# HIOKI E.E. CORPORATION Financial Results Briefing for the Fiscal Year Ending December 31, 2022

(Securities Code: 6866)

February 2023



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# 1. Company Overview

HIOKI

Photograph: The four seasons at HIOKI Forest Hills: Spring

# **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 1,009 (consolidated-basis, including part-time workers) (as of December 31, 2022)



# 2. Financial Results Overview

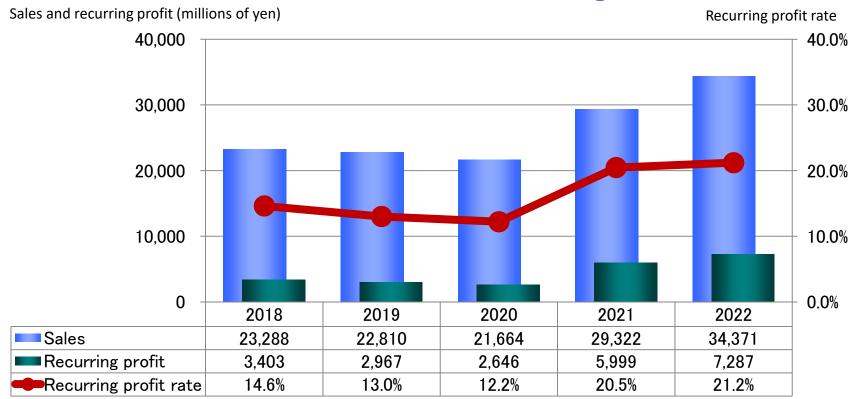
HIOKI

Photograph: The four seasons at HIOKI Forest Hills: Summer

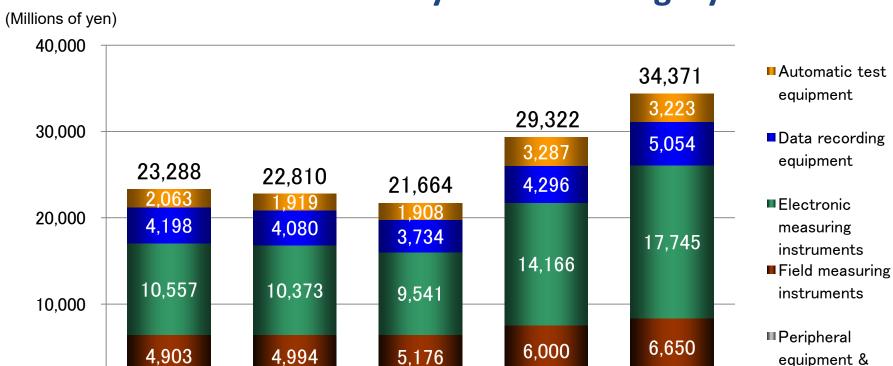
# **Overview of 2022 Results**

	2021		2022		
	Results (millions of yen)	Percent of sales (%)	Results (millions of yen)	Percent of sales (%)	Year-on-year (%)
Sales	29,322		34,371		117.2%
Cost of sales	15,683	53.5%	18,501	53.8%	118.0%
Selling, general, and administrative expenses	7,888	26.9%	8,799	25.6%	111.5%
Operating profit	5,750	19.6%	7,070	20.6%	123.0%
Recurring profit	5,999	20.5%	7,287	21.2%	121.5%
Net income	4,521	15.4%	5,330	15.5%	117.9%
Earnings per share	¥331.35		¥390.47		

# **Trend in Sales and Recurring Profit**



# **Trend in Sales by Product Category**





other

1,696

2022

1,303

2020

1.570

2021

0

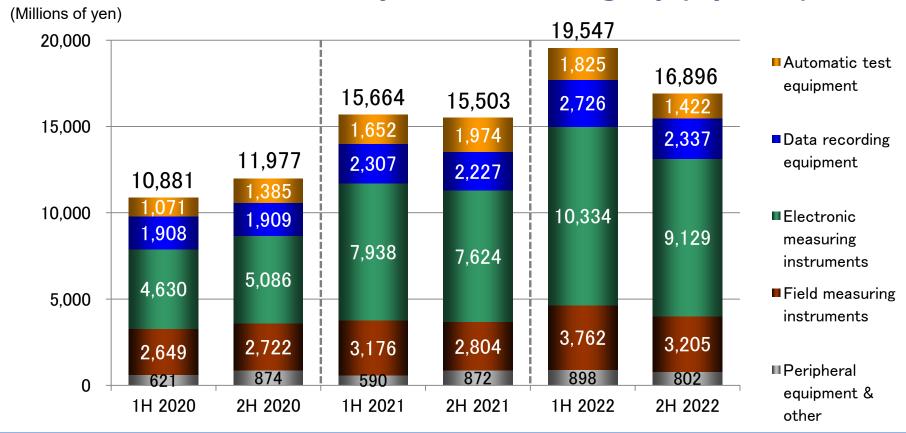
1.564

2018

1.442

2019

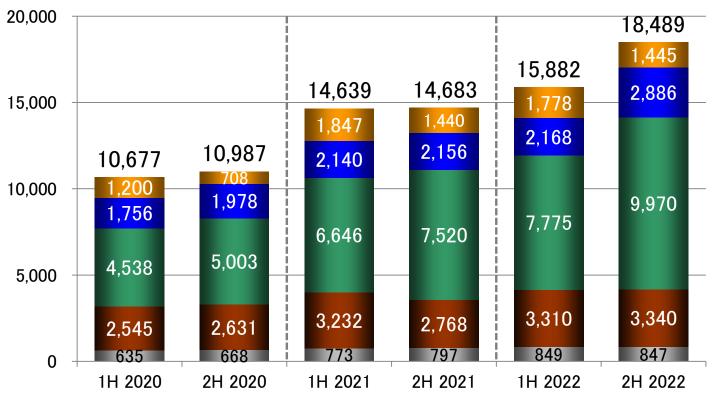
# **Trend in Orders by Product Category (by Half)**





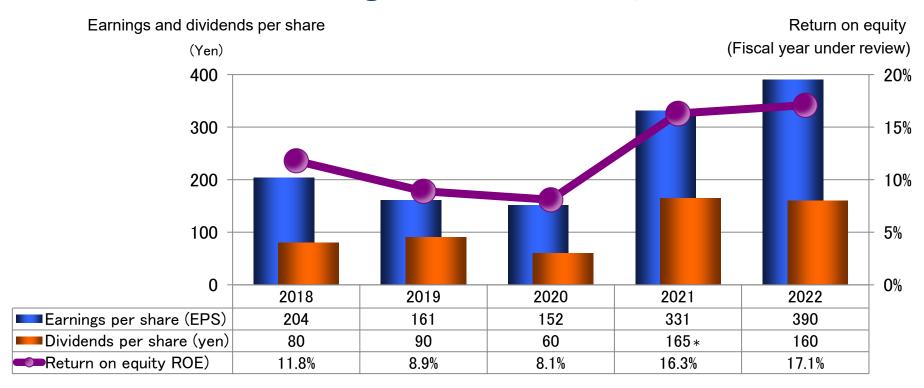
# Trend in Sales by Product Category (by Half)

(Millions of yen)



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

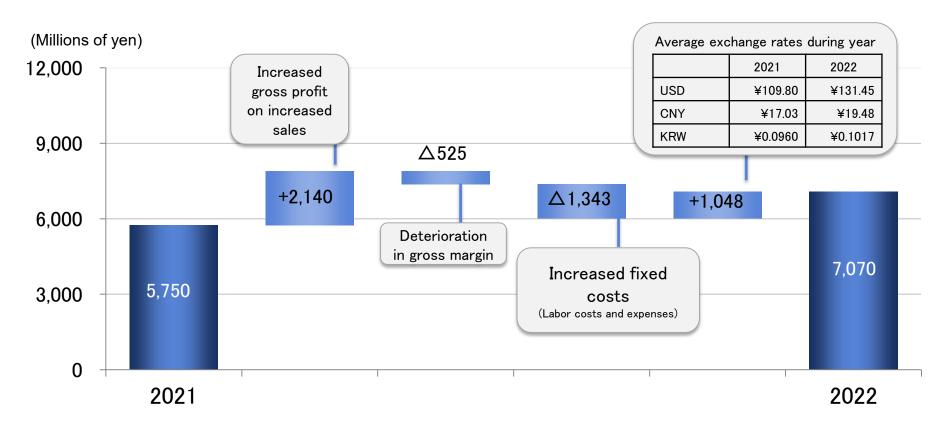
# Trend in Earnings and Dividends per Share



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



# 2022: Factors Impacting Operating Income



# **Dealing with Risk Factors**

Risk	2022 status	2023 expectation				
Part procurement risk	<ul> <li>We used external resources to change existing product designs.</li> <li>We procured parts at costs exceeding market prices via a variety of routes while giving top priority to fulfilling our responsibility to supply parts to customers. During the second half, procurement conditions improved.</li> </ul>	Improvement, with some exceptions (Risk declining)				
Risk of increased costs due to higher raw material and energy prices and soaring shipping costs	<ul> <li>We strengthened earnings by reassessing the suitability of product pricing in Japan abroad.</li> </ul>	Continuation of 2022 conditions				
Risk of economic stagnation due to urban lockdowns resulting from the COVID-19 pandemic (variants)	<ul> <li>Our inability to ship products domestically within China, which lasted for two months last April and May, was resolved in July.</li> <li>We finished studying how to revamp structures to prepare for distribution snags in China.</li> <li>Orders for some products slowed following a rise in infections in China at the end of 2022.</li> </ul>	Unclear but expected reduction in risk due to normalization of life with COVID				
Risk of fluctuations in performance due to exchange rates	Yen weakness fueled growth in revenue and profit.	Our 2023 business plan is based on an appreciating yen, but future exchange rates remain unclear.				

