

HIOKI E.E. CORPORATION

Financial Results Briefing for the Fiscal Year Ending December 31, 2021

(Securities Code: 6866)

February 2022

HIOKI



1. Company Overview

HIOKI

Photograph: The four seasons at HIOKI Forest Hills: Spring

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Overview

■ Name	HIOKI E.E. CORPORATION
■ Businesses	Development, manufacture, sale, and service of electrical measuring instruments
■ Founded	June 1935
■ Incorporated	January 1952
■ Capitalization	¥3,299 million
■ Representative	Takahiro Okazawa, President
■ Head Office	81 Koizumi, Ueda-shi, Nagano Prefecture
■ Group Companies	HIOKI Forest Plaza Corporation; HIOKI USA CORPORATION; HIOKI (Shanghai) MEASUREMENT TECHNOLOGIES CO., LTD.; HIOKI (Shanghai) TECHNOLOGY DEVELOPMENT CO., LTD.; HIOKI (Shanghai) MEASURING INSTRUMENTS CO., LTD.; HIOKI SINGAPORE PTE. LTD.; PT. HIOKI ELECTRIC INSTRUMENT; HIOKI KOREA CO.,LTD.; HIOKI INDIA PRIVATE LIMITED; HIOKI EUROPE GmbH; HIOKI TAIWAN CO.,LTD.
■ Employees	1,058 (consolidated-basis, including part-time workers) (as of December 31, 2021)



2. Financial Results Overview

HIOKI

Photograph: The four seasons at HIOKI Forest Hills: Summer

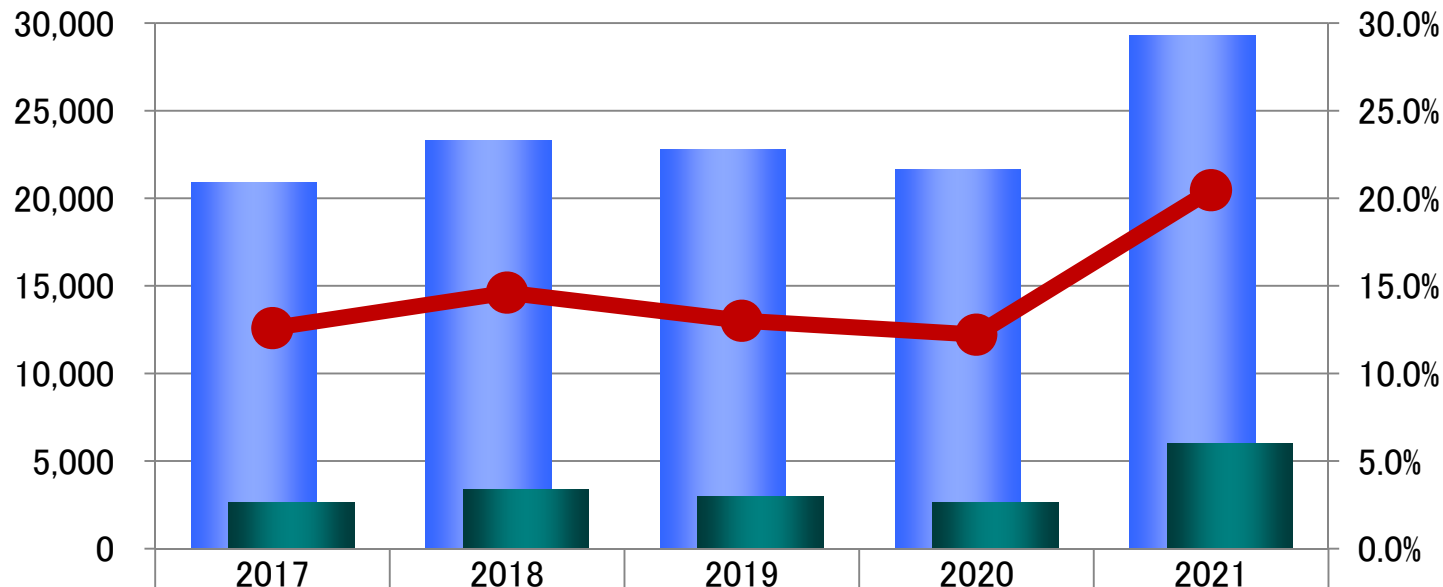
Overview of 2021 Results

	2020		2021		
	Results (millions of yen)	Percent of sales (%)	Results (millions of yen)	Percent of sales (%)	Year-on-year (%)
Sales	21,664		29,322		135.3%
Cost of sales	12,349	57.0%	15,683	53.5%	127.0%
Selling, general, and administrative expenses	6,845	31.6%	7,888	26.9%	115.2%
Operating profit	2,469	11.4%	5,750	19.6%	232.8%
Recurring profit	2,646	12.2%	5,999	20.5%	226.7%
Net income	2,071	9.6%	4,521	15.4%	218.3%
Earnings per share	¥151.91		¥331.35		

Trend in Sales and Recurring Profit

Sales and recurring profit (millions of yen)

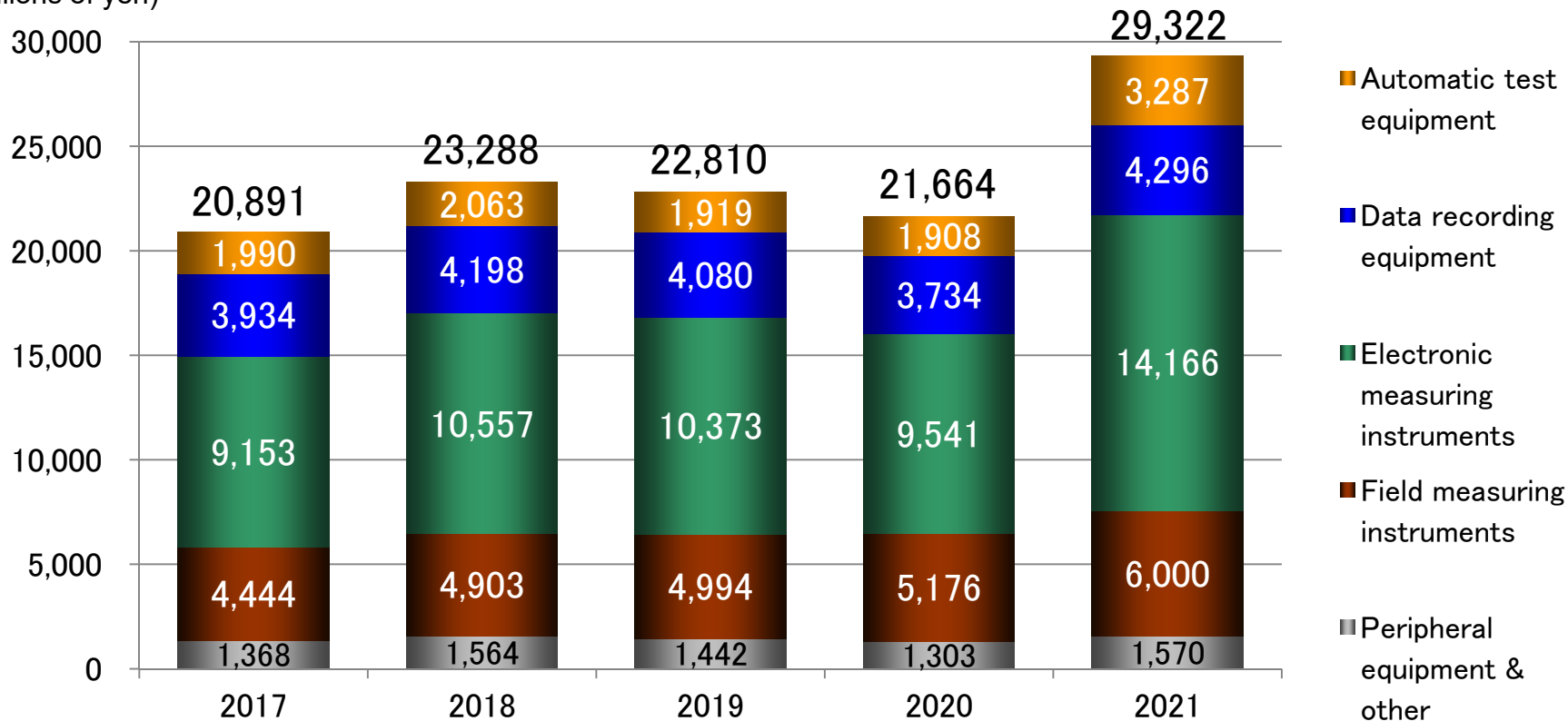
Recurring profit rate



■ Sales	20,891	23,288	22,810	21,664	29,322
■ Recurring profit	2,630	3,403	2,967	2,646	5,999
● Recurring profit rate	12.6%	14.6%	13.0%	12.2%	20.5%

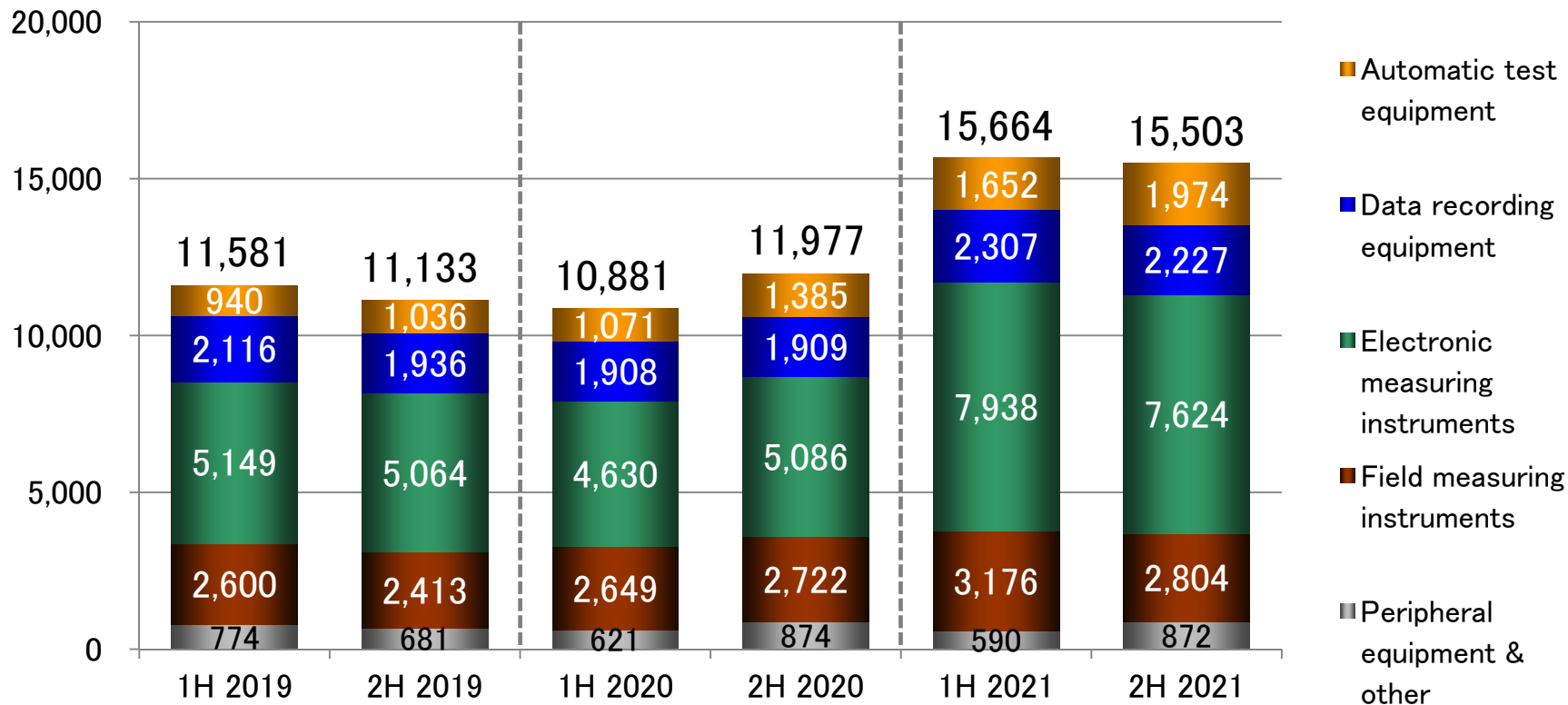
Trend in Sales by Product Category

(Millions of yen)



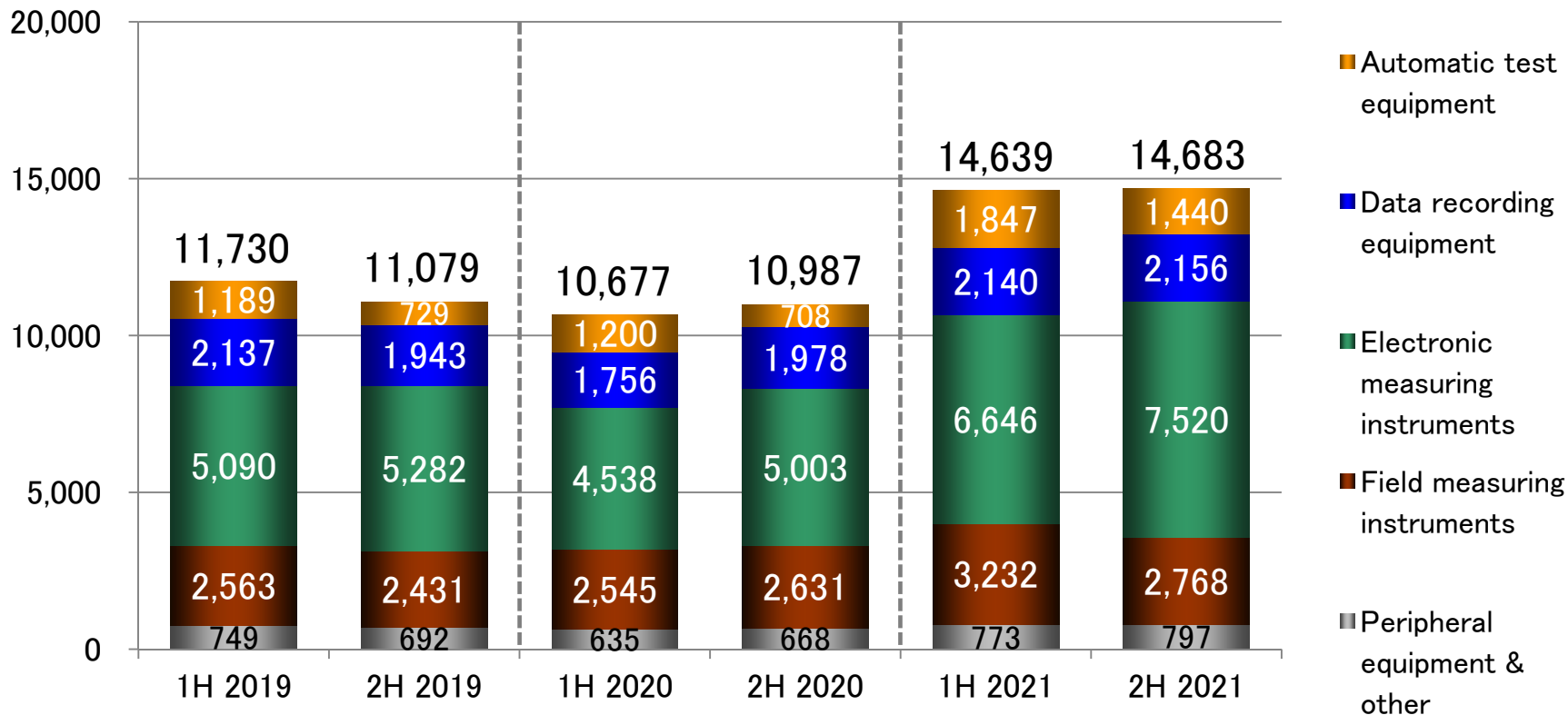
Trend in Orders by Product Category (Bi-Annual)

(Millions of yen)

