Based on the “Grand Design” mid/long-term management policy (10-year plan) that Advantest announced in 2018, we resolutely implemented our first mid-term management plan (MTP1: FY2018-2020), and in 2021 announced our second mid-term management plan (MTP2: FY2021-2023). Integrated Report 2021 aims to provide a comprehensive overall picture of how the plans and strategies set forth in MTP2 will strengthen and expand Advantest’s mid- to long-term “sustainable growth”, and how our business is linked to global sustainability. Recent upheavals in our business environment, such as the Covid-19 pandemic, catastrophic natural disasters, and the ongoing transformation of supply chains spurred by economic security considerations, have tested our ability to respond to crises, and proved that our global team is more than capable of rising to challenges and transforming crises into opportunities. Integrated Report 2021 also celebrates the spirit and accomplishments of the Advantest Group family. At the heart of our successful teamwork is The Advantest Way, our corporate philosophy, centering on our INTEGRITY core values, which also form the foundation of our ESG initiatives. For further details of our ESG initiatives, please refer to our Sustainability Databook.

[https://www.advantest.com/sustainability/]

Reporting guidelines, etc., referenced
- International Integrated Reporting Framework of the International Integrated Reporting Council (IIRC)
- “Value Co-Creation Guidance” issued by the Japanese Ministry of Economy, Trade and Industry

Report period and scope
This report covers the period of fiscal 2021 (April 1, 2020 to March 31, 2021). However, earlier and later events are also mentioned as necessary. The data aggregation range (boundary) is the scope of consolidated financial statements, except where otherwise stated.

Disclaimer Regarding Forward-Looking Statements
This report contains “forward-looking statements” that are based on Advantest’s current expectations, estimates and projects. These statements involve, among other things, the discussion of Advantest’s business strategy, outlook and expectations on market and business developments, production and capacity plans. Generally, these forward-looking statements can be identified by the use of forward-looking terminology such as “anticipate,” “believe,” “estimate,” “expect,” “intend,” “project,” “forecast” and similar expressions. Forward-looking statements are subject to known and unknown risks and uncertainties, which may cause actual results to differ materially from those expressed or implied by such forward-looking statements.
The Advantest Way

Founded in 1954 in Tokyo by just four people, Advantest has grown into a global company with nearly 6,000 employees, which contributes to safety, security, and comfort worldwide through leading-edge measurement technology. To help our global team perform at their best, despite differences in cultures, languages, customs, and values, we codified our vision of what Advantest should be into The Advantest Way, a set of guidelines that we live out every day in our work. The Advantest Way is not only a corporate philosophy but also our promise to all stakeholders.

The Advantest Way

Enabling Leading-Edge Technologies

We will continuously improve ourselves so that we can offer products and services that will satisfy our customers worldwide, and contribute to the development of our society through the development of the most advanced technologies.

Purpose & Mission

Why do we exist

Adding Customer Value in an Evolving Semiconductor Value Chain

Advantest will further contribute to the semiconductor industry by enriching, expanding, and integrating our test and measurement solutions throughout the entire semiconductor value chain.

Vision

What we want to be

Adding Customer Value in an Evolving Semiconductor Value Chain

Advantest will further contribute to the semiconductor industry by enriching, expanding, and integrating our test and measurement solutions throughout the entire semiconductor value chain.

Core Values

What we value most

- “INTEGRITY” means honesty and truthfulness.
- When you have integrity, it means being open, honest and respectful at all times with all stakeholders.

The value of INTEGRITY can serve as a common thread uniting people of diverse cultures, religions, and viewpoints, and it is Advantest’s core value globally.
Advantest's measurement technology has consistently led the industry for 67 years, charting our path through successive growth phases. As in the past, we will continue to support the technological evolution of semiconductors with best-in-class test technology, contributing to humanity’s sustainable future.

1954-1980
Beginnings of the Electronic Measurement Technology Business
Advantest Enters the Semiconductor Test Equipment Market
Amidst the rapid growth of the Japanese electronics industry, Advantest’s founding entrepreneurs expanded our business with successive innovations in measurement technology. Confident that semiconductors were the future, we took on the challenge of developing test equipment with applied measurement technology. While overcoming business crises and other difficulties, we developed semiconductor test systems with industry-leading performance.

1954 Takeda Riken Industries founded with four employees.
1954 Takeda Riken Industries founded with four employees.
1954-1980

1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Counter for digitally measuring technology, contributing to humanity’s sustainable future.
1957 TR-124B Electronic Count...
The Value Creation Process and Advantest’s Business Model

We believe that the source of our corporate value is in carrying out business that realizes the value required by the society. Business profit is our wage for realizing the value that society needs; hence, we believe that growing our business in harmony with social values is a contribution to humanity’s sustainable future.

**Our Market**
Our main business is the development, production, and sales of semiconductor test equipment. The market for semiconductor test is worth about ¥550 billion (CY2020 estimate). Markets are an expression of the value that society demands, so our market share is simply the valuation (corporate value) placed on our value proposition by society.

**The Advantest Way**
It is people and their teamwork that generate corporate growth. The Advantest Way is our commitment to sustainable growth, which is also a commitment to all our stakeholders.

**External Environment**

- SDGs / ESG Contributions and Promotion
  - Climate change: reduction
  - Diversity and inclusion
  - Protection and respect for human rights
  - Response to urbanization / aging
  - Enhancement of information disclosure
- Geopolitical Risk
  - Economic security
  - Supply chain disruption

**Value Creation Drivers**
1. Reinforce core businesses, invest strategically
2. Seek operational excellence
3. Explore value to reach a higher level
4. Pioneer new business fields
5. Enhance ESG initiatives

**Grand Design (Commitments)**

<table>
<thead>
<tr>
<th>MTP1</th>
<th>MTP2</th>
<th>……</th>
</tr>
</thead>
</table>

**Strategies Issues**
- Industry’s No. 1 customer base
- No. 3 in semiconductor test (VLSIresearch)
- ¥285 billion in shareholders’ equity
- Approximately 6000 employees
- Inclusion of INTEGRITY
- Local excellence

**Input**
- Shareholders’ equity: ¥285 billion
- Rating A (R&I)

**Value Chain Capital**
- State-of-the-art measurement technology
- Capital investment and R&D investment
- Functional utilization of EMS and in-house production

**Human Capital**
- Number of employees: approximately 6000
- Inclusion of INTEGRITY
- Local excellence

**Natural Capital**
- Renewable energy introduction rate: 40% (2020)
- Water resources usage: <288km³/year

**Mission (The Advantest Way)**

**Purpose & Mission**
Enable Leading-Edge Technologies

**Core Values**
INTEGRITY
- ESG for Sustainability
- Guiding Principle Quest for the Essence

**Vision**
Adding Customer Value in an Evolving Semiconductor Value Chain

**Output**
- Semiconductor testers
- Mechanotronics products
- Field service solutions
- Newly planned products beyond semiconductor test
- New business acquired through M&A and business alliances

**Outcome (Created value)**

**Stakeholder Returns**
- Shareholders: Increase Shareholder value and highly efficient capital management
- Employees: Greater rewards, job satisfaction, and engagement
- Customers: Enhancement / reduction of Time to Market and Time to Quality
- Supply Chain: Securing and expanding business opportunities
- Global environment: Contribute to realizing a sustainable future
- Community: Safety, security, and comfort through semiconductor test

**Amassed Corporate “Earning Power”**
- Global leadership position
- Employee engagement
- State-of-the-art technology
- Collaborative creation with Tier-1 suppliers
- Customer base reinforcement and expansion
- Growth through M&A and business alliances
- Further growth of human resources
- Effective governance

**Strategy**

**Sustainability**

**Information**
A Synergistic Solution Family Centered on Our Tester Business

Advantest’s three business segments are Semiconductor & Component Test Systems, which accounts for the majority of sales, Mechatronics, which handles peripheral equipment for test systems, and Services & Others, which mainly focuses on customer support and system level test.

We enable industry-leading test solutions by integrating our test systems with peripherals such as device interfaces and test handlers, all supported by our expert technicians. In addition, the introduction of system-level testing can address complex defects that are difficult to detect with traditional test methods. The synergies produced by these three business segments give Advantest an unparalleled competitive advantage.

Advantest’s Business Segments

**Semiconductor and Component Test Systems**

Our flagship products—test systems—integrate our core technology of measuring minute currents and voltages into automated measurement systems known as semiconductor test equipment (ATE), which have both advanced electrical signal measurement capability and high-speed data processing capability. This segment’s business is broadly divided into “SoC test” and “memory test.”

SoC Testers cover almost all types of non-memory devices, such as logic semiconductors, analog semiconductors, and RF devices. Due to the widespread use of semiconductors, the SoC tester market is two to three larger than the memory tester market. In addition, semiconductor supply chains are becoming more and more fragmented, and SoC tester users number in the hundreds, from semiconductor design specialists to contract test specialists. This large number of customers and device types is a defining characteristic of the SoC tester market. Against this background, scalability of test range and capability is an important performance metric for SoC testers.

In the memory semiconductor business, dedicated memory test systems with a high throughput index, called parallel measurement capability, optimized for the low-mix high-volume production lines typically used in the manufacturing of memory semiconductors such as DRAM and NAND flash, are generally used.

**Mechatronics Systems**

Our mechatronics-related business deals with device interfaces and test handlers, which are used with test systems, and nanotechnology products used in semiconductor front-end processes.

Device interfaces (DI) are products that connect the devices under test with the test system by physically making contact with their pins (electrodes). DI products have consumable characteristics, and demand for them grows in step with the utilization ratios of semiconductor production lines, so they are the main source of sales in our mechatronics segment.

Test handlers are pieces of equipment that play three distinct roles: they transport semiconductor to the test system for back-end processing, apply the correct temperature for the specific test being carried out, and sort semiconductors according to test results. By combining them with our highly accurate test systems and device interfaces, we can offer “test cells” that offer high test quality and production efficiency all in one.

Our principal nanotechnology product is a line of scanning electron microscopes that measure the dimensions of semiconductor circuit patterns using Advantest’s proprietary electron beam technology. In the semiconductor front-end process, they measure whether the width and height of the circuit pattern are properly drawn on photomasks and wafers. Demand is expected to increase with the widespread adoption of technologies that directly contribute to the further miniaturization of advanced semiconductors, such as EUV lithography.

**Services, Support and Others**

Our field service business and system-level testing business account for the majority of sales in this segment.

Field services, as well as the maintenance and repair of our systems, we offer new services such as system utilization ratio improvement and volume production ramp consulting, and secure online support. We are aiming for stable profit growth through the adoption and expansion of high-value-added services.

System-level test systems test semiconductors under conditions mimicking real-world usage, screening them for defects that cannot be checked by conventional test of individual devices. It has been attracting attention from semiconductor technology leaders as semiconductor functionality and complexity increase. Advantest has rapidly established a presence in this market with MISIA and other activities, and we are now working to grow it through synergies with our test system business.

This segment also contributes to revenues through second-hand product sales and measurement solutions for applications in healthcare and other non-semiconductor fields.
Business Portfolio

Our test systems are responsible for testing a wide variety of semiconductors produced by customers around the world.

The ongoing miniaturization of semiconductors and the evolution of packaging technology are bringing successive “waves” of business opportunities and test issues to the tester market. Advantest is developing test solutions that meet these new needs by strengthening our partnerships with leading customers, who are driving the waves of progress in technology and business.

The Semiconductors We Test

Moreover, increases in semiconductor functionality and capacity, higher complexity, and higher reliability needs have lengthened the test time required for each device, so the number of test systems shipped is steadily increasing year by year. For Advantest, improving the quality of operations of the entire Group, including not only R&D but also sales, production, service, and administrative functions, will directly contribute to the business expansion of customers and will be the key to our future growth.

The Semiconductors We Test

**Application processors**

These devices symbolize the evolution of semiconductors and resulting smartphone performance gains. Application processor test is uniquely complicated due to the adoption of state-of-the-art semiconductor processes in their production, whilst manufacturers are also actively investing in test systems.

**CMOS image sensors**

These semiconductors convert camera images into digital data. In addition to the trends toward higher image quality and multi-lens cameras in smartphones, rapid progress in response to high-speed image data processing amidst growing demand for video has created new needs for higher test system performance.

**RFICs**

Radio Frequency ICs handle wireless communications. Their main applications are smartphones and base stations. With the expansion of 5G into the millimeter-wave band, expectations are rising for test solutions that address these technological trends.

**Display driver ICs**

These ICs control the color and brightness of displays on products such as smartphones and televisions. In the display industry, technological evolution is driving rapid new developments such as the adoption of organic EL, larger screens, higher definition, narrower edges, and incorporation of touch sensors, so display driver IC test continues to become more complex.

**Power devices**

These semiconductors convert DC to and from AC and adjust voltage, among other functions. They have a wide range of applications in addition to consumer electronics, including automobiles and industrial equipment. The power device market is expected to grow in the future amidst increasing public demand for lower power consumption.

**HPC ICs**

This is a general term for semiconductors designed to perform large-scale operations at high speed on data servers and AI servers. With the spread of AI, machine learning, and deep learning, the HPC device market continues to make yearly strides.

**Automotive Semiconductors**

This is a general term for semiconductors installed in automobiles, such as controllers for engines and batteries, sensors for airbags and collision avoidance systems. High quality and reliability that meet the safety standards of automobiles are required, so it is necessary to carefully test these devices.

**Memory Semiconductors**

These semiconductors store data, such as DRAM, which can read and write data at high speed, and NAND flash, which can hold data for a long time without a power supply. Memory semiconductors have been used in personal computers for a long time, but in recent years, demand from the smartphone and data center sectors has been increasing.
Financial Highlights

Sales
(Billion yen)
Achieved sales of over ¥300 billion for the first time in our history; double the sales of 4 years ago.

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>155.9</td>
<td>207.2</td>
<td>282.5</td>
<td>275.9</td>
<td>312.8</td>
</tr>
</tbody>
</table>

Net income / Profit margin
(100 million yen / %)
A record high, even excluding the additional gain of approximately ¥10 billion associated with deferred tax capitalization.

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net income</td>
<td>9.1</td>
<td>8.7</td>
<td>570.0</td>
<td>535.0</td>
<td>698.0</td>
</tr>
<tr>
<td>Profit margin</td>
<td>4.8</td>
<td>4.2</td>
<td>5.4</td>
<td>5.4</td>
<td>5.4</td>
</tr>
</tbody>
</table>

Basic earnings per share (EPS)
(¥)
In addition to higher profits, the repurchase of ¥13.1 billion of treasury stock also contributed to the increase.

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic earnings per share</td>
<td>81.07</td>
<td>101.94</td>
<td>302.35</td>
<td>270.12</td>
<td>353.87</td>
</tr>
</tbody>
</table>

R&D expenses / capital expenditures
(Billion yen / Billion yen)
We continued to expand investment in anticipation of future growth.

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>R&amp;D expenses</td>
<td>31.2</td>
<td>33.5</td>
<td>37.9</td>
<td>40.1</td>
<td>42.7</td>
</tr>
<tr>
<td>Capital expenditures</td>
<td>4.8</td>
<td>5.4</td>
<td>6.6</td>
<td>9.9</td>
<td>13.7</td>
</tr>
<tr>
<td>Total</td>
<td>36.0</td>
<td>39.1</td>
<td>44.5</td>
<td>49.9</td>
<td>56.4</td>
</tr>
</tbody>
</table>

Operating income / Operating margin
(Billion yen / %)
Even excluding the one-time profit of about ¥8.1 billion posted, operating profit margin was over 20%.

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating income</td>
<td>8.9</td>
<td>11.9</td>
<td>11.8</td>
<td>24.5</td>
<td>120.9</td>
</tr>
<tr>
<td>Operating margin</td>
<td>5.6</td>
<td>4.4</td>
<td>4.4</td>
<td>8.4</td>
<td>26.5</td>
</tr>
</tbody>
</table>

Dividends per share
(¥)
With the addition of a commemorative dividend of ¥10 due to strong performance, this represents a significant dividend increase.

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dividends per share</td>
<td>2.5</td>
<td>3.2</td>
<td>9.2</td>
<td>8.3</td>
<td>118.0</td>
</tr>
</tbody>
</table>

Non-financial highlights

Number of employees* / Number of SE / AE employees
(Number / %)
We continuously hire diverse human resources with the aim of increasing corporate value. In particular, we are actively promoting the growth of our workforce of highly skilled engineers who support the total solutions we provide to our customers.

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of employees</td>
<td>2,546</td>
<td>2,316</td>
<td>2,893</td>
<td>2,815</td>
<td>3,046</td>
</tr>
<tr>
<td>Number of SE / AE employees</td>
<td>3,558</td>
<td>3,258</td>
<td>3,987</td>
<td>3,987</td>
<td>4,226</td>
</tr>
</tbody>
</table>

Turnover rate
(%) We are striving to create a work environment where everyone can work comfortably and expanding access to workstyles that help individuals to continue to maximize their abilities.

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turnover rate</td>
<td>13.7</td>
<td>13.7</td>
<td>13.7</td>
<td>13.7</td>
<td>13.7</td>
</tr>
</tbody>
</table>

Industrial accident rate (Japan)
(Frequency)
We are working to ensure the safety and health of our employees and raise their safety awareness in carrying out our business activities.

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial accident rate</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Energy usage / renewable energy ratio
(kt-CO2 / %)
We actively work to reduce greenhouse gas emissions by efficiently using energy and introducing renewable energy sources.

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy usage</td>
<td>1,987</td>
<td>2,549</td>
<td>3,046</td>
<td>3,568</td>
<td>4,226</td>
</tr>
<tr>
<td>Renewable energy usage</td>
<td>51.0</td>
<td>51.0</td>
<td>51.0</td>
<td>51.0</td>
<td>51.0</td>
</tr>
</tbody>
</table>

GHG (Scope 1, 2, and Scope 3) CO2 emissions
(billion yen)
We are working to mitigate climate change by quantifying greenhouse gases indirectly emitted in our value chain and promoting greenhouse gas emission reduction activities.

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHG (Scope 1, 2, and Scope 3)</td>
<td>44.1</td>
<td>49.4</td>
<td>56.8</td>
<td>56.8</td>
<td>56.8</td>
</tr>
</tbody>
</table>

Overview

For each fiscal year beginning on April 1st.
Maintaining Continuity and Customer Value in Challenging Times

Throughout the pandemic, Advantest demonstrated a commitment to its customers and the semiconductor test industry by maintaining its long-standing schedule of activities and stakeholder engagements while shifting quickly to a virtual model. Learning how to safely navigate the new norm where face-to-face customer interaction was no longer an option proved to be pivotal for Advantest’s growth as a global company.

Virtual VOICE 2021 Attracts Largest-Ever Participation

Advantest applied these learnings to its VOICE Developer Conference, going virtual with its highly anticipated annual customer and partner conference, which invites users and strategic partners involved with our main products and solutions to actively participate in a learning and sharing environment.

The shift to virtual conferencing was inevitably challenging, and the event had been canceled in FY2020, but in FY2021 a talented team was mobilized and led by Advantest’s Global Marketing Communications organization. Driven by our “Enabling Leading-Edge Technologies” mission and INTEGRITY core values, the group expertly adapted to the undertakings of hosting an international virtual conference.

VOICE is truly a partnership between Advantest and its customers, who participate on the Steering Committee, the Technical Committee, and as authors and presenters in the technical program. Additionally, Advantest partners add value to the unique format by displaying their complementary product offerings.

Our robust program, which was optimized for an international audience, included dynamic keynoters, technical presentations covering 8 topical tracks and a Technology Kiosk Showcase featuring virtual booths and live sessions.

Encouraging interactivity within our virtual environment was a key value proposition. A strategically timed agenda and key topic line-up addressed the diverse application needs of customers and partners worldwide. Even virtually, VOICE continued to effectively deliver business value to attendees through its innovative technical content and engaging demonstrations.

Customer-Focused Communications Enhance our Business

Virtual VOICE 2021 drew a record-breaking audience to the Developer Conference, reaching over 300 international attendees. So successful was the event that 97% of those responding to a post-event survey gave a ‘recommend’ rating to the conference, proving its high-quality value for Advantest customers and partners and confirming the importance of continuous customer interaction.

In addition to Virtual VOICE, Advantest also participated in numerous virtual trade shows and industry conferences, helping to maintain our influence and leadership mindshare when opportunities for in-person interaction were limited. Additionally, Advantest was quick to plan and host two of its own virtual trade shows, drawing attendees from around the globe, when pandemic-related restrictions forced the cancellation of our on-site events. As a technology and service-focused business leader, continuity was key to successfully staying connected with our customers and providing them with the services and information that they need throughout a challenging year.
At the conclusion of the MTP1 period, results exceeded the targets we had set for all 4 metrics (sales, operating margin, net income, ROE, and EPS). This performance greatly exceeded our initial expectations, but in terms of medium- to long-term trends in the semiconductor market, it was in line with the scenario set forth in our Grand Design. I believe these trends simply developed sooner than expected.

