



Financial Information

HORIBA, Ltd.

August, 2022

Contents

- 2022 First Half Results
- 2022 Forecasts
- Outlines by Business Segment
- Topics – Contribution to Social Issues by Cross-Segment Approach
- Shareholder Return
- Financial Data
- Corporate Profile

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Review of First Half of 2022

External Events	<ul style="list-style-type: none">◆ Procurement difficulties and rising purchasing prices◆ Increasingly complex international situations such as the Russia-Ukraine war and energy issues◆ Global structural reform of the semiconductor industry from the economic security perspective◆ Growing interest in hydrogen energy as a way to achieve carbon neutrality◆ Further heightened interest in life science
Internal Events	<ul style="list-style-type: none">◆ Continued investment for growth mainly in China and Europe◆ Business expansion in new fields such as hydrogen energy and life science◆ Focus on new technology development and aggressive launch of new products◆ Strengthened procurement capabilities through cooperation among HORIBA Group companies

2022 First Half Results

(Billions of yen)

	2021	2022		vs 2021	vs Previous Forecasts
	1st half Results (Jan-Jun)	1st half Forecasts (as of May 13)	1st half Results (Jan-Jun)	Changes	Changes
Sales	101.3	119.0	★ 114.9	+13.6	- 4.0
Operating Profit	13.0	17.0	★ 16.2	+3.1	- 0.7
O.P.%	12.9%	14.3%	14.1%	+1.2p	-0.2p
Ordinary Profit	13.0	16.8	★ 16.7	+3.7	- 0.0
Net Income Attributable to Owners of Parent	8.7	11.0	★ 11.2	+2.4	+0.2
USD/JPY	107.82	-	123.14	+15.32	-
EUR/JPY	129.89	-	134.39	+4.50	-

2022 First Half Results by Segment

(Billions of yen)

	Sales			Operating Profit		
	2021	2022	vs 2021	2021	2022	vs 2021
	1st half Results (Jan-Jun)	1st half Results (Jan-Jun)	Changes	1st half Results (Jan-Jun)	1st half Results (Jan-Jun)	Changes
Auto	24.9	25.6	+0.7	-1.1	-1.7	-0.5
P&E	10.0	★ 10.1	+0.1	1.1	0.6	-0.4
Medical	12.8	13.6	+0.7	0.3	-0.1	-0.4
Semi	40.0	★ 49.4	+9.3	12.3	★ 16.7	+4.4
Scientific	13.4	★ 15.9	+2.5	0.4	★ 0.7	+0.3
Total	101.3	114.9	+13.6	13.0	16.2	+3.1

2022 First Half Results (B/S, CF)

B/S

- ◆ Total assets were ¥398.3bn, up ¥26.8bn, by increasing inventory
- ◆ Equity ratio: 56.2%

(compared to the end of Dec. 2021)







CF

- ◆ Operating CF: Cash in ¥10.2bn due to operating profit
 - ◆ Investing CF: Cash out ¥3.0bn due to capital investments
 - ◆ Financial CF: Cash out ¥6.9bn due to payment of dividends
- } Free CF: + ¥7.1bn

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HORIBA's Assumptions Regarding Market Environment

<p>General</p>		<p>Expect a recovery in economic activities living-with/post COVID-19. Remain concerned about procurement issues such as material shortages and rising prices, as well as increasingly complex international affairs.</p>
<p>Automotive</p>		<p>Expect an increase in R&D investment for electrification, autonomous driving, etc. Concerned about delay in shipment and acceptance inspection due to procurement difficulties.</p>
<p>Process & Environmental</p>		<p>Environmental regulation-driven demand will remain strong; the Asian market will expand mainly in air and water quality measurement. Expect expansion of applications with the launch of new products.</p>
<p>Medical</p>		<p>Market outlook is difficult to foresee due to uncertainty in timing of containing COVID-19 by region.</p>
<p>Semiconductor</p>		<p>Capital investment by semiconductor manufacturers will stay high. Expect a medium-term growth in demand for measurement due to technological advance in semiconductor manufacturing processes.</p>
<p>Scientific</p>		<p>Expect strong demand for measurement and analysis equipment for development and manufacturing processes in the semiconductor market. Anticipate an increase in demand in the life science market.</p>

2022 Forecasts

(Billions of yen)

	2021	2022		Changes	
	Results	Previous Forecasts (as of May 13)	Forecasts (as of Aug. 12)	vs 2021	vs Previous Forecasts
Sales	224.3	260.0	★ 260.0	+35.6	-
Operating Profit	32.0	38.0	★ 40.0	+7.9	+2.0
O.P.%	14.3%	14.6%	15.4%	+1.1p	+0.8p
Ordinary Profit	32.0	37.5	★ 40.0	+7.9	+2.5
Net Income Attributable to Owners of Parent	21.3	25.5	★ 28.0	+6.6	+2.5
USD/JPY	109.90	124.00	130.00	+20.10	+6.00
EUR/JPY	129.91	133.00	135.00	+5.09	+2.00

2022 Forecasts by Segment

(Billions of yen)

	Sales					Operating Profit				
	2021	2022		Changes		2021	2022		Changes	
	Results	Previous Forecasts (as of May 13)	Forecasts (as of Aug. 12)	vs 2021	vs Previous Forecasts	Results	Previous Forecasts (as of May 13)	Forecasts (as of Aug. 12)	vs 2021	vs Previous Forecasts
Auto	61.2	70.0	66.0	+4.7	-4.0	-0.0	1.5	-	+0.0	-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	103.0	★ 107.0	+19.9	+4.0	28.0	31.5	★ 35.0	+6.9	+3.5
Scientific	29.9	35.0	★ 35.0	+5.0	-	1.9	2.5	★ 2.5	+0.5	-
Total	224.3	260.0	260.0	+35.6	-	32.0	38.0	40.0	+7.9	+2.0

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First Half Results and 2022 Forecasts

(Billions of yen)

2022 First Half Results

- Orders were on a recovery trend; the timing of shipments and acceptance inspections delayed due to procurement difficulties.

【EMS】
 Captured demand for heavy-duty vehicles such as trucks and buses in Europe and the U.S.