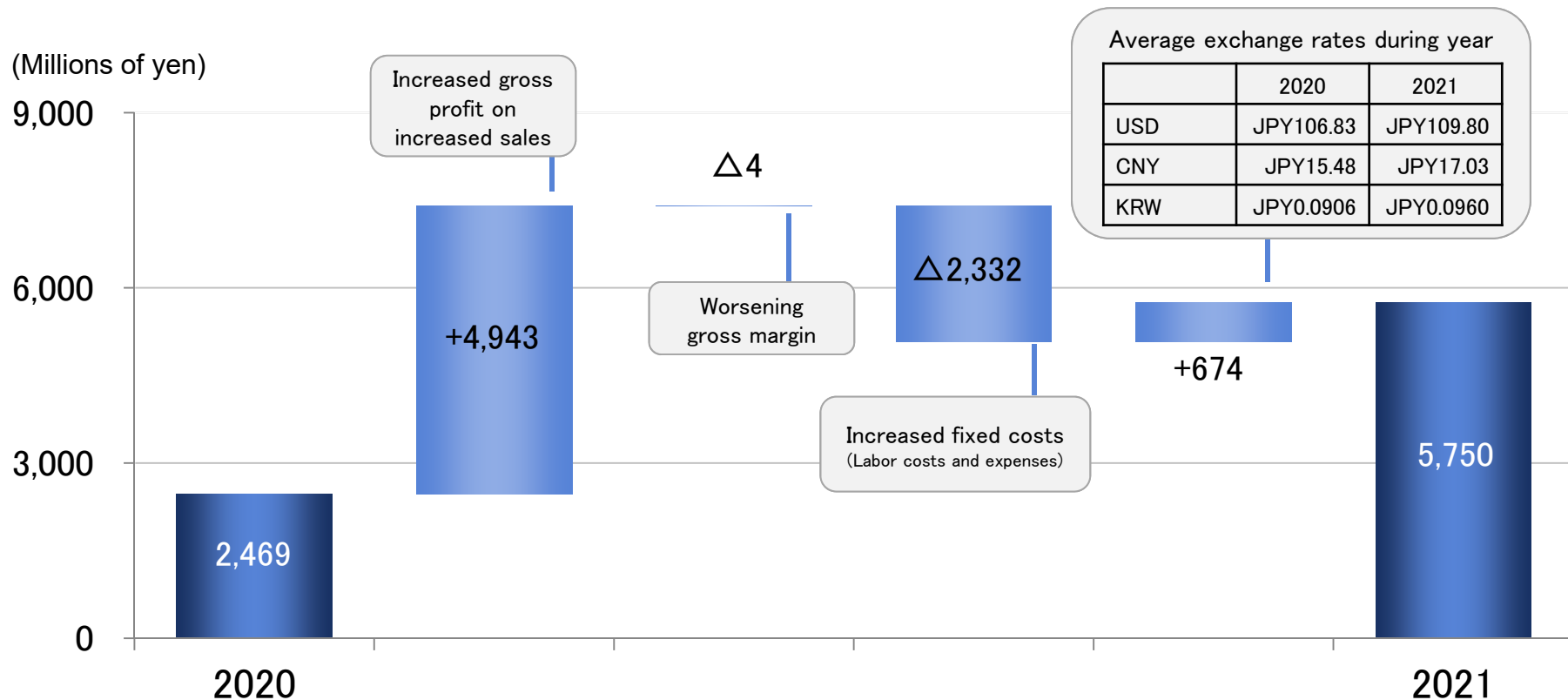


Trend in Sales by Product Category (Bi-Annual)

(Millions of yen)



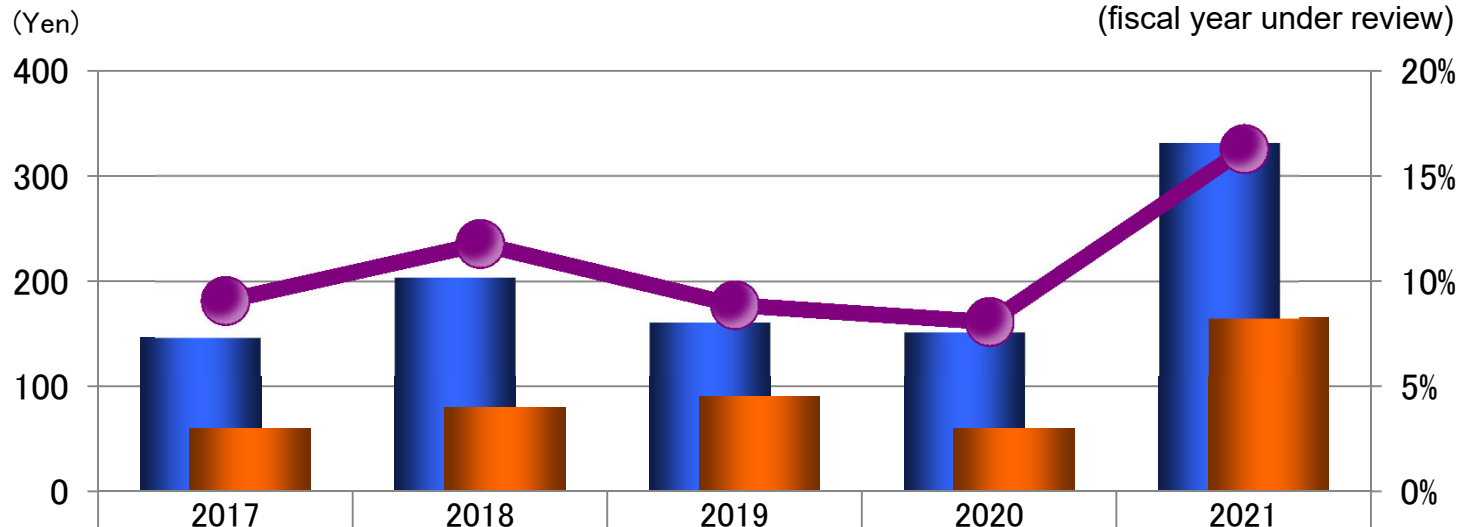
2021: Factors Impacting Operating Income



Trend in Earnings and Dividends per Share

Earnings and dividends per share

Return on equity
(fiscal year under review)

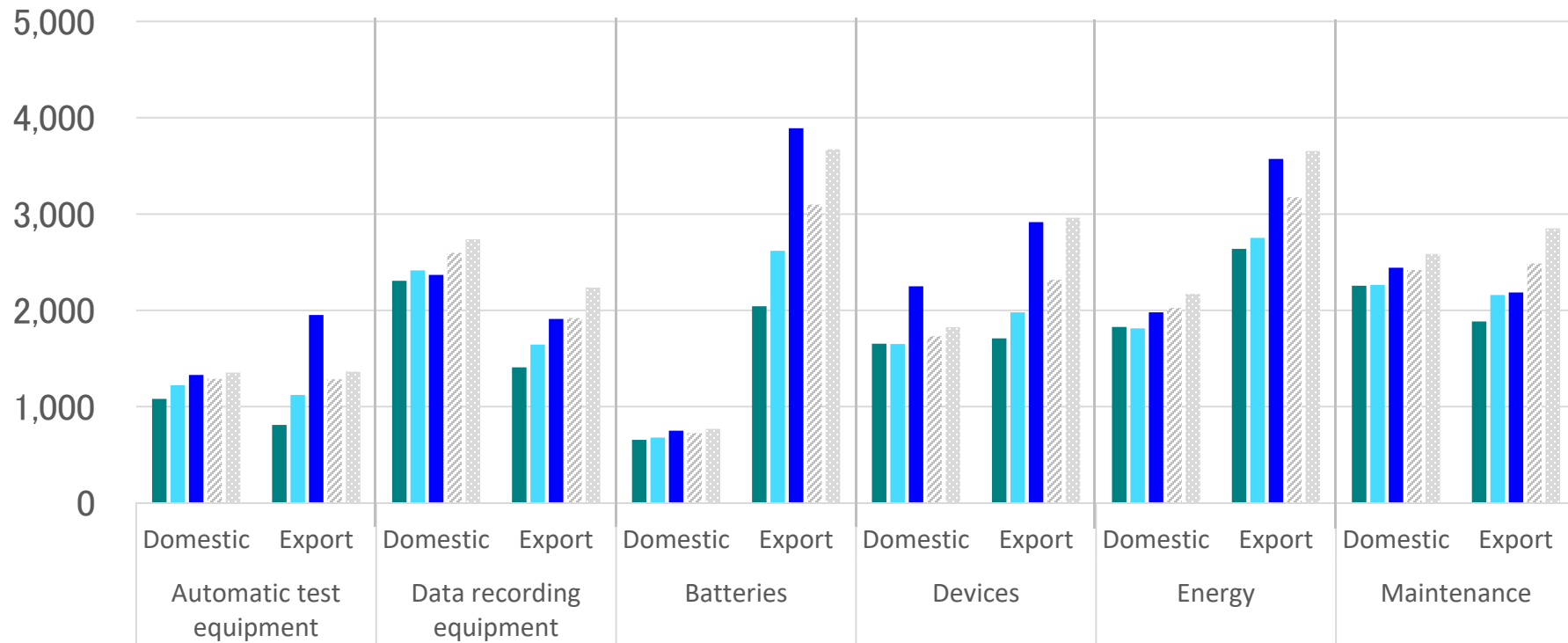


Earnings per share (EPS)	147	204	161	152	331
Dividends per share (yen)	60	80	90	60	165 ※
Return on equity (ROE)	9.1%	11.8%	8.9%	8.1%	16.3%

*Includes ¥30 dividend commemorating Hioki's initial public offering

Sales by Market/Application

(Millions of yen) ■ 2020 ■ 2021 initial plan ■ 2021 full-year results ▨ 2022 initial plan ▩ 2023 initial plan

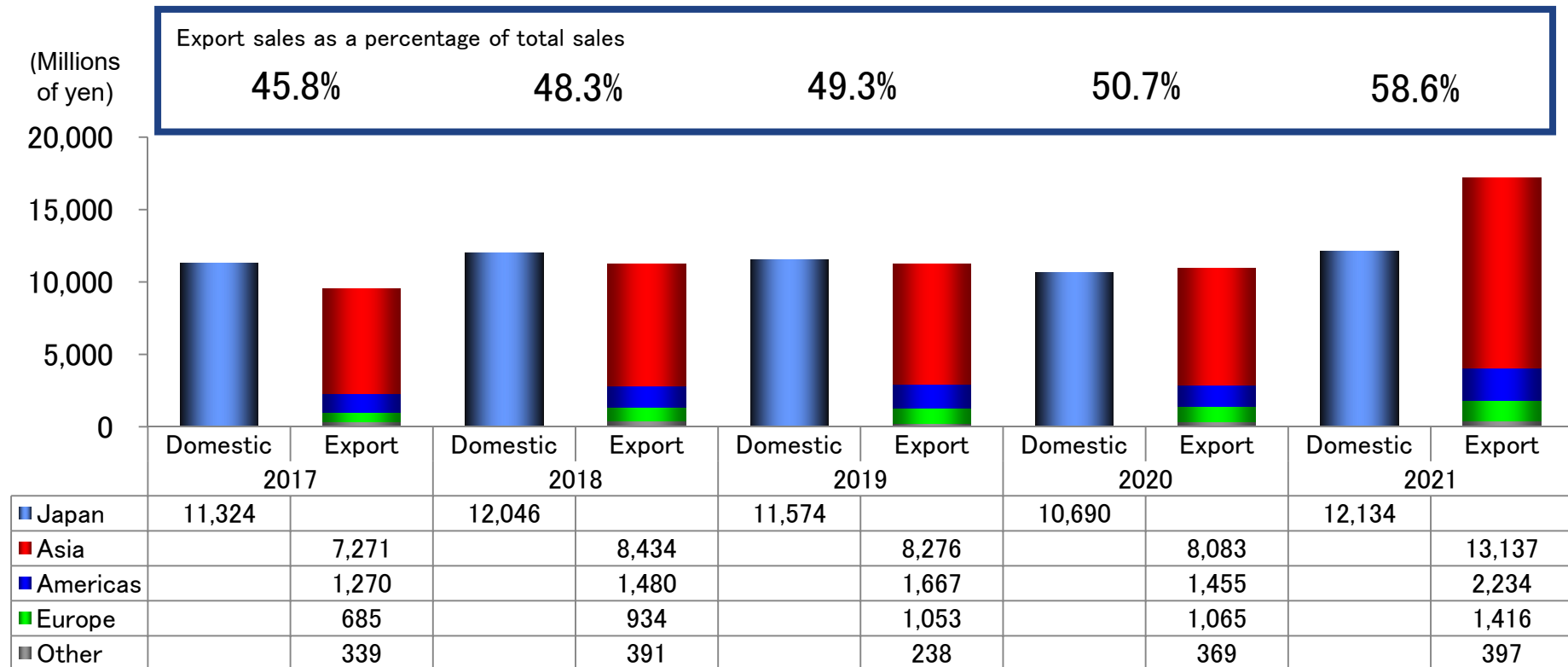


Reasons Performance Exceed Plans

Product category	Factors
Automatic test equipment (Export)	• Introductions of new high-precision products to the bullish semiconductor market contributed to performance. • Created new applications for battery testing.
Batteries (Export)	• Increased investment in batteries for EVs, a high-performing sector, worldwide. • Intensive new product launches since 2020 bolstered performance.
Devices (Domestic)	• Electrification of vehicle powertrains and increased production of electronic devices necessary for the digital transformation (DX) pushed up demand for state-of-the-art components. • Demand for high-performance measurement and testing equipment rose as manufacturers sought to assure high reliability. • Performance was aided by Japanese companies' strong reputation in this area.
Devices (Export)	
Energy (Export)	• Manufacturers stepped up development related to EVs and renewable energy, fueling increased demand for power meters and other instruments. • Investment in solar power equipment rose.

During 2021, demand for these instruments rose at a **greater-than-expected pace**

