OXIDE

Business Plan and Matters Related to Sustainability of Growth

OXIDE Corporation

(6521, TSE Growth)

April 2023

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A small prefab shed in Kobuchisawacho, Yamanashi prefecture.
This was where OXIDE Corporation came into existence.

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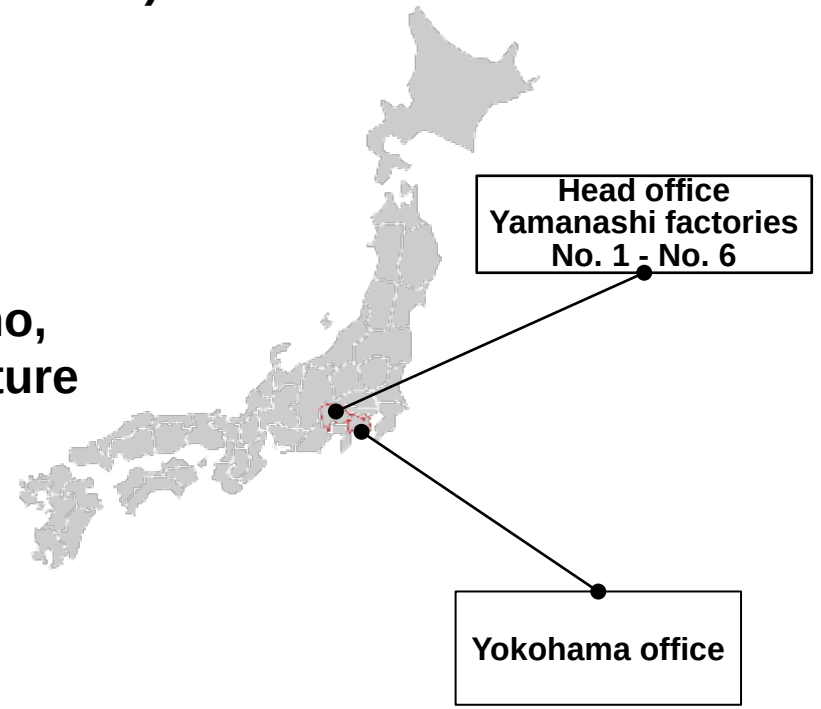
Overview of company (as of February 28, 2023)

Company name	:	OXIDE Corporation (Stock code: 6521)
Founded	:	October 2000
Head office location	:	1747-1 Maginohara, Mukawa-cho, Hokuto City, Yamanashi Prefecture
Number of employees	:	263
Capital	:	1,737 million yen
Main corporate shareholders	:	NTT-AT, KLA, Nikon, Lasertec, Shimadzu, and others