Our Grand Design, announced in April 2018, foresaw that a “data explosion” would lead the semiconductor market into a new growth phase in the future. This “data explosion” accompanies the development of social infrastructure such as 4G / 5G base stations and data centers, and the recent evolution and wider adoption of technologies such as data sensing, edge devices, high-speed communications, and data storage, which generate zettabytes of data traffic. Our scenario sees semiconductor test demand also increasing as demand for semiconductors, which handle all this data, grows dramatically.

Early 2020 saw the beginning of the global Covid-19 pandemic. This unprecedented event has caused hardships for many and has badly damaged various businesses. On the other hand, it has also accelerated transformational changes in communication styles. The value of gathering at work and having face-to-face conversations has become less obvious to many, due to the normalization of digital communications, which are unaffected by physical distance, but while this change may seem to

<table>
<thead>
<tr>
<th>Key management metrics</th>
<th>FY2015-17 Average</th>
<th>MTP1 Targets (FY2018-20 Average)</th>
<th>MTP1 Actual (FY2018-20 Average)</th>
<th>MTP2 Targets (FY2021-23 Average)</th>
<th>Grand Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales (¥B)</td>
<td>175.1</td>
<td>250</td>
<td>290.4</td>
<td>350~380</td>
<td>&gt; 400</td>
</tr>
<tr>
<td>Operating Margin (%)</td>
<td>9</td>
<td>17</td>
<td>22</td>
<td>23~25</td>
<td></td>
</tr>
<tr>
<td>Net Income (¥B)</td>
<td>13</td>
<td>--</td>
<td>22</td>
<td>23~25</td>
<td></td>
</tr>
<tr>
<td>ROE (%)</td>
<td>12</td>
<td>18</td>
<td>29</td>
<td>23~25</td>
<td></td>
</tr>
<tr>
<td>EPS (¥)</td>
<td>74</td>
<td>170</td>
<td>309</td>
<td>320~370</td>
<td></td>
</tr>
</tbody>
</table>

Strong performance in the MTP1 period puts us ahead of schedule with respect to the goals of our Grand Design.

Advantest’s first mid-term management plan (MTP1), a three-year plan that started in fiscal 2018, ended with strong results that exceeded targets across all metrics. We faced risks during the period that dwarfed our initial expectations, such as the intensification of US-China friction and the spread of Covid-19. However, these risks spurred changes in markets, which were vigorously embraced, bringing new opportunities for companies, and encouraging them to take on new challenges. In April this year, we launched our second mid-term management plan (MTP2). We anticipate that demand for semiconductors will continue to grow in the medium to long term. I believe we have entered a phase where the true value of our company as a global leader and advocate of our corporate philosophy (Purpose & Mission), “enabling leading-edge technologies,” is being put to the test.

Advantest’s first mid-term management plan (MTP1), a three-year plan that started in fiscal 2018, ended with strong results that exceeded targets across all metrics. We faced risks during the period that dwarfed our initial expectations, such as the intensification of US-China friction and the spread of Covid-19. However, these risks spurred changes in markets, which were vigorously embraced, bringing new opportunities for companies, and encouraging them to take on new challenges. In April this year, we launched our second mid-term management plan (MTP2). We anticipate that demand for semiconductors will continue to grow in the medium to long term. I believe we have entered a phase where the true value of our company as a global leader and advocate of our corporate philosophy (Purpose & Mission), “enabling leading-edge technologies,” is being put to the test.

At the conclusion of the MTP1 period, results exceeded the targets we had set for all 4 metrics (sales, operating margin, net income, ROE, and EPS). This performance greatly exceeded our initial expectations, but in terms of medium- to long-term trends in the semiconductor market, it was in line with the scenario set forth in our Grand Design. I believe these trends simply developed sooner than expected. Our Grand Design, announced in April 2018, foresaw that a “data explosion” would lead the semiconductor market into a new growth phase in the future. This “data explosion” accompanies the development of social infrastructure such as 4G / 5G base stations and data centers, and the recent evolution and wider adoption of technologies such as data sensing, edge devices, high-speed communications, and data storage, which generate zettabytes of data traffic. Our scenario sees semiconductor test demand also increasing as demand for semiconductors, which handle all this data, grows dramatically.

Early 2020 saw the beginning of the global Covid-19 pandemic. This unprecedented event has caused hardships for many and has badly damaged various businesses. On the other hand, it has also accelerated transformational changes in communication styles. The value of gathering at work and having face-to-face conversations has become less obvious to many, due to the normalization of digital communications, which are unaffected by physical distance, but while this change may seem to
have occurred abruptly in response to Covid-19, it is nothing more than the very shift to a new style of communication that we always expected to see in the future.

In the past, sales of products used directly by people, such as replacement personal computers, or the adoption of digital cameras, and LCD TVs, drove demand for semiconductors. Trends in demand for these items drove waves of demand for semiconductor test, and had a major impact on our business. However, in the current IoT era, where all manner of things are connected to the internet, data communications are rapidly expanding into the realm of M2M (Machine to Machine) where human intervention is minimal or absent, including social / transportation infrastructure, data centers, and industrial equipment. More and more products in this area are being equipped with semiconductors, further diversifying the industry's end-product base. At the same time, I believe that the absolute number of semiconductors in use will increase steadily due to the “data explosion” mentioned above. In addition, against the background of increasing social demand for decarbonization, semiconductors are required to save energy and use less power, which promotes higher performance, greater complexity, and stronger reliability guarantees. As a result, more advanced and efficient semiconductor test is indispensable. These trends, combined with the early spread and global expansion of digital communications impelled by Covid-19, were among the factors that boosted demand for semiconductors and test during the MTP1 period (FY2018-2020).

**MTP2 Targets Further Growth**

We launched MTP2 in April 2021. While following the same route as MTP1, this plan will accelerate growth further through steady engagement with the following five strategic issues, we will strengthen Advantest’s foundation for corporate value improvement and sustainable growth.

1. Reinforce core businesses, invest strategically
2. Seek operational excellence
3. Explore value to reach a higher level
4. Pioneer new business fields
5. Enhance ESG initiatives

Our mid-term management plans (MTP1, MTP2) aim to achieve the goals of our Grand Design by 2027, but at the same time, they are initiatives to strengthen and expand Advantest’s ability to sustainably bring in revenue to achieve social value,” and thus we can say that they are blueprints for growth that will continue beyond that date. I believe that this sustainable “earning power” is key to improving our corporate value, as I explained in our MTP2 announcement.

**Enhancing Corporate Value by Expanding the “Value Cube”**

The corporate value enhancement we aim for is the expansion of social contributions through business growth. The ability of Advantest’s core business to grow steadily is itself a contribution to humanity’s sustainable future. Conversely, businesses that do not reflect the values of society will not grow sustainably. Figure-(1) shows the improvement of corporate value that we aim for under MTP2 as the sustainable expansion of future profits (earning power) along the three axes of ① shareholder value, ② stakeholder value, and ③ ESG value, using the analogy of an expanding cube. Above all, I believe that enhancement of our ESG initiatives is key to promoting growth along the other two axes, and we therefore added it as our fifth strategic issue under MTP2, as mentioned above.
a treasure trove of knowledge that was new to Advantest at the time, ranging from development, design, quality assurance, production and procurement, to corporate culture, personnel systems, market communications, and beyond. 10 years have passed since then. There is no doubt that the success of MTP1 was supported by many innovations, including products, new systems, new cultures, and more, created from “new combinations” of knowledge. This also gives us confidence that we will achieve our MTP2 goals. In this light, growth investments undertaken during the MTP2 period will also be long-term measures to hone our strength (earning power) and enable Advantest to grow further beyond the 2027 finish line of our Grand Design.

Further Enhancement of ESG Initiatives

As I mentioned earlier, the driving force of our corporate value is sustainable earning power, which is the ability to grow while doing business that delivers the value society is demanding and I believe this will be enhanced by the further promotion of ESG. In July 2019, we updated “The Advantest Way,” our corporate philosophy system. The Advantest Way sets guidelines for ESG promotion, but in order to connect these guidelines to more practical activities, we added “further enhancement of ESG initiatives” as our fifth strategy under MTP2, announced in July 2021. This newly establishes a basic policy for ESG promotion, stipulates that Executive Management Committee and the Board of Directors will hear reports on the status of ESG promotion and discuss these issues twice a year, and makes clear that “further enhancement of ESG initiatives” is one of the important issues that executives in central management roles should tackle. In addition, to promote ESG within the Advantest Group as a whole, we have formulated our “ESG Action Plan 2021,” which provides activity guidelines for the entire Group, as well as for ESG activities that each business group and regional subsidiary can work on.

On that note, I believe that one important element in the further enhancement of ESG is individual employee buy-in. At this point many companies are focusing on ESG and initiatives related to the SDGs, which is well and good, but if we cannot offer convincing answers to employee questions such as “Why is this necessary?” and “How does my work contribute to social sustainability?”, we will just end up nagging employees into going through the motions. Even if a person understands that combating global warming is an urgent issue, or even if he or she knows there are not many female managers in the company, he or she is not going to put much effort into solving those issues if they don’t particularly impact his or her own life and work, or to put it another way, if he or she doesn’t see any value in it. Again, our story is that growing our core business (from employees’ point of view, this means doing their jobs well) is the driving force for improving corporate value, and that this capacity contributes to society. So first of all, I believe it is management’s responsibility to clearly demonstrate the value of ESG, talk about it often, and proactively hold discussions. To be honest, I think it will take a while until all employees buy into this story. However, I think it is important for management to grow the number of employees who see value in ESG and are “hungry” to solve ESG challenges, even if just one by one, with clear awareness and determination.

Advantest Leadership Model Improves Teamwork

Advantest operates on a global stage. Since more than 90% of our consolidated sales are made overseas, and the semiconductor industry increasingly disperses design and manufacturing across regional borders, our customers are located all over the world, in Europe, America, Southeast Asia, Taiwan, South Korea, and China. We cannot win business without controlling complex value chains and responding quickly to market changes and geopolitical risks. Team strength is the key to that, on both a global and local level. Of course, improving the skills of individual employees is important, but establishing and instilling a leadership model is essential for achieving solid results as a team. One could liken a team to an orchestra. Depending on the conductor, a piece can be played in a wide variety of ways. While respecting individual diversity, we will strengthen our leadership to produce results. As a part of our corporate philosophy system, The Advantest Way, we started holding “Advantest Leadership Model” workshops in 2021. Approximately 1,200 managers in Japan and overseas are eligible. These workshops are not “employee trainings” to impart knowledge and skills, but rather define “leader”, “manager”, “coach” and “expert” as the four types of skills required for leadership. We have positioned this as a “journey” where leaders seek to discover through their daily work how these skills should be deployed and balanced. There is no one easy answer, of course. However, I am convinced that regularly thinking about these things and taking on challenges as team leaders, without fear of failure, will, in sum, make our global team more powerful.

Towards the Future Beyond “Tested by Advantest”

Our Grand Design targets a semiconductor test market share of 50% or more by 2027. This means that more than half of all the world’s semiconductors that need to be tested will have been tested with our products and solutions. It is no exaggeration to say that “Tested by Advantest” is a synonym for semiconductor safety and security. That said, we have our roots in measurement technology, and to this day it is our core competence. The semiconductor testing business is just one application of that technology. More and diverse applications for measurement technology exist, and though it may take some time to commercialize them, we are working on developing business opportunities in some of these new areas, including the medical field. We will continue to take on challenges with our eyes on a future that extends beyond “Tested by Advantest.”
Mega Trend and Our Market

The Digital Revolution and the Data Explosion

In the decades since the electronics industry took off in the latter half of the 20th century, many have talked about the “digital revolution,” meaning the dramatic changes wrought upon society by digital technology. However, we believe that the evolution of digital technology over the last few years has accelerated to the point where the “revolution” tag is finally warranted.

At the heart of the present digital revolution is the analysis of big data. The evolution of sensing and networks has made it possible to convert all events affecting society, from road congestion to atmospheric conditions, into data. By collecting vast amounts of data and deeply analyzing it, we can obtain new knowledge that was hitherto unavailable. People have begun to make major judgments affecting our lives and our industries, ranging from proposed solutions for major issues such as urban problems and climate change to forecasts of product sales and stock prices, based on data, which now occupies a position so important that it could be called the “new oil.” In addition, as a result of Machine-to-Machine exchanges of data without human intervention, the amount of data generated worldwide continues to grow exponentially. This is the “data explosion.”

Semiconductors Are Evolving Into Social Infrastructure

Improvements in semiconductor performance led to the data explosion. Semiconductor and semiconductor production equipment manufacturers constantly strive to develop manufacturing technologies that can integrate more semiconductor components onto each chip. Thanks to the success of EUV (extreme ultraviolet) lithography technology, which enables the drawing of finer circuits, and the evolution of laminate package technology, which enable higher integration of semiconductor devices “stacked” into three-dimensional structures, it is certain that semiconductor performance improvements will continue inexorably.

Opportunities and Risks for Advantest

Test systems that can verify the performance of advanced technologies also contribute to semiconductor evolution. Data obtained from test systems is not only useful for determining the quality of semiconductors, but can also signal potential improvements in manufacturing processes. By utilizing test data, semiconductor manufacturers can improve manufacturing yields for advanced semiconductors and ramp up volume production quickly. The current situation, in which demand for advanced semiconductors for applications such as 5G communication, AI, and connected vehicles, is expanding at an unprecedented rate, presents enormous business opportunities for Advantest.

Of course, opportunities are always accompanied by risks. The response to the Covid-19 pandemic has boosted demand for semiconductors via the imposition of remote work requirements, but it has also created risks, such as supply chain disruptions and adverse effects on semiconductor demand owing to macroeconomic decline. In addition, it is still impossible to predict whether and how movements related to geopolitical risks and national economic security policies will affect the semiconductor industry. The dangers of climate change and natural disasters cannot be understated. There are also movements to reframe the traditional values of the market economy, ranging from the backlash against globalization to “stakeholder capitalism.”

In summation, it is important for Advantest to strengthen its information gathering and analysis capabilities and flexibly respond to change while pursuing our vision of “adding customer value in the evolving semiconductor value chain” and implementing our existing growth strategies. In addition, for us and for all companies, ESG initiatives such as supply chain management and corporate governance are now indispensable to sustainable growth.
The Basic Structure of the Semiconductor Tester Market

For many years, the semiconductor tester market has been driven by two main types of opportunity: “technology buys” and “capacity buys.”

When designing and evaluating their new products, semiconductor manufacturers adopt new testers that support the latest technologies and standards. By using the same test systems from the design stage, volume production can be started smoothly. When evaluations are completed and production lines are set up, testers that support the volume production plan are required. Then, if yield falters and the volumes needed for the target market are not reached, manufacturers add more testers to secure higher production volumes. Tester purchases driven by these technical factors are termed “technology buys.”

After that point, if a new semiconductor succeeds in the market, or if sales of final products that use it increase, greater production of the device will create further demand for testers. Tester purchases driven by the need to increase production are termed “capacity buys.”

The semiconductor market is affected by demand for final products utilizing semiconductors. Additionally, semiconductor testers, which are capital goods, are always subject to larger demand fluctuations than semiconductors, which are consumer goods.

Until the early 2010s, the tester market was a cyclical market linked to semiconductor demand fluctuations, where vendors benefited greatly from technology buys and capacity buys in the growth phase of the cycle, but saw sales crash on the downturn. Cyclicity was further exacerbated by the fact that there were only a few final products that exerted a great influence on the semiconductor market, such as personal computers and digital domestic appliances.

However, since the late 2010s, the semiconductor tester market has undergone a structural transformation stemming from the digital revolution that itself has been brought about by the evolution of semiconductors. This transformation can be explained in terms of four changes.

The Digital Revolution Has Ushered in Structural Change in the Tester Market

The first change is surging technology buys driven by semiconductor performance evolution. In the past, efforts to increase the integration, complexity, capacity, and speed of semiconductors, and to lower power consumption, were renewed once every few years. However, in recent years, efforts aimed at improving the performance of semiconductors have been broad and continuous, and as a result, the difficulty of designing and manufacturing semiconductors is continuously increasing. Test times and the man-hours needed for test have increased, and the time required for semiconductor test has grown faster than has semiconductor production itself.

The second change is the increase in “capacity buys.” As data now mediates every action and event in the world, and helps people to make decisions in many aspects of society, the number of semiconductors installed in each smartphone and automobile is increasing year by year. As a result, semiconductor shipments are no longer dependent on final product supply and demand as they once were. This has encouraged semiconductor manufacturers to continuously invest in expanding their test capabilities, leading to a rise in demand for testers.

The third change is the appearance of “quality buys” spurred by increasing demands for quality and reliability. Semiconductors are now rooted in people’s lives and businesses as social infrastructure, so losses and reputation-related risks due to semiconductor defects can be much larger than in the past. For instance, data in data centers must not be lost or damaged, while defects in automotive semiconductors can cost lives. To ensure higher quality and reliability, with a focus on mission-critical applications, test now has to be even more accurate, forcing more time to be spent on testing.

The fourth change is the expansion and diversification of final products. In addition to smartphones and data centers, semiconductor applications now extend beyond electronics to various fields such as automobiles, factory automation, healthcare and “smart cities.” The structure of the semiconductor test market is becoming more stable than before, with multiple layers and other products able to compensate when demand for any given product stagnates.

Semiconductor Test Contributes to Our Sustainable Future

Semiconductors also play a role in solving various social issues. They are powering many social innovations such as remote learning, telemedicine, monitoring of cultivated land and farms, smart housing, and smart cities. Through their evolution, semiconductors also play a very important role in reducing the power consumption of electronic devices and improving the energy efficiency of automobiles and industrial devices. Semiconductor test not only benefits the digital revolution, but also directly contributes to humanity’s sustainable future by supporting the evolution of semiconductors. We believe that its role will become even more important going forward.
Grand Design Update

Advantest’s Basic Management Policy

Our management philosophy is to “enable leading-edge technologies,” and our mission is to contribute to people’s lives through the development of leading-edge technologies. With semiconductors expected to play an increasingly important role as social infrastructure, we will continue to add customer value in the evolving semiconductor value chain. In carrying out that mission, all executives and employees are guided by “The Advantest Way,” and commit to respecting all stakeholders and working for sustainability, while at the same time seeking to ensure the sustainable development of our company and achieve medium-to-long-term improvement of corporate value.

Mid/Long-Term Management Strategy

Our “Grand Design” medium- to long-term management policy (duration: 10 years), formulated in 2018, defines who we want to be as a company and sets forth guidelines for what we should do to continue being a company that embodies our corporate philosophy of “enabling leading-edge technologies.” At the same time, in 2018, we formulated our first three-year plan, the “First Mid-Term Management Plan (FY2018-2020)” (MTP1) for the achievement of our Grand Design goals, and proceeded to implement it.

Grand Design Update (FY2018–FY2027)

Background to Formulation of the Grand Design

In the past, demand for semiconductor testers was influenced by the trends in the markets for final products such as PCs. The tester market was cyclical, such that semiconductor production volumes expanded and technology advanced in some years, but then test efficiency improved and the demand for testers dropped off again. However, around 2017, against the backdrop of growing and diversifying applications for semiconductors, the shift to semiconductors as social infrastructure, and the digital revolution, the market transitioned into a booming cyclical growth market that is firmly set on a growth trajectory, despite fluctuations in demand. This major change supports our confidence in Advantest’s future growth prospects centered on our core business, the semiconductor tester business.

Based on the fact that we successfully completed MPT1 in FY2020 with results exceeding all management metrics, we have updated our Grand Design and newly formulated our “Second Medium-Term Management Plan (FY2021-2023)” (MTP2). Under MTP2, we aim to make further strides forward to secure our path toward achievement of our Grand Design.

Strategy

Our vision statement “Adding customer value in an evolving semiconductor value chain” demonstrates our philosophy of providing higher added value to customers and winning their loyalty.

It calls for us to strengthen our core business (the development and sales of semiconductor volume production test systems) and expand our business domains to related markets such as semiconductor design / evaluation processes and product / system level test processes, which come before and after the semiconductor volume production process, respectively. In this way, we aim to grow our business and enhance corporate value.

Advantest will further contribute to the semiconductor industry by enriching, expanding, and integrating our test and measurement solutions throughout the entire semiconductor value chain.

