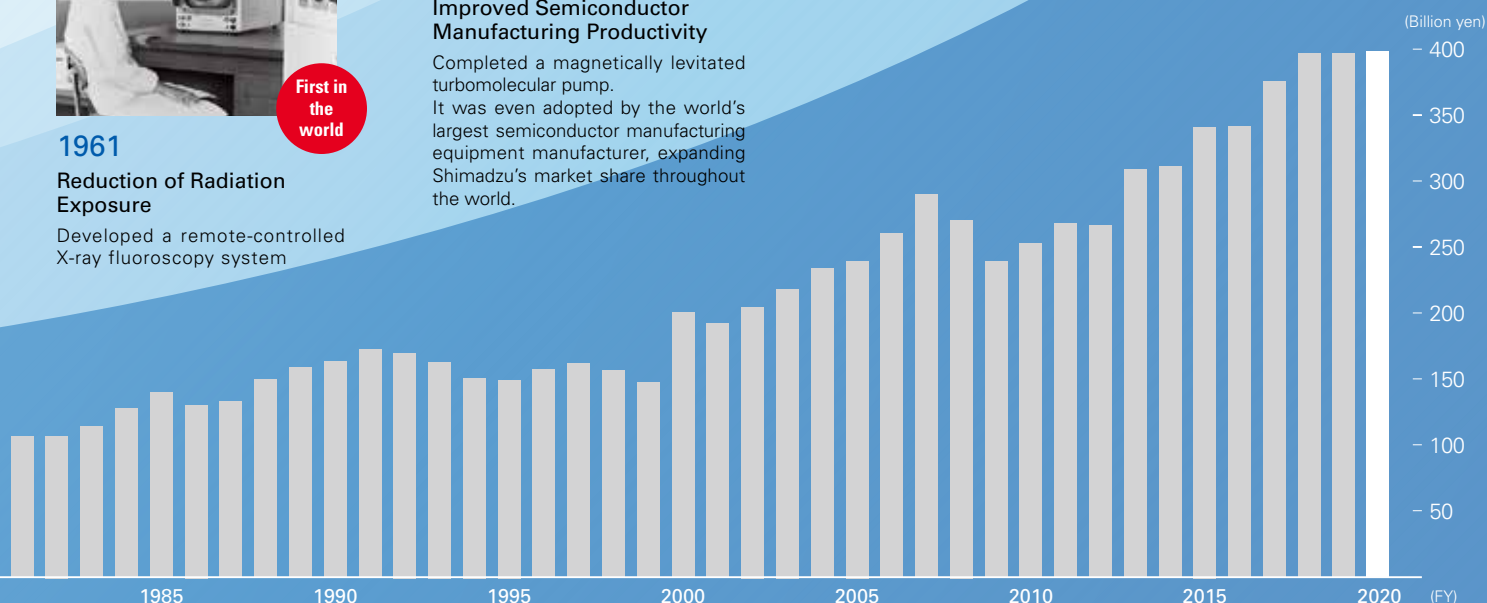
Developed a fully automatic real-time PCR testing system and novel coronavirus detection kits

**2018****High-Accuracy Qualitative-Quantitative
Analysis of Complex Compounds**

Developed a quadrupole time-of-flight (Q-TOF) high-performance liquid chromatograph mass spectrometer

First in
Japan**2014****Early Detection of Breast Cancer**

Developed a dedicated breast PET system



Shimadzu's Science and Technology and their Utilization

Shimadzu's Science and Technology and their Utilization

Ever since Shimadzu was founded, the Shimadzu Group has been supplying innovative products and services useful to customers. Therefore, research and development serves as a critical lifeline of the Group that requires we continue engaging in ambitious research and development work intended to acquire advanced technologies.

There are as many different challenges and needs in society as there are regions and countries in the world and they continue to become more diverse. The Shimadzu Group contributes broadly to solving the challenges of customers by identifying those challenges and needs and breaking them down into specific research objectives.

However, to create new technologies and innovations, it is essential that we work with partners in the respective regions where the challenges or needs occur. Consequently, we are engaged in joint development or innovation creation projects with a variety of partners around the world.

Such collaborations are based at innovation centers established in various regions around the world. Conducting joint research with advanced customers at the respective regional locations in the Americas, Europe, China, other Asian countries, and Japan, has allowed us to produce results more quickly. By sharing those results with the other locations around the world, we offer corresponding value to more people.

Europe



Innovation Center (Germany)

Examples of Collaborations at Innovation Centers

Europe Jointly developed an oxygen content analysis system for use in biofuel research, in partnership with the major petroleum company TotalEnergies SE in France, the University of Pau and the Adour Region in France, and the University of Oviedo in Spain.



GCMS-QP2020NX Gas Chromatograph Mass Spectrometer Used for System Development

Asia Established the Shimadzu-CGH Clinomics Centre joint research laboratory with Changi General Hospital (in Singapore) for using mass spectrometers in clinical testing and individualized treatment.

Ceremony for Signing Joint Research Agreement between Changi General Hospital and Shimadzu (Asia Pacific)



Front row: SAP Managing Director Tetsuya Tanigaki (left) and CGH CEO Ng Wai Hoe (right) who signed the joint research agreement

Back row: From the left, SAP Corporate Officer Prem Anand, Deputy Prime Minister of Singapore Heng Swee Keat, and CGH Medical Board Chairman Siau Chuin

The following web page includes information
about the topics listed below.

https://www.shimadzu.com/research_and_development/index.html



R&D

Shimadzu Group Innovation Centers

Contributing to Solving Challenges in Society by
Implementing Advanced Results from R&D

<https://www.ssi.shimadzu.com/about/shimadzu-academic-program.html>



Innovation Center (China)

China

Japan

Asia



Innovation Center (U.S.)

Americas



Global Application Development
Center, Head Office in Kyoto



Innovation Center (Singapore)



Shimadzu Tokyo Innovation Plaza
(opening scheduled 2022)

China Engaged in environmental analysis with the Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, and researched Chinese herbal medicines with the National Institutes for Food and Drug Control in China.

Signing Ceremony for Comprehensive Joint Research Agreement with the Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences



Left: Professor Guibin Jiang, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences

Right: Managing Director Yoshiaki Mase, Shimadzu (Hong Kong) Ltd. (at the time)

Japan Jointly researched a new cancer immunotherapy method using mass spectrometry technology in partnership with the Providence Cancer Institute in the U.S.

The following web page includes information about the topics listed below.

<https://www.shimadzu.com/news/78b3e6xveh8nq8bt.html>



LCMS-9030 High-Performance Liquid Chromatograph Mass
Spectrometer Used for Research



Americas Jointly developed the Nexera UC Prep semi-preparative supercritical fluid chromatograph system in partnership with a pharmaceutical organization in the U.S., based on the needs of R&D users.

The following web page includes information about the topics listed below.

<https://www.shimadzu.com/news/5grl8xpx1xo9886c.html>



Nexera UC Prep

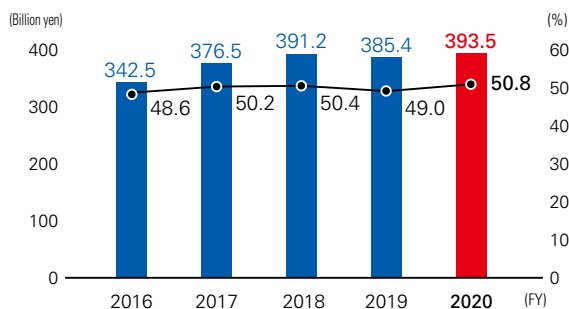


Financial and Non-Financial Highlights

Financial Information

Net Sales/Overseas Sales Ratio

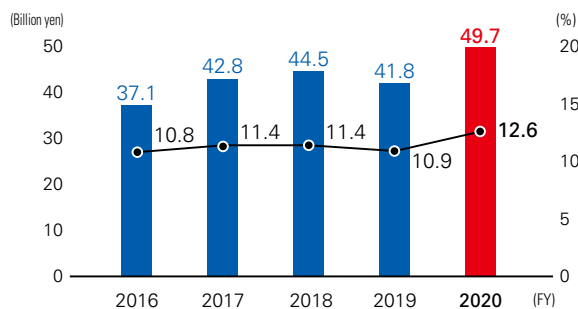
■ Net sales ● Overseas sales ratio



Although net sales were impacted by the COVID-19 pandemic, contribution from Analytical & Measuring Instruments key models and pandemic-related products resulted in a record 393.5 billion yen in net sales.

Operating Income/Operating Margin

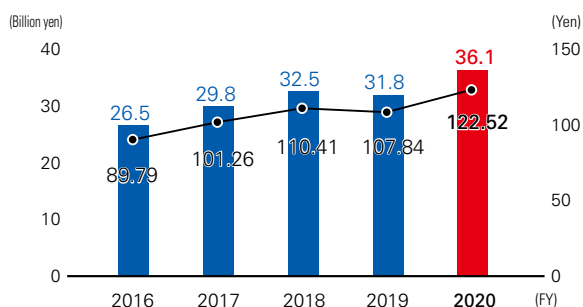
■ Operating income ● Operating margin



Increased operating income and expense-reduction measures resulted in operating income of 49.7 billion yen and a 12.6% operating margin, which were both record levels.

Profit Attributable to Owners of Parent/ Profit per Share (EPS)

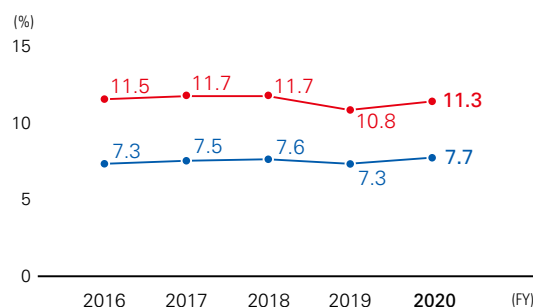
■ Profit ● EPS



Increased operating income and other factors resulted in record profit of 36.1 billion yen and 122.52 yen per share (EPS).

ROE/ROA

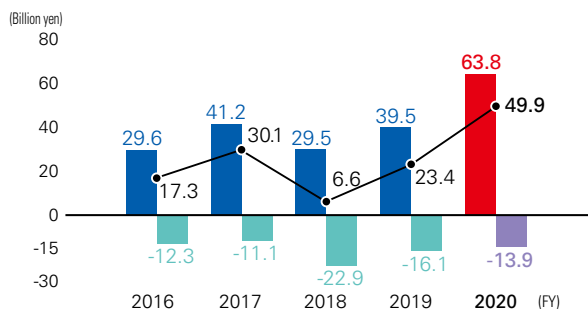
● ROE ● ROA



The ROE increased 0.5 points (year on year) to 11.3% and the ROA increased 0.4 points to 7.7%, with both the ROE and ROA improving due to record profit and other factors.

Operating Cash Flow/Investment Cash Flow/ Free Cash Flow

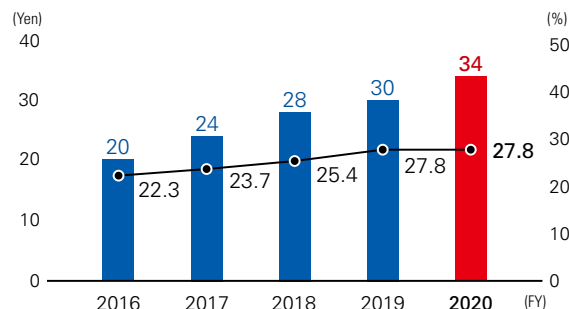
■ Operating cash flow ■ Investment cash flow ● Free cash flow



Operating cash flow increased by 24.3 billion yen due to increased income before income taxes and other factors and the investment cash flow decreased by 2.2 billion yen due to a decrease in the purchase of property, plant and equipment. As a result, free cash flow increased by 26.5 billion yen to 49.9 billion yen.

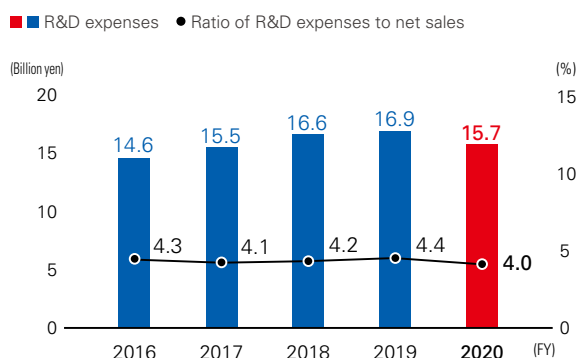
Dividend/Payout Ratio

■ Dividend ● Payout ratio

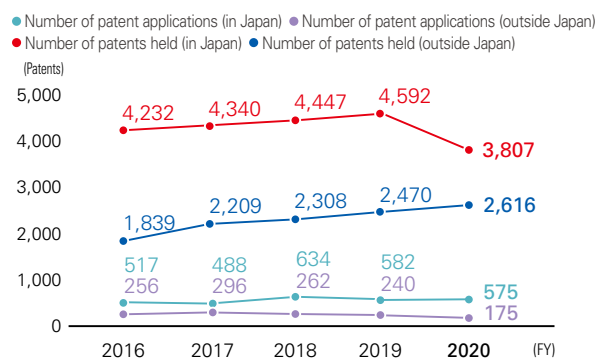


Cash dividends increased for the seventh consecutive year to 34 yen and the payout ratio increased to 27.8%. We intend to maintain stable dividends while also comprehensively taking into account earnings performance and cash flows when determining shareholder returns.

Non-Financial Information

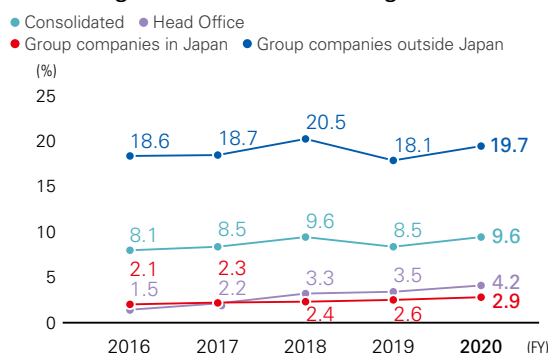
R&D Expenses (Testing and Research Expenses +
Industrial Application Research Expenses)/
Ratio of R&D Expenses to Net Sales

R&D expenses decreased by 1.2 billion yen (year on year) to 15.7 billion yen, due to restrictions on some activities impacted by the COVID-19 pandemic. Given that about 53.0 billion yen of investments were specified in the medium-term management plan (FY 2020 to 2022), we will continue to actively implement R&D activities in the future.

Number of Patent Applications/
Number of Patents Held

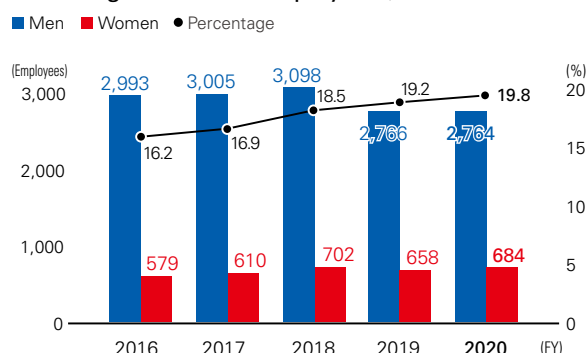
The number of patents held decreased by 639 to 6,423 patents. That decrease was mainly due to reassessing the number of patents held in Japan. In the future, we intend to acquire more patents based on our basic policy of creating new value based on intellectual property generated from research and development.

Percentage of Women in Management Positions

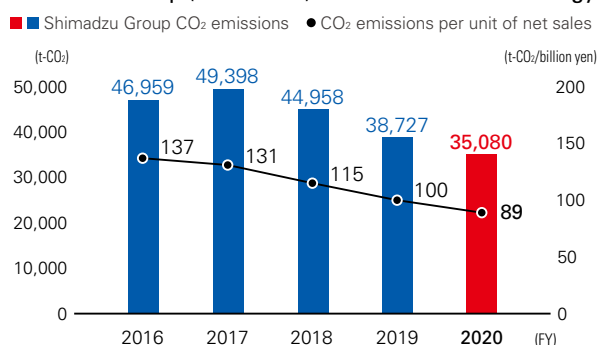


We are actively implementing diversity management practices in an effort to better generate value in society through innovation and by acquiring talented human resources, regardless of nationality or gender. The percentage of consolidated Shimadzu Group women employees in management positions increased 1.1 points (year on year) to 9.6% in FY 2020.

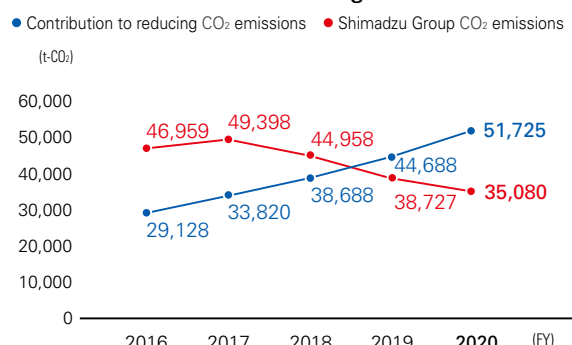
Percentage of Women Employees (Non-Consolidated)



Due to our efforts to become a company where women can work for a long time, the percentage of women employees has been increasing each year. By promoting even more working practice diversity in the future, we will create workplace cultures where all employees are free to proactively work in their own way.

Shimadzu Group (Worldwide) CO₂ Emissions from Energy

CO₂ emissions decreased 9% (year on year) to 35,080 t-CO₂ due to initiatives to save energy, switching to renewable energies, and improved electric power company emission conversion factors. Consequently, we are close to achieving our goal of reducing emissions 30% from FY 2017 levels by FY 2030.

Shimadzu Group (Worldwide) CO₂ Emissions
and Contribution to Reducing CO₂ Emissions

The Shimadzu Group is committed to improving the environment-friendliness of products in an effort to minimize our impact on the global environment. In particular, products that achieve especially high environmental performance are offered to customers as certified Eco-Products Plus products. During FY 2020, these models reduced CO₂ emissions generated at customer operations by 51,725 tons.

Message from the President

As “a company that solves challenges in society in collaboration with partners all around the world,” we will engage in measures to offer healthcare solutions and achieve a carbon-free society to achieve sustained growth by creating and deploying systems for solving challenges in society.

Corporate Philosophy

Contributing to Society through
Science and Technology

Management Principle

Realizing Our Wishes for the Well-being of
Mankind and the Earth

Teruhisa Ueda

Jun. 2021

Representative Director, President & CEO



Shimadzu's DNA

Throughout the over 145 years since Shimadzu was founded in 1875, we have remained committed to ensuring business continuity and progress by valuing an approach of facing facts head-on from a scientific perspective to discern their true essence, based on Shimadzu's corporate philosophy “Contributing to Society through Science and Technology” and management principle “Realizing Our Wishes for the Well-being of Mankind and the Earth.”

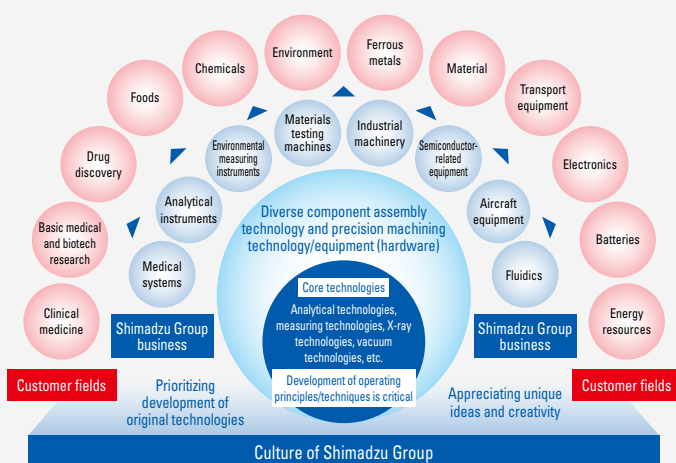
That process has resulted in satisfying customer needs in a variety of fields while also expanding the

scope of our business operations through advancements in core technologies and through applications of our products and technologies. In addition, we have carefully fostered an ecosystem within the company to ensure we have the new technology development capabilities necessary to meet the challenges of new business fields.

That approach of solving customer and societal challenges by confronting them head-on has been an unwavering principle that has served, and will serve in the future, as the foundation for the Shimadzu Group corporate culture throughout our history.

Reasons Shimadzu has Remained in Business for Over 145 Years

- (1) Despite changing times, **Shimadzu remains steadfastly committed to actions based on the corporate philosophy** “Contributing to Society through Science and Technology.”
- (2) Shimadzu's approach **is to earnestly respond to the requirements of customers in a variety of fields**, even for niche markets.
- (3) **Shimadzu always maintains strong R&D capabilities** that contribute to the advancement, growth, and development of industry.



Model for Creating Value

Our societies face a mountain of challenges that need to be solved, including fighting COVID-19 and other infectious diseases, environmental issues such as climate change and microplastics, ensuring safe water and public health, maintaining public infrastructure, and addressing aging populations.

Meanwhile, as members of society, we are under strong pressure to fulfill our roles and responsibilities, such as taking action toward solving various issues that threaten the sustainability of society on a global scale, achieving the United Nations' sustainable development goals (SDGs), and complying with the Paris Agreement

on climate change, and disclosing information accordingly.

Given these circumstances, the current business environment can be described as having a mixture of risks and opportunities.

While constantly questioning the very meaning of our existence, we strive to become even more essential to society by working with partners around the world to use science and technology to offer solutions to the increasingly diverse and complex challenges we face and to further increase the shared value with customers and society. In doing so, we will create a better society and build the foundations for a prosperous, safe, and secure world.

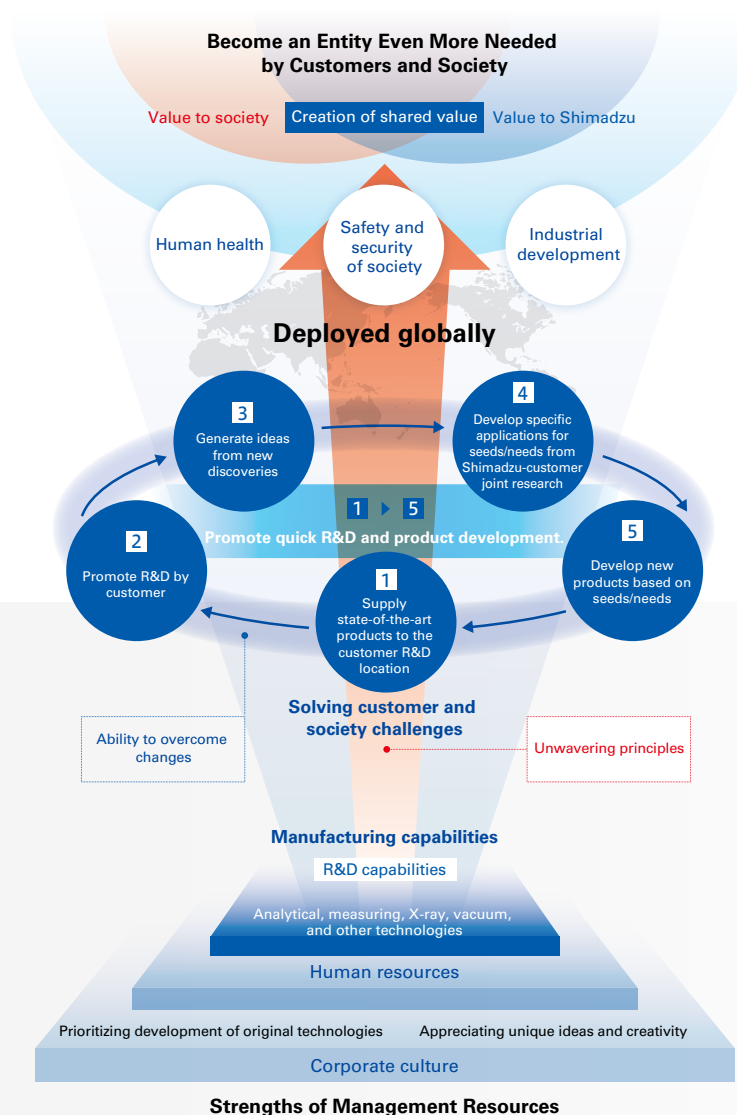
Model for Creating Value

The following web page includes information about the topics listed below.

https://www.shimadzu.com/sustainability/common_value/value_creation_model.html



Model for Creating Value



Message from the President

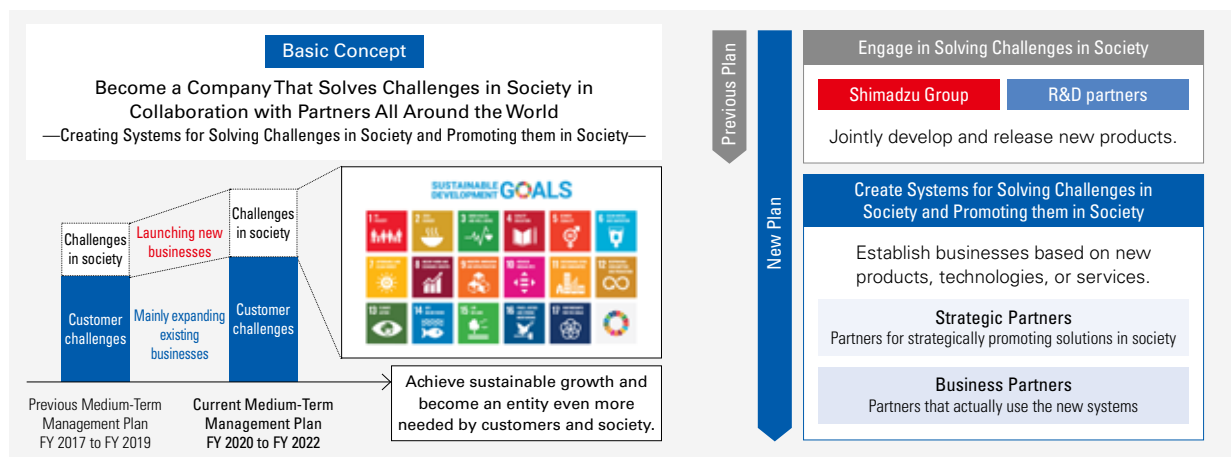
Achieving a Safe and Secure Society with CSV and CSR Goals

The CSR Charter is a declaration of Shimadzu's commitment to solving actual customer challenges and potential challenges of society by promoting business activities that are consistent with both solving the challenges of society through business (i.e. CSV, which is strategic CSR) and by engaging in activities as a responsible member of society (fundamental CSR).

We will develop more advanced sustainability management practices while reassessing the 17 SDGs in terms of strategic CSR and fundamental CSR and implementing the SDGs as part of the medium-term management plan. As part of that effort, we signed the United Nations Global Compact in September 2019.



Medium-Term Management Plan (FY 2020 to FY 2022)



Accomplishments during the First Year of the Medium-Term Management Plan

For FY 2020, the first year of the medium-term management plan, we initially assumed a worst-case scenario because we could not predict the impact of the COVID-19 pandemic. Given the circumstances, Shimadzu launched "infectious disease countermeasure projects" as important emergency challenges and prioritized implementing the projects above all else. That resulted in significant contribution to business performance from novel coronavirus detection kits, fully automatic PCR testing systems, and mobile X-ray systems used to diagnose pneumonia. Sales also increased for liquid chromatographs and mass spectrometer systems used for healthcare and virus research applications.

Turbomolecular pump sales increased significantly due to factors such as production capacity being expanded to satisfy increased demand for semiconductor manufacturing equipment in response to the expanded demand for 5G (fifth-generation communication network) and data center applications.

Consequently, record results were achieved during FY 2020. Net sales were 393.499 billion yen (year on year 2.1% increase); operating income was 49.742 billion yen (year on year 18.9% increase) due to increased sales, expense reductions, identifying investments, and other factors; ordinary income was 48.378 billion yen (year on year 13.4% increase); and profit attributable to owners of parent was 36.097 billion yen (year on year 13.6% increase).

Highlights of FY 2020 Consolidated Results

Net Sales 393.5 billion yen +2.1 % year on year	Increased sales and income Both sales and income exceeded previous records	<ul style="list-style-type: none"> The Analytical & Measuring Instruments segment increased both sales and income to achieve record net sales and operating income. The Medical Systems segment sales decreased, but they achieved record operating income. The Aircraft Equipment segment sales and income both decreased due to major impacts from the COVID19 pandemic. The Industrial Machinery segment increased both sales and income to achieve record net sales.
Operating Income 49.7 billion yen +18.9 % year on year	Promotion of infectious disease countermeasure projects	<ul style="list-style-type: none"> Product development and joint research intended to prevent spreading the pandemic resulted in novel coronavirus detection kits, fully automatic PCR testing systems, and mobile X-ray systems for pneumonia examinations contributing significantly to results
Ordinary Income 48.4 billion yen +13.4 % year on year	Sales increased outside Japan Second-half sales increased in Japan	<ul style="list-style-type: none"> Outside Japan, sales increased in China, Europe, and other Asian countries, with net sales in China recovering to pre-COVID-19 FY 2018 levels. In Japan, sales decreased 2% year on year but increased 6% in the second half due to supplementary budget appropriations and COVID-19 related products.
Profit Attributable to Owners of Parent 36.1 billion yen +13.6 % year on year	Record sales of key models by the Analytical & Measuring Instruments segment, turbomolecular pumps by the Industrial Machinery segment, and mobile X-ray systems by the Medical Systems segment	<ul style="list-style-type: none"> For the Analytical & Measuring Instruments segment, both sales and income increased for all three key model lines (liquid chromatographs, mass spectrometers, and gas chromatographs) For the Industrial Machinery segment, demand increased for semiconductors used for 5G (fifthgeneration communication network) and data centers.

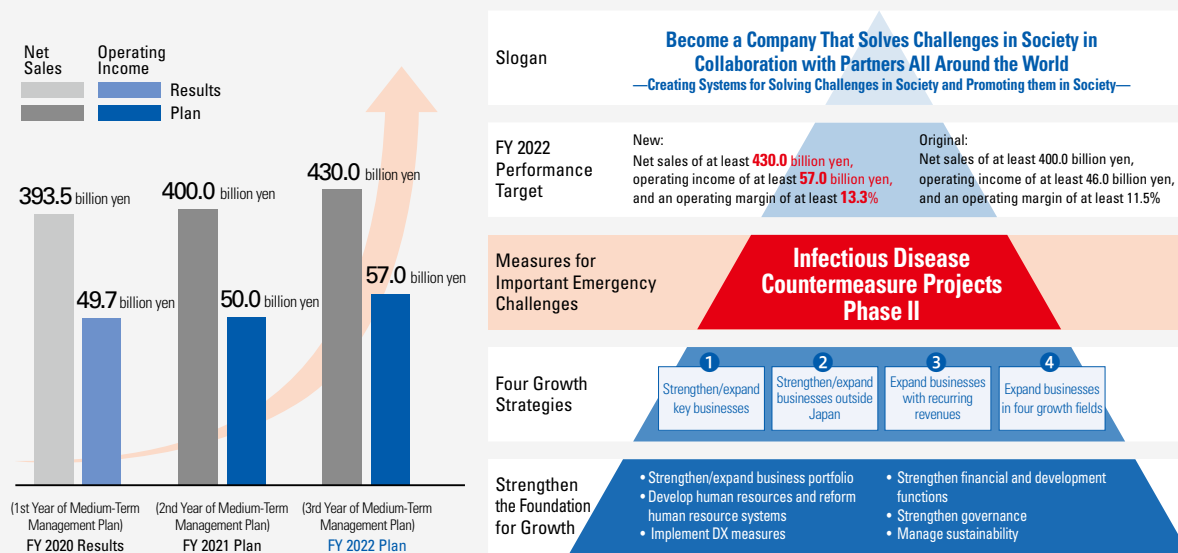
Reassessing the Medium-Term Management Plan

Considering the FY 2020 results and changes in the business environment due to polarization of businesses that grew due to the pandemic and those that slowed down because of the pandemic, the performance targets for FY 2022, the final year of the plan, were revised upward to net sales of at least 430.0 billion yen (30.0 billion yen increase from the previous announcement) and operating income of at least 57.0 billion yen (11.0 billion yen increase).

Our basic strategy has not changed significantly, but instead of simply providing physical products, we will strive to improve/expand our efforts to create systems for solving customer challenges, identify societal challenges that underlie those customer challenges, and aim to offer solutions in the true sense of the word.

To achieve this, despite the various constraints involved, it will be important to not be confined by previous assumptions, maintain a solid understanding of our mission, have a strong will to execute our mission, and exhibit flexibility for changing the content of decisions as our business environment changes.

Medium-Term Management Plan (Apr. 2020 to Mar. 2023)



Message from the President

COVID-19 Pandemic Countermeasures

The COVID-19 pandemic has had a major impact on our societies, with restrictions on the movement of people and goods imposed throughout the world and resulting in many rapid changes in business activities and working practices in many regions and countries. The pandemic has resulted in large differences between how much our business conditions were impacted in different regions, fields, and business categories, and it has revealed a variety of problems.

The infectious disease countermeasure projects implemented during the first year of the medium-term management plan included offering existing mobile X-ray systems for use in pneumonia examinations, offering reagent kits for detecting COVID-19, releasing a new fully automatic PCR testing system, and other measures to fight the pandemic. That major effort provided a significant contribution to FY 2020 results.



Novel Coronavirus Detection Kit



Release of AutoAmp, a Fully Automated Genetic Analyzer for PCR Testing



Mobile X-Ray System (Pneumonia Examination)

The infectious disease countermeasure projects have taught us a lot about development and sales methods. Essentially, it taught us to venture beyond normal departmental boundaries. In other words, the vertical organizational structure of Shimadzu divisions was deterring the rapid commercialization of business opportunities. In order to shorten development times for infectious disease countermeasure projects, they were given top priority and technical and sales personnel were recruited from other departments, which achieved a faster response. We intend to continue to promote this type of interdivisional alliance in the future as a way of better utilizing management resources.

In addition, we are actively collaborating with academia, hospitals, healthcare institutions, and others to not only offer products but also create systems for fighting infectious diseases.

Starting in FY 2021, the second year of the medium-term management plan, we will continue the previous measures, referred to as Phase II infectious disease countermeasure projects, and also develop new testing methods, build a network management system for test data, and actively engage in creating infectious disease countermeasure systems, such as for monitoring viruses in sewer water.

We intend to contribute to society from the two perspectives of preventing the spread of the COVID-19 virus and addressing future risks of infectious diseases in general.

Four Growth Strategies

We will continue to implement the four growth strategies we have been pursuing since the beginning, expand businesses in growth areas, especially in healthcare and environmental/energy, and also focus on areas that have grown despite the pandemic.

(1) Strengthening Various Solutions Based Primarily on a Key Business

We intend to increase market share, especially of liquid chromatographs and mass spectrometer systems, which are a key business for the Analytical & Measuring Instruments segment. As the scope of analytical and measuring instruments continues to expand, the number of people unfamiliar with the instruments has increased. Therefore, to ensure that even such people can perform analytical tasks easily, we will expand/improve product lines by

using AI or robotics technologies to automate processes and by expanding/improving databases to offer fully automatic pretreatment systems and other products. In addition, we will accelerate our support for satisfying the pandemic-based need for non-contact and remote working solutions. We will also develop new fields with high-end mass spectrometer products that offer high resolution and high sensitivity.



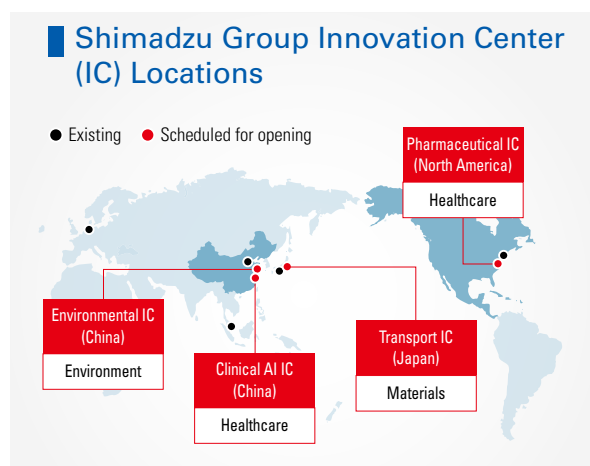
Release of High-Performance Liquid Chromatograph System to Support Working from Home and Teleworking



High-Performance Liquid Chromatograph Mass Spectrometer

(2) Optimizing the Business Base by Strengthening Operations Outside Japan

To achieve business growth outside Japan, we will strengthen the functions of our bases according to local conditions and expand business by working with local partners to solve the challenges facing each region. One of our strengths is the global deployment of Innovation Centers, where we work with customers to create new value by understanding and helping to solve the challenges they face. We intend to achieve growth at businesses outside Japan by strengthening the functions of Innovation Centers and through selective investments.