Trend in Export Sales



Target Management Indicators

Recurring profit rate: 20%

Export sales as a percentage of total sales: 50%

Fiscal year ended December 2021

Recurring profit rate: 20.5%

Export sales as a percentage of total sales: 58.6%

We achieved both targets



3. Mid-term Business Plan and Strategy

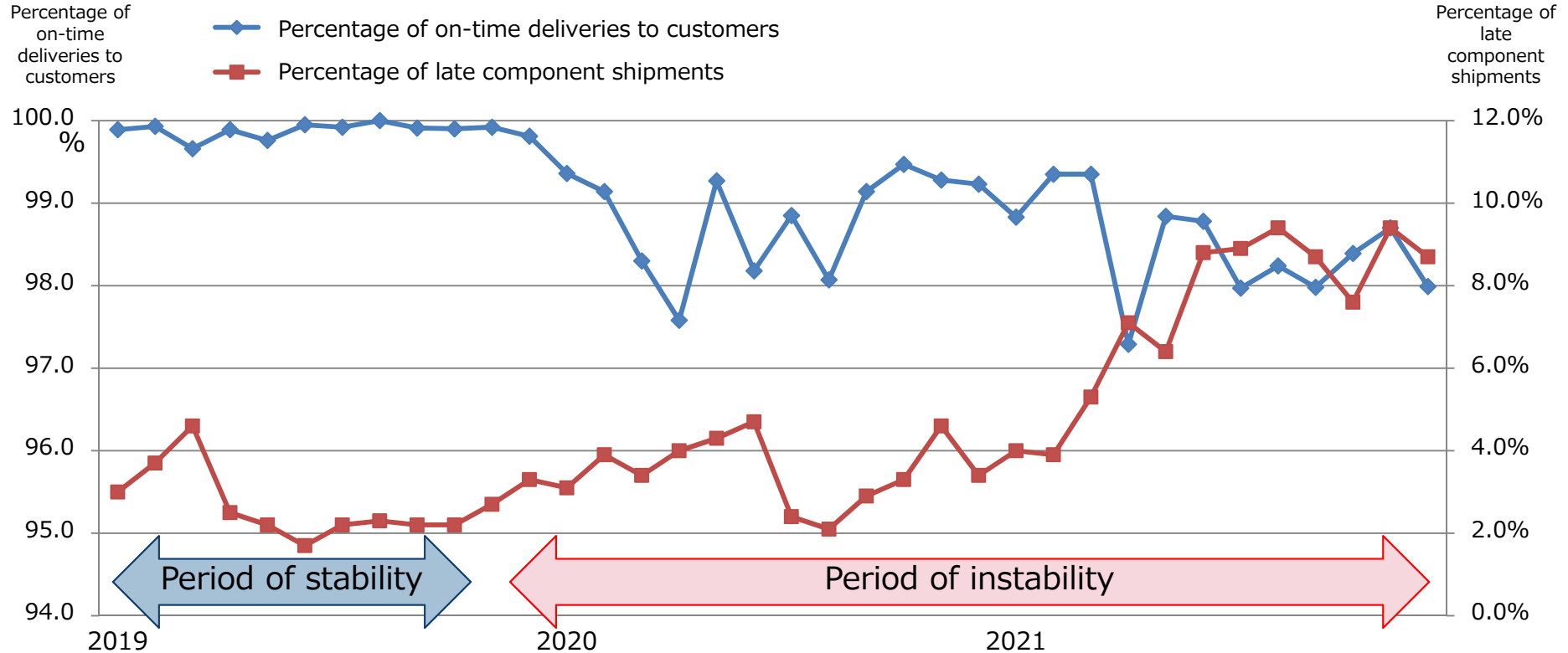
HIOKI

Photograph: The four seasons at HIOKI Forest Hills: Winter

Dealing with Risk

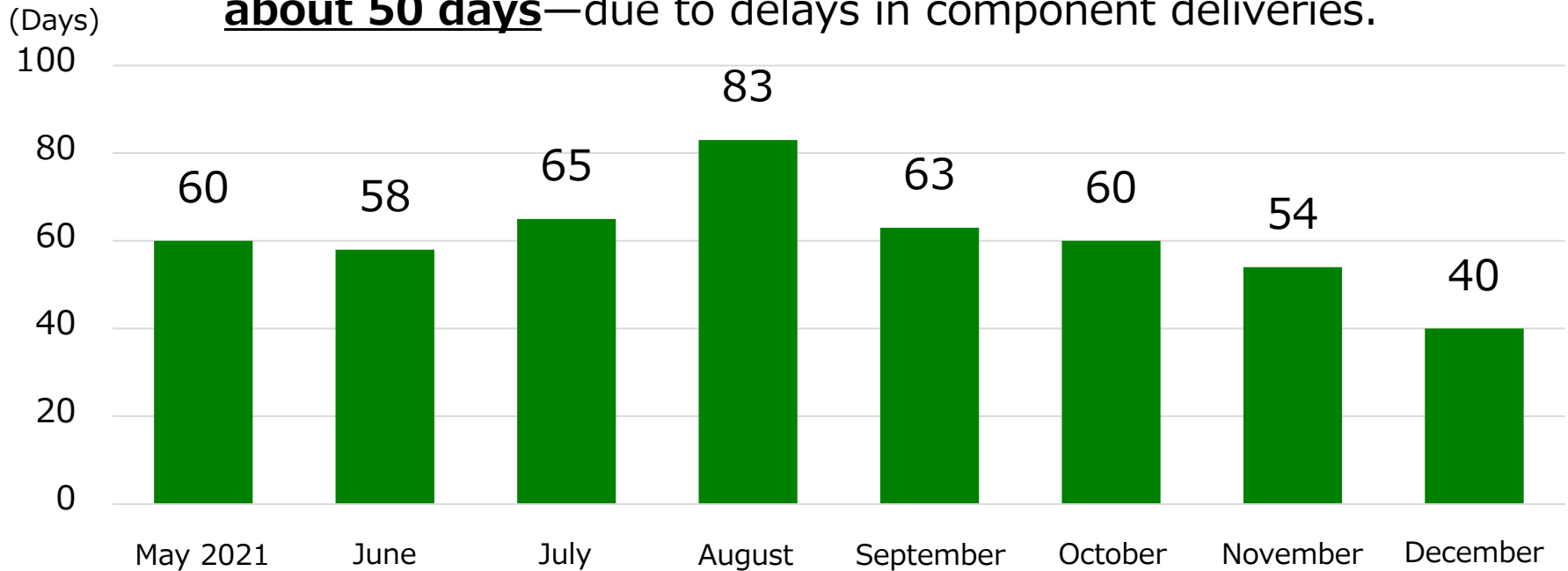
Risk	Mitigation measures
Component procurement risk due to semiconductor shortages and other issues	Declared a state of emergency with regard to component delivery delays and strengthened our internal structures. → Implemented steps last September. Drawing on outside resources to change existing product designs. Purchasing components.
Risk of delays in customer investments due to component procurement risk (2H 2021 and later)	Working to assess the situation through close communication with customers.
Risk of risk of rising costs due to increases in raw material prices	Boosting profitability by normalizing product prices in domestic and overseas markets.
Risk of rising expenses due to increased shipping costs	Boosting profitability by normalizing product prices in domestic and overseas markets.
Risk of an economic downturn due to urban lockdowns triggered by rising COVID-19 infections	Strengthening sales through a new business style that moves away from face-to-face meetings. We're strengthening investment in online activities.

Percentage of On-time Deliveries to Customers and Percentage of Late Component Shipments



Number of Days from Order Receipt to Product Shipment (May 2021 and forward)

Orders that used to be fulfilled in 30 days are taking longer—**an average of about 50 days**—due to delays in component deliveries.



*Results for 15 major Hioki product lines

Social Sustainability

- Decarbonization initiatives are underway worldwide
- Countries including the U.S., E.U., and Japan are working to achieve the goal of carbon neutrality by 2050
- China expects emissions to peak in 2030 and achieve carbon neutrality in 2060

Intermediate CO₂ reduction goals

U.S.	Reduce to 50% to 52% of 2005 levels by 2030
China	Reach peak GHG emissions by 2030
E.U.	Reduce to 55% of 1990 levels by 2030
U.K.	Reduce to 78% of 1990 levels by 2035
Japan	Reduce to 46% of 2013 levels by 2030

Source: New Energy and Industrial Technology Development Organization (NEDO)
TSC Trends: Trends in Major Overseas Nations (U.S., China, E.U., and U.K.) Concerning
Carbon Neutrality in Pursuit of COP26 Targets
<https://www.nedo.go.jp/content/100938612.pdf>

Compiled by Hioki based on major countries' CO₂ reduction targets in pursuit of carbon neutrality (page 8).

Long-term Management Policy: Vision 2030

Mission

Why do we
contribute to
society?

Our mission at Hioki is to contribute to society's peace of mind and by promoting customers' safe, effective use of energy through electrical measurement

Vision

10 years in the
future

Beyond Measure

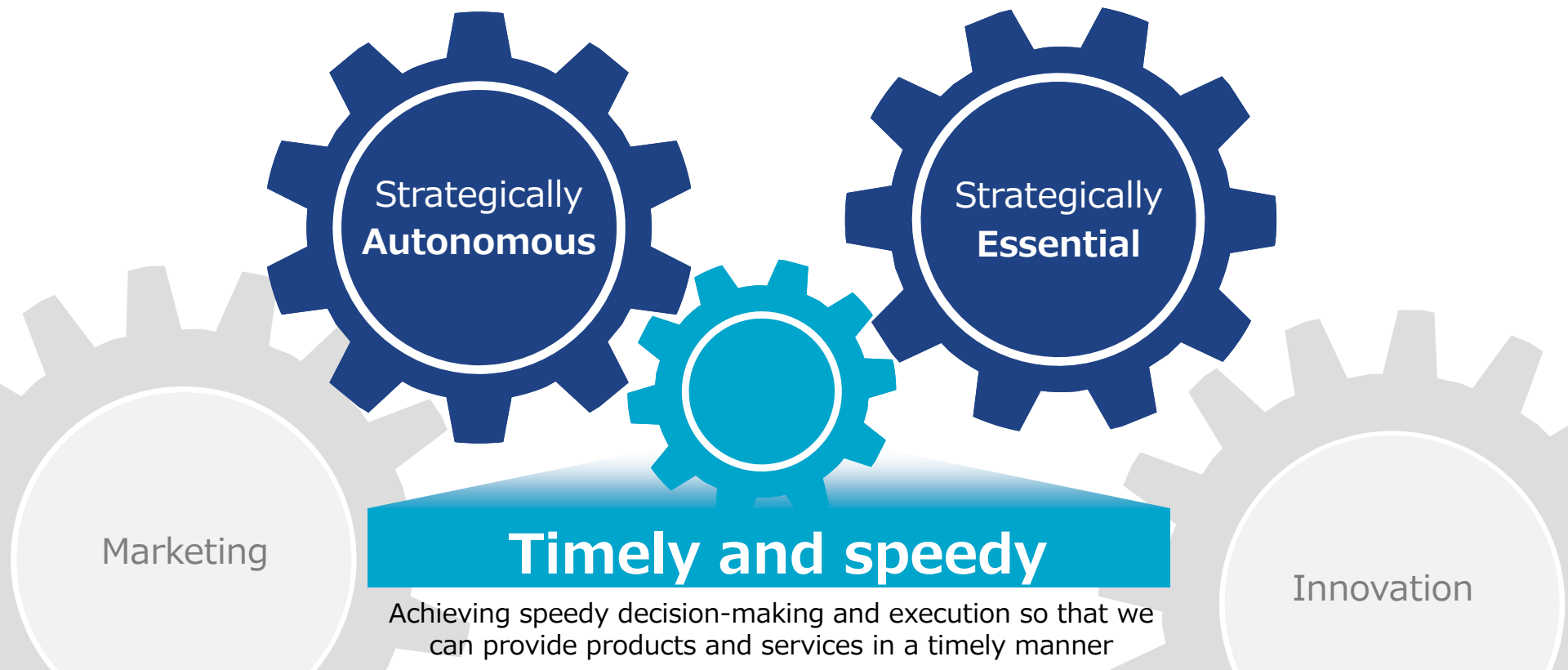
Hioki will become a creator of solutions that helps forge a sustainable society together with customers worldwide by continuing to evolve measurement as an industry leader



Companywide
efforts to realize
these goals

As a solution creator, we supply competitive, high-value-added electrical measurement solutions to customers worldwide through sustained, ongoing innovation in companywide functions

Realizing the Vision 2030



Five Types of Sustained, Ongoing Innovation in Companywide Functions for Realizing the Vision 2030

Innovation is the process of gaining customers by forging new connections.



Creating new **customer value**



Building new **production structures**



Building **relationships for collaborating creatively with customers to forge a new society**



Building new **supply chains**



Realizing new **organizations**



Energy transition

Water (水素) → **Electricity (電気)** → **CO₂**

Carbon Cycle (カーボンサイクル)
CO₂ is captured and stored, or used for various purposes, and then released back into the cycle.

Higher voltages
High-voltage power lines for efficient transmission.

Hydrogen energy
Hydrogen is produced from water and used for power generation, transport, and storage.

Next-generation power electronics
Advanced power electronics for efficient energy conversion and storage.

Widespread adoption of solar power
Solar panels for generating clean energy.

Development of new batteries
Advanced batteries for energy storage and transport.

Rapid charging
Fast charging stations for electric vehicles.

Adoption of electric power
Electric power for various applications, including transportation and industry.

Increased maintenance of power equipment
Regular maintenance of power infrastructure for reliability.

Other key elements:
- **Renewable Energy:** Wind, solar, biomass, and geothermal power.
- **Transportation:** Electric vehicles (EVs), hydrogen fuel cell vehicles (FCEVs), and electric trains.
- **Industry:** Electric power for manufacturing and processing.
- **Buildings:** Electric power for heating, cooling, and lighting.
- **Energy Storage:** Batteries, hydrogen storage, and pumped hydro storage.

Source
Ministry of Economy, Trade and
Industry
Announced on December 25,
2020
Public relations material (1)
From “Illustration of Carbon-
neutral Industry”
(Compiled by Hioki based on the
Ministry’s public relations
materials)



Creating
new
customer
value

New Products Launched in Key Markets

EV/FCV development



POWER ANALYZER
PW8001

Inspections of solar power systems



DC HIGH VOLTAGE PROBE
P2000

Promoting a total of 14 products that we launched last year



Creating
new
customer
value

Digital Transformation Initiative Plans

- Enhancing software services
- Moving forward with prior investments in software
- Strengthening cloud-related investments

 **GENNECT Remote**





Creating
new
customer
value

Beyond Measure Creating New Measurement and Testing Standards Building relationships for collaborating creatively with customers to forge a new society

2021 initiatives

- Joined LIBTEC*.
*Consortium for Lithium Ion Battery Technology and Evaluation Center



- Presented a paper describing joint research with Shinshu University and other companies at the 62nd Battery Symposium in Japan.

Planned 2022 initiatives

- Will establish a new joint experimental laboratory (in our Research Building). We will strengthen our agile development capabilities and collaborate creatively with customers.
- Will strength R&D investment.
FY2022 R&D expenses: ¥320 billion
(FY2021: ¥272.5 billion)
- Will strengthen advance development in the area of hydrogen energy.



Creating
new
customer
value

Globalization

2021 initiatives

- Strengthened our sales structures in Europe and the U.S.
Our U.S. subsidiary achieved full compliance with ISO/IEC 17025.
- Our South Korean subsidiary opened its Taegu Office.
The company's Daejeon Office began measurement sales.

Planned 2022 initiatives

- Will establish a global business development team to provide group-wide handling of projects that involve multiple sales companies.
- Will open a Vietnam Sales Office.
- Our Indian subsidiary will open offices in Pune and Bangalore.
- Will increase the percentage of repairs made locally by sales companies, and we will continue to strengthen sales companies' after-sales service.



Building
new
production
structures



Building
new supply
chains

Strengthening Production Structures

2021 initiatives

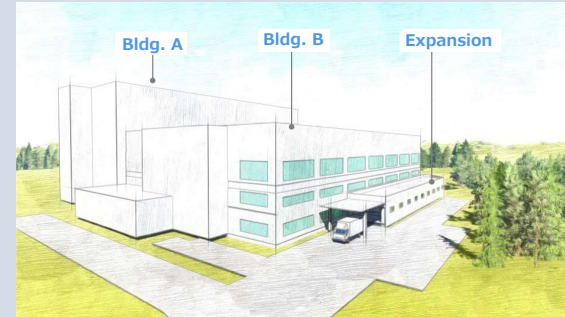
- Opened the Sakaki Plant at an affiliate plant in the town of Sakaki, which borders the city of Ueda, home to our Head Office, in Nagano Prefecture. The move is part of an effort to boost productivity by transferring production of field measuring instruments to the facility.



Dedication ceremony at the Sakaki Plant

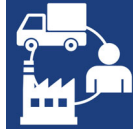
Planned 2022 initiatives

- Will improve lines of movement by undertaking capital investments at our Head Office Plant. We expect these changes to increase floor space by a factor of 1.5 to 2.0.





Building relationships for
collaborating creatively with
customers to forge a new society



Building
new supply
chains

Basic Sustainability Policy

The HIOKI Group will contribute to the realization of a sustainable society through its business based on the principles of "respect for humanity" and "contribution to society".

- The HIOKI Group will contribute to the security and development of society by promoting the safe and effective use of energy by customers through electrical measurement.
- Will build a relationship of trust with all stakeholders through active communication.
- As a member of society, we will engage in activities that contribute to the development of society and environmental preservation.



Building
new supply
chains

HIOKI Sustainability Declaration

Will continue our efforts to decarbonize our business based on the following targets.

- 2025 (90th anniversary of founding)
Achieve carbon neutrality in Scope 1 and Scope 2.
- 2035 (100th anniversary)
Achieve carbon neutrality in Scope 3.

For Scope 3, we aim to achieve carbon offset **without relying on emissions trading as much as possible** to achieve the goal by 2035



Building
new supply
chains

Initiatives to Address Environmental Issues

2021 initiatives

- Transitioned to CO₂-free power at our Head Office Plant. We expect this change to reduce CO₂ emissions by about 2,300 tons (based on 2020 results).
- Updated air-conditioning equipment at our Head Office Plant to reduce energy use.
- Studied adoption of biomass plastic products. (This initiative will continue in 2022.)
- Continued efforts to minimize food waste (for example, by reducing food waste in our employee restaurant).

Planned 2022 initiatives

- Will work towards having our Head Office Plant generate its own electricity using renewable energy. We will transition to CO₂-free power at other business sites.
- Will support CO₂ visualization at affiliate plants.



Realizing
new
organizations

Human Resources Initiatives

2021 initiatives

- Sought to increase diversity among our workforce, and we promoted a female operating officer.
- Made organizational changes in response to changes in the market.
- Created the HiChallenge program to promote employee growth through idea solicitation-based programs, internal ventures, and other means.
- Created a career consultation program and began offering generation-specific career training. We helped empower employees to guide their own career paths.
- Was chosen as a 2022 Great Place to Work® by the Great Place to Work® Institute Japan.

Planned 2022 initiatives

- Will appoint our Chief Technology Officer (CTO) to serve as Chief Information Officer (CIO) and Sustainability Officer.
- Plan to have our General Shareholders' Meeting consider a female employee as an auditor candidate.
- Will tap a local employee (from China) to serve as an operating officer at our Head Office.
- Will promote personnel transfers between our Head Office and sales companies and between sales companies.
- Will increase the number of long-term interns we accept.