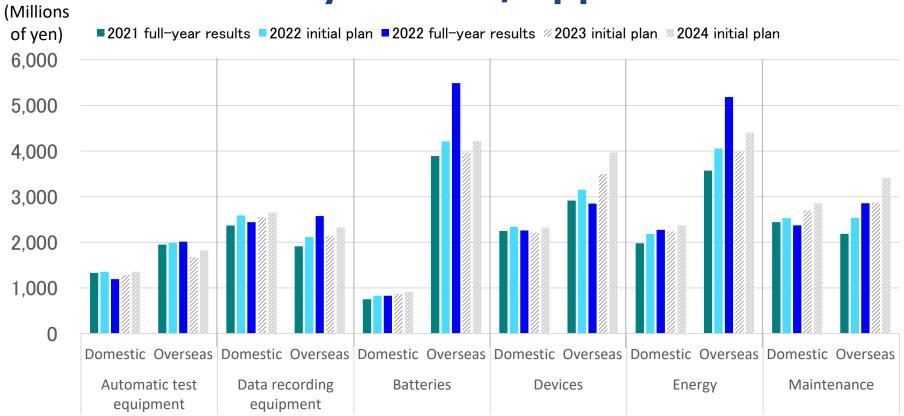


### **Trend in Order Backlog**



The halt in accepting orders and issuing quotes, which began in January 2022, <u>has</u> <u>already been</u> resolved.

# Sales by Market/Application



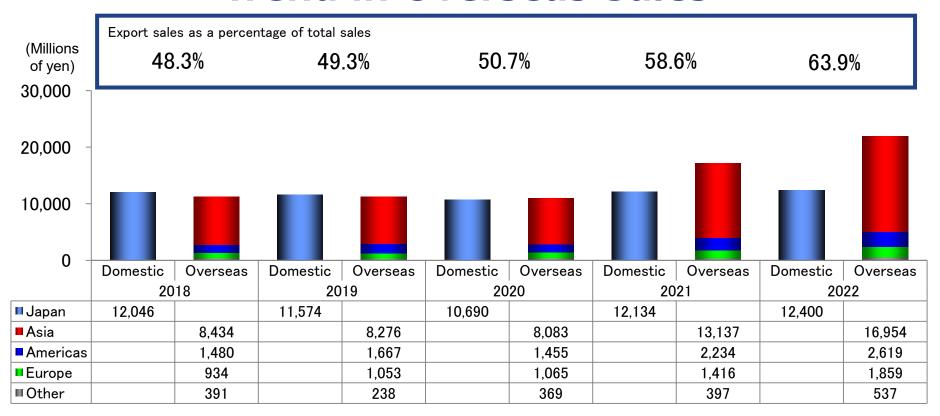


### **Factors in Success/Failure in Achieving Plan Goals**

Product category	Factors				
Data recording instruments (International)	<ul> <li>Efforts to manage thermal energy in order to ensure effective energy use became more sophisticated.</li> <li>Demand for high-speed, high-precision data loggers grew overseas.</li> </ul>				
Batteries (Overseas)	<ul> <li>Companies made investments to increase battery production for EVs in the face of brisk sales worldwide.</li> <li>We launched battery inspection equipment designed for use with EVs and other products with new technologies.</li> </ul>				
Devices (Domestic/overseas)	<ul> <li>Investment in parts engineered to deliver high-voltage reliability for use in xEVs remained robust.</li> <li>Investment in mass production, particularly by overseas electronic component manufacturers, declined as worldwide demand for smartphones and PCs slowed.</li> </ul>				
Energy (Overseas)	• The electrical energy measurement field grew rapidly thanks to brisk investment in EV R&D, PV inverter mass production, and energy savings in response to ongoing decarbonization efforts.				
Maintenance (Overseas)	<ul> <li>The pace of EV and renewable energy development picked up, and demand for instruments for use in maintenance management applications rose.</li> <li>We enhanced offerings of instruments and software designed to boost the efficiency of work carried out in the field.</li> </ul>				



# **Trend in Overseas Sales**



# **Management Targets**

Recurring income rate on overseas sales: 20%

Percentage of overseas sales: 70% or greater

Return on equity (ROE): 10% or greater

# Fiscal year ended December 2022

Recurring income rate on overseas sales: 21.2% Percentage of overseas sales: 63.9% Return on equity (ROE): 17.1%



# 3. Mid-term Business Plan and Strategy



Photograph: The four seasons at HIOKI Forest Hills: Winter

# 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 development 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.

# 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** 

# **Five Innovation Initiatives**

### Creating new value

- Our sales subsidiary in opened a new sales branch in Bangalore after previously launching a similar facility in Pune. We're strengthening our face-to-face sales activities worldwide.
- We're also strengthening assignments of personnel to overseas sales subsidiaries, for example by taking advantage of internal recruitment.

# Building new production structures

- The Sakaki Plant, which opened the year before last, began operating at full scale as a facility dedicated to
  producing field measuring instruments. We completed a construction project to add floor space to the Head
  Office Plant and improved lines of movement. We expect to continue improving productivity going forward.
- We continued to focus on communicating closely with suppliers in an effort to facilitate smooth production.

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

- We're establishing a new Creative Collaboration Lab at the Innovation Center (construction will be completed in March 2023).
  - We're equipping the facility with state-of-the-art technologies in the areas of hydrogen energy, batteries, and power electronics, and we're building relationships to enable creative collaboration with customers.

# Building new supply chains

- We're implementing initiatives to reduce CO<sub>2</sub> emissions in our supply chains and at partner plants.
- We're strengthening initiatives focusing on respect for human rights in our supply chains.
- We're seeking cooperation through face-to-face dialog with suppliers at material procurement policy briefings.

# Realizing new organizations

- We're planning human resources programs to help individual employees realize a sense of purpose.
- We're implementing DE&I across the Group, and we've appointed personnel to spearhead that effort.

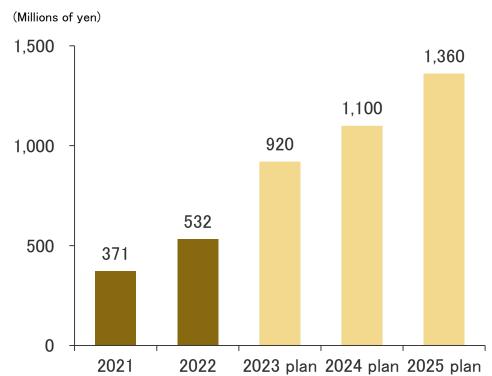




### **Strengthening Operations in the Indian Market**

Creating new customer value





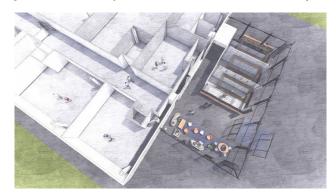


# Measures to Strengthen R&D

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



New Creative Collaboration Lab (To be completed in March 2023)



We're building an environment to foster joint research with customers in areas such as batteries, power electronics, and hydrogen.  Strengthening development of hydrogen-related technologies



After joining LIBTEC\* in 2021, we joined the Japan Hydrogen Association.

\*Consortium for Lithium Ion Battery Technology and Evaluation Center (Director: Akira Yoshino)





# Reassessing Production Structures to Improve Productivity

- Our Sakaki Plant, which opened in November 2021, is now fully operational as a field measuring instrument production facility.
- In 2022, we updated our Head Office Plant with a truck terminal, additional elevators, and other layout enhancements. Improved manufacturing lines of movement will help us shrink lead times.