(3) Strengthening Aftermarket Business

We intend to achieve steady growth by developing our aftermarket business globally, with a focus on reagents and consumables. We will strengthen our profit base by deploying new business models based on new sales formats, such as offering subscription or pay-as-you-go payment methods to enable repeated use of our products, data, and application software.



(4) Expanding Businesses in Four Growth Areas

We intend to create new markets in four growth areas, namely healthcare, environmental/energy, materials, and infrastructure, by working together with business partners and strategic partners to solve challenges in society.

We will use the Startup Incubation Center, newly established for the purpose of fostering new businesses, to promote the commercialization of businesses in growth areas. For example, in the area of advanced healthcare, we will accelerate building and commercializing a shared business platform that utilizes previous research results to offer solutions from the three perspectives of disease prevention, diagnosis, and treatment, starting mainly with solutions for the challenge of declining birthrates and aging populations and solutions for the COVID-19 pandemic. To address diseases (such as dementia, depression, and cancer) that have increased in importance due to the pandemic, we will invest effort into using our products and technologies to help maintain and improve people's health while promoting joint development and open innovation.



Message from the President

Strengthening the Foundation for Growth

Reassessing the medium-term management plan not only strengthened the foundation for future growth, but also added promotion of digital transformation (DX) and sustainability management.

(1) Implementing DX (Digital Transformation) Measures

Digital technology is critical for implementing our strategies. In FY 2020, the pandemic resulted in major changes to the way we work, with an expansion and permanent adoption of teleworking practices, such as working from home. There has also been a rapid increase in the use of remote web-based meetings, digital marketing, and other practices.

Within the Shimadzu Group, we have been utilizing digital technologies and various types of data to address the needs of customers and society and also increase the efficiency of business processes. In April, we also established a new DX Strategy Management Department to promote digital transformation.

DX is not only about implementing digital technology in products. It is important to transform business models by utilizing digital technology from two perspectives: introducing digital technology into business operations for business DX and making business processes more intelligent through business process DX. We intend to achieve new growth and increase our competitive strength by fundamentally reforming our business models.



(2) Implementing Sustainability Management

Given the growing demand for incorporating environmental, social, and governance (ESG) measures in management practices, we intend to develop more sophisticated sustainability management practices.

As for the environment, we will accelerate our efforts to achieve a carbon-neutral and circular economy.

As for society, we are paying close attention to health and productivity management. We will implement a variety of measures for ensuring the

health of employees and their family members and will also offer products and technologies that contribute to health and longevity in society. We will focus efforts on promoting diversity management practices and training human resources based on respect for differences and diversity in language and culture in order to achieve a better work-life balance.

To improve governance, we will strengthen internal controls.

(3) Measures for Achieving Carbon-Neutrality

One of the many issues attracting particular attention around the world today is carbon-neutrality. The increasing number of disasters attributable to abnormal weather is a reminder of the importance of implementing countermeasures for climate change. In Japan, the government has announced a policy to achieve net-zero greenhouse gas emissions by 2050. Considering that Japan emits 1.1 billion tons of the 33.0 billion tons of the CO₂ emissions emitted globally and the Shimadzu Group emits only 40,000 tons, it is not possible for Shimadzu to make a significant contribution to reducing emission levels. Nevertheless, for us to make a contribution to achieving a sustainable society, it will be important to comply with international norms that exceed national and regional laws and regulations and actively participate in initiatives.

Therefore, Shimadzu endorsed the June 2017 recommendations of the Task Force on Climate-related

Financial Disclosures (TCFD) and in November 2019 obtained certification from the Science Based Targets (SBT) initiative certifying that the Shimadzu Group CO₂ reduction targets have a valid scientific basis.

Furthermore, in March 2021, Shimadzu became a signatory to the RE100 declaration for achieving carbon-neutrality. In addition, Shimadzu is actively engaged in measures that contribute to the environment in an effort to accelerate commercialization of environment /energy-related businesses, including the 3Rs (reduce, reuse, and recycle), measures aimed at achieving a circular economy.

In the future, we will promote DX and other activities based on two perspectives, namely a business perspective of offering products and services to customers and a business process perspective for Shimadzu's own business processes.

Implementing Sustainability Management

- Promote **sustainability management** to implement ESG measures, such as "zero-carbon commitment" measures and infectious disease countermeasures.
- **Improve our ESG rating from ESG assessors** and aim to achieve a **positive cycle of improvement** that further strengthens measures.



Achieving Sustainable Growth for Society and Increasing Medium- and Long-Term Corporate Value

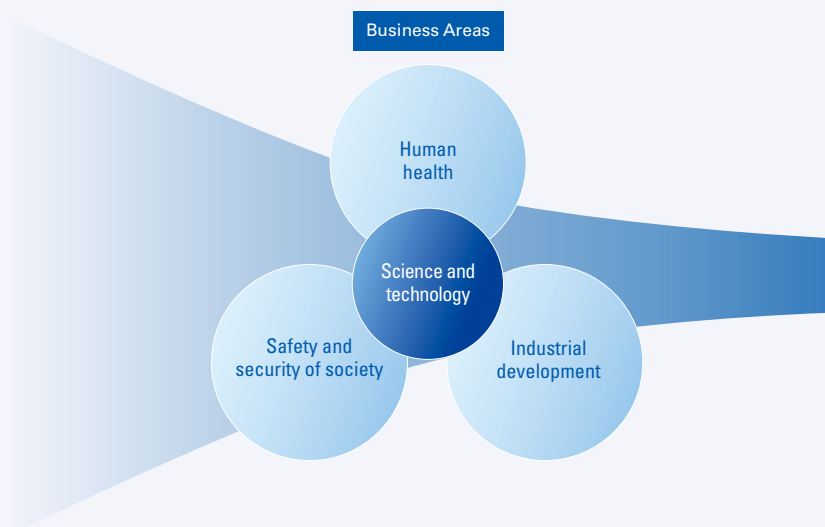
We remain committed to achieving sustainable growth for society and increasing medium- and long-term corporate value for Shimadzu by continuing to place our corporate philosophy, management principle, and CSR charter at the core of our management practices. In this way, by ensuring healthy and transparent management practices based on a long-term view and by utilizing science and technology, we will address the challenges facing society head-on.

I believe that my role is to question why each business and department exists and then rebuild Shimadzu accordingly. I am confident that the Shimadzu Group will become even more dynamic than ever before if every employee treats issues as their own and steadily executes strategies and initiatives to solve them.

I want to thank all our stakeholders for their ongoing and unchanging support.

Message from the President

Materiality of the Shimadzu Group



Identifying Materiality (Important Issues that should be Prioritized)

In the over 145 years since Shimadzu was founded, the company has consistently contributed to solving societal challenges in each era. Today, with the increasing globalization of society and economies, increasing severity of climate change, and other factors, the world is facing an even broader range of societal challenges while new issues continue to emerge one after another.

Accordingly, in addition to recognizing how such challenges impact society, the economy, and Shimadzu, the Shimadzu Group has performed a materiality assessment to identify important issues that should be prioritized based on our CSR Charter that we adopted in 2017. For our environmental, social, and governance (ESG) activities, we determined materiality based on two factors. One is solving the challenges of society through business and the other is engaging in activities as a responsible member of society. In the area of solving the challenges in society through business, we

aim to solve these by deploying and expanding our business in four growth areas—healthcare, materials, infrastructure, and environmental/energy fields.

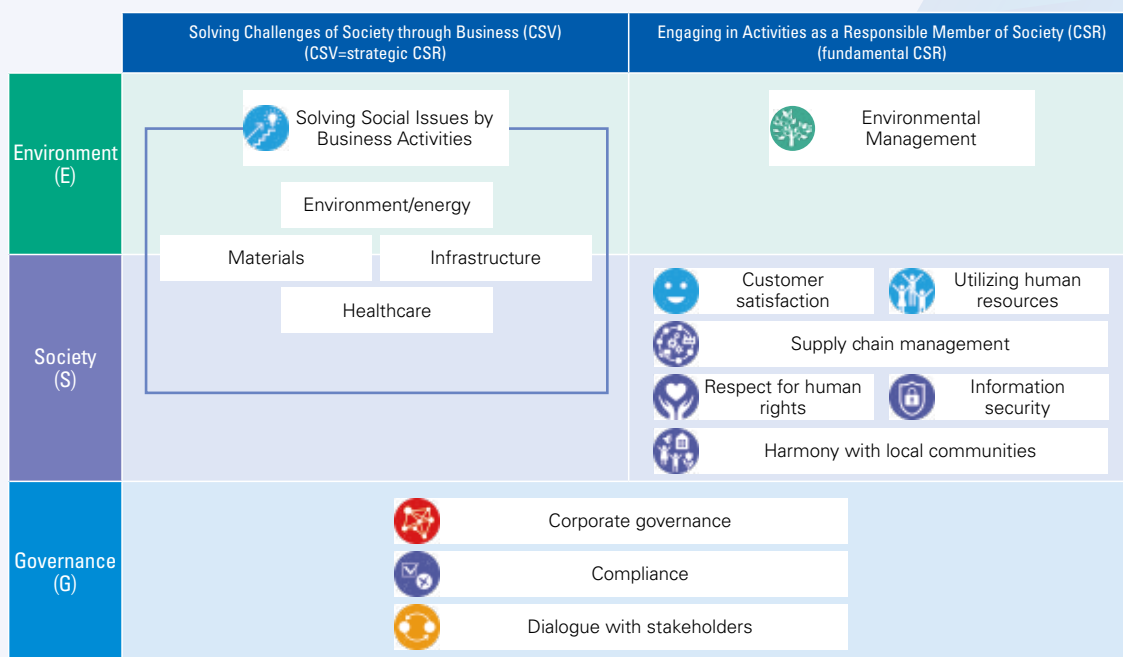
Creating shared value is equal to strategic corporate social responsibility (CSV = strategic CSR), and starting in FY 2020, the medium-term management plan goes beyond solving existing customer challenges and seeks to nurture businesses that solve societal issues that are not yet apparent in the world.

Regarding engaging in activities as a member of society, we aim to strengthen our corporate infrastructure by implementing measures demanded by society throughout the entire business activity value chain and product life cycles. As part of fundamental CSR, that involves searching for ways to minimize internal and external risks and contribute to a wide range of stakeholders.

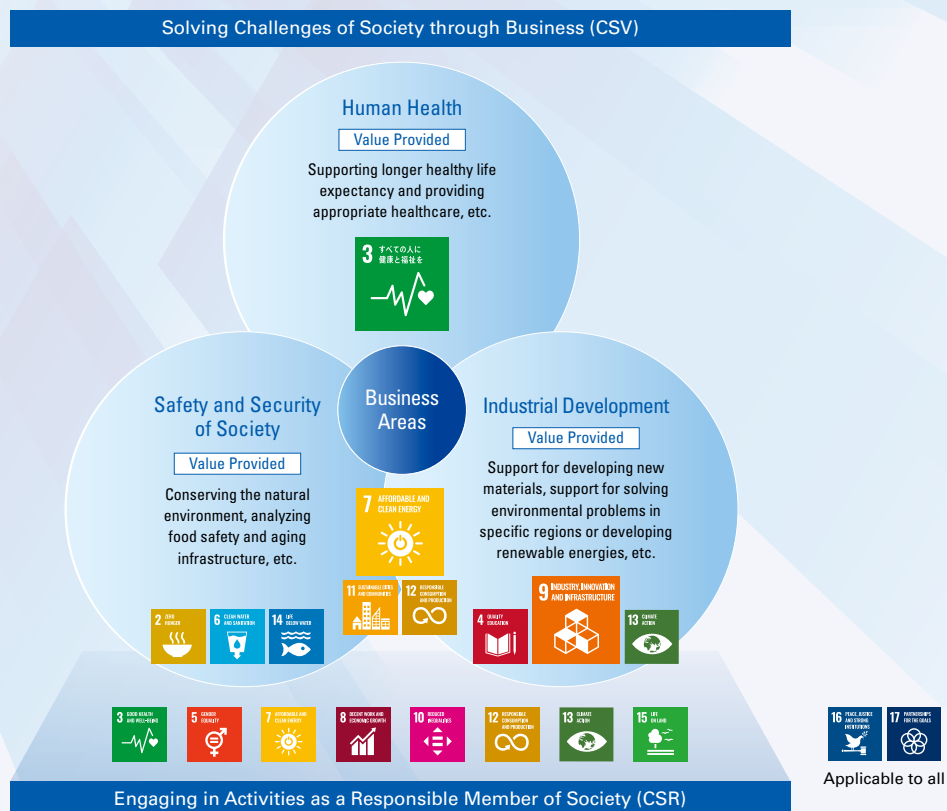
Process of Determining Materiality

We determined which SDGs to adopt based on materiality and relevance to our business areas by understanding megatrends for SDG-based societal challenges, confirming that we can make a contribution based on Shimadzu Group science and technology, and identifying measures

we should implement with our management base. In the future, we will continue to revise that approach as necessary in response to changes in societal issues and feedback from our stakeholders.



Targets for Contributing to SDGs through Shimadzu Businesses



Key Strategy Advanced Healthcare

Combining Analytical and Medical Technologies to Develop New Diagnostic and Treatment Systems

Shimadzu is promoting advanced healthcare as solutions that are based on using a combination of Shimadzu analytical and medical technologies for research and development at every stage of healthcare, including ultra-early diagnosis, diagnosis, treatment, and prognosis, for the purpose of overcoming cancer, lifestyle diseases, and other disorders, and achieving a healthy life cycle.

Measure
01

Dementia

At least 5 million elderly people in Japan and 50 million worldwide are estimated to be suffering from dementia. Therefore, the Shimadzu Group is researching biomarkers in the blood of people with Alzheimer's dementia. (Biomarkers are substances useful for determining the

presence or progression of diseases.) In 2018, Shimadzu collaborated with the National Center for Geriatrics and Gerontology to jointly develop a method for detecting Alzheimer's disease from a few drops of blood, based on estimating the amyloid-beta accumulation levels in the brain. Amyloid-beta is considered a possible cause of Alzheimer's. The Shimadzu Group has continued to research the prevention, diagnosis, and treatment of dementia.

Amyloid MS CL Approved as Medical Device for Reducing the Burden on Patients

The Shimadzu Amyloid MS CL system for measuring amyloid peptides in blood received approval as a "controlled medical device" (Class II) in December 2020 and was released in June 2021. The Amyloid MS CL system is a product configured with a Shimadzu AXIMA Performance CL mass spectrometer, data analysis software, and other portions of the mass spectrometry technology used for the Alzheimer's disease detection method developed in joint research work with the National Center for Geriatrics and Gerontology.

Amyloid peptides are a key component of the amyloid plaques that are characteristic of the Alzheimer's disease. This product measures the concentration of amyloid peptides in blood and outputs a biomarker value that correlates to the quantity of amyloid-beta, a possible cause of Alzheimer's disease. Consequently, it is attracting interest as a new examination method that is easier on patients than conventional PET scanning and cerebrospinal fluid analysis methods.

Alzheimer's Disease Detection Method that can Predict Amyloid Accumulation Levels

Blood Sampling



0.6 mL blood sample
(about 1/10 teaspoon)

Mass Spectrometry



AXIMA Performance mass spectrometer for detecting amyloid plaques

Release of BresTome, World's First TOF-PET System Dedicated for Heads and Breasts

Released in March 2021, the BresTome is the world's first TOF-PET system that can examine both head and breast areas, by button-operated reconfiguration of the detector position.

Designed with state-of-the-art Shimadzu semiconductor detectors and TOF technology, it provides high-definition PET images. Due to the small 30-cm diameter detector hole, the detectors can be positioned much closer to the target area being examined, which means the BresTome offers about double the resolution of conventional whole body PET systems (which have a hole diameter of about 80 cm). For breast examinations, it can acquire images without any breast compression or associated pain.

It also opens up a broad range of new potential applications for PET imaging, not only for clinical treatment of brain tumors, epilepsy, and breast cancer, but also to contribute to brain research, such as for researching Alzheimer's or other dementias.

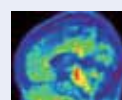


Dedicated Head and Breast TOF-PET System in Head Scan Mode

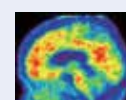
BresTome Image



BresTome PET Images of Amyloids



Negative case



Positive case

The more yellow and red areas in the image, the more abundant the accumulations of amyloid-beta, which is considered a possible cause of Alzheimer's dementia.

Data provided by: Division of Positron Emission Tomography, Institute of Advanced Clinical Medicine, Kindai University

Measure
02

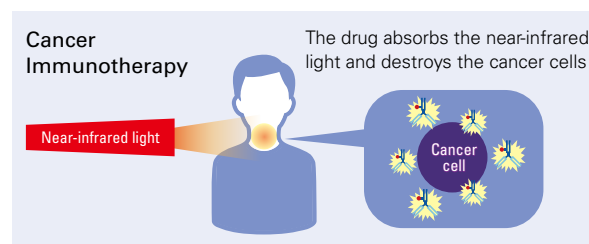
Cancer

In recent years, there has been a global increase in the number of people diagnosed with or who have died from cancer. In Japan, cancer has been the number one cause of death since 1981, with cancer causing over 300,000 deaths per year. Therefore, Shimadzu has actively provided support for developing ultra-early diagnosis methods and new detection and treatment methods.

Photoimmunotherapy

Photoimmunotherapy has been attracting attention as a new cancer treatment that can selectively target and destroy cancer cells by administering a drug that selectively binds to cancer cells and then irradiating the drug/cancer with light (near-infrared light). The method was developed by Dr. Hisataka Kobayashi, a Senior Investigator working at the National Cancer Institute in the United States, a department in the U.S. National Institutes of Health.

Since FY 2020, Shimadzu has been involved in new joint research with the National Cancer Center Japan aimed at developing clinical applications for photoimmunotherapy. In June 2021, Shimadzu signed an agreement with Rakuten Medical to jointly develop and commercialize medical devices based on photoimmunotherapy to be used with the Illuminox® platform. The Shimadzu Group is using near-infrared image processing technology and mass spectrometry technology to visualize and record the reaction of the drug to photoirradiation in real time, which will hopefully promote the widespread use of photoimmunotherapy for not only supporting medical treatment but also for satisfying clinical application needs.



Examples of R&D for Advanced Healthcare

• Biomarker Discovery Using a Mass Spectrometer and Support for Clinical Application Research

Biomarker measurement results provide important information for identifying cancers or other specific disorders and judging how far they have advanced. Therefore, discovery research intended to search for new biomarkers that are effective in indicating the status of a disease or the therapeutic effects of treatment has been a very active field of research in recent years. Due to the superior quantitative ability of mass spectrometry technology, it has served an important role in various types of clinical application research work and is expected to help result in developing in-vitro diagnostic methods and prevention and treatment methods.

• Significance of Measuring Brain Function and Applicable Fields

Given the ongoing advancements in brain science research, functional near-infrared spectroscopy (fNIRS) has been attracting attention as a new technique for measuring brain activity under conditions that more closely approximate daily life. Because patients can be measured in a safe and natural state without restricting their movement, optical imaging has expanded the scope of potential applications for brain function research, such as for drug discovery and medical research fields, including rehabilitation research and the study of neonatal brain function, psychology, and neuroscience.

• Diagnosis and Treatment of Primary Aldosteronism

One effective way to determine a treatment plan for primary aldosteronism is to acquire samples from the adrenal vein, however it can take several days to obtain results.

For more information about research examples, refer to the website.

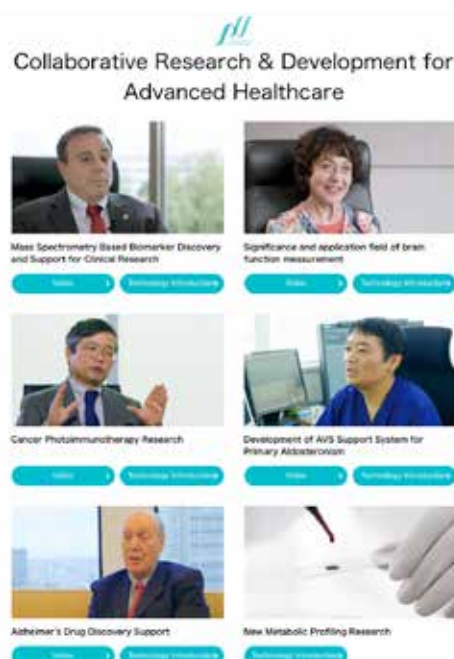
(The photo is from the top page of the Advanced Healthcare website.)

<https://www.shimadzu.com/advanced-healthcare/>



Furthermore, because samples are acquired from multiple locations, the difficulty of integrating the measurement results with image information and managing the data has been considered an issue.

In contrast, the AVS support system for primary aldosteronism marks adrenal vein images with the locations where blood was acquired from adrenal veins and records measurement results linked to those marked locations. Consequently, the system shows accurate measurement results at each adrenal vein location that are immediately understandable from only a glance.



Key Strategy

Promoting Infectious Disease Countermeasure Projects

At this moment, a wide variety of medical personnel, researchers, and other people in society are working hard to restore the normal activities of society after living under its worldwide threat by preventing the proliferation of the COVID-19 virus, testing people, and treating infected patients. The entire Shimadzu Group is committed to help bring an end to the current situation by providing support to all the people currently fighting the pandemic.

Measures in FY 2020

Overview

Overview

In an effort to implement infectious disease countermeasures, the Shimadzu Group has strengthened its measures for offering viral, bacterial, and other pathogenic testing solutions. Within those measures, in addition to offering new infectious disease

testing-related products, we have also been working with universities and healthcare institutions to jointly develop solutions for society's challenges with the pandemic, in the form of systems intended to help society control infections.

	Virus Testing			Pathological Diagnosis (Pneumonia Examination)	Therapeutic Drug Development Support
Products	PCR Testing Reagent 	Fully Automatic PCR Testing System 	Displaying Results 	Mobile X-Ray System 	System for Measuring Blood Concentration of Candidate COVID-19 Therapeutic Drugs 
Creating Systems	Building Kyoto Model Built the "Kyoto Model" for monitoring COVID-19 infection status by PCR testing of sewer water and then testing people to identify infected individuals only if a positive reaction is found.		Helped Establish PCR Testing Centers in Companies/Universities Supported testing at universities/ companies, such as by establishing a PCR testing center at Kyoto Sangyo University.	Enables bedside pneumonia examinations in patient rooms, ICUs, etc. 	Standards Testing of Ethanol for Disinfectant  Patient Self-Interview System as COVID-19 Countermeasure 
	Collaboration with Tohoku University Established new virus testing method using exhaled breath and deployed the method for healthcare including predicting progression to increased severity. 		Collaboration with Kumamoto University Jointly researched technology for predicting increased COVID-19 severity based on blood or urine testing. 		

Fully Automatic PCR Testing System

AutoAmp DNA Sequencer Released for Fully Automatic PCR Testing

Released in November 2020, the system can be used to achieve rapid and easy testing for obtaining consistent data by simply placing specimen vials containing a nose swab or saliva in the system. Due to the compact size and affordable price, the fully automatic PCR testing system is widely used at healthcare facilities such as clinics, small/medium hospitals, and urgent care providers, regional public health research centers, and testing laboratories.

By offering the PCR testing system and a broad line of other products and reagents, Shimadzu is contributing

to expanding/improving testing capabilities for preventing the spread of novel coronavirus infections.



AutoAmp DNA Sequencer Released for Fully Automated PCR Testing

Variant
Strain
DetectionRelease of Reagent Kits for Detecting Trace Quantities of Viruses Attached to Substances
and for Detecting Variant Strains

In February 2021, Shimadzu released the world's first swab-type novel coronavirus detection kit. The kit enables high-sensitivity detection of novel coronaviruses attached to door knobs, faucets, and other surfaces. Using Shimadzu's unique Ampdirect technology not only eliminates the need for complicated RNA purification, but also concentrates viruses to shorten the test time to about 100 minutes from the several hours required conventionally. The kit was intended for testing at geriatric nursing care, childcare, and food-related facilities and

will be offered to contract analysis companies and healthcare institutions.

Shimadzu released the SARS-CoV-2 variant detection core reagent kit and N501Y primer/probe sets in May 2021 and L452R and E484K primer/probe sets in July 2021 (all reagents are for research purposes). All of the reagents enable direct detection of specific virus mutations from saliva, nasopharyngeal, or other swab specimens.

We will continue this research and development in response to new variant strains as they appear in the future.

Illustration of Swab Testing Workflow

1 Acquire sample.



2 Open the novel coronavirus swab-type detection kit.



3 Detect and check the results.

PCR Testing
of Sewer
Water

Building "Kyoto Model" Novel Coronavirus PCR Testing System

In May 2021, Shimadzu Corporation and Shimadzu Techno-Research started a contract testing business based on the Kyoto Model* testing system. The system is used to monitor the COVID-19 infection status of target groups by PCR testing of sewer water (toilet effluent water) and then testing people to identify infected individuals only if a positive reaction is found.

Testing the sewer water is much less burdensome to individuals than testing people conventionally, can be used to assess the infection status of entire groups, and makes it easy to monitor specific locations.

PCR testing of people individually after confirming the virus in sewer water is more efficient than indiscriminate PCR testing.



Shimadzu Techno-Research PCR Testing Sewer Water

* Jointly developed in partnership with Professor Hiroaki Tanaka and Assistant Professor Masaru Ihara from Kyoto University, Associate Professor Ryo Honda from Kanazawa University, and Lecturer Akihiko Hata from Toyama Prefectural University.

Establishing
Testing
Centers

Establishing the Kyoto Sangyo University PCR Testing Center

As measures for preventing further spread of COVID-19 infections, Shimadzu signed a comprehensive partnership agreement with Kyoto Sangyo University and established the Kyoto Sangyo University PCR Testing Center. Shimadzu is also engaged in education and research partnerships that contribute to preventing the spread of infections.



From the left:
Kyoto City Mayor Kadokawa, Shimadzu
President Ueda, Kyoto Sangyo University
then-President Oshiro, and
Kyoto Prefecture Governor Nishiwaki

Key Strategy Promoting Infectious Disease Countermeasure Projects

Severity Prediction

Jointly Researched Technology for Predicting Increased COVID-19 Severity Based on Blood or Urine Testing

Based on results achieved in joint research work with Kumamoto University and AiSTI SCIENCE Co., Ltd. (in Wakayama City) for developing new methods for diagnosing COVID-19 infections by measuring modified nucleic acids, Shimadzu released a new LC/MS/MS method package for analyzing modified nucleosides in June 2021. The method package includes a collection of information necessary for using a Shimadzu liquid chromatograph mass spectrometer (LC-MS) system to analyze certain samples for specific applications.

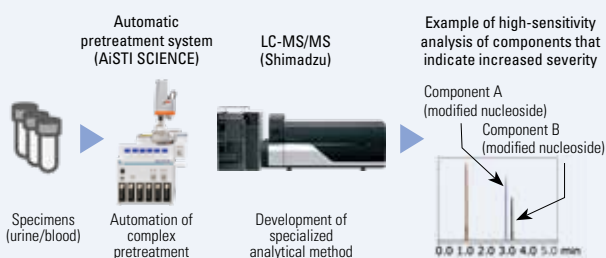
Configured with an automatic specimen pretreatment system from AiSTI SCIENCE and a

Shimadzu LC-MS system, the modified nucleic acid analysis system is able to measure components in urine or blood that indicate the severity level of COVID-19 infections. The measurement takes less than six minutes (when analyzing a series of samples). In the future, we anticipate the system will be used at nursing or medical facilities for selecting therapeutic drugs based on using the technology to predict the severity of the symptoms after a positive infection is diagnosed by PCR testing or other method.



From the left: Representative Director Ryoichi Sasano from AiSTI SCIENCE, Associate Professor Yu Nagayoshi and Professor Kazuhito Tomizawa from Kumamoto University, and Norio Mukai, General Manager, Life Science Business Department, Analytical & Measuring Instruments Division, Shimadzu Corporation

Development of Modified Nucleic Acid Measurement Method for Predicting COVID-19 Severity



New Testing Methods

Development of New Breath-Based COVID-19 Testing Method

Joint research with Tohoku University resulted in successfully developing a new testing method based on using exhaled breath as samples. Next, we will conduct clinical research in an effort to establish its practical use as soon as possible.

Because samples can be acquired from exhaled breath, it is much less burdensome to people being tested than conventional nasal swabbing and also minimizes the infection risk to medical personnel involved. In addition, the multifaceted data provided by mass spectrometry or other analysis can be further analyzed for diagnosing symptoms or predicting the risk of increased severity, therapeutic effects, variant virus strains, complications,

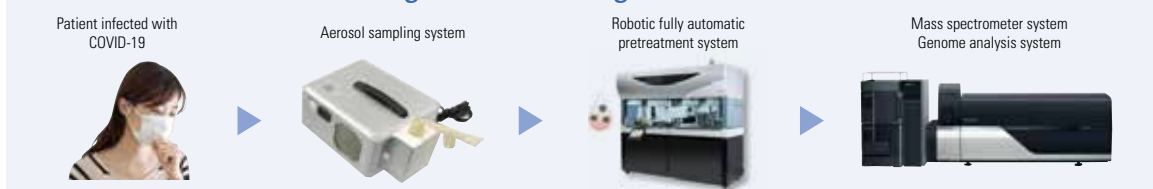
and so on. It also enables multiple viruses to be measured at the same time, making it useful for infectious disease countermeasures even after the current COVID-19 pandemic subsides.

In the future, we also intend to use the various information obtained from exhaled breath to diagnose or prevent other diseases as well.



Shimadzu President Ueda (left) and Tohoku University President Ohno (right)

Testing Method Using Exhaled Breath

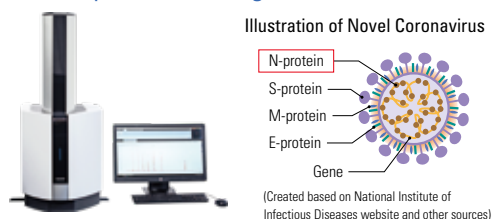


What's Next

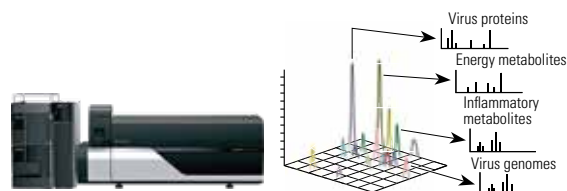
In FY 2021, as Phase II of the infectious disease countermeasure projects, we will deploy COVID-19-related products globally based on our achievements thus far, further expand/improve those product lines, and implement our solutions throughout society, including by linking data, in an effort to help end this crisis and continue supporting all those fighting the pandemic.

Product Development

Rapid Virus Testing–MALDI-TOF/MS



Virus Testing and Severity Prediction–LC-MS



We will develop products for rapidly diagnosing infections and predicting the severity of symptoms, such as by using the MALDI-TOF/MS system to quickly test for viruses or by using an LC-MS system and method package to measure biomarkers that correlate to the severity of COVID-19 symptoms.

Data Management System

We will develop a network system for managing COVID-19 test results and test histories to improve the efficiency of linking testing information. We are also offering systems for testing laboratories within companies and PCR testing centers at universities.

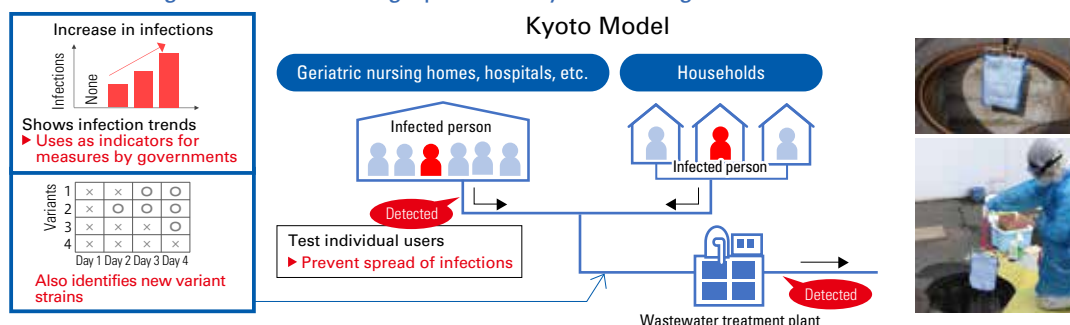
Virus Monitoring

Shimadzu is also working to establish sewer water monitoring systems, based on PCR testing or other technology, in society as soon as possible. In June 2021, Shimadzu signed a letter of understanding with Shionogi & Co., Ltd. regarding a partnership intended to achieve the early adoption of systems in society

for monitoring COVID-19 and other infectious diseases in sewer water.

In the future, the partnership intends to quickly deploy sewer water monitoring systems in society for automatically detecting viruses, determining the public infection status based on monitoring data, and so on.

Predicting and Understanding Epidemics by Monitoring Coronaviruses in Sewer Water



This links to more information about Shimadzu products that contribute to healthcare workplaces, solutions for supporting therapeutic drug development, comments from researchers, and more.



For more details, refer to the website.
<https://www.shimadzu.com/covid-19/>

Message from the CFO



Yasunori Yamamoto
Director,
Senior Managing
Executive Officer

Building Resilient Corporate Constitution without Complacency from Record Results

Financial results for FY 2020 were significantly impacted by changes in business conditions caused by the COVID-19 pandemic. Fortunately, due to the success of various measures implemented by the entire company, the Shimadzu Group was able to achieve record results in terms of net sales, operating income, and operating margin. In particular, novel coronavirus detection kits and fully automatic PCR testing systems that were developed and released to market very quickly and mobile X-ray systems used to diagnose pneumonia contributed to results by helping to fight the COVID-19 pandemic, which has become an urgent challenge for society. Furthermore, sales grew for key models of the Analytical & Measuring Instruments segment, which represent core Shimadzu businesses, especially in the healthcare-related markets, and sales of Industrial Machinery segment turbomolecular pumps expanded due to background circumstances of increasing demand for semiconductors.

Furthermore, expense-reduction measures also helped achieve record business results. In addition to eliminating unnecessary and non-urgent expenses, expense-reduction measures implemented throughout the Shimadzu Group also resulted in a lower breakeven point by establishing financially healthier business operations that can get back on a growth track after making it through the current emergency circumstances.

Nevertheless, though the overall Group achieved record results, a breakdown by business indicates a mixture of some businesses that were able to expand sales despite the pandemic and some businesses that struggled. Given our renewed awareness of the need build a resilient corporate constitution by operating businesses based on new approaches, rather than being confined to previous ways of doing things, we are now discussing measures out to 2025.

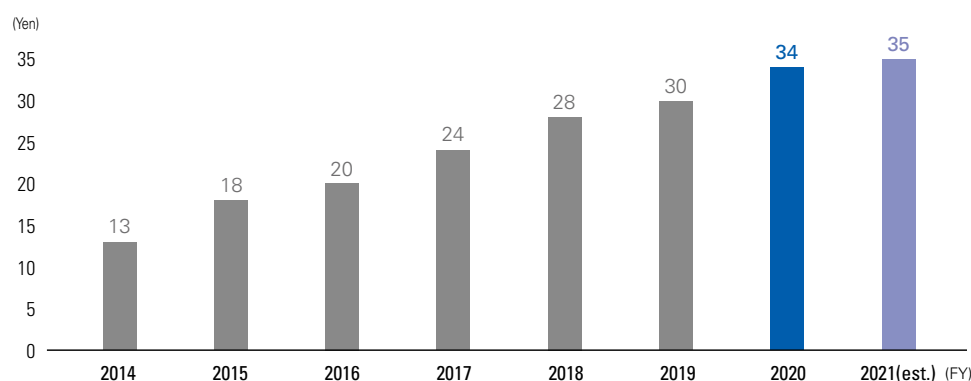
Both Investing in Growth and Continuing to Increase Dividends

Our capitalization policy is based on both investing in growth in anticipation of expanding corporate value in the future and ensuring stable shareholder returns.

To invest in growth, we will not only invest in R&D and capital equipment, but also consider M&A and capital participation, and search for investments that can generate corporate value more efficiently.

In terms of R&D, we plan to invest 53.0 billion yen during the three-year medium-term management plan period, with 15.7 billion yen invested in the first year and 18.5 billion yen in the second year (FY 2021). Investments will be prioritized for important topics, such as infectious disease countermeasures, advanced healthcare, and carbon-neutrality, and for liquid chromatograph and mass spectrometer system products.

Dividends from FY 2014 to 2021 (Est.)



In terms of capital equipment, we invested 15.7 billion yen during the first year, which is behind schedule for reaching the planned 53.0 billion yen during the three years, but we plan to invest 18.5 billion yen during the second year. During the previous medium-term management plan, we invested in improving/expanding R&D facilities, including within Japan. During the current medium-term management plan, we will strengthen the business base outside Japan by investing in Innovation Centers and improving/expanding application development and service networks there. We will also invest in increasing/strengthening production capacity and implementing digital transformations. In terms of M&A, we intend to actively utilize M&A in order to expand business operations and will also consider using partnerships involving capital participation.