New Management Targets

Recurring income rate: 20%

Export sales as a percentage of total sales: 70% or greater

Return on equity (ROE): 10% or greater

Will strive to achieve a balanced sales mix that does not depend unduly on performance in any particular geographic area. Will work to boost ROE by improving our **net profit margin and total asset turnover**

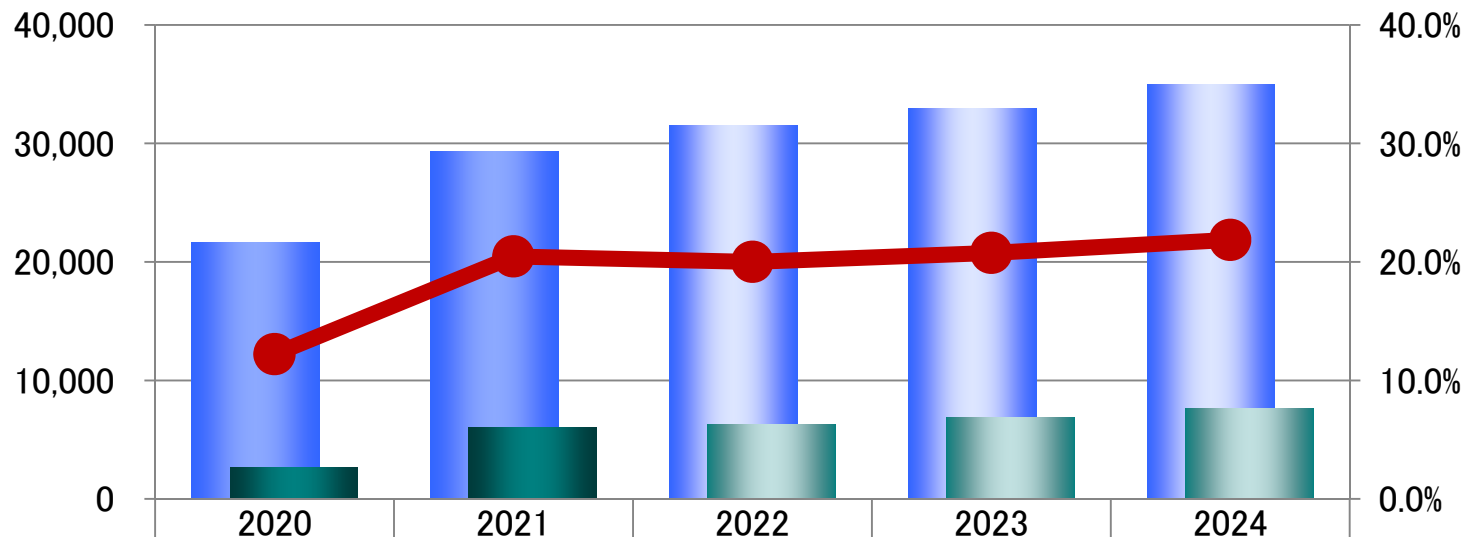
2022 Business Forecast

	2021		2022		
	Results (millions of yen)	Percent of sales (%)	Results (millions of yen)	Percent of sales (%)	Year-on-year (%)
Sales	29,322		31,500		107.4%
Cost of sales	15,683	53.5%	16,840	53.5%	107.4%
Selling, general, and administrative expenses	7,888	26.9%	8,480	26.9%	107.5%
Operating profit	5,750	19.6%	6,180	19.6%	107.5%
Recurring profit	5,999	20.5%	6,300	20.0%	105.0%
Net income	4,521	15.4%	4,800	15.2%	106.2%
Earnings per share	¥331.3		¥351.8		

Mid-term Business Plan (2022 to 2024)

Sales and recurring profit (millions of yen)

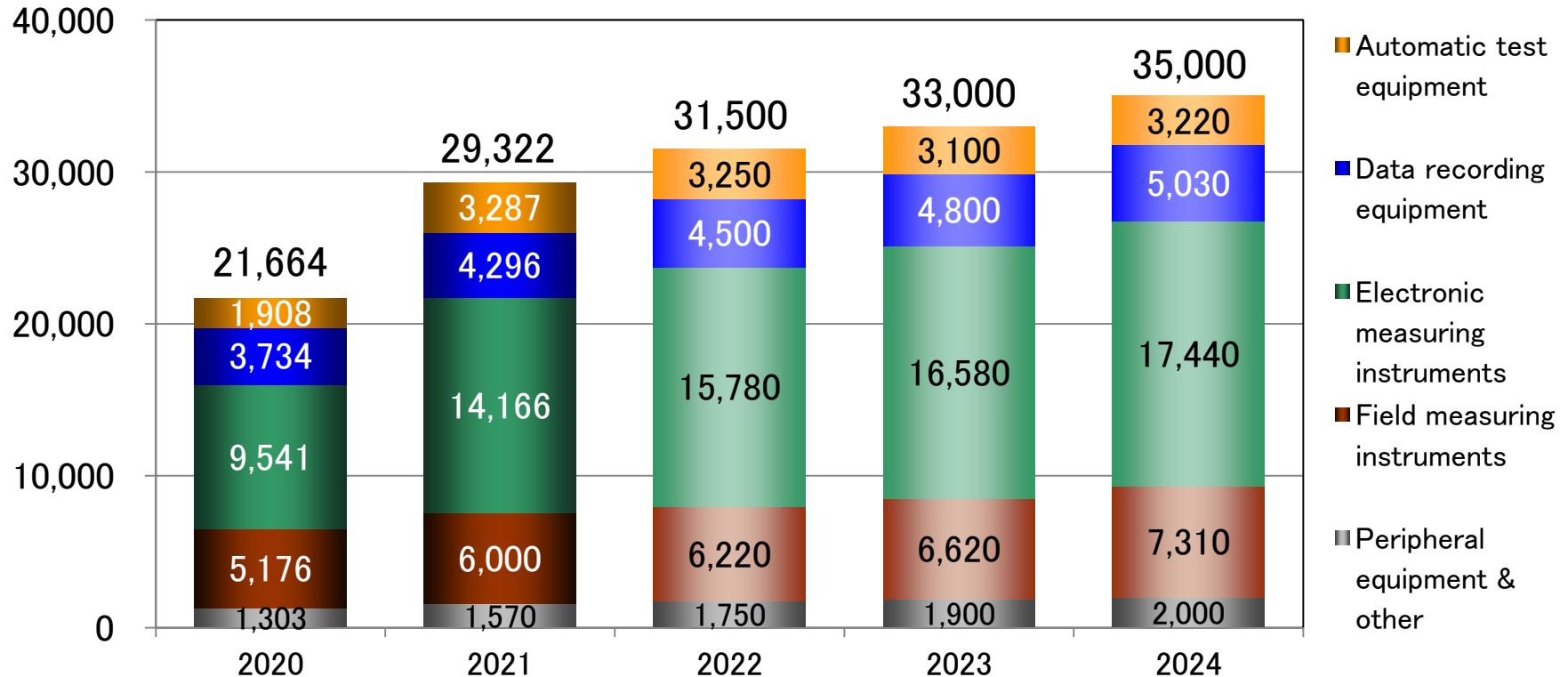
Recurring profit rate



■ Sales	21,664	29,322	31,500	33,000	35,000
■ Recurring profit	2,646	5,999	6,300	6,850	7,650
● Recurring profit rate	12.2%	20.5%	20.0%	20.8%	21.9%

Mid-term Sales Plan by Product Category (2022 to 2024)

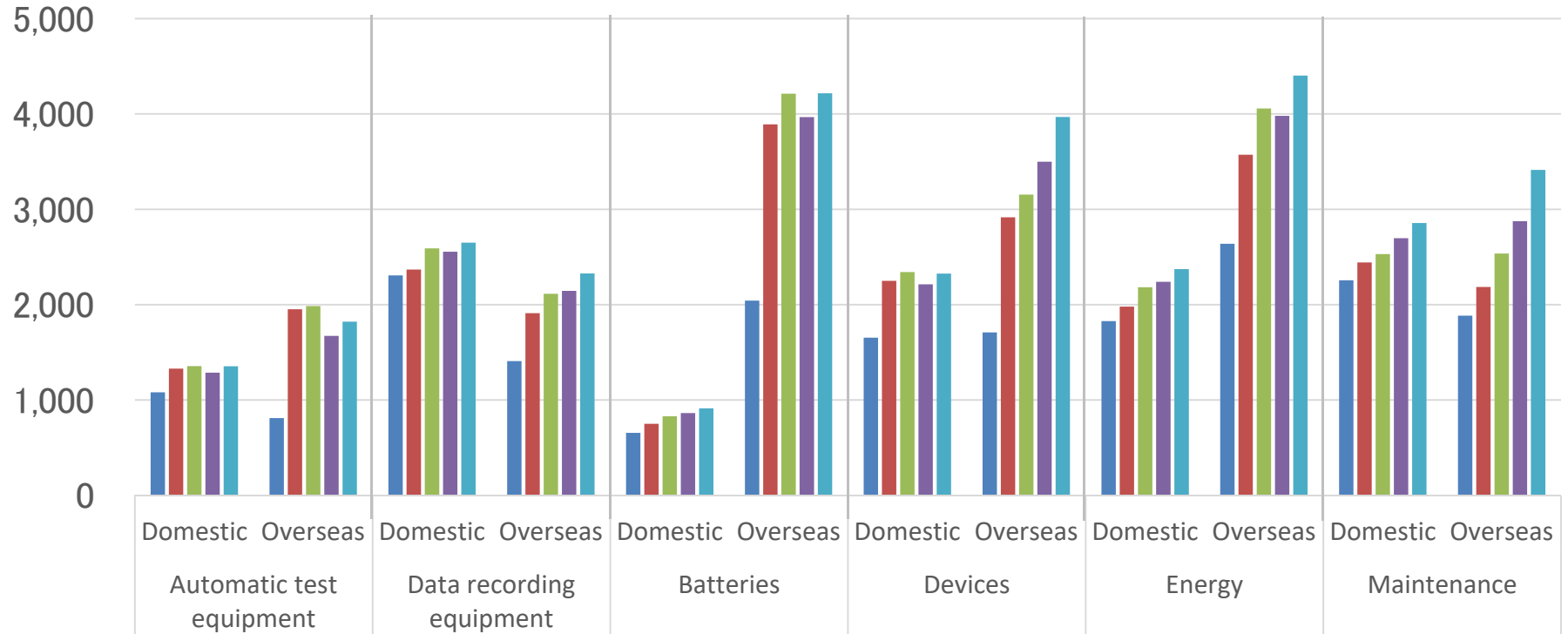
(Millions of yen)



Mid-term Sales Plan by Product Category (2022 to 2024)

(Millions of yen)

■ 2020 ■ 2021 ■ 2022 ■ 2023 ■ 2024



Export Mid-term Sales Plan (2022 to 2024)

Export sales as a percentage of total sales

(Millions of yen)

24,000

16,000

8,000

0

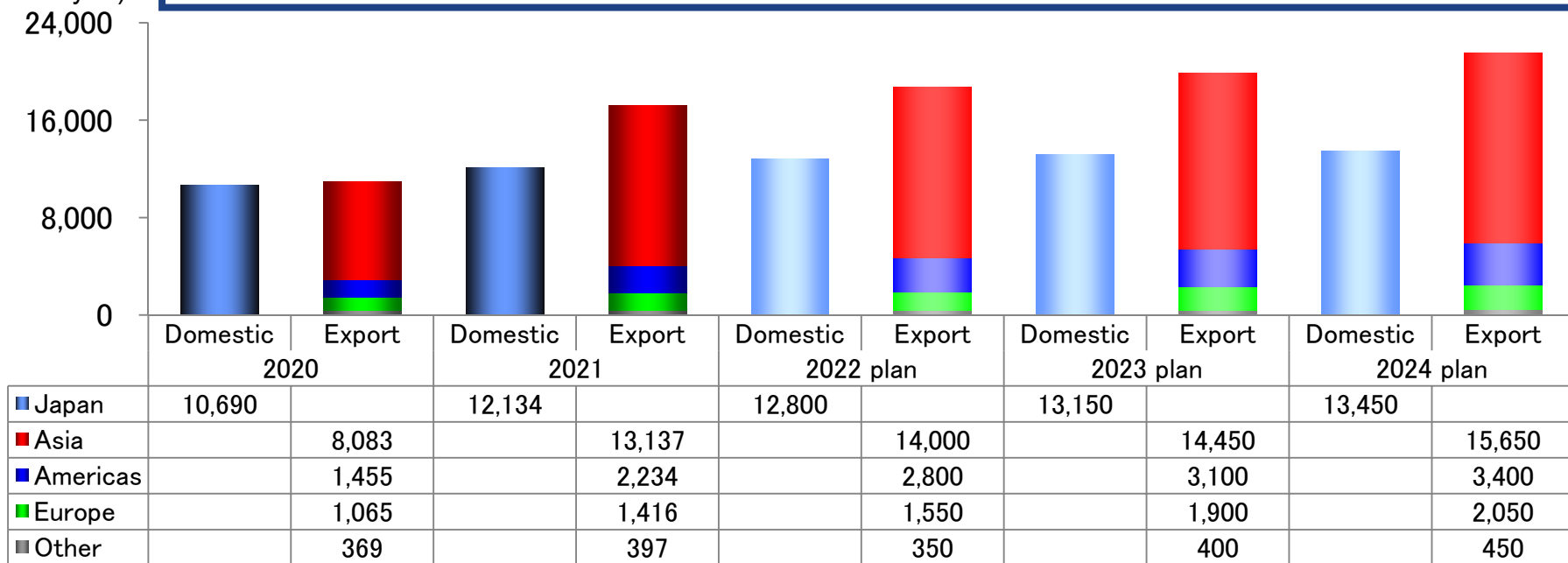
50.7%

58.6%

59.4%

60.2%

61.6%



Change in Dividend Policy

Until FY2021

Deliver a return on shareholders' investments by adopting a stable **annual dividend base of 20 yen** and a target consolidated dividend payout ratio of 40%.

Starting in FY2022

Deliver a return on shareholders' investments by adopting a stable annual dividend base of a **consolidated dividend on equity (DOE) of at least 2% (this fiscal year, ¥45*)** per share and a target consolidated dividend payout ratio of 40%. *Dividend figures will be announced during the financial briefing each January.

Will expand our base of stable dividends for fiscal years in which we post a net loss by changing to DOE.

Earnings and Dividends per Share Outlook for 2022

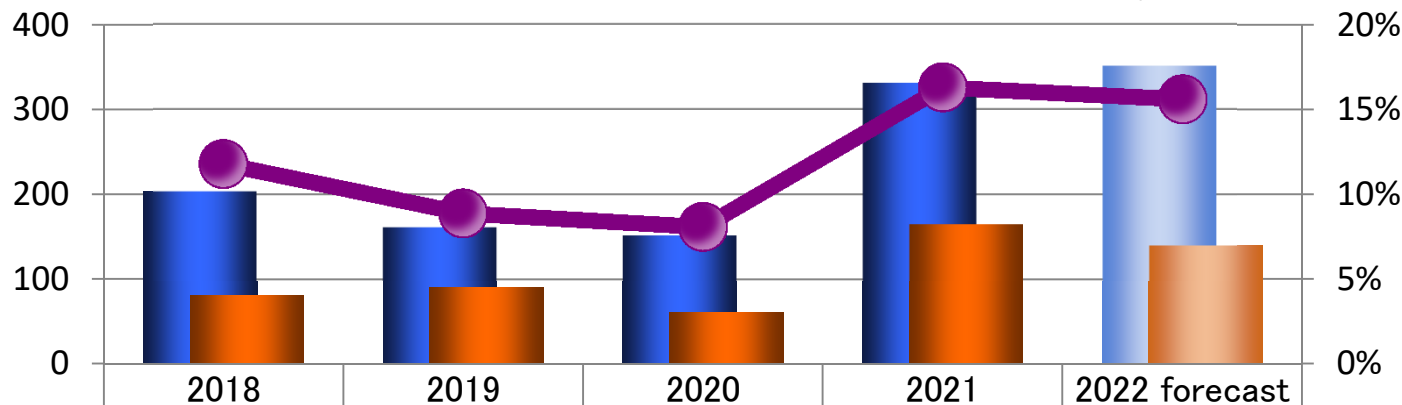
Dividend policy: Deliver a return on shareholders' investments by adopting a stable annual dividend base of a consolidated dividend on equity (DOE) of at least 2% per share and a target consolidated dividend payout ratio of 40%.

Earnings and dividends per share

(Yen)

Return on equity

(fiscal year under review)



■ Earnings per share (EPS)

■ Dividends per share (yen)

● Return on equity (ROE)

2018

2019

2020

2021

2022 forecast

204

161

152

331

351

80

90

60

165

140

11.8%

8.9%

8.1%

16.3%

15.6%

Through Vision 2030, HIOKI will contribute to the realization of a sustainable society by supplying high-quality products and services to customers, working to move away from reliance on carbon.



5. Reference Materials

Performance and Employee Head Count since HIOKI's Establishment

Sales and recurring profit

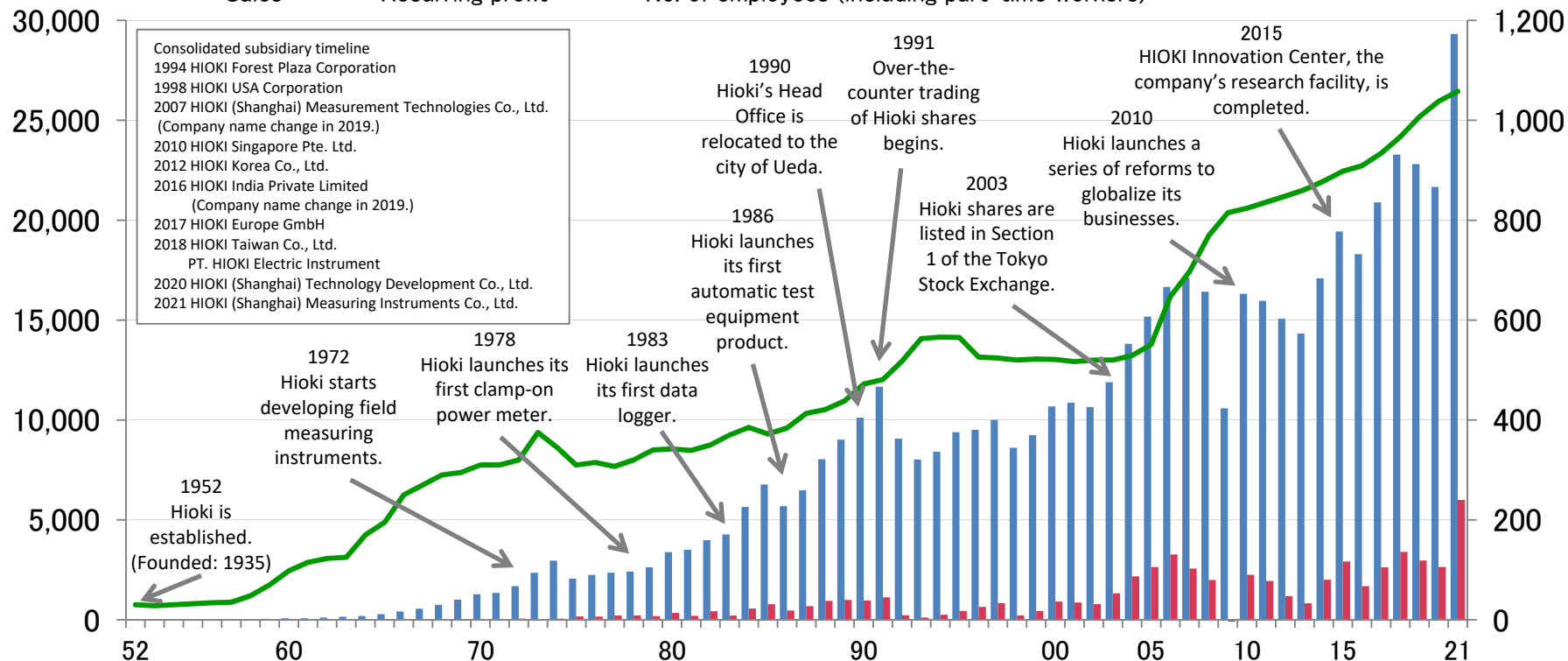
(Millions of yen)