Cloud, AI, Data Analytics

Our Existing Business Areas

IC System Level
Design/ Evaluation Processes Production processes Wafer test/Final test
System Level
Product/ System Level Test Process

Semiconductor Value Chain

Commitments

1. Be the No.1 provider of test & measurement solutions
2. Partner with leading-edge customers
3. Develop leading-edge technologies
4. Attract and retain the best talent in the industry
5. Learning organization
6. Improve financial KPI and increase corporate value

Strategies

1. Reinforce Core Businesses, Invest Strategically
2. Seek Operational Excellence
3. Explore Value to Reach a Higher Level
4. Pioneer New Business Fields
5. Enhance ESG initiatives
Grand Design Updated

Three years have passed since we first announced our Grand Design in April 2018. Together with the formulation of our new mid-term management plan, we also updated our Grand Design in May 2021 to incorporate up-to-the-minute environmental awareness.

1. Numerical Targets Updated

Previously, we had set our ultimate Grand Design goal at annual sales of ¥310 to ¥400 billion, but we have raised this target to ¥400 billion in response to reaching the lower limit of the range (¥300 billion) in FY2020. In addition, whereas we originally planned to achieve this goal in 2027, we now aim for it to be achieved earlier, depending on our business performance and future outlook.

We have also revised our market share target upward to 50% or more, because the former target of 46% was achieved early under MTP1.

<table>
<thead>
<tr>
<th>MTP1</th>
<th>Grand Design Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tester Market</td>
<td>FY2018-20</td>
</tr>
<tr>
<td>Testers/CAGR</td>
<td>Approx.$3.0B CY2017</td>
</tr>
<tr>
<td>Advantest Share</td>
<td>36% CY2017</td>
</tr>
<tr>
<td>Core businesses</td>
<td>Approx.$3.8B CY2017</td>
</tr>
<tr>
<td>New businesses</td>
<td>Approx.$2.7B CY2017</td>
</tr>
<tr>
<td>Sales</td>
<td>¥290.4B CY2027</td>
</tr>
</tbody>
</table>

At the time of formulating MTP1, we recognized that our numerical targets for the conservative and base scenarios were ambitious targets compared to our actual results from FY2015 to FY2017, and we thought it would be hard to achieve them. However, in the event, business results far exceeded all management metrics.

2. Corporate Philosophy (Purpose & Mission) Updated

“Enabling leading-edge technologies” is our corporate philosophy, describing our mission of refining leading-edge technology and contributing to the development of customers and society in general. Even 30 years after formulation, this philosophy is as timely as ever. We hold it as an important starting point for a future in which we will increasingly “grow into” this vital mission.

In recent years, as people have increasingly begun to question the purpose of any given company’s existence, we have posed these questions to ourselves, and as a result reaffirmed that our corporate philosophy is our purpose. We are now calling our corporate philosophy our “Purpose & Mission” to make it clearer what we stand for.

3. “Further Enhancement of ESG Initiatives” Added as a Strategic Issue, in Line with Changes in Society

As a result of reviewing our business environment after completing MTP1, we clearly recognized that we would have to do more to promote ESG in the future, and we added this as a new strategy under MTP2.

During the period of our previous mid-term management plan, latent risks such as US-China trade conflict and the spread of new infectious diseases materialized, while uncertainty increased. In addition, public awareness of concerns relating to sustainability, such as climate change, human rights, and resource depletion, has reached new heights.

Through our ESG initiatives, we will keep our antennae tuned to social demands, and discuss management guidelines for various scenarios to hone our ability to respond to them (information gathering ability, analytical ability, adaptability to change), and improve our ability to respond to opportunities and risks alike.

Through our business activities, we will contribute to solving social issues and bringing about a sustainable future for humanity, and at the same time, we will aim for sustainable management of our own company.

Contributing Factor 1: Accurately calibrated efforts during an expansion phase in the tester market

As the semiconductor market grew, Advantest’s strengths, including our broad product portfolio and customer base, comprehensive solutions including peripheral devices, and global support capabilities, worked to our advantage, leading to an increase in market share.

During the MTP1 period, SoC tester demand grew strongly across various semiconductor device types and regions, led by 4G / 5G smartphone demand. This, as well as having continuously grown our customer base and expanded our range of solutions to meet diverse needs, contributed to the growth of our market share.

Contributing Factor 2: Progress in expansion of business domains

In line with the vision of our Grand Design, we executed two M&As and one capital and business alliance during the MTP1 period, aiming to expand our business domains to adjacent fields.

The two M&As conducted in the SLT sector contributed significantly to business performance at an earlier date than expected, due to growing demand for high-performance semiconductors.

Only about half of the ¥100 billion fund earmarked for strategic investments under MTP1 was utilized, but results were greater than expected.

Contributing Factor 3: Non-financial initiatives during MTP1 period

To achieve our Grand Design goals, we made sweeping changes to “The Advantest Way”, which guides our business activities, to focus on fostering a corporate culture and human resources optimized for global operations, which gives all Advantest Group employees around the world common goals to work towards.

In terms of ESG, we promoted measures such as greater diversity of directors, further globalization of our executive corps, support for TCFD, participation in the Global Compact, and workstyle reforms.

These efforts supported our success in maintaining the quality of our business globally in terms of, for instance, keeping up with rapidly expanding product demand and enhancing customer support in the face of major changes in the environment occasioned by the Covid-19 pandemic, and contributed to our achievement of all MTP1 targets.
Mid-Term Management Plan

Second Mid-Term Management Plan (duration: 3 years)  
(MTP2, FY2021~FY2023) Summary

Under MTP2, as a step towards the final goal of our Grand Design, we are targeting annual sales of ¥400 billion by focusing on the following two axes of business expansion to strengthen our earnings base over the medium to long term:

1. Reinforce our core semiconductor tester business by leveraging our strengths
2. Expand our business into new business domains—a medium- to long-term theme

To achieve our Grand Design goals, we have set strategic investment limits of ¥100 billion for M&A and ¥90 billion for capex during the MTP2 period, continuing our policy of aggressive growth investments. In addition, while maintaining financial soundness, we will allocate newly generated cash flow to growth investments and shareholder returns to improve capital efficiency and strengthen shareholder returns. We will also enhance our ESG initiatives and improve our ability to adapt to future changes in the environment and respond to risks and opportunities. We will strive to increase corporate value and strengthen our foundation for sustainable growth.

■ MTP2 Priority Measures

Strategy 1: Reinforce Core Business, Invest Strategically
We aim to achieve our MTP2 goals by further enhancing our strengths in the semiconductor tester business.

- Strengthen relationships with industry-leading customers
  Continuously deepening our partnerships with customers who lead the industry in technology, and keeping up with the evolution of cutting-edge technology—these things are the source of our competitiveness. Over the years, we have cultivated the industry’s best customer base of semiconductor manufacturing companies, including IDM, fabless companies, foundries, and OSATs across all regions. We will further strive to accelerate the acquisition of emerging players, including major IT companies that have entered the growing semiconductor market in recent years and promising fabless companies, with the aim of solidifying our mid- to long-term growth base.

- Launch of competitive new test platforms and growth of linked stock business
  Our test systems employ highly scalable platforms with modular architecture, and with this as a base our broad product portfolio can capture semiconductor test demand from every angle. In growth fields such as DRAM, NVM,* and HPC, we will continue to provide solutions in step with the evolution of semiconductors and further strengthen our position. By launching even more competitive new test platforms one after another, we help our customers to quickly bring their advanced semiconductors to market (Time to Market) and achieve early yield improvement (Time to Quality). In addition, by steadily expanding our installation base, we will grow recurring business revenue from sources such as maintenance services and device interfaces.

- Providing comprehensive consulting for test know-how
  Due to increasing semiconductor complexity and manufacturing difficulty, customers are focusing more than ever on the time it takes to achieve stable volume production of high-performance semiconductors (Time to Market / Time to Quality). Being close to the customer, grasping their needs, and providing high-quality test consulting will increase our value as a tester vendor and will differentiate us in the competitive landscape.

In today’s globally decentralized semiconductor supply chain, we are expanding our engineering resources globally across all regions so that we can promptly support customer test processes—anywhere.

By providing comprehensive consulting, including for test peripherals such as devices interfaces, we contribute not only to ensuring the reliability of semiconductors, but also to optimizing the entire test process.  

Strategy 2: Seek Operational Excellence
We will continue to invest in R&D from a long-term perspective with an eye on future technology roadmaps, and continue to reinforce our core technologies.

- R&D
  We will strengthen our production system to support our business expansion, and maintain high product quality. We will also maintain our BCP and ensure a stable product supply system.

- Financial
  We will reinforce the development and training of our human resources, who are the source of our growth. In addition to improving individual skills, we will promote the development of leaders who can unite teams.

- HR
  We will conduct balance sheet management and cash management according to our profit status, raise the level of our business management, and support management stability and flexible strategy execution.

Strategy 3: Explore Value to Reach a Higher Level
We will provide integrated test solutions covering processes from semiconductor design verification to system level test.

- Business Domain Expansion
  We will continue to expand our system level test business, which has been growing since the MTP1 period, by expanding its customer base.

- Quest for New Customer Value
  In the data analytics field, we will develop innovative solutions that integrate hardware and software, based on our “AT Cloud solution,” through dialogue with customers.

Strategy 4: Pioneer New Business Fields
We will apply our measurement technologies to develop new businesses outside the semiconductor value chain with a long-term perspective.

- Strategy 4: Pioneer New Business Fields
  Exploring new ways to provide value in other industries, such as the medical field, will enhance our own sustainability.

  By diversifying our businesses, we believe that we can continue to provide value to society through measurement technology, regardless of what major changes may occur in society or the structure of industry.

Strategy 5: Further Enhance ESG Initiatives
Contribute to solving social issues and achieving sustainability through business activities

- Strategy 5: Further Enhance ESG Initiatives
  We will lay the foundation for ongoing reinforcement of Advantest’s sustainable growth through corporate governance that provides for the establishment and operation of management and execution systems and succession plans, which also form the basis for our own sustainability.

  At the same time, we will strengthen sustainability factors related to human capital, such as respect for human rights and the development and training of human resources, and reinforce our climate change response.

Additionally, we will enhance our ESG activities throughout the company and contribute to the promotion of ESG activities in our supply chain. By enhancing these ESG initiatives, we will make our own business healthier and stronger, and contribute to safe, secure and comfortable lifestyles for people everywhere as well as to the sustainable future of our world.
Management Metrics
Under MTP2, we will endeavor to position our business for further growth, expand both growth investments and shareholder returns, and strive to increase corporate value. Thus, the management metrics emphasized in MTP2 are sales, operating margin, net income, return on equity attributable to owners of the parent (ROE), and basic earnings per share (EPS). We will seek to achieve numerical targets for each of these metrics as follows: sales of ¥350 to ¥380 billion; operating margin of 23 to 25%, net income of ¥62 to ¥70 billion, ROE of 20% or more, and EPS of ¥320 to ¥370 on average over the FY2021-FY2023 period. We are using three-year averages to smooth out the effects of single-year performance fluctuations, with the aim of evaluating the progress of the plan from a medium- to long-term perspective.

Market Environment
As during the MPT1 period, the importance of semiconductors is increasing against the backdrop of the digital revolution, while growing needs for semiconductor performance, complexity, and reliability continue to shape our market. Our business environment is expected to remain positive for the time being.

We expect the CAGR of the MTP2 (CY21-23) tester market to be 7% -8% (3-year average) and the CY21-23 tester market size to be approximately $ 4.6-4.8B (3-year average). Our market share target is 50% or greater.

Focus Points by Segment
- We are still in the position of being the only tester vendor that can provide solutions for all players and all test processes for both DRAM and non-volatile memory. As the demand for testers grows due to larger device capacity and higher device speeds, we will introduce competitive solutions to maintain and improve our market share.

- Amidst increasing emphasis on ensuring the reliability of semiconductors, we will provide test environments that support test quality improvements.
- We will grow our EUV mask inspection business as EUV lithography adoption expands.
- Advances in miniaturization and the adoption of advanced packages will expand demand for high-performance SoC testers in the medium term. Leveraging the strengths of our newest product, the V93000 EXA Scale, we will further capture demand for smartphone-related SoC and HPC device test, where we already have a strong presence.
- With the evolution of the 5G standard, demand for millimeter-wave related semiconductor test is expected to take off from 2022. This technological change will be a game-changing opportunity for us to establish a leading position in 5G RF test going forward.
- The performance and accuracy of MCUs, analog ICs, display driver ICs, etc. for consumer electronics, automobiles, and FA equipment are increasing, as are production volumes. As customers become increasingly willing to invest, we will attentively grasp their needs and increase our market share.

- We will expand our post-sales business by providing OEE (Overall Equipment Effectiveness) improvement solutions that utilize the Advantest Cloud Solutions™.
- Amidst growing needs for semiconductor reliability improvements, the spotlight is on system-level test in mission-critical applications. We will seek to win new customers in mobile, HPC, automotive, memory / storage, etc.
- In our system level test business, in addition to expanding unit sales, we will also strive to grow sales of consumables such as contactors, as well as recurring sales.
- In the data analytics business, the plan at the moment is to continue to build high-value solutions and search for innovative business models.

---

### Targets of MTP2*1

<table>
<thead>
<tr>
<th></th>
<th>MTP1 Actual</th>
<th>MTP2 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CY2017 Actual</td>
<td>CY2018-2020 (Average)</td>
</tr>
<tr>
<td><strong>Tester Market</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAGR 9% (vs CY2017)</td>
<td>Approx. 3.0B</td>
<td>Approx. 3.8B</td>
</tr>
<tr>
<td><strong>Advantest Share</strong></td>
<td>36%</td>
<td>50%</td>
</tr>
<tr>
<td><strong>SoC Testers Market</strong></td>
<td>Approx. 2.2B</td>
<td>Approx. 2.8B</td>
</tr>
<tr>
<td><strong>SoC Tester Share</strong></td>
<td>30%</td>
<td>47%</td>
</tr>
<tr>
<td><strong>Memory Tester Market</strong></td>
<td>Approx. 0.8B</td>
<td>Approx. 1.0B</td>
</tr>
<tr>
<td><strong>Memory Tester Share</strong></td>
<td>57%</td>
<td>57%</td>
</tr>
</tbody>
</table>

*1 OEE: Overall Equipment Effectiveness
The Need for SoC Test is Expanding in Multiple Dimensions

Senior Executive Officer
Executive Vice President, 93000 Business Unit, ATE Business Group
Juergen Serrer

The semiconductor industry is fueled by the digital transformation, 5G, AI/HPC, autonomous drive, ... a mobile, secured and connected society.

Devices become complex systems and need to be designed at an accelerating speed and to be tested as complete HW-SW system. New failure mechanisms appear due to new process and 3D packaging technologies.

Test must expand to much earlier in the semiconductor lifecycle, cooperating with EDA for fast design cycles but also to system-level verification.

The test content of digital devices continues to grow driven by structural tests and must be complemented by ATE-based system-test  — also driven by emerging 3D/chiplets. Furthermore, the power and thermal environment needs to be managed.

In RF devices the combination of more band, modes and concurrent transmission drives the complexity to be tested.

Quality demands drive up the test coverage. Test results need to be analyzed for fast yield and design learning.

The EXA Scale generation, our latest expansion of the 93000 SoC platform, deploys a test-processor ASIC, which includes innovations for throughput, result processing and yield learning. All processing elements are connected via a proprietary high-bandwidth backplane for data intensive application.

Our digital instrument covers the broadest application range from MCU to up HPC. It’s unique features enable emerging DFT innovations like HSIO-SCAN and SCAN-fabrics.

EXA Scale enables new test methodologies like ATE-based system-test and DFT innovations. This is done in cooperation with EDA to ensure effectiveness.

Our power instruments lead in density and offer multi-functional capabilities needed for advanced application like battery management.

Test data is processed on multiple levels — at the instrument, at the test-cell but also on the edge to the cloud - shared over our Advantest Cloud and enabled by AI technology.

We partner to offer complete test-cells, addressing economics challenges improving OEE and COT.

All the innovations are and will be done in a compatible way to ensure lasting ROA for our customers.

This will fuel the demand for our 93000 SoC platforms and Advantest is and will continue to expand test in multiple dimensions.

*1 HSIO-SCAN: High Speed Input/Output Scan (An efficient test method utilizing high-speed serial interface)
*2 SCAN-fabrics: (A network structure that efficiently handles test data)
*3 DFT: Design for Test
*4 EDA: Electronic Design Automation
*5 DPS: Device Power Supply
*6 COT: Cost of Test
*7 ROA: Return on Assets
When cash is derived from a favorable business environment, we will appropriately utilize and allocate it to shareholder for growth.

In May, we announced our new mid-term management plan running from FY2021 to FY2023. Under this plan, we have substantially revised our management indicators related to profit and loss compared to the previous mid-term management plan, and also clarified our plans for strengthening shareholder returns and how to use the cash flow generated. I would like to explain the background to these efforts.

May: Announced our new mid-term management plan running from FY2021 to FY2023.

Shareholder Return Policy

We have changed our shareholder return policy from a dividend payout ratio of 30%, linked to business performance, to a total return ratio* of 50% or more, which is the sum of dividends and share repurchase. Let me explain the thinking behind this change. Advantest’s business performance has been relatively stable for the past few years, but while dividends were increased in line with our dividend rate calculation based on business performance on a semiannual basis—in accordance with our dividend policy before the change—dividend amounts were unstable, including some reductions in comparison to the previous period or the same period in the previous fiscal year. Our new policy ensures a minimum dividend amount of 50 yen as an interim dividend and 100 yen as an annual dividend, with the primary goal of eliminating dividend instability, i.e. ensuring stable payouts that will not decrease.

*Total return ratio: (dividend amount + share buybacks) / consolidated net income

Previously, we returned about 30% of net income to shareholders and flexibly acquired treasury stock when we had the opportunity. With this change in our shareholder return policy, we will return more than 50% including share repurchase, and we are considering more aggressive acquisitions of treasury stock. Unlike dividends, share repurchase does not directly deliver money to shareholders, but the expectation of a positive effect on stock prices by reducing the supply of shares on the market will benefit long-term shareholders. In July, we announced that we would acquire...
Measuring stock worth up to ¥70 billion (10 million shares) from August to March 2022, this was planned and is being implemented in consideration of the balance between capital efficiency and the effect on shareholder returns mentioned above, while taking into consideration Advantest’s business performance and cash on hand for the current fiscal year. In addition, in the past, we used acquired treasury stock in our stock-based compensation system for executives and employees, or paid it out when convertible bonds with stock acquisition rights were exercised, resulting in the return of the acquired shares to the market. This time, we are considering canceling the acquired treasury stock as a measure to strengthen shareholder returns.

Minimum Cash Holding Level Policy

We are planning to shorten our cash conversion cycle compared to our previous mid-term management plan, but expenses incurred are expected to increase. We have calculated our minimum cash holding level based on a certain amount of expenses other than expenses such as capital investment, in addition to expenses that do not involve cash expenditure, such as depreciation and stock compensation, which must be financially supported during the period from materials purchase to collection of revenue from customers. Under this mid-term management plan, we believe that cash and deposits held as working capital will be about ¥50-60 billion, so this is a significant increase. The background to the increase is that due to further business expansion, we anticipate increases in hiring and capital investment, as well as increases in dividends and tax payments, depending on timing. Regarding hiring, our employee headcount increased by about 800 in the last three years, although this included new personnel brought in through M&A. Capital investment is also expected to increase further under the new mid-term management plan. Regarding taxes, we had a long-term loss carryforward due to losses that occurred in the past, which suppressed our tax payments somewhat, but the balance of the loss carryforward was consumed at the end of FY2020, so our tax burden and hence tax payments will increase from FY2021.

Capital Balance Policy

A larger capital balance is better from the viewpoint of safety. However, since Advantest’s goals include efficient management and a ROE over 20%, we are careful not to accumulate too much capital. However, maintaining financial soundness is a top priority. We also emphasize metrics such as reliability evaluations from customers, that is, whether we are a partner that companies can rely on to support their business, in addition to financial numbers such as D/E ratio. In the past, we have experienced significant decreases in equity capital due to impairment of inventories and long-term assets, or the reversal of deferred tax assets due to the rapid deterioration of our business environment. We therefore retain a level of capital that will not lead to insolvency in the unlikely event of an economic crisis that requires us to recognize several adverse events at the same time. Since the level of damage in these cases varies from asset to asset, a different amount of stress is applied to each asset category, and even, in a worst-case scenario, they were all to occur at the same time, we have made sure that we hold the minimum capital required, taking into account fluctuations on the asset side, to secure a certain capital balance in that event. Of course, we understand that ROE would be maximized by minimizing our capital balance, but in a growth phase like we are at present, we also need to increase our invested capital. Some recommend covering those needs with debt, but we think that excessive leverage causes problems in terms of impairment. On the other hand, we believe that too much capital is also a problem. Thus, we aim for an optimal balance by, for example, adjusting our capital balance by reducing cash and deposits with a low return rate through shareholder returns with the goal of maintaining financial soundness and hitting our ROE targets.