In terms of shareholder returns, we have continued to increase dividends for the last seven years, with plans to increase dividends for the eighth consecutive year in FY 2021 as well. We intend to continue increasing dividends and payout ratios, while also considering additional shareholder returns.

Improving Financial Health and Efficiency

Our financial health is currently improving, with an equity ratio close to 70%. We estimate that at least 30.0 billion yen in free cash flow can be generated and plan to cover capital equipment investments with our own funds.

In terms of efficiency, an ROE of 11.3% was achieved for FY 2020, compared to the target ROE of at least 10% specified in the current medium-term management plan. Though the target value has already been achieved, we will continue striving to improve the operating margin in an effort to further increase the ROE value. We are considering introducing ROIC as an indicator for investment decisions. That would involve calculating an ROIC value for each business division and using the values to increase efficiency by reducing unutilized resources, to make investment decisions, and to reassess business portfolios.

Achieving Business Growth through Sustainability Management

As the CFO, I intend to promote progress toward achieving ESG goals, such as carbon-neutrality and infectious disease countermeasures, and communicate Shimadzu's own sustainability management measures to shareholders and

investors in an easy-to-understand way. In addition, I intend to actively disclose non-financial information in an effort to improve our ESG rating and thereby significantly strengthen our initiatives, resulting in a cycle of growth. I myself will actively maintain a dialogue with shareholders and investors about ESGs.

Developing Accounting Human Resources and Also Increasing Accounting Literacy Levels

It is the strength of our human resources that enables Shimadzu's financial strategies. Therefore, the Finance and Accounting Department, which is in charge of Shimadzu Group finance and accounting functions, is spearheading a system for fostering and improving such human resources by developing accounting human resources that have systematically acquired accounting expertise. Furthermore, the department is preparing to station those accounting human resources in divisional departments or at major Group companies around the world. By appropriately distributing such accounting personnel, we intend to sustainably maintain organizations with effectively functioning governance practices.

The department is also implementing measures to improve accounting literacy by conducting ongoing basic accounting and tax training for all Group employees.

Actively Communicating with Shareholders and Investors

As the director in charge of investor relations, I communicate with shareholders and investors nearly 100 times per year. Though I am sometimes unsure of how to respond to opinions expressed, I take all opinions seriously and report them to top divisional management by means of the Executive Committee. Even after becoming the CFO this year, I have tried to maintain a dialogue with shareholders and investors, to the extent time allows, in an effort to build relationships of mutual trust.

I intend to help Shimadzu "Become a Company That Solves Challenges in Society in Collaboration with Partners All Around the World" by building the trust of not only shareholders and investors, but also of customers and society in general, and also by achieving sustained growth and increased medium- and long-term corporate value.

Message from the CTO



Mitsuo Kitaoka
Director,
Senior Corporate
Executive Officer

Shimadzu's Greatest Strength—Technical Expertise Maintained since Shimadzu was Founded

Shimadzu Group's greatest strength has been based on the technical capabilities and trust cultivated since the company was founded through a sincere response to what customers want. In addition, a close relationship with research institutions that are researching innovative technologies has resulted in acquiring advanced technologies and identifying advanced needs through joint research work with such institutions. Furthermore, Shimadzu's ability to respond to new technologies due to a foundation provided by involvement in a diverse range of technical areas and the high discretionary freedom of Shimadzu researchers and engineers, resulted in an ideal environment for generating highly creative and competitive technologies.

Thus far, the Medical Systems, Aircraft Equipment, and Industrial Machinery Divisions have deployed businesses focused on specific industries. In contrast, the Analytical & Measuring Instruments Division has deployed businesses in multiple fields of industry, such as pharmaceuticals, foods, metals, chemical engineering, environmental, and automotive fields. Broadly speaking, that means the analytical and measuring technologies can be a key factor in achieving synergistic benefits from cooperation with other business divisions and thereby represents core technologies that extend across the entire Shimadzu Group.

Promoting R&D to Prepare for the Next Generation

The research policy of the Shimadzu Group is to engage in developing new businesses and technologies that will be required by society in the future. For example, that includes researching and developing core technologies necessary for generating innovative next-generation products, developing new products that are better than current products or with better technologies, and developing common technologies with broad applicability that involve AI, IoT, and/or robotics technologies. That means it is important to promote research and development that is based on looking ahead to the next generation. Accordingly, in an effort to support current businesses and achieve additional growth, we are engaged in building the broad capabilities necessary for developing everything from basic technologies to products and applications.

We are also promoting the development of advanced technologies by participating in joint research and open innovation projects that combine the strengths of the Shimadzu Group with those of outside partners.

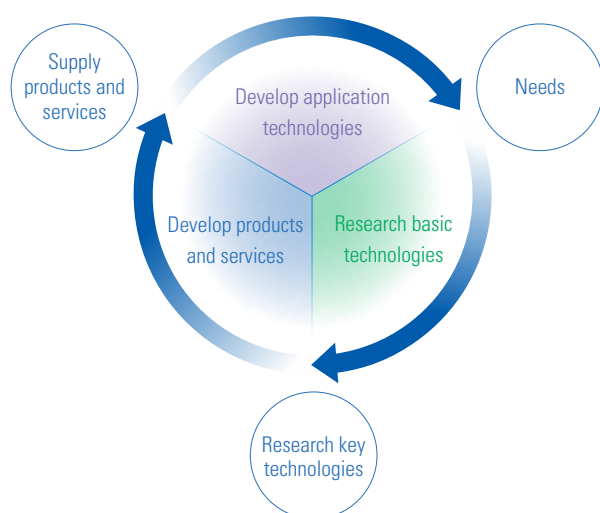
Technical innovation is a major driving force behind changes in the world. My role as CTO is to contribute to the growth and progress of Shimadzu by ensuring we predict future changes in society and new technological advances, coordinate our portfolio of technologies, acquire new technologies from a company-wide and long-term perspective, and generate new products and businesses.

Actively Engaging in Open Innovation

There have been two major policies we have been implementing since the previous medium-term management plan.

One is establishing additional locations for open innovation. We set up Innovation Centers in key regions outside Japan and have used them to identify local customer needs and develop application systems for those needs. Within Japan, we founded the Healthcare R&D Center in June 2019 and established the Shimadzu Future Collaboratory, the Shimadzu Tokyo Innovation Plaza, and other facilities for each layer of the research and development process (product development, basic technology research, and application development).

The other policy is to engage in organizational partnerships with research institutions that have a large number of development seeds available. The partnership matchmaking process involves discussing the research projects that may be of interest to both organizations and the technologies individual researchers can offer. In the future, we intend to promote open innovation for all related processes, including planning, research, product development, and application development, and also deploy organizational partnerships with research institutions outside Japan.



Becoming a Company That Solves Challenges in Society in Collaboration with Partners All Around the World

During the previous medium-term management plan, we promoted developing outside partnerships and actively engaged in joint research with R&D partners. However, in reality, only a few of those projects resulted in actually implementing the resulting technologies in society and developing a commercial business.

To successfully commercialize results as a business will require working with and tapping the expertise of different types of partners other than just R&D partners. In other words, we need to identify and work with strategic partners to jointly create important systems for commercializing R&D results and establish business partners that can help use those systems to actually deploy the businesses. Therefore,

the current medium-term management plan specifies strong policies for commercializing R&D results and actually implementing the results in society, as an exit strategy for R&D partnerships.

Requirements for Generating Innovation

I think that in the past, researchers and engineers were generally expected to do everything by themselves, but they were also given broad freedom of discretion. That probably resulted in a more broad-but-shallow approach that was conducive to generating new ideas. In contrast, given the increasing technical sophistication of product development work in recent years, narrower specialization is increasingly expected in an effort to improve efficiency. Although higher specialized expertise levels are required as the steps involved in creating each product become increasingly specialized, such as mechanical design, electrical design, and software development, it seems there are fewer and fewer individuals able to envision future products in their entirety. Consequently, I think there is an urgent need to develop human resources that can think about products and technologies with a broad perspective.

Furthermore, previously even if new ideas were generated, we lacked the systems for developing them into new products or businesses. To solve that issue, a new Startup Incubation Center was established in October 2020 to incubate new startup businesses or help launch new products.

In terms of Shimadzu Group R&D, I think it is important to engage in so-called “deep tech,” which has been attracting a lot of attention in recent years. Deep tech refers to technological solutions based on innovative technologies that could have a major impact on solving challenges in society, but that also require a correspondingly large investment or long period to establish. Of course, even R&D work requires being mindful of short-term results, but it will nevertheless be essential to carefully consider deep tech within the scope of Shimadzu R&D. We therefore intend to consider deep tech very seriously, if only to ensure Shimadzu retains its key characteristics.

Contributing to Society through Science and Technology

I believe that constantly striving to implement our corporate philosophy “Contributing to Society through Science and Technology” and serving a role in building a sustainable society will surely result in increasing our corporate value. Thus, we are committed to ceaselessly researching and developing advanced technologies.

Message from the Director in Charge of Digital Transformations



Kunimasa Ito

Senior Managing Executive Officer,
In Charge of Information Systems
and Promoting
Digital Transformations
Jointly in Charge of
Technology Research

Promoting Digital Transformations for both Businesses and Business Processes

Due to revolutionary advances in online communication technologies, the adoption of automation and AI/IoT technologies at manufacturing plants, and impacts from the COVID-19 pandemic, many companies have started remote working practices, which are increasingly replacing conventional face-to-face sales meetings. Consequently, there has been an increasingly rapid transformation to digital technologies.

The Shimadzu Group intends to promote such digital transformations (DX) in order to achieve new growth and strengthen competitiveness by standardizing business processes, reforming organizational cultures, and fundamentally transforming business models. Accordingly, the Shimadzu Group will engage in two types of DX measures. “Business DX” measures use digital technologies to provide solutions to customers and “business process DX” measures use digital technologies to transform internal business processes.

Using Business DX for Solving Customer Challenges

So far, we have actively used business DX measures in response to the pandemic, such as to improve our webpages, conduct remote sales meetings, and conduct virtual product exhibitions, but next we intend to use business DX measures in more advanced ways. For example, many customers

currently visit Shimadzu websites to search for products. However, different application software and consumables are often used even for identical analytical instruments, depending on the given application. The current systems require the customer to investigate which products they need by themselves, which is very inconvenient. To address such frustration, we are considering adding functionality for recommending relevant products based on the customer’s search history or other information.

We have also developed MESSE SHIMADZU, a common platform for virtual product exhibitions. Previously, exhibitions were organized by individual divisions, but in the future they will be organized based on a theme, such as electric vehicles, to offer Shimadzu solutions that involve multiple divisions.

Using Business Process DX to Standardize Business Processes

Initially, it will be important to use business process DX for standardizing business processes within the Shimadzu Group. Unfortunately, there are still many jobs within the Group that rely on specific individuals or involve unnecessary processes. RPA and other digital technologies could be used to increase processing speed, but eventually company and organizational cultures will need to be reformed for DX to be truly successful.

Preparing a Platform for Promoting DX, Training Human Resources, and Establishing Security Countermeasures

For DX to be successful, it is essential to have human resources that not only have a high level of IT skills, but also can implement business model reforms. However, I am not very worried about human resources.

The Shimadzu Group already has a very large number of employees with advanced technical skills and knowledge, so I am confident we can do it by ourselves if we provide the proper training. Therefore, we will focus more on preparing training programs and corresponding systems.

Meanwhile, in addition to DX measures for improving our offense, we will also implement proper cybersecurity measures to ensure a strong defense. The Shimadzu Group already specifies information security policies and trains personnel using E-learning and other appropriate methods, but given the need to increase cybersecurity measures to a new level, we will start implementing additional measures accordingly.

Expect Great Things from the Shimadzu Group as DX Reforms are Implemented

Our businesses provide deep access to the R&D and business development processes of customers. That puts us in a position to learn a lot about the challenges being faced by customers. As business process improvements are implemented within the Shimadzu Group, we aim to offer those systems to customers so that both Shimadzu and Shimadzu customers can achieve growth and competitive strength. Therefore, expect great things from the Shimadzu Group as we use DX measures to achieve major reforms.

Model for Creating Value

Using Remote Technologies to Achieve Faster and More Convenient Customer Response Capabilities

To ensure we can provide timely customer response even during the COVID-19 pandemic, many sales activities are being performed remotely, such as product demonstrations, facility tours, and on-the-spot analysis, where Shimadzu instruments are used to actually analyze samples provided by customers.

Performing such activities remotely offers many benefits for both customers and Shimadzu, such as by eliminating the trouble and downtime associated with travel, simplifying scheduling, and enabling simultaneous participation by many customers. If a video of the event is recorded, it also allows checking the video later. We therefore intend to continue using remote technologies as a tool for achieving even faster customer response than before.



Remote Product Demonstration

New MESSE SHIMADZU Virtual Showroom

The new MESSE SHIMADZU virtual showroom was opened in March 2021. In addition to providing a forum for showcasing Shimadzu products and solutions offered by different divisions for specific fields and markets, the showroom also offers solutions for customer challenges by means of online seminars.



MESSE SHIMADZU Virtual Showroom

Business Overview and Results

Shimadzu is committed to achieving sustainable development and growth for both Shimadzu and society by continuing corporate activities that meet the expectations and demands of our stakeholders.

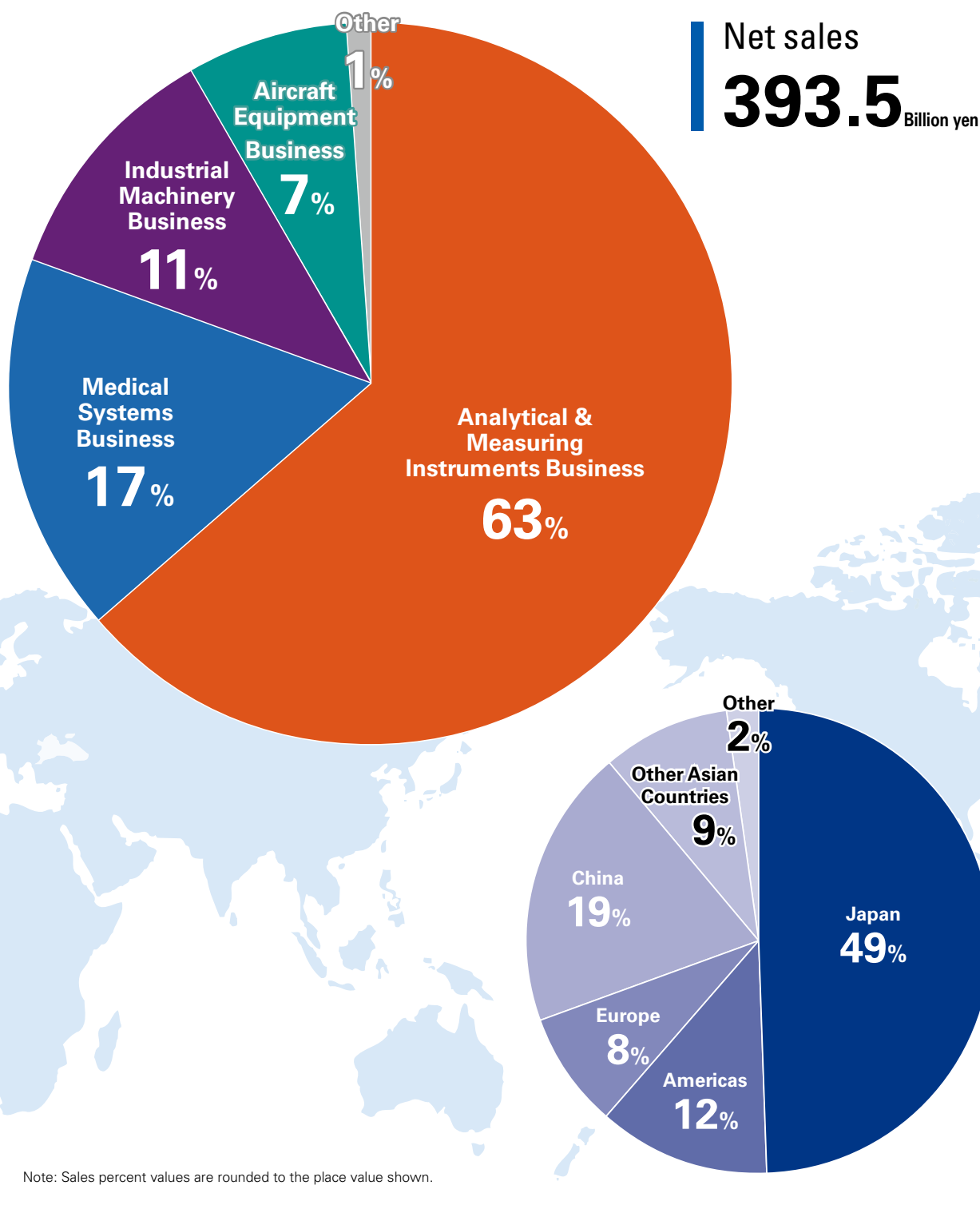
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Business Overview

The Shimadzu Group creates innovative products and services with partners throughout the world, particularly in businesses related to human health, safety and security of society, and industrial progress.

We strive to build a more prosperous society by using exceptional science and technology to contribute to progress in a wide range of industries, such as pharmaceuticals, healthcare, environmental, energy, semiconductors, and materials.



Analytical & Measuring Instruments Business

Supports research, technology development, and quality control in a variety of fields, including pharmaceuticals, foods, and materials by offering high-performance analytical instruments.

Key Products	<ul style="list-style-type: none"> • Liquid chromatographs • Mass spectrometers • Spectrometers • Environmental monitoring instruments
Main Applications	<ul style="list-style-type: none"> • Quality control in foods or pharmaceutical industries • Early disease detection or drug development • Environmental analysis, such as for water quality or air pollution • Evaluating strength of various materials and non-destructive observation of industrial products
Users	Manufacturers of pharmaceuticals, foods, materials, energy, automobiles, industrial machinery, etc., and government/academic institutions

FY 2020

Net sales	Operating income	Overseas Sales ratio
248.6 Billion yen	42.5 Billion yen	58%

LCMS-8060NX Liquid Chromatograph Mass Spectrometer



Medical Systems Business

Contributes to maintaining and improving the health of people by offering medical systems for supporting accurate diagnoses.

Key Products	<ul style="list-style-type: none"> • Fluoroscopy systems • Mobile X-ray systems • Angiography systems
Main Applications	<ul style="list-style-type: none"> • Diagnostic X-ray imaging for pneumonia, bone fractures, etc. • Catheterization support for cardiovascular or cerebrovascular diseases
Users	Hospitals and clinics

Trinias Angiography System



FY 2020

Net sales	Operating income	Overseas sales ratio
66.9 Billion yen	4.4 Billion yen	45%

Industrial Machinery Business

Supports cutting-edge manufacturing by offering high-performance key components to contribute to industrial development.

Key Products	<ul style="list-style-type: none"> • Turbomolecular pumps • Hydraulic equipment • Industrial furnaces
Main Applications	<ul style="list-style-type: none"> • Generating vacuum environments for semiconductor manufacturing processes • Motive power sources for industrial vehicles, etc.
Users	Semiconductor manufacturing equipment manufacturers, industrial vehicle manufacturers, etc.

FY 2020

Net sales	Operating income	Overseas sales ratio
45.1 Billion yen	4.1 Billion yen	49%



Turbomolecular Pump
(Vacuum Pump)



Hydraulic Gear Pump

Aircraft Equipment Business

Contributes to safety, comfort, and reducing stress on passengers by offering cutting-edge aircraft equipment.

Key Products	<ul style="list-style-type: none"> • Flight control systems
Main Applications	<ul style="list-style-type: none"> • Controlling the aircraft attitude, etc.
Users	Japan Self-Defense Forces, aircraft manufacturers, etc.

FY 2020

Net sales	Operating income	Overseas sales ratio
28.6 Billion yen	0.1 Billion yen	13%



Analytical & Measuring Instruments Business

Analytical & Measuring Instruments



We contribute to solving challenges in society by using analytical and measuring technologies to support manufacturing in food, pharmaceutical, and industrial fields, by using cutting-edge life science research applications, such as for COVID-19 virus detection and testing technologies, to screen for cancer or dementia using mass spectrometer systems, and by analyzing water quality, air pollution, and other environmental samples.



Yoshiaki Mase

General Manager, Analytical & Measuring Instruments Division

Business Environment

Today, we are expected to help achieve a sustainable society by implementing infectious disease countermeasures, establishing a safer and more secure society, reducing our global environmental impact, developing environmentally friendly new materials, improving food safety and other public health conditions, and so on.

Given such business conditions, the Shimadzu Group contributes to solving challenges in society by offering analytical and measuring instruments and services.

Challenges in Society

- Declining birthrates and aging populations are resulting in higher costs for healthcare, social welfare, and other services. Due to growing interest in health, there is also increasing demand for ultra-early or preventive diagnosis capabilities, and countermeasures, prevention, and rapid diagnosis of infectious diseases.
- With increasing global warming, there will be increasing water shortages, expanding use of renewable energies for achieving carbon-neutrality, and a shift to electric, hydrogen, or biofuel power sources that reduce CO₂ emissions.
- As structural materials for automobiles and other transport equipment become more sophisticated, lighter weight, more fuel efficient, and easier to process, customers are involved in complying with safety regulations for functionally engineered materials and improving reliability.

Value Provided

Healthcare Field

- We contribute to preventing the spread of infections by developing infection testing technologies, such as the novel coronavirus detection kits, and developing data management, virus monitoring, and other solutions.
- We contribute to maintaining people's health by developing technologies for the early diagnosis of diseases, such as dementia, cancer, and lifestyle diseases, and by developing a health management system for managing all stages of healthcare, from medical intervention to prognosis management and nursing care.
- We contribute to new drug development and productivity improvements by providing technologies to pharmaceutical companies, not only for advanced separation analysis, mass spectrometry, and cellular analysis technologies, but also by supplying AI/IoT-based data analysis technologies.
- In the food field, we help ensure the safety and security of food by testing for residual pesticides and water quality, evaluating the presence of regulated substances contained in packaging, and ensuring regulatory compliance.

Data Integrity

- We offer systems for centralized control of analytical instruments, testing information, and so on, that improves the efficiency of testing and analysis processes and prevents altering, replacing, or otherwise changing data.

Environment and Energy Fields

- We contribute to achieving a carbon-free society by supplying systems and application software that are useful for developing clean energy technologies.
- We contribute to global environmental conservation by supplying instruments for measuring microplastics and various environmental pollutants.
- We contribute to reducing customer energy usage by making Shimadzu products more energy efficient, making consumables last longer, and so on.

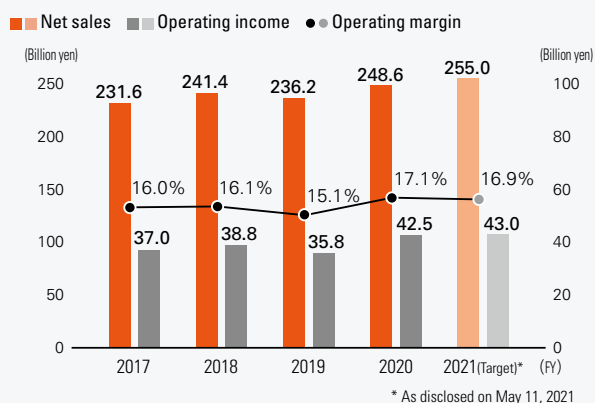
Materials Field

- In the transport equipment field, where there are increasing needs for inspection, analysis, and evaluation testing, we contribute to developing new materials that improve fuel efficiency and safety, by offering an extensive variety of solutions based on a wide range of analytical and measuring technologies for satisfying the needs in the field.

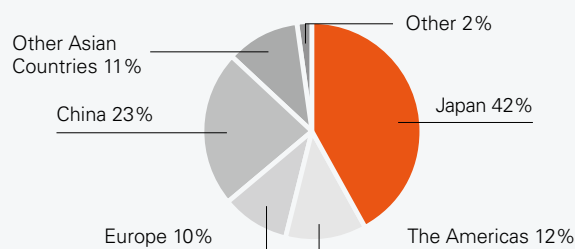


LabSolutions DB/CS
Analytical Data Processing System

Net Sales/Operating Income/Operating Margin



Ratio of Net Sales by Region



FY 2020 Results

Business Environment

- **Healthcare:** Because of the COVID-19 pandemic, healthcare markets have been expanding due to a trend by various countries to shift from importing pharmaceutical ingredients to producing them domestically and due to new pharmaceutical quality control and other requirements specified in the 2020 edition of the Chinese Pharmacopoeia.
- **Government/Academia:** Although business conditions were severe during the first half, demand started recovering in the second half, due to government expenditures in various countries.
- **Manufacturers:** Business conditions were severe for transport equipment and other manufacturers due to impacts from reluctance to invest in capital equipment.

Key Measures and Results

- Record net sales and operating income results achieved.
- Strong sales for healthcare applications, such as in pharmaceutical, clinical, and food safety fields.
- Activities for helping to prevent spreading COVID-19 infections were prioritized, resulting in novel coronavirus detection kits and a fully automatic PCR testing system that contributed to infectious disease countermeasures.
- Joint research projects with universities and research institutions were accelerated, such as the collaboration with Tohoku University for using breath samples to test for COVID-19 infections, the collaboration with Kumamoto University for predicting the severity of COVID-19 symptoms from blood or urine, and the collaboration with the Changi General Hospital (in Singapore) for establishing a joint research laboratory for clinical testing and individualized treatment using a mass spectrometer system.
- We released the LCMS-8060NX ultra-fast liquid chromatograph mass spectrometer system, which offers improved operability and durability while also achieving among the world's highest sensitivity and measuring speed levels, and the Advanced i-Series integrated high-performance liquid chromatograph system, which offers improved pressure resistance performance and enhanced functionality for supporting working from home or remotely.
- The aftermarket sales ratio was increased to 34% (+2 point year on year increase) by expanding/improving the novel coronavirus detection kit and consumables product lines.

Novel Coronavirus-Related Products



AutoAmp
Fully Automatic PCR Testing System



Novel Coronavirus Detection Kit

Key Model New Products



Advanced i-Series
Integrated Liquid Chromatograph



LCMS-8060NX
Liquid Chromatograph Mass Spectrometer System

Analytical & Measuring Instruments Business

Key Measures for FY 2021

- We will strive to expand business by acquiring advanced technologies through partnerships within and outside the Shimadzu Group and creating new truly unique and number-one products and businesses for solving challenges in society in a timely manner. We will also work with strategic partners and business partners to create systems for using Shimadzu Group products and services to help solve challenges in society.

Contributing to Society and Expanding Business through Infectious Disease Countermeasures

Preventing the COVID-19 pandemic from spreading has become a global challenge. Therefore, the Shimadzu Group will develop and offer quick and accurate tests for infectious diseases in general and provide support for developing corresponding therapeutic drugs.

We will also engage in measures to establish new testing methods, such as testing for viruses in breath samples or predicting and preventing more severe symptoms based on urine or blood tests.

In addition to establishing testing capabilities for verifying negative test results, we will also promote partnering with governments and local authorities to create systems for fighting infectious diseases.

In June 2021, the Shimadzu Group signed a letter of understanding with Shionogi & Co., Ltd. regarding a partnership intended to achieve the early adoption of systems in society for monitoring COVID-19 and other infectious diseases in sewer water.

By utilizing the respective strengths of both partners, the partnership intends to establish monitoring systems in society that enable automatic detection of viruses in sewer water and early determination of infection rates or variant strain trends based on monitoring data.

Strengthening Key Models

We will offer high-resolution and high-sensitivity liquid chromatograph and mass spectrometer systems for expanding healthcare applications, such as pharmaceuticals, clinical testing, and food safety.

We will also expand/improve the product lines with products that reduce the work involved in analytical operations, such as fully automatic pretreatment systems based on AI, IoT, robotics, or other technologies.

Strengthening Businesses in the EU and U.S.

We will contribute to developing new drugs by promoting joint development of analytical instruments with strong partners in the EU and the U.S. pharmaceuticals markets and contract development/testing markets.

We will also increase market share by expanding sales of the new Nexera series liquid chromatographs, Nexera UC series supercritical fluid chromatographs, and the newly released LCMS-8060NX mass spectrometer systems.

Deploying the Amyloid-Beta Testing Business

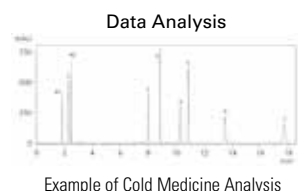
In June 2021, Shimadzu released the Amyloid MS CL system for measuring amyloid peptides in blood. Approved as a “controlled medical device” (Class II), the Amyloid MS CL system indicates biomarker values associated with amyloid-beta levels, which are considered a possible cause of Alzheimer’s dementia. In Japan and North America, Shimadzu has been deploying an amyloid MS contract analysis service intended for R&D. By participating in cohort studies with outside companies and research institutions, Shimadzu will contribute to developing therapeutic drugs and early prevention methods.

Life Sciences and Pharmaceuticals

- By investigating the metabolites, active ingredients, and other components contained in blood or urine, these instruments can be used for applications such as cancer or dementia screening or for verifying the efficacy of drugs.
- These instruments can measure the content of active ingredients and impurities in samples and can be used for quality control in a wide range of fields, such as in pharmaceutical, biochemical, food, and environmental fields.



LCMS-9030
Liquid Chromatograph Mass Spectrometer System



Nexera Series
Ultra High Performance Liquid
Chromatograph



TOC-100e
TOC Analyzer for Purified Water



LC-2030C NT Integrated Liquid Chromatograph
Compatible with Slide-In Columns

Foods and Chemicals

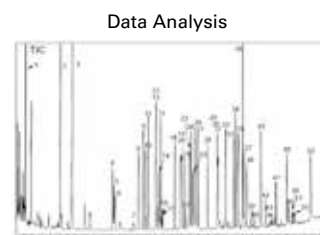
- These instruments help ensure food safety by accurately measuring trace amounts of components contained in samples. They are used in a wide range of fields, including food, environmental, chemical, electronic/semiconductor, and pharmaceutical fields.



ICPMS-2030
ICP Mass Spectrometer System



GCMS-TQ8050 NX
Gas Chromatograph Mass Spectrometer
System



Data Analysis

Example of Analyzing Pesticides in Tea Leaves

Materials

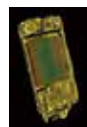
- These instruments are used to test the strength of a wide variety of items, such as rubber, plastic, or metal materials, or objects such as foods, mobile phones, or automotive parts.



SPM-Nanoa
Scanning Probe Microscope



AGX-V Series
Precision Universal
Testing Machine



Example of Observation
inside a Smartphone

inspeXio
SMX-225CT FPD HR Plus
Nondestructive Inspection Machine



KRATOS ULTRA2
Imaging X-Ray Photoelectron Spectrometer

Environmental and Energy

- We provide instruments and services that help ensure compliance with environmental regulations as well as support for alternative energies.



TNP-4200
Online Total Nitrogen and Total
Phosphorus Analyzer



Microplastics Collected along
the Seashore



IRSpirit
Infrared Spectrophotometer



EDX-7000
Energy Dispersive X-Ray Fluorescence
Spectrometer

Analytical & Measuring Instruments Business

This section describes how liquid chromatographs and mass spectrometer systems, which are considered key models and the strongest product lines of the analytical and measuring instruments business, contribute to pharmaceuticals and food safety.



Measures in the Pharmaceuticals Field

Pharmaceutical products require a very long development period and must satisfy strict quality control standards.

Shimadzu Group products provide support for a wide range of associated phases, from basic research and clinical testing to quality control during drug discovery.

The Shimadzu Group supplies high-performance liquid chromatograph (HPLC) systems to pharmaceutical manufacturers throughout the world for an extremely wide range of applications, from identifying candidate compounds before starting drug research to researching metabolic processes after drug administration and for quality control of the final product.

i-Series integrated high-performance liquid chromatograph systems from the Shimadzu Group are used for quality control by pharmaceutical manufacturers around the world,

not only because of the high reproducibility and robustness they offer, but also because customers appreciate their user-friendly operability. Furthermore, they offer intelligent functionality for processing large amounts of data with high accuracy, which can help save labor for customers working in quality control.

Thus, by offering HPLC systems, the Shimadzu Group contributes to achieving a society where safe and worry-free pharmaceuticals are available throughout the world.

Topics

Nexera UC Prep System Developed in Collaboration with a Major U.S. Pharmaceutical Consortium

The Shimadzu Group collaborated with Enabling Technologies Consortium (ETC), a major consortium of pharmaceutical companies in the United States, to jointly develop the Nexera UC Prep semi-preparative supercritical fluid chromatograph system.

Preparative systems are used to separate specific substances from samples and purify them, which has become an essential process step for extracting impurities from target compounds during the drug discovery phase or for extracting functionally beneficial components from chemical or food products. Improvements to the Nexera UC Prep system enable recovering 95% or more of target compounds using between about one-half to one-fifth of the labor hours normally required for preparative purification using conventional LC systems.



Measures for Food Safety

Food safety needs are diverse and require high accuracy. The Shimadzu Group offers products for supporting all aspects of food safety, such as for food ingredient labeling, regulatory compliance, and voluntary testing to verify safety.

By offering mass spectrometer (MS) systems, the Shimadzu Group contributes to ensuring safe food distribution and maintaining healthy water environments in order to protect the safe and secure day-to-day life of people around the world.

To ensure the safety of food and water, national and international regulatory bodies or other institutions have specified official measurement methods and criteria values.

Given that MS systems are able to measure trace quantities of hundreds of compounds simultaneously, they are perfect for identifying or quantifying trace pesticide residues in foods or trace pollutants in drinking water, for

example. Consequently, they are used by public agencies and contract analysis companies throughout the world.

Shimadzu also offers various software packages that can be used for rapid and accurate screening measurements, such as the database for residual pesticide analysis.

Nothing is more relevant to our daily lives than food and water. Therefore, to protect the safety of food and water, the Shimadzu Group is constantly developing and supplying new MS products that can measure substances more accurately and easily than before.

Topics

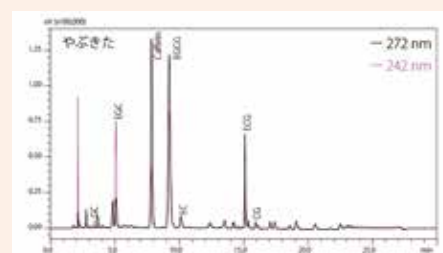
Establishment of NARO Shimadzu Kyoto Laboratory for Food Innovation

The Shimadzu Group helps improve health by analyzing the functionally beneficial components in food. In August 2019, Shimadzu signed a joint research agreement with the National Agriculture and Food Research Organization (NARO) and established the NARO Shimadzu Kyoto Laboratory for Food Innovation within Shimadzu's Healthcare R&D Center for the purpose of analyzing the functionally beneficial components in foods.

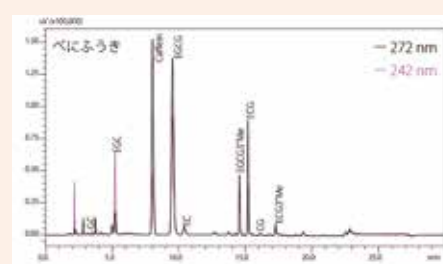
The laboratory aims at developing new methods that can quickly, easily, and accurately analyze components with functional benefits (such as food fiber, polyphenols, and carotenoids) in about 20 types of green teas, vegetables, fruits, and other foods or agricultural products developed by NARO in various regions of Japan.

The laboratory is also engaged in searching for new functionally beneficial components by building a component database.

The Shimadzu Group intends to normalize and standardize the results achieved by the laboratory and deploy them throughout the world in an effort to develop agricultural products with higher added value and to contribute to promoting better health in society.



Yabukita tea



Benifuki tea

Analytical & Measuring Instruments Business

Shimadzu Network-Compatible Analytical Data Systems

The global COVID-19 pandemic has significantly changed our daily lives. Due to the dizzying advancements in digital and network technologies, we are expected to respond quickly to changes in business conditions and use data and digital technologies to achieve digital transformations (DX). Meanwhile, to achieve a safe and secure society, we are also expected to comply with data integrity requirements not only for pharmaceuticals, but also in various other fields, such as foods, environmental, and steel fields.