Sakaki Plant



New truck terminal at the Head Office Plant

# **Management Targets**

Operating profit on sales: 20%

Percentage of overseas sales: 70% or greater

Return on equity (ROE): 10% or greater

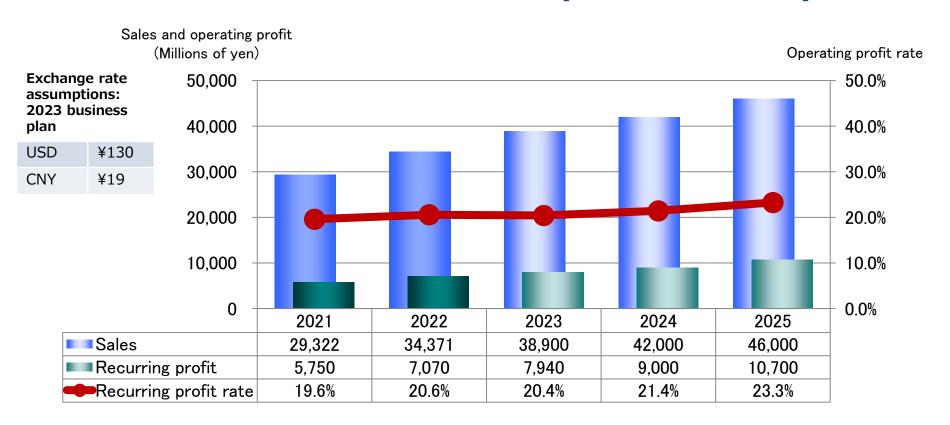
We've switched from recurring income rate to **operating profit on sales** as a management indicator since the latter facilitates direct judgments of business profitability.

# **2023 Business Forecast**

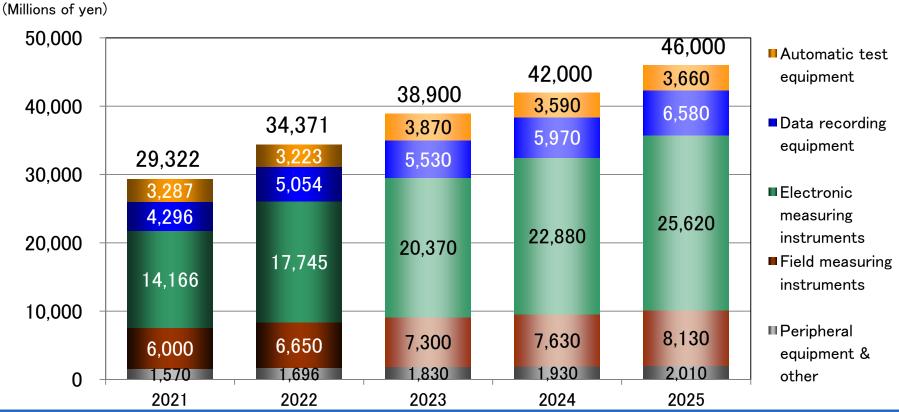
	2022		2023		
	Results (millions of yen)	Percent of sales (%)	Plan (millions of yen)	Percent of sales (%)	Year-on-year (%)
Sales	34,371		38,900		113.2%
Cost of sales	18,501	53.8%	20,800	53.5%	112.4%
Selling, general, and administrative expenses	8,799	25.6%	10,160	26.1%	115.5%
Operating profit	7,070	20.6%	7,940	20.4%	112.3%
Recurring profit	7,287	21.2%	8,080	20.8%	110.9%
Net income	5,330	15.5%	6,080	15.6%	114.1%
Earnings per share	¥390.47		¥445.39		

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# Mid-term Business Plan (2023 to 2025)



# Mid-term Sales Plan by Product Category (2023 to 2025)





### **Future Directions of HIOKI's Businesses**

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

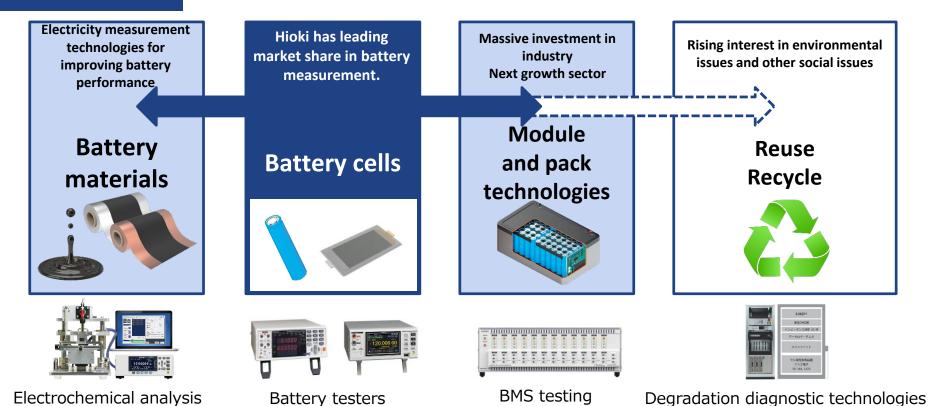


Focusing development resources on the key markets that comprise a new social system

Transition to Effective use of Digital transformation (DX) alternative energy electric energy Electronic **EVs/PHEVs** CAN **Batteries** components Datacenters Self-driving **ADAS ESS** 5G base Charging stations infrastructure **UPS** Power grid

Transition to alternative energy
Effective use of electric energy

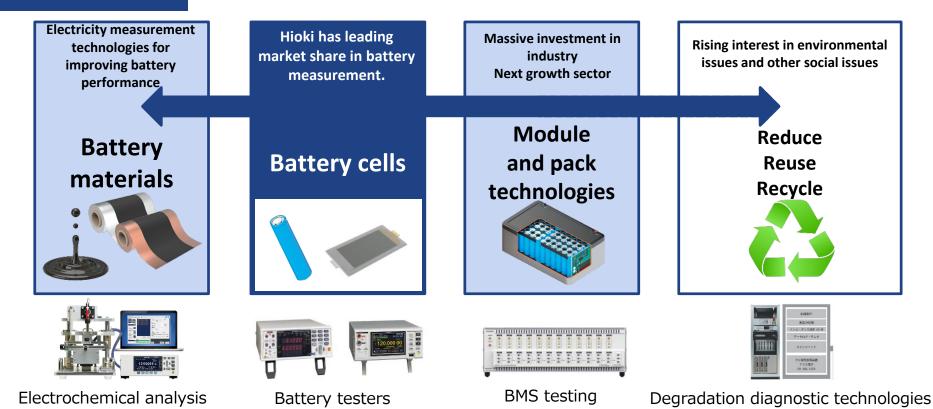
# **Contribution to the Battery Life Cycle**



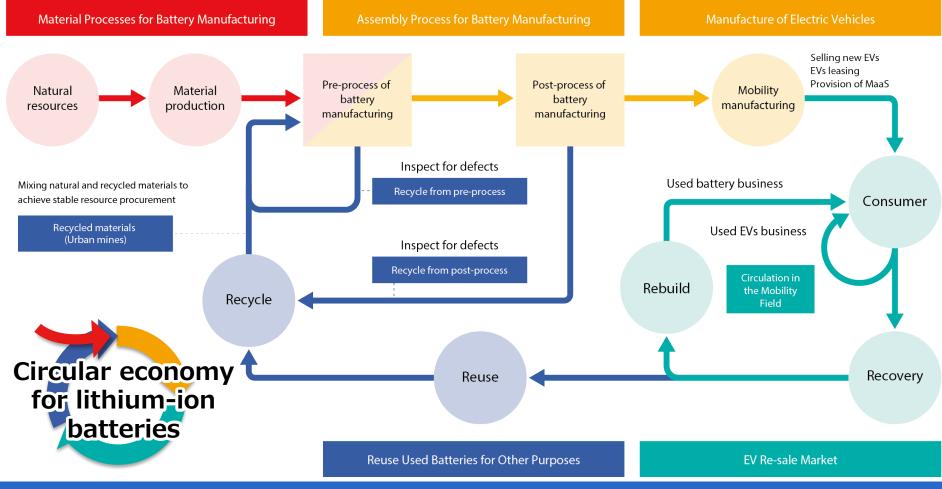


Transition to alternative energy
Effective use of electric energy

# **Contribution to the Battery Life Cycle**









#### **Creating high-performance** batteries

#### Supplying safe, high-quality batteries

Selling new EVs

Consumer

Recovery

EVs leasing Provision of MaaS

Mobility

manufacturing

Used EVs business

EV Re-sale Market

- Developing instruments that are the first of their kind in order to judge optimal manufacturing processes
- Joining LIBTEC
- Material Processes for Battery Manufacturing Pre-process of Post-process of Natural Material production manufacturing manufacturing Inspect for defects Used battery business Mixing natural and recycled materials to Recycle from pre-process achieve stable resource procurement Recycled materials Inspect for defects Recycle from post-process Rebuild Recycle Joining consortiums Partnering with Reuse companies in different Reuse Used Batteries for Other Purposes industries

