



# Financial Information

**HORIBA, Ltd.**

November, 2022

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- 2022 3Q (Jan.- Sep.) Results & 2022 Forecasts
- Topics – Contribution to Social Issues by Cross-Segment Approach
- Shareholder Return
- Financial Data
- Corporate Profile

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# 2022 3Q (Jan.-Sep.) Results

(Billions of yen)

Increased in sales and profits  
mainly due to an increase in sales of the Semiconductor segment

	2021	2022	vs 2021	
	9 Months Results (Jan.-Sep.)	9 Months Results (Jan.-Sep.)	Changes	%
Sales	153.9	★ 185.1	+31.1	+20.2%
Operating profit	19.8	★ 28.5	+8.7	+43.9%
O.P.%	12.9%	15.4%	+2.5p	-
Ordinary profit	19.8	★ 29.5	+9.6	+48.5%
Net income attributable to owners of parent	13.7	★ 20.7	+6.9	+50.9%
USD/JPY	108.58	128.30	+19.72	
EUR/JPY	129.87	136.05	+6.18	

★: Record-high

# 2022 3Q (Jan.-Sep.) Results by Segments

(Billions of yen)

	Sales				Operating profit			
	2021	2022	vs 2021		2021	2022	vs 2021	
	9 Months Results (Jan.-Sep.)	9 Months Results (Jan.-Sep.)	Changes	%	9 Months Results (Jan.-Sep.)	9 Months Results (Jan.-Sep.)	Changes	%
Auto	37.3	41.3	+4.0	+10.7%	-1.9	-3.2	-1.3	-
P&E	14.5	★ 15.4	+0.8	+5.9%	1.2	0.9	-0.3	-24.2%
Medical	19.1	★ 21.5	+2.4	+12.9%	0.0	-0.0	-0.1	-
Semi	62.6	★ 81.4	+18.7	+29.9%	19.7	★ 29.2	+9.5	+48.3%
Scientific	20.2	★ 25.3	+5.1	+25.2%	0.6	★ 1.6	+0.9	+139.1%
Total	153.9	★ 185.1	+31.1	+20.2%	19.8	★ 28.5	+8.7	+43.9%

★: Record-high

- <Auto> Increased in sales of the ECT\* business in Europe. Operating loss was recorded owing mainly to rising purchasing prices, an increase in expenses due to expanded investment in growth area, as well as impact of exchange rate fluctuations
- <P&E> Increased in sales in Americas and Japan. Operating income decreased mainly to rising purchasing prices.
- <Medical> Increased in sales in Asia and Japan. Operating loss was recorded owing mainly to rising purchasing prices, even though the sales of reagents, which are profitable products, increased
- <Semi> Sales to semiconductor production equipment manufacturers increased significantly, in response to expansion of semiconductor manufacturers' capital expenditures
- <Scientific> Increased in sales of Raman spectrometers and optical components

# 2022 Forecasts

(Billions of yen)

## Revised forecasts of sales and all profits upwardly

	2021	2022		Changes	
	Results	Previous forecasts (as of Aug. 12)	Forecasts (as of Nov. 11)	vs 2021	vs Previous forecasts
Sales	224.3	260.0	★ 265.0	+40.6	+5.0
Operating profit	32.0	40.0	★ 43.0	+10.9	+3.0
O.P.%	14.3%	15.4%	16.2%	+1.9p	+0.8p
Ordinary profit	32.0	40.0	★ 43.5	+11.4	+3.5
Net income attributable to owners of parent	21.3	28.0	★ 30.0	+8.6	+2.0
USD/JPY	109.90	130.00	133.00	+23.10	+3.00
EUR/JPY	129.91	135.00	138.00	+8.09	+3.00

★: Record-high

# 2022 Forecasts by Segments

(Billions of yen)

	Sales					Operating profit				
	2021	2022		Changes		2021	2022		Changes	
	Results	Previous forecasts (as of Aug. 12)	Forecasts (as of Nov. 11)	vs 2021	vs Previous forecasts	Results	Previous forecasts (as of Aug. 12)	Forecasts (as of Nov. 11)	vs 2021	vs Previous forecasts
Auto	61.2	66.0	66.0	+4.7	-	-0.0	-	-1.5	-1.4	-1.5
P&E	20.2	23.5	★ 23.5	+3.2	-	1.9	2.0	2.0	+0.0	-
Medical	25.8	28.5	★ 28.5	+2.6	-	0.1	0.5	0.5	+0.3	-
Semi	87.0	107.0	★ 112.0	+24.9	+5.0	28.0	35.0	★ 39.5	+11.4	+4.5
Scientific	29.9	35.0	★ 35.0	+5.0	-	1.9	2.5	★ 2.5	+0.5	-
Total	224.3	260.0	★ 265.0	+40.6	+5.0	32.0	40.0	★ 43.0	+10.9	+3.0

★ : Record-high

- <Auto> Revised downward operating profit, reflecting mainly the expected impact of a temporary increase of expenses in response to boosting order, and rising purchasing prices.
- <Semi> Revised sales and operating profit upwardly by taking into account recent order and exchange rate trends.