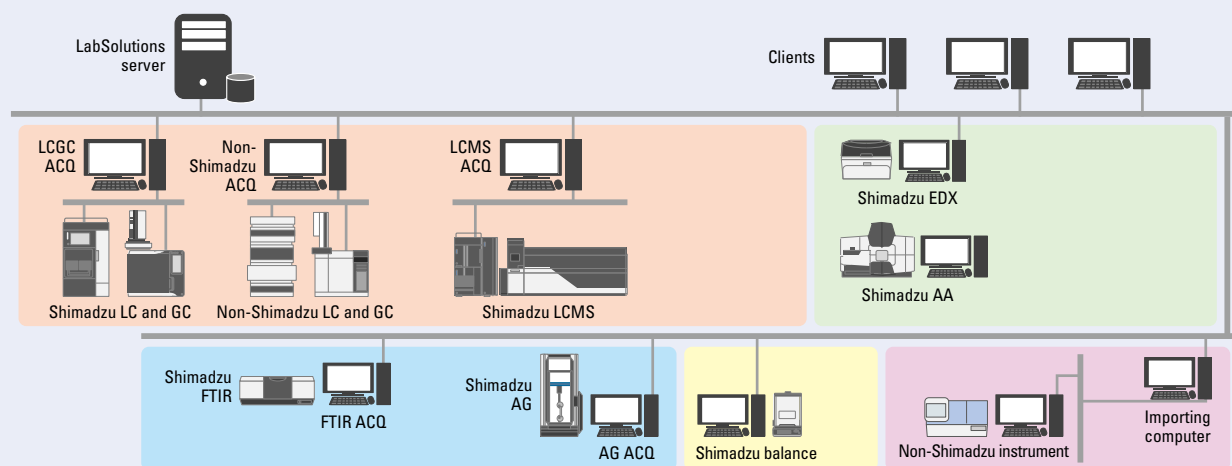
Therefore, the Shimadzu Group offers network-compatible LabSolutions analytical data systems that generate new value by helping customers implement business process reforms or solve challenges.

1 Connectivity to a Wide Variety of Instruments

Liquid chromatographs, gas chromatographs, mass spectrometer systems, and various other analytical instruments are widely used for quality control and R&D applications in pharmaceutical, chemical, food, and other fields. Consequently, demand for analysis and measurement in food safety and environmental conservation fields has been increasing in recent years, with customers trying to achieve even higher efficiency through business process reforms. Shimadzu network-compatible LabSolutions

analytical data systems can improve business process efficiency by managing analytical instruments used in customer laboratories and data more appropriately.

In addition to Shimadzu analytical instruments, they can even connect instruments and manage data for non-Shimadzu instruments. Some models can be monitored from a smartphone or other smart device, so that analysis can be performed while checking the instrument status remotely from a location away from the laboratory.



ACQ: Acquisition controller that controls analytical instruments and collects data



Directly access laboratory HPLC unit from a smartphone or tablet computer

2 Implementing DX Measures to Reform Analytical Processes

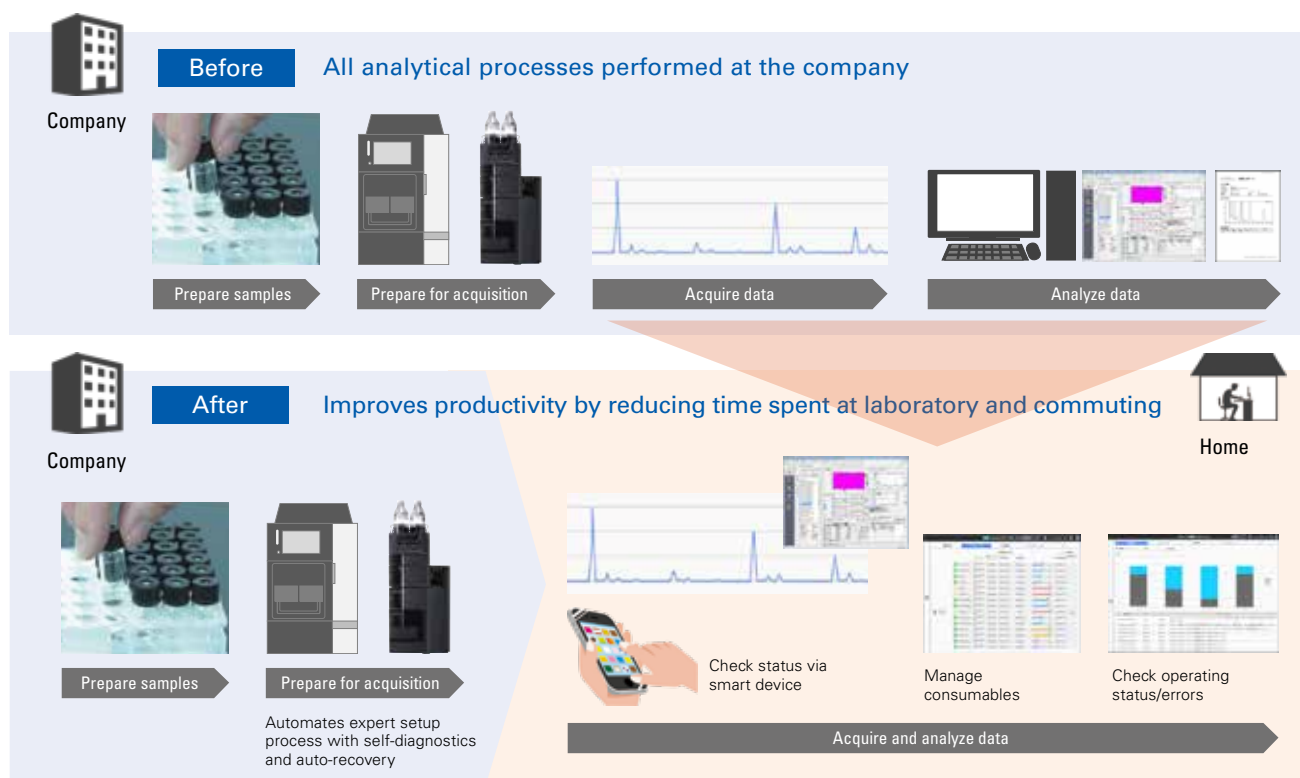
As people increasingly work from home or remotely, improving the efficiency of work processes through digital transformations (DX) has become an urgent challenge.

Shimadzu LabSolutions software enables remote access for configuring instrument settings, starting data acquisition, or performing post-run analysis on the acquired data. Some models, such as Nexera series ultra-high-performance liquid chromatographs, include “Analytical Intelligence” functionality that can be used to remotely perform a wide variety of operations that were previously

performed in-person, such as starting up and stabilizing the system.

That functionality can significantly improve the efficiency of analytical work by minimizing the number of laboratory tasks that must be performed by a human, enabling automatic execution of analytical processes, and allowing remote operability via a computer or smart device.

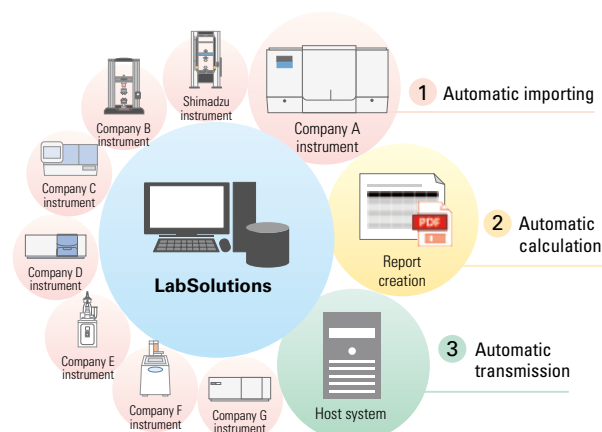
New functionality and solutions will continue to be added in the future to achieve even more analytical efficiency improvements or reforms.



3 Ensuring Data Integrity and Reforming Analytical Processes

Due to data tampering or other problems, there is growing interest in ensuring the reliability of analytical data in a variety of industries. Analytical laboratories need to ensure not only the accuracy of data obtained from analysis, but also that there were no errors or tampering involved in any of the steps taken to obtain analytical results from data. That requires checking the test results and a reliable analysis log (record of operations).

LabSolutions DB/CS supports compliance with such data integrity requirements. In addition to providing connectivity with a wide variety of analytical laboratory equipment, LabSolutions DB/CS can also be used to configure networked or cloud systems optimized for the given laboratory scale or form of operation, from small systems that consist of only a computer and an instrument to large systems configured from a large number of analytical or measuring instruments.





Medical Systems Business



We contribute to early detection and early treatment of a variety of diseases, such as infectious diseases, cerebrovascular/cardiovascular diseases, and cancers, at medical facilities around the world by offering easy-to-use medical systems that reduce the stress on patients, based on our state-of-the-art image processing technology.



Koki Aoyama

General Manager, Medical Systems Division

Business Environment

In developed economies, society demands medical care that mitigates the risks of injury and illness associated with aging populations, while minimizing the burden on patients. Even many developing countries are facing challenges with population aging, with health levels expected to approach the level of developed economies by 2035. Consequently, they are demanding more sophisticated healthcare technologies and diagnostic imaging systems.

Challenges in Society

- Achieve longer healthy life expectancies, so people can be healthy in their daily life.
- Provide more advanced examination technologies that can detect physical disorders as early as possible and identify the causes of diseases in more detail.

Value Provided

Diagnosis

- Fluoroscopy systems help maintain bone health by diagnosing osteoporosis or by using tomosynthesis software for follow-up examinations after artificial joint surgery.
- Dedicated head and breast PET systems can display high-definition images of brain tumors, epilepsy, breast cancer, and other disorders, and even contribute to Alzheimer's or other dementia research.
- For psychiatric disorders, we offer supplemental support for differential diagnosis of depression using near-infrared light.

Treatment

- We offer angiography systems equipped with a video imaging application for supporting cutting-edge minimally invasive procedures. We also offer near-infrared camera systems for supporting surgical techniques used in breast surgery, plastic surgery, gastrointestinal, and dermatology departments.

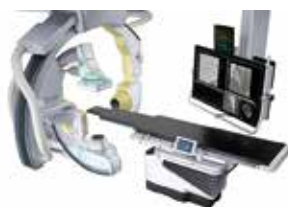
- To support efficient radiation therapy, we offer a tumor-tracking system that, used in combination with a radiation therapy system, can significantly reduce the radiation dose to normal tissue by efficiently radiating only cancer tissue.

Other

- To promote clinical applications for analytical technology, we are improving the practicality of techniques that can be used in the future to predict the risks of a wide variety of diseases from a single drop of blood.
- We provide support for improving the efficiency of healthcare administration, such as by offering returning patient reception systems and treatment fee payment systems to hospitals and electronic medical records systems to clinics.
- We improve the efficiency of radiological processes by including power-assist technologies in products.

Diagnostic X-Ray Systems

- Equipped with advanced image processing technology, these easy-to-use medical systems reduce the stress on patients.



Angiography System

SCORE PRO Advance



Improving the visibility of medical devices and reducing the radiation dose

SCORE RSM

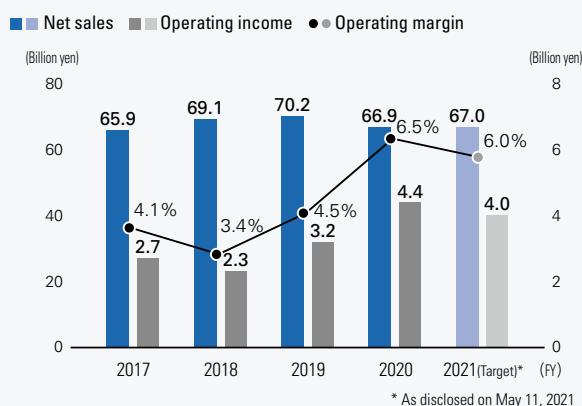


Imaging with low radiation dose levels that is minimally affected by movement

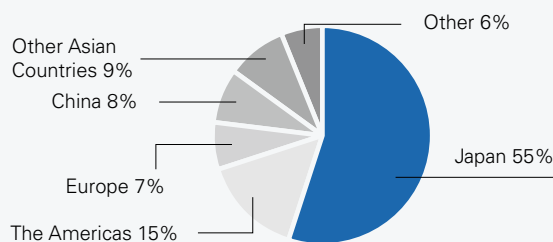


Mobile X-Ray System

Net Sales/Operating Income/Operating Margin



Ratio of Net Sales by Region



FY 2020 Results

Business Environment

Sales of mobile X-ray systems for pneumonia diagnosis increased due to the COVID-19 pandemic, but sales struggled for other models due to postponement or freezing of capital equipment investments as healthcare institutions focused on COVID-19 countermeasures or their profitability suffered.

Key Measures and Results

- Sales decreased, but record operating income was achieved due to cost and expense reduction measures.
- In Japan, sales decreased due to hospitals, clinics, and other healthcare institutions postponing or freezing capital equipment investments due to the COVID-19 pandemic.
- Outside Japan, sales increased due to increased sales of mobile X-ray systems.
- By diligently strengthening the aftermarket business, which resulted in service contracts increasing along with increased product deliveries, the aftermarket business sales ratio was 33% (3-point year on year improvement).

Key Measures for FY 2021

Expanding Sales of Fluoroscopy and Angiography Systems

We will expand/improve our offering of new products and software to increase market share for fluoroscopy and angiography systems.

Improving Healthcare Operating Efficiency

We will expand sales of products for improving the operating efficiency of healthcare institutions based on working practice reforms, such as patient reception systems and automatic payment systems.

Strengthening Measures in North America

We will expand sales of new fluoroscopy system products that can be operated according to clinical needs in the U.S. market and provide high-quality digital images using low radiation dose levels.



Table-Size Operable R/F System Offered in the United States

Expanding Businesses with Recurring Revenues

We will expand the aftermarket business by expanding service areas and applicable products, by adding IoT-based failure prediction functionality, and by offering remote inspection/operation services. We will also engage in promoting sales methods, such as subscription-based billing methods that generate recurring revenues for application software.

Solutions for Supporting Healthcare and Improving Healthcare Operating Efficiency

- PET systems are offered for producing high-definition imaging of brain tumors, epilepsy, and breast cancer.



Dedicated Head and Breast PET System

- We offer patient reception systems and electronic medical record systems.



Returning Patient Reception System



Fluoroscopy System



Bone Mineral Density Measurement



General Radiography System

Industrial Machinery Business



We contribute to industrial development by supplying high-quality and high-performance key components, such as turbomolecular pumps and equipment and parts equipped with sophisticated hydraulic technology.

The following web page includes information about the topics listed below.
<https://www.shimadzu.com/industry/index.html>



Vacuum Equipment/Industrial Machinery



Akira Watanabe

General Manager, Industrial Machinery Division and Fluidics Systems Division

Business Environment

As the demand for semiconductors continues to increase in response to increasingly widespread adoption of IoT and 5G technologies underlying the trend toward more extensive use of information in society, the market for turbomolecular pumps used in semiconductor manufacturing equipment is expected to expand as well. Due to recovering demand for logistics equipment, construction machinery, and agricultural equipment, demand for hydraulic equipment is expected to expand. To contribute to industrial development, we will release new products based on innovative technologies and develop new market fields.

Challenges in Society

- Develop sustainable and resilient infrastructure.
- Implement global measures to achieve a carbon-free society.

Value Provided

- We will promote sustainable infrastructure development by offering key products and manufacturing equipment that contribute to a broad range of advanced manufacturing industries, such as by offering turbomolecular pumps used as key components in semiconductor manufacturing equipment, gear pumps used as hydraulic power sources in forklifts and construction/agricultural machinery, and industrial furnaces for ceramics, expected to be increasingly demanded for use as electric vehicle circuitry heat sink or insulation materials.

- We contribute to the expansion of renewable energies by supplying glass winders for winding glass fiber used to reinforce wind turbine blades.



Turbomolecular Pump

Industrial Machinery

- Turbomolecular pumps are vacuum pumps used to create the ultra-high vacuum environment essential for manufacturing semiconductors and panels.



Turbomolecular Pump

- These furnaces are used to harden metals, ceramics, or other materials by heat-treating them in a vacuum or pressurized environment.



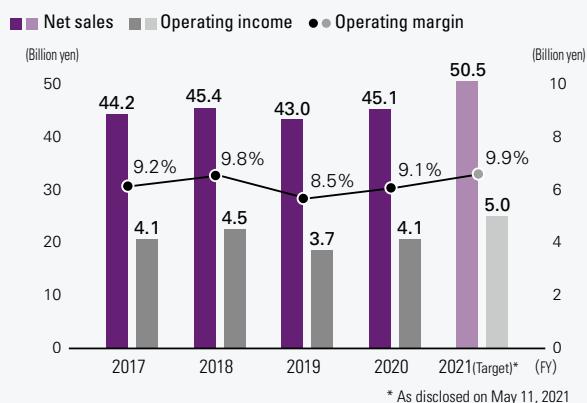
Industrial Furnace

The following web page includes information
about the topics listed below.

<https://www.shimadzu.com/hydraulic/index.html>

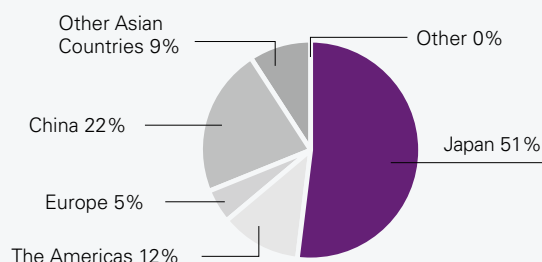


Net Sales/Operating Income/Operating Margin



Ratio of Net Sales by Region

Hydraulic
Equipment



FY 2020 Results

Business Environment

Sales of turbomolecular pumps, the division's strongest product line, were strong for use in semiconductor manufacturing equipment, due to increased semiconductor demand for 5G and data center applications. Hydraulic equipment and industrial furnace sales struggled due to the COVID-19 pandemic and lower capital equipment investment levels, despite increased sales in China.

Key Measures and Results

- Turbomolecular pump demand was strong for use in semiconductor manufacturing equipment, resulting in record sales.
- Hydraulic equipment sales were strong in China due to a recovery in capital equipment investment levels, but decreased in Japan, Europe, and the United States, due to lower demand for forklifts, construction machinery, and agricultural equipment.
- Industrial furnace sales decreased due to a slowdown in the machine tool and automotive industries.
- Turbomolecular pump aftermarket sales increased 8% (year on year) due to expansion/improvement of operating locations.

Key Measures for FY 2021

• Expanding the Turbomolecular Pump Business Again

By introducing new products with superior technology compared to competitor products, we will expand our market share of major semiconductor manufacturing equipment manufacturers in Japan, Europe, and the United States. We will also continue focusing efforts on expanding the aftermarket service business globally.

• Expanding Market Share for Hydraulic Equipment

In the United States, Europe, and China, which are major markets for hydraulic equipment, we will focus efforts on increasing market share by offering low-noise and high-efficiency models.

• Strengthening Measures for Automotive Industry

Due to the expanding adoption of electric vehicles, demand is expected to increase for products such as industrial furnaces used to manufacture ceramics for electric circuitry heat sink materials or balancing machines used to measure eccentricity between the center of gravity and center of rotation in motor rotors. We will expand/improve products and services for electric vehicles and strengthen measures for automotive applications.



EV Motor
Measurement
Example

- Balancers are used to eliminate eccentricity in various rotating parts by providing basic data for precision balancing (determining how uniformly mass is distributed throughout rotating bodies and shafts).



Balancer

- These hydraulic power sources are used for a wide range of applications, such as forklifts and other industrial vehicles, construction machinery, special-purpose vehicles, and agricultural equipment.



Hydraulic Gear Pump



Power Package



Forklift

Hydraulic Equipment

Hydraulic Gear Pump

Aircraft Equipment Business



We contribute to ensuring a safe and secure society by offering components, parts, and systems that integrate advanced technologies with sophisticated precision machining technologies.

The following web page includes information about the topics listed below.

<https://www.shimadzu.com/aircraft/index.html>



Aircraft Equipment/Marine Devices/Magnetometers



Susumu Yamamoto

General Manager, Aircraft Equipment Division

Business Environment

The global COVID-19 pandemic has changed the way people live their lives. In the aircraft industry, the previous strong sales fueled by expanding global markets have turned a corner and are now expected to undergo market changes that will be difficult to predict for some time to come. Nevertheless, there will be even greater demand for safely and securely transporting people and goods globally. Therefore, we believe there will be increasing needs for Shimadzu Group's advanced manufacturing technologies and cutting-edge technologies for ensuring security.

Challenges in Society

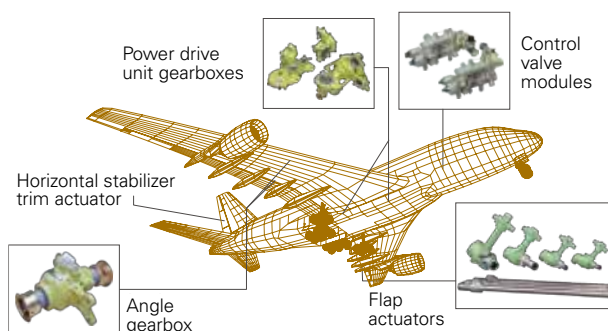
- Improve the resilience of social infrastructure and improve safety, environment-friendliness, and comfort in the mobility field.

Value Provided

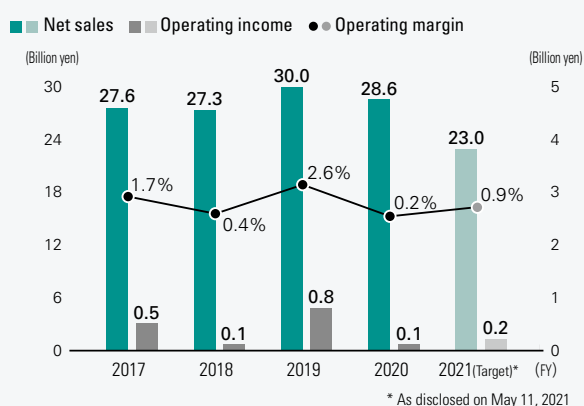
- Technologies for developing smaller, lighter, and electrically powered flight control systems contribute to reducing the environmental impact of aircraft.
- Air management technology used for air conditioning contributes to providing a more comfortable cabin atmosphere.
- Cockpit display technology contributes to improving the safety and reliability of flying.
- Underwater magnetic technologies contribute to improving marine and shipping safety.
- Quality control throughout the entire manufacturing and service value chain serves as a key means of ensuring the safety of aircraft.

Products for Commercial Aircraft and Defense Businesses

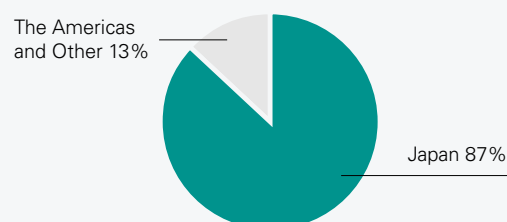
- The flight control system controls the lift, attitude, and other aspects of aircraft during flight. Its high-quality mechanical technology and highly reliable electronic control technology help ensure flight safety.



Net Sales/Operating Income/Operating Margin



Ratio of Net Sales by Region



FY 2020 Results

Business Environment

The major impact by the COVID-19 pandemic on the commercial aircraft industry has resulted in a severe business environment.

Key Measures and Results

• Defense Business

Sales increased due to large projects that compensated for decreased service projects.

• Commercial Aircraft Equipment Business

Sales decreased due to significantly lower demand in the commercial aircraft equipment field.

• Structural Reforms

The breakeven point was reduced by improving the cost structure based on improved efficiency and given business conditions and by selecting/consolidating areas of focus.



Illustration of Face Shield with Diagnostic-Assist Functionality

Key Measures for FY 2021

• Selecting and Focusing on Target Fields

To ensure profitability given the severe business conditions that are predicted to continue, designate whether to expand, cultivate, or withdraw from each product category, to select and focus on specific target products, regardless of whether they are for the defense or commercial aircraft equipment business.

• Promoting New Business

For over half a century, the Shimadzu Group has been supplying a variety of products and technologies to the Japanese Ministry of Defense and commercial aircraft manufacturers throughout the world since 1957.

All of those products have involved world-class technical capabilities and truly unique features. Therefore, we are considering launching a new business based on applying products and technologies from aircraft fields in the social infrastructure market, in an effort to achieve a safer and more secure society in an era living with or after COVID-19, and in the renewable energy market for achieving a carbon-free society.

One example is the development of face shields with diagnostic-assist functionality based on information display technologies used for helmet-mounted displays (HMD) worn by aircraft pilots. These shields could be used to successively display the body temperature, symptoms, test results, or treatment histories of hospital patients, and represents futuristic technology for hands-free information processing to assist front-line medical personnel working with infectious diseases.

Products for the Defense Business

Air Management System

Air management systems are used to adjust the air temperature and pressure levels inside aircraft. They contribute to ensuring a comfortable environment based on analysis and evaluation technology that continuously optimizes the onboard environment.



Cockpit Display

Shimadzu display systems use sophisticated electronic and optical technologies to display various flight information overlaid on the external view in head-up (HUD) or head-down (HDD) projection-type display systems. These systems contribute to reducing the burden on pilots and increasing safety.



Sustainability Strategy

The Shimadzu Group endeavors to improve environmental, social, and governance (ESG) measures, such as measures intended to help achieve carbon-neutrality or fight infectious diseases, and engages in sustainability management practices uniquely characteristic of the Shimadzu Group. We also strive to improve the ESG rating given by ESG assessors in order to achieve a positive cycle of improvement that further strengthens measures.

Environment

Rapid global economic growth and progress are causing increasingly serious consequences in the global environment, such as extraordinarily large storms, heavy rains, and other climate changes around the world and pollution from waste and chemical substances.

Therefore, as part of our commitment to global society and to information disclosure, the Shimadzu Group became a signatory to the United Nations Global Compact, which is a set of principles recommended by the United Nations for environmental conservation, endorsed disclosing information about the impact of businesses on climate change, as recommended by the Task Force on Climate-related Financial Disclosures (TCFD), and obtained certification by the Science Based Targets (SBT) initiative that our target levels for reducing CO₂ emissions generated from business activities have a scientific basis.



Environment
(E)

Measures for Achieving Carbon-Neutrality

Supporting a Circular Economy

Contributing to Conservation of Biodiversity



● **Nikkei SDGs Management Survey**

(System for assessing about 700 companies in Japan)



FY 2019
Within
top 117



FY 2020
Within
top 39



**FY 2021
Within
top 30**

Society

Shimadzu is committed to achieving sustainable development and growth for both Shimadzu and society by continuing corporate activities that meet the expectations and demands of our stakeholders.



Society
(S)

**Contributing to People's Health, Fighting Infectious Diseases,
and Managing Employee Health**

Initiatives to Achieve Advancements in Science and Technology

Contributing to Advancements in Industry and Society

Safety and Security of Society

Responsible Member of Society

Governance

To achieve sustained growth, increase medium- and long-term corporate value, and ensure effectiveness, we are engaged in building a system of governance.



Governance
(G)

Strengthening Shimadzu Group Internal Controls

Strengthening Intellectual Property Strategies

Mitigating Risks of Natural Disasters

● **CDP**
(Climate change)



FY 2020
C-rating



**FY 2021
B-rating**

● **FTSE**
(Index used by GPIF)

**Aim to use index by
FY 2022.**

Environmental Report

Shimadzu is engaged in various business activities intended to achieve development and growth for a sustainable society by solving environmental challenges.

- 55 Solving Various Environmental Challenges in an Effort to Achieve Development and Growth for a Sustainable Society
- 56 Certified as Eco-First Company by the Minister of the Environment
- 56 Shimadzu Joins RE100 International Environmental Initiative
- 57 Measures for Addressing Climate Change
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- 65 Designing and Supplying Products and Services that Promote Global Environmental Conservation
- 66 Activities for Conservation of Biodiversity
- 66 Each Employee Actively Engaged in Environmental Conservation Activities





Shimadzu is Engaged in Solving Various Environmental Challenges in an Effort to Achieve Development and Growth for a Sustainable Society

Large storms, heavy rain, flooding, and other abnormal weather events caused by global climate change, and pollution from waste or chemical substances are causing increasingly serious global environmental impacts. Consequently, many countries, including the U.S., China, and in Europe, have been actively implementing environmental countermeasures, such as setting long-term targets for achieving zero greenhouse gas emissions.

Given the current situation, the Shimadzu Group intends to promote development and growth for a sustainable society, solve environmental challenges, and increase our corporate value by engaging in a variety of activities based on the five commitments below.

Accordingly, in an effort to honor our commitment to global society and to information disclosure, the Shimadzu Group became a signatory to the United Nations Global

Compact, which is a set of principles recommended by the United Nations for environmental conservation, endorsed disclosing information about the impact of businesses on climate change, as recommended by the Task Force on Climate-related Financial Disclosures (TCFD), obtained certification from the Science Based Targets (SBT) initiative that our target levels for reducing CO₂ emissions generated from business activities have a scientific basis, and joined the RE100 in declaring a commitment to use 100% renewable energy for our business activities by 2050.



Five Commitments for Environmental Management by the Shimadzu Group (Eco-First Commitment)

1 We will implement measures for addressing climate change.

- Medium/long-term target reduction in CO₂ emissions: 30% reduction by 2030 (vs 2017)
- Actively introduce solar panels and other renewable energy equipment.
- Strengthen energy efficiency measures, such as by installing smart meters to enable the visualization of electric power usage.
- Offer products with superior energy efficiency to reduce CO₂ emissions from product operation by customers. Also strive to reduce the environmental impact of the entire supply chain.

2 We will implement measures for establishing a recycling-oriented society.

- Maintain a 99% or higher waste recycling rate at all production sites, research laboratories, and other facilities in Japan.
- Strengthen environmental monitoring capabilities at operations in Japan, such as for monitoring effluent water.

3 We will develop and supply products and services that promote global environmental conservation.

- Reduce Shimadzu's environmental impact by implementing life-cycle assessment (LCA) practices for all new products and achieve spread of more environmentally friendly products.
- Contribute to the environmental conservation of air, water, and soil by developing and supplying analytical and measuring instruments used to qualitatively and quantitatively analyze environmental pollutants.
- Provide support for a wide range of activities, from R&D activities for solving challenges in environmental and new energy fields to environmental conservation activities in local societies.

4 We will engage in biodiversity conservation activities.

- Help conserve biodiversity by engaging in forest maintenance activities in cooperation with community organizations or other groups.
- Implement activities to teach environmental conservation by holding on-site classes at schools or other locations.

5 We will actively engage in environmental conservation activities involving each employee.

- Actively engage in a variety of environmental activities within various business practices, with each employee engaged as a member of Shimadzu, an environmentally contributing company.
- Strive to increase environmental awareness by providing environmental education for all employees.

Certified as Eco-First Company by the Minister of the Environment

On October 21, 2020, Shimadzu issued the five “Eco-First Commitments” on the left as a declaration to Japan’s Minister of the Environment. As a result, Shimadzu Corporation became the first company in the precision equipment industry to be certified by the Minister of the Environment as an “Eco-First company,” in recognition of Shimadzu’s wide variety of advanced environmental conservation measures, policies, and goals introduced thus far.

Shimadzu is engaged in a wide variety of initiatives intended to solve environmental challenges based on achieving a carbon-free and recycling-oriented society. We are strengthening efforts to minimize our environmental impact, such as by reducing CO₂ emissions and increasing waste recycling rates at all Shimadzu operations. For many years, we have been developing and supplying analytical and measuring instruments used to support global environmental conservation and have also focused

efforts on supporting the development of new technologies in environmental and new energy fields. We are also committed to conserving biodiversity, such as by cultivating endangered rare plant species and maintaining forests in various regions.



Certification Ceremony (October 21, 2020)
Minister of the Environment Shinjiro Koizumi (left) with President Ueda (right)

The following web page includes information
about the topics listed below.

[https://www.shimadzu.com/sustainability/approach/
environmental/ecofirst.html](https://www.shimadzu.com/sustainability/approach/environmental/ecofirst.html)



Certified as Eco-First Company

Eco-First Program

Under this program, companies declare a commitment to Japan’s Minister of the Environment that they will proactively implement concrete environmental measures for addressing climate change and building a recycling-oriented society, and the Minister of the Environment then certifies that “the companies are actually engaged in progressive, original, and industry-leading business practices in environmental fields.” The purpose of the program is to promote the implementation of environmental measures in respective industries.

As of July 2021, 50 companies in a variety of industries have been certified.



Shimadzu Joins RE100 International Environmental Initiative Committing to Use Electric Power from 100% Renewable Energy by 2050

In an effort to contribute toward achieving a sustainable society, on March 24, 2021, Shimadzu joined the RE100 international environmental initiative and declared a commitment to use 100% renewable energy for all worldwide Shimadzu Group activities by 2050. As interim goals, Shimadzu also intends to achieve using 85% renewable energy by 2030 and 90% by 2040. Shimadzu is the first company in the global analytical and measuring instruments industry to join the RE100 initiative. The declaration means that, beginning in FY 2021, Shimadzu will successively introduce the use of 100% renewable energy at Shimadzu Group plants, research centers, and other facilities within Japan.

For example, for Shimadzu’s Technology Research Laboratory (in Kyoto Prefecture), Shimadzu signed an agreement to purchase “D-Green Premium” from the menu of renewable energies offered by the Osaka Gas Co., Ltd. That service promotes the development of new renewable energy power generation facilities by supplying electric power generated by newly installed renewable energy generating equipment and non-fossil fuel certificates.



1 We will implement measures for addressing climate change.

Measures for Achieving Carbon-Neutrality Intended to Help Establish a Carbon-Free Society

Global Trends and Expansion of New Environmental Markets (Carbon-Free)

During FY 2020, our lives were significantly impacted by wild fires, flooding, and other abnormal weather events around the world caused by climate change. Given the circumstances, as of the end of April 2021, 125 countries and one region, including Japan, had announced policies and started initiatives to achieve carbon-neutrality.

Considering the research and development occurring throughout the world in response to the global climate change crisis, Shimadzu measures to eliminate carbon use, the environmental contribution by Shimadzu products and services, and so on, are becoming increasingly important.

Reducing CO₂ Emissions

Using Renewable Energies and Reducing Energy Use

Due to initiatives to save energy, switch to renewable energies, improved electric power company emission conversion factors, and other factors, worldwide Shimadzu Group CO₂ emissions decreased 9% year on year to 35,080 t-CO₂ during FY 2020. Even the CO₂ emissions per unit of net sales improved 10.9% to 89 t-CO₂ per billion yen in sales.

In March 2021, Shimadzu joined the RE100 international environmental initiative and declared a commitment to use 100% renewable energy for all Shimadzu Group business activities by 2050. We also specified high interim targets of 85% renewable energy by 2030 and 90% by 2040. Shimadzu will reduce CO₂ emissions by actively promoting the use of electricity generated from renewable energies.

We are also considering further increasing the FY 2030 target 30% CO₂ reduction level (vs FY 2017).

The following web page includes information about the topics listed below.

<https://www.shimadzu.com/sustainability/approach/environmental/warming.html>

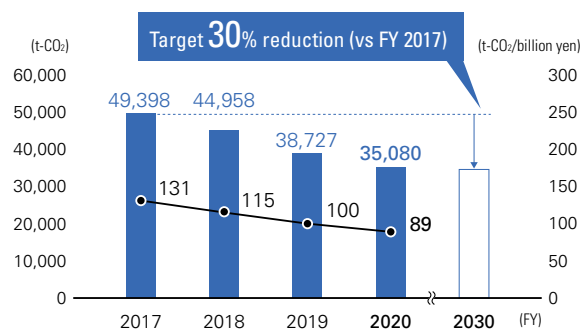


Preventing Global Warming

We will actively engage in achieving a carbon-free society and contributing to establishing a sustainable society.

Shimadzu Group (Worldwide) CO₂ Emissions from Energy

■ Shimadzu Group CO₂ emissions ● CO₂ emissions per unit of net sales



Examples of Facilities with Solar Panels Introduced



Technology Research Laboratory



Shimadzu Manufacturing Asia Sdn. Bhd. (Malaysia)



Shimane Shimadzu Corporation

Contributing to Achieving Carbon-Neutrality with Products and Technologies

Helping to Develop Efficient Renewable Energies and Ensure their Reliable Supply

Shimadzu will contribute to creating innovation in environmental/energy fields by supplying a variety of products and technologies that contribute to the development and quality control of technologies related to automobiles, batteries, and renewable energies, such as hydrogen fuels, biofuels, and offshore wind power, and that are essential for achieving carbon-neutrality. Carbon-neutrality is a core component of "green recovery" economic policies being implemented throughout the world.

Hydrogen Power Generation

A broad offering of inspection technologies helps ensure the safety and security of equipment maintenance and the reliable supply of energy.



Evaluation of Fuel Cell Catalysts
Portable Gas Analyzer



Non-Destructive Inspection of Hydrogen Tanks
Ultrasonic Optical Fatigue Testing System

Biofuel Power Generation

Shimadzu helps ensure a reliable supply of renewable energies, such as by supporting development, quality control, and improving the combustion efficiency of biofuels.