Developing a "three brothers" approach to battery safety testing

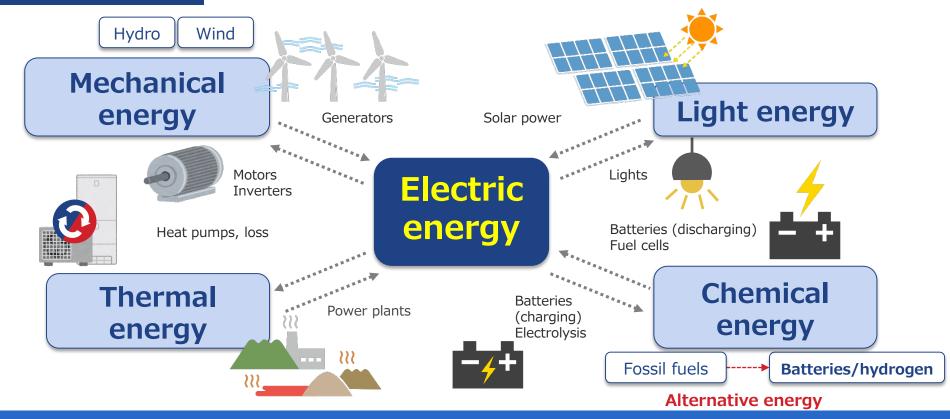
Developing new technologies for measuring battery packs directly

**Using resources** effectively

Connecting technology with society

Transition to alternative energy
Effective use of electric energy

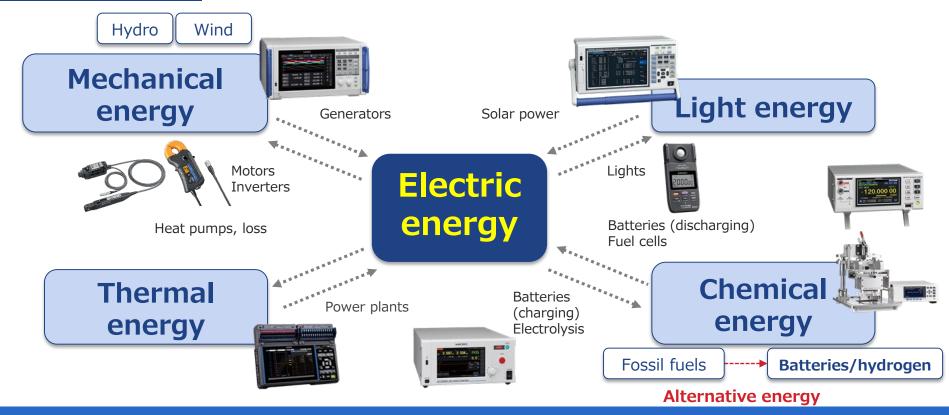
# Resolving Societal Issues through Electrical Measurement





Transition to alternative energy Effective use of electric energy

# Resolving Societal Issues through Electrical Measurement



# **Planned DX Initiatives**

### **External** (Customers)

- Enhancing software services (GENNECT Cloud)
- Strengthening over-the-air (OTA) updates

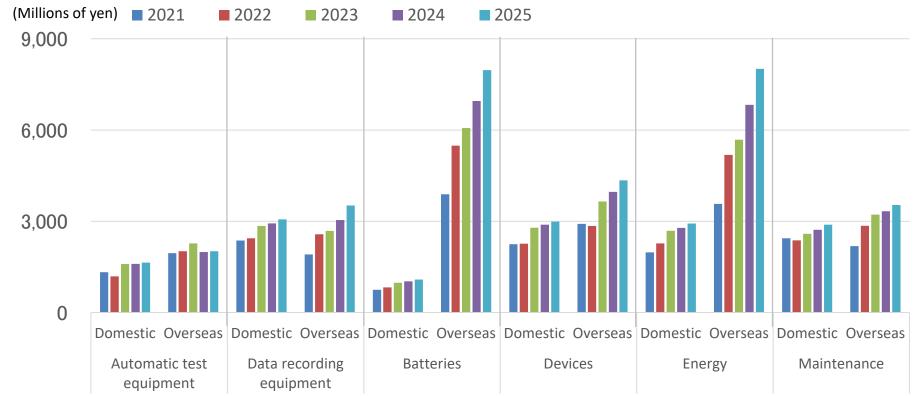
# Internal (Hioki)

- Strengthening internal security structures
- Updating core systems

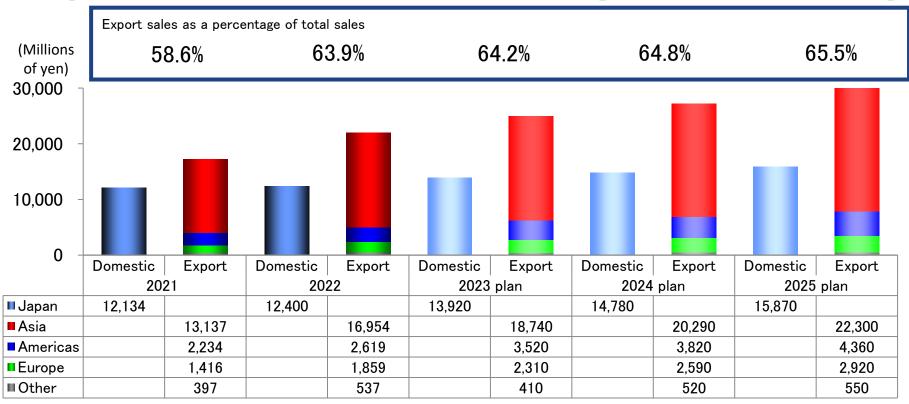




# Mid-term Sales Plan by Market Application (2023 to 2025)



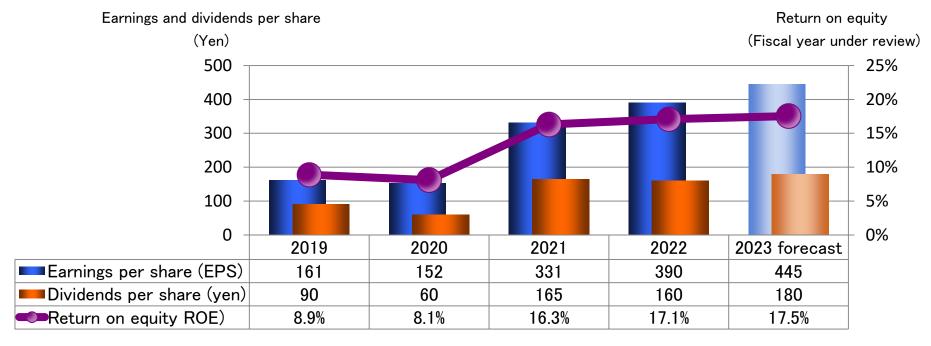
# **Export Mid-term Sales Plan (2023 to 2025)**



# Earnings and Dividends per Share Outlook for 2023

Dividend policy:

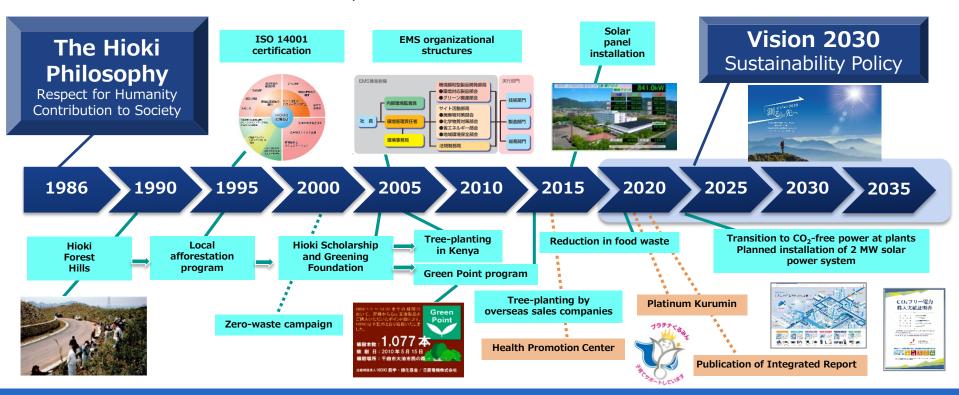
Deliver a return on shareholders' investments by adopting a stable annual dividend base of a consolidated dividend on equity (DOE) of at least 2% per share and a target consolidated dividend payout ratio of 40%.





# **Sustainability Timeline**

We've undertaken a series of sustainability initiatives in accordance with The Hioki Philosophy, and we will continue to pursue new initiatives as we work to realize Vision 2030.







# **Hioki Sustainability Declaration**

# We will continue to work towards the following goals to further decarbonization:

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

Scope 3 refers to an effort to implement carbon offsets **while minimizing reliance on emissions trading** as we work to achieve our goals by 2025.