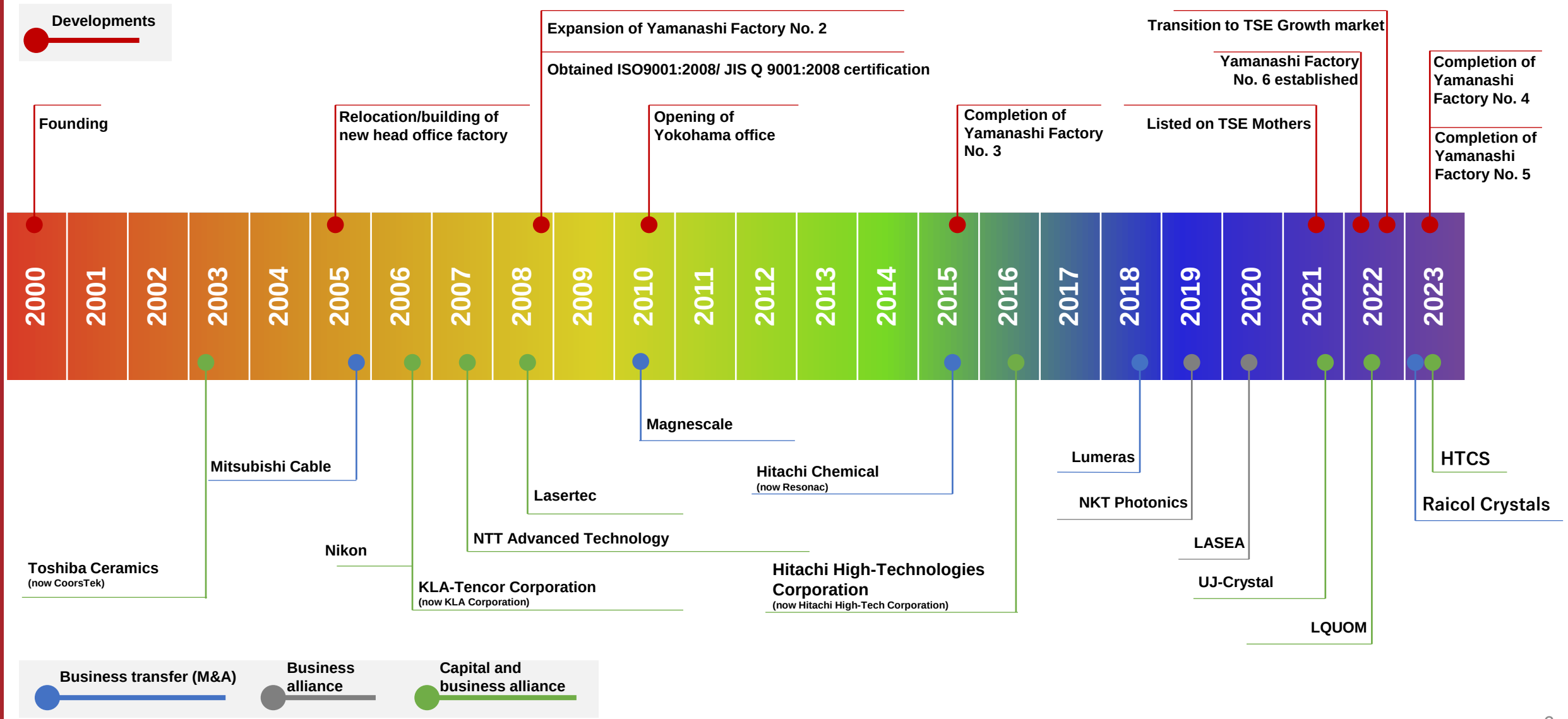


Management philosophy

Be a global-niche-top company in single crystals and lasers

- Use the results of our research to benefit society, and provide key materials to the world
- Provide material solutions to customers and contribute to the development of society
- Develop products centered on single crystals, and continue to create future market opportunities

History



M&A and business alliance initiatives

- **Through being the recipient of business transfers from companies both in Japan and overseas, OXIDE has acquired a range of advanced optical technologies.**
- **We have accelerated the development of the business by generating chemical reactions between our own core technologies and technologies acquired from outside the Company.**

Core technologies	M&A, business alliances	Our business
Single crystals	2023 Capital and business alliance with HTCS	Frontier Technology business
Single crystals	2023 Raicol Crystals becomes a subsidiary	Frontier Technology business
Single crystals	2022 Capital and business alliance with LQUOM	Frontier Technology business (Communications field)
Single crystals	2021 Capital and business alliance with UJ-Crystal	Frontier Technology business (Power semiconductor field)
Optics	2020 Business alliance with LASEA S.A. for sales of laser micromachining equipment	Frontier Technology business (Micro-machining field)
Optics	2019 Business alliance with NKT Photonics for development and manufacture of femtosecond lasers	
Optics	2018 Purchased vacuum ultraviolet laser business from Lumeras	Frontier Technology business (Photoemission spectroscopy equipment field)
Single crystals	2015 Purchased scintillator single crystal business from Hitachi Chemical (*now Resonac)	Healthcare business
Optics	2010 Purchased laser business from Magnescale	Semiconductor business
Single crystals	2005 Purchased optical device business from Mitsubishi Cable	Frontier Technology business
		Startup for high-quality single crystals

Management team (at the time of publication)

President & CEO
Yasunori Furukawa
Doctor of Engineering

Founded the Company in October 2000
(Main career)
National Institute for Materials Science

Vice President & CFO
Masayuki Yamamoto

(Main career)
The Shoko Chukin Bank, Ltd.

Director (Co-CTO)
Hiroyuki Ishibashi
Doctor of Science

(Main career)
Hitachi Chemical Co., Ltd.

Director (in charge of Corporate Strategy)
Seiji Uchida

(Main career)
Citigroup Global Markets Japan Inc.

Director (Co-CTO)
Kazuo Fujiura
Doctor of Engineering

(Main career)
Nippon Telegraph and Telephone Corporation

Outside Directors, Audit & Supervisory Board Members, Independent Officers (at the time of publication)

OXIDE

Outside Directors

Jiro Nakamura
Knowledge of Optics

Doctor of Engineering

(Main career)
Nippon Telegraph and Telephone Corporation

Emi Tamechika
University Professor
Knowledge of Optics

Doctor of Science

Independent Officer

(Main career)
Nippon Telegraph and Telephone Corporation
Education and Research Center for Economic Growth Strategy, Yokohama National University, Professor

Audit & Supervisory Board Members

Tsuyoshi Nakajima
Full-Time Audit & Supervisory Board Member
Knowledge of Management

Independent Officer

(Main career)
Shin Nikkei Co., Ltd., Representative Director and President
Nippon Light Metal Co., Ltd. Director, Vice President

Yoshihito Kosaka
Certified Public Accountant

Independent Officer

(Main career)
Actus Audit Corporation, Representative Partner
ASTMAX Co., Ltd., Corporate Auditor
Star Mica Co., Ltd., Audit & Supervisory Board Member
Shin-Etsu Chemical Co., Ltd., Audit & Supervisory Board Member

Masaki Kanehyo
Attorney at law

Independent Officer

(Main career)
Nagashima Ohno & Tsunematsu
GE Capital
Lehman Brothers Japan Inc.
Barclays Capital Japan Ltd.