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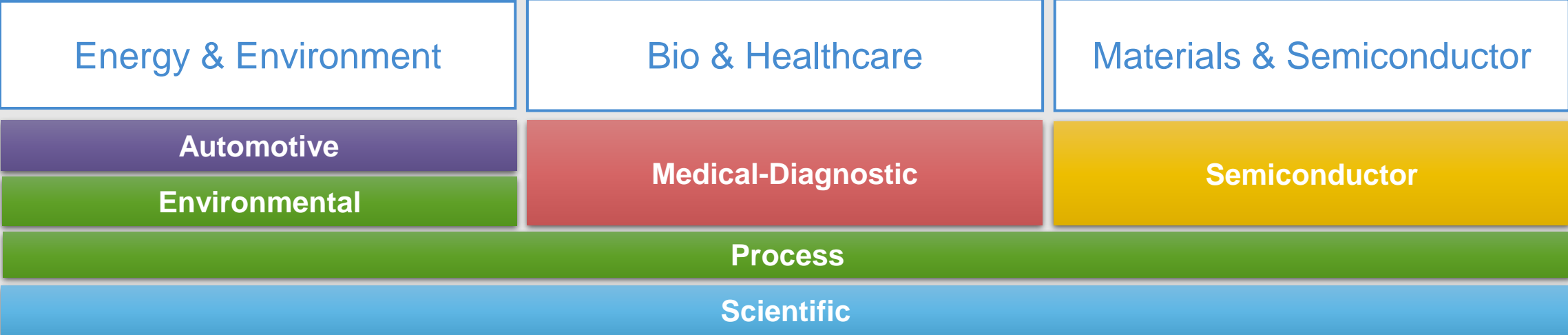


# Contribution to Social Issues by Cross-Segment Approach

Mid-Long Term Management Plan "MLMAP2023"

## Market Oriented Business

To develop analysis and measurement solutions, utilizing HORIBA's core technologies, in the leading three business fields of the mega trend



## Solution Provider Beyond "Life Cycle Management"

To support customers' core businesses from all aspects – from product introduction to replacement



# HORIBA FuelCon New Facility Launched Operation

Response to needs to realize carbon neutrality

- ✓ Named "HORIBA eHUB" as a global hub for new energy business.
- ✓ Production capacity to be tripled by the end of 2023.



Top:  
Evaluator series  
production line at eHUB



Right:  
Battery, fuel cell,  
electrolyzer evaluation  
device "Evaluator"

Started mass production of electrolyzers that generate hydrogen using renewable energy in Europe.

Evaluator series is composed of evaluation devices for electrolyzer development and inspection devices for their manufacturing.

**HORIBA eHUB,  
a base to meet growing needs**

Location: Barleben, Germany  
 Building area: 9,900m<sup>2</sup>  
 (Development/production area 7,000m<sup>2</sup>  
 Office area 2,900m<sup>2</sup>)  
 Employees: 139 (Dec. 2021)  
 Total cost: Approx. 3.5 billion yen

# Contributing to Next-Generation Mobility Development

Demand growth for advanced vehicle engineering services



**Continuous investment immediately after acquisition**

- Advanced Emission Test Facilities
- Advanced Battery Test Facilities
- Environmental Wind Tunnel Laboratory
- Vehicle Resilience\* Technology Centre
- Comprehensive Development Engineering Facility— Assured CAV etc.

\*Solutions that eliminate threats associated with advanced vehicle technologies



Vehicle Resilience Technology Centre



ASSURED CAV

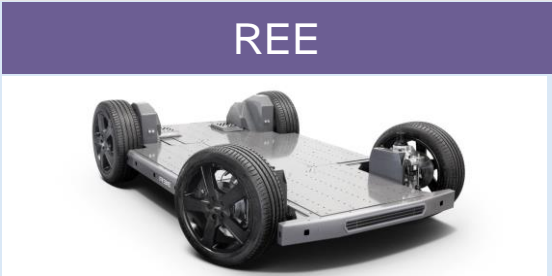
2015      2016      2017      2018      2019      2020      2021      2022...

Acquisition of HORIBA MIRA

Order intake in ECT business

Increase in order intake

Further leap



Projects with companies focused on next-generation mobility development

# "HORIBA will Never Stop Combustion Measurement"

Contribute to energy issues caused by increasingly complex international affairs

Respond to demand for new vehicles in the transition period to vehicle electrification  
Thoroughly support customers' utilization of HORIBA's existing emission measurement systems and development labs



### Emission Measurement System —MEXA—

Monitoring combustion control in the engine through analysis of emission

Shipment of about 8,000 units of MEXA series in 2001-2021, creating the installed base of HORIBA

Multifaceted approach to ensure availability of automotive development labs

#### <UPDATE>

Upgrade to the latest equipment for future use  
Introduce equipment with latest specification

#### <PROLONG PRODUCT LIFE>

Maintain functions with a prolonged life plan  
Add new functions

#### <RECYCLE>

Remove parts  
Manage stock parts for repair

Contribute to improving the efficiency of conventional power plants to meet the growing demand for electricity



### Stack Gas Analyzer —ENDA—

Equipment for process control of stack gas treatment installed in power plants, etc.



- ✓ Contribute to solving thermal power plant issues such as safe operation, stable power supply, and improved power generation efficiency.
- ✓ Support the efficiency of the power generation process by monitoring the equipment for stack gas desulfurization and denitrification.