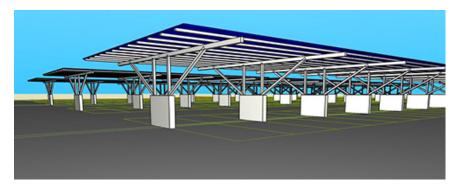
## **Decarbonization Initiatives**

Transition to CO<sub>2</sub>-free power at the Head Office Plant in 2021, and at the Sakaki Plant in 2022.



Head Office Plant

Install a 2 MW solar panel-equipped carport at the Head Office Plant so that we can generate about half the electricity used by the Head Office ourselves.



Solar panel-equipped carport (Artist's conception; we plan to start construction by the end of 2023 and complete the project in 2025.)



## Hioki Programs That Support Individuals' Sense of Purpose

### **Career autonomy**

#### 1. Hi-Challenge program

A set of mechanisms that lets employees embrace challenges like job changes and projects

#### 2. Career training and consultations

A set of mechanisms that helps employees think about their own career and sense of purpose

#### 3. Hi-Career program (under development)

A program that will allow employees to think about their own sense of purpose and career plan and then choose their own workstyle and approach to creating market value



new organization with a laboratory function that aims to create new value by flassiving a ctual product is no ur testing lab. The Hioki Innovation Center will also be equipped with a functionality that enables the active collaboration with customers. We have also joined an external organization to work with customers. We have also joined an external organization to work with customers from the development stage of battery materials.

#### 4. Building new supply chains

To contribute to a sustainable society starting from the supply chain, we have revised our basic procurement policy. We also set targets for Scope 1.2, and 3 of the GHB Protocol to strengthen sustainability. As Scope 3 cannot be achieved without the cooperation of suppliers, as a manufacturer of electrical measuring instruments, we will support the visualization of energy consumption of each company.

#### 5. Realizing new organizations

To respond to changes in the external operating environment, we have changed our technical development and manufacturing divisions into a

We manage the company in an employee-first manner in which the priority is on individual purpose and maximizing their individuality will drive the company's growth.

business and market-oriented organization.

In order to drive the maximization of individual potential, we have created a system that will foster this by allowing each employee to choose which area motivates them while also respecting their individual sense of purpose (their will to do something, realize goals, take on challenges, make contributions). We also have a study program that enables employees to develop their careers at overseas sales subsidiaries. We believe that customer recognition and appreciation are important in fostering a sense of fulfillment, and we expect that these efforts will produce the next seeds that will lead to winning customer recognition.

#### Sustainability initiatives

Based on its corporate philosophy, Hioki has long been engaged in activities to contribute to the realization of a sustainable society, and in 202 ve formulated the Basic Sustainablity Policy to disseminate that intention both inside and outside the company. Sustainablity as two axes, sustainablity as a manufacturer and sustainablity as a social institution, and we believe that both must be embodied through the measuring

A Managing Executive Officer who is the Chief Technical Officer and Chief Information Officer has been appointed as the person in charge of promoting sustainability, as efforts to promote collaboration throughout the Hioki Group are being further accelerated.

#### Management focused on individual purposes

To grow sustainably into an industry frontrunner, we need to be able to turn small corners faster than anyone else, create new measurement and test standards, and compete in niche markets. The growth of our employees is an essential part of achieving this goal.

Individuals are the most important factor in realizing our vision, which is rotted in the principles of "Respect for Humanity" and "Contribution to Society," and maximizing their individuality will give rise to stronger drive to achieve our vision. That is why Hioki's aim is to manage the company in an employee-first manner in which the priority is on individual purpose. The company will continue with its updates to create new value and actively promote the appointment of younger employees.

Looking ahead, we will continue to invest in the development of an environment for collaborative creation with customers and in the exploration of new businesses, and by further strengthening corporate governance. We will enhance trust in Hioki and realize our individual purpose to become a company that is "Beyond Meassure".

July 2022

Takahiro Okazawa President

In order for Hioki to become an industry frontrunner as a company that continues to develop, we need each and every employee to become a solution creator and consistently contribute to society.





# S Initiatives to Strengthen Human Capital

Human resources program reforms	Recognition by outside entities
riaman resources program referms	recognition by catoric circles
2011 Age of retirement extended to 65 (progressively in steps by 2025).	2018 Hioki earns Kurumin certification as a parenting-friendly company (2020: Platinum certification).
<ul><li>2012 Compensation for veteran employees improved.</li><li>2017 Ongoing reemployment program for employees of up to 70 years of age introduced. Human</li></ul>	2020 Hioki earns Eruboshi certification, the highest level, from the Minister of Health, Labour and Welfare.
Resources Department launched.  2018 New human resources program started.  (Leveraging individual growth for corporate growth)	2021 Hioki is chosen as a Great Place to Work and as a Best Company in the medium-size enterprise category in the GPTW 2022 edition. Hioki is chosen as an Advanced Positive Workplace Company as part of the Workplace Environment
<ul><li>2019 Human resources policy formulated.</li><li>2020 Compensation of veteran employees improved.</li></ul>	Improvement Promotion Program.
Career training started.  2021 Annual salary for managers introduced.  Hi-Challenge program launched (open to employees).	2022 Hioki receives the Best Future Generation Support Company Award from the Alliance of Governors in Support of Future Generations for Japan.
Hi-Career program development begun with the Human Resources Department manager serving as the DE&I promotion officer.	





### **Strengthening Corporate Governance Structures**

#### ■ Strengthening of structures

2001 Listed on Section 2 of the Tokyo Stock Exchange; Executive officer system introduced

2002 Management Advisory Committee established

- Sho Masujima (formerly Executive Director, TDK)
- Junjiro Tomosawa (Vice Chairman, Asahi Glass)

Management Advisor Committee 2013 abolished, outside director added

Yasuo Nakagami (formerly Managing Director, Mitsubishi Heavy Industries)

Outside director added

- Sakuzo Nakatani (formerly
- President, Nissin Kogyo)

2021 Management Advisory Committee abolished Nomination and Compensation Committees established Members: Three, including two outside directors Listed in the Prime Market of the Tokyo Stock Exchange 2023 Two outside directors added (One of the four is a woman.)

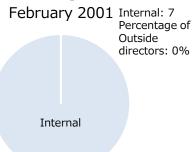
Listed in Section 1 of the 2003 Tokyo Stock Exchange

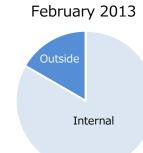
2009 Management Advisory Committee membership changed

- · Ken'ichi Mori (formerly Managing Director, Toshiba)
- · Takao Isoyama (formerly Vice President, Tokio Marine Nichido)

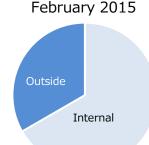
2016 Management Advisory Committee reestablished; members: five, including two outside directors

#### ■ Changes in Board of Directors makeup

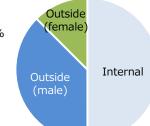




Internal: 5 Outside: 1 Percentage of Outside directors: 17%



Internal: 4 Outside: 2 Percentage of outside directors: 33%



February 2023

Inside (male): 4 Outside (male): 3 Outside (female): 1 Percentage of outside

directors: 50%



# We're planning to publish our second Integrated Report (in July 2023).



Image: Last year's report, our first

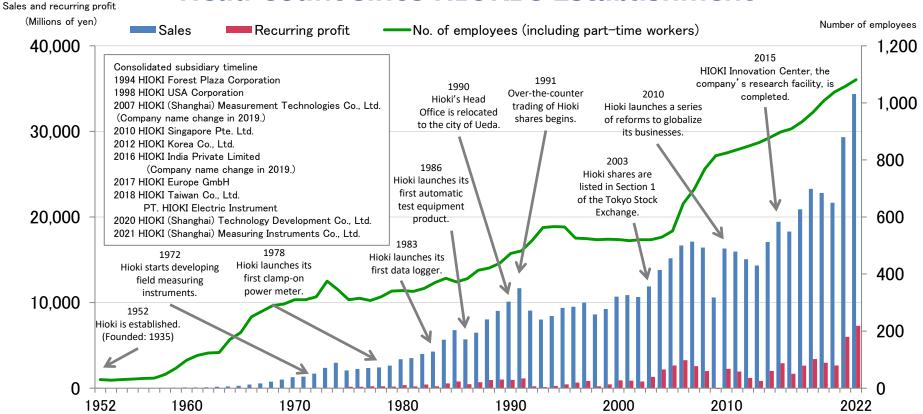


Going forward, we will contribute to the realization of a sustainable society by providing high-quality products and services for use in customers' decarbonization initiatives as we strive to realize Vision 2030.