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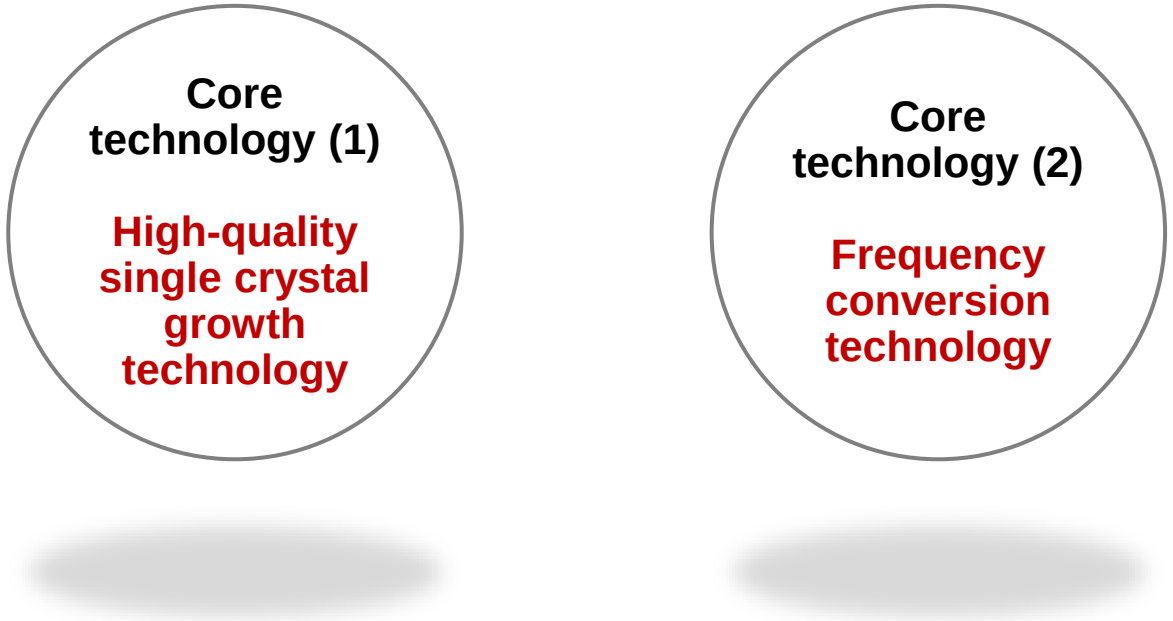
Our core technologies



[Core technology (1)] What are single crystals?

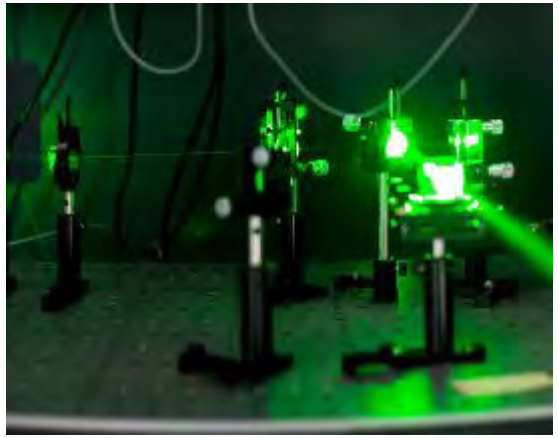
- A single crystal is a substance in which the atomic and molecular arrangement is identical throughout.
- The attributes and functions of single crystals are utilized in a variety of products encountered in daily life.

Examples of products that use single crystals

Solar panels

Quartz watches

Smartphones containing semiconductors



Solid-state lasers

[Core technology (1)]
High-quality single crystal growth technology

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- Single crystal growth technology is the use of artificial methods to create in a short time (days to months) single crystals that would be formed over a long period (several hundred years) in the natural world.
- OXIDE Corporation has access to the Double-Crucible Czochralski (DCCZ) method developed at the National Institute for Materials Science (NIMS) in Tsukuba, Ibaraki prefecture.
- In addition to the DCCZ method, OXIDE Corporation has adopted a range of crystal growth technologies since it was founded.
- Different combinations of elements result in an infinite number of single crystal types, and the optimal crystal growth method varies depending on their respective applications.
- We use our knowledge of various types of equipment, raw material blends, growth conditions, and other factors to create new materials and enhance their quality.
- Particularly for use in lasers, high-quality single crystals are required.

Growth method	CZ method	FZ method	TSSG method	VB method	DCCZ method
Equipment					
Growth method characteristics	• Enables growth of large single crystals	• Enables growth of high-purity single crystals without contamination from crucible impurities • Perfect for test production of single crystals	• Enables growth of high-quality single crystals	• Enables growth of large single crystals	• Raw materials can be added during growth • Enables growth under the same conditions from start to finish

[Core technology (1)]
Types of crystal that can be manufactured using each method

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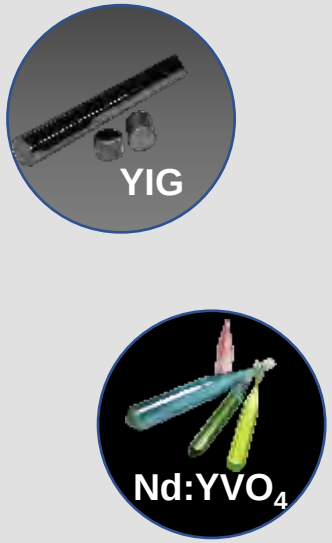
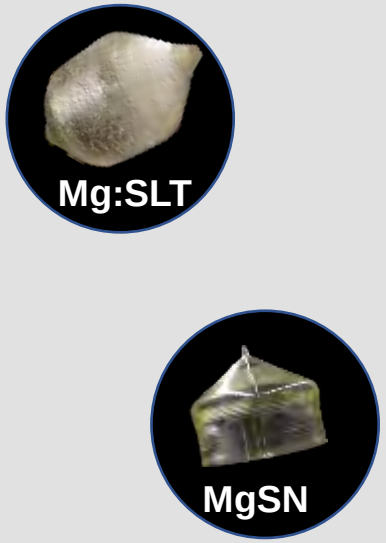
Growth method	CZ method	FZ method	TSSG method	VB method	DCCZ method
Equipment					
Crystals					