- 【MCT*1 ECT*2】**
- Expansion of demand for new technologies and electrified vehicle development solutions
 - Increase in demand related to new energy, especially hydrogen technology

2022 Full Year Forecasts Medium- to long-term outlook

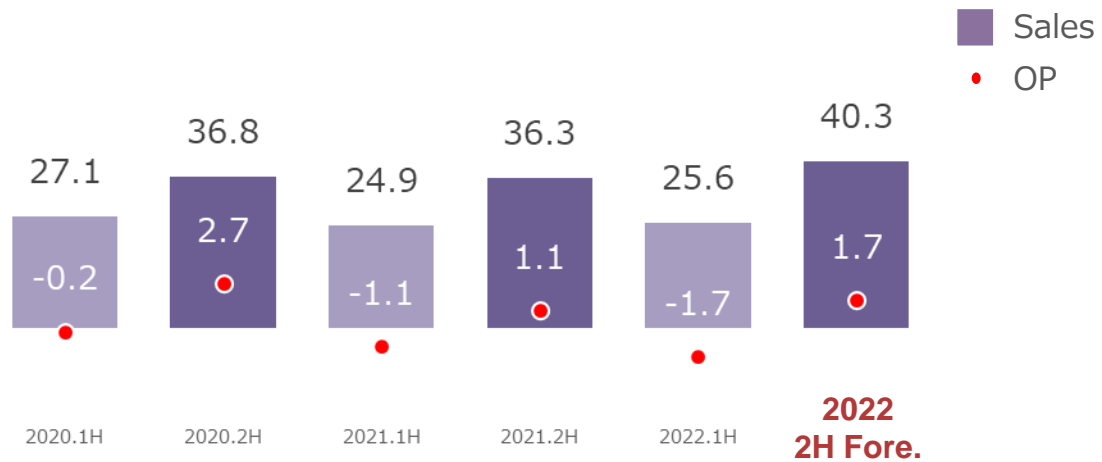
*1 Mechatronics
 *2 Engineering Consultancy & Testing

- Remain concerned about procurement difficulties and rising prices.
- Focus on vehicle development support during power unit transition.

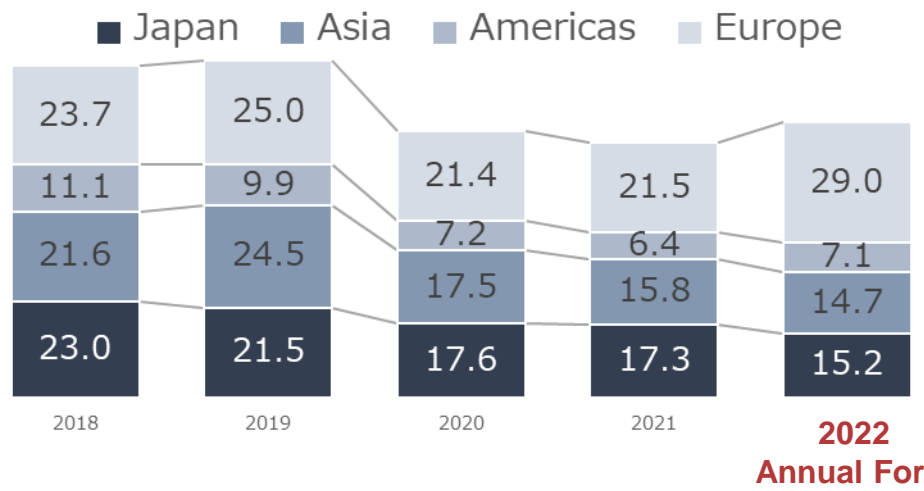
【EMS】
 Increase in medium-term demand in response to the introduction of new exhaust gas regulations

- 【MCT · ECT】**
- Expect sales expansion in the field of next-generation mobility development.
 - Expect further expansion of demand for hydrogen related technology.

Sales and O.P. (First Half and Second Half)



Sales By Region



First Half Results and 2022 Forecasts

(Billions of yen)

2022 First Half Results

Business was strong but was affected by procurement difficulties.

【Gas monitoring】

- Steady demand for replacement and sales increase in Japan
- Solid measurement-related at existing power plants

【Water quality monitoring】

Strong demand for water quality measurement equipment used in the manufacturing processes in the electronics industry and in compliance with environmental regulations

2022 Full Year Forecasts Medium- to long-term outlook

*1 Carbon dioxide Capture, Utilization and Storage
*2 Total Organic Carbon

Expect steady measurement demand to comply with environmental regulations and for the electronics industry.

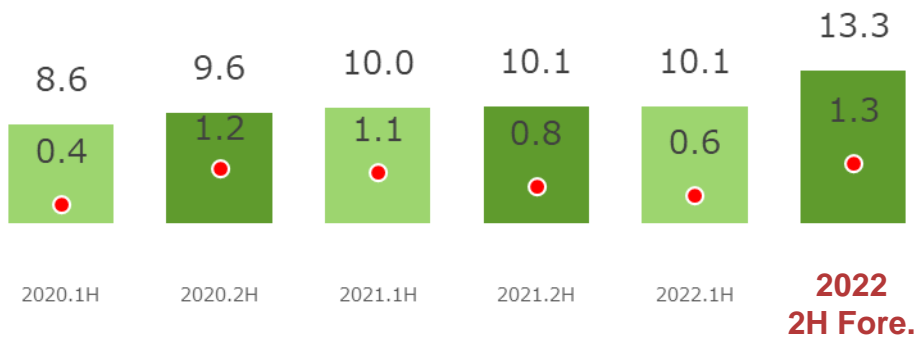
【Gas monitoring】

- Expect an increase in demand for gas measurement in the electronics industry.
- Expect an increase in demand for new energy such as hydrogen and ammonia combustion power generation, and CCUS*1-related demand.