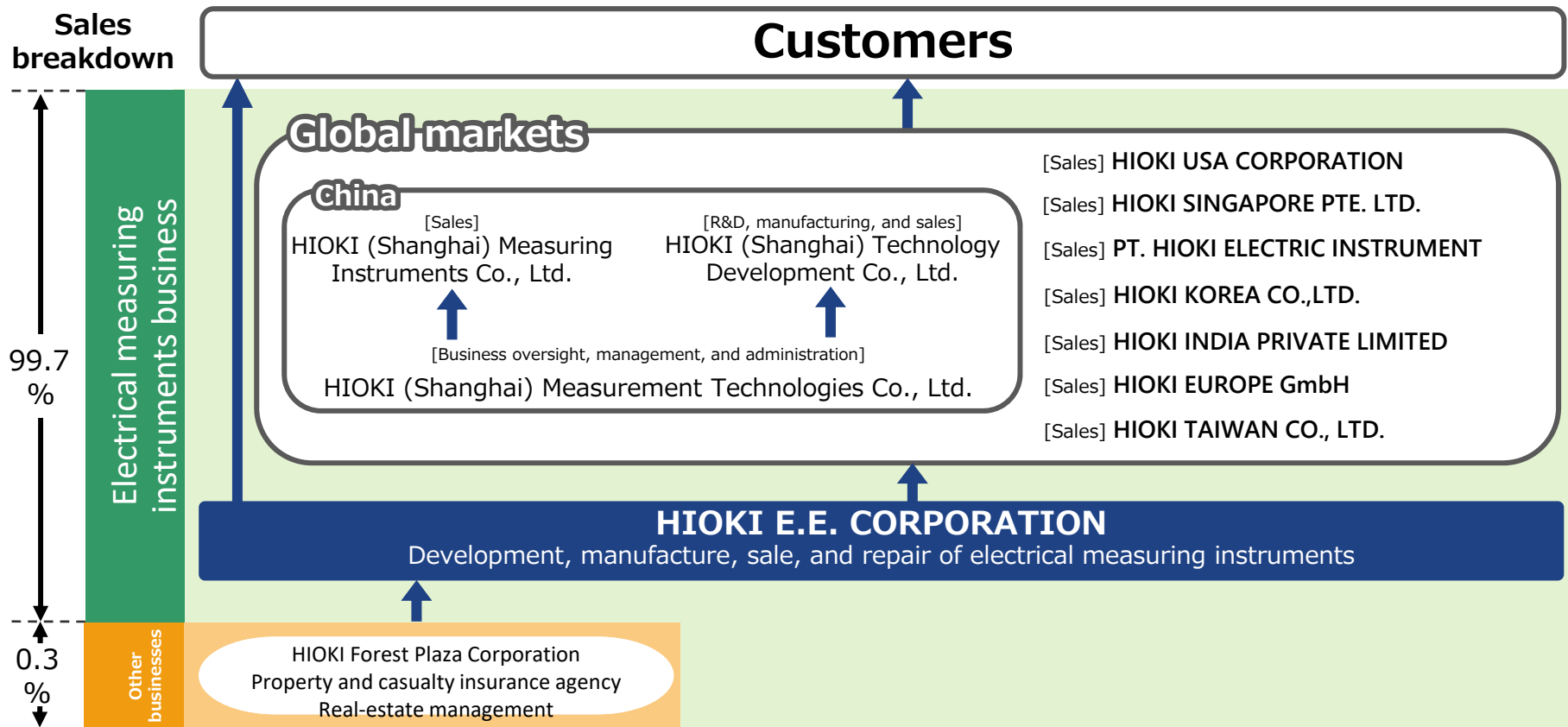
■ Sales

■ Recurring profit

— No. of employees (including part-time workers)

Number of employees





Reference Materials



Vision 2030 Beyond Measure

Hioki is committed to pushing the boundaries of measurement as an industry front-runner, and to becoming a solution creator that works with customers worldwide to realize a sustainable society.

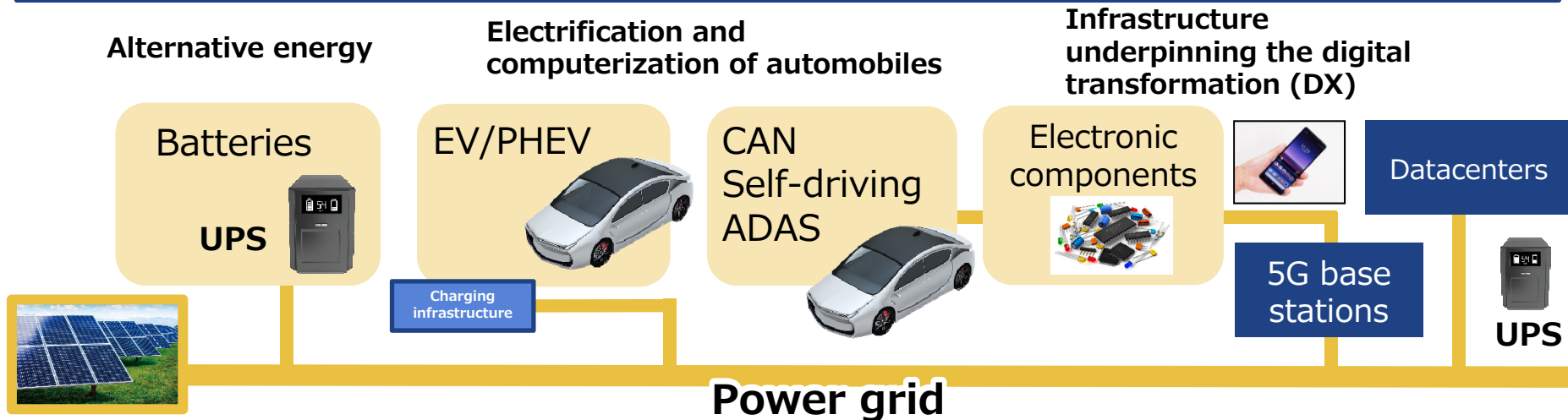


Future Directions of HIOKI's Businesses

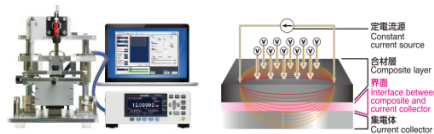
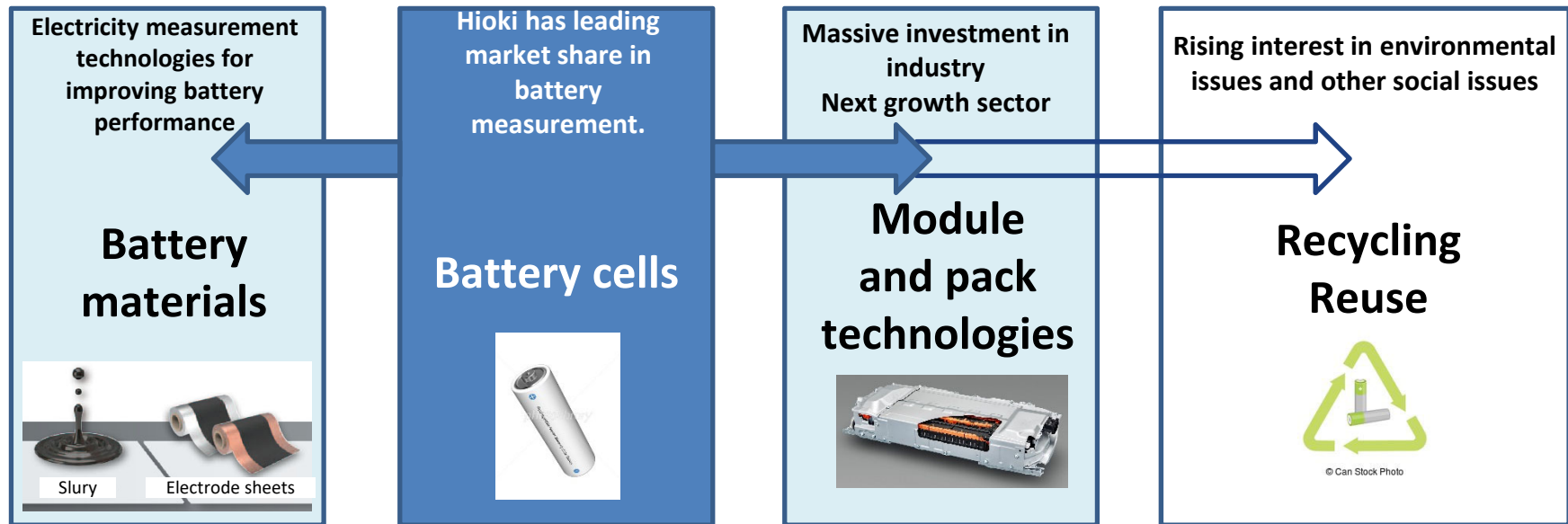
Bringing products to every field that will use electric energy as infrastructure in the future



Focusing development resources on the key markets that comprise a new social system



Contribution to the Battery Life Cycle



Electrochemical analysis



Battery testers



BMS testing



Degradation diagnostic technologies

New Product Launches in Key Markets

Solutions for battery processes

Electrode sheet R&D



Verification of tab weld quality



Charge/discharge testing



Internal resistance measurement



BMS evaluation/testing



Lithium-ion battery production processes

Slurry

Electrode sheets

Coater
Press
Slitting

Sheet cutting
Stacking

Tab
welding

Sealing
Vacuum
drying

Liquid
injection
Impregnation

Charging
Aging

Cell
testing

Module/
pack
testing

Multichannel
measurement



Contamination and separator tear
detection



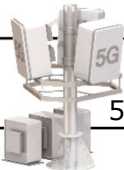
Open voltage
measurement



Open voltage measurement
Cell defect detection/analysis



Battery Types and Applications

Total battery voltage	1000 V		EV buses			
	400 V		Residential storage batteries		EV passenger vehicles	
	230 V				Forklifts	
	72 V				5G base stations	
	48 V					
	24 V				Vacuum cleaners	
	12 V				Electric-assist bicycles	
	3.7 V				Smartphones	
					Notebook computers	
					Smartwatches	
						 Coin batteries
		0.1 mΩ	1 mΩ	10 mΩ	100 mΩ	1Ω
		Battery cell internal resistance				

HIOKI Product Organization and Fields of Use

HIOKI meets customer needs ranging from advanced R&D to production lines and on-site electrical work in every industry with 300 products

Overall organization

R&D

Production lines

Field maintenance

Automatic testing equipment



Package and board manufacture
Electric device manufacture

Data recording equipment

Power generation and distribution
Transport equipment

Machinery
Transport equipment



Power equipment inspections
Elevator maintenance

Electronic measuring instruments

Alternative energy
Materials, environment



Devices and batteries
Motors



Environment
Energy

Field measuring instruments

Electronic devices
Transport equipment



Electrical and power equipment inspections
Communications equipment testing



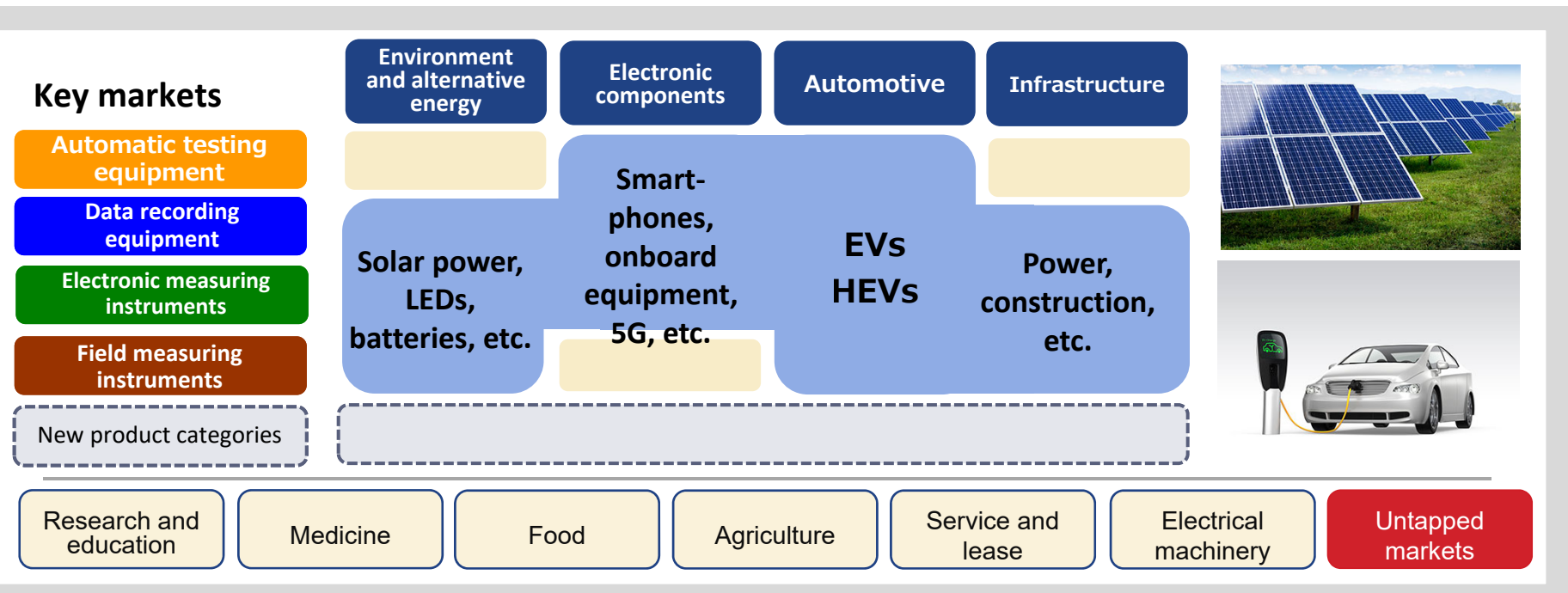
Peripheral equipment and other

Accessories for products shown above

*The width of each application category illustrates its relative contribution to HIOKI's sales

HIOKI's Expanding Products and Markets

Strive to grow and develop by expanding product launches in every market and by creating new product categories

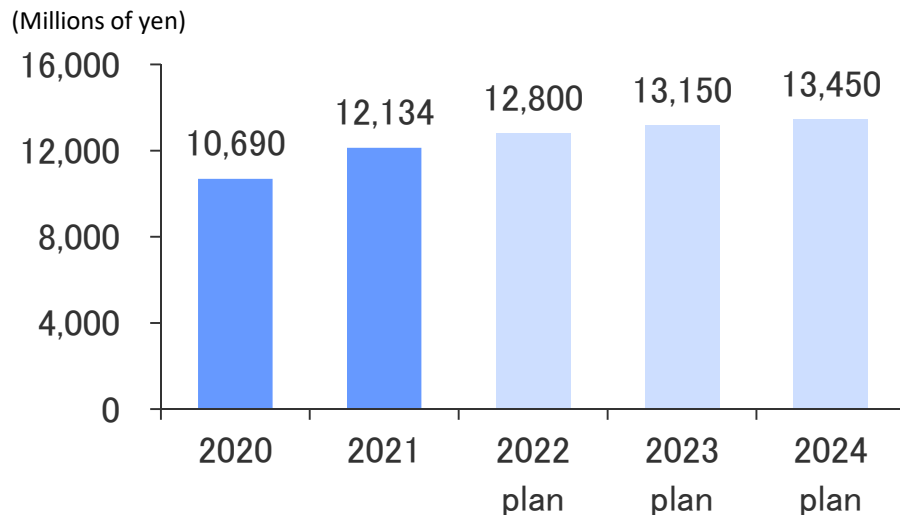


2021 Market Conditions by Product Group

Automatic test equipment		- Succeeded in developing a new market for circuit boards. - Aided by a brisk semiconductor market, sales of test equipment for populated boards grew significantly.
Data recording equipment		- Demand for Memory HiCorders for use in industrial equipment remained flat. - Sales of data loggers for use in applications such as effective use of energy continued to be strong. - Sales of high-dielectric-strength multichannel data loggers for use in battery evaluation grew significantly.
Electronic measuring instruments	Batteries	Sales grew significantly, particularly in China, as we introduced multiple new battery tester models for the battery market.
	Devices	Sales of measuring instruments for electronic devices grew significantly thanks to brisk capital investment in the electronic component industry due to adoption of 5G and the transition to electric drivetrains for automobiles.
	Energy	Sales transitioned to a growth footing thanks to brisk growth in the energy market.
Field measuring instruments	Maintenance	- Sales grew as the importance of electrical equipment maintenance rose as a result of decarbonization and increased reliance on data communications. - Sales grew as we introduced new IoT-enabled products in response to growing demand for IoT support due to changes in the work environment stemming from labor shortages.