[Core technology (2)]
Wavelengths of light and their applications

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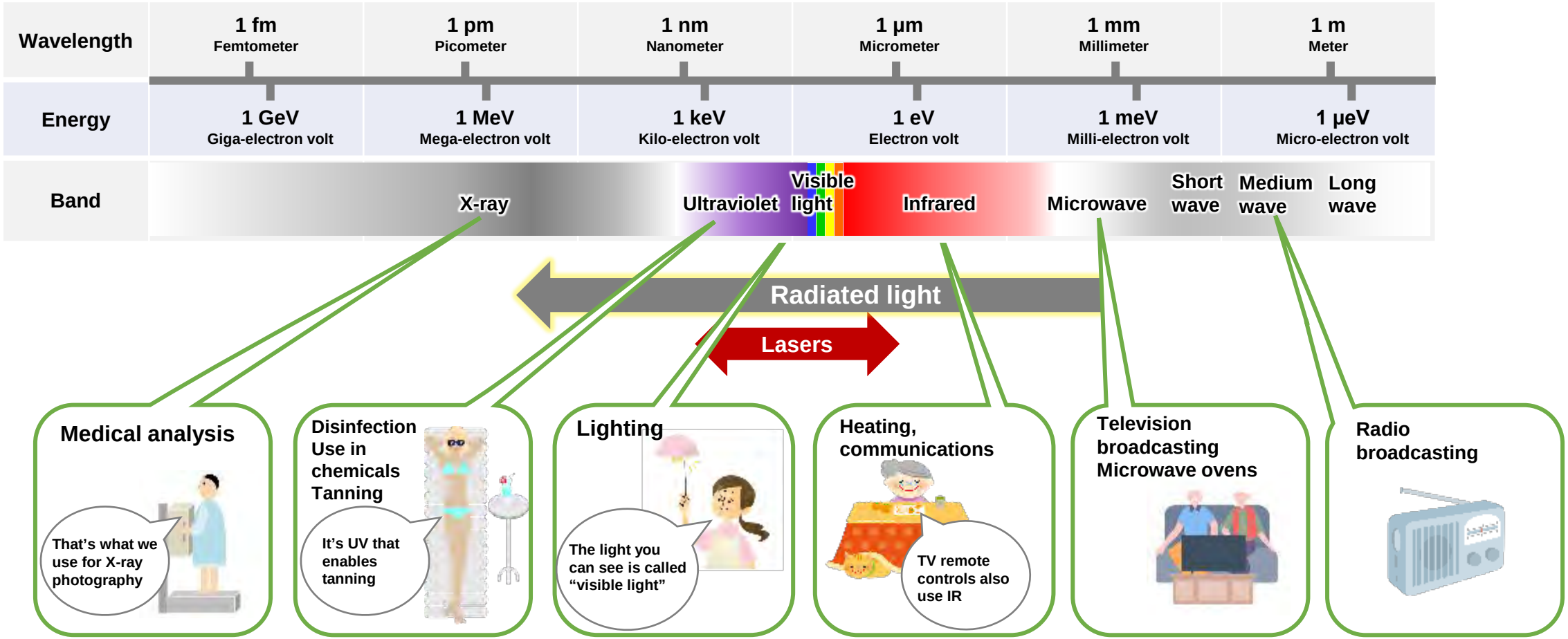
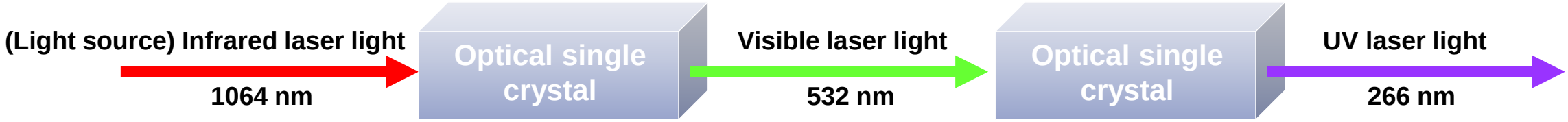
- **The characteristics of light vary according to its wavelength, and these characteristics are used in a variety of fields.**