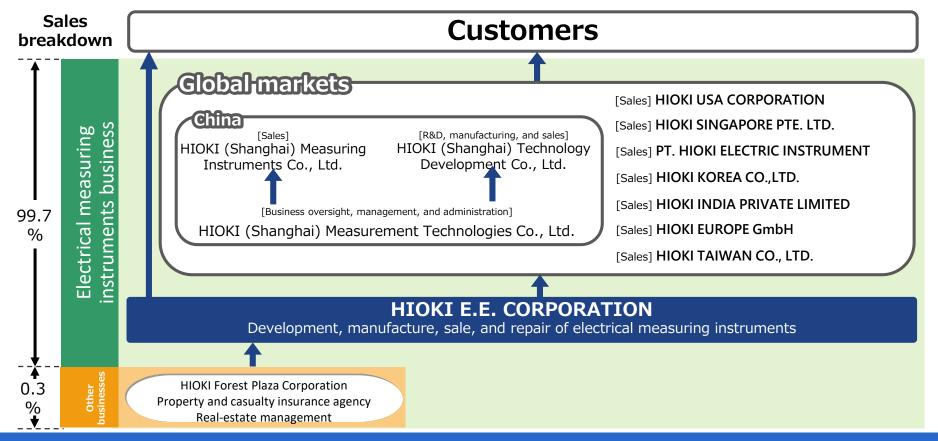


# Performance and Employee Head Count since HIOKI's Establishment

Source: Internal data (1999 and beyond: Consolidated basis)

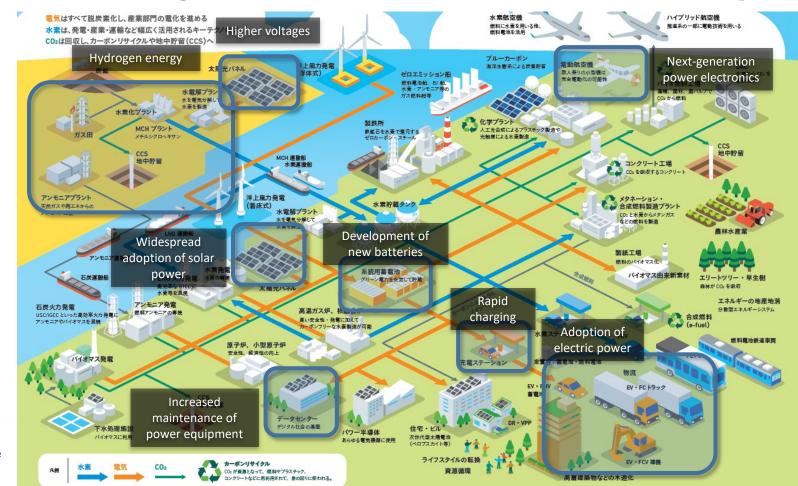


# **HIOKI Group Business Diagram**





## **Major Fields in Carbon-neutral Industry**



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)

# **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 about 300 products.

# Overall organization

R&D

#### **Production lines**

Field maintenance

Automatic testing equipment

**Data recording** 

equipment

Power generation and distribution

Transport equipment

Machinery
Transport equipment

Devices and batteries

Motors



Package and board manufacture

Electric device manufacture

Power equipment inspections
Elevator maintenance

Electronic measuring instruments

Field measuring

instruments

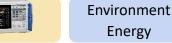
Electronic devices
Transport equipment

Alternative energy

Materials, environment



Electrical and power equipment inspections
Communications equipment testing





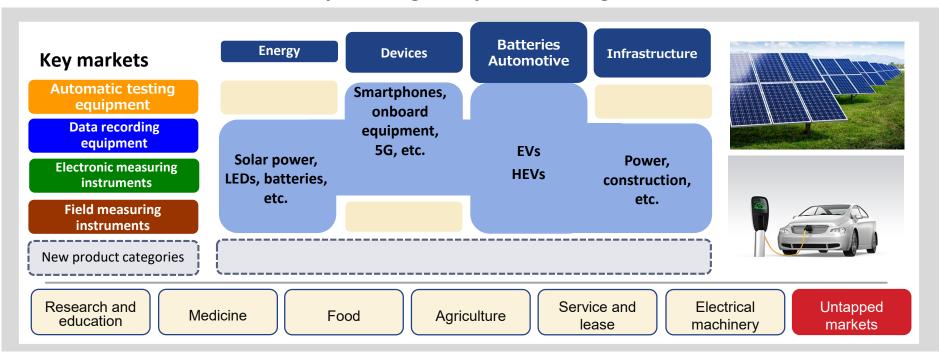
Peripheral equipment and other

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**

We strive to grow and develop by expanding product launches in every market and by creating new product categories.



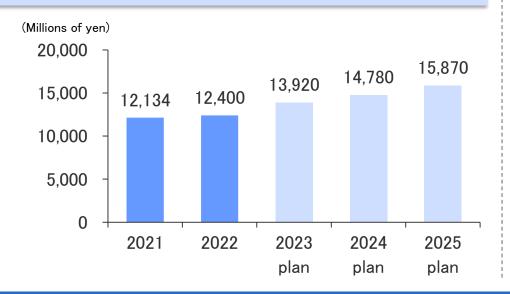
### **2022 Market Conditions by Product Group**

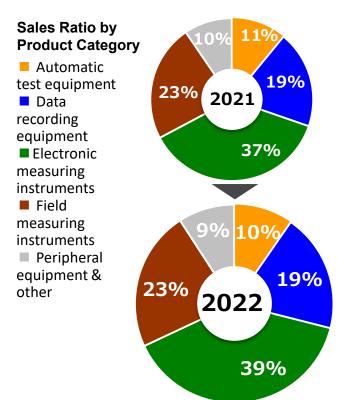
Automatic test equipment		<ul> <li>Sales of unpopulated circuit board testing systems remained strong thanks to sophisticated requirements in the semiconductor market, where the move to ever-finer-pitch designs continues.</li> <li>Sales of populated board testing systems remained strong thanks to sophisticated requirements in the automotive market, where the trend towards electrification continues.</li> </ul>
Data recording	g equipment	<ul> <li>Demand for high-speed, high-resolution data recorders rose thanks to increasingly sophisticated energy management in global markets.</li> <li>Sales of high-dielectric-strength multichannel data loggers for use in battery evaluation continued to enjoy substantial growth.</li> </ul>
	Batteries	<ul> <li>Capital investment remained brisk, particularly in the Chinese and Korean markets, and extended to other regions, including Europe and India.</li> <li>We launched a series of new products such as testing equipment designed to boost the safety of lithiumion batteries for EVs.</li> </ul>
Electronic measuring instruments	Devices	<ul> <li>Investment in high-voltage, high-reliability components for xEVs was robust.</li> <li>Investment in mass production by overseas electronic component manufacturers weakened as a result of declining smartphone and PC demand.</li> </ul>
	Energy	<ul> <li>Hioki maintained a high rate of growth in the electrical energy measurement field, where we enjoy competitive advantages, thanks to the ongoing move towards decarbonization.</li> <li>We launched a new series of current sensors that deliver even higher-reliability measurement.</li> </ul>
Field measuring instruments	Maintenance	<ul> <li>We enhanced our line of field measuring instruments with IoT support in order to improve work efficiency in the field.</li> <li>We added functionality to our software suite allowing IoT-capable field measuring instruments to connect to the cloud from around the world and provided services that improve work efficiency worldwide.</li> </ul>



### **Actual and Forecasted Sales by Geographic Region: Japan**

- We launched a technical consultation service. Expert user experience designers are carrying out sales activities to bring innovation to bear on customers' latent issues.
- We anticipate demand in the electronic device, xEV, battery, and new energy fields as the move away from carbon accelerates.



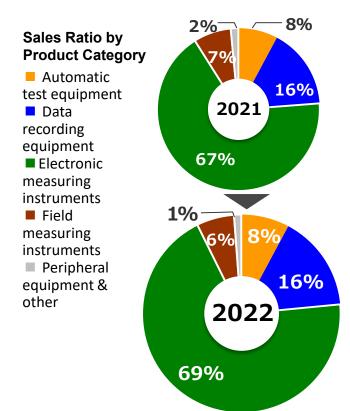




### Actual and Forecasted Sales by Geographic Region: China

- The battery industry continues to enjoy bullish performance. Sales in the industry are permeating from power conditioners to the EV power measurement field.
- We will maintain our position as a leader in the battery industry by increasing sales in markets including power, healthcare, and university research while focusing on EVs and new energy.

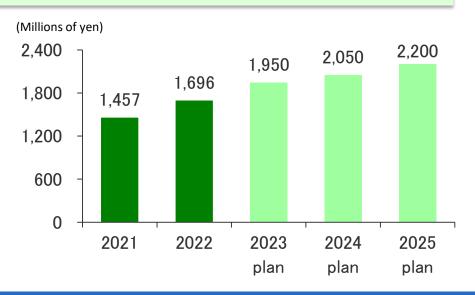


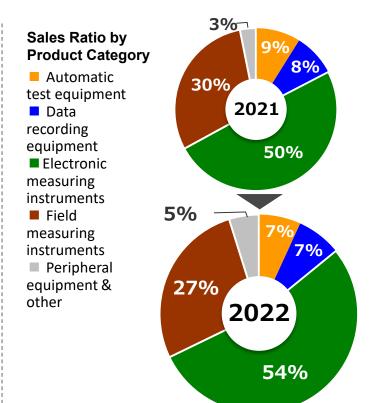




#### Actual and Forecasted Sales by Geographic Region: Southeast Asia (including Oceania)

- We're developing battery and EV markets in the region's countries and focusing on building relationships with customers.
- We will strive to cultivate new markets, including infrastructure and educational institutions, as investment in decarbonization accelerates.