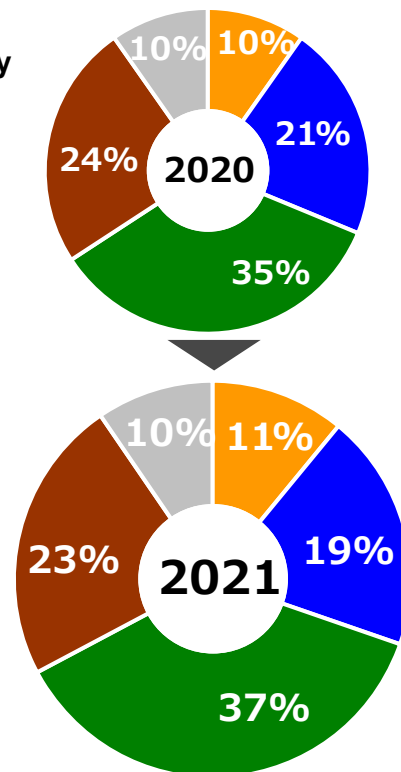
Actual and Forecasted Sales by Geographic Region: Japan

- Will launch a technical consultation service. Expert user experience designers will propose optimizations for the measurement environment.
- Electronic device, automobile, battery, and infrastructure demand is expected to grow as the move away from carbon accelerates.



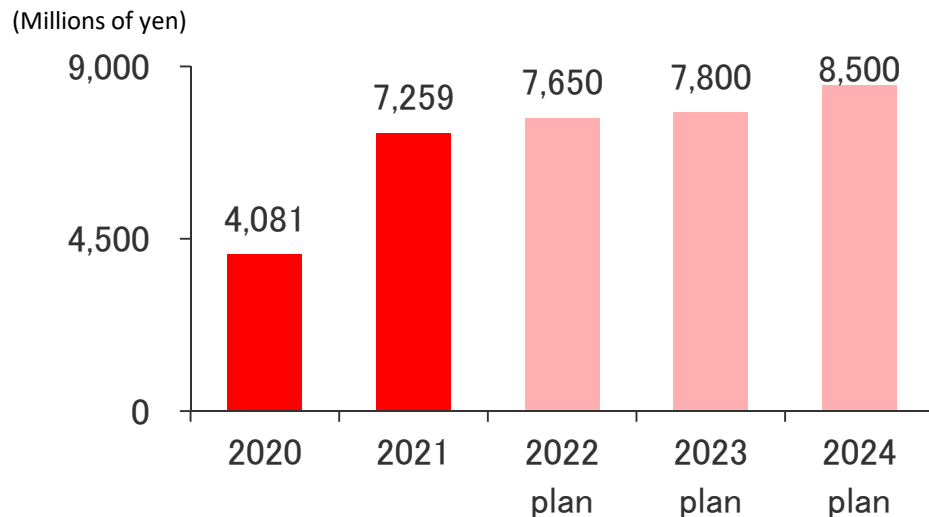
Sales Ratio by Product Category

- Automatic test equipment
- Data recording equipment
- Electronic measuring instruments
- Field measuring instruments
- Peripheral equipment & other



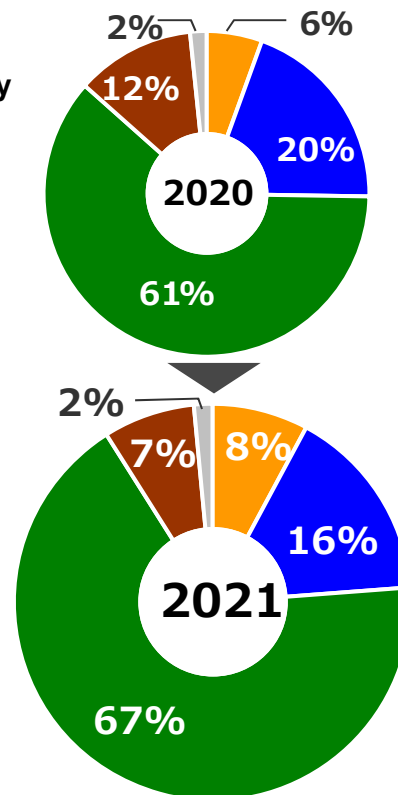
Actual and Forecasted Sales by Geographic Region: China

- Building on growth of the battery market, will strengthen energy-related businesses that are helping customers implement carbon-free operations.
- Will develop new demand through a customer-focused approach. Will introduce solutions through the R&D functions of subsidiaries' subsidiaries.



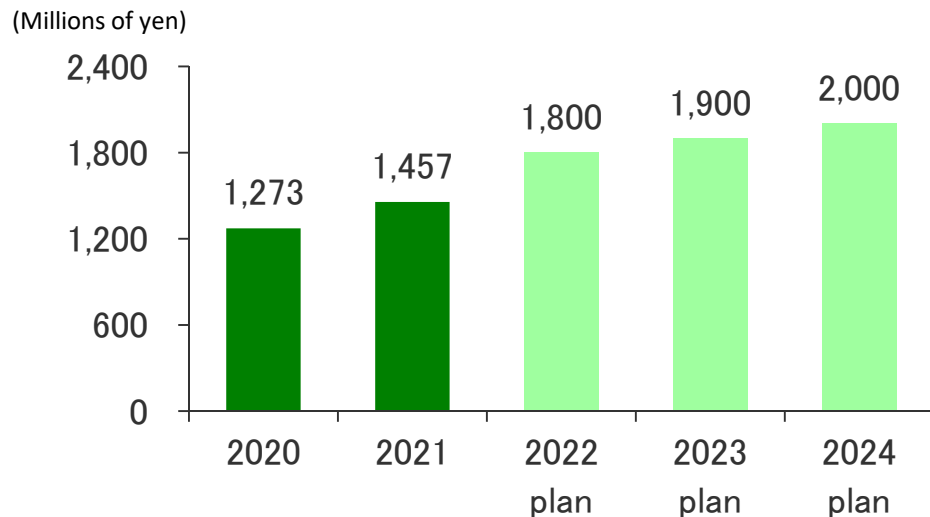
Sales Ratio by Product Category

- Automatic test equipment
- Data recording equipment
- Electronic measuring instruments
- Field measuring instruments
- Peripheral equipment & other



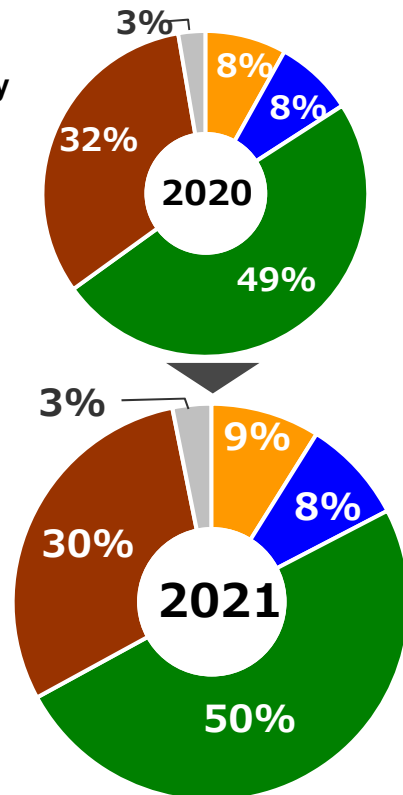
Actual and Forecasted Sales by Geographic Region: Southeast Asia (including Oceania)

- Expect investment in lithium-ion battery production and EV production to rise throughout Southeast Asia.
- Will start selling products through an online store.



Sales Ratio by Product Category

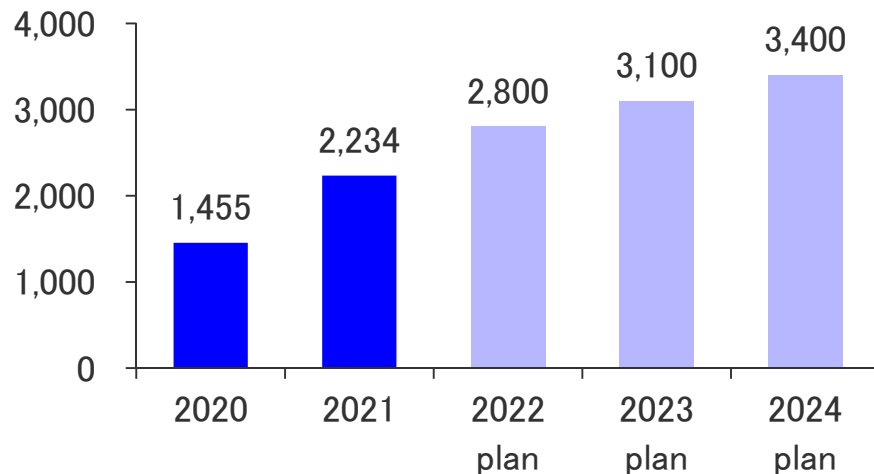
- Automatic test equipment
- Data recording equipment
- Electronic measuring instruments
- Field measuring instruments
- Peripheral equipment & other



Actual and Forecasted Sales by Geographic Region: U.S.A. (North and South America)

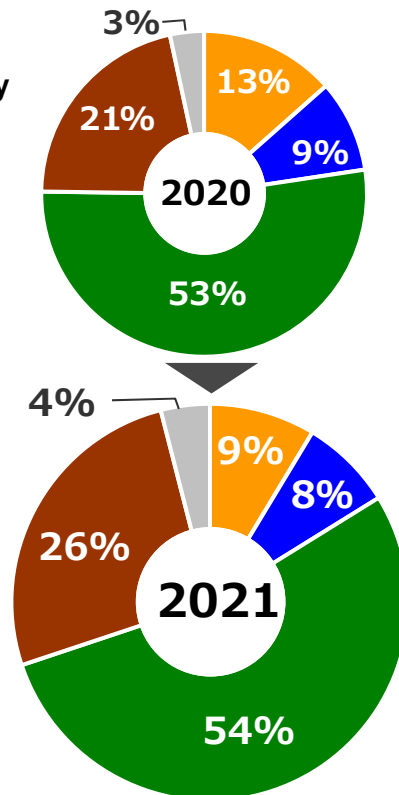
- Investment in carbon-free energy, including the EV industry and next-generation batteries, will accelerate.
- Consolidation and human resources investment will continue in the carbon-free energy sector.

(Millions of yen)



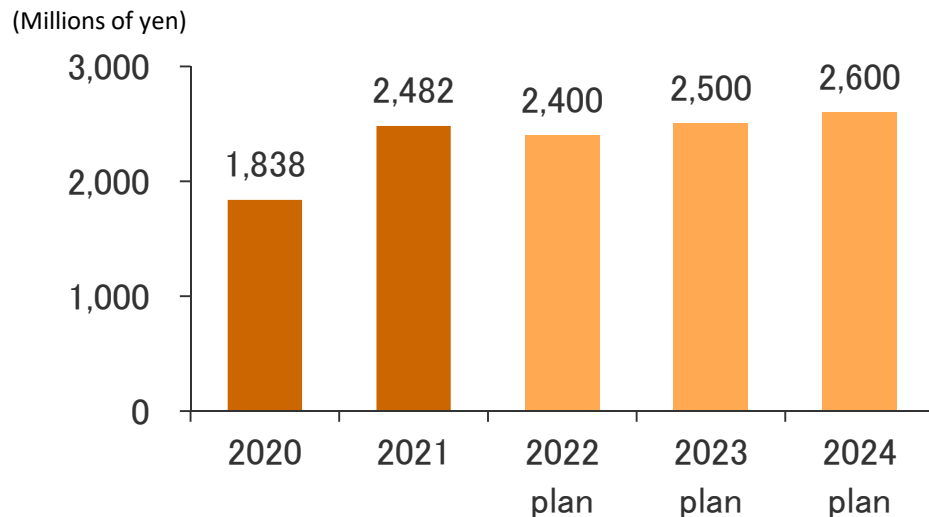
Sales Ratio by Product Category

- Automatic test equipment
- Data recording equipment
- Electronic measuring instruments
- Field measuring instruments
- Peripheral equipment & other



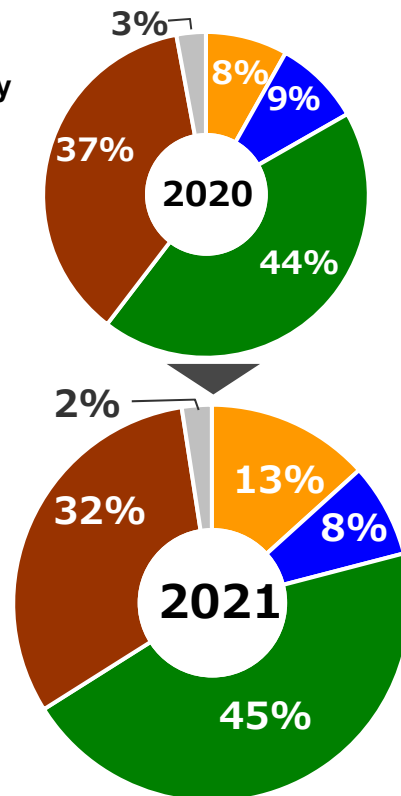
Actual and Forecasted Sales by Geographic Region: Korea

- Capital investment by battery manufacturers will continue.
- Will create new solutions through our customer-focused approach by strengthening technical functions.



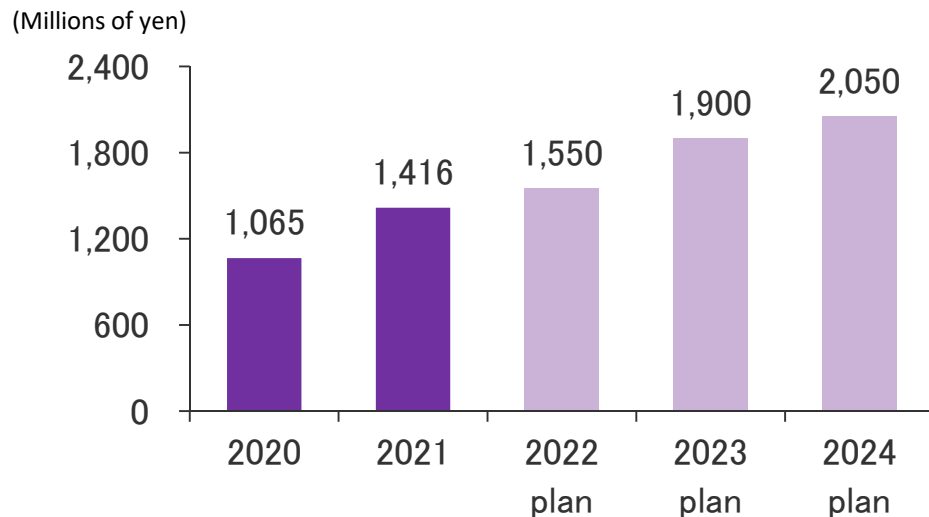
Sales Ratio by Product Category

- Automatic test equipment
- Data recording equipment
- Electronic measuring instruments
- Field measuring instruments
- Peripheral equipment & other



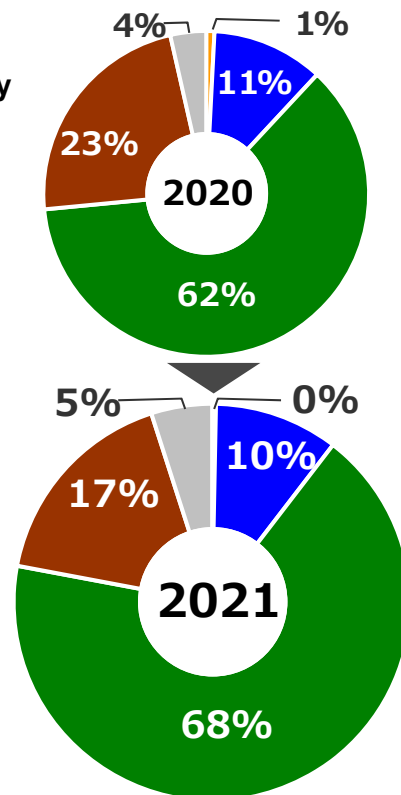
Actual and Forecasted Sales by Geographic Region: Europe

- R&D investment will accelerate along with battery production investment in Europe.
- Will look to expand our sales network by strengthening marketing functions.