# Development of Healthcare Business <Medical Business>

## Medical Business – Aiming to expand business in the IVD\* field

### Hematology and CRP analyzer “Yumizen H330 CRP”

- ✓ Simultaneous measurement of blood cell count and CRP, an index of inflammation.
- ✓ Used as one of the diagnostic indicators of the severity of infectious diseases including COVID-19.



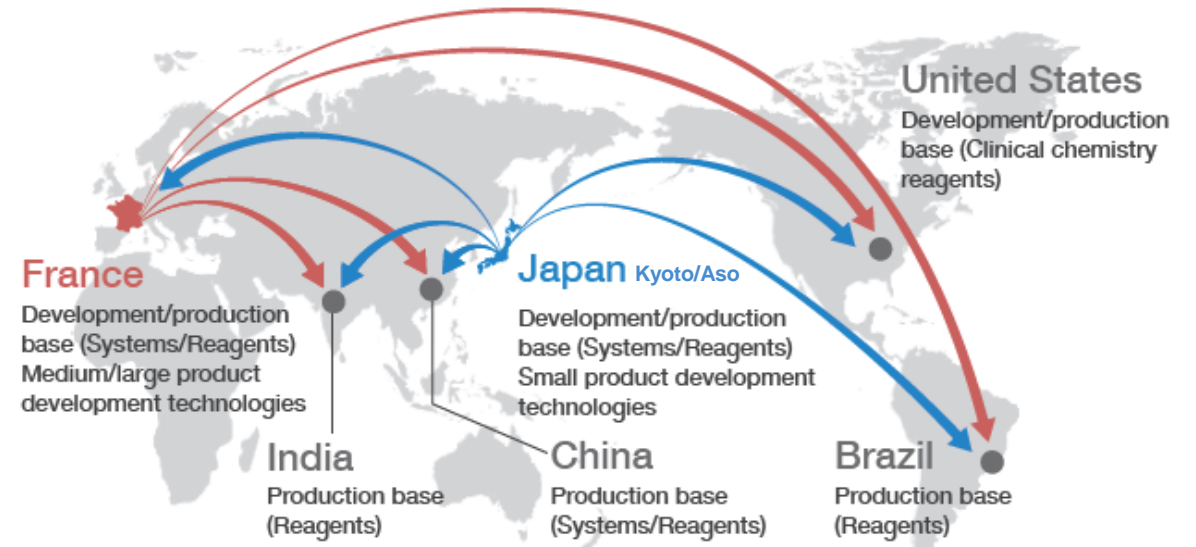
New product

#### HORIBA's hematology and CRP analyzer

- Introduced to the market for the first time in the world in 1998
- 90% market share in Japan

### 【Medical Business】

#### Global network for product development and reagent production



### HORIBA India Nagpur New Reagent Factory

- ✓ Quadrupled annual reagent production capacity to approximately 8,000 tons by combining new factory with the Haridwar Factory.
- ✓ Demand is expected to grow in the fields of hematology and clinical chemistry testing in India.



Reagent factory

Start operation in  
January 2022

Location: Nagpur, India  
 Total floor area: 23,900m<sup>2</sup>  
 (Reagent factory 7,769m<sup>2</sup>)  
 Employees: 35 (as of end of Dec. 2021)  
 Total cost: Approx. 1.9 billion yen

# Business Expansion in Life-science Field

## Proactive approach to the food and pharmaceutical industries

### Residual chlorine concentration monitor “UP-400CL”

- ✓ An online monitor that manages the chlorine concentration of washing water at food cooking, manufacturing, and processing sites with our unique measurement technology that specializes in vegetable washing
- ✓ Automatic sampling and measurement data output to collectively manage measured figures and contribute to food safety and security



\*HORIBA's estimates as of Apr. 2022

- The world's first\* diamond electrode is used for a residual chlorine concentration monitor.
- Achieve long-life and measure electrolyzed water with high accuracy.

### Microbial rapid inspection device “Rapica”

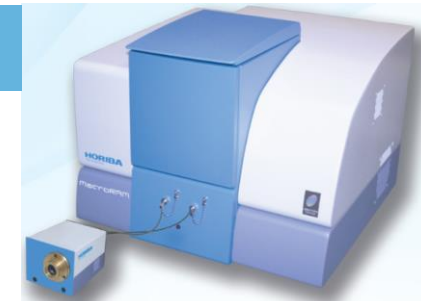
- ✓ Inspects microorganisms contained in products and enable strict quality control.
- ✓ Contributes to sophistication of quality control and productivity improvement in a wide range of fields such as pharmaceuticals, beverages, and regenerative medicine.



- Microorganisms can be detected in about 2.5 hours without culture, instead of several days with the culture method.
- Minimize human operations, reduce the risk of contamination from workers, and reduce work man-hours.

### Raman monitor for pharmaceutical processes

- ✓ Enables non-destructive monitoring in the pharmaceutical manufacturing process and contributes to manufacturing design, analysis, and quality control.
- ✓ Improves the efficiency and quality in development and manufacturing by monitoring control indicators of the composition and antibody concentration of biopharmaceuticals with a growing need in the future.



Versatile Raman probe

# Expanding Cross-segment Business Opportunities for the Semiconductor Market

Contribute to productivity improvement in the semiconductor manufacturing process

## AMC\* monitoring system

- ✓ AMC affects the performance of products and manufacturing equipment in clean rooms used in the semiconductor and electronic component industries, etc.
- ✓ Automatically monitors AMC trends and estimates pollution causes.
- ✓ Visualizes pollution status and reduces management costs.