Mid-Term Management Plan

Our previous mid-term management plan presented a profit and loss model with sales of ¥300 billion. In FY2020, we achieved sales of ¥312.8 billion, exceeding ¥300 billion for the first time in Advantest’s history. Operating profit margin was 22.6%, which seemed to achieve the 22% set forth in the profit and loss model, but excluding other income and expenses such as temporary profit from the revision of the pension system at a subsidiary, it was only 20.0%, which was less than the profit and loss model aimed for. This is because we discerned that our business could be expanded further during the mid-term management plan period than originally planned, so we secured personnel and invested in development sooner than originally foreseen. As a result of such upfront investment, we expect average sales of ¥350 to ¥380 billion in the current mid-term management plan period, which greatly exceeds the average sales of ¥290.4 billion over the previous three years. The cost of sales depends on the mix of products sold, so it is somewhat difficult to forecast an improvement such as a 1% reduction every year, but we hope to secure our gross profit margin even in an environment where material costs are expected to rise. Regarding SG&A expenses, although increased hiring imposes a cost burden, we aim to keep the cost ratio down to about the level of FY2020 by increasing sales. The ratio of R&D costs to sales may appear to have declined, but this is due to our growing sales, and our policy is to increase R&D expenditures in absolute terms. Since we always have a longer-term growth perspective, we have no intention of easing off on R&D investment. Our results for fiscal 2020 make it look as if operating profit margin has not increased much, but the present mid-term management plan period still keeps us on the road of continuing growth investments, aiming for sales of ¥400 billion. Of course, we will pay attention to cost controls, but we plan to invest with an awareness of growth and profitability from a long-term perspective rather than focusing on single-year operating profit margins.

CFO Message

Increase profitability on a consistent basis by improving operational efficiency, while maintaining R&D investment as a source of growth

Maintain our high level of R&D investment to date as a driving force for value creation and social contribution, aiming for a cumulative total of approximately ¥150B during Mid-Term Plan 2

Maintain and improve gross margin by introducing competitive platforms

Supress the rise of SG&A as % of sales by pursuing operational excellence

<table>
<thead>
<tr>
<th>FY2020 result</th>
<th>MTP1 (FY2018-20 Avg.)</th>
<th>MTP2 (FY2021-23 Avg.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>¥312.8B</td>
<td>¥290.4B</td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
<td>46%</td>
<td>45%</td>
</tr>
<tr>
<td>SG&amp;A as % of Sales</td>
<td>31%</td>
<td>33%</td>
</tr>
<tr>
<td>(of which R&amp;D expenses)</td>
<td>14%</td>
<td>13%</td>
</tr>
<tr>
<td>Operating Margin</td>
<td>23%</td>
<td>22%</td>
</tr>
</tbody>
</table>

Overview Strategy Sustainability Information

TOPIX (Including dividends) Information Overview Sustainability Strategy

963.4

Total shareholder return (TSR)
Over the past several years, Advantest has made investments organically as well as through M&A to expand into new business areas that complement our core ATE business. We recognized the need in the industry for additional test solutions to achieve the required test coverage at the right economics, so we have made these investments. The investments begin in focused areas and when we integrate them into the broader Advantest test and measurement portfolio, we are unlocking additional synergistic value. As our customers’ semiconductor devices and modules continue to increase in complexity, various combinations of different test insertions and strategies are being employed, and it is Advantest’s responsibility to support these different workflows. A high-end IC can have as many as a dozen test insertions from start to finish, and these insertions can change over the life of an IC.

These new Advantest businesses include test platforms for performing system level test (SLT) for high end SoC devices as well as SSD testing for storage drives. Additionally, we have invested in the critical consumable components that interface between these test platforms to a customer’s device under test. These additional test platforms, components, and technologies provide Advantest with important building blocks to adapt to the future needs of our customers. In many cases, customers want to shift as much of their testing earlier (to the “left”) to avoid wasting costs on packaging bad parts. This requires innovations at the wafer or die level. In other cases, a last test insertion (to the “right”) to guarantee device system performance can require long test times with lots of power, so a massively parallel platform with active thermal control must be adopted. Therefore, depending on the customer and industry needs, Advantest is in the position to provide the best combinations of test solutions.

The next exciting piece to realize will be how test insertions can be linked together through data analytics which we call “going up”. Helping our customers to fully utilize the data between their test insertions to make the most efficient use of their test equipment can unlock a great deal of value. This linkage will create additional synergies and new business models for Advantest that leverage our core ATE business together with these new system test businesses.
Advantest’s Sustainability Vision

The Advantest Way, which defines our management philosophy, sets Sustainability through ESG Promotion as one of our management guidelines. Under our first mid-term management plan (FY2018-2020) (MTP1), we set 20 items of materiality to tackle in response to the corporate vision formulated in our Grand Design, and established sustainability goals as guidelines for meeting these challenges. Under our second mid-term management plan (MTP2) starting in FY2021, we aim to further strengthen these aspects of our sustainability vision.

How Sustainability Relates Our Business to Society

For us to meet the expectations of society and contribute to humanity’s sustainable future, another source of strength—earning power—is indispensable. Under our second mid-term management plan, the idea that earning power is the source of corporate value improvement is depicted in terms of expanding a matrix consisting of three axes. The three axes are (1) shareholder value, (2) stakeholder value, and (3) ESG value, where ESG value is positioned as an important value that promotes the growth of the other two axes. This is the reason why we added Further Enhancement of ESG Initiatives to MTP2 as one of our five key strategies.

Redefining Materiality

In order to put the materiality item of further enhancement of ESG initiatives into practice, we established our ESG Initiatives Basic Policy (for details see URL https://www.advantest.com/sustainability/advantest-sustainability/) as a management guideline for promoting ESG initiatives. In addition, we formulated our “ESG Action Plan 2021” with a total of 27 corporate-level themes, nine each for “E”, “S”, and “G”, as guidelines for expanding company-wide ESG activities on the global scale.

ESG Promotional Structure

With the intention of promoting company-wide ESG activities globally, a company-wide committee, the Sustainable Management Promotion Working Group, has been established, comprising the leaders of all Business Units and Functional Units. In collaboration with the Internal Control Committee, Disclosure Committee, and Compliance Committee, we are building a system to manage and support the progress of ESG measures across the entire Advantest Group.
**ESG Action Plan 2021**

<table>
<thead>
<tr>
<th>E (Environment)</th>
<th>Key Issue</th>
<th>Person in Charge</th>
<th>Objective</th>
<th>KPI</th>
<th>Target Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Climate Change (Scope 1+2)</strong></td>
<td>Mihashi</td>
<td>Reduce GHG emissions from business activities by 60% by 2030</td>
<td>GHG emissions reduction amount / rate</td>
<td>35%</td>
<td>38%</td>
</tr>
<tr>
<td></td>
<td>Tsukakoshi</td>
<td>Raise renewable energy usage to 70% by 2030, Group-wide</td>
<td>Coverage rate by Renewable Energy</td>
<td>50%</td>
<td>53%</td>
</tr>
<tr>
<td></td>
<td>Tsukakoshi</td>
<td>Reduce production time 30% through production process reviews (vs. FY2020)</td>
<td>Production time reduction rate for target models</td>
<td>25%</td>
<td>26%</td>
</tr>
<tr>
<td><strong>Value Chain (Scope 3)</strong></td>
<td>Tsukakoshi</td>
<td>Promote the use of renewable energy by suppliers and contractors</td>
<td>Number of suppliers who have introduced renewable energy</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Mihashi</td>
<td>Reduce CO2-equivalent emissions (basic unit per test by 50% by 2030</td>
<td>Reduction rate in basic units (vs. FY2018)</td>
<td>20%</td>
<td>30%</td>
</tr>
<tr>
<td><strong>Green Products</strong></td>
<td>Tsukazaki</td>
<td>Develop products that are free from polluting substances</td>
<td>Perfluorocarbon (PFC) refrigerant will no longer be used</td>
<td>New methodology in development plan</td>
<td>PFC totally eliminated from next-generation models</td>
</tr>
<tr>
<td><strong>Resource Recycling</strong></td>
<td>Fujita</td>
<td>Improve in-house recycling rate by promoting the 3Rs</td>
<td>Waste recycling rate</td>
<td>JPN: 90% Other region: 73% or more</td>
<td>JPN: 90% Other region: 73% or more</td>
</tr>
<tr>
<td><strong>Biodiversity</strong></td>
<td>Mihashi</td>
<td>Promote nature conservation activities (protection of endangered species in biotope, tree planting, beach clean-up, etc.)</td>
<td>Planning and implementation rate of nature conservation activities</td>
<td>10 activities planned, 80% implemented</td>
<td>14 activities planned, 80% implemented</td>
</tr>
<tr>
<td><strong>ESG management at Supply Chain</strong></td>
<td>Tsukakoshi</td>
<td>Share and solve / mitigate ESG issues (risk management, human rights / occupational safety, environment, fair trade, compliance, etc.)</td>
<td>Due diligence implementation rate for major customers</td>
<td>90%</td>
<td>95%</td>
</tr>
<tr>
<td><strong>Diversity Protection and Respect for Human Rights</strong></td>
<td>Fujita</td>
<td>Fair treatment in gender</td>
<td>Female manager ratio</td>
<td>9.0%</td>
<td>(tbd)</td>
</tr>
<tr>
<td></td>
<td>Tsukakoshi</td>
<td>Editorial and practice of Human Rights</td>
<td>Participation rate of educational training</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>Fujita</td>
<td>Work-Life Balance</td>
<td>Return-to-work rate after maternity leave (ATJ)</td>
<td>100%</td>
<td>12% (tbd)</td>
</tr>
<tr>
<td></td>
<td>Tsukakoshi</td>
<td>Conflict minerals elimination</td>
<td>Elimination of Red List smelter</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Customer Satisfaction</strong></td>
<td>Sakamoto</td>
<td>Raise customer satisfaction under New Normal circumstances</td>
<td>Ranking of YLResearch Customer Satisfaction Survey</td>
<td>1st</td>
<td>1st</td>
</tr>
<tr>
<td><strong>Employee Engagement</strong></td>
<td>Handa</td>
<td>Enhancement of attractive corporate culture</td>
<td>Score of Gallup survey</td>
<td>4.5</td>
<td>4.5</td>
</tr>
<tr>
<td><strong>Occupational Safety and Health</strong></td>
<td>Fujita</td>
<td>Infectious disease countermasures (e.g. Covid-19) and occupational safety</td>
<td>Number of workplace accidents (frequency rate)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Promotion of Health Management</strong></td>
<td></td>
<td>to be selected in White 500 (ATJ)</td>
<td></td>
<td>Do</td>
<td>Do</td>
</tr>
<tr>
<td><strong>Board Effectiveness</strong></td>
<td>Yoshida</td>
<td>Update business and management issues to outside directors</td>
<td>3 times / year</td>
<td>Do</td>
<td>Do</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Data discussion through OK site meeting by board members</td>
<td>2 times / year</td>
<td>Do</td>
<td>Do</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Succession Plan</td>
<td></td>
<td>Policy/Process making, planning, updates</td>
<td>Do</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Diversity of board members</td>
<td>Outside director (&gt; 40%), must be female members</td>
<td></td>
<td>Do</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Add ESG performance assessment on compensation</td>
<td>Start from FY2022</td>
<td></td>
<td>Plan</td>
</tr>
<tr>
<td><strong>Corporate culture and code of conduct (Compliance, Risk Management)</strong></td>
<td>Fujita</td>
<td>Work Shop / Training for all employees (The Advantest Way, Law, Regulations, Information securities, etc)</td>
<td>Participation rate to e-learning (100%)</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strengthening Internal Control</td>
<td>Regularly discuss about Internal Control issues</td>
<td></td>
<td>Do</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Timely and appropriate disclosure (Integrated Annual Report, Sustainability Databook)</td>
<td>Issuance every year</td>
<td></td>
<td>Do</td>
</tr>
</tbody>
</table>
Risk Management

Risk management is crucial for Advantest, which depends on overseas markets for more than 90% of its sales, in dealing with situations that straddle multiple countries and regions. We believe that the key to successful risk management is a system that addresses risks with both top-down and bottom-up approaches.

1. Our Basic Risk Management Philosophy

It is essential to identify present and future risks, prepare for them, and take appropriate countermeasures so as to seize business opportunities and tackle challenges amidst the upheavals, such as the data explosion, the progress of the digital revolution, and accelerating social changes, affecting our business environment. Therefore, from fiscal 2019, we decided to link management strategy with risk management to comprehensively identify existing and anticipated risks. Each unit identifies risks as factors that hinder the achievement of management strategies from a bird’s-eye view, and takes appropriate countermeasures according to the magnitude of the risks.

In addition, to sustain our business, it is important to prevent imminent risks from materializing and to establish a system that can promptly respond to these risks when they become apparent. Each unit strives to coordinate with the so-called second line (management division) and third line (internal audit division) of defense in managing its own risks, so as to be prepared to respond to risks even in a changing environment.

Thus, our risk management system is based on management supervision of risk analysis and risk response at the unit level. At the same time, regarding corporate-level risks, the Board of Directors or the Management Committee makes timely decisions and issues instructions to relevant departments to create a system that combines bottom-up and top-down risk management.

2. Risk Management Structure

1 Organization

Under the risk management policy set by the Internal Control Committee, each unit manages its own risks while the Internal Control Committee supervises and evaluates the situation and provides feedback.

Risks regarding information disclosure are collected by the Disclosure Committee, and compliance-related risks are collected by the Compliance Committee. In addition, there is also risk information that is reported directly to the Board of Directors or the Executive Management Committee.

A Risk Management Group, headed by the President, has also been set up to act promptly in the event of an emergency.

2 Process

Each unit incorporates the management plan formulated by the Board of Directors and the Executive Management Committee into priority measures for its own division. The Sustainable Management Promotion Working Group supports the policy planning and risk management activities of each Unit, especially from the aspect of ESG.

The Internal Control Committee defines the factors (risks) that hinder the achievement of these priority measures, and requests individual units (individual divisions, business units, and six overseas locations) to identify risks and report on their respective risk responses. In this manner, the Internal Control Committee supports the risk analyses of individual units as well as information sharing between units from a company-wide perspective. Each unit reports its risk management status to the Internal Control Committee twice a year. The Internal Control Committee then checks the risk management status of individual units and provides feedback.

Risks regarding information disclosure are collected by the Disclosure Committee, and compliance-related risks are collected by the Compliance Committee. The officers in charge of each committee then report them to the Board of Directors and the Executive Management Committee. Depending on the nature of the risk, some risk information may be reported directly to the Board of Directors or the Executive Management Committee. The Board of Directors or the Executive Management Committee handles risks at the corporate level by making timely decisions and giving instructions to related units.

In the event of an urgent matter, quicker response is possible under the direction of the Risk Management Group.

3. Key Risks and Countermeasures

In fiscal 2020, approximately 500 risks were identified by divisions, business units, and overseas locations. There are also additional risks identified by the Disclosure and Compliance Committees. Below is a list of the major ones organized by materiality. (For climate change risks, see pages 50-53.)

<table>
<thead>
<tr>
<th>Key risks</th>
<th>Materiality addressed</th>
<th>Priority Measures</th>
<th>Executive in charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Significant demand fluctuations in the semiconductor industry</td>
<td>1 2</td>
<td>While reinforcing outsourced production and diversification of suppliers, we will strive to collect accurate information by strengthening communication with customers and overseas locations.</td>
<td>Mihashi</td>
</tr>
<tr>
<td>2 Market share losses due to failure to deliver new products in a timely manner</td>
<td>1 2</td>
<td>We will strive to accurately anticipate demand by strengthening relationships with leading customers. We will consider lean ways to develop our products by thorough analysis during the early phases of development and design reviews at each phase.</td>
<td>Tsukui</td>
</tr>
<tr>
<td>3 Intense competition may impact market share</td>
<td>1</td>
<td>We will strive to provide unique functions and high value-added solutions by strengthening communication with customers and overseas locations.</td>
<td>Tsukui</td>
</tr>
<tr>
<td>4 Potential lack of highly specialized human resources</td>
<td>1 2</td>
<td>In the short term, we will respond by coordinating and replenishing human resources between divisions while formulating a mid- to long-term hiring plan, improving our working environment, providing opportunities to improve skills through education and training programs, and simultaneously pursuing automation and training multi-skilled engineers.</td>
<td>Harbeck</td>
</tr>
</tbody>
</table>
Environmental Initiatives

Based on “The Advantest Way,” Advantest implements climate change mitigation and adaptation measures from a long-term perspective, aiming to contribute to solutions for socially important environmental issues through our business.

We also analyze and disclose information regarding business risks and opportunities attributable to climate change in alignment with the recommendations of the TCFD (Task Force on Climate-related Financial Disclosures).

ESG Action Plan: “E (Environment)"

With the implementation of the ESG Basic Policy, the Environmental Action Plan was formulated under the “E (Environment)” category of the ESG Action Plan and launched in fiscal 2021. Advantest consistently encourages responsible efforts to clarify KPIs for the three-year period of our second mid-term management plan (MTP2) (FY2021 to 2023), and contribute to the realization of climate change mitigation and society-wide CO₂ emissions reduction.


Climate Change Initiatives

Advantest actively engages in international initiatives on climate change. As a global company, we are implementing climate change mitigation measures that are linked to international norms.

Outline of International Initiatives and Advantest Initiatives on Climate Change

<table>
<thead>
<tr>
<th>Institution</th>
<th>Advantest’s Initiatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCFD</td>
<td>Based on the PCG scenarios for global temperature increase, Advantest will continue to analyze management risks and opportunities related to our business activities stemming from climate change, together with the relevant laws and regulations, and set science-based information disclosure goals.</td>
</tr>
<tr>
<td>RE100</td>
<td>We have formulated a plan to shift the electricity used in business operations to renewable sources, and begun implementing it.</td>
</tr>
<tr>
<td>CDP</td>
<td>We are actively disclosing our initiatives addressing risks caused by climate change based on the recommendations of the TCFD (Scope 2) and RE100.</td>
</tr>
</tbody>
</table>

4. Cases of Dealing with Explicit Risks

In fiscal 2020, the risks we had anticipated, including the global spread of Covid-19 and the sharpening friction between the United States and China, materialized more severely than we had expected. However, we were able to flexibly handle these adverse circumstances according to the nature of the risks.

- Response to the Global COVID-19 Pandemic

Response to the global spread of Covid-19: The Risk Management Group took the initiative in gathering information about the nature of the risks.

- Response to the Sharpening Friction between the United States and China

Response to the sharpening friction between the United States and China: When export controls were globally tightened, including the reinforcement of the US Export Control Ordinance (US-EAR) and the enactment of the China Export Control Law, we were required to comply with these regulations. With the General Manager of the Legal Department leading our response, we gathered cross-national and cross-functional members to launch the US-China Trade Compliance Project and respond to the situation. We now have a system ready to accurately comply with the export control laws and regulations of each country by collecting information from all over the world on this project and verifying our response.

- Fiercer competition in the labor market

We are preparing for the labor market situation, including the reinforcement of the US Export Control Ordinance and labor market trends.

- Risks associated with legal violation

We are striving to promptly obtain information on regulations and in order to appropriately set up and monitor internal processes and educate and train our employees.

- Response to the Global CO2 Pandemic

Response to the global CO2 pandemic: We are striving to promptly obtain information on regulations and in order to appropriately set up and monitor internal processes and educate and train our employees.

- Change mitigation measures that are linked to international norms

Advantest actively engages in international initiatives on climate change. As a global company, we are implementing climate change mitigation measures that are linked to international norms.

- Green Products

Develop products that are free from polluting substances

- Resource Recycling

Reduce resource recycling rate by promoting the 3Rs

- Biodiversity

Promote nature conservation activities in the region where the business operations are located.