Measuring Moisture Content in
Wood Chips for Fuel
Electronic Moisture Analyzer



Biogas Component Analysis
System GC

Automotive and Battery-Related

Shimadzu analytical and measuring instrument technologies contribute to achieving a society with more environmentally friendly mobility.



Electrode Material Analysis
Chemical Bond State
Analyzer for Lithium-Ion
Battery Cathode Materials



Observation of Structures inside Parts
Microfocus X-Ray CT System

Offshore Wind Power Generation

Composite material manufacturing equipment and inspection systems contribute to building safer and more secure energy infrastructure.



Testing Part Strength
Precision Universal Testing
Machine



Manufacturing Glass
Fibers for Reinforcing
Turbine Blades
Glass Winder

Joint Development of Analytical Systems for Promoting the Widespread Use of Biofuels

In order to achieve carbon-neutrality and a carbon-free society by 2050, widespread use of bioethanol, biodiesel, or other biofuels with lower carbon dioxide emission levels will be required. Because organic acids or other oxygen-containing substances can inhibit consistent biofuel quality, achieving widespread use will require developing technology for efficiently identifying and removing such substances.

TotalEnergies SE (France), the University of Pau and the Adour Region (France), and the University of Oviedo (Spain) obtained a patent for an innovative technology that uses gas chromatography to separate compounds and break them down into constituent elements and then uses a mass spectrometer for detection. The method shortens the time required for identifying biofuel

components that contain oxygen to tens of minutes, rather than the several hours required previously, and provides more reliable measurement results.

Shimadzu signed a joint research agreement with the three parties to develop a revolutionary oxygen content analysis system based on using Shimadzu gas chromatography technology in combination with patented technology owned by the parties. Shimadzu will contribute to R&D and production improvements intended to promote the widespread use of biofuels.



TCFD Measures for Addressing Climate Change

For more details, refer to the website.

<https://www.shimadzu.com/sustainability/approach/environmental/climate.html>



Measures for Addressing Climate Change



Endorsing TCFD Recommendations, Obtaining SBT Certification, and Joining the RE100 Initiative

The Shimadzu Group considers environmental problems as one of our most important management challenges. To address the problem of climate change in particular, we are engaged in reducing CO₂ emissions generated from our business activities throughout the entire value chain and offering products and solutions that contribute to creating innovations in environmental and energy fields. In May 2019, we endorsed the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and have remained committed to disclosing relevant information.

Governance

As the highest deliberative body for environmental problems, the Environmental Committee, chaired by the President and attended by management level personnel, meets twice a year to identify societal trends, determine Shimadzu's current status, and discuss measures for solving the issues raised. Important matters relevant to Shimadzu Group environmental management, such as setting medium/long-term CO₂ emission reduction targets or joining the RE100 initiative, are decided by the Executive Committee or Board of Directors.

Strategy for Addressing Climate Change

In March 2021, Shimadzu announced a commitment to use electric power from 100% renewable energy by 2050 based on the RE100 initiative. Shimadzu specified a medium/long-term target of reducing CO₂ emissions from all Shimadzu Group business activities 30% by 2030 (vs 2017) and obtained SBT certification based on an initiative by the international environmental group Science Based Targets (SBT). Shimadzu is also considering increasing that reduction target.

Risks and Opportunities Based on Climate-Related Scenarios

The following describes a prediction of the future in various fields assuming two global-warming scenarios and indicates how the company intends to respond. One scenario assumes a transition to a carbon-free society that limits the temperature increase to within 1.5°C by the end of the current century. The other scenario assumes a temperature increase that reaches 4°C.

Automotive Field

Prediction of Future Market Conditions (Given 1.5°C Increase)

A rapid transition to electric-powered mobility would occur in response to worldwide actions for establishing a carbon-free society. In Europe, a law has been enacted to ban sales of new gasoline- and diesel-powered vehicles between 2030 and 2035. China is trying to change all new vehicles to electric power by 2035. Even in Japan, sales of new gasoline-powered and other vehicles will be banned in 2035, though that ban will include various exclusions such as for hybrid vehicles and is more lenient than in Europe. However, there are also predictions that the timing of the ban will be moved up.

Prediction of Future Market Conditions (Given 4°C Increase)

Despite the trend toward electric vehicles in developed economies, the trend will not progress as planned and gasoline- and diesel-powered



vehicles will continue to dominate. Nevertheless, electric and hydrogen-powered vehicle development will make steady progress, with broad use within general society predicted sometime after 2030.

Shimadzu Responses and Measures

With the increasingly widespread use of electric vehicles, there will be growing demand for large-capacity, safe, and efficient batteries. The current rush to develop fully solid-state batteries due to their superior safety characteristics, in particular, could provide an opportunity to contribute to supporting corresponding R&D or quality control efforts with evaluation technology, evolved gas analysis technology, or other technologies based on X-rays, such as nondestructive X-ray inspection systems and X-ray fluorescence spectrometers.

Given the needs for stronger and lighter materials, we intend to offer support with material testing machines and surface analysis technologies. Due to the progress in developing plastics made from biological sources, we will offer material testing machines, thermal analyzers, various chromatographs, and elemental analysis instruments for contributing to development and quality control of such plastics.

Energy Field

Prediction of Future Market Conditions (Given 1.5°C Increase)

Presumably multifaceted technological measures will be required, such as for storage battery, hydrogen, electrical transmission, and electrical power trading technologies used to support an expansion in the use of renewable energies while continuing to provide a safe and reliable electric power supply, but mainly involving government policies based on treating renewable energies as a primary source of electric power. Markets are also expected to expand in an energy field.

Due to the active introduction and rapid spread in the use of renewable energies and the changing mix and form of electric power sources, demand for storage batteries is predicted to increase.

In newly emerging economies with issues in preparing an adequate electric power infrastructure or other capabilities necessary for achieving widespread adoption of electric vehicles, a certain level of demand will remain for vehicles powered by gasoline or other fuels. Therefore, higher demand and lower prices are predicted for bioethanol used as fuel.

Prediction of Future Market Conditions (Given 4°C Increase)

In response to higher demand for electric power, business is predicted to expand for generating electricity not only from renewable energies, but also from burning clean natural gas. Demand for natural gas is predicted to increase as a fuel for generating electricity used to satisfy the additional demand for electricity that will exceed the widespread adoption of renewable energies.

Within Japan, installations of new solar panel equipment will slow after the electricity buyback system ends. Meanwhile, as many solar panels reach their expected service life of 20 to 30 years and an increasing number are damaged by natural disasters, a large increase in solar panel waste is expected.



Shimadzu Responses and Measures

Since hydrogen use will be promoted as an important energy source, we will offer various chromatographs to be used for quality control analysis in hydrogen manufacturing processes. For terrestrial and offshore wind power generation, we will develop and offer testing, inspection, and safety monitoring instruments for maintaining and managing equipment.

With the promotion of local production for local consumption for energy, wood biomass-based electricity generation is predicted to increase as well. We will contribute to wood biomass-based electricity generation by offering moisture analyzers used to ensure efficient operation and X-ray fluorescence spectrometers used to investigate the presence of hazardous substances in incineration ash. In response to expanding demand for bioethanol in newly emerging economies, we will offer gas chromatographs and elemental analysis instruments for bioethanol quality control.



Gas Chromatograph

CO₂ capture and storage (CCS) and CO₂ capture, utilization, and storage (CCUS) technologies are predicted to be essential for reducing CO₂ emissions from steel manufacturing and thermal power plants. For CCS, we will offer surface analysis and powder evaluation technologies for researching and developing CO₂ adsorbents. For CCUS, we will offer chromatographs for evaluating methanol or other substances generated from CO₂. We will also contribute to developing technologies for recovering CO₂ from biomass power generation equipment or directly from the atmosphere.

In terms of risks, there are concerns that demand for gas chromatographs used for purification and quality control will decrease as petroleum demand decreases. However, we expect that gas chromatograph demand will continue due to similar quality control processes required for oil generated from microalgae, which is expected to be a petroleum alternative. There is also concern that demand for emission gas analyzers will decrease due to the decrease in power generated from petroleum and coal, but we think some of that demand can be replaced by demand for biomass generation and we can capitalize on new demand for replacing equipment when systems are converted or for fuel quality control.

Opportunities Based on Climate-Change Scenarios

Category	Main Opportunities	Key Measures
Markets and Services	Increasing anticipation of technical innovations in various fields, such as renewable energies, new materials, mobility (automotive and aircraft, etc.), and batteries, and expanding needs for environmentally friendly products	Plan, research, and develop analytical and measuring instruments and other products and services that contribute to technical breakthroughs in respective fields and improve the environmental friendliness of all products.

Risks Based on Climate-Change Scenarios

Temperature Increase	Category	Main Risks	Period Generated	Key Measures
1.5°C Scenario	Government policies, laws, and regulations	Business costs increase due to carbon and energy consumption taxes	Short- to long-term	Introduce renewable energy and thorough energy efficiency measures for business activities.
4°C Scenario	Acute and chronic	Business continuity risks from storms, heavy rains, and other abnormal weather disaster events	Short- to long-term	Create and reliably implement BCP to ensure business continuity during disasters and assist customers damaged by disasters.

Semiconductor and Industrial Machinery Fields

Prediction of Future Market Conditions (Given 1.5°C Increase)

Markets for semiconductors and electronic components are predicted to expand due to the rapid adoption of remote communication technologies and digital technologies in society.

In the automobile parts market, a rapid increase in the percentage of electric vehicles is predicted to result in a rapid expansion in the demand for motors and batteries.

The ratio of biodegradable plastics is predicted to increase in the petrochemical market and the ratio of renewable energies, such as wind power generation, is predicted to increase rapidly in the energy/infrastructure markets.

Prediction of Future Market Conditions (Given 4°C Increase)

The semiconductor and electronic component markets can be expected to expand due to increasing adoption of digital technologies throughout society, but the ratio of electric vehicles, biodegradable plastics, and renewable energies will increase only modestly.

Shimadzu Responses and Measures

In response to the expanding markets for semiconductors and screen films for flat panel displays and smart devices, we will develop turbomolecular pumps essential for manufacturing such products and prepare adequate production capabilities in an effort to achieve the number-one global market share.

In terms of delivery pumps used in the petrochemical market, we will release new high-efficiency models designed for biodegradable plastics. Due to the shrinking gasoline-



powered vehicle market, demand for leak detectors used to test for leaks around gasoline tanks and balancers used to inspect the balance of engine rotation will decrease, but we will also release electric motor balancers and other new products in response to the increase in electric vehicles.

We will continue developing new industrial furnace products, required for heat-treating cutting tools or functionally engineered fine ceramics, that save energy by requiring a shorter treatment time, and developing glass fiber winding machines for wind power turbine blades.

Carbon-Reduction Measures within Business Activities

We will implement thorough energy-saving measures and promote using electricity generated from renewable energies. We conduct energy efficiency assessments for buildings and other facilities that consume large amounts of electricity, in an effort to identify and eliminate wasteful energy usage. These efforts have been steadily achieving results. We have specified targets of using 85% of electricity from renewable energies by 2030, 90% by 2040, and 100% by 2050.

Measures for Abnormal Weather

We are implementing measures to prepare for large storms, heavy rains, and other abnormal weather events that have been occurring with increasing frequency in various regions throughout the world. To prepare for disasters or predicted damage, we have initiated a business continuity plan (BCP) that is steadily being implemented. It includes measures for immediately establishing a disaster response task force, confirming and ensuring the safety of personnel, assessing and minimizing damage, and restoring operations as quickly as possible. The Shimadzu Group is also establishing capabilities for confirming the safety of employees, assessing damage to buildings, equipment, or information infrastructure, and diversifying risk, such as by taking out insurance policies.

We have also put in place a support system to help customers that use Shimadzu instruments to resume their business activities quickly and smoothly in the event of a disaster.

Indicators and Targets

- We intend to reduce CO₂ emissions from Shimadzu Group business activities 30% by 2030 (vs 2017).
- We intend to use only electricity generated from 100% renewable energies by 2050.
- We intend to reduce CO₂ emissions throughout the entire value chain, including emissions by customers and suppliers, and will implement measures to reduce the environmental impact of all products throughout their entire life cycle.

2 We will implement measures for establishing a recycling-oriented society.

Measures for Achieving a Circular Economy

Global Trends and Expansion of New Environmental Markets (Recycling-Oriented Society)

A variety of business models are being generated for transitioning from a linear economy, based on mass production, mass consumption, and mass disposal, to a circular economy that extends the value of products and

resources and minimizes the amount of waste generated. Shimadzu will therefore continue steadily implementing "3R" measures (reduce, reuse, and recycle) and other measures aimed at achieving a circular economy.

Recycling Resources

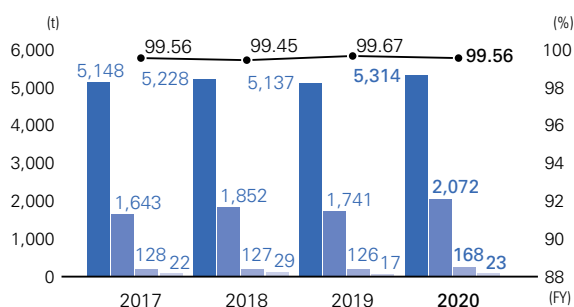
Promoting Appropriate Waste Processing and Recycling

Although production quantities decreased for certain models impacted by the COVID-19 pandemic, the overall output of unnecessary items during FY 2020 increased 3.4% (year on year), mainly due to metal shavings from increased production of mobile X-ray systems for pneumonia diagnosis due to the COVID-19 pandemic and turbomolecular pumps. Meanwhile, we have maintained a recycling rate over 99% for 11 years by prioritizing reusing resources. We appoint and train "Eco Leaders" and "Industrial Waste Leaders" at each Shimadzu location to promote initiatives for establishing a recycling-oriented society that uses the Earth's limited resources efficiently. Furthermore, we monitor suppliers, including regular site inspections of waste management vendors, and have established and implemented company regulations intended to ensure compliance with laws and regulations.

Waste Output and Recycling Rates

(Manufacturing, Research, and Major Manufacturing Subsidiary Locations in Japan)

■ Output of unnecessary items ■ Output of waste items
■ Hazardous waste (substances that require special waste management)*
■ Quantity eventually landfilled ● Recycling rate * Added this year



The following web page includes information about the topics listed below.

<https://www.shimadzu.com/sustainability/approach/environmental/waste.html>



Waste Management

Water Management

Reducing Water Usage and Managing Effluent Water Appropriately

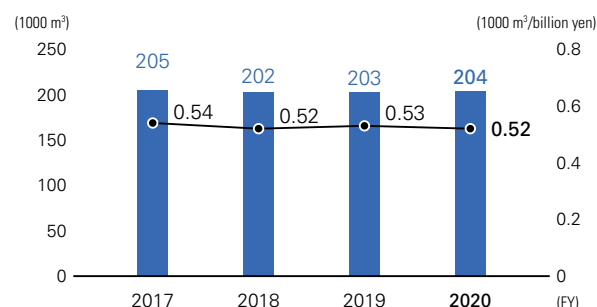
We are committed to reducing water usage, such as by watering green areas with rainwater and installing water-efficient fixtures.

In addition to performing process steps that involve chemical substances in accordance with regulations and procedures, we also prevent releasing potential water pollutants during those processes and only release the chemicals outside the facility after they have been properly neutralized or otherwise treated. We control plant effluents to our own voluntary standards that are stricter than the standards required by current laws and regulations. We continuously monitor the total organic content (TOC) in effluent waters from Sanjo Works, Seta Works, and Hadano Works, Shimadzu's main production locations. The ability of TOC analyzers to detect and quickly measure organic pollutants makes them ideal for quickly monitoring water from upstream effluent points. We will continue to deploy our experience from using TOC analyzers broadly throughout society to achieve widespread use and support customer environmental measures.

Water Usage

(Manufacturing, Research, and Major Manufacturing Subsidiary Locations in Japan)

■ Water usage ● Water usage per unit of net sales



The following web page includes information about the topics listed below.

<https://www.shimadzu.com/sustainability/approach/environmental/chemical.html#water>



Water Management

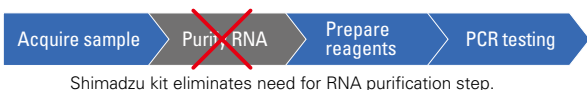
Reduce

Reducing Waste from PCR Testing



Regular PCR testing requires an RNA purification process that generates large amounts of solid and liquid waste, however using Shimadzu PCR testing kits eliminates the need for RNA purification. That significantly reduces the quantities of waste generated from consumables, such as ethanol and other reagent liquid waste, plastics, and so on. For example, the waste reduction from actually performing one million tests using the kits reduced plastic waste by over 14 tons and reagent liquid waste by over 2,200 liters (about 2.2 tons), which provided a huge waste reduction benefit. Furthermore, the kits also reduce the number of process steps, so more tests could be performed each day.

Coronavirus Detection Process by PCRTesting



Improving Environmental Friendliness of Packaging Materials –Using Bioplastic Packaging Materials

In an effort to improve the environmental friendliness of products and business practices, Shimadzu has also been using more environmentally friendly packaging materials. Starting in April 2020, packaging materials used for some products were substituted with biomass plastic bags, made from 30% green polyethylene plant-based plastic. Biomass plastic not only reduces the amount of petroleum-based plastic used, it also reduces CO₂ emissions from photosynthesis during the growing stage of the main ingredient, sugar cane. It also generates less CO₂ emissions than petroleum-based polyethylene during manufacturing and other processes. Consequently, it is expected to contribute toward preventing global warming.



Plastic Bags Made with “Green Polyethylene”



Used for Nexera Series Accessories

Reuse

Reducing Waste by Reusing Packaging Materials

In an effort to reduce the amount of stretch wrap film (plastic) used to prevent loads from falling during transit, Shimadzu Logistics Service Corporation, which is in charge of Shimadzu Group shipping logistics, started using reusable and efficient Eco Band pallet straps. Using the Eco Band straps has reduced the amount of plastic waste by 460 kg in one year.

At a Shimadzu Group company in the UK, employees have been actively involved in implementing environmentally friendly reusing practices. One such measure is the “reusable supplier delivery container project,” which involves using reusable packing boxes to transport purchased parts or service parts from suppliers. The container was designed in cooperation with suppliers based on operations during production. Using the containers, which are designed specifically for packing the given parts, offers a wide range of benefits, such as reducing expenses from damage during transit and from less disposable corrugated fiberboard box waste.



Using Stretch Wrap Film



Using Eco Band Straps



Independently Designed Supplier Delivery Containers

Recycle

Using Unnecessary Items in Business Activities

—Recycling Wood Debris and Paper

Generating wood debris from wooden pallets and packing materials used for shipping as part of business activities is unavoidable. At Seta Works (in Otsu City, Shiga Prefecture), such wood shipping materials are broken down and sent to a recycling vendor in the Shiga Prefecture that converts the wood to carbon for reuse.

The charcoal produced by the recycling process is used to improve soil in green areas of Shimadzu properties or donated to the NPO Setouchi Olive Foundation in Teshima (Kagawa Prefecture) for use in the five olive groves operated

The following web page includes information about the topics listed below.

<https://www.shimadzu.com/environment/index.html>



Shimadzu Environmental Contribution

by the foundation. It is also converted for events or other uses, such as a deodorizing agent or to extend the life of cut flowers.

Waste paper collected at recycling collection sites within Shimadzu is recycled as notebook paper.



Scattering Charcoal at a Setouchi Olive Grove



Charcoal Donated to Botanical Garden for Extending the Life of Cut Flowers

Topics

—Seawater and River Pollution from Waste in Effluents— Contributing to Determining the Actual Status of Microplastic Problems

To identify environmental pollution problems from microplastics in oceans, rivers, and other environments, various investigative and research organizations throughout the world are involved in assessing the actual status of microplastics (such as particle count, distribution density, size, composition, and adhered substances) being discharged into the environment or ingested into biological organisms. The IRSpirit Fourier transform infrared spectrophotometer is essential to microplastic analysis because it is ideally suited to identifying and quantifying substances or predicting their chemical structure. Shimadzu's Plastic Analyzer system includes two databases available only from Shimadzu, namely a UV-Degraded Plastics Library which allows for UV-degraded plastics analysis though they cannot be conventionally measured, and a Thermally-Degraded Plastics Library. Consequently, using the system enables analysis of microplastics floating in oceans or other natural environments. For microplastics, an ISO international conference has been established to specify standard measurement methods. In Japan, Shimadzu participates in a committee that proposes analytical methods for microplastics.

Similarly, Shimadzu Techno-Research is surveying and researching petroleum-based and biodegradable plastics to determine whether microplastics in the ocean cause a "vector effect" by acting as a medium for transporting chemical substances. Shimadzu Techno-

The following web page includes information about the topics listed below.

<https://www.shimadzu.com/an/industries/environment/microplastics/index.html>



Microplastics

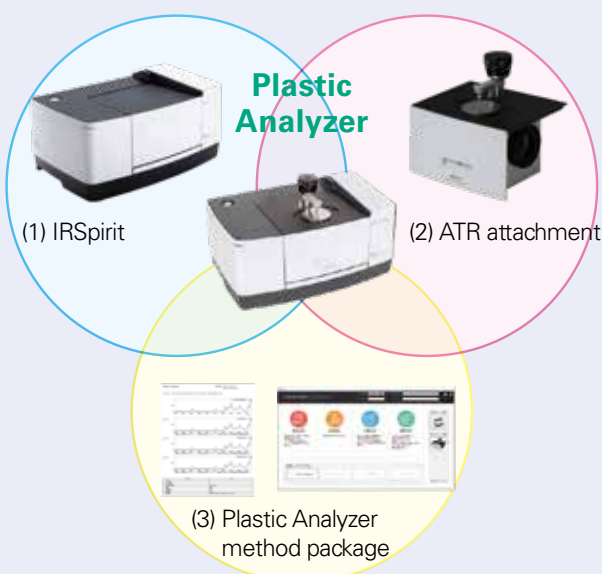
The following web page includes information about the topics listed below.

<https://www.shimadzu.com/environment/product/index.html>



Contribution through Products and Services

Research has also been contracted by the New Energy and Industrial Technology Development Organization (NEDO) to develop testing methods for evaluating the vector effect.



3 We will develop and supply products and services that promote global environmental conservation.

Improving the Environmental Friendliness of All Products

Environmental Considerations in Product Development

The Shimadzu Group is committed to improving the environmental friendliness of products in an effort to minimize our impact on the global environment. In particular, products that achieve especially high environmental performance are offered to customers as certified Eco-Products Plus products. To be certified, Eco-Products Plus products must satisfy one of three criteria. They must (1) consume at least 25% less energy, (2) be at least 25% smaller, and/or (3) consume at least 25% less of consumables, such as gases or solvents, than previous models. So far, 143 models have been certified. During FY 2020, these models reduced CO₂ emissions generated at customer operations by 51,725 tons. That is more than all the CO₂ emissions by the entire Shimadzu Group. Shimadzu also specified an interim goal of increasing the ratio of Eco-Products Plus products to 30% of product sales by FY 2030.

A program started in October 2019 to improve the environmental friendliness of all products has included a requirement in the review criteria for new product development that requires all new products to include measures for reducing their environmental impact. A checklist in Product Design Guidelines ensures those working in product design and development are constantly mindful of environmental friendliness.

The following web page includes information about the topics listed below.

<https://www.shimadzu.com/sustainability/approach/environmental/ecoproplus.html>



Eco-Products Plus Certified Environmentally Friendly Products
—Designed to Reduce Global Environmental Impact—



—Striving to Minimize Shimadzu's Global Environmental Impact—

Eco-Products Plus

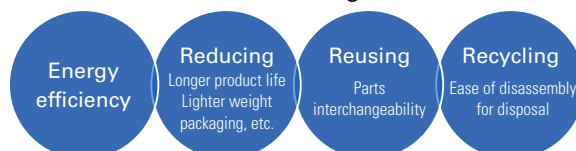
- 1 At least **25%** lower energy consumption
- 2 At least **25%** smaller size
(in terms of weight, volume, and/or footprint)
- 3 At least **25%** reduction in use of gases, solvents, or other consumables

Eco-Products Plus products must satisfy one of the criteria compared to the previous Shimadzu model.

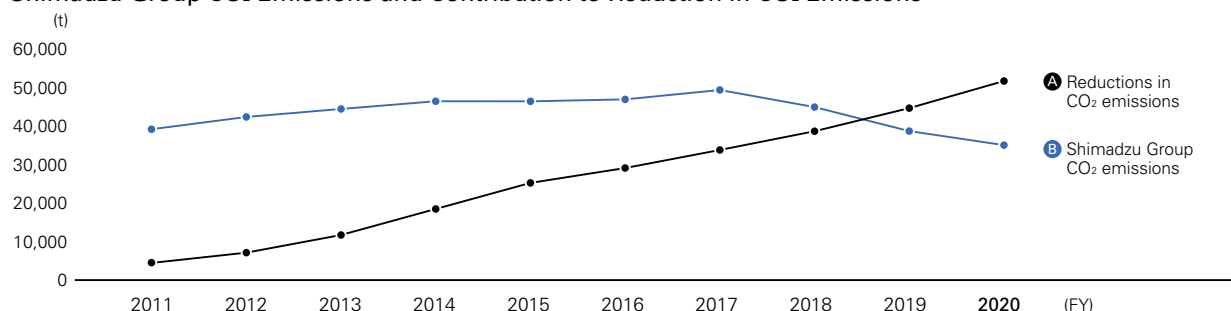
Total Number of Eco-Products Plus
Products Developed
143 models

Contribution Volume of Reduction
in CO₂ Emissions
51,725 t-CO₂

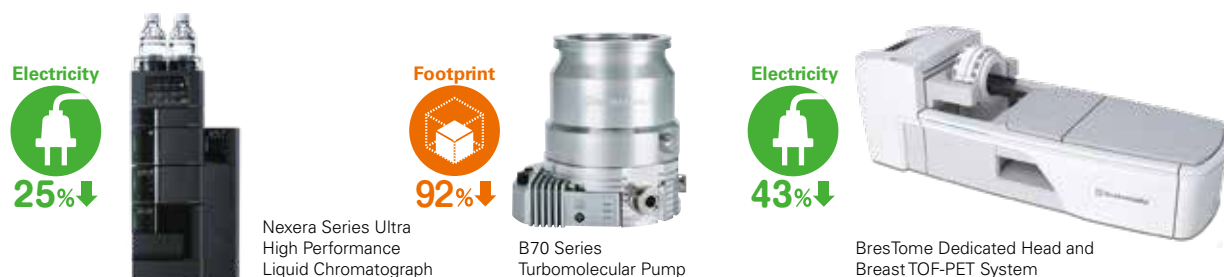
Criteria in Environmental Design Guidelines



Shimadzu Group CO₂ Emissions and Contribution to Reduction in CO₂ Emissions



Eco-Products Plus Certified Products



4 We will engage in biodiversity conservation activities.

Conservation of Biodiversity

Using the Power of Science for Biodiversity Conservation

When the Head Office building was rebuilt in 2014, about 1,000 plants were planted on about 8,000 m² of the Head Office/Sanjo Works property (Kyoto City, Kyoto Prefecture) to establish the Shimadzu Forest, which is used as a place where visitors and employees can relax.

In 2015, the forest received the maximum AAA rating from the Japan Habitat Evaluation and Certification Program (JHEP), established by the Ecosystem Conservation Society-Japan. It was the first time a manufacturer in Western Japan received the AAA rating, which is based on an objective evaluation of measures to conserve and restore biodiversity. The forest retained the AAA rating when it was reevaluated in 2020.

Since 2019, Shimadzu has been involved in soil amendment by working with Professor Motoki Kubo, Department of Biotechnology, College of Life Sciences, Ritsumeikan University, to develop the SOFIX soil fertility index as a technique for visualizing the soil amendment process based on analyzing biological characteristics of soil. The SOFIX index is technology used to cultivate healthy agricultural

The following web page includes information about the topics listed below.

<https://www.shimadzu.com/sustainability/approach/environmental/biodiversity.html>



Conservation of Biodiversity

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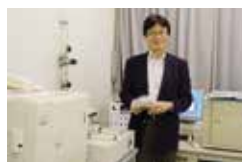
<https://www.shimadzu.com/environment/index.html>



Shimadzu Environmental Contribution



Shimadzu Forest
within Sanjo Works
in the Head Office
Grounds



Professor Kubo of
Ritsumeikan
University with
Shimadzu
Instruments Used



products and plants from healthy soil prepared by mixing microorganisms with organic matter. The index indicates the concentration of carbon in soil, which is an important indicator of available nutrients, and is measured using a Shimadzu TOC solid sample combustion system.

5 We will actively engage in environmental conservation activities involving each employee.

Engage in Activities that Help Shimadzu Contribute to Environmental Conservation

Forest Cultivation Activities

The Shimadzu Group is engaged in environmental conservation activities throughout the world.

Since 2008, Shimadzu has supported activities of the Kyoto Model Forest Association by having employees, family members, and new hires participate in ongoing Shimadzu Corporation Forest cultivation activities (in Nantan City, Kyoto Prefecture). Beginning in 2021, Shimadzu started preparing a forest plan from a scientific perspective based on a joint research agreement with Kyoto Prefectural University.

Employees from Shimadzu's Group company in Germany contribute to the community by planting trees in a forested area within Duisburg City. Similarly, employees in China are planting trees to protect water and soil in Huang He and Yangtze watershed areas and restore vegetation. In addition, employees in the Philippines have been involved in an environmental conservation event in Cavite City by participating in tree-planting and cleanup activities.

The following web page includes information about the topics listed below.

<https://www.shimadzu.com/sustainability/approach/environmental/support.html>



External Support Activities



Social Report

Shimadzu is committed to achieving sustainable development and growth for both Shimadzu and society by continuing corporate activities that meet the expectations and demands of our stakeholders.

69	Dialogues with Stakeholders
70	Customer Satisfaction (CS)
71	Utilizing Human Resources
76	Respect for Human Rights
77	Message from the Director in Charge of Human Resources
79	Supply Chain Management
80	Harmony with Local Communities







Dialogues with Stakeholders

The following web page includes information about the topics listed below.

https://www.shimadzu.com/sustainability/approach/stake_holder/engagement.html








Stakeholders Engagement

Basic Policy

To achieve Shimadzu's basic management philosophy, the Shimadzu Group must operate the company based on a long-term perspective in terms of both solving challenges of society through our business activities and engaging in activities consistent with being a responsible member of society. Managing the Shimadzu Group in that way is only possible if we first gain the trust of Shimadzu's various stakeholders, including customers, shareholders, suppliers, employees, and local communities.

To build relationships of trust with stakeholders, the Shimadzu Group will actively engage in smooth, two-way communication with them regarding all aspects of our corporate activities. Doing so is not only our corporate responsibility, but is also essential in terms of enhancing corporate value.

Specific Measures for Shimadzu Group Stakeholders

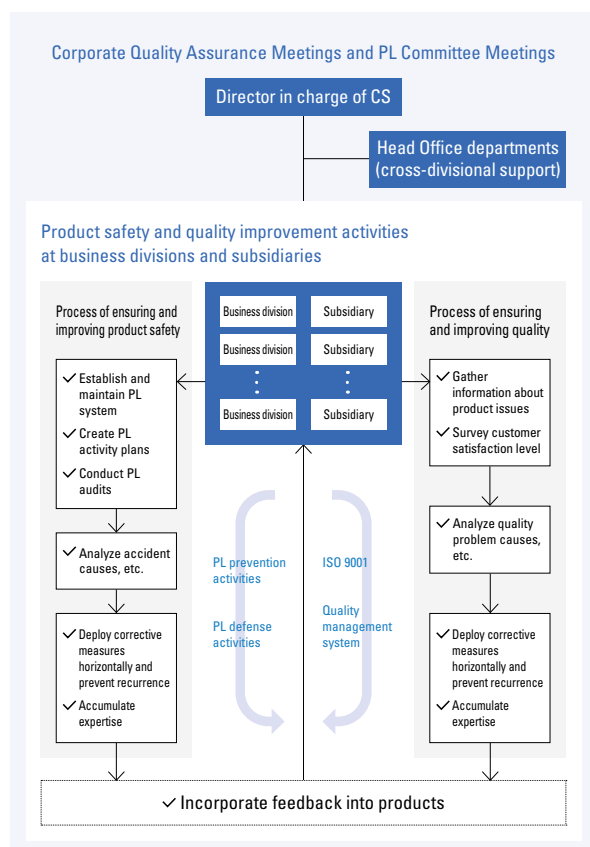
Stakeholder	Involvement	Specific Measures
Customers	We have offered products and services that solve challenges of customers and society.	<p>For more details, refer to "Customer Satisfaction" on page 70.</p> <p>For more details, refer to the website.</p> <p>https://www.shimadzu.com/sustainability/approach/efforts/satisfaction/</p> 
Shareholders	To promote better understanding of management policies and increase corporate value, we have disclosed appropriate information whenever applicable and engaged in dialogue with shareholders.	<p>For more details, refer to the website.</p> <p>https://www.shimadzu.com/ir/index.html</p> 
Suppliers	To implement corporate social responsibility throughout the entire supply chain, we have cooperated with suppliers to ensure human rights are respected and environmental impacts are minimized.	<p>For more details, refer to "Supply Chain Management" on page 79.</p> <p>For more details, refer to the website.</p> <p>https://www.shimadzu.com/sustainability/approach/social/supply_chain/</p> 
Employees	We have respected employee diversity, trained human resources, and strived to provide a safe and comfortable working environment.	<p>For more details, refer to "Utilizing Human Resources" on page 71.</p> <p>For more details, refer to the website.</p> <p>https://www.shimadzu.com/sustainability/approach/efforts/talent/</p> 
Local communities	We are also actively involved in solving societal problems in communities where a Shimadzu office or Group company is located, or in societal challenges related to business activities.	<p>For more details, refer to "Harmony with Local Communities" on page 80.</p> <p>For more details, refer to the website.</p> <p>https://www.shimadzu.com/sustainability/approach/social/local/</p> 

Customer Satisfaction (CS)

Measures for Maintaining and Improving Product Quality and Safety

The most fundamental and important factor for achieving customer satisfaction is product safety. We therefore established a Basic Policy for Product Safety that specifies practices for improving product safety, disclosing appropriate information, and responding quickly to resolve any accidents that might occur.

The director in charge of CS chairs corporate quality assurance meetings and the PL Committee, which is involved in product liability (PL) issues, and works to maintain and improve quality and safety throughout the entire Shimadzu Group. We also share information and deploy activities or expertise from specific divisional departments at the Head Office or subsidiaries horizontally throughout the entire Shimadzu Group and implement measures for achieving quality goals.



Quality Management System (QMS)

Shimadzu Corporation's Sanjo Works has obtained ISO 9001 certification, the international standard for quality management systems (QMS) since 1994. They have also obtained ISO 13485 certification required for medical devices and JIS Q 9100 certification required for the aircraft equipment industry.

The following web page includes information about the topics listed below.

<https://www.shimadzu.com/sustainability/approach/efforts/satisfaction/>



Basic Policies, Principles, and Measures (Basic Quality Assurance Policy and Customer Satisfaction, Taking Responsibility for Manufactured Products and Basic Policy for Product Safety, Ensuring Product Safety and Disclosing Information to Customers, Improving Quality throughout All Stages from Development and Design to Manufacturing, Quality Management System, and Improving Knowledge about Quality Control Activities)

QMSs are also introduced at relevant subsidiaries in Japan and other countries. As of March 2021, 14 subsidiaries have obtained certification in Japan and 25 subsidiaries outside Japan.

These QMSs are used to assess the effectiveness of measures and processes for ensuring product quality and safety based on the Basic Quality Assurance Policy established by the Shimadzu Group. Then the PDCA cycle is repeated to achieve further improvements.

In this way, we are engaged in improving customer satisfaction through constant improvements at each stage of the product life cycle.

Quality Center for Pursuing the Highest Quality

The Quality Center, with capabilities for six functions, including materials analysis, physical property analysis, and EMC measurement*, is located at the Head Office/Sanjo Works site to serve as the center of quality for the overall Shimadzu Group. For EMC measurements, the center can perform tests as a testing facility with international ISO/IEC 17025 certification that is compliant with standards specified in respective countries and regions. Furthermore, the center is registered by TUV Rheinland Japan (TRJ) as an accredited international third-party testing laboratory.

* EMC measurements evaluate both whether electromagnetic waves emitted from instruments affect surrounding devices and whether instruments are resistant to malfunction from exposure to electromagnetic waves from surrounding areas.



Anechoic Chamber at the Quality Center

Increasing Customer Satisfaction

We are improving customer satisfaction (CS) by establishing systems and capabilities that ensure we can respond to changes in market and customer requirements at each stage of the product life cycle. For example, to improve the quality of Shimadzu Group products, systems, and services from the customer's perspective, customer satisfaction surveys are periodically conducted to obtain feedback from customers.