Send data to the central control room via LAN connection

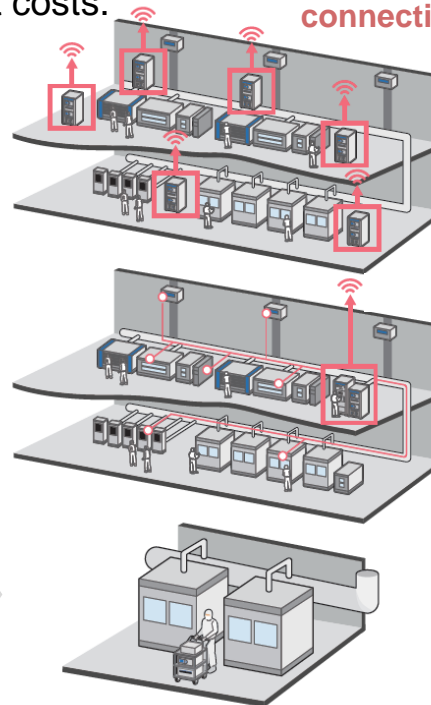
\*AMC: Airborne Molecular Contamination



Automatic continuous measurement at each point with a stand-alone analyzer

Automatic measurement at multiple points by a line selector

Point-by-point measurement with a portable stand-alone analyzer



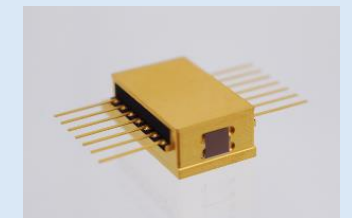
## CEMS for semiconductor factories\* [Under development]

- ✓ A measuring device that monitors whether the gases used in the semiconductor manufacturing process have been rendered harmless before being released into the atmosphere.
- ✓ Utilizing proprietary technology IRLAM, various components contained in emission gas are measured with high accuracy.

\*CEMS: Continuous Emission Monitoring System

### IRLAM Infrared Laser Absorption Modulation

- ✓ Gas concentration calculation algorithm originally developed by HORIBA



In-house developed laser



# Growth Investment in Europe

Respond to increasing demand for analysis and measurement in various industries

Drive the market as a leading company with spectroscopic technology



- ✓ Relocated the custom grating production base in Saclay near Paris to the "HORIBA Europe Research Center".
- ✓ Respond to increasing demand in fields such as advanced materials research, medical care, and biotechnology by consolidating production functions.

Top:  
HORIBA France SAS

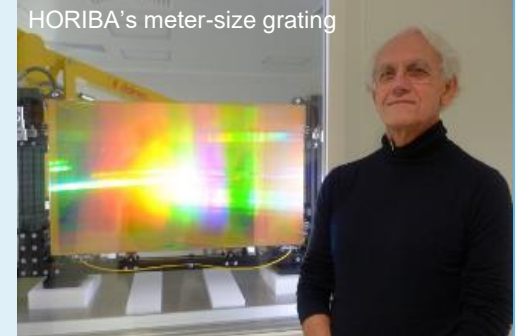
Right:  
Manufacturing  
facilities for large  
gratings



## 【Gratings】

- A device which disperses light by wavelength
- Critical components for analytical instruments and laser systems

Professor Gérard Moule,  
winner of the 2018 Nobel Prize in Physics (photo).  
He uses HORIBA's gratings for research for a long time.



Respond to measurement needs to achieve carbon neutrality

- ✓ The production base for gas analyzers such as air pollution analyzers in Reichlingen, Germany, has been expanded to about twice the size of the existing production base, and began full-scale operations this spring.
- ✓ Respond to growing needs for gas measurement in order to improve factory production efficiency and reduce CO2 emissions.
- ✓ Provide total solutions that combine gas measurement technology with evaluation technology for fuel cells and hydrogen production equipment.





# New Product Development for Target Markets

HORIBA's technology that contributes to efficiency, such as by reducing analysis time and maintenance man-hours

## X-ray Analytical Microscope “XGT-9000 Pro” and “XGT-9000 Expert”

- ✓ High-precision analysis of types and amounts of elements contained in materials.
- ✓ Maximum reduction in analysis time: 65% for the Pro and 50% for the Expert<sup>1</sup>.
- ✓ The Expert is the first device in the world<sup>2</sup> to achieve light element analysis from boron.



XGT-9000 Expert

- 1 Comparison with HORIBA's conventional products. The effect may vary depending on the method of use and conditions.
- 2 The world's first tabletop energy dispersive X-ray fluorescence spectrometer (as of August 2022, based on HORIBA's research)

Contributing to quality control and R&D of all kinds of materials, such as semiconductor wafer film thickness analysis and foreign matter analysis in the manufacturing process of lithium-ion batteries