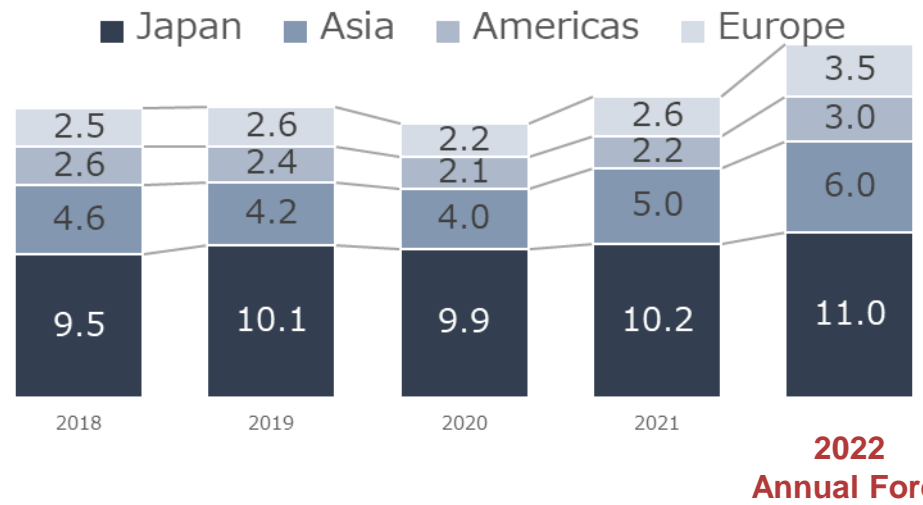
【Water quality monitoring】

Will capture demand for TOC*2 and regulation-related new products.

Sales and O.P. (First Half and Second Half)



Sales By Region



First Half Results and 2022 Forecasts

(Billions of yen)

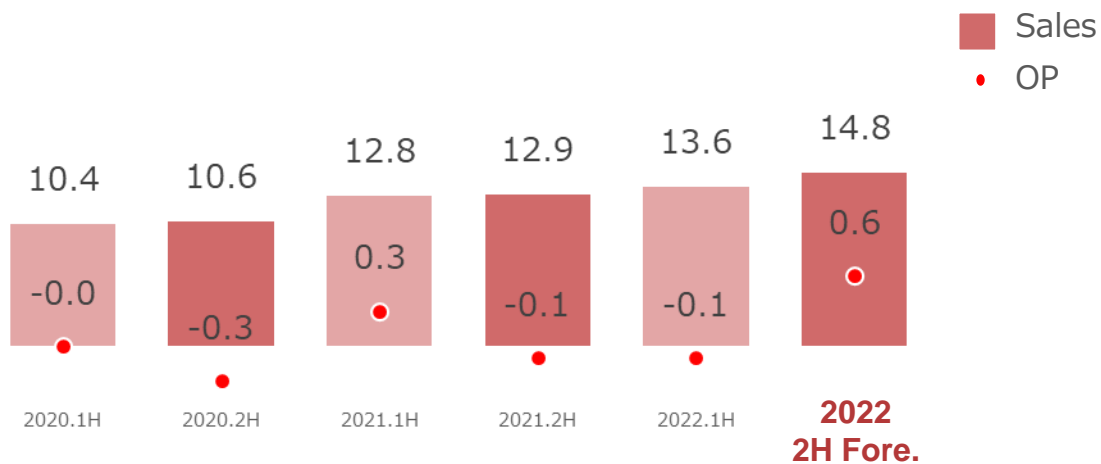
2022 First Half Results

- Sales of test reagents remained sluggish due to the lingering impact of COVID-19.
- Increased sales of hematology analyzers in Asia.
- Increased sales of clinical chemistry analyzers and reagents in Europe.

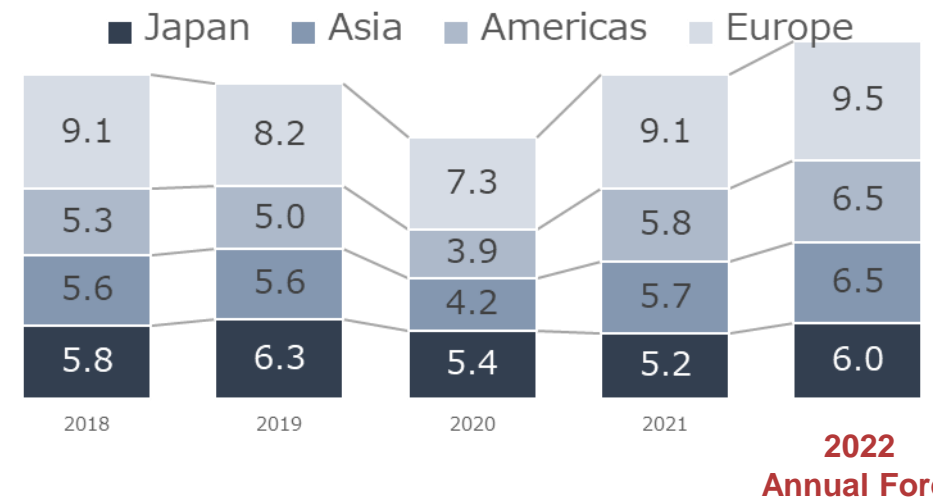
2022 Full Year Forecasts Medium- to long-term outlook

- Expect containment of COVID-19, leading to full normalization in the number of hospital in-patients.
- Will supply hematology analyzers to Siemens earnestly. Will expand sales areas globally from some European countries, where the product was launched. Anticipate medium- to long-term profit contribution.
- Aim for further business expansion in the fields of immunology and clinical chemistry other than hematology.

Sales and O.P. (First Half and Second Half)



Sales By Region



First Half Results and 2022 Forecasts

(Billions of yen)

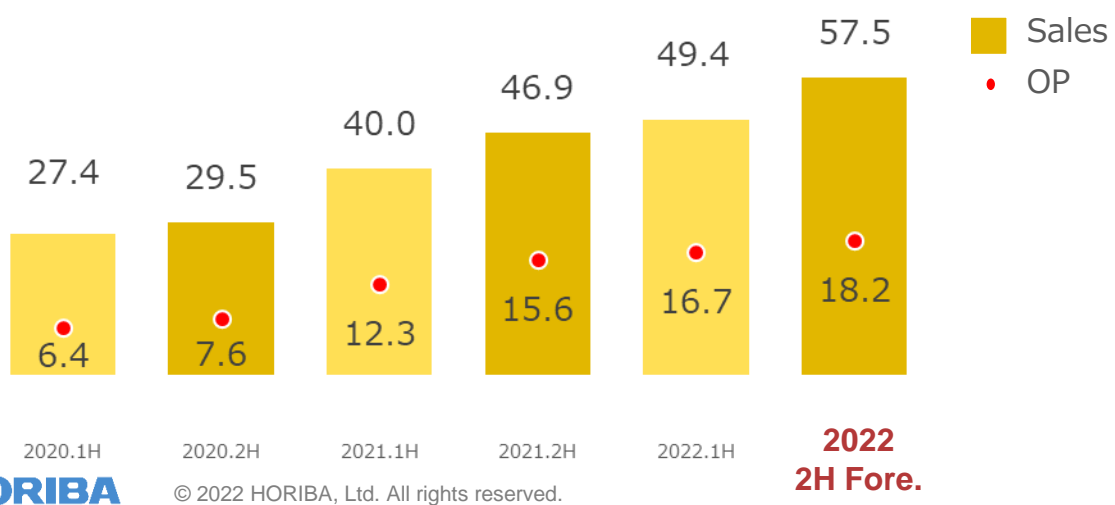
2022 First Half Results

- Semiconductor manufacturers further boosted capital investment. Significant increase in sales to semiconductor production equipment (SPE) manufacturers.
- Expanded business to China and India. Increased sales of photovoltaic cell manufacturing products, demand for which has been increasing from the perspective of carbon neutrality.