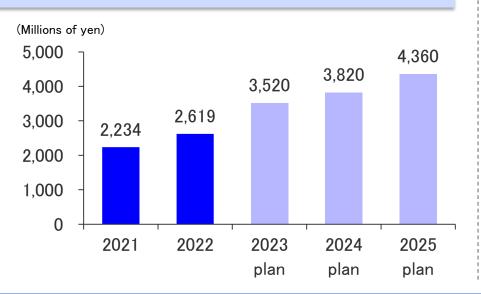


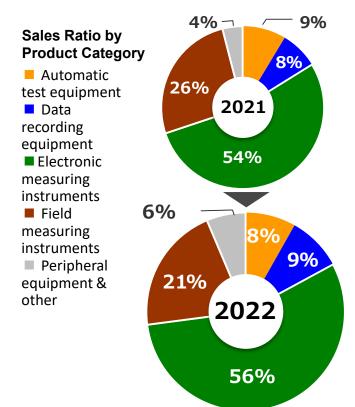




#### **Actual and Forecasted Sales by Geographic Region: U.S.A. (North and South America)**

- Investment in decarbonization and energy, for example in EV-related industries and next-generation battery development, is accelerating.
- We will focus on strategic customers in the decarbonization and energy markets.

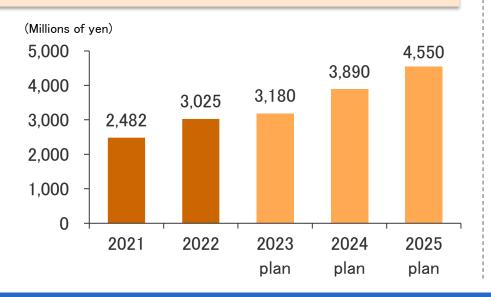


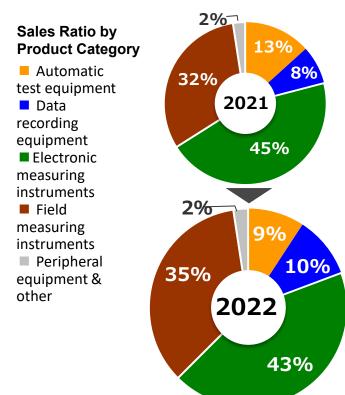




#### **Actual and Forecasted Sales by Geographic Region: South Korea**

- Capital investment by battery manufacturers continues.
- We will work to increase sales in the electrification business (inverter development and motor development markets, systems, and defense).

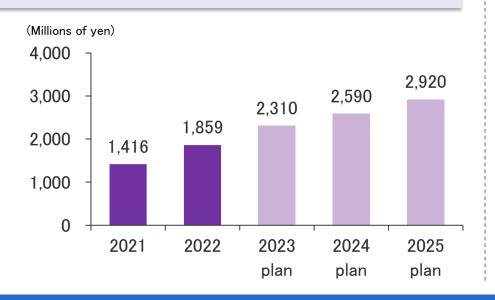


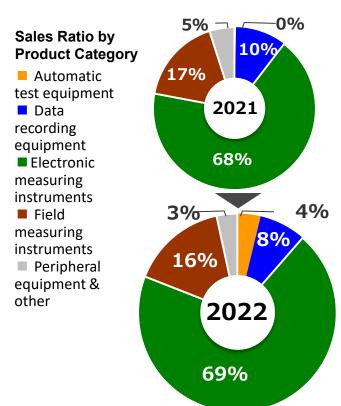




#### **Actual and Forecasted Sales by Geographic Region: Europe**

- Although business conditions are being destabilized by high inflation, investment in realizing a decarbonized society remains robust.
- We will continue promotional efforts targeting the EV and battery markets as we look to foster permeation of the Hioki brand.

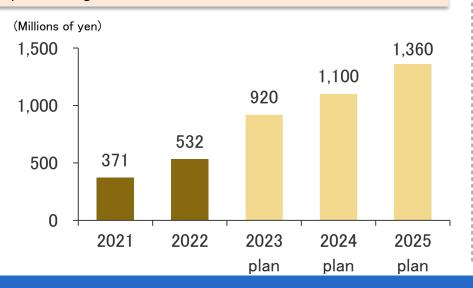


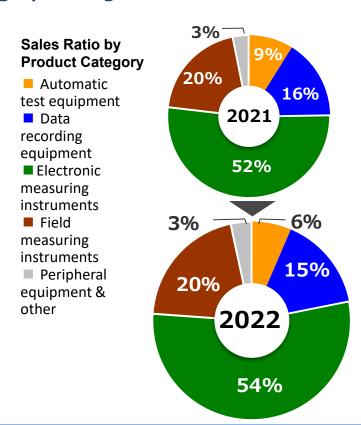




#### **Actual and Forecasted Sales by Geographic Region: India**

- Investment in the manufacturing industry is expected to grow as a result of the government's "Make in India" policy.
- Local production of batteries is accelerating. We're working with equipment manufacturers. Investment in engineer education is also increasing.
- Investment in the EV industry is accelerating, and demand is expected to grow.

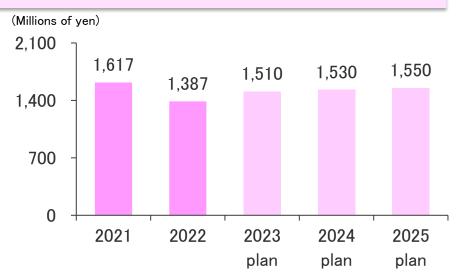


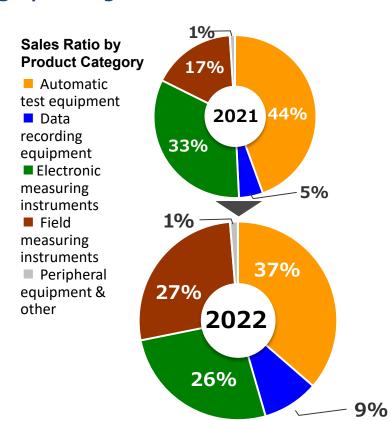




#### **Actual and Forecasted Sales by Geographic Region: India**

- Capital investment is expected to rise during the second half thanks to a recovery in the device market.
- We will continue to focus on the battery, energy, and electronic device (including semiconductors) markets.
- We will provide valuable services by strengthening our technological capabilities and field repair services.







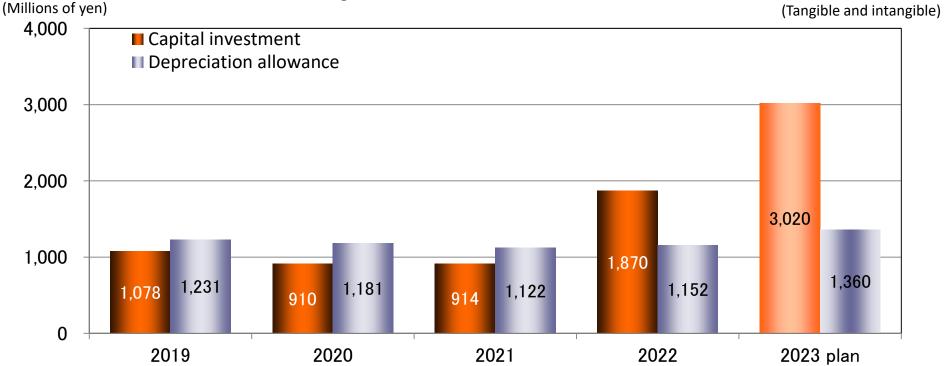
#### **Actual and Forecasted Sales by Geographic Region: Other**

2023 plan: ¥400 million

### Middle East

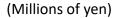
We're working to establish Hioki branding in the Middle East, North Africa, and Pakistan. We anticipate measurement demand from the effort to transition away from oil and realize a carbon-neutral society, particularly in connection with large projects that take advantage of areas that are well suited to energy savings.