## No-refill self-cleaning pH electrode

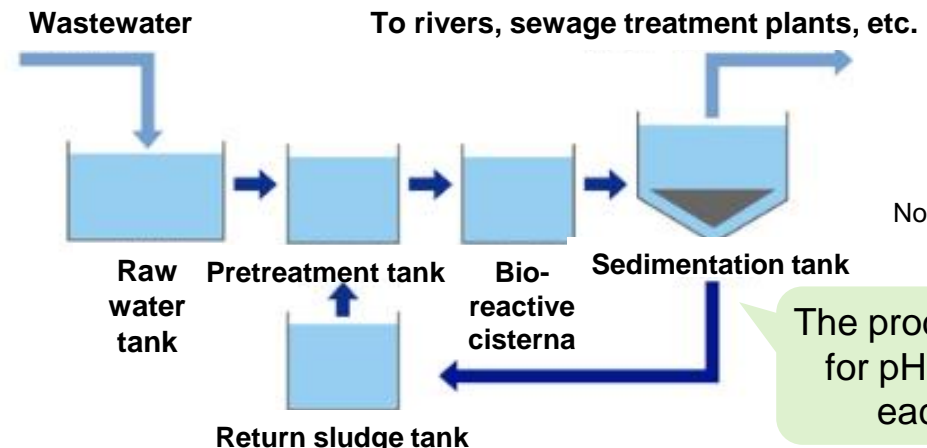
No need to replenish electrode solution; the world's first<sup>1</sup> antifouling technology

- ✓ Achieved stable continuous measurement in the wastewater treatment process where the electrodes are prone to contamination.
- ✓ Reduce maintenance man-hours by 99%<sup>2</sup> at max and contribute to more efficient wastewater treatment.



Non-refill self-cleaning pH electrode

### Factory wastewater treatment process (illustration)



The product is used for pH control of each tank

- 1 As a glass electrode pH meter (as of October 2022, based on HORIBA's research)
- 2 Comparison with HORIBA's conventional products. The effect may vary depending on the method of use and conditions.

# 2022 Masao Horiba Awards Ceremony (Held on 2022/10/18)

【Theme】

Analytical and measurement technologies that contribute to the use of hydrogen for a decarbonized society

Application targets: Advanced analysis and measurement technologies

that contribute to technological innovation for new use of hydrogen

Focus:

Research that leads to technological development for the realization of carbon neutrality



A record 26 entries from Japan and overseas,  
three Masao Horiba Award winners and  
two Special Award winner

## Masao Horiba Awards

A contribution to the acceleration of  
innovation, by supporting young researchers  
and engineers in Japan and overseas



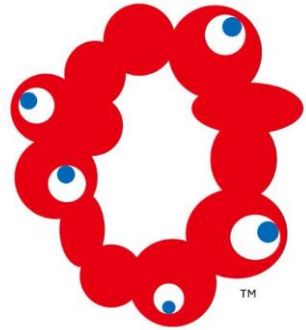
Masao Horiba Awards  
堀場雅夫賞

“We hope that this award will give  
some encouragement to academics  
striving in the field of measurement  
technology research...”

Established in 2003  
by the company founder  
Dr. Masao Horiba

# Co-sponsorship of a Thematic Project for EXPO2025

Contribution to the “Future of Life” by measurement technology



OSAKA, KANSAI, JAPAN  
**EXPO**  
**2025**

Logo of the  
Osaka-Kansai Expo

**Sponsorship as a Bronze Partner  
of one of the Signature Pavilions**

Pavilion led by Dr. Hiroshi Ishiguro, Producer

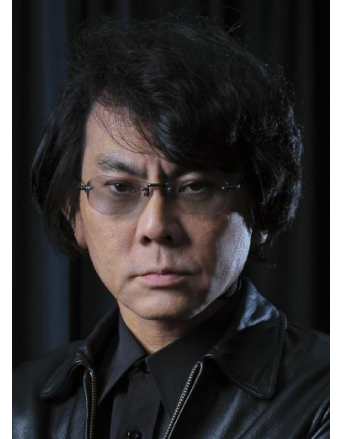
Theme: “Future of Life”

Expand the possibilities of life by fusing with technology

Erase the boundaries between humans and robots

Future of Life Co-creation Project 2025

Create the future of 50 years from now  
with the thematic project sponsors



Dr. Hiroshi Ishiguro  
Professor,  
Osaka University  
Visiting Director,  
ATR Hiroshi Ishiguro  
Laboratories

Based on the "measurement" technology that we have cultivated since our founding, we will contribute to the world of 50 years from today whether Dr. Ishiguro will envision.