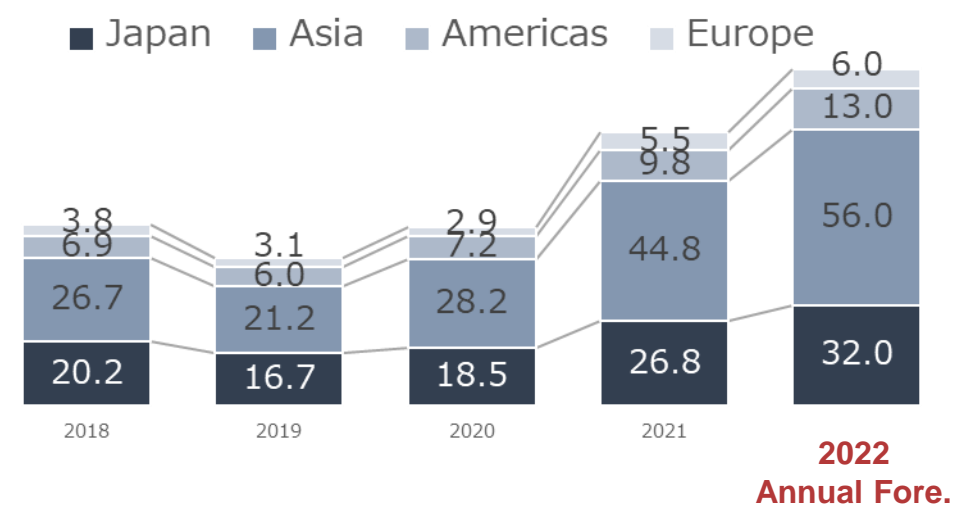
2022 Full Year Forecasts Medium- to long-term outlook

- Expect an increase in sales to SPE manufacturers on the back of continued strong capital investment by semiconductor manufacturers.
- Concerned about procurement difficulties and rising materials prices.
- In addition to existing main products, aim to expand business fields by utilizing various sensing technologies.

Sales and O.P. (First Half and Second Half)



Sales By Region



First Half Results and 2022 Forecasts

(Billions of yen)

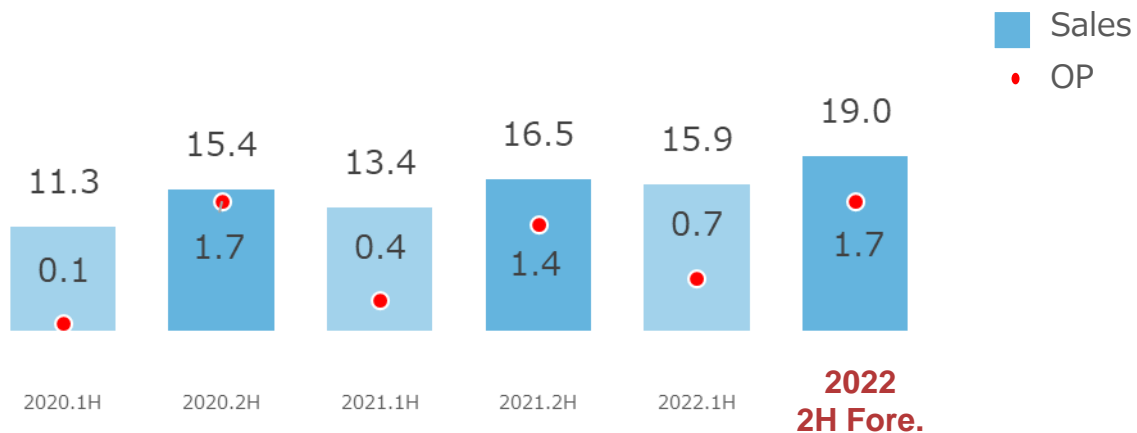
2022 First Half Results

- Strong demand for and increased sales of optical components for semiconductor production equipment (SPE) manufacturers.
- A recovery in corporate R&D investment led to an improvement in sales of Raman Spectrometers and other devices.

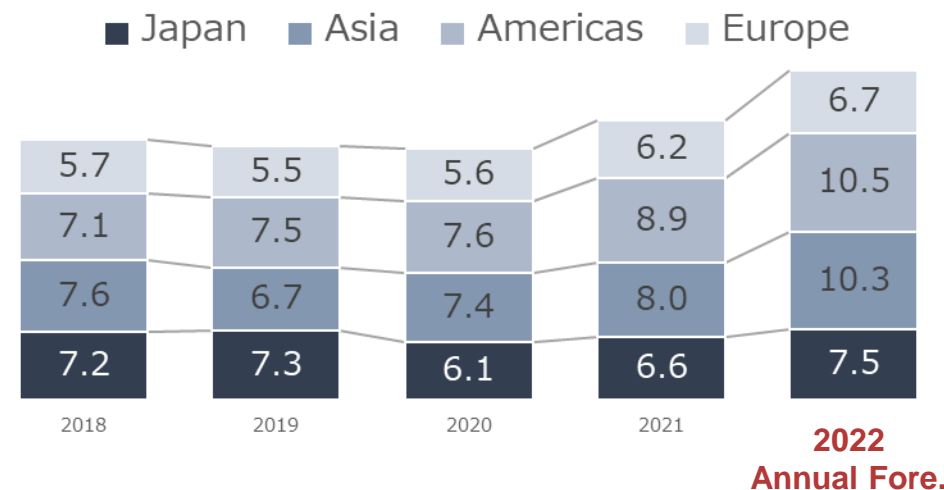
2022 Full Year Forecasts Medium- to long-term outlook

- Concerned about procurement difficulties and rising prices, despite anticipating steady business.
- Expect to reap the harvest from products recently introduced to the market.
- Will strengthen analysis and measurement applications in terms of both technologies and sales. Will provide solutions in the life-science field (i.e., food and pharmaceuticals) and the semiconductor market (industrial processes).