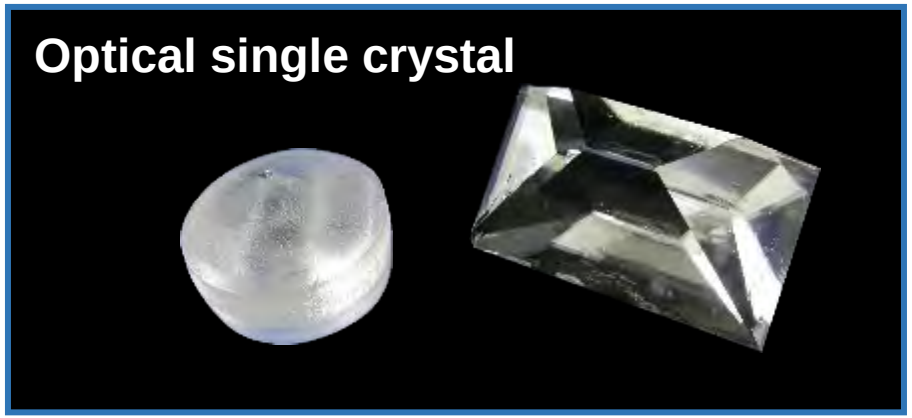


[Core technology (2)] Frequency conversion technology

- Frequency conversion is a technology for changing the wavelength of light.
- UV laser light is generated through frequency conversion of infrared laser light, by passing it through an optical single crystal.
- In particular, the performance and reliability of deep UV laser light, which is a short wavelength of 190-280nm, is significantly affected by the performance and quality of the crystal.
- Our deep UV lasers leverage the knowledge and technology we have accumulated in relation to the manufacture, machining and utilization of OXIDE Corporation's optical single crystals to achieve world-leading lifespans and levels of power output.

Example of frequency conversion to generate wavelength of 266 nm





Products that use single crystal growth technology and frequency conversion technology

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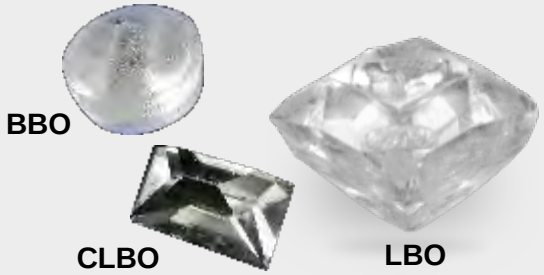
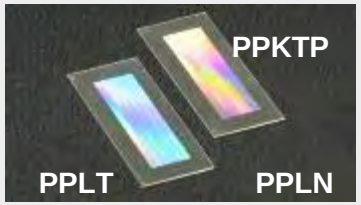
- OXIDE Corporation develops, manufactures, and sells optical single crystals for use over a wide range of wavelengths.
- The expected field of application depends on the wavelength.

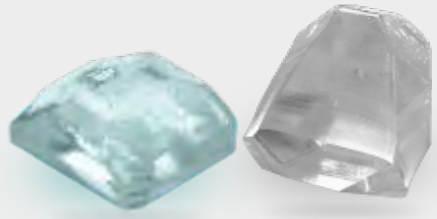
Gamma radiation	Deep UV	Ultraviolet	Visible light	Infrared

Single crystals

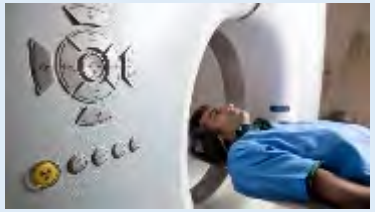

LGSO






KTP RTP

Field of application


Healthcare


Semiconductor inspection

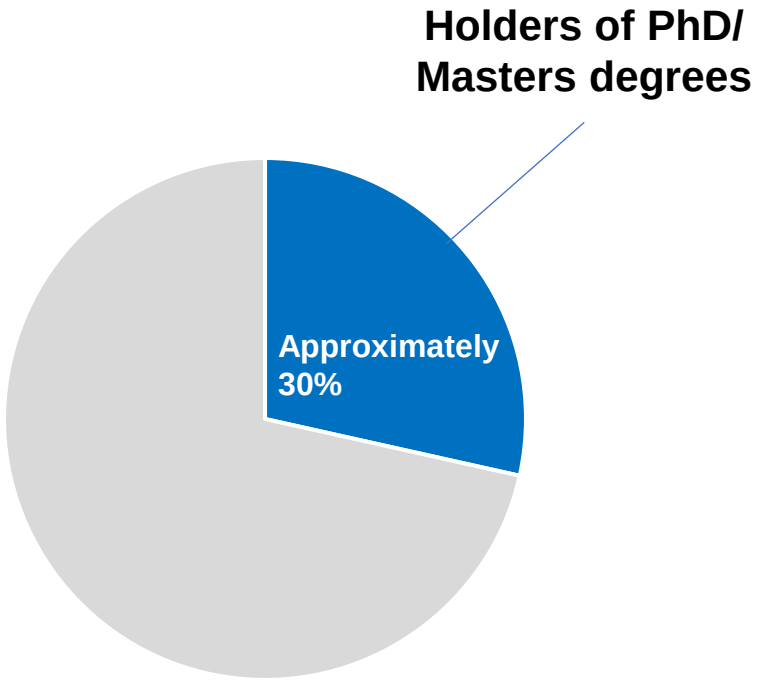

Micromachining


Energy-saving lighting


Quantum technology

The team members supporting our core technologies

OXIDE Corporation is home to many specialist engineers with a track record in the fields of crystals and optics.