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# Shareholder Return

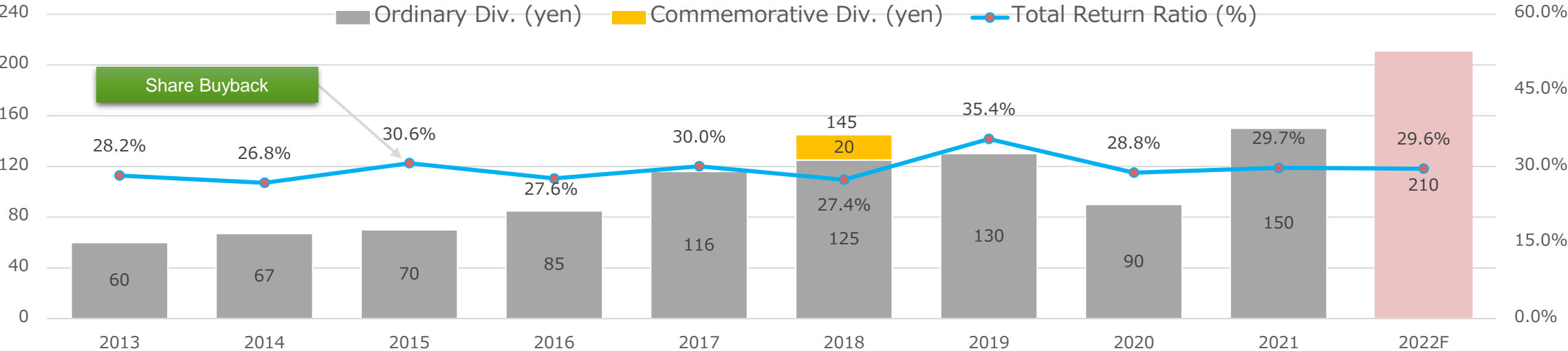
## Basic Policy

- Dividend payment + Share buyback = 30% of Consolidated net profit to be targeted
- Remaining earnings are retained internally for strategic investment (i.e. facilities, M&A)

### Dividends per share and Share buybacks

- 2020 Results: 90YEN [Interim 30yen / Year-end 60yen]
- 2021 Results: 150YEN [Interim 50yen / Year-end 100yen]
- 2022 Forecast: 210YEN [Interim 65yen / Year-end 145yen]

## Per-share dividend



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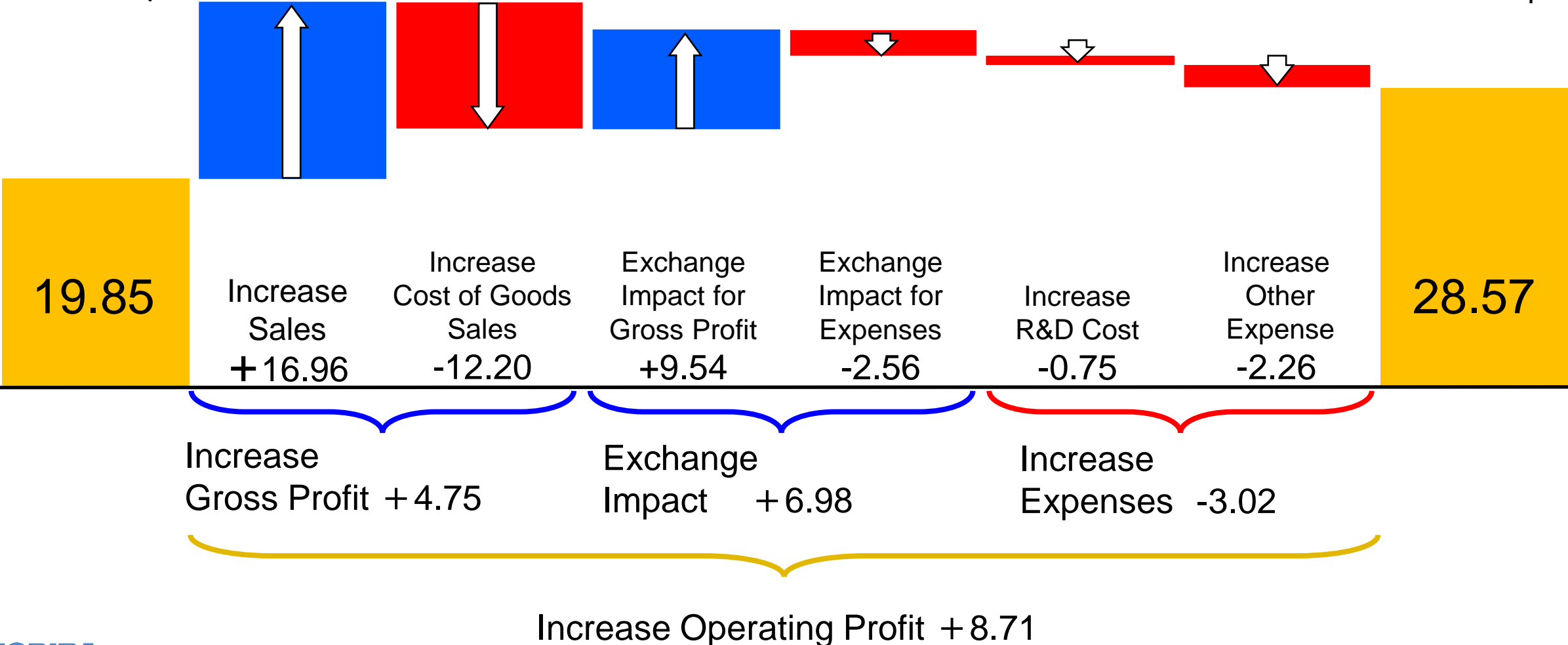
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# Operating Profit Analysis (vs 2021 Jan. – Sep.)