Sales Ratio by Product Category

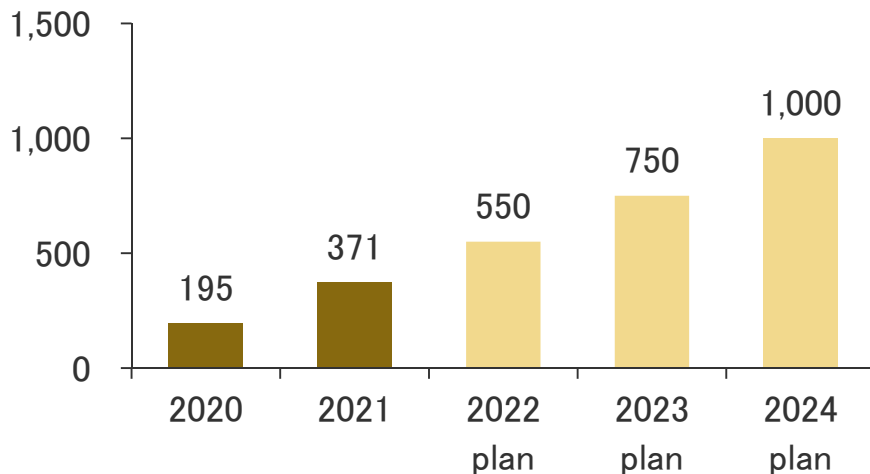
- Automatic test equipment
- Data recording equipment
- Electronic measuring instruments
- Field measuring instruments
- Peripheral equipment & other



Actual and Forecasted Sales by Geographic Region: India

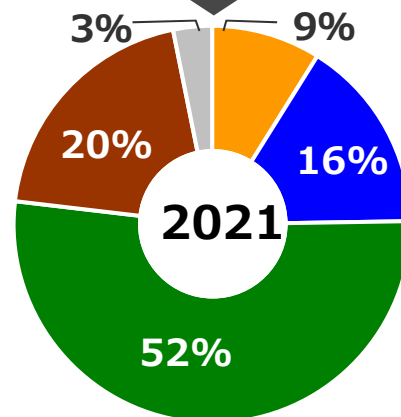
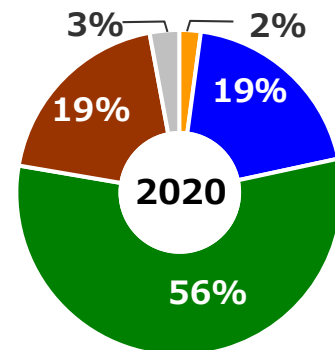
- Expect to see investment in the manufacturing increase under the “Make in India” initiative.
- Local battery production will accelerate. Will work to collaborate with equipment manufacturers.
- Investment in the EV industry will accelerate and demand is expected to grow.

(Millions of yen)



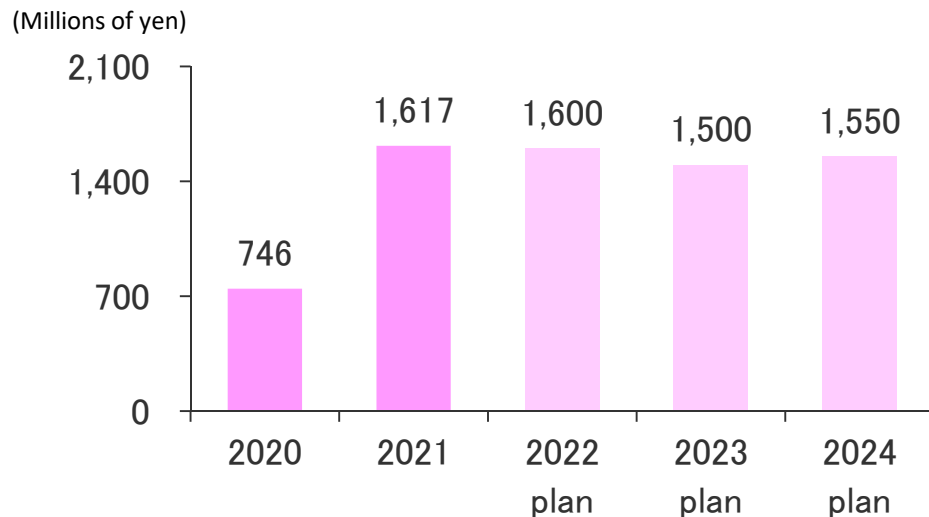
Sales Ratio by Product Category

- Automatic test equipment
- Data recording equipment
- Electronic measuring instruments
- Field measuring instruments
- Peripheral equipment & other



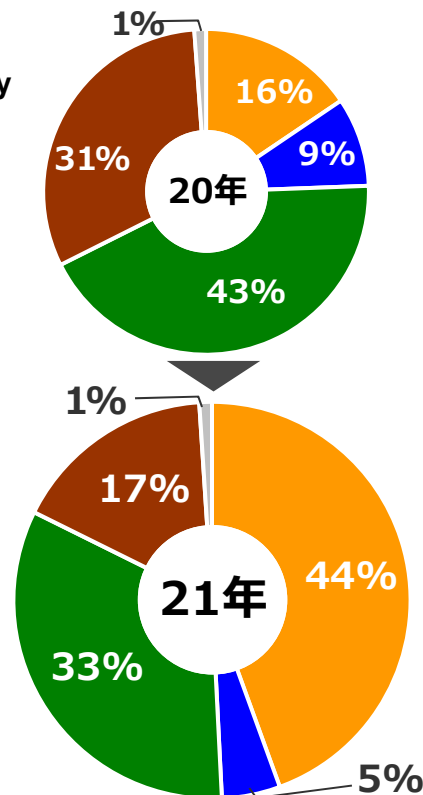
Actual and Forecasted Sales by Geographic Region: Taiwan

- Expect to see capital investment due to ongoing investment in the device and semiconductor package markets as well as investment in moving production facilities from China to Taiwan.
- Expect battery R&D investment to grow.



Sales Ratio by Product Category

- Automatic test equipment
- Data recording equipment
- Electronic measuring instruments
- Field measuring instruments
- Peripheral equipment & other



Actual and Forecasted Sales by Geographic Region: Other

Middle East

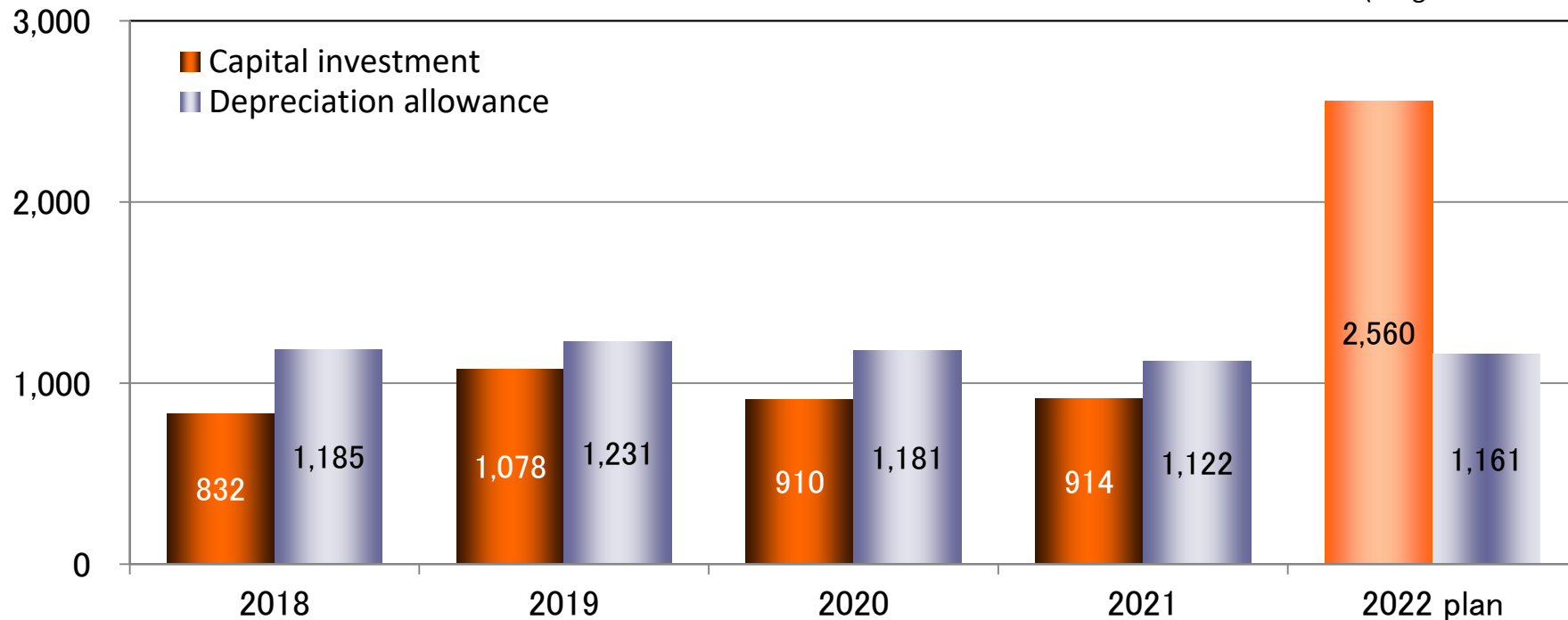
2022 plan: ¥250 million

The potential for renewable energy, particularly solar power, is high in the region due to efforts by oil-producing countries in the Gulf to pursue decarbonization. Initiatives targeting hydrogen and fuel ammonia generation as clean energies are proceeding at a rapid clip, driving up demand for electrical measurement in generation, transport, and maintenance processes.

Capital Investment and Depreciation Allowance

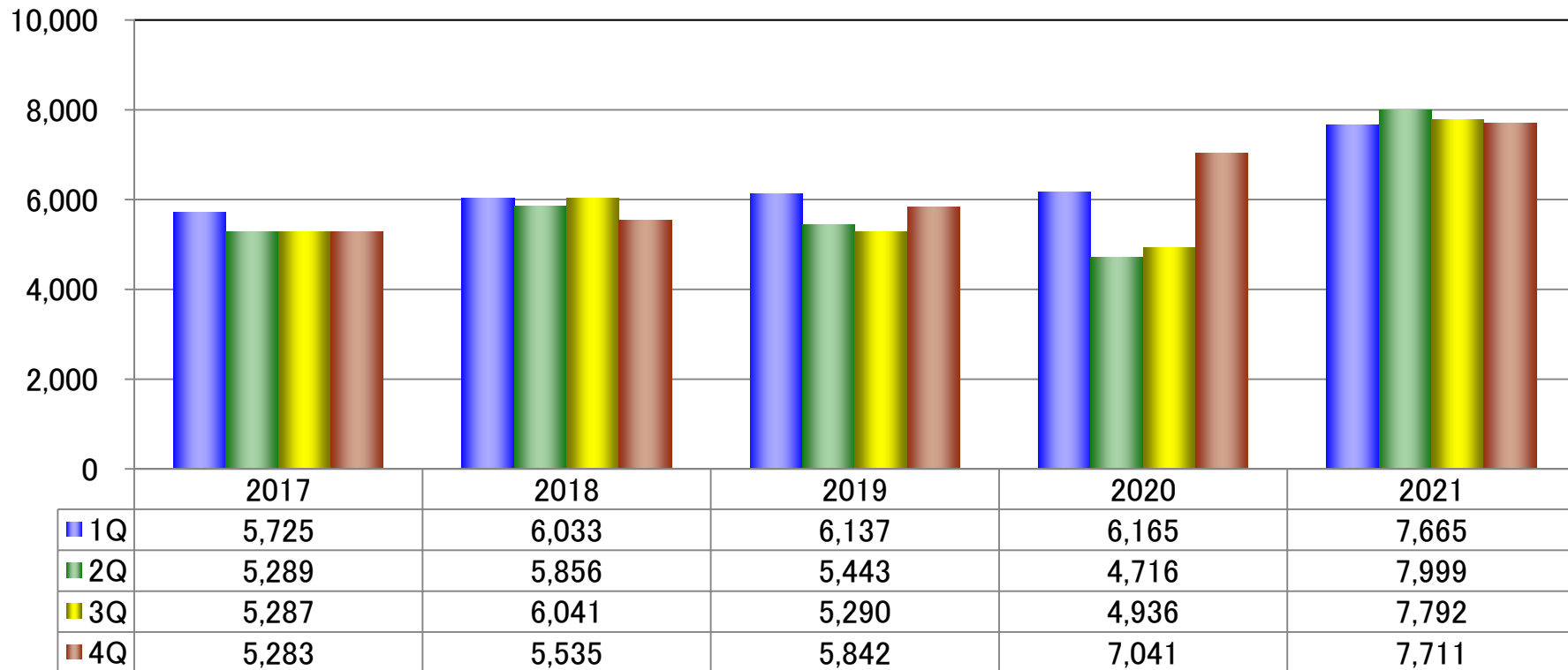
(Millions of yen)

(Tangible and intangible)



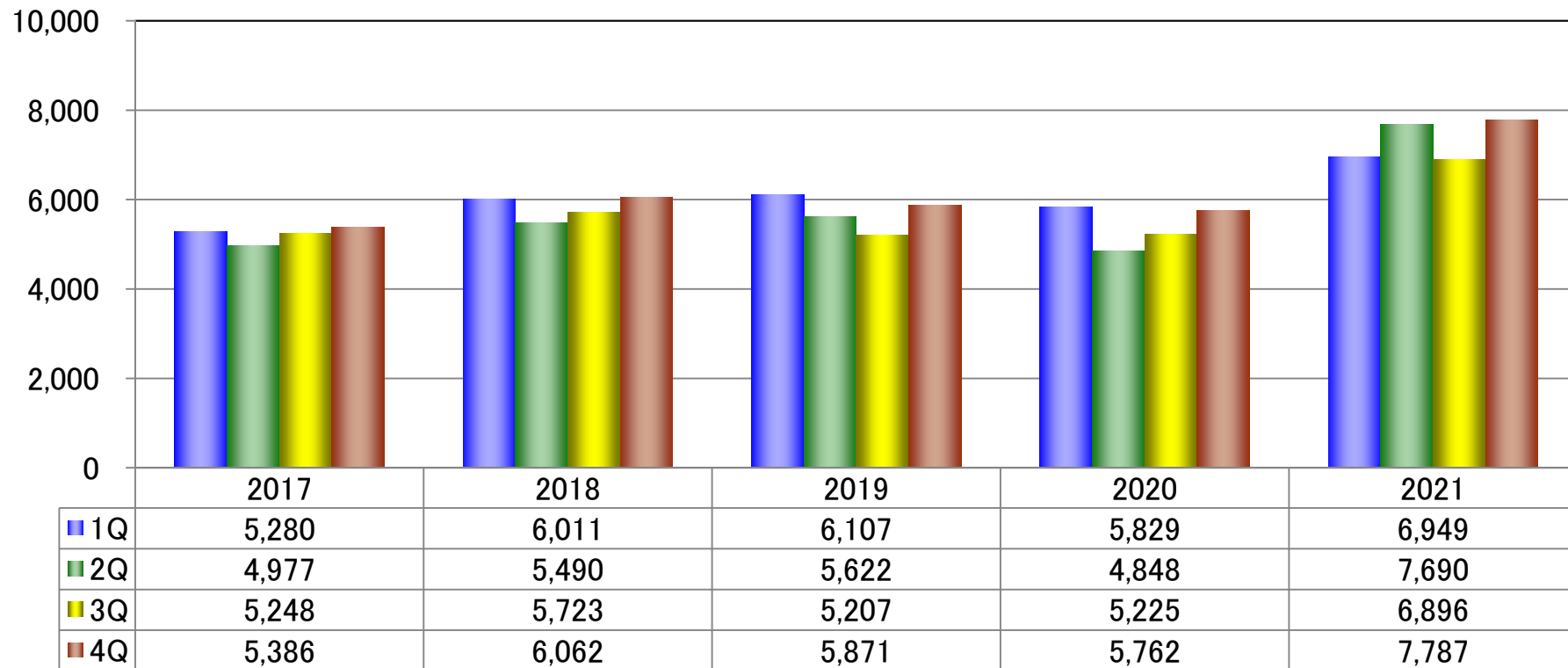
Quarterly Order Volume

(Millions of yen)



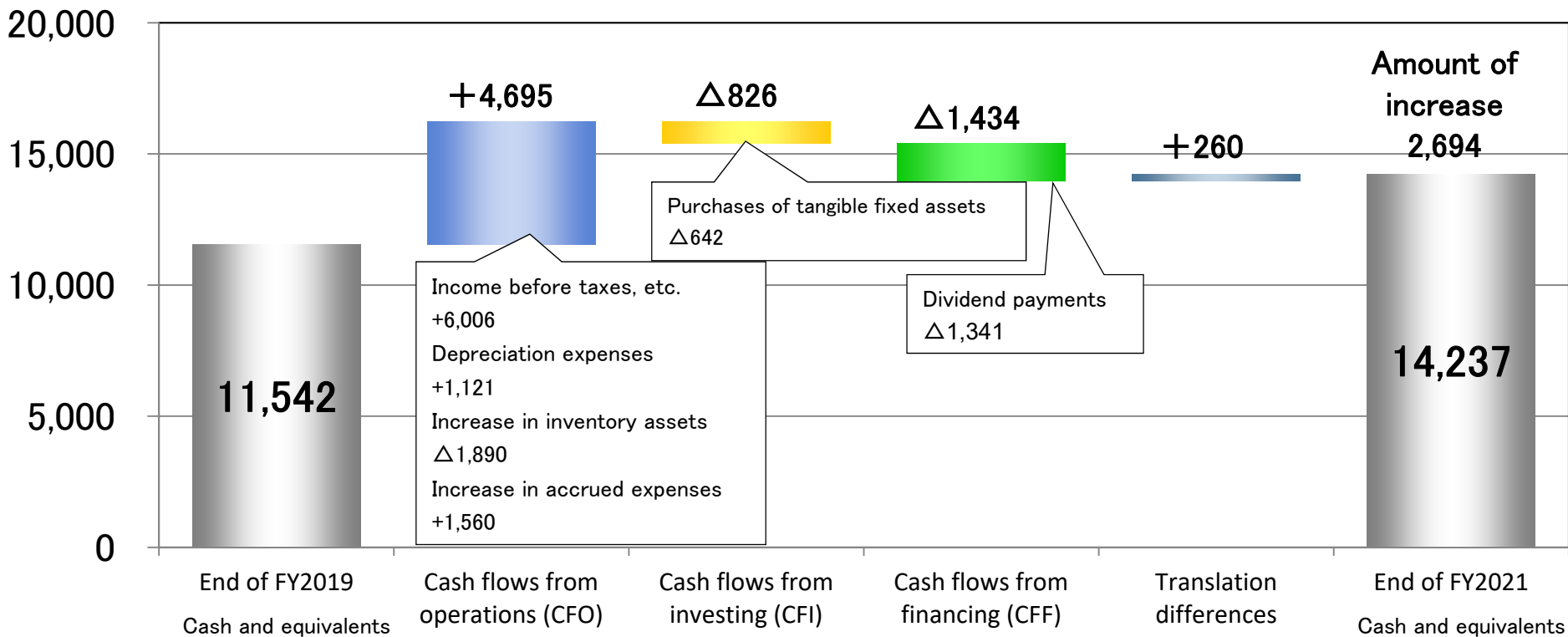
Quarterly Sales

(Millions of yen)