Sales and O.P. (First Half and Second Half)



Sales By Region



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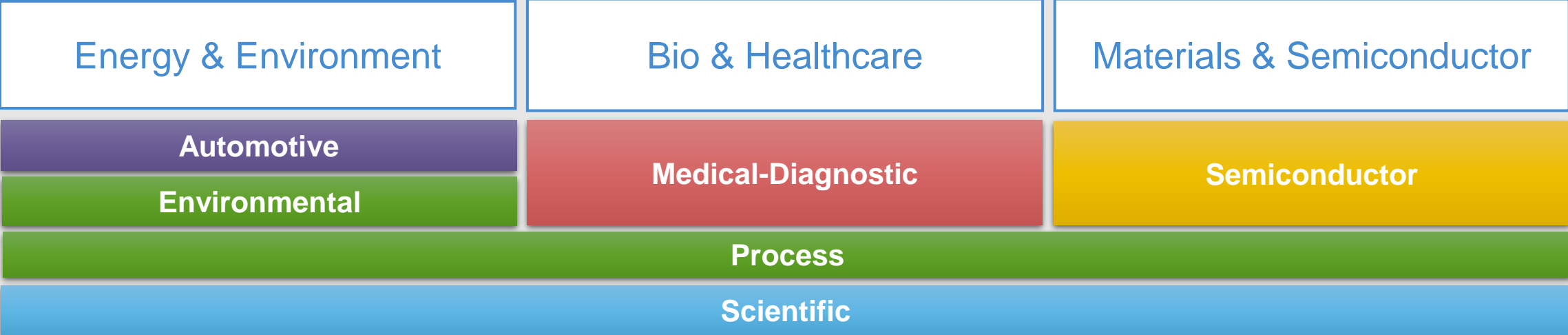
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Contribution to Social Issues by Cross-Segment Approach

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: 9,900m²
 (Development/production area 7,000m²
 Office area 2,900m²)
 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

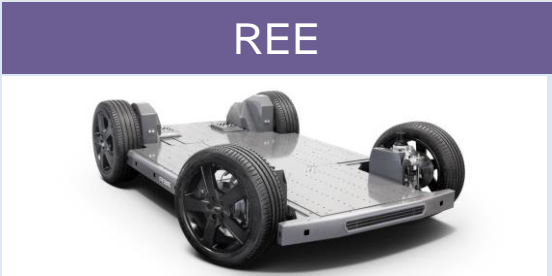
2015 2016 2017 2018 2019 2020 2021 2022...

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>

*IVD: In Vitro Diagnostics

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.

HORIBA's hematology and CRP analyzer

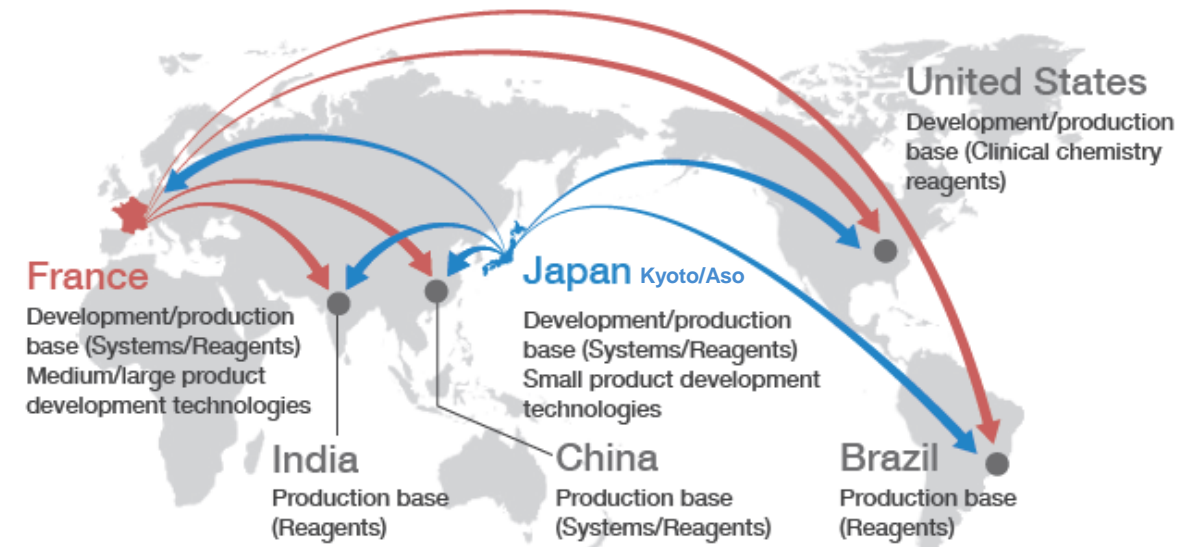
- Introduced to the market for the first time in the world in 1998
- 90% market share in Japan



New product

【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: 23,900m²
(Reagent factory 7,769m²)
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”

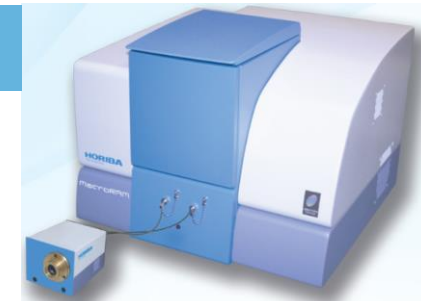
- ✓ Inspects microorganisms contained in products and enable strict quality control.
- ✓ Contributes to sophistication of quality control and productivity improvement in a wide range of fields such as pharmaceuticals, beverages, and regenerative medicine.