(Billions of yen)

2021  
Jan. – Sep.

2022  
Jan. – Sep.



# Exchange Rate Trend / Forecasts / Impacts

	2021	2022				vs 2021
	Annual	Previous Forecasts (as of 12 Aug.)	Actual	Forecasts		
			Jan. - Sep.	Oct. - Dec.	Annual	
USD	109.90	130	128.30	147.10	133	+23.10
EUR	129.91	135	136.05	143.85	138	+8.09

## Exchange rate impact for 2022 Jan. – Sep. (vs 2021 Jan. – Sep.)

	(Billions of yen)
Increase sales	+14.20
Increase cost of goods sales	-4.65
Impact to gross profit	+9.54
Increase expenses	-2.56
Impact to operating profit	+6.98

## Exchange rate impact for 2022 Forecasts 1 yen impact of Sales and O.P. (Weak yen)

	(Billions of yen)	
	Sales	Operating profit
USD	+0.70	+0.37
EUR	+0.34	-0.00



# Capital Investment, Depreciation, R&D

(Billions of Yen)

	2021	2022			2022
	Actual	Previous Forecasts (as of Aug. 12)	Forecasts (as of Nov. 11)	vs Previous Forecasts	Actual Jan. - Sep.
Capex	12.4	15.0	13.5	-1.5	7.4
Depreciation and amortization	10.4	11.0	11.0	-	8.3
R&D expenses	16.7	19.0	19.0	-	13.2
to net sales(%)	7.4%	7.3%	7.2%	-0.1p	7.2%

## 2022 Topics

### PP&E:

Continuation : Investment in a new facility in China, HORIBA FuelCon's new facility, etc.  
New : Enhance the base of global production

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# Five Business Segments & Major Products

Figures are the sales composition ratio for FY 2021

**Automotive  
(27%)**



**Emission Measurement  
Systems**



**Process &  
Environmental  
(9%)**



**Stack Gas Analyzers**




**Medical  
(12%)**



**Automatic Blood Cell  
Counters plus CRP**



**Semiconductor  
(39%)**



**Mass Flow Controllers**



**Scientific  
(13%)**



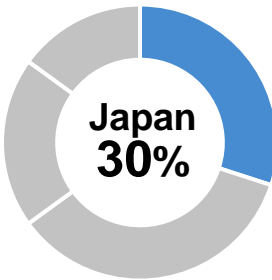
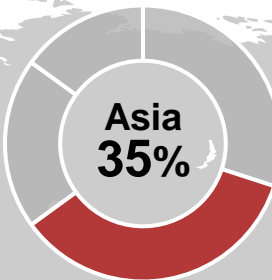
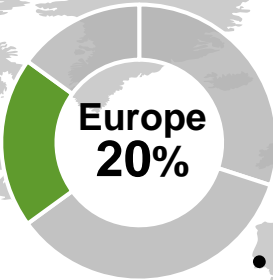
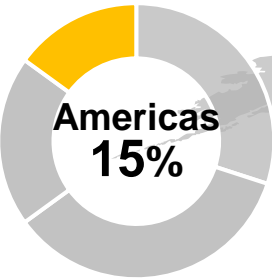
**Raman Imaging Device**



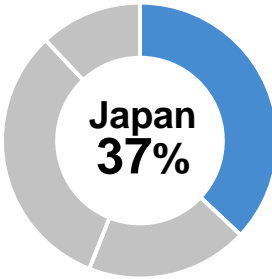
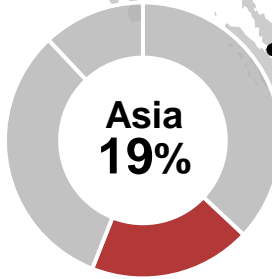
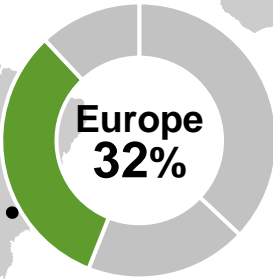
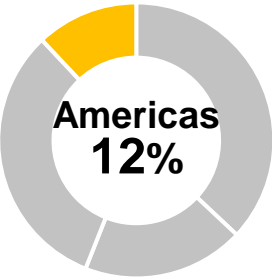
# Global Network

## Sales by region (as of Dec 2021)

● : Major business hubs



## Employee headcount by region (as of Dec 2021)



Number of companies  
(as of Dec 31, 2021)

**49**



Overseas sales ratio  
(as of Dec 2021)

**70%**



Foreign employee ratio  
(as of Dec 31, 2021)