- Other region:

JPN: 90%

- Other region:

10 activities implemented

14 activities implemented

10 activities implemented
Environmental Initiatives

Overview Strategy Sustainability Information

Efforts Supporting the Recommendations of TCFD

In April 2020, Advantest announced its support for the recommendations of the Task Force on Climate-related Financial Disclosure (TCFD) based on the idea that the risks and opportunities posed by climate change to our business and financial status need to be evaluated to achieve sustainable growth. Since then, we have been working on analysis, examination, and disclosure. (For details please refer to: https://www.advantest.com/sustainability/governance/tcfd.html)

In fiscal 2020, which was the inaugural year of our efforts, we began by analyzing multiple IPCC RCP scenarios and IEA scenarios and examined associated physical risks and transitional risks as a part of our business management. In fiscal 2021, we will continue to utilize the recommendations of the TCFD to achieve sustainable growth for the Advantest Group, enhance corporate value, and foster a sustainable future.

Governance

Advantest newly established the Sustainable Management Working Group (hereinafter WG*1) in fiscal 2020. With the WG as the secretariat for promotion, we identify and evaluate issues related to climate issues, while the ESG goals and priority measures of the entire Group and each Business Unit, Functional Unit, and Regional Unit will be summarized in an ESG Action Plan to support and promote activities for each business year. The WG will share information on the implementation status of the ESG Action Plan with related company-wide committees such as the Disclosure Committee, Internal Control Committee, and Compliance Committee in a timely and appropriate manner, and will manage the progress of the entire group and perform risk management. The WG will report the implementation status of the ESG Action Plan to the Executive Management Committee and the Board of Directors twice a year. Specifically, in fiscal 2020, Advantest agreed to support the TCFD and join RE100.

Strategy

Advantest began by referring to the global warming emissions scenarios such as the Representative Concentration Pathways (RCP) RCP8.5, RCP6.0, RCP2.6 of the United Nations Intergovernmental Panel on Climate Change (IPCC) and Sustainable Development Scenario (SDS) of the International Energy Agency (IEA) to analyze scenarios and examine associated physical risks and transitional risks as a part of our business management. Under the 2-degrees Celsius framework, we assumed that climate change incentives, such as the introduction of carbon pricing, would be strengthened and that there would be no physical impact of climate change at levels that would impact our business. On another front, in a low-carbon society, the demand for semiconductors will increase substantially, leading to an anticipated expansion of our business opportunities. However, under the 4-degrees Celsius warming scenario, where climate change countermeasures are not strengthened, we assumed that we may be physically affected by the effects of climate change such as the intensification of extreme weather events resulting in the collapse of systems.

Business Risks and Opportunities Brought About by Climate Change

Based on the guidance and classification for TCFD, Advantest has identified and considered environmental risks and opportunities relating to the Advantest Group’s business activities impacted by climate change. These risks and opportunities are evaluated according to “importance” and “impact,” and classified under the following three temporal axes: “short-term (from now to 2025),” “mid-term (from now to 2030),” and “long-term (until 2050).”

Major Risks Brought About by Climate Change

Advantest analyzed impacts of climate-change risks and business opportunities using the following two scenarios in line with the TCFD classification: (1) “risks related to the transition to a low-carbon society” that occur mainly in the course of the 2-degrees Celsius or lower scenario, and (2) “risks related to the physical impacts of climate change” that occur when the 4-degrees Celsius scenario is reached due to failure to reduce global CO₂ emissions.

2-degrees Celsius or Lower Scenario: Transition Risks to a Low-carbon Society

<table>
<thead>
<tr>
<th>Category</th>
<th>Major Risks</th>
<th>Strategy &amp; Mitigation Measures</th>
<th>Temporal Axis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy &amp; Legal</td>
<td>Scarcity and product prices due to the introduction of carbon taxes</td>
<td>Implementation of CO₂ emissions reduction management throughout the supply chain</td>
<td>Short-term</td>
</tr>
<tr>
<td>Technology</td>
<td>Electricity prices due to instability to meet customer demand, balancing improved test performance with transition to lower-emissions technology and materialization from existing products and services</td>
<td>Research and development of energy-saving technology, facilitating human resources for the next generation</td>
<td>Mid-term</td>
</tr>
<tr>
<td>Market</td>
<td>Introduction and market adoption of new semiconductor equipment</td>
<td>Research into new test methods and development of test equipment</td>
<td>Long-term</td>
</tr>
<tr>
<td>Reputation</td>
<td>Increased stakeholder concern or negative stakeholder feedback due to delayed greenhouse gas emissions reduction plan</td>
<td>Introducing renewable energy based on the roadmap and steadily implementing energy conservation plans</td>
<td>Short and mid-term</td>
</tr>
</tbody>
</table>

4-degrees Scenario: Physical Risks Related to Impacts of Climate Change

<table>
<thead>
<tr>
<th>Category</th>
<th>Major Opportunities</th>
<th>Strategy &amp; Mitigation Measures</th>
<th>Temporal Axis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute or Chronic</td>
<td>More frequent and severe weather events (e.g., hurricanes and torrential rain) leading to business disruption and damage across the supply chain</td>
<td>Minimization of damage through formulation of business continuity plan (BCP)</td>
<td>Long-term</td>
</tr>
<tr>
<td>Products and services / markets</td>
<td>Expanding the base of semiconductor demand and growing market due to the digital revolution</td>
<td>Research and development of energy-saving technology</td>
<td>Mid-term</td>
</tr>
<tr>
<td>Products and services / markets</td>
<td>Introduction and market adoption of new semiconductor equipment</td>
<td>Research into new test methods and development of test equipment</td>
<td>Mid-term</td>
</tr>
<tr>
<td>Reputation</td>
<td>Gaining social trust as a resilient company</td>
<td>Introducing renewable energy based on the roadmap and steadily implementing energy conservation plans</td>
<td>Mid-term</td>
</tr>
</tbody>
</table>

Risk Management

At Advantest, we consider the factors that hinder business management to be risks, and have established a company-wide risk management system. Management risks posed by climate change are also managed within this system. With the support of the WG, we analyze and evaluate urgent and anticipated risks posed by climate change. Using the company-wide risk management system that we have already established, we implement countermeasures to avoid and mitigate those risks to prepare for and enable continuity of our business activities in the face of adversity.

Indicators and Targets

The Advantest Group works to promote ESG management and realization of a sustainable society, which is the foundation of “The Advantest Way.” As a measure to combat global warming, we set medium- and long-term climate change countermeasure targets (CO₂ emissions reduction) in April 2020, in view of the mitigation of climate change and the desirability of reducing society-wide emissions, as well as “RE100.” Regarding our promotion and adoption of renewable energy, by 2020, our bases in Europe and the United States will use almost 100% renewable energy. In Japan as well, we achieved 100% renewable energy usage at our Gunma Factory in April 2021. In terms of global CO₂ emission, we have set long-term reduction targets that cover not only Scope 1 and 2, but also for Scope 3, that refer to emissions from our products during utilization at our customers’ sites.

Advantest’s Global CO₂ Emissions (Scope1+2)

- More than 70% by 2030
- 100% by 2050
- Global CO₂ emissions (Scope 1, 2)
- 60% reduction from 2018 by 2030
- Average CO₂ emissions per test
- 50% reduction from 2018 by 2030
Environmental Initiatives

Sustainability

Efforts to Reduce Global CO₂ Emissions

The Advantest Group regards the prevention of global warming as an important corporate mission, and makes efforts to reduce greenhouse gas emissions by providing green products and reforming our business processes. In addition, we are promoting medium- and long-term energy conservation measures and conversion to renewable energy at each Advantest Group base and throughout value chains inside and outside Japan.

CO₂ Emissions in Advantest’s Supply Chain

- **Upstream**: Scope 3
  - Capital goods
  - Fuel and energy-related activities
- **In-house**: Scope 1+2
  - Employee commuting
  - Transportation, distribution
- **Downstream**: Scope 3
  - Usage of products
  - Disposal of post-lifecycle products
  - Own industrial processes

**Gunma Factory Achieves 100% of Electricity Sourced from Renewables**

From April 2021, all the electricity used at the Gunma Factory is now derived from renewable sources. This renewable energy is carbon-neutral and locally produced for local consumption at a hydroelectric power plant owned by Gunma Prefecture. The environmental added value of our electricity at Gunma Prefecture. The environmental added value of our electricity at Gunma Factory is about 12.8 million kWh per year, so it is expected that switching to renewable energy will reduce CO₂ emissions by about 5,000 t-CO₂ per year. This is equivalent to the CO₂ absorbed by about 360,000 Japanese cedar trees in one year. (One cedar tree absorbs 14 kg of CO₂ annually, according to Ministry of Agriculture, Forestry and Fisheries data.)

**Environmental Education**

Advantest provides global environmental education to our more than 5,000 employees in approximately 16 countries around the world. In fiscal 2020, 99.1% of our employees attended. We also provide environmental education full of originality at each of our overseas bases.

- **Japan: Global Exchange Through the New Internal Website: Advantest and the SDGs**

  Japan currently operates the internal website “Advantest and the SDGs”, which promotes SDGs activities, and the in-house social network My LIFE.ON., where employees post and share activities that enhance Advantest’s sustainability for people, the environment, and society.

  On our “Advantest and the SDGs” homepage, we share various social / environmental activities at each of Advantest’s global locations, contributing to the achievement of the SDGs.

  On our in-house social network “My LIFE.ON.”, we not only post and share employee environment and social contribution activities, but also plan and hold various events. These activities originating in Japan play vital roles in developing human resources who contribute to the SDGs by playing a central role in exchanges with our overseas bases.

- **Singapore (ASP): SDGs Online Workshop Held at ASP**

  SDG workshop were organized and held for employees in April and May 2021. Two workshops were held (Session 1 in April and Session 2 in May) with professional lecturers, and a total of 300 employees from Singapore, Malaysia, Thailand, and the Philippines participated. Both Sessions 1 and 2 were held multiple times to make it easier for employees to participate, and participants learned about the SDGs, the progress assessment of the SDGs in Singapore, and the role of Advantest in the achievement of the SDGs. In addition, we introduced quizzes and devised ways to make the sessions more engaging and interactive, where everyone actively answered the questions online and deepened their understanding of the environment.
Environmental Initiatives

Environment / SDGs: Advantest’s Participation in Global Earth Day

Advantest held events to contribute to the awareness of the Earth Day at various locations around the world to commemorate Earth Day on April 22.

■ Taiwan: Contributing to the Global Environment through the Declaration on Earth Day and Vegan Meal

At Advantest Taiwan, a series of campaigns and events, chiefly 1) The Declaration on Earth Day and 2) A vegan meal, were organized to which a total of 200 employees participated. In the Declaration on Earth Day, we installed a board with a big poster beside the reception desk where our employees expressed/write their ideas with 3M stick- ers to pledge reduction of environmental footprint such as carrying their own bags for shopping and valuing water re- sources.

In addition, we offered vegetarian meals such as plant- based tofu burgers, and our employees contributed to the global environment by eating healthy and environmentally friendly foods.

■ China: 2021 Earth Hour

Our employees turned off the lights at home and at the of- fice, and shared their participation and feelings towards the Earth Day night on our in-house social network My LIFE. ON. Everyone who joined the Earth Hour experienced a meaningful night in their own way and acknowledged how their tiny actions could contribute to the prevention of global warming.

*Earth Hour: A global initiative uniting people to take action on environ- mental issues and contribute to the prevention of global warming and environmental conservation by switching off the lights on the same day and at the same time all over the world.

■ The United States: Virtual Earth Day Event to Learn the SDGs

At Advantest America we held a virtual Earth Day event to share and learn about our environment. 128 employees participated in the event to discuss the ISO14001 program, learn about ESG activities, and share awareness about Sustainable Development Goals (SDGs17). We also had three sessions by three non-profits, Habitat for Humanity, Feeding America, and Second Harvest Silicon Valley, which our local subsidiary has collaborated with, making contributions towards achieving their goals.

How Advantest is Contributing to Society through Sustainable Activities to Support Childhood Education

Advantest participated in the “Edu Town SDGs Alliance,” a project sponsored by publishing groups Nikkei BP, TREE, and Tokya Shoseki, that aims to help elementary and junior high school students learn about the SDGs, in addition to the science classes we regularly hold for elementary school students.

■ EduTown SDGs Start Book

The Edu Town SDGs Alliance’s goal is to “cultivate creators of a sustainable society.” It operates the comprehensive educational site “EDU Town” and publishes supplementary teaching materials (Booklet “Edu Town SDGs Start Book”) and distributes them free of charge.

In this project, we asked our young employee representa- tive to share her episodes in the Edu Town Tomorrow website, which supports children’s career education and vocational research. Our employee explained why she as-pired to be an engineer and what she studied to become the engineer she is today. Edu Town Tomorrow is an opportun- ity for children, who read these articles, to expand their image of work and their future dreams and ambitions while giving them a better understanding of their present selves and learning at school.

I was delighted to have been involved in ATI’s participation in the Edu Town SDGs Alliance, and gained a lot of valuable experience. Looking back, I think the prepara- tion for the first “Edu Town SDGs” interview was the most difficult. There were about 10 questions I had to answer, but the questions were like, “What kind of fu- ture world will semiconductors help to create?” I don’t go around thinking about this abstract stuff in my every- day life! I felt like I had to answer immediately, since I’m in the semiconductor industry, but when they asked me again, I stumbled over my answer, and realized how narrow my horizons are in my everyday work.

The content of the interview for “Edu Town Tomorrow” was about my own background, so it was a little embar- rassing. However, it gave me an opportunity to look back on my life so far, and I realized something new. Until now, when choosing my career path or looking for a job, I just kind of drifted in the direction of “things I kind of like” without thinking too hard about it, but as a result, I am now doing the job I wanted to do when I was little! This is just my personal experience, but I’m happy to tell ele- mentary, junior high and high school students that there may be good things coming if you pay attention to your own likes and dislikes.

Thinking back, I realized that it is important to have a broad perspective. From now on, I will consciously think about what my daily work means from various perspectives, and I will think about how I can contribute to society and the world.
Advantest has received very well among our employees and is almost sold out every time. Being accustomed to sustainable seafood in the employee cafeteria has led our employees to make SDGs-conscious choices, such as purchasing marine products with the MSC / ASC certification label at supermarkets in our daily lives.

**Environmental Initiatives**

### Awareness Building through Sustainable Choices

**MSC / ASC CoC Certification & Provision of Sustainable Seafood**

In February 2021, Advantest acquired Marine Stewardship Council (MSC) / Aquaculture Stewardship Council (ASC) Chain of Custody (CoC) certification, which is an international certification for sustainable seafood, at four of our bases: Advantest Facilities Office, Gunma R&D Center, Gunma Factory, and Saitama R&D Center.

Currently, the employee cafeterias at our three offices in Gunma and Saitama regularly offer menus using sustainable seafood, contributing to the sustainability of fishery resources.

In addition, the sustainable seafood menu has been received very well among our employees and is almost sold out every time. Being accustomed to sustainable seafood in the employee cafeteria has led our employees to make SDGs-conscious choices, such as purchasing marine products with the MSC / ASC certification label at supermarkets in our daily lives.

### Continuing Activities to Protect Biodiversity

#### 20th Anniversary of Advantest’s Biotope

Advantest has celebrated the 20th anniversary of the establishment of our biotope eco-park at the Gunma R&D Center. The biotope is one of the largest of its kind established by any private company in Japan. Under the guidance of Gunma University, we created forests, ponds, and streams that are rich in nature in a place that was initially a vacant lot. Furthermore, we aimed at regenerating a forest while exterminating invasive species, and protecting and nurturing native and threatened species.

Our biotope is the home of the bonset plant, which has been designated as a near threatened species by the national government and as threatened species (IA) by Gunma Prefecture. For more than 10 years, Advantest has cooperated with Gunma University’s research on bonset to avoid its extinction. Similarly, our biotope is also protecting and growing endangered species found in Gunma Prefecture such as floating hearts and Amsonia elliptica.

Birds of prey including top predators such as black kites, buzzards, and sparrowhawks have also been identified in our biotope as examples of an environment in which diverse creatures can live together. In 2020, owls were confirmed for the first time.

From 2020, as part of a joint research project with Gunma University, we restarted calculation of carbon dioxide absorption by the biotope. Advantest will continue to contribute to mitigating climate change through research over the next three years.

(For further details, please refer to: [https://www.advantest.com/sustainability/biotopes/index.html](https://www.advantest.com/sustainability/biotopes/index.html))

---

**ESG Promotion Depends on Everyone’s Sincere Buy-In**

Executive Officer, Executive Vice President, Field Service Group

Titan Chang

Do you know how many places are short of water and how many places have been flooded this year? These disasters are getting closer and closer to us. No one can escape the effects of global warming!

Did you know that scientists estimate 50-80% of the oxygen production on Earth comes from the ocean, particularly oceanic plankton? That’s more than is produced by forests! What about the fact that butterfly larvae feed on bamboo, and how light pollution affects fireflies? Insects are also indispensable for agriculture. Without insects, we’d have almost no fruits or vegetables! However, the plants that insects depend on for survival are rapidly becoming scarce due to human activity, and the destruction of animal habitats is unimaginable! I have always been concerned with efforts to restore the ecology of indigenous plants, insects, and wild animals, giving them places to thrive and multiply, reducing human intervention, and protecting biodiversity.

Twenty years ago, I bought two large cabbage fields near my home. Damaged by chemical fertilizers and pesticides, the ground was being eroded by heavy rains, so I started planting saplings of various native species. Planting about 3,000 trees in the last 20 years, such as maple, fir, cypress, cherry, plum, and peach, has stopped soil erosion. The native plants under the trees have also attracted many insects, birds, and animals. Bees, butterflies, fireflies, tree frogs, wild boar, swallows, and eagles have all returned to the land and are thriving. It’s like a “theater of life” for my family and friends and me, where our children can experience nature in a clean and fresh atmosphere.

Everyone’s Sincere Buy-In

Left: Titan Chang

I have also started to grow organic peaches. In the future, I hope to continue activities that contribute to the public welfare, so that more people can benefit from this land. I believe that what an individual can do is limited, but collective action can be very effective. When companies and governments join in, the effect will be even greater.

In Japan there is the Satoyama Project, in Asia there is the Wilderness Conservation Association, in China there is tree-planting in the desert, and there is also a plan to protect the oceans in the Pacific. We at Advantest also have “Further enhancement of ESG initiatives” in our second mid-term management plan. But without sincere buy-in from each person, nothing will happen. In addition to working on environmental protection as an individual, I’ll do my best as an executive officer of Advantest and a leader of the FS department to encourage individual buy-in by sharing my thoughts and experiences, as described above.

When we are all working together to support the company’s ESG initiatives, we’ll have a far greater positive impact than if we tried to go it alone.
As corporate activities become more and more globalized, a new spotlight has shone on human rights violations and labor issues. Companies must take the initiative to solve social issues not only by themselves but also in collaboration with their own supply chain.

Advantest proactively deploys measures to solve these social issues throughout our business, based on The Advantest Way and our corporate mission statement, “Enabling Leading-edge Technologies.” Our ESG Basic Policy, formulated in 2021, sets forth our social responsibility as a global company and our commitments to our stakeholders. Meanwhile, our ESG Action Plan 2021 describes specific themes, goals, and KPIs to support and promote company-wide activities and to disclose information.

Respecting and Protecting Human Rights

Advantest has participated in the United Nations Global Compact since 2019, which commits us to support the Ten Principles of the UN Global Compact, covering human rights, labor, the environment, and anti-corruption, and to participate in the UN Global Compact since 2019, which commits us to support the Ten Principles of the UN Global Compact, covering human rights, labor, the environment, and anti-corruption, and to promote and resolve these issues within the company and in our supply chain.

In 2021, we broadly set forth our approach to human rights and awareness of top-priority issues in the Advantest Group Human Rights Policy and Advantest Group Priority Issues Related to Human Rights document, as a part of our efforts to promote and resolve these issues.

At Advantest, we annually conduct a Supply Chain CSR Survey guided by international norms such as the Ten Principles of the UN Global Compact and the RBA Code of Conduct. In this year’s survey, we investigated the status of foreign technical intern trainees at our business partners, which had been brought up as an issue related to human rights, and shared the problems associated with it.

Responsible Mineral Procurement

Advantest’s Procurement Policy requires our business partners to eliminate conflict minerals (TGT, tin, tantalum, tungsten, gold) that can be sources of funding for armed groups in the Democratic Republic of Congo and adjacent countries. Advantest promotes efforts to inhibit acts that may result in impaired socio-economic and environmental stability including participation in human rights violations such as human trafficking or environmental destruction, and tolerating, recognizing, benefiting, contributing, supporting, or promoting agents of armed conflict.

Quality Assurance Initiatives

Semiconductor testing equipment manufactured and offered by Advantest (hereinafter referred to as testers) plays a vital role in supporting the reliability of semiconductors by testing the operation of semiconductors and verifying that they operate correctly.