- 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

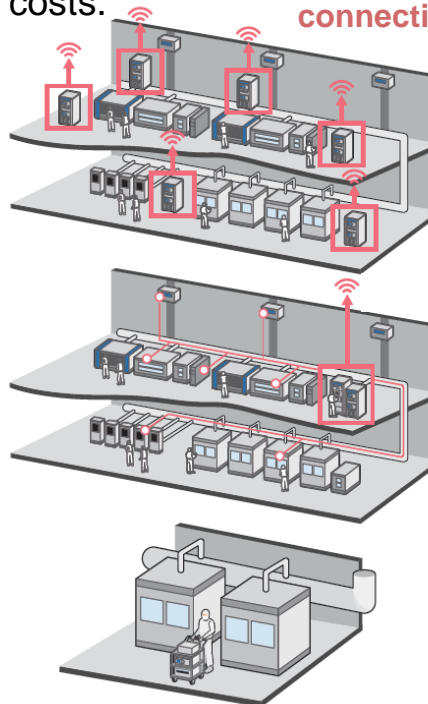
*AMC: Airborne Molecular Contamination



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



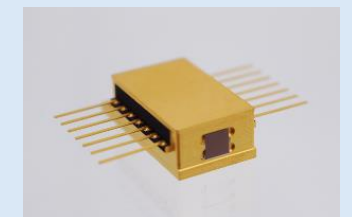
CEMS for semiconductor factories* [Under development]

- ✓ 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

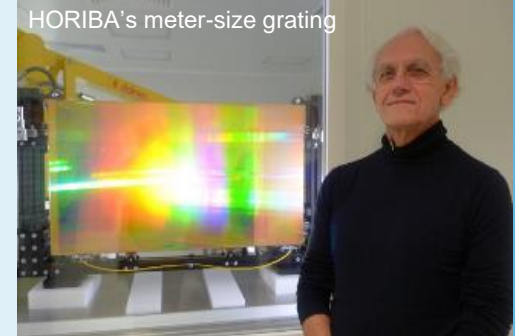
Right:
Manufacturing
facilities for large
gratings



【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.



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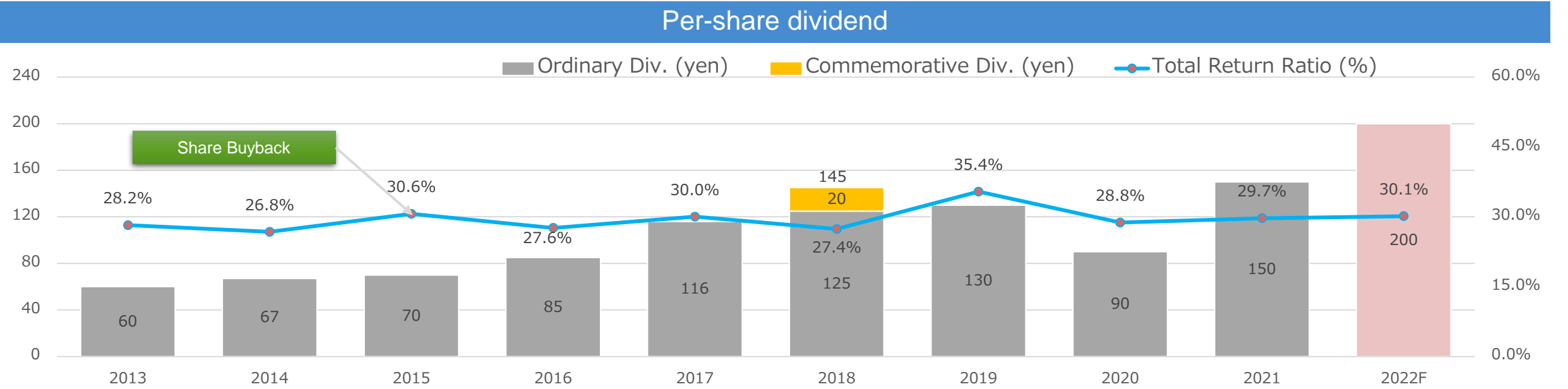
Shareholder Return

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 200yen [Interim 65yen/Year-end 135yen]



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Exchange Rate Trend / Forecasts / Impacts

	2021		2022				vs 2021
	1H	Annual	Previous Forecasts (as of 13 May)	Actual 1H	Forecasts 2H	Forecasts Annual	
USD	107.82	109.90	124	123.14	136.86	130	+20.10
EUR	129.89	129.91	133	134.39	135.61	135	+5.09

Exchange rate impact (2022 First Half results)

Increase Sales	+7.05
Increase Cost of Goods Sales	-2.48
Impact to Gross Profit	+4.56
Increase Expenses	-1.35
Impact to Operating Profit	+3.20

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

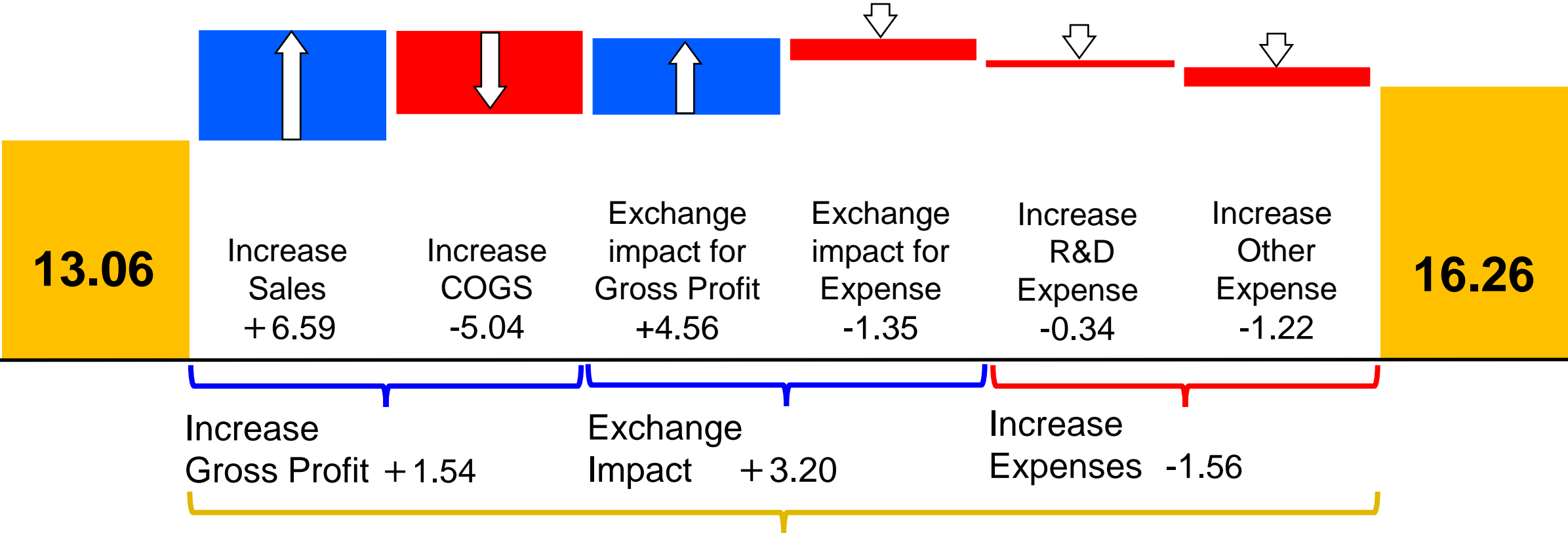
	Sales	Operating Profit
USD	+0.70	+0.36
EUR	+0.34	+0.00