**63%**

# Achieving Sustainable Growth Through M&A

## Major M&As

**1996**  
**ABX** (France)  
【Medical】



**1997**  
**Jobin Yvon**  
(France)  
【Scientific】



**2005**  
**SCHENCK DTS**  
(Germany)  
【Automotive】



**2015**  
**MIRA** (UK)  
【Automotive】

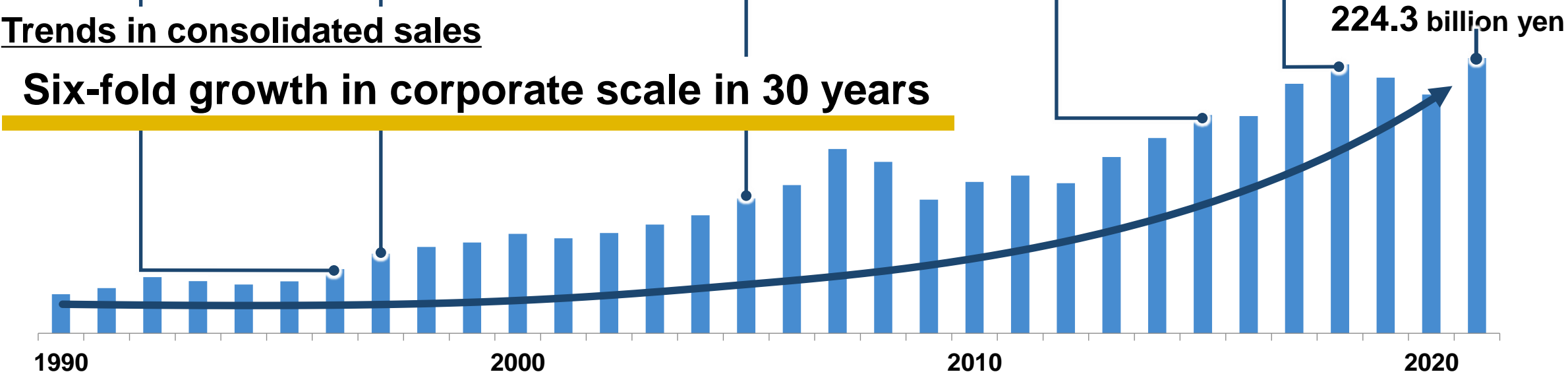


**2018**  
**FuelCon**  
(Germany)  
【Automotive】

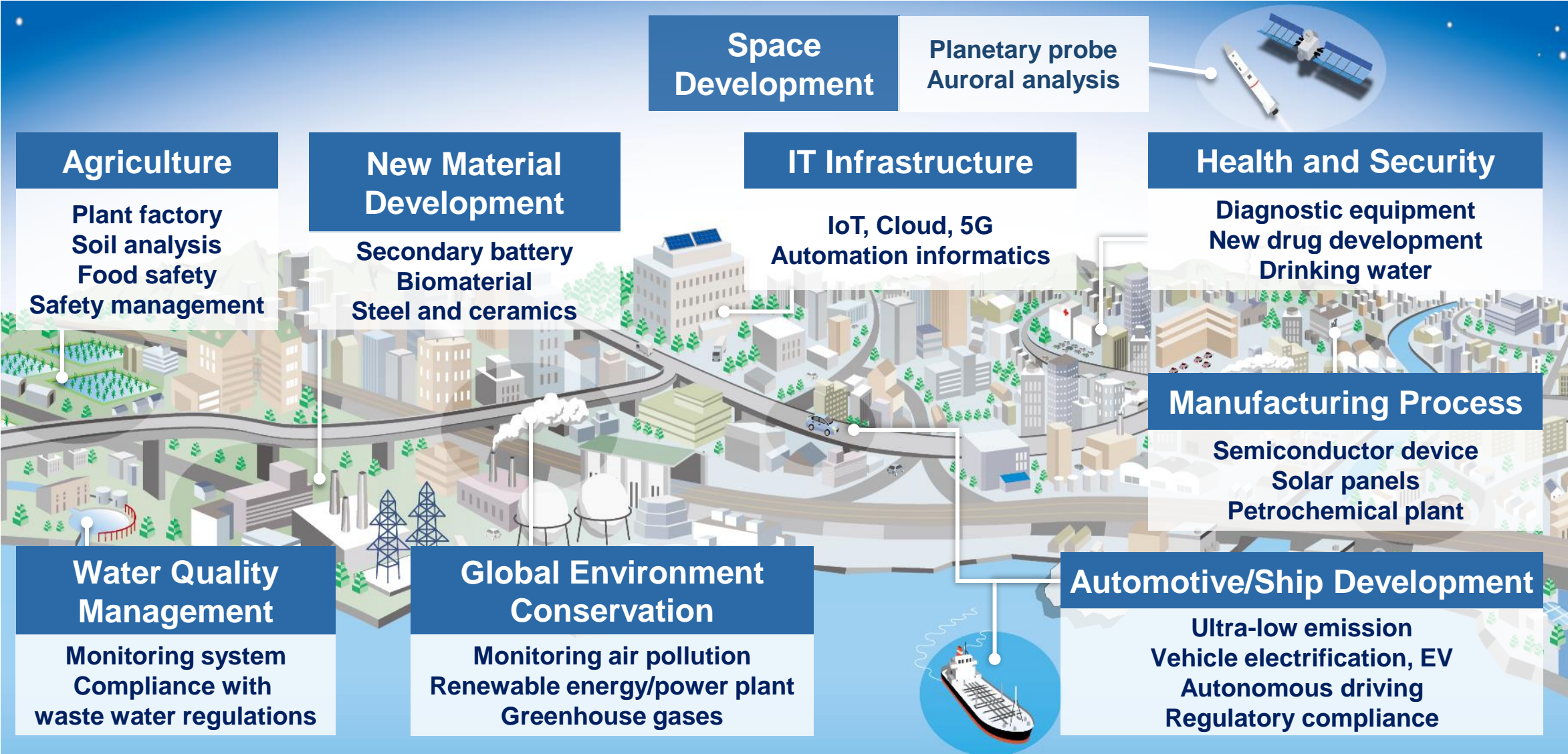


## Trends in consolidated sales

**Six-fold growth in corporate scale in 30 years**



# HORIBA's Business Domain



Omoshiro-okashiku  
Joy and Fun



Terima kasih  
谢谢  
Gracias  
Σας ευχαριστώ πάρα πολύ  
धन्यवाद  
شُكْرًا  
Danke  
Tack ska du ha  
Grazie  
**THANK YOU**  
Obbrigado  
Большое спасибо  
Cảm ơn  
Merci  
감사합니다  
ขอบคุณครับ  
ありがとうございました  
Dziękuję