In recent years, semiconductors applications have expanded dramatically into diverse fields, and production volumes are also rising. The wide use of semiconductors in automobiles, aircraft, transportation infrastructure, etc., has focused additional attention on their quality and safety. Semiconductors play an important role in ensuring the safety of automated systems (autonomous driving, drones, etc.), which are now being trialed in society as research and development continue. Advantest has created a quality tracing system and has begun efforts to contribute to ensuring the safety of such automated systems.

In terms of software development, Advantest has begun efforts to improve quality through visualization by quantitative measurement of the development process by acquiring Automotive SPICE (Software Process Improvement and Capability Determination) Certification, which defines the framework of the automotive software development process.
Efforts to Address Social Issues

Sustainability

In order to meet market requirements, we believe that it is essential to build good relationships with our customers and continue to be a strong business partner. This is the fruit of the relationships of mutual trust formed through regular communication with customers, technological strength, exceptional products, and expert support system. Every year, Advantest participates in a customer satisfaction survey conducted by VLSI Research, the world’s leading semiconductor market-research firm, in order to objectively grasp how our customers perceive our efforts. The survey has been conducted since 1988 and is known as the only survey in the industry to receive direct customer feedback.

In the 2021 survey results, Advantest was ranked first in both THE BEST suppliers of test equipment and on the 10 BEST list of large suppliers of chip making equipment for the second consecutive year. Advantest also achieved customer ratings of 9.5/10 and above in the categories including Recommended Supplier, Trust in Supplier, Technical Leadership, Partnership, and Field Engineering Support. Advantest has always been ranked high in THE BEST Suppliers category, but in 2001 Advantest was the only automatic test equipment supplier to receive a 5 VLSI Star designation.

Employee Engagement

We conducted our first Global Employee Engagement Survey in the fall of 2018. Unfortunately, the result was below the level of comparable companies. In particular, our management was shocked by the remarkably low score in Japan, and reaffirmed the need for corrective action. (Survey by Gallup, Inc. Advantest was 3.48, compared to the overall average of 4.03 at that time.) We also confirmed that the Group tends to have low awareness and opportunities regarding the category of Recognition (the need to know that efforts are recognized and valued) and Development.

With this situation in mind, these results were communicated to each division of the Advantest Group, asking them to consider the factors that lead to each result by sharing and listening more deeply to our employees’ opinions. As a result, various opinions were expressed and collected ranging from requests to improve the work environment itself, to how to progress with work, and the future of the company and personal ambitions. Based on these opinions, offices and employees’ cafeterias were renovated at each business location while some departments introduced tools to measure employee engagement in a concise and frequent manner.

In addition, regarding improvement at the company-wide level, we introduced our INTEGRITY Core Values, and launched an initiative to enhance and strengthen these new philosophies with a focus on workshop-type trainings. These initiatives also generated opportunities for mutual understanding and learning among our employees. Not only did the INTEGRITY workshops instill workshop-type internal communication, but also provided a place to expand the opportunities for active exchange of opinions and idea creation.

We have scheduled a survey by Gallup, Inc. to be conducted again in the fall of 2021. While objective assessment is critical by all means, continued efforts to improve employee engagement is of paramount importance. We will continue working on improvement without being swayed by short-term numerical fluctuations as recorded by the survey.

Customer Satisfaction

In order to meet market requirements, we believe that creating a comfortable and inclusive workplace environment and instilling working practices that maximize employee capabilities while encouraging positive work-life balance is imperative. Under this philosophy, Advantest actively works to create a workplace and corporate culture that helps each employee to maximize their capabilities and individually, and promotes engagement and enthusiasm.

Work-Life Balance Programs for Childcare and Caregiving

At Advantest in Japan, pregnant employees can receive 100% compensation during prenatal checkups and pregnancy complications leave, and are offered the choice to work shorter hours if a doctor recommends it. Advantest offers childcare leave and caregiving leave that exceeds legal standards. Childcare leave can be taken until the child reaches the age of two years and three months, and caregiving leave can be taken for a maximum of three years.

Other leave programs are also widely used, such as those related to pregnancy, postpartum recovery, and family caregiving responsibilities. Furthermore, Advantest offers shorter work hours for employees who are raising children or looking after ill relatives. Shorter working hours for childcare can be used until the child reaches the sixth grade, and this option is currently being used by many parents to balance work and childcare. There is no restriction on the period in which employees can work short hours for caregiving, so that employees can best balance their jobs with their home lives.

As there are certain cases in which employees resign their jobs for personal reasons, such as marriage, childbirth, family caregiving, and spousal job relocation, Advantest has established a re-employment program for employees who meet certain criteria.

It should be noted that re-employment following childcare leave, as a result of these efforts, was 100% in fiscal 2020. We are also working on support for childcare participation for fathers, which includes the provision of personal consultations for male employees with children and their supervisors, guidance for childcare-related systems, and support for using childcare leave.

In addition, as a measure to prevent the global spread of COVID-19, we introduced the remote working system ahead of schedule. By December 2020, we made it a permanent system and withdrew the restrictions on the maximum number of days of remote work that is possible. The expansion of new workstyles has also helped employees who are raising children to balance work and childcare.

However, since the ratio of male employees taking childcare leave in fiscal 2020 remained at 5.1%, we continue to provide individual guidance to male employees who are raising children with the aim of encouraging more of them to take childcare leave.

Advantest has a goal of exceeding the average female participation in our industry in fiscal 2018 in the General Business Operator Action Plan according to the “Act on Promotion of Women’s Participation and Advancement in the Workplace,” and has been promoting various activities to achieve the goal. In November 2020, Advantest was granted the “Eruboshi” Grade 2 certification (2 stars) based on the “Act on Promotion of Women’s Participation and Advancement in the Workplace,” and has been promoting Action Plan according to the “Act on Promotion of Women’s Participation and Advancement in the Workplace.”

Advantest was also granted the “Kurumin” certification based on the “Act on Advancement of Measures to Support Raising Next Generation Children” in February 2021, which recognized initiatives during the action plan period from April 2018 to March 2020 (measures and efforts to improve the ratio of male employees taking childcare leave and creating an environment for supporting work-life balance, reduction of overtime labor, promotion of acquisition of annual paid leave).

Diversity

Efforts to Address Social Issues

Active participation by each employee is crucial for a company’s sustainable growth. Thus, Advantest has set inclusion and diversity as one of its core values. We believe that creating a comfortable and inclusive workplace environment and instilling working practices that maximize employee capabilities while encouraging positive work-life balance is imperative. Under this philosophy, Advantest actively works to create a workplace and corporate culture that helps each employee to maximize their capabilities and individually, and promotes engagement and enthusiasm.
Leadership

Overview

Strategy

Sustainability

Information

Occupational Health and Safety

Advantest Group recognizes that Health and Safety (H&S) is one of the important aspects of our business operation. The Advantest Group Health and Safety Policy is set forth to ensure every Advantest employee’s Health and Safety.

Every year we convene a “Health and Safety Committee Meeting” which decides the health and safety direction and policy for the whole group. Our approach to health and safety is based on the main activity themes decided on at this meeting, based on which the health and safety committees at each location set their annual targets and plans. We also regularly hold health and safety committee secretarial meetings throughout the company, and strengthen each location’s health and safety activities through this sharing of information about relevant activities. Members of the company-wide Health and Safety Committee are the heads of the Health and Safety Committees at each business location. Furthermore, the members of the Health and Safety Committees at each business location include both company and union representatives.

Implementation of Workplace Vaccination

At Advantest, in order to reduce this burden in the community regarding COVID-19 vaccination and speed up the vaccination process, we carried out occupational vaccination at the Guma R&D Center.

The second inoculation was completed in early August for about 2,000 people, mainly employees working at business locations in the Guma area.

Support for Healthcare Workers at the Forefront of COVID-19

Advantest donated a total of 90 million yen to six of the medical associations and nursing associations of the local governments where our overseas locations are based, with the aim of supporting the healthcare workers and medical professionals at the forefront of the prolonged COVID-19 pandemic.

Promotion of Health and Productivity Management

Up to this point, Advantest has had various initiatives for health and productivity. To further promote various initiatives for health and productivity, Advantest formulated a Declaration of HPM Policy in September 2019 and decided to incorporate the Declaration of HPM Policy in fiscal 2020, under the achievement of the Sustainable Development Goals.

Declarations of HPM Policy

In order to realize Advantest’s mission, we will strive to create a workplace where every employee can work in optimal physical and mental health, and to contribute to humanity’s sustainable future as a corporate citizen.

Ever since the Declaration of HPM Policy was established, the health insurance society and labor union have come together to promote health check-ups, boost the implementation rate of specified health guidance, and introduce a health portal site, along with various other activities that directly affect employees’ health such as online dieting/smoking cessation programs and yoga/health/exercise seminars. As a result, although we were not certified in fiscal 2018, Advantest has been certified as a Certified Health & Productivity Management Outstanding Organization in the large enterprise category in fiscal 2019, and was selected for the “White 500”, which corresponds to the top 500 companies with excellent health management, in fiscal 2020, under the program promoted by the Ministry of Economy, Trade and Industry and hosted by the Nippon Kenko Kaigi.

Webinar on Breast Cancer

As part of our efforts for Health and Productivity Management, we convened an all-female webinar in June 2021 on breast cancer. By limiting the lecturers and participants to women, we made it easier for female employees to participate in the webinar, where experts explained the details of breast cancer including its nature, symptoms, risk factors, and self-check methods, and communicated the importance of screening.
Corporate Governance

Our Basic Policy of Corporate Governance

Based on our mission of “enabling leading-edge technologies,” we at the Advantest Group constantly strive to better ourselves as we provide products and services that satisfy customers around the world, and to contribute to the future of society through the development of leading-edge technologies.

In accordance with this philosophy, and in response to our mandate from stakeholders, the Group seeks sustainable development and the improvement of corporate value over the medium to long term. To achieve this, our basic principles of corporate governance are fairness, efficiency, and high transparency. Our “Basic Policy of Corporate Governance” is published on our website at the below link.

https://www.advantest.com/sustainability/governance/governance.html

Corporate Governance System

General Meeting of Shareholders

- Board of Directors
  - Directors who are not audit and supervisory committee members
  - Directors who are audit and supervisory committee members

- Secretary/Chief Executive Officer
  - Proposes decisions on business operations

- Executive Management Committee
  - Executive Officers

- Departments and Group Companies conducting business activities

- Internal auditing

- Accounting Auditors

Initiatives to Reinforce Corporate Governance

- Introduction of executive officer system
- Abolition of retirement allowance system
- Appointment of first foreign directors
- Transitioned to the “company with audit and supervisory committee” format
- First appointment of a female director
- Establishment of stock compensation system and reviewed stock option compensation system

- Abolition of advisor system
- General Review of Executive Compensation System, CxO System

Governance Highlights

- Board of Directors
  - Outside (non-managing executive directors): 45%
  - Internal (managing executive directors): 45%
  - Chairperson: 10%

- Nomination and Compensation Committee
  - Outside (non-managing executive directors): 33%
  - Internal (managing executive directors): 67%
  - Chairperson: 67%

- Composition Ratio of Audit and Supervisory Committee
  - Internal (managing executive directors): 33%
  - Outside (non-managing executive directors): 67%
  - Chairperson: 45%

Term of Office for Directors (Total)

- As of June 23, 2021

- 1 to 5 years: 8 Directors
- 6 to 9 years: 2 Directors
- 10 years or more: 1 Director

Term of Office for Directors

- 13 times
- 14 times
- 14 times
- 2 times

Activity Results (FY2020)
General Meeting of Shareholders

We consider our annual General Meeting of Shareholders to be an opportunity for dialogue with our shareholders. As in 2020, our top priority at the 2021 General Meeting of Shareholders was the safety and security of shareholders and their families. To prevent the spread of Covid-19, the event was held in a large hall on our premises where social distancing is easy, helping shareholders to feel at ease. This year for the first time, we livestreamed the General Meeting of Shareholders to all shareholders. On the day of the meeting, we also invited opinions from shareholders in the form of online messages. We received opinions from several shareholders, some of which were answered by the chairman in real time.

Going forward, we will continue to open our general meetings to as many shareholders as possible, including those who may have difficulty attending in person.

Board of Directors

As a management decision-making body, the Board of Directors decides important matters such as the management policy and management strategy of the entire Advantest Group, and monitors and supervises the execution of these policies and strategies by the managing organization responsible. By including multiple outside directors in the Board of Directors, we have strengthened the Board’s oversight function. At meetings of the Board of Directors, directors with a wide range of knowledge and experience pertinent to the agendas proposed by management express their opinions and share their perspectives in the context of lively discussions. The Board of Directors meets to consider budgets, the settlement of accounts, personnel affairs, proposed business alliances, etc. once a month, for about 3 to 5 hours each time. Simultaneous Japanese/English interpretation is provided at meetings, ensuring that the diversification of our Board of Directors does not negatively impact communication, and materials and minutes are also translated into English. Details of the members of the Board of Directors are given on pages 77-78. The Board of Directors is chaired by Yoshiaki Yoshida, Representative Director and President.

In addition, in the case of major themes related to the company as a whole, such as mid-term management plans, we may hold off-site meetings of all directors so that they can take as much time as necessary to discuss proposals and freely and frankly exchange opinions.

Board of Director Off-Site Meetings

The Board of Directors holds off-site meetings to share information and exchange opinions so that important issues such as mid-term management plans, succession plans, and M&A can be effectively discussed. In FY2020, the Board discussed our new mid-term management plan and succession plan during a two-day off-site meeting, where information on our core systems and business operations was also provided to outside directors.

Board of Directors Activity Results (as of June 23, 2021)

Mid-term Management Plan

Advantest’s second mid-term management plan, launched in 2021, was discussed multiple times by the Board of Directors and approved by the Board. Prior to submission of the agenda to the Board of Directors, opinions were also exchanged at off-site meetings.

Formulation of ESG Basic Policy

Our new mid-term management plan stipulates further enhancement of ESG initiatives, and the Board of Directors also discussed ESG at an off-site meeting. As a result, Advantest has newly formulated an ESG Basic Policy.

Executive Compensation

The new compensation system based on our current mid-term management plan, launched in 2021, was resolved after multiple discussions by the Board of Directors following a report from the Nomination and Remuneration Committee. Prior to submission of the agenda to the Board of Directors, opinions were also exchanged at off-site meetings. After multiple discussions by the Board of Directors and informal meetings at which all directors were present, the Board of Directors approved the new system, and portions of it were also approved at the 2021 General Meeting of Shareholders.

Business Restructuring and Business Alliances

The Board of Directors deliberated and approved several important business transfers and business alliances during FY2020.

Share Repurchase

In FY2020, the Board of Directors approved and implemented the acquisition of treasury stock in order to more efficiently utilize capital and allow for the exercise of stock options. We have also resolved to acquire treasury stock in 2021.

Evaluation of the Board of Directors

From March to April every year, Advantest distributes questionnaires to all directors to evaluate the effectiveness of the Board of Directors. The main items for evaluation are:

Structure of the Board of Directors

(number of members, diversity of members, status of concurrent positions of outside directors, etc.)

Management of the Board of Directors

(time of distribution of materials, contents of materials, frequency of meetings of the Board of Directors, performance of chairpersons, quality of web conferences and simultaneous interpretation, etc.)

Agenda of the Board of Directors

(management strategy, mid-term management plan, delegation to the executive side, succession plans, compensation system, risks, climate change, conflict of interests, appointments and dismissals of executives, compliance, etc.)

Support system of the Board of Directors

(meeting of outside directors reports from the Nomination and Compensation Committee, provision of information to outside directors, training for directors, use of experts, etc.)

Results of FY2019 Evaluation

The effectiveness evaluation of the Board of Directors in FY2019 revealed several issues: improvement of the materials distributed by the Board of Directors and their exploration methods, frequency of reports from the Nomination and Compensation Committee, and how best outside directors can utilize external experts.

Based on the above evaluation results, efforts were made to address these issues

The Board of Directors now prepares and attaches executive summaries when providing materials. The Board also asks presenters to keep their explanations concise. The Nomination and Compensation Committee reported to the Board of Directors three times in FY2020, providing sufficient information to the Board of Directors.

We made it possible for outside directors to utilize external experts, and will continue to improve this system to make it more effective.

Results of FY2020 Evaluation

The effectiveness evaluation of the Board of Directors in FY2020 confirmed that discussions of corporate strategies, etc., were sufficient, and that the Board of Directors had free and frank exchanges of opinions.

In addition, in order to further enhance the effectiveness of the board of directors, results indicated the importance of holding deeper discussions of ESG at Board of Directors meetings, and considering the most desirable composition of the Board of Directors.

Auditing System

On June 24, 2015, Advantest became a company with an audit and supervisory committee. In accordance with our formulated audit policy and audit plan, and following their internal division of duties, Audit and Supervisory Committee members attend important meetings of organs such as the Board of Directors, the Executive Management Committee, the Internal Control Committee, the Compliance Committee, and the Disclosure Committee. In addition to hearing reports on the execution of duties from directors and executive officers, they view important approval documents and investigate the status of operations and property of the head office and major consolidated subsidiaries in Japan and overseas. In collaboration with the Audit Office, other internal control departments, and the Accounting Auditors, they also audit the execution of duties by directors, executive officers and other business execution organizations. Yuichi Kurita is the chairman of the Audit and Supervisory Committee.

Outside directors who are Audit and Supervisory Committee members participate in the Internal Control Committee and visits to the business execution organizations conducted by full-time Audit and Supervisory Committee members as necessary, and actively audit and supervise the status of business execution of the Company. In addition, the Audit and Supervisory Committee cooperates with the Accounting Auditor, the Audit Office and other internal control departments, and the audit officers of Advantest Group companies to secure opportunities to exchange opinions as necessary and to communicate with each other.

For internal audits, we have set up an Audit Office, and multiple full-time employees monitor the maintenance and operation status of the company’s internal controls on a daily basis, while identifying issues and recommending improvements.

Regarding accounting audits, we have entered into an audit contract with Ernst & Young ShinNihon LLC, and have undergone the prescribed audits. The certified accountants who executed the auditing audit work of the Company in 2020 are Toshiyuki Matsumoto, Minoru Ota and Hiyuki Nakada. The continuous audit period is within 7 years for all employees. In addition, the assistants involved with our accounting audit work are mainly certified accountants, including system experts and others with specialized knowledge.
Nomination and Compensation Committee

Advantest has established the Nomination and Compensation Committee as a non-mandatory organization, which comprises the Board of Directors, to decide on the appointment, selection, and dismissal of Directors and Executive Officers, and to determine their compensation. The Nomination and Compensation Committee is responsible for the functions of the Board of Directors, in accordance with the Act on the Business Judgment of Directors, the Act on the Appointment, Selection and Dismissal of Directors and Executive Officers, and the Act on the Audit of Corporate Accounts, which includes the Audit Committee, the Nomination and Compensation Committee, and other committees established by the Act on the Business Judgment of Directors. The Nomination and Compensation Committee is composed of a sufficient number of members selected from among the directors by resolution of the Board of Directors, and to incorporate an independent perspective, the majority of the members are outside directors. The Human Resources Department serves as the secretariat of the Nomination and Compensation Committee. The main agenda of the Nomination and Compensation Committee during the period was:

- Regarding candidates for director and executive officer positions
- Regarding the review of the executive compensation system
- Regarding the company's CEO successor plan

Executive Management Committee

The current members of the Committee are Toshimitsu Urabe, Sayaka Sumida, and Yoshiaki Yoshida. Toshimitsu Urabe is the chairman. Regarding directors and executive officers, the Nomination and Remuneration Committee complies with the policy and procedures for appointment, selection, and dismissal of directors and executive officers established by the Board of Directors, and recommends personnel as candidates to the Board of Directors who will contribute to a sustainable level of business development and enhancement of corporate value over the mid-to-long term. In addition, regarding outside directors, in addition to the aforementioned policy and procedures, the “Independence Criteria for Outside Directors” established by the Board of Directors applies. Candidates recommended to the Board of Directors shall have a wealth of knowledge and be expected to contribute positively to the Board of Directors. This year, the Managing Executive Officers Committee discussed important matters related to the Group's overall management strategy and business execution, but this year we decided it was necessary to change the Managing Executive Officers Committee system to further promote global management. From June 2021, Advantest established a new Executive Management Committee to discuss the above matters. The Executive Management Committee is composed of executive officers, half of whom are non-Japanese. We are also preparing to transition to a CoO system to ensure optimal decisions on agenda items important to Group management, and their timely implementation. Meetings of the Executive Management Committee are held about twice a month, mainly in the form of web conferences.