Operating Profit Analysis (vs 2021)

(Billions of yen)

2021
Jan. – Jun.

2022
Jan. – Jun.



Capital Investment, Depreciation, R&D

(Billions of Yen)

	2021	2022			2022
	Actual	Previous Forecasts (as of May 13)	Forecasts (as of Aug 12)	vs Previous Forecasts	Actual Jan - Jun
Capex	12.4	15.0	15.0	-	4.0
Depreciation and amortization	10.4	11.0	11.0	-	5.5
R&D expenses	16.7	19.0	19.0	-	8.5
to net sales(%)	7.4%	7.3%	7.3%	-	7.4%

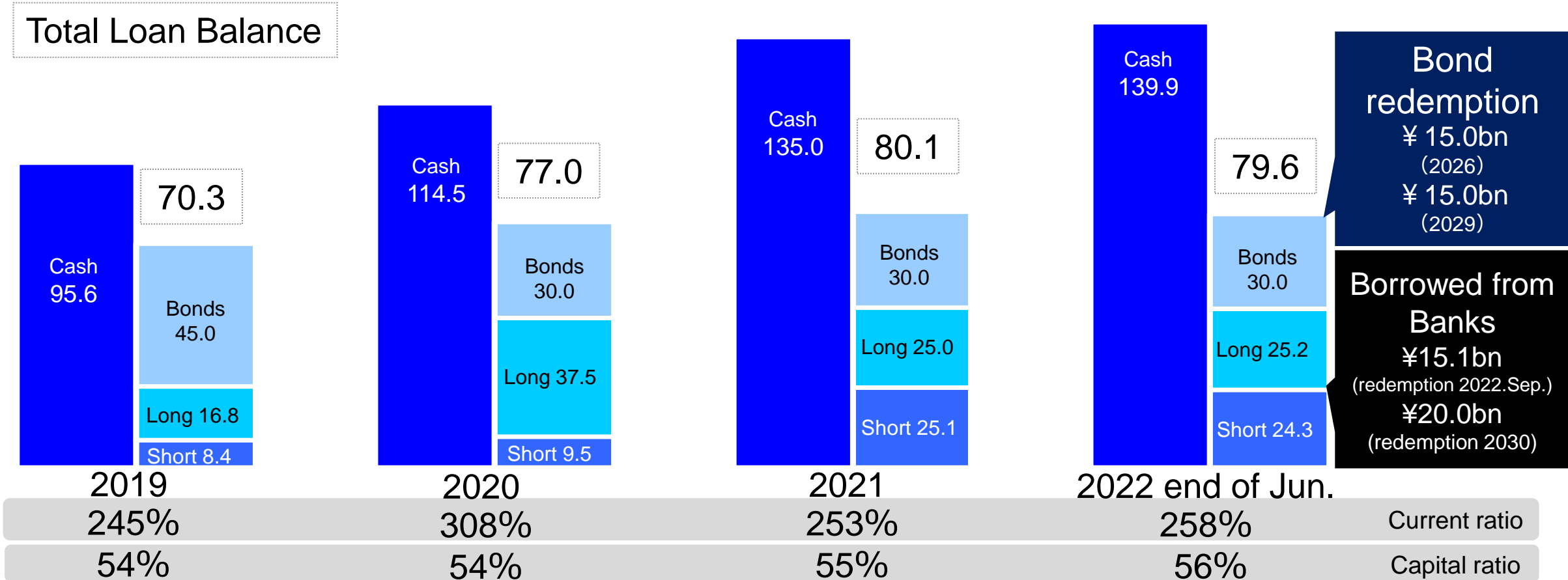
2022 Topics

PP&E:

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

Cash Balance

(Consolidated basis, each end of period)
(Billions of Yen)



• Recent issuer rating: R&I “A” (Aug. 2021), JCR “A+” (Aug. 2021)

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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%)**



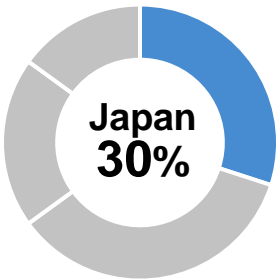
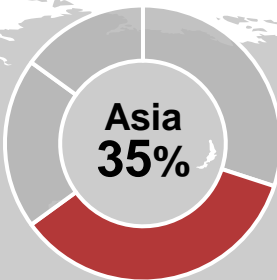
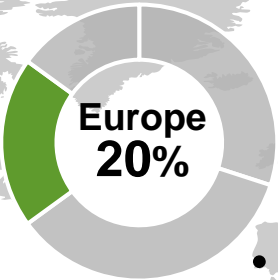
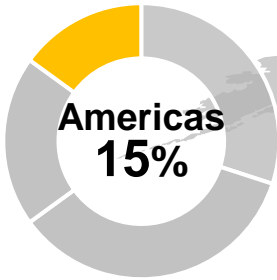
Raman Imaging Device



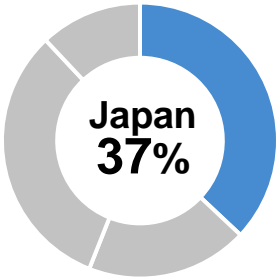
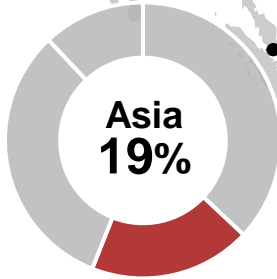
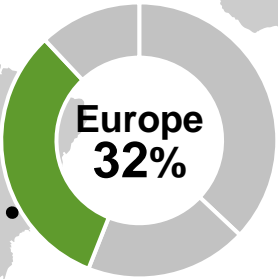
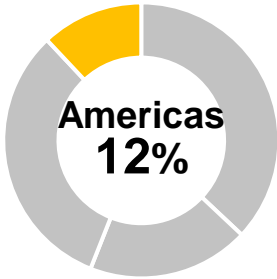
Global Network