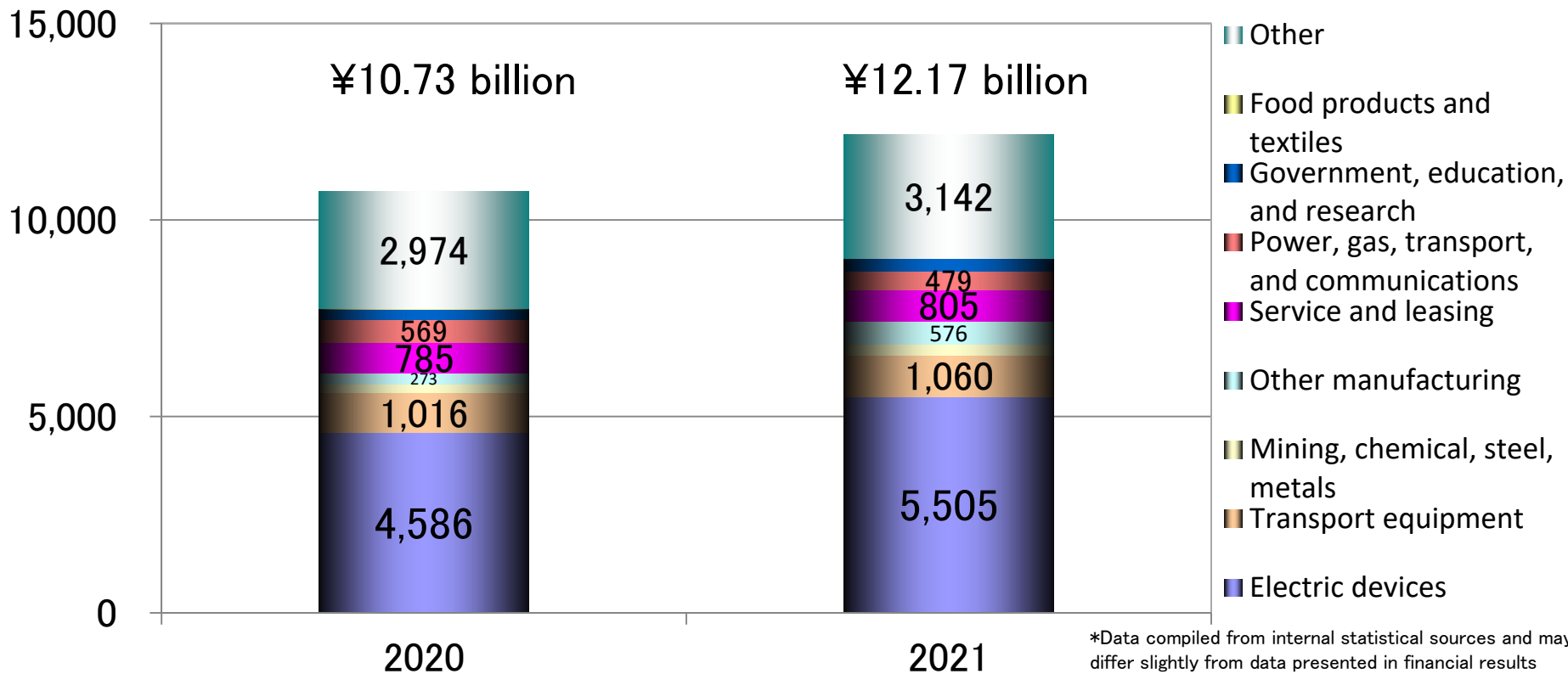
Cash Flows

(Millions of yen)



Trend in Sales (Domestic) by Industry

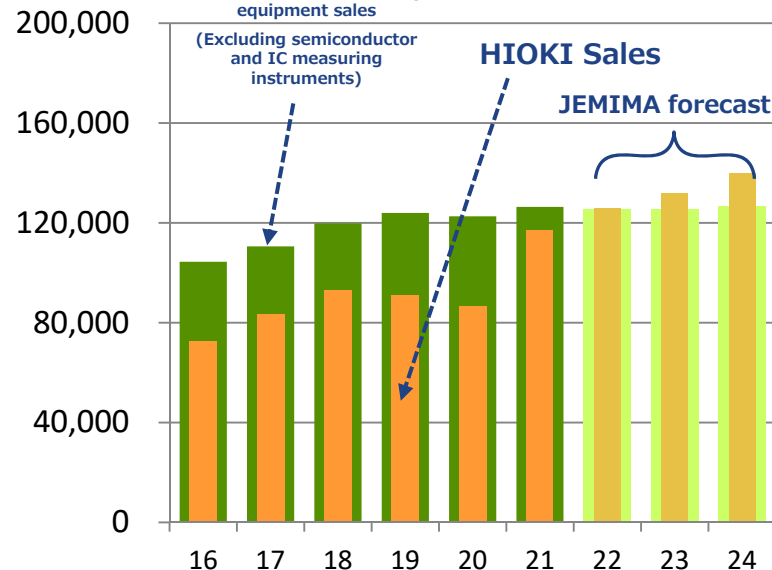
(Millions of yen)



*Data compiled from internal statistical sources and may differ slightly from data presented in financial results briefings.

Business Environment in the Electrical Measuring Instruments Industry and Future Outlook

Electric test and
Measuring
equipment sales
(Millions of yen)



HIOKI sales
(Millions of
yen)

*Japan Electric Measuring Instruments Manufacturers' Association (JEMIMA) forecast

The group forecasts an annual growth rate of +0.4% from FY2021 to FY2025.

Factors: Growth in the use of high-speed communications such as 5G is driving up demand for the ability to measure components and modules. Development of electric drivetrains for automobiles and more advanced self-driving functions is increasing the need for the ability to measure large numbers of electronic components. Growing momentum in the areas of increasingly high-performance batteries and fuel cell development is pushing up demand for measurement capabilities for use in material development and evaluation.

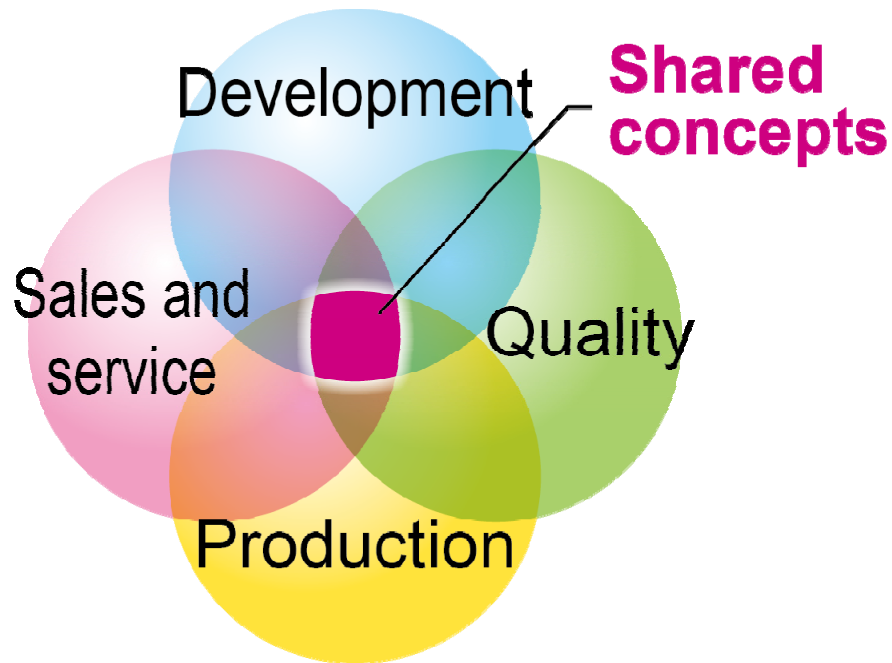
* As defined by JEMIMA, electric test and measuring equipment accounts for about 30% of electricity meters. Under the JEMIMA classification scheme, HIOKI's products consist of general measuring instruments, obtained by excluding semiconductor and IC measuring instruments from the electric test and measuring equipment category.

* Based on statistical data from the Japan Electric Measuring Instruments Manufacturers' Association. Sales figures for 2020 and subsequent years reflect JEMIMA forecasts (as of December 2020).

Improving Value-added Productivity

Concurrent engineering

In HIOKI's approach to product development, departments come together organically with the goal of improving productivity.

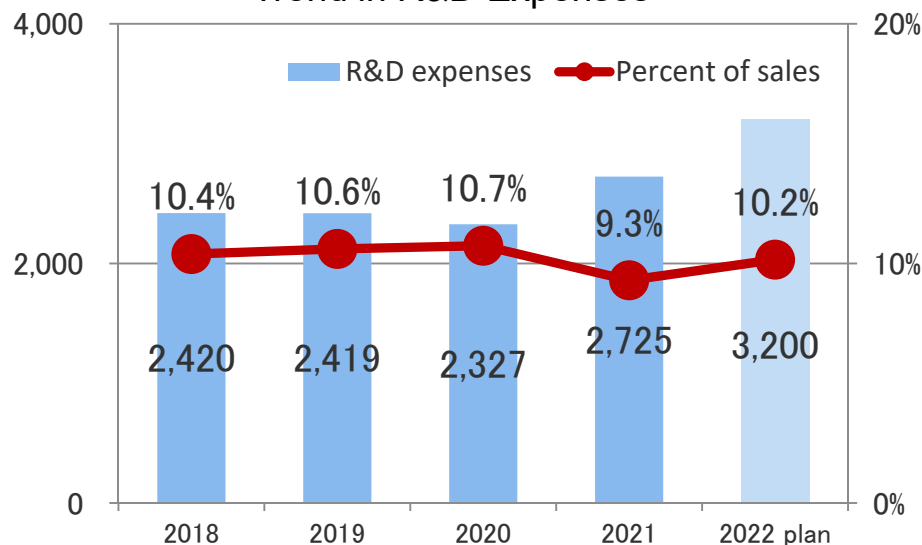


Development Capability: Unique Products Built around Core Technologies

- Patent program that motivates inventors
- R&D spending as percent of sales: Greater than 10%

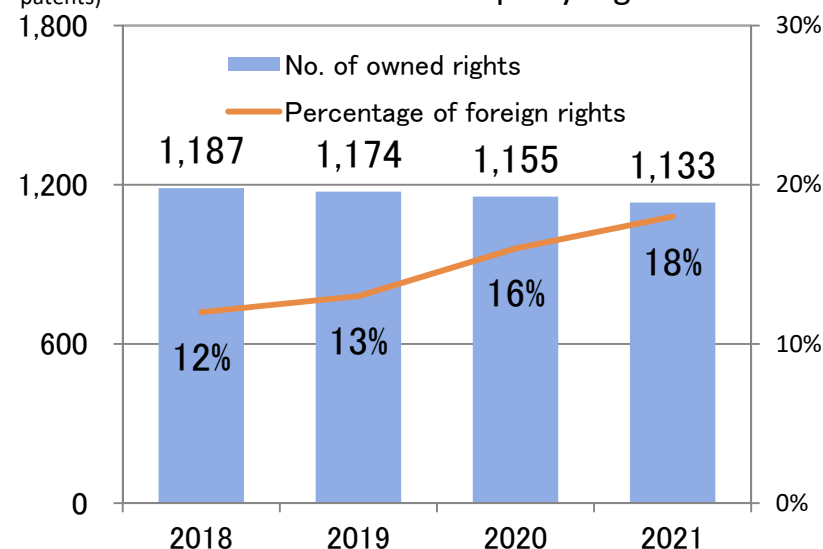
(Millions of yen)

Trend in R&D Expenses



(Rights or patents)

Trend in Industrial Property Rights



Production Capability: Manufacturing Calibrated to Sales Velocity



Quality

Aggressively practicing a “Quality First” approach from the standpoint of the “Sangen Principle” based on the 5S philosophy



Cost

Enhancing initiatives at the source of development
Minimizing cost through leveled production



Delivery

Anticipating customer information and accommodating customer requests
Shortening delivery times for after-sales service

Sales Capabilities: Customer-focused Solutions Sales

Domestic sales

- Direct marketing to domestic customers
- About 70 sales staff at 12 domestic facilities
- PR via webinars and other non-contact means



Global sales

- Group companies: 10 facilities
- Overseas representative offices: 2 facilities
- Realizing market potential in partnership with overseas distributors (about 280 companies)



Assessing latent customer requests and future needs

Automatic Test Equipment

● Pass/ fail testing of electronic circuit boards

Principal products	Fields of use (applications)
Populated circuit board testing systems	Testing circuit boards on which electronic components have already been mounted
Bare board testing systems	Testing circuit boards with embedded active and passive devices or boards on which no components have been mounted (Including IC packages and flexible boards used in devices such as mobile phones)



In-Circuit Tester FA1220



Flying Probe Tester FA1816



Flying Probe Tester FA1817

Reliable detection of latent defects on high-density circuit boards

Data Recording Equipment

- Recording and analyzing changes in electrical signals over time

Principal products

Fields of use (applications)

Memory recorders

Observing and recording waveforms for high-speed phenomena in an extensive array of applications ranging from the electric field to the machinery field

Developed in 1983

Data loggers

Monitoring and recording long-term changes in temperature, voltage, and other characteristics across numerous channels

Capable of capturing large amounts of data over extended periods of time



Memory HiCorder
MR6000



Memory HiLogger
LR8450

Electronic Measuring Instruments: Batteries

● Battery evaluation and testing

Principal products

Fields of use (applications)

Battery testers

Battery R&D and shipping inspections;
measuring internal resistance and battery
voltage

Extensive product line to accommodate a variety of batteries

Safety testers

Measuring batteries' insulation resistance
and performing withstand voltage testing

Broad product line for an array of applications

Digital multimeters

Providing high accuracy and multichannel
capability that extends from R&D to the
production line

Broad product line for an array of applications



BATTERY HiTESTER
BT3562A



Insulation Tester
ST5520



PRECISION DC VOLTmeter
DM7276

Electronic Measuring Instruments: Devices

● Evaluating and testing electronic components and devices

Principal products

Fields of use (applications)

Circuit element
measuring instruments

Testing on electronic component production
lines
Evaluating the performance of materials

Fast, high-stability measurement in a compact, lightweight package

Super megohmmeters

Accommodating embedded applications such
as laminated ceramic capacitor mass-
production testing

Meeting a variety of needs with an extensive product line

Resistance meters

Supports built-in automatic machines such as mass
production inspection of multilayer ceramic capacitors

Meeting a variety of needs with an extensive product line



Impedance Analyzer
IM7585



SUPER MEGOHM METER
SM7110



RESISTANCE METER
RM3545

Electronic Measuring Instruments: Energy/Other

- Power and power quality analysis in the environment and energy field

Principal products

Fields of use (applications)

Power meters

Evaluating and analyzing inverters and motors
Reducing energy use by electrical equipment;
managing power

HIOKI developed the first clamp-type meter in 1978.

Power quality analyzers

Verifying the quality of dispersed power supplies such as
alternative energy (solar and wind power, fuel cells, etc.) and
cogeneration systems

Analytical devices capable of identifying the causes of power supply problems

Current probes

Observing current waveforms

For use as oscilloscope sensors



Power Analyzer
PW8001



Power Quality Analyzer
PQ3198



Current Probe
CT6711

Field Measuring Instruments

- Performing maintenance and inspections of electrical wiring work and equipment

Principal products

Fields of use (applications)

Clamp ammeters

Maintenance and inspections of electrical wiring work and equipment

A powerful brand with a long history

Insulation resistance testers

Maintenance and inspections of electrical work and equipment

A must-have instrument for electrical work

Digital multimeters

Measuring characteristics from voltage to current and resistance

Used in all applications



AC/DC Clamp Meter
CM4001



Insulation Tester for Photovoltaic Systems
IR4053



Digital Multimeter DT4261

Note on the Information in This Presentation

Plans, forecasts, strategies, and other information in this presentation relating to future business performance were compiled on the basis of currently available data and by their nature incorporate a certain degree of risk and uncertainty. Actual performance will be determined by a variety of important factors and may vary significantly.



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