Proportion of officers and employees engaged in R&D and manufacturing will hold a PhD or Masters degree

Yasunori Furukawa (Doctor of Engineering)

Role	Research field	h-index*	Number of references	Number of citations
President	Single crystals	31	154	3,997

Hiroyuki Ishibashi (Doctor of Science)

Role	Research field	h-index*	Number of references	Number of citations
Director	Single crystals	21	91	1,430

Yutaka Anzai (Doctor of Engineering)

Role	Research field	h-index*	Number of references	Number of citations
Senior Scientist	Single crystals	11	15	314

Kazuo Fujiura (Doctor of Engineering)

Role	Research field	h-index*	Number of references	Number of citations
Director	Lasers	15	71	873

Yushi Kaneda (Doctor of Engineering)

Role	Research field	h-index*	Number of references	Number of citations
Research Advisor	Lasers	19	96	1,453

*The h-index is a metric conceived by physicist Jorge E. Hirsch based on the number of citations in the Web of Science citation database, and shows the relative contribution made by a researcher's work based on the number of papers written and citations made.

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OXIDE and Raicol

In order to continue to make the world a better place through crystal and optical technology, our aim is to work with Raicol Crystals Ltd. in the field of optics to create a global leading company.

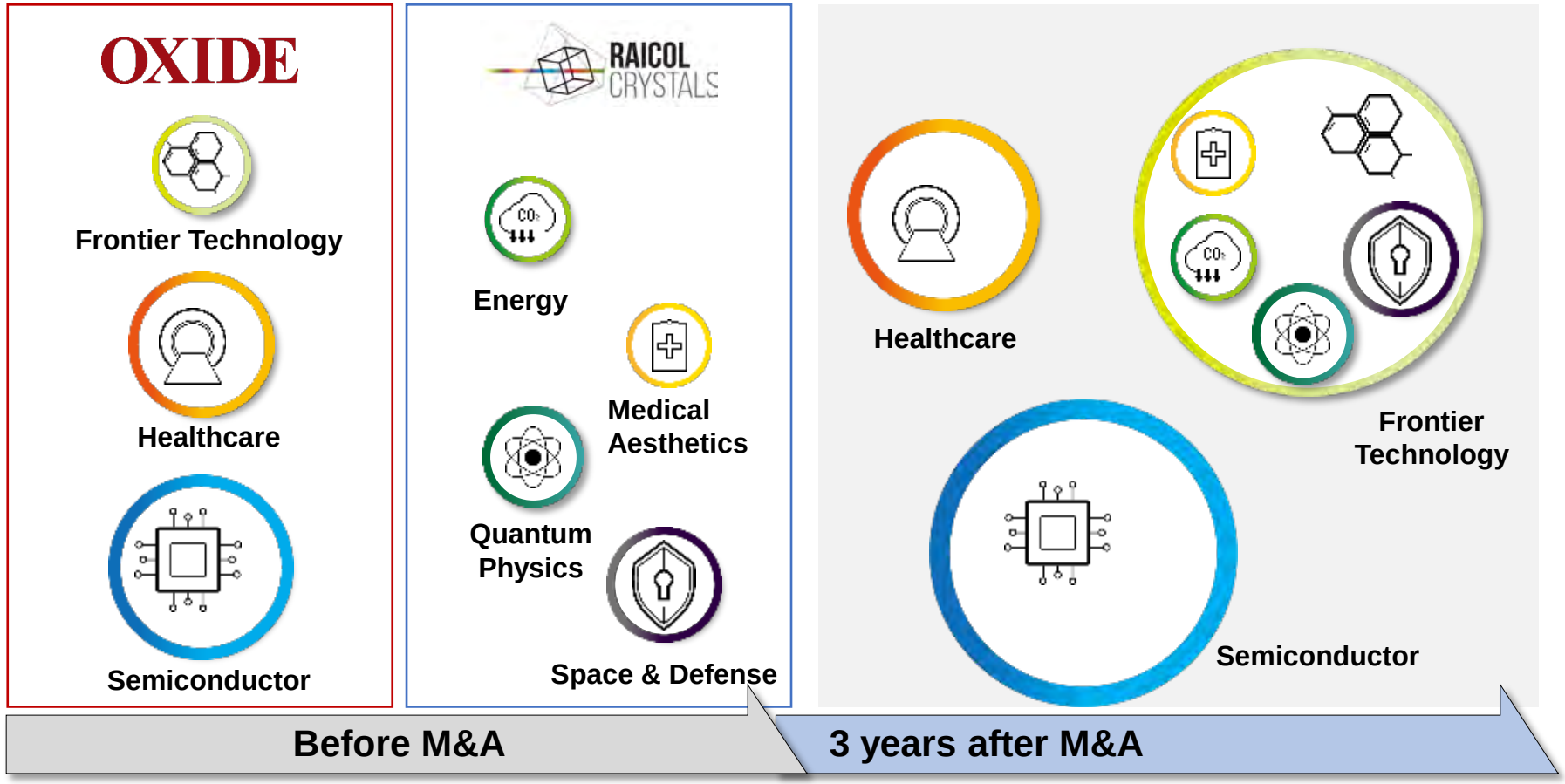
OXIDE CEO
Yasunori Furukawa

Raicol Crystals CEO
Aner Yarden

We always keep moving forward, and never lose the mission to make the world a better place.