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】

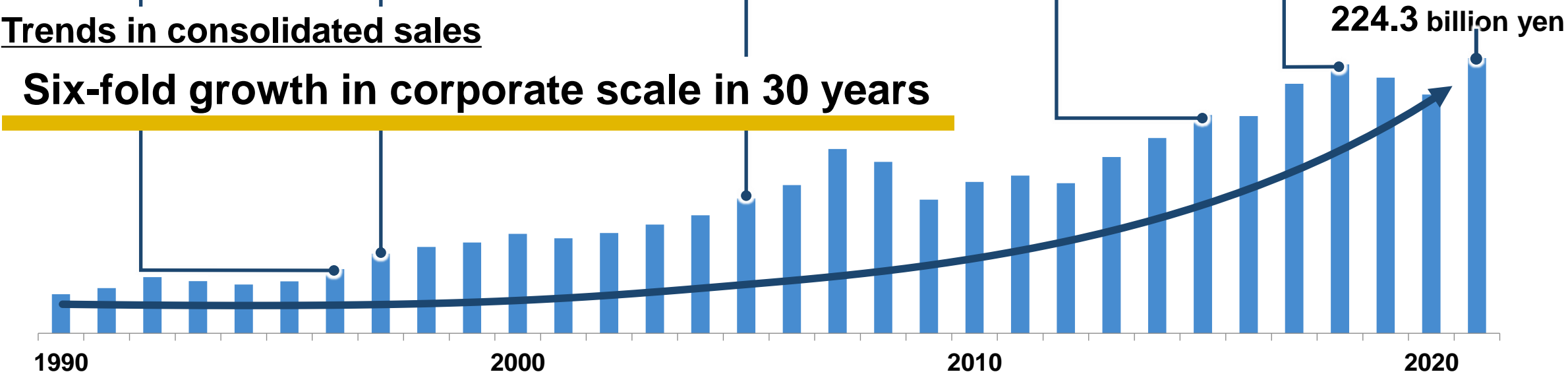


2018
FuelCon
(Germany)
【Automotive】

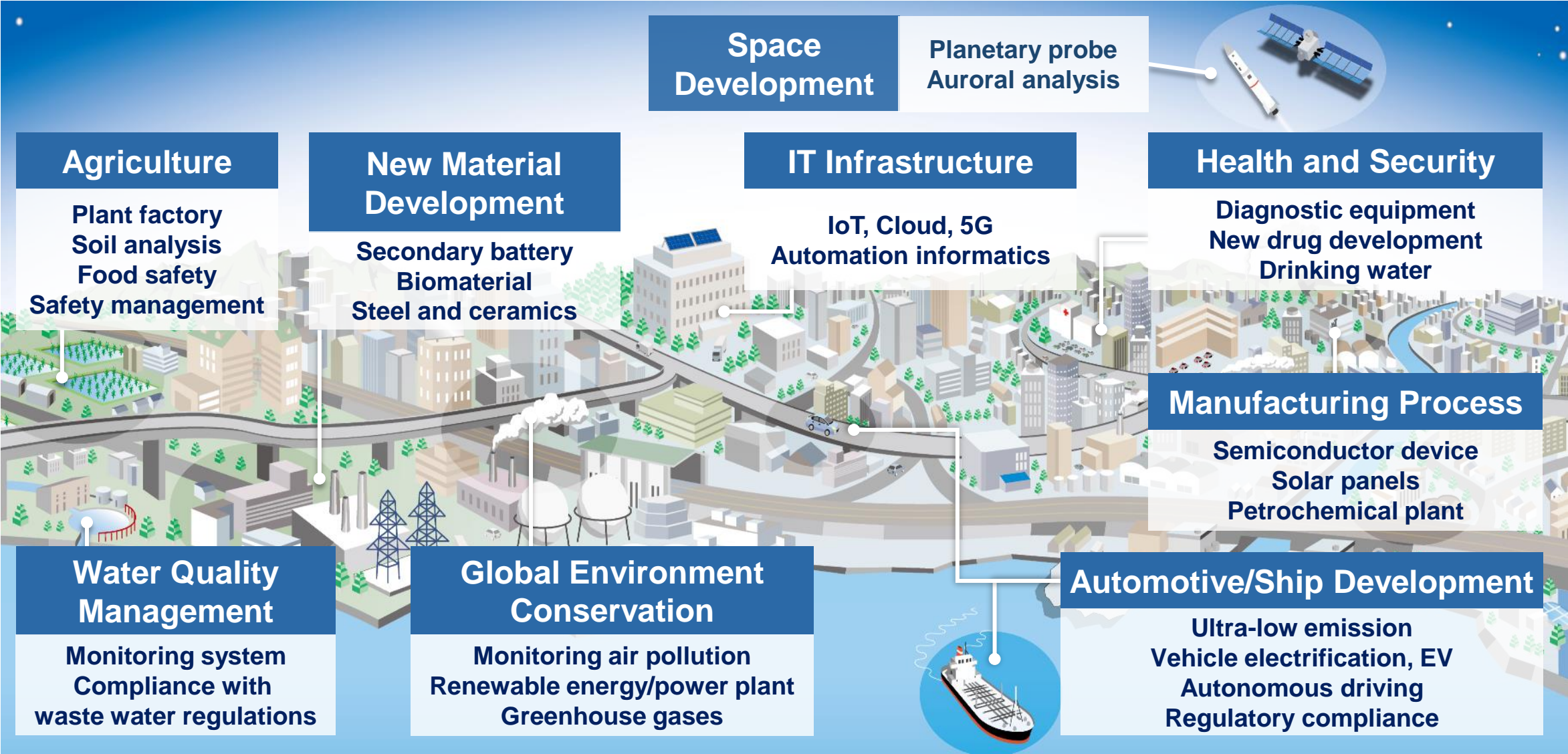


Trends in consolidated sales

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
THANK YOU
Obbrigado
Большое спасибо
Cảm ơn
감사합니다
Danke
Tack ska du ha
Grazie
ขอบคุณครับ
Dziękuję
ありがとうございました