Utilizing Human Resources

Basic Policy for Human Resource Strategies

We believe that innovation is critical for achieving our corporate philosophy “Contributing to Society through Science and Technology.” Innovation is generated by combining the diverse expertise and values offered by each employee to work passionately as a team, which can be used to solve challenges in society.

Considering the increasing speed of changes in business conditions and technical innovations and the increasing diversity and complexity of societal challenges, employee

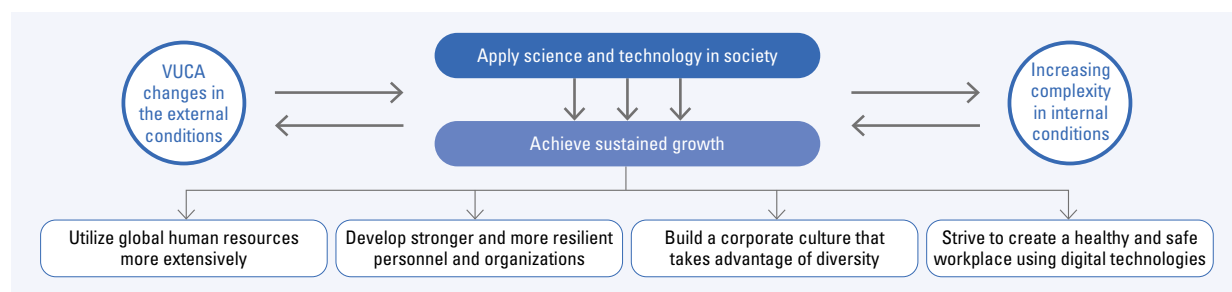
The following web page includes information about the topics listed below.

<https://www.shimadzu.com/sustainability/approach/efforts/talent/index.html>



Basic Policies, Principles, and Shimadzu Measures (Human Resource Development, Occupational Health and Safety, Health and Productivity Management, and Working Practice Reforms)

abilities are essential for achieving the targets specified in the medium-term management plan. For that and other reasons, we will cultivate human resources by implementing four important policies: (1) Utilize global human resources more extensively; (2) Develop stronger and more resilient personnel and organizations; (3) Build a corporate culture that takes advantage of diversity; and (4) Strive to create a healthy and safe workplace using digital technologies. We will also strive to become a company that achieves a sustainable society through cooperation with partners around the world.



Cultivating a Culture of Taking on Challenges

To be prepared for increasingly diverse and complex challenges, it will be important to cultivate a mindset and environment that promotes taking on challenges, in addition to having competence and passion.

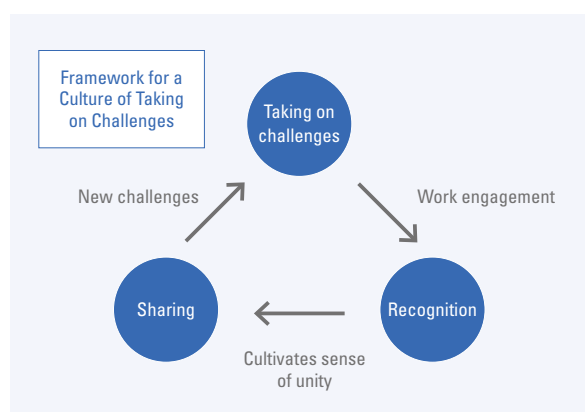
Each year we issue Shimadzu Business Performance Awards in recognition of individuals, teams, or organizations at Group companies throughout the world that implemented outstanding measures or achieved exceptional accomplishments in business activities. Cases of especially large contributions are awarded a Gold Prize. In FY 2020, a total of 67 entries were received, including 25 entries from the Head Office, 9 entries from Group companies within Japan, and 33 entries from Group companies outside Japan. One entry was awarded the Gold Prize for increasing global unit sales of integrated liquid chromatographs through partnerships throughout the world. In addition, a newly established Future Innovation Prize was awarded for developing novel coronavirus reagents and for developing a portable optical lattice clock and using it to verify the general theory of relativity at the Tokyo Skytree. In a typical year, the awards ceremony would be held in Kyoto, but last year the ceremony was broadcast live throughout the world via YouTube, with awardees from outside Japan attending via Zoom.

DIO (“do it ourselves”) improvement activities, originally started 26 years ago for small groups of employees at manufacturing workplaces to identify problems and then propose and implement solutions, are now used in other

non-manufacturing departments, such as product development, sales, corporate administrative departments, and even at Group subsidiaries. DIO teams that achieve particularly noteworthy results are recognized and receive an award at the All-Shimadzu DIO Awards Ceremony. DIO activities have now spread outside of Japan to China, Malaysia, and the Philippines as well.

Globally identifying and sharing examples of taking on challenges in that way increases our knowledge as an organization, fosters a sense of unity, and instills a culture of taking on challenges.

Furthermore, in an effort to provide a work environment where employees are free to take on new challenges, a Work Engagement Survey was started at the Head Office in 2020 to assess each employee’s level of engagement in their work.

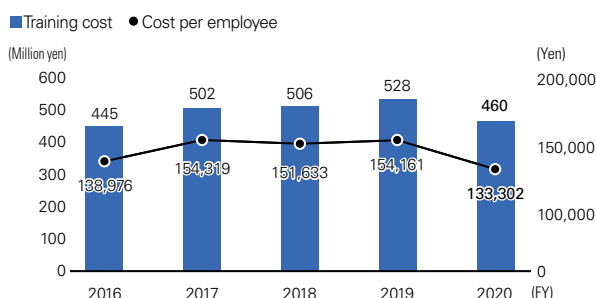


Human Resource Development

Given the rapid changes in our business environment, systematically and continuously developing management personnel with a global perspective is considered a significant management challenge. In addition to training for select individuals provided thus far, we will also offer a new leadership development program that systematically provides the experience necessary for management personnel. Furthermore, we will look for new human resource candidates globally, regardless of nationality or gender, in an effort to achieve talent management that assigns the best available human resources for each job.

Shimadzu's greatest strength is our exceptional technical and other expertise. Therefore, extending our advantage in expertise by each person learning from a wide variety of experiences will lead to creativity that generates innovation. For example, one skill that will be important in a digital age is data science. In an increasingly global business environment, there are more and more opportunities to work cooperatively

Cost of Training Full Employees (Non-Consolidated)



with personnel at Group companies outside Japan or partners outside Japan, which will require skills for communicating and collaborating in a different cultural environment.

Due to the wide range of skills and knowledge that requires, we will encourage each employee to manage their career independently with the intention of building a culture of independence where employees keep their knowledge and skills updated on their own.

Training System for Developing Global Human Resources

Training Name	Applicable Personnel	Purpose and Description	People Trained (Total)
Management Training	Managers who are candidates for executive management	Based on case studies and lectures by executive managers, this training instills business literacy and decision-making skills required by executive managers and also develops a management vision to be pursued, based on a consideration of challenges at Shimadzu.	98 people (including 2 who are now corporate officers)
Local Training outside Japan	Young employees interested in global business and that have worked at the company for about five years	The training is intended to improve skills for communicating in a different cultural environment and provide experience identifying local issues, gaining the involvement of local personnel, and taking a leadership role in solving issues. The program consists of medium- to long-term training of personnel for supporting global business within the Shimadzu Group by providing up to two years of experience working in a business environment outside Japan.	51 people (including 19 who have been transferred outside Japan) Note: Transfers were canceled during FY 2020 due to the COVID-19 pandemic.
GMT (Global Manager Training)	Newly promoted managers of Shimadzu Group companies outside Japan	The purpose is to develop business leaders able to drive business in markets outside Japan, by cultivating deeper understanding and loyalty of Shimadzu and instilling leadership and management skills.	137 people (including 39 who have been promoted)

Types of Training

		Newly Hired Employees	General	Sub-Leader	Assistant Manager	Assistant Section Chief	Manager	General Manager	Corporate Officer
All	Required	New-employee training	Third-year employee training	Promotion guidance		Business skills course	Pre-promotion training	New general manager training	Executive management training
		Follow-up training	Problem-solving (basic)	Mid-career training		Follow-up training	Governance training		
			Training for supervising managers and mentors at sites with new employees						
	Optional		New mid-career employee follow-up training						
			Problem-solving training (application), project management training, logical presentation training, and data skills course						
			Business skills courses (management strategy course, marketing course, and accounting course)						
			Presentations						
		English/Chinese language study							
	Selected							Management training	
	Developing Global Human Resources		Local training outside Japan			Intercultural communication training			
								Training before assignment as president of a subsidiary outside Japan	
Job-Specific	Technical	New-employee basic technical training	Young engineer training (67 courses in 11 fields)						
	Sales/Marketing	New-employee sales course	Sales practicum course (second year)	Improvement workshop		Sales leader training program			
		PSS training (first year)							
		Customer interaction skills training (first year)							
			Compliance training for sales departments						
	Skill-Based	Technical school training	Second-year follow-up training	Basic skills training (L5)	Basic leader training (L6)				
			Basic skills training (J2)			Supervisor training (L7)			
		Basic skills training (J3)							
Group Companies	Japan	New-employee training				Junior administrator training			
	Outside Japan					Global manager training			

Utilizing Human Resources

Diversity and Inclusion

Diversity management generates new value in society through innovation that results from acquiring talented human resources, regardless of nationality or gender. However, because Shimadzu has a lower ratio of women in corporate executive or management positions than average for other manufacturers, increasing the number of women in leadership positions has become an urgent challenge. Shimadzu promotes diversity based on the following principles.

- Combining diverse types of knowledge and senses of value provides a source of new science and technology required by Shimadzu.
- Providing a workplace environment where employees are free to fully utilize their strengths, regardless of differences in gender, nationality, age, gender identity/orientation (SOGI/LGBTQ), disabilities, or other limitations on work practices, leads us to continue to be a company that attracts talented human resources and that is admired by society.
- Each employee feeling like they are a valued member of their workplace provides the foundation for employee trust in the company and sharing corporate value.

Shimadzu Diversity Day

Last year Shimadzu established the Shimadzu Diversity Day as a day for everyone working at Shimadzu to think about how diversity affects the workplace, with a presentation about unconscious bias and an employee awareness survey conducted on that day. In the future, we will also conduct training to eliminate unconscious bias in an effort to eliminate biases about gender, nationality, and age, and create comfortable workplace environments where supervisors and subordinates can freely discuss careers and work.

Achieving Flexible Working Practices

We have promoted teleworking and other flexible working practices in order to improve productivity by better utilizing women and non-Japanese employees. In Japan, Mondays, Wednesdays, and Fridays every week are designated as "Refresh Days," when employees are encouraged to leave work at the official quitting time. The purpose is to promote generating new ideas by ensuring employees are healthy and have time to communicate with a variety of people and improve their skills.

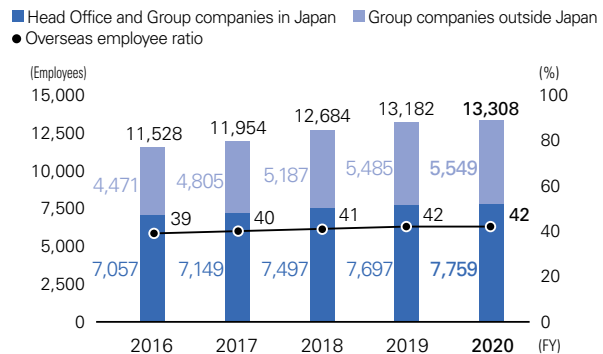
The following web page includes information about the topics listed below.

<https://www.shimadzu.com/sustainability/approach/efforts/talent/index.html>

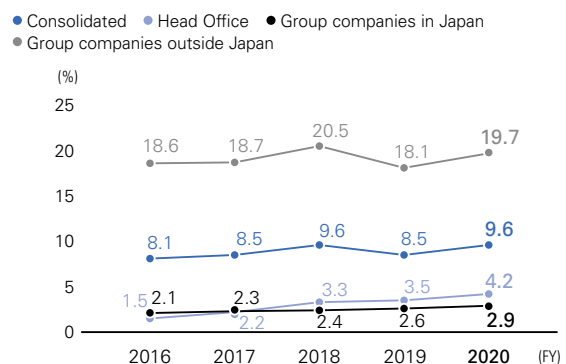


Basic Policies, Principles, and Shimadzu Measures (Human Resource Development, Occupational Health and Safety, Health and Productivity Management, Working Practice Reforms, and Promoting Diversity)

Number of Employees/Overseas Employee Ratio (Head Office and Group Companies in and outside Japan)



Percentage of Women in Management Positions (Head Office target was 5% by FY 2020.) (Head Office and Group Companies in and outside Japan)



Selected as a "Diversity Management Selection 100" Company

In 2019 Shimadzu Corporation was selected by the Japanese Ministry of Economy, Trade and Industry as a Diversity Management Selection 100 company utilizing the capabilities of diverse human resources to increase medium- and long-term corporate value.



Selected as a Nadeshiko Brand

Each year, the Japanese Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange select "Nadeshiko" brands in respective industries from the approximately 3,600 companies listed on the exchange. Nadeshiko brands are selected based on practices that actively promote the role of women, including providing a work environment where women are free to continue working. Shimadzu has been selected as a Nadeshiko brand for five consecutive years.



Due to the COVID-19 pandemic in FY 2020, a teleworking system was fully introduced from July that enables all employees to work from home or a satellite office. The goal is to permanently establish the optimal combination of some employees working at the office and some at home.

To facilitate teleworking, we have also been using various digital tools, strengthening confidentiality measures, converting documents to digital form, and reassessing business processes.

Consequently, the Japanese Ministry of Internal Affairs and Communications selected Shimadzu Corporation as a top-100 "Telework Pioneer" in 2020. Shimadzu's teleworking system was introduced in 2017 for childcare and nursing care purposes, but eligibility was urgently expanded this year due to the pandemic. Currently, the system has transitioned to become a permanent program available to all employees.

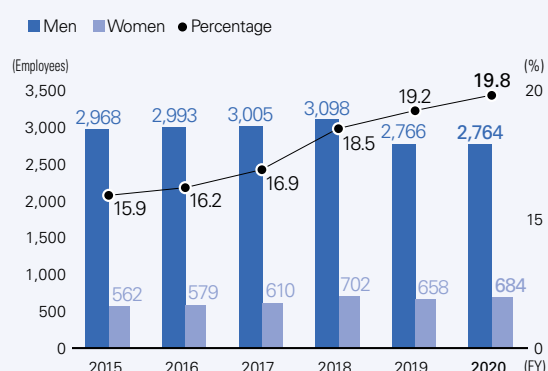
Diversity Data (Non-Consolidated)

Data about Women's Initiatives	FY 2019	FY 2020	Average*
Percent Leave Days Used: Men	13.6%	16.7%	6.16%
Average Number of Leave Days Used: Men	103	93	80% used less than 1 month

* Source: July 3, 2019, Japanese Ministry of Health, Labour and Welfare Report Status of Childcare Leave Usage by Men and Measures to Promote Usage

Percent Childcare Leave Days Used	FY 2019	FY 2020
Men	13.6%	16.7%
Women	100%	100%

Percentage of Women Employees (Non-Consolidated)



	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Number of Managers or Above	810	813	834	864	868	859
Number of Managers or Above (Women)	11	12	18	24	25	29
Percentage of Women	1.4%	1.5%	2.2%	2.8%	2.9%	3.4%
Number of General Managers or Above	190	182	197	190	191	186
Number of General Managers or Above (Women)	2	2	3	5	6	8
Percentage of Women	1.1%	1.1%	1.5%	2.6%	3.1%	4.3%

Average Number of Years Employed (FY 2020)

Men: 19.0 yrs; Women: 14.8 yrs

Working Practice Data Per month

FY 2020 Data	FY 2019	FY 2020
Avg. Overtime Hours: Core Management Target: 30hrs	29.4	30.3
Labor Union Target: 5hrs	6.8	2.4
Annual Vacation Day Usage Rate: Core Management Target: 45%	50.1%	
Labor Union Target: 85%	78.8%	
Total Number of Employees who Used Vacation Days in 1-Hour Increments	6,698	
Ratio Working from Home: Company Average (Average for All of 2020)	—	31%

RPA (Robotic Process Automation) Results

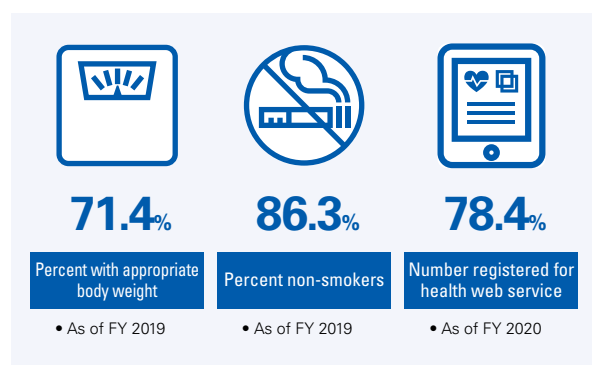
FY 2020 Data	FY 2018	FY 2019	FY 2020
Hours Saved during Fiscal Year	7,414	15,414	19,514
Cumulative Hours Saved	8,959	24,373	43,887
Number Created during Fiscal Year	102	117	30
Cumulative Number Created	127	244	274

Health and Productivity Management

To ensure the company is able to create new products and technologies needed by the world, it is important that each employee takes an interest in their personal health to make sure they are both mentally and physically healthy. Therefore, a health management environment has been prepared and healthcare technologies, products, and services created by Shimadzu are offered to employees.

Key Measures

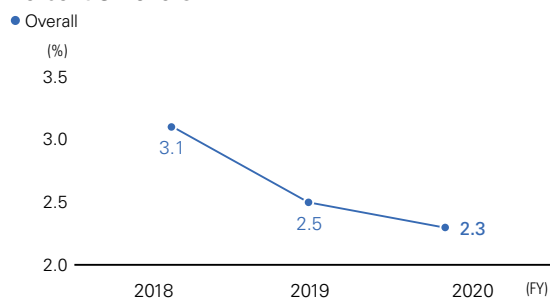
With a focus on maintaining employee health, improving mental and physical health, and balancing both treatment and work, key measures have been specified in five areas: exercise, diet, sleep, mental health, and quitting smoking. We are focusing on health management of employees based on the percent of employees with appropriate body weight, the percentage of non-smokers, and the percentage of employees that are registered on the Shimadzu health web service, as key performance indicators (KPI).



Shimadzu offers healthy menu items in the employee cafeteria, provides support for receiving sleep apnea examinations, conducts activities to prevent secondhand smoke and promote not smoking, and so on. On-demand exercise videos are broadcast to Group companies around the world in order to raise awareness about health throughout the entire Shimadzu Group.

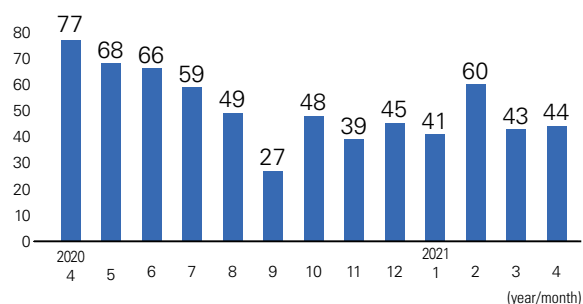
Efforts are particularly focused on not smoking, such as by eliminating all indoor smoking areas in April 2020 and implementing a no-smoking policy during work hours. In addition, nicotine gum and patches are offered free-of-charge to those who request them and employees are encouraged to stop smoking.

Percent Smokers



To prevent the spread of COVID-19 infection, all employees complete a daily online health management survey. A nurse or other occupational health personnel individually contacts all employees or family members experiencing a change in their day-to-day health status. That has significantly helped prevent the spread of infection. We also talk to employees about their stress levels, with in-house counselors available for addressing individual cases.

Number of Cases Addressed by Occupational Health Nurses (Health Checks)



In-House PCR Testing Room Established

As a company committed to fighting the pandemic, such as by developing and selling PCR testing kits and fully automatic PCR testing systems, Shimadzu has established a new PCR testing room within the health center at Shimadzu.

Consequently, Shimadzu's own technologies are being used for employee health management, such as to confirm negative PCR test results.



Subsidizing Breast Cancer Examination Expenses with Elmammo Avant Class Dedicated Breast PET System

In cooperation with Medical Corporation Chionkai, we established a system for subsidizing the cost of obtaining a breast cancer examination using a Shimadzu Elmammo Avant Class dedicated breast PET system. The subsidy system was established to promote the early detection and early treatment of breast cancer by increasing the ratio of women receiving breast exams. Female employees or spouses of male employees aged 40 or older were eligible for the examination.



Dedicated Breast PET System

Introducing Health Web Service

A “KenCoM” health web service was introduced to increase mindfulness about health and instill healthy habits in each employee. With the KenCoM service, users can record step-counts and weight, participate in health events, view health exam results and medication histories, and more. As of the end of March 2020, 78% of employees have registered for the system.



 **kencom**

Shimadzu Health and Productivity Management

Recognized as “Health and Productivity Management Brand” and “White 500” Company

In March 2021, Shimadzu was selected as a “Health and Productivity Management Brand” for the first time. Shimadzu was also recognized as a “White 500” company with outstanding health and productivity management practices for the fifth consecutive year since the system was started.



Respect for Human Rights

Measures for Respecting Human Rights

The Shimadzu Group has included respecting the rights of individuals and not discriminating based on race, gender, language, nationality, religion, physical disabilities, beliefs, or other reasons among the principles of conduct in Shimadzu’s Corporate Code of Ethics. Meanwhile, we established a Conduct Guidelines Related to Respecting the Human Rights and Diversity of Employees and have been promoting the creation of workplaces that respect the human rights of all employees and show mutual appreciation of diversity, such as differences in personality and individuality. Human rights is also included as an important theme of Shimadzu’s CSR Charter, which specifies a basic policy of complying with international norms, laws, and regulations, such as respecting the rights of individuals, eliminating child labor and forced labor, and banning discrimination.

The following web page includes information about the topics listed below.

Respect for Human Rights

https://www.shimadzu.com/sustainability/approach/social/human_rights.html



Statement on the UK Modern Slavery Act

<https://www.shimadzu.com/sites/shimadzu.com/files/about/procurement/xtqe/yju9hb9res3rrcsi.pdf>



Respect for Human Rights-Basic Policies and Principles, and Statement on the UK Modern Slavery Act

A Corporate Ethics and Code of Conduct Handbook was created, an internal education program based on e-learning has been provided, a harassment help desk is available, and so on, based on that policy. In addition, we implement measures to promote awareness about respecting human rights, such as distributing a booklet about respecting human rights to new managers and conducting harassment elimination training for managers and for personnel working at contact points for reporting harassment. We also periodically survey suppliers in and outside Japan to check for any human rights violations in their business practices.

Note: For more information about procurement, refer to Supply Chain Management on p. 79.

Message from the Director in Charge of Human Resources



Yoshino Kajitani
Managing Executive Officer

Valuing the People that Generate Innovation

Given our corporate philosophy “Contributing to Society through Science and Technology,” solving challenges in society has been a core theme of Shimadzu Group businesses ever since the company was founded. Today, as we face intense changes due to what is referred to as “VUCA” (volatility, uncertainty, complexity, and ambiguity), continuing to solve challenges in society will require constantly generating new value and innovation. Since innovation is generated by people, that means it is people that will serve as the driving force for determining our future. Therefore, we all serve an important role of creating an environment where the respective strengths offered by each person can be actualized by combining our strengths.

Shimadzu has been an early leader in introducing and permanently adopting outstanding systems for prioritizing employee work-life balance, such as providing childcare and nursing care leave benefits. As a result, childcare leaves are taken by 16.7% of eligible men and 100% of eligible women. Shimadzu Corporation also offers long-term training for new employees (four months for technical personnel), a mentorship program, and other systems for developing human resources, a global 25-year long-service award system, and measures for company-wide celebration when employees reach the mandatory retirement age. These and other measures are implemented to achieve a corporate culture that values people. In the future as well, we will strive to promote the growth of people and businesses by continuing to provide support for more diverse working practices and by improving our training capabilities.

Supporting the Personal Growth of Each Employee

To improve the skills and expertise of individual employees, we provide career training and expertise improvement programs suitable for each stage of the long career journey, from joining the company as a new employee to leaving the company at mandatory retirement age. We also provide support for achieving growth through independent learning opportunities.

Furthermore, although currently conducted online due to the COVID-19 pandemic, in order to recognize the contribution by employees throughout the world and increase employee motivation, Shimadzu Performance Awards are presented by the President individually to each recipient.

Additionally, management by objectives (MBO) is used to clarify roles within organizations and empower employees. It is used to ensure employees and managers meet for communication about the goals set by employees based on company policies, the process of achieving the goals, and the progress and results achieved, to provide advice about expected roles and how to achieve those goals, and to assess their results. Although many issues remain, we intend to achieve employee growth and contribution by using that approach of employees setting their own growth goals and then achieving those goals, with results assessed based on the roles and actions expected for their given position. I think implementing such measures to promote company growth is an important topic for human resource development.

Strengthening Training of Global Human Resources

To promote operating businesses more globally, it is essential that we increase employee skill levels at locations outside Japan and develop more global employees at the Head Office in Japan. The Shimadzu Group aims to increase the capabilities of each employee and organization globally. To accomplish that, we offer a “Local Training Outside Japan” system that stations young employees at Shimadzu locations outside Japan to expose them to cultures in various countries or regions and promote personal growth through hands-on work experience outside Japan. We also have a “Global Manager Training” program that invites personnel from Shimadzu locations outside Japan to participate in management training in Japan in order to cultivate a better understanding of Japanese culture and Shimadzu corporate culture. Although the global human resource development process is just getting started, we aim to develop human resources that are able to think about the Shimadzu Group and execute measures from a global perspective.

Cultivating More Diversity as the Foundation for Innovation

In order to solve challenges in society, achieve sustained growth, and create corporate value in the current era of rapid changes, we must be able to respond to changes with flexibility, creativity, and innovativeness. Making full use of such abilities will require acceptance of unconventional ideas and increasingly diverse values, and rethinking of our previous preferences for homogeneity in organizations. It will also require management that can coordinate a more diverse variety of personnel, which is an important challenge for promoting diversity within the Shimadzu Group. We also intend to achieve organizational reforms that eliminate various barriers to working together in a manner that enables working cooperatively regardless of departmental affiliation. One such measure is the Shimadzu Diversity Day started last year to promote eliminating unconscious biases. That will presumably require a long process of small steps, but the first step is for each person to identify their own biases. Given that only 9.6% of management are women globally and only 4.2% within Shimadzu Corporation, increasing the role of women is a current challenge that is exacerbated by the fact that the Shimadzu Group has a low percentage of women employees overall. In the short term, we have set a target of increasing the percent of women in core management (to 6% or higher) and hiring more non-Japanese in Japan (at least three people per year). Revisions to the corporate governance code require disclosing the percent of non-Japanese and new hires with previous experience that have been promoted to management positions. Therefore, we are actively recruiting non-Japanese and experienced candidates and also implementing significantly more measures to promote increased diversity throughout the Shimadzu Group, including assessing global working practices by local personnel at locations outside Japan.

KPIs for Diversity

April 1, 2020, to March 31, 2023

FY 2020 Data	Target Value (FY 2023)	FY 2020
Ratio of Women in Management Positions	At least 6%	4.2%
Percent Women Full Employees	At least 30%	19.8%
Percent of Childcare Leave Used by Men	At least 30%	16.7%

Note: The values above are for Shimadzu Corporation alone.

Establishing Characteristically Shimadzu Health and Productivity Management Practices Integrated with Business

Health and productivity management represents a core conviction of the Shimadzu Group, as expressed by our management principle “Realizing Our Wishes for the Well-being of Mankind and the Earth.” We are therefore implementing health and productivity management measures characteristic of Shimadzu while integrating them into business operations. In an effort to share the benefits of using Shimadzu technologies with Shimadzu employees, Shimadzu has been offering free PET mammography examinations for preventing breast cancer. Currently, a PCR testing system has been installed in the health center within Shimadzu, where PCR tests can be performed within the company when testing is required for work purposes.

Employees can also access the system via a web-interface to not only prevent infection but also to check mental health. Employees with a health concern can use the Health Check system to talk to an occupational health nurse or use the Kencom health app to deploy online events, such as walking events or health check challenges.

When it comes to the topic of health, it mainly depends on the initiative of each individual. It is important to create systems that trigger the employees’ impetus to take action by visually displaying their health status to identify which measures to implement and having them sense the importance of managing their health. Measures involve the effective use of Shimadzu technologies and include menus for a wide variety of health-related information, for example, so that employees enjoy managing their health, rather than feeling obligated. Health management systems are intended to ensure the wellbeing of each employee and the overall organization in coordination with other measures to ensure a healthy working environment, such as by improving employee working practices and communication within the company.

Training Human Resources for Leading Sustained Growth

Providing an organizational environment where each employee can freely work with vigor and enthusiasm and where their individual capabilities are fully utilized provides a foundation that will enable the Shimadzu Group to offer new value and achieve sustained growth. In addition to creating that foundation, we will develop the human resources for building global synergies and leading the sustained growth necessary for implementing management strategies.



Supply Chain Management

Promoting Procurement Based on CSR

To promote procurement based on CSR, the Shimadzu Group only procures raw materials and other supplies from suppliers with a respect for social responsibility (such as respecting human rights and reducing environmental impact). To ensure we fulfill our social responsibility throughout the entire supply chain, we request suppliers to comply with the following.

- ① Comply with all applicable laws, regulations, and social norms from an international perspective.
- ② Respect human rights and mutually accept diversity.
- ③ Provide a workplace environment where employees can work without worry. Endeavor to maintain and manage employee health.
- ④ Endeavor to protect the global environment and achieve a sustainable society.
- ⑤ Engage in fair and transparent transactions. Do not abuse positions of authority or associate with anti-social elements.
- ⑥ Disclose and transmit correct information with integrity, in a fair and timely manner. Store confidential information from Shimadzu or other companies securely, do not use it for unintended purposes, and make sure it is not leaked.
- ⑦ Supply safe, secure, and trustworthy products and services.
- ⑧ Contribute to the progress of society through business activities.

Measures for CSR Procurement

To ensure compliance with restrictions on the chemical substances contained in products and other various international laws and regulations, we are actively engaged in green procurement practices that prioritize procuring raw materials with a minimal environmental impact. In addition to the three main measures for ensuring compliance, namely obtaining non-inclusion guarantees from suppliers, auditing suppliers for RoHS compliance, and analyzing samples of procured items, Shimadzu also conducts annual informational presentations to promote a deeper understanding of conflict minerals, slavery laws in various countries, SDGs, and other issues. We also monitor green procurement rates each month, even for office supplies, and have been participating in the supply chain subcommittee of the Global Compact Network Japan since September 2019. Of the 107 key suppliers asked to complete the CSR survey form released by that subcommittee, 100 of them provided survey responses. Furthermore, for member companies of the Shimadzu Cooperative Association, we also offer seminars on environmental management or SDGs and promote supplier environmental activities, such as jointly collecting waste plastics or assessing energy savings.

Number of Domestic Suppliers Monitored	751 of 799 (94% implementation rate) <Breakdown> 501 of 549 purchasing suppliers (91% implementation rate) 250 of 250 affiliated companies (100% implementation rate) Note: The denominator is the number of applicable companies.
Percentage of Non-Inclusion Guarantees Obtained	98% (for about 77,000 items) Note: For items subject to 10 RoHS restrictions.

The following web page includes information about the topics listed below.

https://www.shimadzu.com/sustainability/approach/social/supply_chain/index.html



Basic Policies, Principles, and Measures (Measures for CSR Procurement, Eliminating Human Rights Violations from the Entire Supply Chain, Measures and Policies for Conflict Minerals, Analyzing Procured Parts, Materials, and Other Items for Substances Banned by RoHS, Compliance with the Modern Slavery Act of 2015, and Informational Presentations for Suppliers)

Analyzing Procured Parts, Materials, and Other Items for Substances Banned by RoHS

Randomly sampled RoHS-compliant parts, assemblies, and secondary materials procured from suppliers are analyzed in Shimadzu's RoHS laboratory to confirm the content of substances banned by the RoHS directive. The RoHS laboratory also accepts non-Shimadzu visitors to share Shimadzu's analytical expertise.

Number of Samples Analyzed	10,500 for six RoHS-banned substances and 3,800 for four additional banned substances Note: Total as of FY 2020-end. About 77,000 applicable items (subject to 10 RoHS restrictions) are regularly sampled by the system.
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Human Rights Measures in Procurement

In accordance with the Shimadzu Group Policy Regarding Conflict Minerals specified for conflict minerals*, if any part or raw material used in Shimadzu products is discovered to contain a conflict mineral, Shimadzu will immediately meet with the supplier to discuss appropriate actions, such as immediately discontinuing the use of such part or raw material. We are implementing measures to promote understanding of conflict minerals and avoid their use throughout the entire supply chain, such as by managing transactions in accordance with the Organisation for Economic Co-operation and Development (OECD) Due Diligence Guidance and investigating smelters using the Conflict Minerals Reporting Template to ensure they are managing conflict minerals in accordance with the Responsible Minerals Initiative (RMI).

Each year we also release a statement on the UK Modern Slavery Act of 2015. Clauses in the statement that indicate conditions for responding to human rights violations by our 300 major suppliers are included in general supplier agreements and letters of understanding that have been signed by 494 companies thus far.

* The term conflict mineral refers to four types of minerals (gold, tin, tantalum, and tungsten) mined in the Democratic Republic of the Congo and nine surrounding countries, which are known to serve as a funding source for armed groups.

Informational Presentations for Suppliers

It is essential that we form partnerships with suppliers, who are central to our supply chain, to ensure human rights are respected in procurement activities and promote reducing our environmental impact. To promote a deeper understanding of our measures, each year we conduct informational presentations for suppliers in two locations, Kyoto and Tokyo, which were attended online by 648 suppliers in FY 2020.



Harmony with Local Communities

The following web page includes information about the topics listed below.

<https://www.shimadzu.com/sustainability/approach/social/local/index.html>



Basic Policies, Principles, and Measures (Supporting Science Education, 39th Shimadzu Award Recipient Shinya Koshihara and Z3 R&D Grants, Shimadzu Cup Awarded for Outstanding Research in China, Shimadzu Foundation Memorial Hall, Promoting the Pink Ribbon Movement, Donation Fund-Raising Activities, Activities for Contributing to Local Communities throughout the World, and Contributing to Society through Tennis)

Creating New Value Jointly with Local Communities

Kyoto Prefecture

In March 2019, we entered a broad cooperation agreement with Kyoto Prefecture to develop an “Innovation City.” Based on the agreement, we will contribute to promoting regional growth, implementing SDGs, and developing companies and people currently in the process of expanding from Kyoto to the world.



Broad Cooperation Agreement Signing Ceremony (March 2019)
Kyoto Prefecture Governor Nishiwaki (right) with Shimadzu President Ueda

Yamaguchi Prefecture

We signed a letter of intent for a regional cohort partnership with five partners, Kao Corporation, Kyodo Milk Industry Co., Ltd., Yamaguchi Prefecture, Yamaguchi City, and Yamaguchi University, for topics such as improving the health of the elderly. Shimadzu will jointly operate a business for preventing the loss of cognitive function through exercise, diet, and other factors and verifying the measurements for showing that effectiveness.



Shown on the Monitors, from the left, is Masazumi Goto, President of Kyodo Milk Industry Co., Ltd., Teruhisa Ueda, President of Shimadzu Corporation, and Yoshihiro Hasebe, Senior Managing Executive Officer of Kao Corporation (at the time). From the left in the front row is Sumitada Watanabe, Mayor of Yamaguchi City, Tsugumasa Muraoka, Governor of Yamaguchi Prefecture, and Masaaki Oka, President of Yamaguchi University

Miyazaki Prefecture

At the Food Research Organization jointly established with Miyazaki Prefecture in 2015, we installed a Shimadzu Nexera UC supercritical fluid chromatograph system and are engaged in developing a method for simultaneously analyzing over 500 kinds of residual pesticide components, analyzing components with functional properties in food that are beneficial to health, and so on.



Nexera UC System used at the Food Research Organization

China

The eight China-based affiliates of Shimadzu have partnered with the China Youth Development Foundation to participate in “Mother River Protection” activities since 2010. We have donated money for protecting water and soil and restoring vegetation in the Yellow River and Yangtze River basins and have been engaged in ongoing afforestation activities.



Philippines

Shimadzu Philippines Manufacturing, Inc. participates in environmental activities around the plant. These activities involve participation by 32 local companies in volunteering to clean up rivers and streams by removing trash, wood, and fallen leaves from along the Maalimango River.