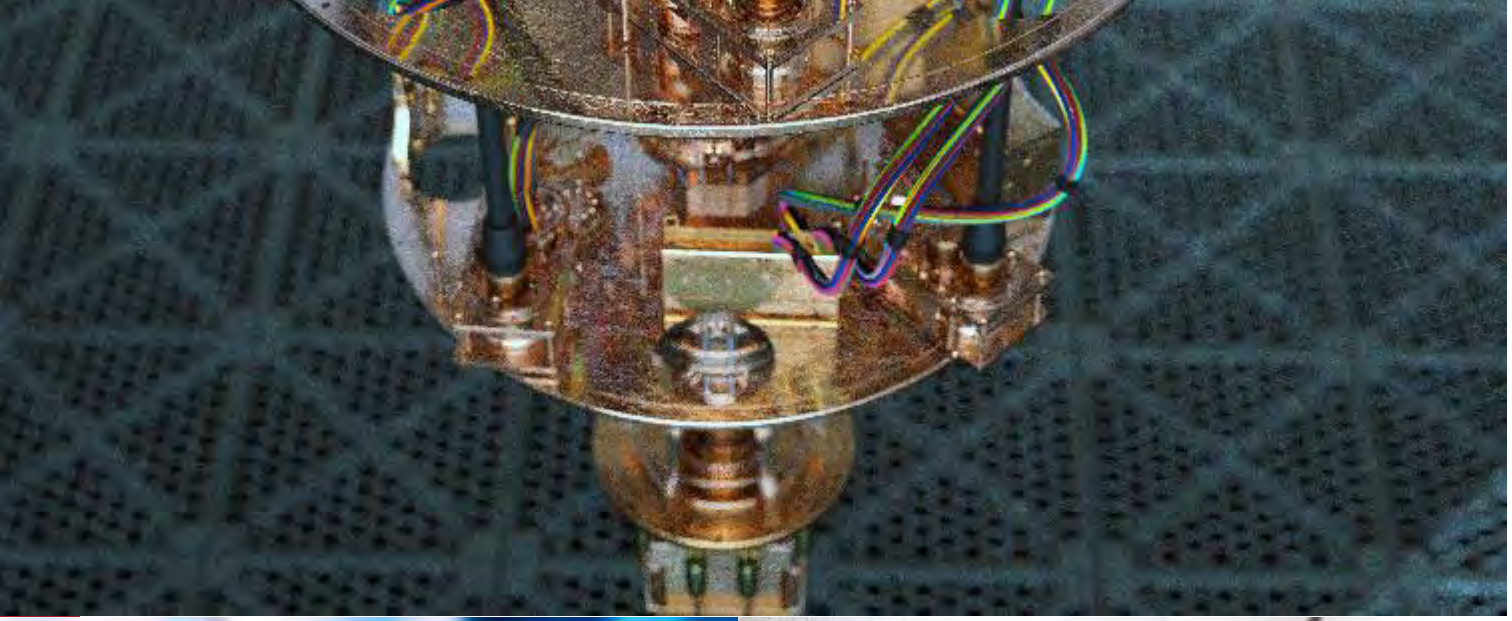
[Business portfolio]
Expanding and growing our fields of business

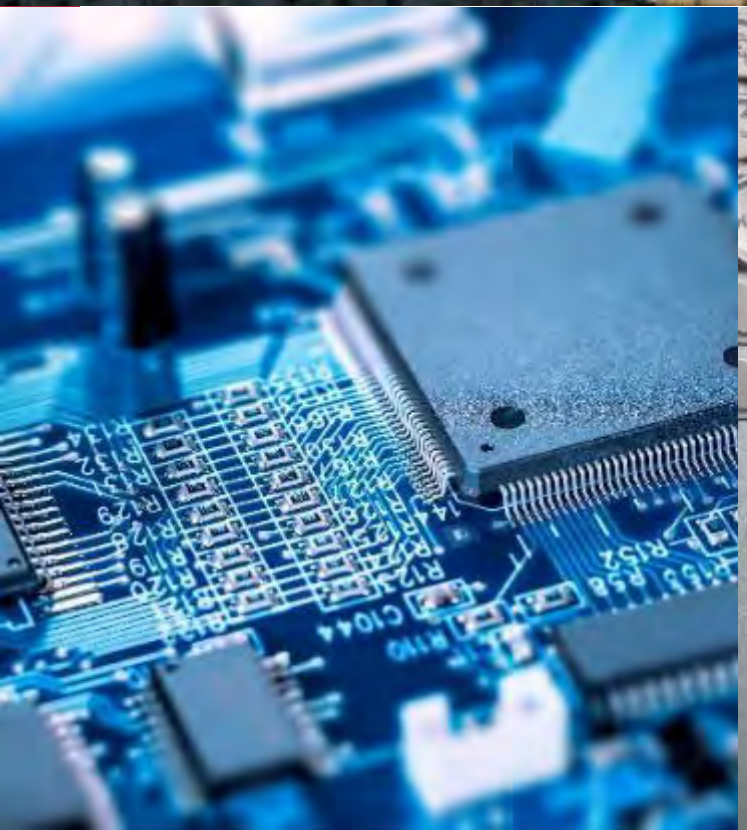
- By making Raicol a subsidiary, we expect to further expand our field of business.
- It gives us entry to the three new fields of Space & Defense, Medical Aesthetics, and Energy.