Internal Control Committee

The Internal Control Committee identifies and analyzes important risks for the entire Group. At the same time, it has clarified which departments are responsible for each risk, and policies and procedures for dealing with them. The Internal Control Committee consists of 23 members, including the Chairman and administration department personnel, the person in charge of the Audit Committee, and the senior management of the executive officers and directors. In addition, outside directors can participate as observers.

Compliance Committee

The Compliance Committee promotes compliance activities, including employee education, provides education on human rights issues, and handles consultations and complaints. The Compliance Committee consists of 10 members, one of whom is an outside lawyer.

Disclosure Committee

The Disclosure Committee oversees proper disclosure by the company. The Disclosure Committee consists of 27 members, including Unit Leaders.

Executive Compensation

Previously, the Company’s executive compensation system consisted of fixed compensation, performance-linked bonuses, stock options, and performance-linked stock compensation. As a result of discussions by the Nomination and Compensation Committee, which has a majority of outside directors, we have restructured our compensation system based on the following three points:

1. Compensation mix and compensation levels should be calibrated to attract international human resources who support Advantest’s global business development.
2. In order to continue to grow on the global level in the complex and fast-evolving semiconductor industry, we will recruit talented human resources from all over the world and compensate them appropriately.
3. Bonuses should be distinctly linked to business performance.

In order to continuously grow on the global level, we will continue to strengthen our business performance and focus on business development.

We will consider transfer-restricted stock compensation that incentivizes the pursuit of mid- to long-term improvement of corporate value together with shareholders and performance-linked stock compensation that promotes the achievement of mid-term management goals linked with improvement of corporate value. Performance-linked bonuses should be linked to corporate value improvement over the mid to long term to increase their correlation with results, and stock-based compensation should be accompanied by transfer restrictions that require shares to be held throughout the recipient’s term of office. On the view that it is desirable to introduce a stock-based compensation system (RS) and a performance-linked compensation system (PSU) that are coupled to achievement of our medium-term management plan, a revised compensation system was proposed to the Board of Directors and approved by them, and a portion of it was also approved at the General Meeting of Shareholders. Changes to the system are summarized as follows.
**Performance-based bonuses**

The ratio of fixed compensation, performance-linked bonuses, and stock compensation is approximately 1:3:1 for Senior Executive Officers including the president and 1:2:1:0.8 for other Executive Officers.

**Fixed compensation** shall be set at an appropriate level according to individual duties and responsibilities, and will be paid monthly with reference to external objective data.

These are short-term incentives for the results of a single year, and are paid once a year after the performance of the Group for the relevant business year is confirmed.

- **Performance Metrics**
  - The Group’s sales, operating margin, net income, and ROE for the relevant fiscal year shall be the KPIs that determine the bonus payment, up to 80% of fixed compensation.
  - **Individual Evaluation**
    - Up to 30% of the total amount calculated and determined according to the policies above of performance-linked bonuses for executive officers, excluding the president, shall be redistributed based on individual evaluations conducted by the president.
    - **Business Metrics**
      - Depending on the status of achievement of the income targets that have been set as a KPI, bonuses shall equal up to 200% of fixed compensation.

- **Restricted Stock (RS)**
  - 50% of stock-based compensation shall be transferred based on the performance of the stock compensation.
  - Shares of RS will be granted every business year. Holding is compulsory during the term of office, and transfer restrictions will be lifted when an officer retires.

- **Performance-Linked Stock Compensation (PSU)**
  - 50% of stock-based compensation shall be performance-linked stock compensation.
  - Shares will be granted upon determination of the value of the Company’s stock. The calculation is based on the year-over-year growth of ROE over the three years of the mid-term management plan.

**Maximum Compensation for Directors**

- **Fixed Compensation**
  - Monetary reward: Within ¥60 million per year

- **Variable Compensation**
  - Performance-based compensation
    - Monetary reward: Within ¥100 million per year

- **Restricted Stock Unit Remuneration Plan (PSU)**
  - Annual amount of ¥300 million or less

- **Stock Options**
  - The number of stock options granted shall be determined based on position.
  - It shall be possible to exercise these options from 2 years to 5 years after the allocation date.

- **Stock-Based Compensation**
  - The amount of performance-linked stock compensation granted will be determined based on the performance of a given business year, and the number of shares received will be based on the performance of the business year. Shares of RS will be granted every business year. Holding is compulsory during the term of office, and transfer restrictions will be lifted when an officer retires.

* The above shows a model in terms of institutional design. The actual payment composition is linked to business performance.
Total Amount of Compensation for Directors (FY2020)

<table>
<thead>
<tr>
<th>Category</th>
<th>Total Compensation (Million of yen)</th>
<th>Total Compensation by Category (Million of yen)</th>
<th>Number of the Officers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fixed Compensation</td>
<td>Performance-linked Compensation</td>
<td>Other Cash Compensation*</td>
</tr>
<tr>
<td>Directors (excluding audit and supervisory committee members) (excluding outside directors)</td>
<td>576</td>
<td>184</td>
<td>159</td>
</tr>
<tr>
<td>Directors (audit and supervisory committee members) (excluding outside directors)</td>
<td>42</td>
<td>42</td>
<td>0</td>
</tr>
<tr>
<td>Outside Directors</td>
<td>62</td>
<td>6</td>
<td>0</td>
</tr>
</tbody>
</table>

Notes:
1. The amount of compensation, etc. above includes the amount of compensation, etc. for one director (excluding Audit and Supervisory Committee members) and one director (Audit and Supervisory Committee member) who both retired on June 25, 2020.
2. In terms of non-monetary compensation, etc., we issue performance-linked stock compensation and stock acquisition rights in the form of stock options to directors (excluding outside directors and directors who are Audit and Supervisory Committee members). Performance-linked stock-based compensation amounts given are recorded as expenses, based on Japanese standards, for the current fiscal year.
3. In the above table, “other monetary compensation” refers to that amount of the total “congratulations money” paid uniformly to all officers and employees to reward them for achieving record high annual performance, based on the company’s performance indicators, including sales and net income, for the current fiscal year, which was paid to directors.

Directors who receive compensation of ¥100 million or more, and their compensation amounts (FY2020)

Persons with a total amount of consolidated compensation of ¥100 million or more are individually disclosed in Advantest’s securities report. The securities report provides individual disclosure of consolidated compensation, etc. for FY2020 as follows:

- The total amount of compensation for Mr. Yoshikazu Yoshida was ¥171 million (basic compensation: ¥60 million, performance-linked bonus: ¥42 million, other monetary compensation: ¥92 million, performance-linked stock compensation: ¥11 million).
- The total amount of compensation for Mr. Soichiro Tsukakoshi was ¥121 million (basic compensation: ¥44 million, performance-linked bonus: ¥51 million, other monetary compensation: ¥0 million, stock options: ¥56 million, performance-linked stock compensation: ¥19 million).
- The total amount of compensation for Mr. Yoshiaki Yoshida was ¥171 million (basic compensation: ¥60 million, performance-linked bonus: ¥42 million, other monetary compensation: ¥92 million, performance-linked stock compensation: ¥11 million).
- The total amount of compensation for Mr. Douglas Lefever was ¥191 million (basic compensation: ¥66 million, performance-linked bonus: ¥51 million, other monetary compensation: ¥0 million, stock options: ¥56 million, performance-linked stock compensation: ¥19 million).
- The total amount of compensation for Mr. Douglas Lefever’s remuneration includes the amount paid to him by Advantest America, Inc.

Stock

As of the end of September 2021, the Company had issued 199,542,265 shares of common stock. Since the end of March 2021, 24,505 shares have been canceled.

Stock options were issued until FY2020 as incentives for directors and executive officers, and the total balance of stock options as of the end of September 2021 was 8,850 (885,000 shares). Other than that, we have not issued stock acquisition rights or convertible bonds.

At the Board of Directors meeting in July 2021, the company resolved to acquire 10 million shares of treasury stock at a total cost of up to ¥70 billion. Currently, we are proceeding with the purchase of treasury stock based on that resolution, and as of September 2021, we hold a total of 4,017,094 shares, including the amount acquired up to last year.

In addition, the company grants one voting right for each unit (100 shares), and does not issue shares that grant multiple voting rights per unit (so-called dual class shares) or non-voting shares.

The Future of Testing in a Digital Engineering Society

It has been 76 years since John von Neumann’s First Draft of a Report on the EDVAC, written in 1945, which describes a key concept now known as the von Neumann architecture. The central idea is that the execution of predetermined functions may be controlled by a processing unit where “input” data is processed into “output” data, as shown in Fig. 1-1.

The chief focus of this model is data processing. This focus gave rise to the field of computer science—which has, of course, brought immeasurable convenience to human societies. Over time, technological advances and the explosive growth of data of all kinds have led to the dramatic transformation of machine architectures into data-centric models, as shown in Fig. 1-2. Here, the focus is on the nature of the data itself, and how best to access it as needed for each processing task. This focus propelled the emergence of data science. We are still in the process of exploring what data science can do and how it can be used.

In contrast to the airy realms of data, in order to make a tangible thing, as shown in Fig. 2-1, we came up with a design that embodies a concept, push and pull the design into shape during the manufacturing process, and finally, after testing it to see if it works as planned, release it to the world. This basic scheme has been useful for a long time, but in recent years, the evolution of digital technology has given rise to the “cyber-physical” scheme. Cyber-physical methods reproduce the appearances, shapes, functions, etc. of tangible things in cyberspace, and check and tweak performance on a virtual stage, which enables shorter times to market and greater functionality. This approach is gaining popularity in digital engineering. The flow starts with the creation of a model, as shown in Fig. 2-2. It is verified by analysis to check whether the initial concept has been realized, and if results are unsatisfactory, the model is corrected based on feedback. Only when this “cyber loop” works out in line with expectations will the thing go into the building stage, and become tangible. What is important here is that test data is an essential item shared by all three procedures: model creation, analysis, and building. This suggests that data-centricity is the very essence of digital engineering, and that testing manages everything. Testing, which is our business, is currently applied to the scheme shown in Figure 2-1, but testing will take on a much more important role if we shift to applying it to the scheme in Figure 2-2. In other words, our corporate value will improve by orders of magnitude through this shift.

I hope to play a role as a visionary evangelist of these ideas.

Messages from Outside Directors

Advantest from Board of Director’s perspective

One of the important missions of the Board of Directors is to encourage executives to make timely, appropriate, and bold management decisions while providing a variety of options for sustainable value creation that society demands from companies. It is essential that each member of the Board of Directors engages in duties with a high degree of expertise and unshaken philosophy.
The Pursuit of Social Value Strengthens Our Business

“Social responsibility” is our starting point.

It is safe to say that corporate value (the present value of our future cash flow) means that “expected revenue generated in the future = sum of added value.” Our source of revenue is our reputation with our customers, based on the premise that the products and services we provide have social value. This is achieved when employees find their jobs worthwhile, continue to work and grow, and maintain a mutually beneficial relationship with our business partners. If this cycle continues, corporate value will increase as a result and the interests of shareholders will be secured. Various concepts such as ESG, the SDGs, and social sustainability share the foundation of corporate social responsibility (Corporate Responsibility to Society, that is our pursuit of social value through our core business). At Mitsubishi Corporation, where I worked for many years, we shared three corporate principles (“Shoki Hoko (Corporate Responsibility to Society),” Sho Korin (Integrity and Fairness),” and “Rihaiyo Boeki (Global Understanding through Business))” and were taught that “continuing to transform and enhance one’s functions in response to change, in society is the only way to survive,” as our deeply rooted corporate DNA.

The pursuit of social value strengthens our business.

Advantest’s board and management team strive to constantly improve corporate governance, as it is the key mechanism for refining strategy and growing profits while also contributing to corporate and global sustainability.

But in today’s world such commitment is merely the minimum necessary starting point for that difficult balancing act. Concrete actions and results are what count. Nice-sounding phrases and policies are not worth more than the paper they are printed on.

Can Advantest leverage its good intentions and healthy board debates to maximize the concrete results that we are targeting? Despite appearances, we are facing strong headwinds. The world seems to have become more “VUCA” than before, with more volatility, uncertainty, complexity, and ambiguity. There are far more “unknown unknowns” than before.

As technological change and demand accelerate, they create many fascinating opportunities. However, they can also stretch supply chains, or increase the chance that disruptive products and services may emerge. We could wake up one day and discover that our talent pool is no longer leading-edge, or there is a new type of competitor in town.

To me, volatility is a big concern precisely because Advantest has just been affected by seismic shifts. Many time-centered companies become complacent and proud of their high ROE, and fail to invest in the future. For this reason, now is precisely the time when we need to boldly invest in future value creation — for instance, by investing in additional foreign talent and R&D, by growing new businesses, adding new customers, and by developing AI-based services.

We already measure our progress towards our near-term goals with financial disclosures, but measuring progress regarding long-term sustainability and resilience to VUCA requires us to do scenario analysis to identify the most important actions and strategies that lead to win-win results; b) track those actions with reliable yardsticks; c) continuously discuss ways to improve at the level of both the Working Group and the Board; and d) sincerely report to shareholders where progress has been made, and where more efforts are needed. We cannot just copy other companies.

We have much work ahead of us to cope with the age of VUCA. Luckily, although our work may be challenging, it is usually fun. These are exciting times for Advantest!
Board of Directors

Mr. Yoshiyuki Yoshiida served as the representative director of a subsidiary of Advantest, Executive Vice President of the Corporate Planning Group, Executive Vice President of the Corporate Relations Group, and Executive Vice President of the Nanotechnology Business Group, before being appointed Representative Director, President and CEO of the company in January 2019. Given his wide range of management knowledge and experience, Advantest believes that he is a suitable person to achieve sustainable enhancement of corporate value as a director of the company.

Ms. Sayaka Sumida has worked for an accounting firm as a certified public accountant, has been engaged in accounting, auditing, and internal control operations for many years, and has extensive knowledge and experience concerning the Advantest Group’s business and corporate management. Thus, Advantest believes that she is a suitable person to achieve sustainable enhancement of corporate value as a director of the Advantest Group.

Mr. Douglas Lefever plays a key role in promoting Advantest’s business development in Silicon Valley and other parts of the United States. He has broad knowledge and experience regarding the businesses and management of the Group. His perspective enhances the diversity of the Board of Directors and can be expected to make it more effective. Thus, Advantest believes he is a suitable person to achieve sustainable enhancement of the corporate value of the Advantest Group.

Mr. Osamu Karatsu has a wealth of knowledge and experience as a semiconductor expert, in addition to management experience at domestic and overseas research and development institutions. Advantest expects that the insights on the industry and the comprehensive perspective which he brings to the global management of the Advantest group will contribute to the sustainable enhancement of corporate value of Advantest and the effectiveness of the Board of Directors. Based on the above, Advantest believes that he is a suitable outside director.

Mr. Atsushi Fujita has been engaged in corporate administration, mainly finance and accounting, for many years, including assignments in the US and Europe, and has gained a wealth of knowledge and experience concerning the Advantest Group’s business and corporate management. Thus, Advantest believes that he is a suitable person to achieve sustainable enhancement of corporate value as a director of the Advantest Group.

Mr. Nicholas Benes has extensive knowledge and experience in corporate governance and experience in investment banking, including M&A. Advantest expects that his insights on corporate governance and the perspective of stakeholders which he brings to the global management of the Advantest group will contribute to the sustainable enhancement of corporate value of Advantest and the effectiveness of the Board of Directors. Based on the above, Advantest believes that he is a suitable outside director.
Off-Site Board of Directors Meetings Facilitate Free and Open Discussion

Since FY2018, Advantest’s Board of Directors has held voluntary “off-site board meetings” several times a year, in addition to regular board meetings. At one of these, all directors gather at an off-site “camp” for one night and two days to discuss agenda items thoroughly. Regular BOD meetings sometimes see lively discussions that last for more than five hours, but the off-site “camp” format facilitates discussion from more diverse perspectives and encourages broad exchanges of opinion on the social and topical needs underlying our agenda items. Prior to the outbreak of the Covid-19 pandemic, camp locations included our subsidiaries in Germany and the United States, where in addition to conference room discussions, directors could also visit sites, adding value to the sessions. In FY2020, we had to refrain from international travel, so we held our camp at a location near the Kanto region of Japan. All directors participated in each day of the camp, despite their busy schedules, in a further proof of the great value of this off-site board of directors meeting.

From FY2020 to June 2021, four off-site board meetings were held, addressing the following agenda items:
- Executive compensation
- Succession plans
- Organizational structure
- Compliance systems
- Next mid-term management plan
- Capital policy
- Evaluation of the effectiveness of the board of directors
- Further enhancement of SDGs / ESG initiatives

In terms of the demographics of Advantest’s Board of Directors, the board includes 5 outside directors, 1 female director (an outside director), and 1 inside director of non-Japanese nationality, ensuring “by-the-numbers” diversity from many angles. However, more important is whether this diversity contributes solidly to the effectiveness of the board of directors, and in that respect we believe that the opportunity for free and open discussion at the “off-site board meetings” has the effect of improving the quality and quantity of perspectives offered for consideration, and improving the validity and persuasiveness of management decisions on individual agenda items.

One outside director made the following comment at an off-site board meeting: “If you don’t write it down, it’s the same as if you hadn’t done it. If you don’t explicitly make a commitment or send a message because you see something as ‘obvious,’ you should understand that it may not be obvious to outsiders at all. We have to work hard to disclose information. It’s too bad that although Advantest has increased its diversity in many ways, we haven’t been able to explain exactly what our reasons are for doing so.” This was a curtain-closing statement on the Board of Directors’ discussions of the basic policies and indicators needful for the “further enhancement of ESG initiatives,” as set forth in our second mid-term management plan announced in May of this year. Another director added, “We are a global company. More than half of our employees work at locations outside Japan. There are always issues and risks that cannot be seen from here, so we must make efforts to hear voices from overseas lest we make mistakes in goal setting and strategies.” Depending on the agenda under discussion, executives in charge of the relevant items may attend an off-site board of directors meeting to explain the details. These sometimes sincere yet blunt opinions have always been fruitful inputs for executives to tackle issues from a global perspective.
## Financial Results

### Fiscal year

<table>
<thead>
<tr>
<th></th>
<th>FY2010</th>
<th>FY2011</th>
<th>FY2012</th>
<th>FY2013</th>
<th>FY2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales (M)</td>
<td>69,634</td>
<td>141,048</td>
<td>132,903</td>
<td>111,879</td>
<td>163,803</td>
</tr>
<tr>
<td>Gross profit</td>
<td>48,470</td>
<td>68,748</td>
<td>68,920</td>
<td>49,333</td>
<td>91,755</td>
</tr>
<tr>
<td>EBITDA (M)</td>
<td>42,359</td>
<td>67,911</td>
<td>68,840</td>
<td>85,702</td>
<td>74,897</td>
</tr>
<tr>
<td>Operating income (M)</td>
<td>8,111</td>
<td>837</td>
<td>80</td>
<td>36,369</td>
<td>16,858</td>
</tr>
<tr>
<td>EBITDA margin %</td>
<td>61.3%</td>
<td>61.3%</td>
<td>61.3%</td>
<td>61.3%</td>
<td>16.3%</td>
</tr>
<tr>
<td>Net income (M)</td>
<td>3,163</td>
<td>(2,195)</td>
<td>(3,821)</td>
<td>(3,540)</td>
<td>16,753</td>
</tr>
<tr>
<td>Earnings per share</td>
<td>¥18.03</td>
<td>¥12.67</td>
<td>¥22.03</td>
<td>¥204.10</td>
<td>¥87.67</td>
</tr>
<tr>
<td>Diluted earnings per share</td>
<td>¥18.03</td>
<td>¥12.67</td>
<td>¥22.03</td>
<td>¥204.10</td>
<td>¥87.67</td>
</tr>
<tr>
<td>Shareholders' equity (M)</td>
<td>¥10.0</td>
<td>¥15.0</td>
<td>¥20.0</td>
<td>¥15.0</td>
<td>¥15.0</td>
</tr>
<tr>
<td>Dividend per Share</td>
<td>¥10.0</td>
<td>¥15.0</td>
<td>¥20.0</td>
<td>¥15.0</td>
<td>¥15.0</td>
</tr>
</tbody>
</table>

### Financial Results (Unit)

<table>
<thead>
<tr>
<th></th>
<th>FY2010</th>
<th>FY2011</th>
<th>FY2012</th>
<th>FY2013</th>
<th>FY2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash flows from operating activities (M)</td>
<td>¥100 million</td>
<td>42</td>
<td>68</td>
<td>81</td>
<td>83</td>
</tr>
<tr>
<td>EBITDA margin %</td>
<td>61.3%</td>
<td>61.3%</td>
<td>61.3%</td>
<td>61.3%</td>
<td>16.3%</td>
</tr>
<tr>
<td>Shareholders' equity (M)</td>
<td>¥10.0</td>
<td>¥15.0</td>
<td>¥20.0</td>
<td>¥15.0</td>
<td>¥15.0</td>
</tr>
<tr>
<td>Dividend per Share</td>
<td>¥10.0</td>
<td>¥15.0</td>
<td>¥20.0</td>
<td>¥15.0</td>
<td>¥15.0</td>
</tr>
</tbody>
</table>