Germany

Shimadzu Europa GmbH (global headquarters in Germany) has been involved in renovating Am Rönsbergshof, a special-needs school, as part of Social Day, a day when employees volunteer to actively participate in activities for local communities.



Governance Report

To achieve sustained growth, increase medium- and long-term corporate value, and ensure effectiveness, we are engaged in building a system of governance.

- 83 Policy on Corporate Governance
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- 97 Messages from Outside Directors







Policy on Corporate Governance

For more details, refer to the website.

<https://www.shimadzu.com/ir/governance/policy.html>



Corporate Governance Policy

Basic Policy

The Shimadzu Group will earn the trust of stakeholders and endeavor to achieve continuous growth and increase medium- and long-term corporate value. The Shimadzu Group will establish and improve systems for ensuring corporate governance, which is considered a core basis for achieving management transparency and fairness and for promoting management dynamism by increasing the speed and boldness of decision-making and implementing measures.

Corporate Governance Policy

Corporate Governance Policy

1. Appropriate Cooperation with Stakeholders
2. Securing the Rights and Equal Treatment of Shareholders
3. Ensuring Appropriate Information Disclosure and Transparency
4. Dialogue with Shareholders
5. Responsibilities of the Board of Directors, etc.

▶ For more information about the Corporate Governance Policy, refer to the website indicated above.

The Corporate Governance Policy was established in December 2015 as a declaration of our stance regarding implementing the corporate governance codes in practice in concrete terms.

In addition to complying with corporate governance codes, we are also strengthening corporate governance by periodically reviewing the policy to expand and improve the measures that serve as core management practices.

Compliance with Corporate Governance Codes

To achieve sustained growth for the Shimadzu Group and increase the corporate value in the medium and long term, we intend to instill the spirit of the corporate governance codes within our corporate management practices.

Cross-Shareholdings

Policy on Cross-Shareholding

We believe having cooperative relationships with a variety of companies is necessary for achieving sustained growth. Therefore, we will decide our shareholdings based on a comprehensive consideration of factors such as our business strategies, strengthening relationships with suppliers, and maintaining relationships with local communities. Each year, the Board of Directors verifies the appropriateness of holdings, by confirming whether the overall scale of cross-shareholdings is appropriate and then confirming whether the holdings of individual stocks are appropriate for the given objectives and whether the benefits and risks from holding the stocks are commensurate with the corresponding cost of capital.

As a result of reviewing our cross-shareholdings, some stocks were sold in FY 2020, because we judged that holding the shares was not necessarily sufficiently meaningful.

Shareholder Voting Criteria

For all issues regarding cross-shareholdings that are subject to a vote, we will exercise our voting rights if we judge that it would increase shareholder value. To ensure we exercise our voting rights appropriately, we check the content of each proposal being voted on based on decision criteria specified for each proposal, such as appropriation of retained earnings, appointment of Directors or Audit & Supervisory Board Members, or establishment of measures to defend against a takeover. For issues involving particularly serious concerns, such as a social scandal, we consider our vote very carefully.



Corporate Governance

For more details, refer to the website.

<https://www.shimadzu.co.jp/ir/governance/organization.html>



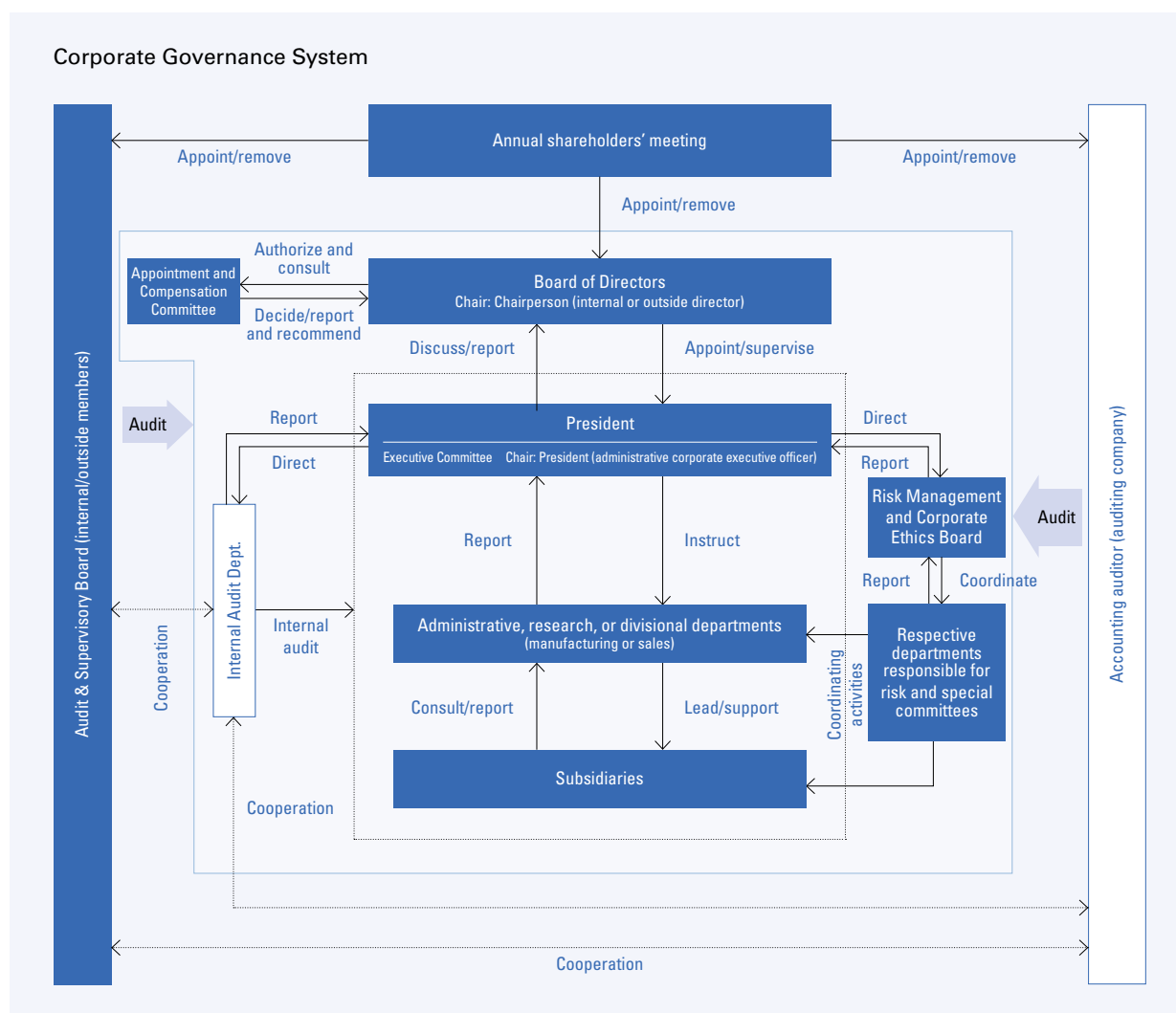
Corporate Governance System

Corporate Governance System

More than one-third (three) of the eight members of the Board of Directors are outside directors, which increases management transparency and objectivity. Inside directors, familiar with business operations and circumstances within the company, and outside directors, who have extensive experience, knowledge, abilities, and insights, discuss issues from various perspectives, so that decisions can be appropriately made and monitored regarding strategies and policies for increasing medium- and long-term corporate value. Outside directors are mainly appointed from candidates with extensive corporate management experience in a wide range of industries. Women and others with diverse backgrounds are also appointed as outside directors in order to provide more diversity.

A system of corporate auditors is used to audit the legality and appropriateness of management operations, with two internal and two outside Audit & Supervisory Board members. The Audit & Supervisory Board and its members attend Board of Directors meetings, where they proactively execute auditing functions, such as by expressing their opinions or exchanging views with directors or administrative corporate executive officers.

The President, administrative corporate executive officers, and the Executive Committee are designated as the agencies for appropriately and quickly executing administrative processes based on decisions made by the Board of Directors.



Corporate Governance

For more details, refer to the website.

https://www.shimadzu.co.jp/ir/governance/skill_matrix.html



Skill Matrix

Directors' Skill Matrix

The composition of the Shimadzu Board of Directors is determined based on achieving a size and diversity appropriate for deploying businesses, the given business environment, and other factors. Shimadzu deploys businesses globally based on the corporate philosophy "Contributing to Society through Science and Technology" in four business segments—Analytical & Measuring Instruments, Medical Systems, Aircraft Equipment, and Industrial Machinery. In particular, Shimadzu is involved in using the company's strengths to create new businesses in healthcare fields based on merging technologies from both the Analytical & Measuring Instruments and Medical Systems segments.

From the perspective of managing the company in this way, in order to achieve a good balance between decision-making for executing important business activities based on extensive discussion by the Board of Directors and

For more details, refer to the website.

<https://www.shimadzu.co.jp/ir/governance/organization.html>



Corporate Governance System

functions for appropriately supervising and auditing such business execution, currently the following areas of knowledge and experience are considered important for the Board of Directors: company management, international experience, technology/IT, sales/marketing, finance/accounting, compliance/risk management, and personnel/human resources development. Directors are appointed from candidates with appropriate knowledge and experience in the above areas. The above areas of knowledge and experience will continue to be reassessed based on external business conditions and company circumstances.

	Name		Knowledge/Experience of Directors						
			Company Management	International Experience	Technology/IT	Sales/Marketing	Finance/Accounting	Compliance/Risk Management	Personnel/Human Resources Development
Directors	Akira Nakamoto		●		●		●	●	
	Teruhisa Ueda		●	●	●	●			
	Yasuo Miura			●		●	●		
	Mitsuo Kitaoka				●				
	Yasunori Yamamoto			●	●				
	Hiroko Wada	Outside Shimadzu	●	●		●			●
	Nobuo Hanai	Outside Shimadzu	●	●	●				
	Yoshiyuki Nakanishi	Outside Shimadzu	●	●		●			
Audit & Supervisory Board Members	Hiroyuki Fujii				●			●	●
	Makoto Koyazaki			●		●			
	Masahiro Nishio	Outside Shimadzu					●	●	
	Tsuyoshi Nishimoto	Outside Shimadzu		●				●	

Note: The above is not intended as a complete list of knowledge and experience held by members of the Board of Directors and Audit & Supervisory Board.

Reasons for Appointing Outside Directors and Audit & Supervisory Board Members and Description of Main Activities

Outside Director and Audit & Supervisory Board Member	Category	Independent Director and Audit & Supervisory Board Member	Name	Reasons for Appointment and Description of Main Activities	Attendance during FY 2019
Outside Directors	Reappointed	Independent director	Hiroko Wada	Based on her extensive global business experience as a director of a multinational company and CEO of a Japanese corporation and her broad knowledge about marketing, human resource development, and diversity, she actively expresses views and offers recommendations that strengthen the decision-making and supervisory functions of the Board of Directors. Also, as a member of the Appointment and Compensation Committee, she participates in discussions about improving the transparency and fairness of director appointment/removal and compensation decisions. She was appointed because of her anticipated role in contributing to sustaining growth and increasing the corporate value of the Shimadzu Group.	<ul style="list-style-type: none"> • Attended 11 of 11 Board of Directors meetings • Attended 6 of 6 Appointment and Compensation Committee meetings
	Reappointed	Independent director	Nobuo Hanai	Based on his extensive management experience as a CEO of a major Japanese pharmaceutical company and global knowledge about R&D and the pharmaceutical industry in Japan and throughout the world, he actively expresses views and offers recommendations that strengthen the decision-making and supervisory functions of the Board of Directors. Also, as a member of the Appointment and Compensation Committee, he participates in discussions about improving the transparency and fairness of director appointment/removal and compensation decisions. He was appointed because of his anticipated role in contributing to sustaining growth and increasing the corporate value of the Shimadzu Group based on his knowledge of major markets.	<ul style="list-style-type: none"> • Attended 9 of 9 Board of Directors meetings • Attended 5 of 5 Appointment and Compensation Committee meetings (Director, Shimadzu Corporation)
	Newly appointed	Independent director	Yoshiyuki Nakanishi	He offers extensive management experience as the CEO of a global chemical company and global knowledge about chemical industries throughout the world, management strategies, manufacturing, marketing, and other expertise. Given his knowledge of major markets of the Shimadzu Group, he was appointed in anticipation of his valuable advice regarding management and to serve the role of appropriately supervising the execution of business operations.	Newly appointed at the annual shareholders' meeting on June 25, 2021
Outside Audit & Supervisory Board Members	Retained	Independent Audit & Supervisory Board member	Masahiro Nishio	Based on his extensive experience and knowledge from many years of working as a certified public accountant, he actively offers his opinions at Board of Directors meetings and other situations. He was appointed in anticipation of his role in helping to improve the governance of the Shimadzu Group by gathering information from internal control departments and other sources, and providing opinions regarding ensuring the financial health of the Shimadzu Group.	<ul style="list-style-type: none"> • Attended 11 of 11 Board of Directors meetings • Attended 18 of 18 Audit & Supervisory Board meetings
	Retained	Independent Audit & Supervisory Board member	Tsuyoshi Nishimoto	He actively offers his opinions at Board of Directors meetings and other situations based on his extensive expert knowledge and experience as a lawyer. He was appointed in anticipation of his role in helping to improve the governance of the Shimadzu Group by gathering information from internal control departments and other sources, and providing opinions regarding the preparedness of internal control systems at Shimadzu subsidiaries, both within and outside Japan.	<ul style="list-style-type: none"> • Attended 8 of 9 Board of Directors meetings • Attended 10 of 11 Audit & Supervisory Board meetings (after being appointed Audit & Supervisory Board member)

Note: The above information represents the status of outside directors and Audit & Supervisory Board members after the Annual Shareholders' Meeting in June 2021. An overview of duties expected for the role of an outside director that resigned during the June shareholders' meeting is provided below.

Outside Director and Audit & Supervisory Board Member	Name	Overview of Duties with Respect to Expected Role	Attendance during FY 2020
Outside Director	Minoru Sawaguchi	With expert knowledge and extensive experience regarding corporate law and corporate governance, he actively expressed views and offered recommendations that strengthen the decision-making and supervisory functions of the Board of Directors. Also, as a member of the Appointment and Compensation Committee, he improved transparency and fairness by actively expressing views in discussions and decisions about succession plans, director compensation, and the appointment and removal of directors, including the President/CEO.	<ul style="list-style-type: none"> • Attended 11 of 11 Board of Directors meetings • Attended 6 of 6 Appointment and Compensation Committee meetings

Criteria for Independence of Outside Directors and Audit & Supervisory Board Members

If none of the following apply, Outside Directors and Outside Audit & Supervisory Board members (including candidates) shall have independence from Shimadzu, with no risk of a conflict of interest with general shareholders.

- (1) Major supplier of Shimadzu (a company that received payments from Shimadzu equivalent to 2% or more of their annual consolidated sales revenue during the previous fiscal year) or an executive officer of that company
- (2) Major customer of Shimadzu (a company that paid Shimadzu an equivalent of 2% or more of Shimadzu's annual consolidated sales revenue during the previous fiscal year) or an executive officer of that company
- (3) Consultant, accounting expert, or legal expert (including persons affiliated with a corporation, association, or other organization that received applicable assets) who receives any large monetary or asset compensation from Shimadzu

other than the designated director compensation (monetary or asset compensation equivalent to 10 million yen or more, excluding the director compensation, received during the previous fiscal year)

- (4) Persons for which any of the conditions (1) to (3) applied within the past year
- (5) Relatives within a second-degree kinship to a person indicated in 1. to 3. below (excluding those without significance).
 1. A person indicated in (1) to (4)
 2. An executive officer of a Shimadzu subsidiary (including directors who are not executive officers when Outside Audit & Supervisory Board members are assigned as independent directors)
 3. A person that served as an executive officer indicated in 2. or as a Shimadzu executive officer within the last year (including directors who are not executive officers when Outside Audit & Supervisory Board members are assigned as independent directors)

Corporate Governance

For more details, refer to the website.

<https://www.shimadzu.com/fir/governance/code.html>

Compliance with Governance Codes

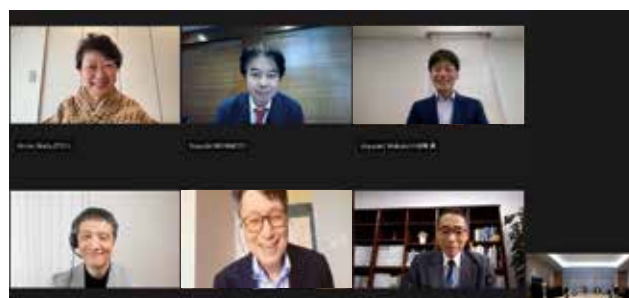
Evaluating the Effectiveness of the Board of Directors

Shimadzu analyzes and evaluates the effectiveness of the Board of Directors for the purpose of making continuous organizational or operational improvements and ensures it functions properly.

The sixth such evaluation involved conducting a survey in FY 2021 about the Board of Directors' effectiveness. An analysis and evaluation of the survey results were then deliberated at a Board of Directors meeting. An overview of that process is provided in the Corporate Governance Report.

Results from Evaluating the Effectiveness of the Board of Directors

Criteria for Evaluating Effectiveness	FY 2020 (Applicable Year: FY 2019)	FY 2021 (Applicable Year: FY 2020)
Operation of Board of Directors Meetings	Positive evaluation results were received again this year in terms of meeting frequency, length of individual meetings, and ensuring an atmosphere/environment where all members can freely express their views. The evaluation also indicated an improvement in ensuring adequate discussion time. On the other hand, to promote deeper discussions, we will make additional improvements to how reports are presented and the content of materials submitted.	Evaluation results were positive, such as indicating an appropriate frequency and length of meetings and an atmosphere and environment that allowed all members to freely express their views. The active use of remote meetings during the COVID-19 pandemic also received high marks.
Roles and Responsibility of the Board of Directors	We received a positive evaluation regarding the high number of meetings and hours the Board of Directors spent actively discussing preparation of the medium-term management plan. On the other hand, we will implement measures to ensure more extensive discussions about important management issues regarding medium/long-term business strategies and business portfolios.	Results were positive in terms of evaluating whether adequate time was provided for assessing and discussing the progress on issues and measures specified in the medium-term management plan and other matters. On the other hand, we intend to increase the opportunities for specifying and discussing topics in a manner that leads to a more dynamic deployment of business activities with personnel executing the measures taking appropriate risk.
Status of Measures to Address Issues Identified in the Effectiveness Evaluation Results Last Year	Positive evaluations were received regarding improvements achieved with respect to feedback about the content of discussions at Board of Directors meetings to administrative corporate executive officers, having discussed competitive strategies as an important management issue, and so on.	Evaluation results indicated that the content and reporting methods of presentation materials submitted for meetings were improved to promote deeper discussions, which had been an issue in the past. On the other hand, we intend to implement measures to ensure there is adequate time for considering the business portfolio, important business strategies, and so on.
Self-Assessment by Directors	All directors adequately understood the basic philosophy of the company, endeavored to achieve that philosophy, and had spent adequate time and effort fulfilling their roles and responsibilities as directors, which is a better result than in the previous year.	All directors adequately understood the basic philosophy of the company, endeavored to achieve that philosophy, and had spent adequate time and effort fulfilling their roles and responsibilities as directors, which is a better result than in the previous year.
Support for and Cooperation with Directors and Audit & Supervisory Board Members	The evaluation was generally positive regarding improvements achieved in methods for explaining the proposals to be discussed to outside directors and Audit & Supervisory Board members in advance. Nevertheless, we will implement measures to further improve/increase opportunities to exchange information between outside directors and outside Audit & Supervisory Board members and measures to provide all necessary information to outside directors and Audit & Supervisory Board members more appropriately.	Evaluation results indicated improvement since last year regarding earlier briefing of outside directors about the agenda before Board of Directors meetings and ensuring information is exchanged and shared appropriately among outside directors and Audit & Supervisory Board members.



Board of Directors Meeting and Briefing Meeting prior to the Board of Directors Meeting Conducted Remotely

Appointment and Compensation Committee

Shimadzu established the Appointment and Compensation Committee as an optional advisory body to the Board of Directors for the purpose of strengthening the independence, objectivity, and accountability of the Board of Directors. Through the activities indicated below, the committee strengthens governance by increasing the transparency and objectivity of processes involved in appointing and compensating directors and Audit & Supervisory Board members.

The committee met six times during FY 2020.

Main Activities of the Appointment and Compensation Committee during the Last Fiscal Year

Appointment Activities	<ul style="list-style-type: none"> Deliberated candidates for the next president and CEO Deliberated candidates for outside directors and Audit & Supervisory Board members Deliberated transfers of directors and Audit & Supervisory Board members
Compensation Activities	<ul style="list-style-type: none"> Deliberated and recommended revisions for policies related to compensation and other amounts and their calculation methods due to legal changes Deliberated fixed compensation and short-term performance-linked compensation amounts for the current fiscal year Deliberated specifying key points for continuity of the system for stock compensation linked to medium/long-term performance Deliberated issues regarding director and Audit & Supervisory Board member compensation

Evaluating the Effectiveness of the Appointment and Compensation Committee

In addition to evaluating the effectiveness of the Board of Directors, a survey about the effectiveness of the

Appointment and Compensation Committee has been conducted annually since 2019, the year after the committee was established.

Survey questions primarily involve (1) committee member composition, (2) committee operation, (3) committee member roles and responsibilities, and (4) feedback to the Board of Directors regarding the content of committee deliberations. Evaluation results have been generally positive.

Composition of Appointment and Compensation Committee

The Appointment and Compensation Committee is composed of Representative Directors and Outside Directors, with a majority of the members Outside Directors. Committee members that are Outside Directors must satisfy independence criteria specified by Shimadzu. (Refer to page 49.)

Name	Appointment and Compensation Committee
Outside Directors	3
Internal Directors	2
Members	5

Members of the Appointment and Compensation Committee

Chairman: Akira Nakamoto

(Representative Director, Chairman of the Board)

Members: Teruhisa Ueda (President & CEO)

Hiroko Wada (Outside Director)

Nobuo Hanai (Outside Director)

Yoshiyuki Nakanishi (Outside Director)

Executive Sessions

To provide an opportunity to periodically meet and freely discuss issues, exchange views, share circumstances, and so on, executive sessions are held between Outside Directors and Outside Audit & Supervisory Board members, or between Outside Directors and Audit & Supervisory Board members after Board of Directors meetings have ended.

For the purpose of the sessions to provide information to executive management and the Board of Directors, Outside Directors and Outside Audit & Supervisory Board members express their respective views on Shimadzu issues and exchange views with an accountant about improving internal controls.



Executive Session of Outside Directors and Outside Audit & Supervisory Board Members

Tours, informational presentations, and other means are used to provide a deeper understanding of Shimadzu business operations, mainly for newly appointed Outside Directors.

In particular, last fall a tour was given of the facility where the fully automatic PCR testing system was developed and released late last year. The tour resulted in valuable feedback about sales methods and other aspects for the system, which was targeted to clinics and medium-sized hospitals.

Given the ongoing pandemic, it has become difficult to conduct tours and other activities, but we plan to resume the tours in the future when appropriate.



Tour of Area where the Fully Automatic PCR Testing System was Developed

Corporate Governance



For more details, refer to the website.

<https://www.shimadzu.com/ir/governance/code.html>

Basic Policy/Compliance with Corporate Governance Codes/Cross-Shareholdings/Appointment and Compensation Committee/Director Compensation System/Evaluating the Effectiveness of the Board of Directors

Policy on Method for Deciding Director and Audit & Supervisory Board Member Compensation

Shimadzu has specified regulations for Director and Audit & Supervisory Board member compensation that govern the procedure for deciding compensation amounts, the compensation system, and other related issues regarding compensating directors, Audit & Supervisory Board members, and executive officers with specific duties. Furthermore, the Policy on Method for Deciding Director and Audit & Supervisory Board Member Compensation is decided by deliberation of the Board of Directors based on the recommendations of the Appointment and

Compensation Committee. That policy was reviewed in March 2021.

Compensation amounts for Directors and executive officers with specific duties are decided by Appointment and Compensation Committee members appointed by Board of Directors within the range decided at the Annual Shareholders' Meeting. The results are then reported to the Board of Directors. Compensation amounts for Audit & Supervisory Board members are decided through discussion with the Audit & Supervisory Board members.

Director and Audit & Supervisory Board Member Compensation System

Compensation for directors (excluding outside directors) and executive officers with specific duties (collectively referred to as "Director or Officer" below) comprises a fixed base compensation amount plus a variable amount linked to variations in short-term performance and stock compensation linked to variations in medium/long-term performance, while also taking into consideration the management duties of the Director or Officer with respect to

expanding our business results during each fiscal year and increasing medium- and long-term corporate value.

Compensation levels are decided based on the expected roles and duties of the Outside Director.

Compensation for Audit & Supervisory Board members only includes a fixed compensation amount decided based on their expected roles and duties.

Classification	Directors (Internal)	Outside Directors	Audit & Supervisory Board Members	Remarks
Fixed Compensation	○	○	○	From the perspective of deciding compensation based on objective information, while also providing a level that is sufficient to enable recruiting talented human resources, compensation is decided based on the candidate's current position and intended role, using the compensation offered by similar companies (group of benchmark companies of a similar size and in a similar type of business), to be determined by a survey performed by an outside specialist company, as an important reference level.
Short-Term Performance-Linked Compensation	○	—	—	Compensation is decided based on overall consideration of the year on year growth rate of consolidated net sales and operating income, an evaluation of the performance of the specific department the executive officer with specific duties is in charge of, and a personal evaluation.
Medium/Long-Term Performance-Linked Stock Compensation	○	—	—	For directors, for example, the number of shares provided for each position is decided in the final year of the medium-term management plan based on the degree to which performance targets specified were achieved. Compensation can vary within the 50 to 200% range, given the target achievement degree is determined based on target values for consolidated net sales and operating income as performance indicators. If a director or other employee commits a serious violation of their job duties or company regulations, they will forfeit their right to benefit from scheduled issues of stock and a system is established to charge a monetary amount equivalent to the stock value provided.

Director and Audit & Supervisory Board Member Compensation Status (FY2020)

Classification	Number of Applicable Directors and Audit & Supervisory Board Members	Fixed Compensation (million yen)	Compensation Linked to Performance (million yen)		Total (million yen)
			Compensation Linked to Short-Term Performance	Stock Compensation Linked to Medium/Long-Term Performance* Recorded as Expense	
Directors (Internal)	6	222	137	46	407
Audit & Supervisory Board Members (Internal)	2	53	—	—	53
Outside Directors	2	36	—	—	36
Outside Corporate Auditors	3	20	—	—	20
Total	15	333	137	46	517

Note: The system for stock and non-monetary compensation linked to medium/long-term performance is intended to provide a quantity of stock every three years based on the extent to which the performance targets for the final year of the medium-term management plan were achieved. However, implementing the system requires recording that stock compensation as an expense each year. The compensation value indicated above is based on the recorded expense calculated by multiplying the number of points attributable to directors (excluding outside directors) for the given fiscal year by the market stock price, assuming a trust purchased Shimadzu stock. However, actual stock compensation is determined after the medium-term management plan has ended.

Note: The above includes compensation paid to one director who retired on June 25, 2020 (excluding outside directors), one outside director, and one outside Audit & Supervisory Board member.



Compliance

Basic Policy

The Shimadzu Group is committed to obtaining applicable permits and licenses and complying with applicable laws and regulations, such as security trade controls, anti-bribery laws, and competition laws, established by governments in respective regions and countries for Shimadzu's various businesses deployed around the world. In addition to compliance with laws and regulations, Shimadzu is also committed to behavior consistent with international norms. We have established a Corporate Code of Ethics that specifies guidelines for ethics that should be shared and complied with by directors and employees, in accordance with Shimadzu's corporate philosophy, management principle, and CSR charter, and we practice a policy of prioritizing compliance above all else.

Promoting Compliance

The Shimadzu Group has created a Corporate Ethics and Code of Conduct Handbook that summarizes the essential elements of the Corporate Code of Ethics in an easy-to-understand form and prevents compliance problems through group training, e-learning, and other teaching activities to teach and instill the contents of the handbook. We also ensure the implementation of corporate compliance within the Shimadzu Group by monitoring compliance with laws, regulations, and other requirements whenever appropriate through the activities of the Export Controls Committee and the Official Approval Committee, or internal audits. We have also established a system for reporting any problems, with contact points established within and outside the company for consultation and notification regarding compliance issues.

Provision of a Corporate Ethics Consultation and Notification Contact Points

To prevent corporate ethics problems, or identify and address them as early as possible, all Shimadzu Group employees (including former employees), temporary personnel, and contractor personnel working within the company are notified that Shimadzu has established special contact points within and outside the company for consultation and notification regarding corporate ethics issues. To provide a system that is independent from normal executive management channels, "External Hotlines" are provided as contact points outside the company, where personnel can notify or consult an outside lawyer, who in turn reports relevant issues to an Audit & Supervisory Board Member. In addition to preparing measures for investigating, remedying, and preventing recurrence, as necessary, rules are also established to protect personnel that utilize the contact points for consultation or notification, such as rules that prohibit treating them unfavorably. In FY 2020, there were 60 cases of the contact points being utilized for consultation or notification.

The following web page includes information about the topics listed below.

<https://www.shimadzu.com/ir/governance/social/compliance.html>



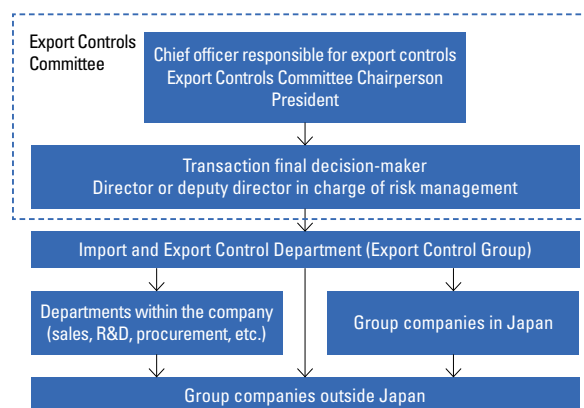
Shimadzu Corporate Ethics/Compliance and Corporate Ethics

Security Trade Controls

The Shimadzu Group has established a security trade control policy and implements appropriate import/export controls from a perspective of maintaining international peace and security.

Export Control System

Internal export control regulations (compliance program, abbreviated "CP") were established, with the President as the chief officer responsible for export controls, to ensure the Security Trade Control Policy is implemented. Based on these regulations, we conduct strict applicability reviews, transaction reviews, and so on, in compliance with the Japanese Foreign Exchange and Foreign Trade Act and other applicable laws and regulations. Furthermore, the Export Controls Committee conducts periodic audits to confirm exports are being controlled appropriately in accordance with the CP.



Preventing Bribery and Anti-Competitive Practices

The CSR charter and corresponding policies for activities specify conducting activities in an open and fair manner and forbid offering bribes to public officials or offering inappropriate entertainment or gifts to suppliers or others in the private sector in order to prevent receiving or giving of bribes. We also forbid obtaining profit through improper means, are committed to competing fairly, and engaging only in fair transactions.

Ensuring Transparency of Relationships with Medical and Other Institutions

To be a company worthy of the trust of society, we have increased the transparency of relationships with medical institutions and others whose cooperation is essential for developing, manufacturing, importing, and selling medical systems by publishing a Guideline for Transparency of Relationships with Medical and Other Institutions and disclosing all funds provided to medical institutions or other relevant parties.

Risk Management

The following web page includes information about the topics listed below.

https://www.shimadzu.com/ir/governance/risk_management.html



Shimadzu Risk Management, Assessment Methods for Risk Management, and Risk Management Activities

Basic Policies

Risk management is an indispensable presence necessary for achieving business continuity and progress, while also fulfilling the social responsibilities of the company.

Therefore, to increase the trust of society, Shimadzu established a risk management system that encompasses corporate ethics and compliance, cultivated a corporate culture that respects corporate ethics and compliance, and has been engaged in activities for ensuring that business risks are properly managed.

Risk Management System

The Shimadzu Group has established Basic Risk Management Regulations that specify systems and activities related to risk management.

Under the direction of the President, who is the chief officer responsible for risk management, a Risk Management and Corporate Ethics Board convenes twice a year to decide important issues as the highest deliberative body for risk management. Decisions by the board are coordinated by the director in charge of risk management and are deployed in a top-down manner to other respective departments and Group companies, primarily by departments specifically responsible for the respective risks or special committees in charge of company-wide risk management issues.

For Group companies outside Japan, the corresponding regional corporate head offices in the United States, Germany, China, and Singapore serve to manage activities, provide training, provide support, and monitor issues related to risk management at group companies under their jurisdiction.

Risk Management Activities

The Shimadzu Group uses a risk management PDCA cycle to periodically identify, assess, and respond to risks.

(1) Top-Down Activities

The Shimadzu Group uses a top-down approach to assess risks and consider corresponding countermeasures from a company-wide perspective. In response to changes in the business environment, potential risks to the Shimadzu Group are identified and then any risks that require particularly prioritized risk countermeasures are classified as a "priority risk" and a director is assigned to be in charge of that risk. The progress status of corresponding risk countermeasures is checked by the Risk Management and Corporate Ethics Board.

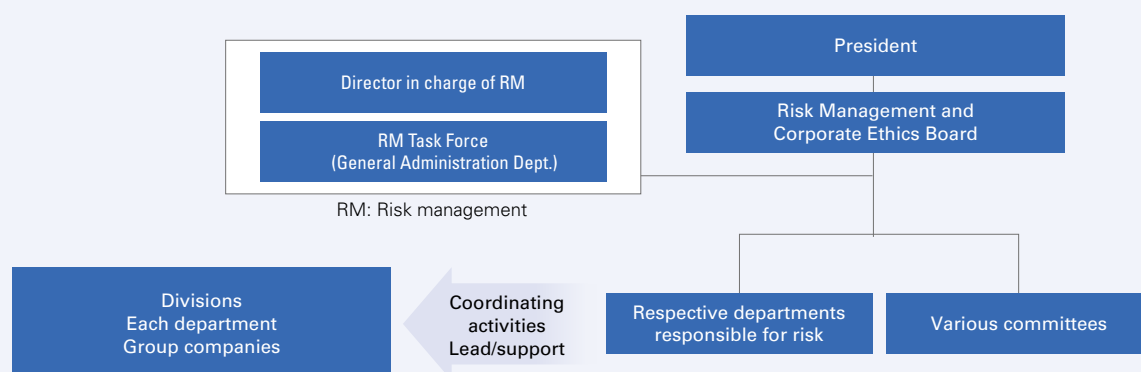
(2) Bottom-Up Activities

Based on the assumption that those working on the front lines are the most aware of risks, the Shimadzu Group periodically conducts risk assessments so that risks can be prevented and controlled by running the PDCA cycle implemented as part of normal front-line business processes. Based on those risk assessment results, each department (or Group company) identifies important risks and increases the effectiveness of risk management measures.

(3) Responding when a Serious Risk Appears

An emergency communication system has been established to ensure an appropriate response in the case of a serious risk. Based on the general rule to communicate the first report as soon as possible, if necessary a response task force chaired by the President is established for implementing response measures.

Risk Management and Ethics System



The following web page includes information
about the topics listed below.

<https://www.shimadzu.com/ir/strategy/risk.html>



Risks to Businesses, etc.

Risk Management and Ethics Systems at Group Companies outside Japan



Business Continuity Plan (BCP)

The Shimadzu Group has established a business continuity plan (BCP) to fulfill our responsibility to supply products to our customers by ensuring the safety of personnel, minimizing damage, and recovering quickly.

(1) Emergency Response System

To coordinate business continuity activities in an emergency, a head office task force will be established for coordinating company-level activities and, below that task force, five divisional task forces will be established within each division. As the head of respective task forces, the President directs the business continuity and recovery activities of the head office task force and respective divisional general managers direct the activities of the divisional task forces.

(2) Preparation of Business Recovery Plans

A business recovery plan is prepared for each division. A separate recovery plan is prepared for buildings, utilities, production lines, procurement, service, and other functions, to ensure a quick recovery of business operations.



(3) Safety Status Confirmation System

A system for each employee to report their safety status using their mobile phone in the event of a large earthquake or other major disaster was introduced at the Head Office and Group companies in Japan, with training conducted periodically. Smooth confirmation of employee safety helps achieve a faster and more appropriate initial response.



Risk Management

Responding to the COVID-19 Pandemic

To prevent the spread of infection, Shimadzu has prioritized the safety of customers, the local community, business partners, employees, and others, by continuing to implement responses in accordance with government instructions. The following describes one such example.

(1) Preparing and Executing Internal Guidelines and Standards

Shimadzu has prepared and periodically updated guidelines based on medical evidence and government policies for how to respond in the event infections occur within the company and standards for preventing further infection. There are six levels of standards for infection prevention measures. By specifying specific basic actions, such as for business trips within or outside Japan, teleworking, or conducting meetings, responses can be implemented organizationally and more flexibly.