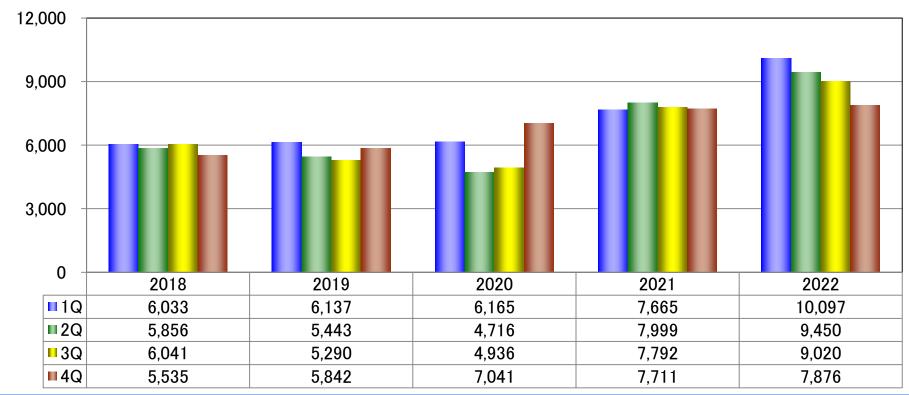
# **Capital Investment and Depreciation Allowance**





# **Quarterly Order Volume**





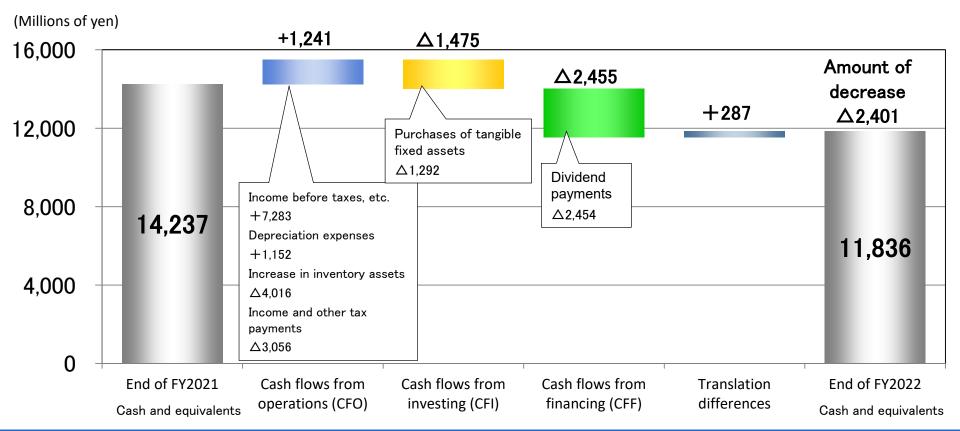


# **Quarterly Sales**

(Millions of yen) 12,000 9,000 6,000 3,000 0 2018 2019 2020 2021 2022 **■1Q** 6,011 6,107 5,829 6,949 8,287 **■2Q** 5,490 5,622 4,848 7,690 7,595 **□**3Q 5,723 5,207 5,225 6,896 9,006 **■**4Q 6,062 5,871 5,762 7,787 9,483

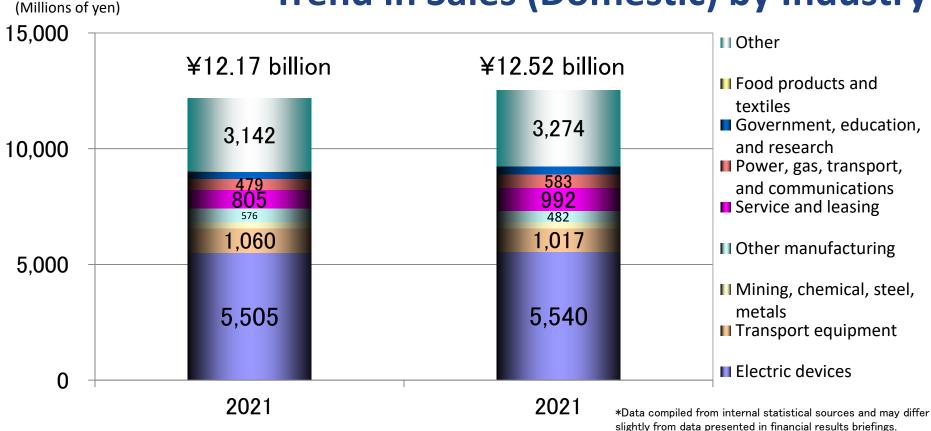


# **Cash Flows**



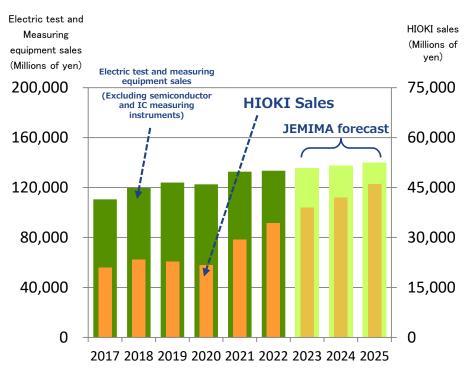


# Trend in Sales (Domestic) by Industry





#### **Business Environment in the Electrical Measuring Instruments Industry and Future Outlook**



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

The group forecasts an annual growth rate of +1.7% from FY2022 to FY2026.

Factors: Self-driving and increased use of electronic components in automobiles are fueling measurement demand, as is development of energy-saving and renewable energy technologies in the drive to achieve carbon neutrality. There is also demand for measurement capabilities in regard to communications infrastructure and datacenters as carriers look to boost capacity.

<sup>\*</sup> As defined by JEMIMA, electric test and measuring equipment accounts for about 20% 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.

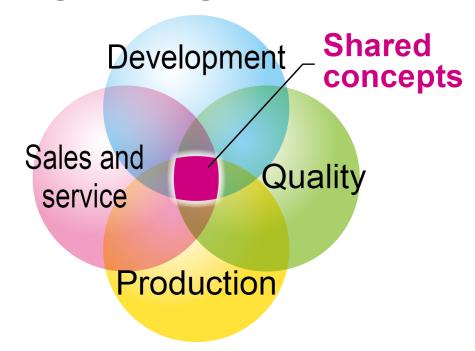
<sup>\*</sup> Based on statistical data from the Japan Electric Measuring Instruments Manufacturers' Association. Sales figures for 2022 and subsequent years reflect JEMIMA forecasts (as of December 2022).

# **Improving Value-added Productivity**

# **Concurrent engineering**

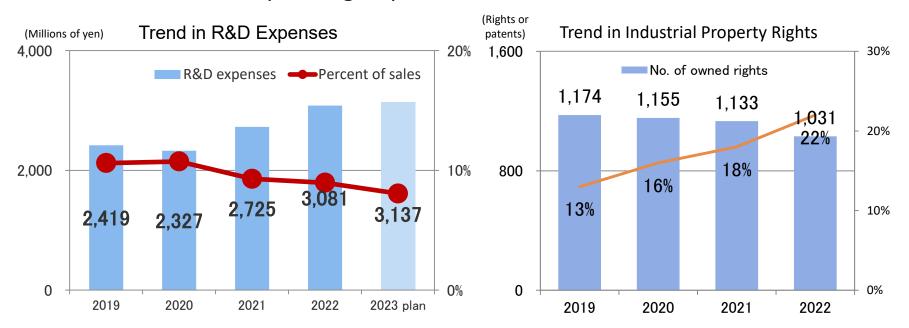
In HIOKI's approach to product development, departments come together organically with the goal of improving productivity.





#### **Development Capability: Unique Products Built around Core Technologies**

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



## **Production Capability: Manufacturing Calibrated to Sales Velocity**



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



Enhancing initiatives at the source of development
Minimizing cost through leveled



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

production

### Sales Capabilities: Customer-focused Solutions Sales

#### Domestic sales

- Direct marketing to domestic customers
- About 60 sales staff at 12 domestic facilities
- PR via webinars and face-to-face meetings



#### 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 highspeed phenomena in an extensive array of applications ranging from the electric field to the machinery field

Developed in 1983



Memory HiCorder MR6000

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 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





PRECISION DC VOLTMETER
DM7276



# **Electronic Measuring Instruments: Devices**

Evaluating and testing electronic components and devices

Principal products

Circuit element measuring instruments

Fields of use (applications)

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

Accommodating embedded applications such as inductor and resistor mass-production testing

Meeting a variety of needs with an extensive product line



Impedance Analyzer
IM7585



SUPER MEGOHM METER SM7110



RM3545



## **Electronic Measuring Instruments: Energy/Other**

Power and power quality analysis in the environment and energy field

Principal products

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

HIOKI developed the first clamp-type meter in 1978.



Power Analyzer PW8001

Power quality analyzers

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

Power Quality Analyzer PO3198

Analytical devices capable of identifying the causes of power supply problems

Current probes

Observing current waveforms

For use as oscilloscope sensors



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



AC/DC Clamp Meter CM4373-50



Maintenance and inspections of electrical work and equipment

A must-have instrument for electrical work



Insulation Tester for Photovoltaic Systems IR4053

Digital multimeters

Measuring characteristics from voltage to current and resistance

Used in all applications



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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