### Financial Results (FY2010)

<table>
<thead>
<tr>
<th></th>
<th>FY2010</th>
<th>FY2011</th>
<th>FY2012</th>
<th>FY2013</th>
<th>FY2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shareholders' equity (M)</td>
<td>¥10.0</td>
<td>¥15.0</td>
<td>¥20.0</td>
<td>¥15.0</td>
<td>¥15.0</td>
</tr>
<tr>
<td>Dividend per Share</td>
<td>¥10.0</td>
<td>¥15.0</td>
<td>¥20.0</td>
<td>¥15.0</td>
<td>¥15.0</td>
</tr>
</tbody>
</table>

### Management Indicator

<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overseas net sales as a % of total net sales</td>
<td>77.5%</td>
<td>88.6%</td>
<td>89.4%</td>
<td>89.1%</td>
<td>90.2%</td>
</tr>
<tr>
<td>Net sales per employee (M)</td>
<td>¥10.0</td>
<td>¥15.0</td>
<td>¥20.0</td>
<td>¥15.0</td>
<td>¥15.0</td>
</tr>
<tr>
<td>Gross profit margin</td>
<td>48.6%</td>
<td>48.7%</td>
<td>51.9%</td>
<td>44.1%</td>
<td>56.0%</td>
</tr>
<tr>
<td>Operating income Margin</td>
<td>6.1%</td>
<td>6.6%</td>
<td>9.6%</td>
<td>12.5%</td>
<td>9.4%</td>
</tr>
<tr>
<td>Net income ratio</td>
<td>3.2%</td>
<td>4.1%</td>
<td>6.1%</td>
<td>8.8%</td>
<td>9.3%</td>
</tr>
<tr>
<td>ROE</td>
<td>31.2%</td>
<td>45.7%</td>
<td>48.7%</td>
<td>46.8%</td>
<td>39.4%</td>
</tr>
<tr>
<td>Cost of sales (M)</td>
<td>¥21,197</td>
<td>¥30,303</td>
<td>¥33,062</td>
<td>¥49,333</td>
<td>¥58,942</td>
</tr>
<tr>
<td>Capital Expenditures (M)</td>
<td>¥168,291</td>
<td>¥290,415</td>
<td>¥326,923</td>
<td>¥460,873</td>
<td>¥567,103</td>
</tr>
<tr>
<td>Depreciation and Amortization (M)</td>
<td>¥111</td>
<td>¥222</td>
<td>¥222</td>
<td>¥222</td>
<td>¥222</td>
</tr>
<tr>
<td>EBITDA margin</td>
<td>10.4%</td>
<td>5.4%</td>
<td>6.1%</td>
<td>25.1%</td>
<td>16.3%</td>
</tr>
<tr>
<td>Cash conversion cycle</td>
<td>131</td>
<td>126</td>
<td>172</td>
<td>192</td>
<td>139</td>
</tr>
<tr>
<td>Shareholders' equity ratio</td>
<td>76.6%</td>
<td>60.0%</td>
<td>62.6%</td>
<td>50.6%</td>
<td>43.7%</td>
</tr>
<tr>
<td>Dividend payout ratio</td>
<td>55.5%</td>
<td>55.5%</td>
<td>55.5%</td>
<td>55.5%</td>
<td>55.5%</td>
</tr>
</tbody>
</table>

### Performance-related data

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales per employee (M)</td>
<td>¥31,312</td>
<td>¥31,172</td>
<td>¥29,519</td>
<td>¥28,895</td>
<td>¥27,654</td>
<td>¥26,677</td>
<td>¥25,020</td>
<td>¥24,871</td>
<td>¥24,871</td>
<td>¥24,871</td>
</tr>
<tr>
<td>ROE</td>
<td>2.2%</td>
<td>2.0%</td>
<td>2.2%</td>
<td>2.4%</td>
<td>2.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividend per Share</td>
<td>¥10.0</td>
<td>¥15.0</td>
<td>¥20.0</td>
<td>¥15.0</td>
<td>¥15.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yen exchange rate US Dollar</td>
<td>85</td>
<td>79</td>
<td>83</td>
<td>83</td>
<td>83</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Information Overview

- **Sustainability Strategy**: Each fiscal year beginning on April 1
- **2021**: EBITDA= Operating income + Depreciation and amortization, EBITDA margin = EBITDA/Sales
- **Figures until the fiscal year ended March 31, 2014 consist of research and development expenses, selling, general and administrative expenses, restructuring and impairment charges.
- **Source: Advantest**: Memory tester market size
- **Source: IMF**: Global real GDP growth
- **Source: Advantest**: Cash flows from operating activities - Cash flows from investing activities
- **Source: Advantest**: Diluted earnings per share
- **Source: Advantest**: Dividend per Share
- **Source: Advantest**: Dividend payout ratio
- **Source: Advantest**: Gross profit
- **Source: Advantest**: Net income
- **Source: Advantest**: ROE
- **Source: Advantest**: Shareholders’ equity ratio
- **Source: Advantest**: Total assets
- **Source: Advantest**: Capital Expenditures
- **Source: Advantest**: Depreciation and Amortization
- **Source: Advantest**: EBITDA margin
- **Source: Advantest**: Earnings per share
- **Source: Advantest**: Earnings per share
Sustainability Accounting Standard Board (SASB) Disclosures

Advantest Corporation and its consolidated subsidiaries, each fiscal year beginning on April 1

The Advantest Group reports sustainability related information based on the Sustainability Accounting Standards Board (SASB) standards to amplify and focus our practice of rigorous disclosure. SASB standards are to help businesses around the world identify, manage and report on the sustainability topics that matter most to our investors. And it can help investors by encouraging report that is comparable within an industry. Some accounting metrics set by the SASB include items that do not apply to Advantest’s business activities.

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>ACCOUNTING METRIC</th>
<th>SASB Code</th>
<th>CATEGORY</th>
<th>UNIT OF MEASURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Gas Emissions</td>
<td>(1) Gross global Scope 1 emissions</td>
<td>TC-SC-110a.1</td>
<td>Quantitative</td>
<td>Metric tons (t) CO₂-e</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2) Amount of total emissions from perfluorinated compounds</td>
<td>TC-SC-110a.1</td>
<td>Quantitative</td>
<td>Metric tons (t) CO₂-e</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Short-term and long-term Scope 1 emissions: strategies, goals, progress</td>
<td>TC-SC-110a.2</td>
<td>Discussion and Analysis</td>
<td>–</td>
</tr>
<tr>
<td>Energy Management in Manufacturing</td>
<td>(1) Total energy consumed</td>
<td>TC-SC-130a.1</td>
<td>Quantitative</td>
<td>Gigajoules (GJ)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2) Percentage grid electricity</td>
<td>TC-SC-130a.1</td>
<td>Quantitative</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(3) Percentage renewable</td>
<td>TC-SC-130a.1</td>
<td>Quantitative</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water management</td>
<td>(1) Total water withdrawn-energy consumed</td>
<td>TC-SC-140a.1</td>
<td>Quantitative</td>
<td>Thousand cubic meters (m³)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2) Total water consumed</td>
<td>TC-SC-140a.1</td>
<td>Quantitative</td>
<td>Thousand cubic meters (m³)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Percentage of each in regions with High or Extremely High Baseline water stress</td>
<td>TC-SC-140a.1</td>
<td>Quantitative</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste Management</td>
<td>(1) Amount of hazardous waste from manufacturing</td>
<td>TC-SC-150a.1</td>
<td>Quantitative</td>
<td>Metric tons (t)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2) Percentage recycle</td>
<td>TC-SC-150a.1</td>
<td>Quantitative</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee Health &amp; Safety</td>
<td>Description of efforts to assess, monitor, and reduce exposure of employees to human health hazards</td>
<td>TC-SC-200a.1</td>
<td>Discussion and Analysis</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Total amount of monetary losses as a result of legal proceedings associated with employee health and safety violations</td>
<td>TC-SC-200a.2</td>
<td>Quantitative</td>
<td>¥</td>
</tr>
<tr>
<td>Recruiting &amp; Managing a Global &amp; Skilled Workforce</td>
<td>Percentage of employees that are</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Foreign nationals</td>
<td>TC-SC-330a.1</td>
<td>Quantitative</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Located offshore</td>
<td>TC-SC-330a.1</td>
<td>Quantitative</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product Lifecycle Management</td>
<td>Percentage of products by revenue that contain IEC 62474 declarable substances</td>
<td>TC-SC-410a.1</td>
<td>Quantitative</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td>Processor energy efficiency at a system-level for: (1) servers, (2) desktops, and (3) laptops</td>
<td>TC-SC-410a.2</td>
<td>Quantitative</td>
<td>Various, by product category</td>
</tr>
<tr>
<td>Materials Sourcing</td>
<td>Description of the management of risks associated with the use of critical materials</td>
<td>TC-SC-440a.1</td>
<td>Discussion and Analysis</td>
<td>–</td>
</tr>
<tr>
<td>Intellectual Property Protection &amp; Competitive Behavior</td>
<td>Total amount of monetary losses as a result of legal proceedings associated with anticompetitive behavior regulations</td>
<td>TC-SC-520a.1</td>
<td>Quantitative</td>
<td>¥</td>
</tr>
<tr>
<td></td>
<td>Total production</td>
<td>TC-SC-000.A</td>
<td>Quantitative</td>
<td>Output</td>
</tr>
<tr>
<td></td>
<td>Percentage of production from owned facilities</td>
<td>TC-SC-000.B</td>
<td>Quantitative</td>
<td>%</td>
</tr>
</tbody>
</table>

The Advantest Group reports sustainability related information based on the Sustainability Accounting Standards Board (SASB) standards to amplify and focus our practice of rigorous disclosure. SASB standards are to help businesses around the world identify, manage and report on the sustainability topics that matter most to our investors. And it can help investors by encouraging report that is comparable within an industry. Some accounting metrics set by the SASB include items that do not apply to Advantest’s business activities.

ADVANTEST CORPORATION

Integrated Annual Report 2021
An industry horizontally fragmented across the globe
Semiconductors used in all kinds of products, such as mobile phones, computers, home appliances, automobiles, and industrial equipment, have become indispensable to our lives. The global semiconductor market is expected to be worth over $500 billion in 2021.
In the past, semiconductor design, manufacturing, and even semiconductor production equipment manufacturing were all carried out in-house by vertically integrated semiconductor manufacturers. However, as circuits shrank and manufacturing technology became more complex, the financial burden of semiconductor development and capital investment increased, and the supply chain was gradually disintegrated across a horizontal global network of specialized providers. Today’s semiconductor industry is made up of companies specializing in design, front-end processing (wafer production process), back-end processing (packaging process), and design tools and manufacturing equipment.

Semiconductor production equipment (SPE) manufacturers
Semiconductor production involves hundreds of processes, beginning with pattern exposure and etching. The fundamental technologies required for each process are diverse, including applied chemistry, material engineering, and electronic engineering, and it is unrealistic for a single semiconductor manufacturer to handle all of them. Thus, each process relies on the specialized technology and expertise of semiconductor production equipment (SPE) manufacturers. SPE manufacturers vary in their business domains and specialties, but they can be seen as a group that acts cooperatively to enable the semiconductor manufacturing process.
Semiconductor manufacturers continuously develop even better devices to launch to the market. SPE companies involved in advanced semiconductor processes collaborate with semiconductor manufacturers to study technology roadmaps for the next few generations, refine their strengths, and develop next-generation manufacturing equipment. Moreover, as the semiconductor supply chain is globally distributed, major SPE companies also operate on a global scale.

The Need for Semiconductor Test
In the semiconductor business, “Time to Market” (delivery of new products as soon as possible, ahead of competitors) and “Time to Volume” (timely supply of products in response to rising demand) are crucial to market share and competitiveness. However, when companies are pushing the limits of nanometer-scale technology, it is not easy to ramp up volume production of new products. In addition to poor circuit connections and short circuits, operating voltage and timing flaws may prevent semiconductors from performing their functions. Especially with semiconductors made using state-of-the-art processes, product quality can vary significantly until the manufacturing process matures.
The test process has the role of checking whether semiconductors operate as designed, and judging whether individual chips are defective, but in addition to this, in the early stages of design evaluation and process development, test providers contribute to Time to Market by analyzing test results and promptly feeding them back to design and other processes. Furthermore, as processes mature, we support Time to Volume and quality improvements by optimizing test sequences. Additionally, we support product development as customers expand their business. By meeting these needs with high-productivity, scalable test systems, we deliver unique value to the semiconductor supply chain.

Semiconductor Test Systems
Semiconductor test includes various test items such as checking for poor connections and short circuits, checking input / output voltage / current values, verifying logic circuit operations, and switch timing. Semiconductor test systems offer the electronic measurement functions required to test these items. Test systems are further integrated with test handlers (which transport devices) and device interface products (which connect devices with test systems) to create test solutions with high measurement accuracy and throughput. As a leading provider of test solutions, Advantest supports the high-volume, timely, economical delivery of semiconductors manufactured with advanced technology, contributing to the growth of the semiconductor supply chain and the future of our world.
Global Network
As of March 31, 2021

Major Subsidiaries

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Principal business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advantest Facilities Co., Ltd.</td>
<td>Saitama, Japan</td>
<td>Providing welfare services</td>
</tr>
<tr>
<td>Advantest Laboratories Ltd.</td>
<td>Miyagi, Japan</td>
<td>Research and development of measuring and testing technologies</td>
</tr>
<tr>
<td>Advantest Finance Inc.</td>
<td>Tokyo, Japan</td>
<td>Leasing of the Company’s products and sales of used products</td>
</tr>
<tr>
<td>Advantest Component, Inc.</td>
<td>Tokyo, Japan</td>
<td>Manufacturing of the parts</td>
</tr>
<tr>
<td>Advantest Koushu Systems Co., Ltd.</td>
<td>Fukuoka, Japan</td>
<td>Development, sales and support of the Company’s products</td>
</tr>
<tr>
<td>Advantest America, Inc.</td>
<td>California, U.S.A.</td>
<td>Development and sales of the Company’s products</td>
</tr>
</tbody>
</table>

Overseas

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Principal business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advantest Europe GmbH</td>
<td>Munich, Germany</td>
<td>Development and sales of the Company’s products</td>
</tr>
<tr>
<td>Advantest (Singapore) Pte. Ltd.</td>
<td>Singapore</td>
<td>Sales of the Company’s products</td>
</tr>
<tr>
<td>Advantest Korea Co., Ltd.</td>
<td>Cheonan, Korea</td>
<td>Support for sales of the Company’s products</td>
</tr>
<tr>
<td>Advantest Taiwan Inc.</td>
<td>Hsinchu, Taiwan</td>
<td>Support for sales of the Company’s products</td>
</tr>
<tr>
<td>Advantest (China) Co., Ltd.</td>
<td>Shanghai, China</td>
<td>Support for sales of the Company’s products</td>
</tr>
<tr>
<td>Advantest (M) Sdn. Bhd.</td>
<td>Penang, Malaysia</td>
<td>Manufacturing of the Company’s products</td>
</tr>
</tbody>
</table>

Employees

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Employees</th>
<th>Number of Subsidiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>2,703</td>
<td>7</td>
</tr>
<tr>
<td>Oversea</td>
<td>5,756</td>
<td>29</td>
</tr>
</tbody>
</table>

Employees

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Employees</th>
<th>Number of Subsidiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>2,703</td>
<td>7</td>
</tr>
<tr>
<td>Overseas</td>
<td>5,756</td>
<td>29</td>
</tr>
</tbody>
</table>

Global Network
Corporate Overview / Stock Information
As of March 31, 2021

Corporate Overview
Registered Name ADVANTEST CORPORATION
Head Office Shin Marunouchi Center Bldg., 1-6-2, Marunouchi, Chiyoda-ku, Tokyo 100-0005
URL https://www.advantest.com/
Established December 1954
Capital 32,363 million yen
No. of Employees 5,756 (Include temporary employees.)
Business Description Semiconductor and Component Test System Business, Mechatronics System Business, Services, Support and Others

Stock Information
Fiscal Year April 1 through March 31
Ordinary General Meeting June
No. of Shares Outstanding 199,566,770
No. of Issuable Shares 440,000,000

Major Shareholders

<table>
<thead>
<tr>
<th>Name</th>
<th>Number of Shares (in thousand)</th>
<th>Percentage of Ownership (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Master Trust Bank of Japan, Ltd. (trust account)</td>
<td>53,804</td>
<td>27.20</td>
</tr>
<tr>
<td>Custody Bank of Japan, Ltd. (trust account)</td>
<td>30,771</td>
<td>15.93</td>
</tr>
<tr>
<td>Custody Bank of Japan, Ltd. (Investment trust account)</td>
<td>9,270</td>
<td>4.70</td>
</tr>
<tr>
<td>NORTHERN TRUST CO. UNITED SUB-ACQ. TRUST</td>
<td>4,035</td>
<td>2.07</td>
</tr>
<tr>
<td>Custody Bank of Japan, Ltd. (trust account 1)</td>
<td>3,907</td>
<td>1.98</td>
</tr>
<tr>
<td>Custody Bank of Japan, Ltd. (trust account 11)</td>
<td>1,964</td>
<td>1.01</td>
</tr>
<tr>
<td>STATE STREET BANK WEST CLIENT - TREATY 2020</td>
<td>1,193</td>
<td>0.61</td>
</tr>
<tr>
<td>J P MORGAN CHASE BANK</td>
<td>2,459</td>
<td>1.24</td>
</tr>
<tr>
<td>Custody Bank of Japan, Ltd. (trust account 15)</td>
<td>1,280</td>
<td>0.66</td>
</tr>
<tr>
<td>CHARTERED TRUST ACCOUNT</td>
<td>2,262</td>
<td>1.14</td>
</tr>
</tbody>
</table>

Note
1. The number of treasury shares (0.25% of issued shares) that Advantest owns does not include Advantest shares which the Board Incentive Plan Trust owns (0.25% of issued shares) and Advantest shares which the Employee Stock Ownership Plan Trust owns (0.25% of issued shares).
2. Number of Shares is rounded down to the nearest thousand.
3. Percentage of Ownership is calculated excluding treasury shares.

Breakdown of Shareholders

<table>
<thead>
<tr>
<th>Year</th>
<th>Financial Institutions and Securities Companies</th>
<th>Non-Japanese Holders</th>
<th>Individuals and Others</th>
<th>Others Entities and Treasury Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>23.64</td>
<td>21.36</td>
<td>31.54</td>
<td>10.77</td>
</tr>
<tr>
<td>2012</td>
<td>23.64</td>
<td>21.36</td>
<td>31.54</td>
<td>10.77</td>
</tr>
<tr>
<td>2013</td>
<td>23.64</td>
<td>21.36</td>
<td>31.54</td>
<td>10.77</td>
</tr>
<tr>
<td>2014</td>
<td>23.64</td>
<td>21.36</td>
<td>31.54</td>
<td>10.77</td>
</tr>
</tbody>
</table>

Please see our website for more detailed information about Advantest.

For Our Investors

Integrated Annual Report

Sustainability Databook

Environment

Climate Change Mitigation

Green Products

Environment

Society

Human Resources & Fair Evaluation

Product and Respect for Human Rights

Governance

Real Management

Compliance

Advantest, a Preferred Sustainability Investment

External Evaluation (2020-2021)

- Selected for the FTSE4Good Index Series, a series of benchmark and tradable indexes for ESG (Environmental, Social and Governance) investors
- Selected for the FTSE Blossom Japan Index, which measures the performance of Japanese companies that demonstrate strong Environmental, Social and Governance (ESG) practices
- Selected as a constituent stock of the SNAM Sustainability Index, which combines ESG value and stock valuation
- Selected for the MSCI Japan Equity Women’s Empowerment Index (WIN) and MSCI Japan Equity Women’s Empowerment Index (WIN) Select
- Ranked first in VLSIresearch’s annual customer satisfaction survey for 2 consecutive years, after ranking in the “10 BEST” for 33 consecutive years
- Selected as 2020 Winner Company in Corporate Governance of the Year Awards sponsored by Japan Association of Corporate Directors (JACD)

Contact

Corporate Communications Division
TEL +81-3-3214-7500  FAX +81-3-3214-7711
https://www.advantest.com/contact