(2) Monitoring Employee Health Symptoms and Responding Quickly if an Infection is Discovered

We ask employees to report health symptoms every day in order to quickly identify and follow up on anyone who is not feeling well. If someone does not feel well, an in-house occupational health nurse will actively give instructions/guidance to manage the person's mental and physical health and increase their awareness of preventing transmission of infection. If an employee infection is confirmed, clusters within the company are inhibited by quickly tracing all close contacts, isolating the employee at home, disinfecting surfaces, and so on.

(3) Indicating and Executing Infection Prevention Measures for Visitors

We strive to relieve visitor concern by preparing standards for responding to visitors, standardizing that response at all locations within Japan, and clearly posting measures to show that Shimadzu takes safety very seriously.

At sites where we manufacture infectious disease countermeasure products, due to our strong awareness of our responsibility as a supplier of such products, in addition to the measures above, we also use Shimadzu products to regularly conduct PCR testing, monitor body temperature, and implement other measures for ensuring business continuity.



Specimen Sampling Booth at the Clinic within Shimadzu



SHIMADZU
Excellence in Science

感染予防のために
みんなで、できること
SAVE OUR LIVES





Information Security

The following web page includes information about the topics listed below.

https://www.shimadzu.com/sustainability/approach/social/information_security/index.html



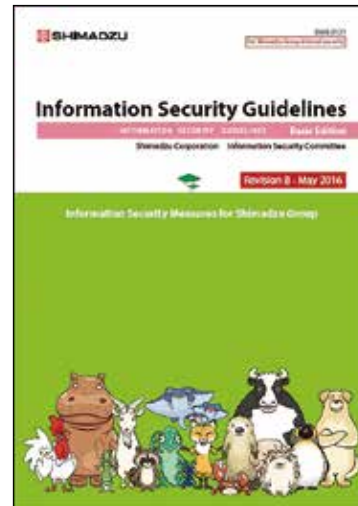
Basic Policies, Principles, and Measures

Systems for Improving Information Security

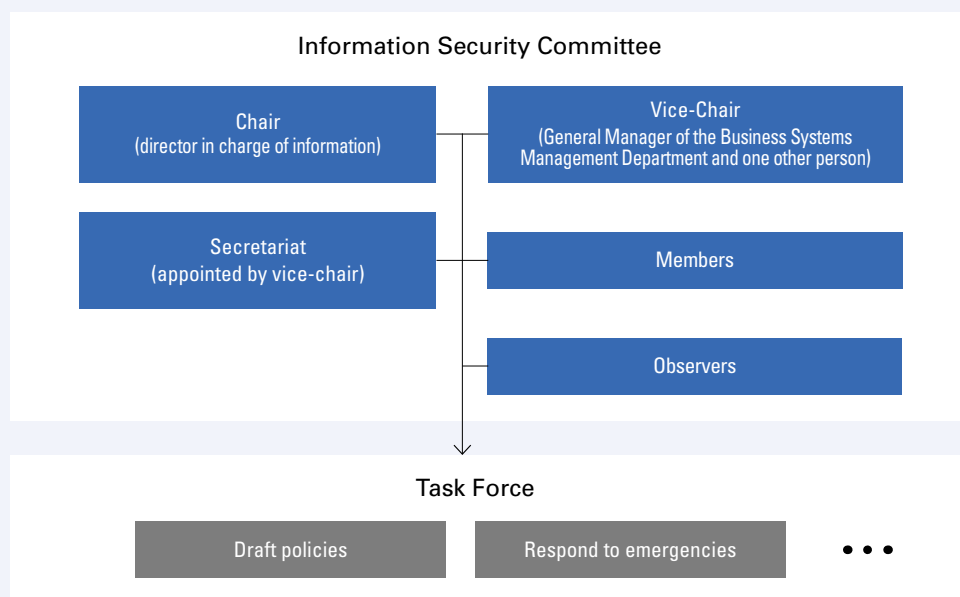
The Shimadzu Group periodically conducts Information Security Committee meetings, chaired by the director in charge of information security, to establish systems for sharing and deploying security measures throughout Shimadzu Corporation and Group companies. At the meetings, the committee discusses the direction and content of measures, creates relevant regulations that incorporate human, organizational, and technical countermeasures, and makes decisions regarding introducing new information management methods and tools. To minimize the damage from any accidents, we established a communication tree system for sharing information with subsidiaries in and outside Japan and specified a protocol for responding to accidents. The committee also distributes an Information Security Guidebook that summarizes Shimadzu rules for information security, provides information security training based on E-learning, and provides practice responding to suspicious or fraudulent emails in order to highlight the importance of information security and engage in ongoing training.

The Shimadzu Group company, Shimadzu Business Systems Corporation (in charge of building information systems for the Shimadzu Group) has obtained ISO 27001

information security management certification. To prevent leaking information or business interruptions due to cyber-attacks, the company actively implements malware protections and diagnoses/remedies security vulnerabilities for networks and computers.



Promotion systems for information security



Profiles of Directors and Audit & Supervisory Board Members

(As of June 25, 2021)

Directors



Akira Nakamoto
Representative Director,
Chairman of the Board

Chair of the Board of Directors
Outside Director of
Furukawa Electric Co., Ltd.

Apr. 1969 Joined Shimadzu Corporation
Jun. 2001 Director, Member of the Board
Jun. 2005 Managing Director
Jun. 2007 Senior Managing Director
Jun. 2009 President and Director

Jun. 2013 CEO
Jun. 2015 Chairman and Representative Director (current)
Jun. 2015 Chairman of the Board (current)



Teruhisa Ueda
Representative Director, President

CEO

Apr. 1982 Joined Shimadzu Corporation
Jun. 2007 Corporate Officer
Jun. 2007 Deputy General Manager, Analytical & Measuring Instruments Division
Jun. 2011 Director, Member of the Board
Jun. 2011 General Manager, Analytical & Measuring Instruments Division

Jun. 2013 Managing Executive Officer
Jun. 2014 Senior Managing Executive Officer
Jun. 2015 President and Representative Director (current)
Jun. 2015 CEO (current)



Yasuo Miura
Director, Senior Corporate
Executive Officer

In charge of risk management and
corporate marketing General Manager,
Tokyo office

Apr. 1980 Joined Shimadzu Corporation
Apr. 2005 General Manager, Corporate Strategy Planning Department
Jun. 2007 Corporate Officer
Jun. 2009 President, Shimadzu Europa GmbH (Germany)
Jun. 2013 Director, Member of the Board (current)
Jun. 2013 Managing Executive Officer
Jun. 2013 In charge of finance (currently finance/accounting)

Jun. 2013 In charge of corporate marketing (current)
Jun. 2015 General Manager, Tokyo Office (current)
Jun. 2017 Senior Managing Executive Officer
Apr. 2019 Senior Corporate Executive Officer (current)
Apr. 2020 CFO
Apr. 2021 In charge of risk management (current)



Mitsuo Kitaoka
Director, Senior Corporate
Executive Officer

CTO

Apr. 1982 Joined Shimadzu Corporation
Jan. 2007 General Manager, Research & Development Department, Analytical & Measuring Instruments Division
Jun. 2011 Deputy General Manager of Analytical & Measuring Instruments Division and concurrently General Manager of Research & Development Department, Analytical & Measuring Instruments Division
Jun. 2015 Corporate Officer

Jun. 2015 General Manager, Technology Research Laboratory
Jun. 2017 Managing Executive Officer
Jun. 2017 In charge of R&D
Jun. 2019 Director, Member of the Board (current)
Apr. 2020 Senior Managing Executive Officer
Apr. 2020 CTO (current)
Apr. 2021 Senior Corporate Executive Officer (current)

Audit & Supervisory Board Members



Hiroyuki Fujii
Senior Audit &
Supervisory Board Member

Outside Corporate Auditor of
Dai Nippon Toryo Co., Ltd.

Apr. 1981 Joined Shimadzu Corporation
Apr. 2005 General Manager, Human Resources Department
Jun. 2007 Corporate Officer
Jun. 2009 Director
Jun. 2013 Senior Audit & Supervisory Board Member (current)



Makoto Koyazaki
Audit &
Supervisory Board Member

Jan. 1991 Joined Shimadzu Corporation
Apr. 2011 General Manager, Business Planning Department, Shimadzu International Trading (Shanghai) Co., Ltd. (currently Shimadzu (China) Co., Ltd.)
Jun. 2012 General Manager, Corporate Strategy Planning Department
Apr. 2016 President and CEO, Shimadzu GLC Ltd.
Apr. 2019 Senior Manager, Audit & Supervisory Board Members' Office
Jun. 2019 Audit & Supervisory Board Member (current)



Yasunori Yamamoto

Director, Senior Managing
Executive Officer

In charge of CFO and corporate strategy
planning and corporate communications

Apr. 1983 Joined Shimadzu Corporation
Oct. 2003 Coordination Manager, Testing
Machines Business Unit, Analytical
& Measuring Instruments Divisions
Jun. 2013 President, Shimadzu Europa GmbH
(Germany)
Jun. 2014 Corporate Officer
Jun. 2017 Managing Executive Officer

Jun. 2017 In charge of manufacturing, information
system, and CS
Jun. 2017 Deputy director in charge of technology
research
Apr. 2020 In charge of corporate strategy planning
and corporate communications(current)
Jun. 2020 Director, Member of the Board(current)
Apr. 2021 Senior Managing Executive Officer
(current), CFO (current)



Hiroko Wada

Outside Director

Representative of Office WaDa
Outside Director of
Coca-Cola Bottlers Japan Holdings Inc.
Outside Director,
Audit & Supervisory Committee Member
of Unicharm Corporation

Apr. 1977 Joined Procter & Gamble Sunhome Co., Ltd. (currently Procter & Gamble Japan)
Jan. 1998 Vice President, Procter & Gamble U.S., responsible for corporate new venture Asia
Mar. 2001 President, Dyson Limited
Apr. 2004 President and CEO, Toys "R" Us, Japan
Nov. 2004 Established Office WaDa (current)
May 2009 Outside Director, Aderans Holdings Company (currently Aderans Company Limited)
Apr. 2016 Advisor, Nutraceutical Business, Otsuka Pharmaceutical Co., Ltd.
Jun. 2016 Director, Shimadzu Corporation (current)



Nobuo Hanai

Outside Director

Outside Director of Perseus Proteomics
Inc.

Apr. 1976 Joined Kyowa Hakko Kogyo Co., Ltd., (currently Kyowa Kirin Co., Ltd.)
Jun. 2006 Executive Officer Kyowa Hakko Kogyo Co., Ltd.,
Apr. 2009 Managing Executive Officer, Kyowa Hakko Kirin Co., Ltd.,
Jun. 2009 Director of the Board, Managing Executive Officer, Kyowa Hakko Kirin Co., Ltd.,
Mar. 2010 Director of the Board, Senior Managing Executive Officer, Kyowa Hakko Kirin Co., Ltd.,
Mar. 2012 Executive Director of the Board, President and Chief Executive Officer, Kyowa Hakko Kirin
Co., Ltd.,
Mar. 2018 Executive Director of the Board, Chairman and Chief Executive Officer, Kyowa Hakko Kirin
Co., Ltd.,
Mar. 2019 Director of the Board, Chairman, Kyowa Hakko Kirin Co., Ltd.,
Jun. 2020 Director, Shimadzu corporation (current)



Yoshiyuki Nakanishi

Outside Director

Advisor of DIC Corporation
Outside Director of IHI Corporation
Outside Director of The Japan Steel
Works, LTD.

Apr. 1978 Dainippon Printing Ink Manufacturing Co., Ltd., (currently DIC Corporation)
Apr. 2010 Corporate Officer, DIC Corporation
Jun. 2011 Director, DIC Corporation
Apr. 2012 Representative Director, President and CEO, DIC Corporation
Jan. 2018 Chairman of the Board of Directors, DIC Corporation
Jan. 2021 Director, DIC Corporation
Mar. 2021 Advisor, DIC Corporation (current)
Jun. 2021 Director, Shimadzu Corporation (current)



Masahiro Nishio

Outside Audit &
Supervisory Board Member

Director, Nishio Certified Public
Accountant Firm
External Audit & Supervisory Board
Member of Mandom Corporation
Outside Auditor of Samco Inc.

Nov. 1974 Joined Daiwa Accounting Office (current KPMG AZSA LLC)
Mar. 1978 Became a chartered accountant
Jan. 2015 Established Nishio Certified Public Accountant Firm (current)
Jun. 2015 Audit & Supervisory Board Member, Shimadzu Corporation (current)



Tsuyoshi Nishimoto

Outside Audit &
Supervisory Board Member

Partner of Hibiya Park Law Offices
Statutory Auditor of Enigmo Inc.
Statutory Auditor of Broadleaf Co., Ltd.

Oct. 2000 Registered as attorney-at-law
Dec. 2002 Joined Hibiya Park Law Offices (current)
Jun. 2020 Audit & Supervisory Board Member, Shimadzu Corporation (current)

Messages from Outside Directors

To achieve sustained growth for the Shimadzu Group and increase the corporate value in the medium and long term, we have used the establishment of the Corporate Governance Codes as an opportunity to implement a wide variety of governance reforms. We asked three Outside Directors currently serving on the Board and one recently retired in June 2021 to provide their frank comments about future issues they may have noticed as business conditions have changed for the Board of Directors, or hopes they have for Shimadzu.



Hiroko Wada

Outside Director
Becoming a Company that
Can Contribute Significantly
to Society
Term of office as Independent
Director: 5 years

Becoming a Company that Can Contribute Significantly to Society

During the past year, the COVID-19 pandemic has had a major impact on business management and people's lives. Without a clear picture of when conditions would settle back into a peaceful environment, a sense of crisis and uncertainty was drifting through society. Being no exception to such effects, Shimadzu adjusted medium-term management plan targets downward. Despite the circumstances, Shimadzu was able to play a role in fighting the pandemic by implementing measures not included in the original plan, such as developing and selling PCR testing reagents, and even increased results for the fiscal year 2020 by operating the organization efficiently based on the given circumstances. When the crisis occurred, rather than simply enduring the rapid changes, Shimadzu was able to find a flexible strength for creating products and services in a timely manner that could make a significant new contribution to society. I think that time of emergency showed Shimadzu's true colors. As a member of the Board of Directors, I endeavor to provide oversight for achieving business growth, while also ensuring a diversity of perspectives, making continuous improvements to corporate governance systems, and satisfying the expectations of stakeholders and responding to new demands of society. As a result, I envision a Shimadzu that generates even more innovations to make an even greater contribution to society.



Nobuo Hanai

Outside Director
Term of office as Independent
Director: 1 year

Using Research and Development Capabilities to Solve New Challenges in Society

Shimadzu has achieved characteristically steady progress in terms of corporate governance. However, I think stronger governance is necessary for achieving growth as a global company. In the future, the composition of corporate officers and board members will probably become an issue in terms of diversity. Shimadzu's tradition of refining technologies, which has continued since its founding, has resulted in improved research and development capabilities today. Shimadzu's speed in quickly developing COVID-19 testing reagents and an automatic analysis system for directly solving challenges in society is the cumulative result of incremental research and development accomplishments and deserves high marks in terms of sustainability as well. However, it is unfortunate that the contribution from that success was mainly limited to within Japan. It is wonderful that Shimadzu's product capabilities were recognized in China last year and resulted in significant sales growth. First-year targets of the medium-term management plan were also achieved. On the other hand, whether or not products generated by Shimadzu research and development will be able to expand market share in North America, given all the competitors there, remains an important question. I think that outcome will be a key performance indicator of achieving Shimadzu's management principle "Realizing Our Wishes for the Well-being of Mankind and the Earth."

After being Appointed to the Board of Directors

Treating Crises as Opportunities



Yoshiyuki Nakanishi

Outside Director
Newly appointed

I was recently appointed as a new Outside Director on the Shimadzu Board of Directors.

The massive changes occurring in our business environment due to the global pandemic have even been changing our conventional assumptions about business practices and values. In times like these, it is common to hear advice such as “crises represent opportunities,” but in reality that is easier said than done. However, Shimadzu is a company with a track record of actually turning crises into opportunities and I believe the spirit of inquiry that drives that success remains alive and healthy to this day.

Needless to say, for a company to create and continuously increase value, it must engage in active discussions and share information based on a healthy sense of tension between the board of directors and executive managers. As a member of the Shimadzu Board of Directors, I will be mindful of appropriately monitoring issues and the risk-taking involved in implementing business measures and try to offer useful advice.

Comments before I Retire from the Board of Directors

Further Strengthening Shimadzu's Business Portfolio

In short, the changes in governance practices during my eight years serving on the board can be described as self-motivated and steady. Given the creation of a code of ethics and other major changes in our operating environment during those years, corporate governance at Shimadzu has changed significantly as well, but most of those changes were voluntarily proposed by management and have resulted in major progress.

One challenge for Shimadzu, which is simultaneously a strength, is the business portfolio. Business portfolios require constant reassessment, but due to the accelerating changes in business conditions they must be addressed with a sense of speed. Meanwhile, the liquid chromatograph business, which started manufacturing and selling products in the 1970s, has been carefully nurtured to be Shimadzu's strongest business category today. The ability of the COVID-19 PCR testing business to contribute to society is also a testament to the strength of that business portfolio. After all, Shimadzu has already started using analytical instruments as powerful sensing devices to develop new businesses in the healthcare field, which offers large potential business opportunities. The Board of Directors' role is significant for such projects. I hope that they can serve to double-check the focus of management and give them a supportive nudge in the right direction whenever necessary.



Minoru Sawaguchi

Former Outside Director
Term of office as Independent
Director: 8 years

Key Financial and Non-Financial Data over the Past 11 Years

Financial Data

	FY 2010	FY 2011	FY 2012	FY 2013
Fiscal Year				
Net sales	252,707	266,255	264,048	307,532
Gross profit	95,520	100,875	96,030	117,959
Selling, general and administrative expenses	79,222	81,509	83,913	93,940
R&D expenses	8,407	8,883	9,659	10,643
Operating income	16,297	19,365	12,116	24,018
Capital investment	8,463	8,911	9,147	16,163
Depreciation and amortization	7,924	7,969	7,909	8,050
Profit attributable to owners of parent	10,046	9,083	7,578	9,724

Cash Flows

Cash flows from operating activities	24,992	8,805	12,028	(5,870)
Cash flows from investing activities	(8,281)	(7,899)	(7,899)	390
Free cash flows (from operating and investing activities)	16,710	906	4,128	(5,480)
Cash flows from financing activities	(9,044)	(4,878)	(2,401)	15,363

Year-End Values

Total assets	284,843	290,840	300,259	340,715
Cash and cash equivalents	34,221	29,756	33,842	43,929
Outstanding interest-bearing debt	30,729	29,075	30,509	53,860
Shareholders' capital	166,401	173,105	178,174	180,449

Per-Share Information

Profit	34.05	30.79	25.69	32.97
Net assets	530.25	546.97	587.53	616.50
Dividends	8.00	8.00	9.00	9.00
Payout ratio (%)	23.5	26.0	35.0	27.3

Key Financial Performance Indicators

Gross margin	37.8	37.9	36.4	38.4
Operating margin	6.4	7.3	4.6	7.8
ROE (Return on equity)	6.5	5.7	4.5	5.5
ROA (Return on assets)	3.5	3.2	2.6	3.0
Shareholders' capital ratio	54.9	55.5	57.7	53.4
Price-earnings ratio (×)	21.7	24.3	26.1	27.8
Overseas sales ratio	39.7	40.8	43.0	46.5

Non-Financial Data

	FY 2010	FY 2011	FY 2012	FY 2013
Number of employees	9,819	10,132	10,395	10,612
Number of employees outside Japan	3,328	3,608	3,842	3,913
Number of patents held	3,996	4,343	4,848	5,304
CO ₂ emissions (t-CO ₂)	34,877	39,213	42,390	44,472

(million yen)

FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
314,702	342,236	342,479	376,530	391,213	385,443	393,499
127,028	140,385	136,409	149,833	157,169	152,430	156,192
99,838	104,683	99,319	107,011	112,688	110,584	106,450
9,786	9,437	9,296	9,676	10,138	10,632	10,155
27,189	35,701	37,089	42,822	44,480	41,845	49,742
13,571	12,098	12,876	17,187	21,711	17,676	14,471
7,951	9,425	9,546	10,591	11,506	13,256	15,536
18,445	23,899	26,473	29,838	32,523	31,766	36,097

40,245	32,348	29,608	41,215	29,454	39,509	63,801
(15,678)	(13,101)	(12,304)	(11,072)	(22,897)	(16,062)	(13,860)
24,566	19,246	17,303	30,142	6,557	23,447	49,941
(33,197)	(11,689)	(7,294)	(7,902)	(10,819)	(26,185)	(13,033)

339,832	349,798	375,354	418,548	437,190	437,618	497,459
38,422	43,508	52,762	75,090	70,842	66,683	106,855
24,668	19,150	18,611	18,636	17,537	2,112	1,743
195,912	214,734	235,342	258,464	282,962	305,395	323,267

(yen)

62.55	81.05	89.79	101.26	110.41	107.84	122.52
711.38	745.13	818.56	908.76	977.35	1,027.87	1,138.67
13.00	18.00	20.00	24.00	28.00	30.00	34.00
20.8	22.2	22.3	23.7	25.4	27.8	27.8

(%)

40.4	41.0	39.8	39.8	40.2	39.5	39.7
8.6	10.4	10.8	11.4	11.4	10.9	12.6
9.4	11.1	11.5	11.7	11.7	10.8	11.3
5.4	6.9	7.3	7.5	7.6	7.3	7.7
61.7	62.8	64.3	64.0	65.9	69.2	67.4
21.4	21.8	19.7	29.5	29.0	26.4	32.68
49.8	50.9	48.6	50.2	50.4	49.0	50.8

FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
10,879	11,094	11,528	11,954	12,684	13,182	13,308
4,059	4,201	4,471	4,805	5,187	5,485	5,549
5,484	5,657	6,071	6,549	6,755	7,062	6,423
46,473	46,453	46,959	49,398	44,958	38,727	35,080

Financial Statements

Consolidated Balance Sheets

	(million yen)	
	FY 2019	FY 2020
Assets		
Current assets		
Cash and time deposits	70,868	112,760
Trade notes and accounts receivable	119,903	117,857
Merchandise and products	46,928	59,117
Work in process	20,643	18,383
Raw materials and supplies	20,301	20,150
Other	8,806	9,296
Allowance for doubtful receivables	(1,811)	(2,119)
Total current assets	285,640	335,446
Noncurrent assets		
Property, plant and equipment		
Buildings and structures, net	46,485	53,016
Machinery, equipment and vehicles, net	7,103	6,366
Land	18,795	18,955
Leased assets, net	2,935	2,275
Construction in progress	6,313	1,703
Other, net	16,142	20,075
Total property, plant and equipment	97,775	102,392
Intangible fixed assets	11,441	11,615
Investments and other assets		
Investment securities	12,008	13,663
Long-term receivables	149	132
Assets related to retirement benefits	12,147	19,175
Deferred tax assets	13,341	11,498
Other	5,466	3,883
Allowance for doubtful receivables	(352)	(348)
Total investments and other assets	42,761	48,005
Total noncurrent assets	151,977	162,013
Total assets	437,618	497,459

	(million yen)	
	FY 2019	FY 2020
Liabilities		
Current liabilities		
Trade notes and accounts payable	60,189	61,424
Short-term loans	2,081	1,462
Lease obligations	1,995	3,568
Accounts payable	13,945	12,960
Income taxes payable	4,844	7,645
Contract liabilities	—	35,696
Allowance for employees' bonuses	9,429	11,430
Allowance for directors' bonuses	268	292
Provision for loss on order received	—	126
Liability for stock benefits	162	—
Provision for loss on defense equipment	20	—
Other	22,535	9,490
Total current liabilities	115,474	144,096
Long-term liabilities		
Long-term debt	30	281
Lease obligations	3,522	4,945
Liability for directors' retirement benefits	144	132
Liability for retirement benefits	14,433	11,342
Liability for stock benefits	—	89
Other	1,237	1,066
Total long-term liabilities	19,368	17,857
Total liabilities	134,842	161,954
Net assets		
Shareholders' capital		
Common stock	26,648	26,648
Additional paid-in capital	34,910	34,910
Retained earnings	245,254	262,966
Treasury stock	(1,419)	(1,259)
Total shareholders' capital	305,395	323,267
Accumulated other comprehensive income		
Net unrealized gain on available-for-sale securities	4,758	6,579
Foreign currency translation adjustments	(5,831)	118
Cumulative adjustments to retirement benefits	(1,546)	5,540
Accumulated other comprehensive income	(2,620)	12,237
Total net assets	302,775	335,504
Total liabilities and net assets	437,618	497,459

Consolidated financial statements have been prepared in accordance with Japanese GAAP.

Consolidated Statements of Income

	(million yen)	
	FY 2019	FY 2020
Net sales	385,443	393,499
Cost of sales	233,013	237,306
Gross profit	152,430	156,192
Selling, general and administrative expenses	110,584	106,450
Operating income	41,845	49,742
Other income		
Interest income	284	214
Dividend income	1,088	337
Insurance payments received	379	278
Subsidy received	826	853
Other	637	744
Total other income	3,217	2,429
Other expenses		
Interest expenses	91	180
Foreign exchange loss	1,157	211
Contribution	303	2,438
Other	841	962
Total other expenses	2,393	3,793
Ordinary income	42,669	48,378
Extraordinary income		
Net gain on transfer of investment securities	—	1,463
Net gain on sale of investment securities	96	338
Gain on sale of property, plant and equipment	546	71
Total extraordinary income	642	1,874
Extraordinary losses		
Loss on disposal of property, plant and equipment	135	225
Impairment loss	—	148
Loss on write-down of investment securities	62	61
Total extraordinary losses	198	435
Income before income taxes	43,113	49,817
Income taxes	10,374	13,417
Income tax adjustments	975	302
Total income taxes and income tax adjustments	11,350	13,719
Profit	31,762	36,097
Profit (loss) attributable to non-controlling interests	(3)	—
Profit attributable to owners of parent	31,766	36,097

Consolidated Statements of Comprehensive Income

	(million yen)	
	FY 2019	FY 2020
Profit	31,762	36,097
Other comprehensive income		
Unrealized gain/loss on available-for-sale securities	(750)	1,820
Foreign currency translation adjustments	(4,100)	5,976
Retirement benefit adjustments	(2,630)	7,087
Total other comprehensive income	(7,481)	14,884
Comprehensive income	24,281	50,982
(Breakdown)		
Comprehensive income attributable to owners of parent	24,285	50,982
Comprehensive income attributable to non-controlling interests	(4)	—

Consolidated Statements of Cash Flows

	(million yen)	
	FY 2019	FY 2020
Cash flows from operating activities		
Income before income taxes	43,113	49,817
Depreciation and amortization	13,256	15,536
Impairment loss	—	148
Increase (decrease) in allowance for doubtful receivables	183	241
Increase (decrease) in allowance for employees' bonuses	351	1,928
Increase (decrease) in allowance for directors' bonuses	(10)	19
Increase (decrease) in assets and liabilities for retirement benefits	(3,255)	314
Interest and dividends income	(1,373)	(552)
Interest expense	91	180
Contribution	—	2,272
Foreign exchange (gain) loss, net	7	(18)
Net (gain) loss on sale and valuation of investment securities	(33)	(277)
Net (gain) loss on transfer of investment securities	—	(1,463)
Net (gain) loss on sale and disposal of property, plant and equipment	(410)	153
(Increase) decrease in trade receivables	4,382	(5,444)
(Increase) decrease in inventories	(5,482)	3,126
Increase (decrease) in trade payables	(5,808)	(92)
Increase (decrease) in contract liabilities	—	4,286
Other, net	2,536	3,322
Subtotal	47,548	73,499
Interest and dividends received	1,374	554
Interest paid	(103)	(180)
Income taxes paid	(9,310)	(10,071)
Net cash provided by operating activities	39,509	63,801
Cash flows from investing activities		
Purchase of property, plant and equipment	(15,868)	(13,312)
Proceeds from sale of property, plant and equipment	1,183	346
Purchase of investment securities	(148)	(34)
Proceeds from sale of investment securities	310	548
Increase in long-term receivables	(52)	(15)
Decrease in long term receivables	66	39
Purchase of subsidiary	(54)	—
Other, net	(1,498)	(1,432)
Net cash provided by (used in) investing activities	(16,062)	(13,860)
Cash flows from financing activities		
Borrowing of short-term loans	231	—
Repayment of short-term loans	(333)	(430)
Borrowing of long-term debt	18	280
Repayment of long-term debt	(329)	(229)
Proceeds from issuance of commercial papers	—	10,000
Redemption of commercial papers	—	(10,000)
Redemption of bonds	(15,000)	—
Cash dividends paid	(8,840)	(8,840)
Dividend payments to non-controlling interests	(0)	—
Payments from changes in ownership interests in subsidiaries that do not result in change in scope of consolidation	(2)	—
Purchase of subsidiary resulting in no change in scope of consolidation	(48)	—
Repayment of guarantee deposits received	(21)	—
Payment of lease obligations	(1,855)	(3,973)
(Increase) decrease in treasury stock	(3)	159
Net cash provided by (used in) financing activities	(26,185)	(13,033)
Foreign currency translation adjustments on cash and cash equivalents	(1,940)	3,068
Net increase (decrease) in cash and cash equivalents	(4,679)	39,976
Cash and cash equivalents, beginning of period	70,842	66,683
Increase in cash and cash equivalents due to inclusion of subsidiaries in consolidation	520	—
Increase in cash and cash equivalents resulting from merger with unconsolidated subsidiaries	—	196
Cash and cash equivalents, end of period	66,683	106,855

Consolidated financial statements have been prepared in accordance with Japanese GAAP.

Corporate Profile

(as of March 31, 2021)

Corporate Outline

Name	Shimadzu Corporation
Founded	March 1875
Formation of Limited Company	September 1917
Address of Head Office	1 Nishinokyo Kuwabara-cho, Nakagyo-ku, Kyoto 604-8511, Japan Phone: +81-75-823-1111
Capital	26,648,899,574 yen
Number of Employees	3,492 (non-consolidated) 13,308 (consolidated)
Number of Consolidated Subsidiaries	23 (in Japan) 53 (outside Japan)

The following web page includes information about the topics listed below.

<https://www.shimadzu.com/about/profile.html>



Corporate Profile

Major Business Offices

Head Office	1 Nishinokyo Kuwabara-cho, Nakagyo-ku, Kyoto
Offices	Tokyo and Kansai (Osaka)
Branches	Sapporo, Tohoku (Sendai), Tsukuba, Kitakanto (Saitama City), Yokohama, Shizuoka, Nagoya, Kyoto, Kobe, Hiroshima, Shikoku (Takamatsu City), and Kyushu (Fukuoka)
Plants	Sanjo and Murasakino (Kyoto City), Atsugi (Atsugi City), Hadano (Hadano City), and Seta (Otsu City)
Research Laboratories	Technology Research Laboratory (Seika-cho, Soraku-gun, Kyoto) Koichi Tanaka Mass Spectrometry Research Laboratory (Kyoto)

Stock Information

(As of March 31, 2021)

Status of Stocks

Total Number of Common Stock Authorized	800,000,000
Total Number of Common Stock Issued	296,070,227
Number of Shareholders	35,822
Stock Listing	Tokyo Stock Exchange
TSE Code	7701
Shareholder Registry Administrator	Mitsubishi UFJ Trust and Banking Corporation
Accounting Auditor	Deloitte Touche Tohmatsu LLC

The following web page includes information about the topics listed below.

<https://www.shimadzu.com/ir/stock/>



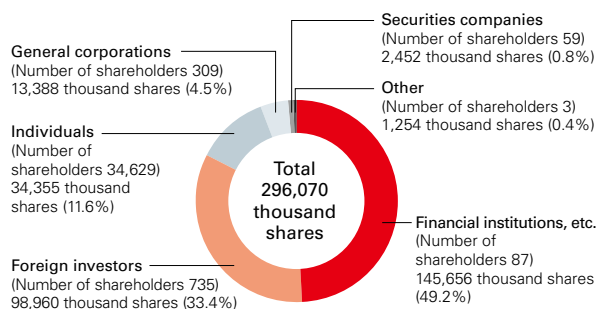
Stock Information

Major Shareholders (10 Largest)

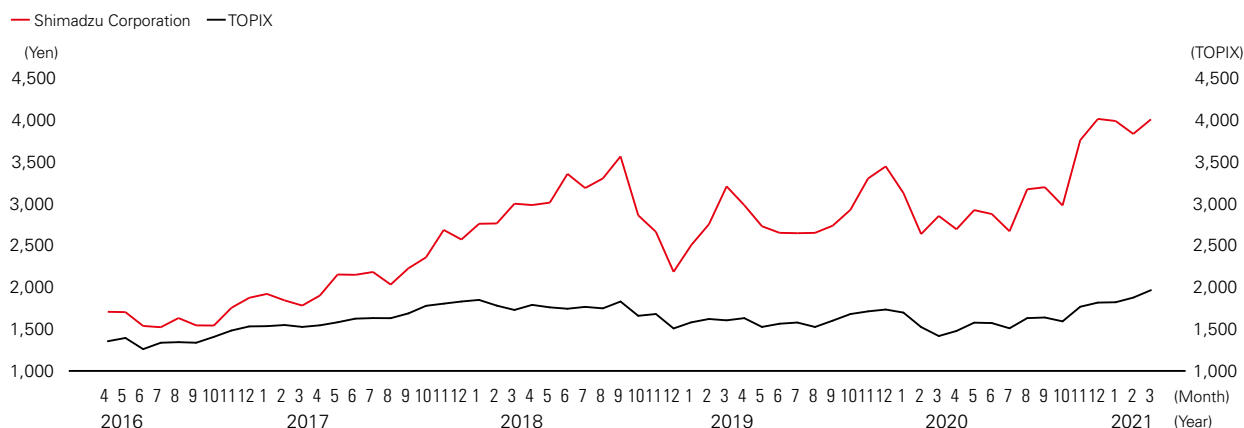
Shareholder Name	Number of Shares Owned (Thousands of Shares)	Shareholding Ratio (%)
The Master Trust Bank of Japan, Ltd. (Trust Account)	27,116	9.20
Meiji Yasuda Life Insurance Company	20,742	7.04
Custody Bank of Japan, Ltd. (Trust account)	13,415	4.55
STATE STREET BANK AND TRUST COMPANY 505223	11,436	3.88
MUFG Bank, Ltd.	7,672	2.60
Taiyo Life Insurance Company	7,411	2.51
Tokio Marine & Nichido Fire Insurance Co., Ltd.	6,287	2.13
The Bank of Kyoto, Ltd.	4,922	1.67
Custody Bank of Japan, Ltd. (Trust account 7)	4,847	1.64
National Mutual Insurance Federation of Agricultural Cooperatives	4,384	1.49

* The indicated shareholding ratio was calculated excluding treasury stock (1,251,708 shares).

Ratio of Shares by Shareholder Type



Stock Price (Tokyo Stock Exchange)



Information about Group Companies

The following web page includes information about the topics listed below.

<https://www.shimadzu.com/links/location.html>



Location

Main Locations outside Japan

[Manufacturing and R&D Organizations]

- Application development
- Manufacturing
- Research and development
- ★ Innovation centers

Beijing Shimadzu Medical Equipment Co., Ltd.
Medical Systems Manufacturing Plant in China



Shimadzu U.S.A. Manufacturing, Inc.
Analytical and Measuring Instruments
Manufacturing Plant in the United States



SHIMADZU (SUZHOU) INSTRUMENTS
MANUFACTURING CO., LTD.
Analytical and Measuring Instruments
Manufacturing Plant in China



Kratos Analytical Ltd.
Analytical and Measuring Instruments
Manufacturing Plant in the UK



Shimadzu Manufacturing Asia Sdn. Bhd.
Analytical and Measuring Instruments
Manufacturing Plant in Malaysia

[Sales and Service Organizations]

- Main sales subsidiaries
- Sales and services

Shimadzu Europa GmbH

Shimadzu Middle East & Africa Fze
UAE Head Office

Shimadzu South Africa (Pty) Ltd.

Shimadzu (Asia Pacific) Pte Ltd.

Shimadzu Scientific Instruments (Oceania) Pty. Ltd.
Shimadzu Medical Systems (Oceania) Pty. Ltd.

Shimadzu (China) Co., Ltd.

Shimadzu
Medical Systems USA

Shimadzu
Scientific
Instruments, Inc.

Shimadzu do Brasil Comercio Ltda.

Shimadzu Corporation

<https://www.shimadzu.com/>