FY2/24 Mainstay fields

1. Further increases in market share in existing businesses (Semiconductors, Healthcare)
2. Accelerate research in Quantum Physics and Power Semiconductors fields
3. Invest in/support deep-tech startups





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Overview of business

- **OXIDE Corporation is engaged in the development, manufacture, and sale of single crystals, optical components, and laser light source equipment.**
- **In the Frontier Technology business, we are leveraging our core technologies to research and develop new products.**
- **By making Raicol a subsidiary, we have expanded the areas covered by the Frontier Technology business.**
- **Two areas in which we have successfully mass-produced from R&D are the Semiconductor business and the Healthcare business.**
- **Through our initiatives in the Frontier Technology business, we aim to create businesses No. 4 and No. 5.**

Single crystals

Frontier Technology business*

New product R&D that leverages core technologies

* The Optical Measurement & Frontier Technology business has been renamed the Frontier Technology business from **FY2/24**.
This name was originally applied to the business because there were more optical technologies in the optical measurement field, but following recent trends in business development the number of applications outside the optical measurement field has increased, and so we have changed it to the Frontier Technology business.

Semiconductor business

Manufacture of single crystals and lasers used in semiconductor wafer inspection systems

Healthcare business

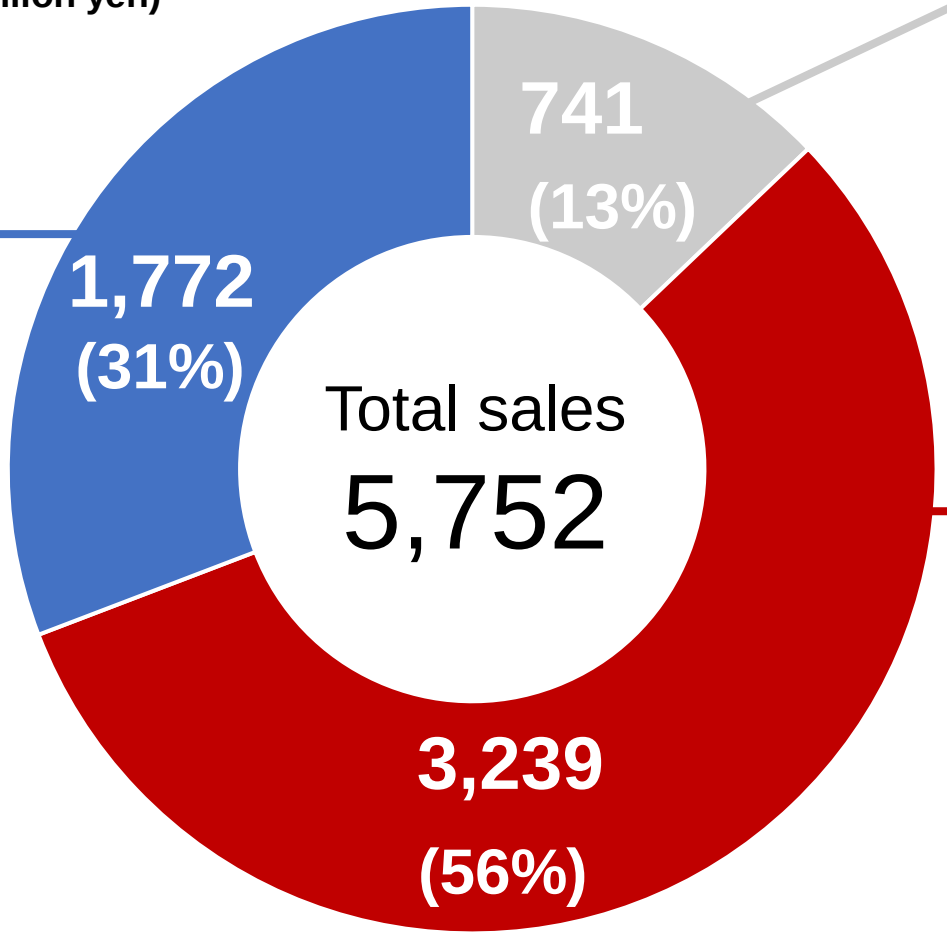
Manufacture of single crystals for PET equipment used to diagnose cancer

And more... **Business No. 4** **Business No. 5**

Breakdown of net sales by business in FY2/23

- The Semiconductor business accounted for 56% of net sales.

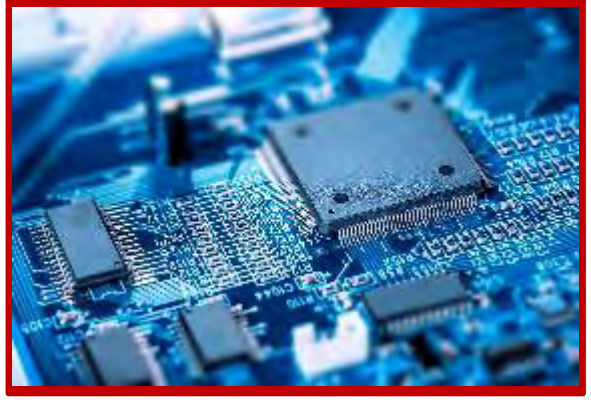
(Million yen)

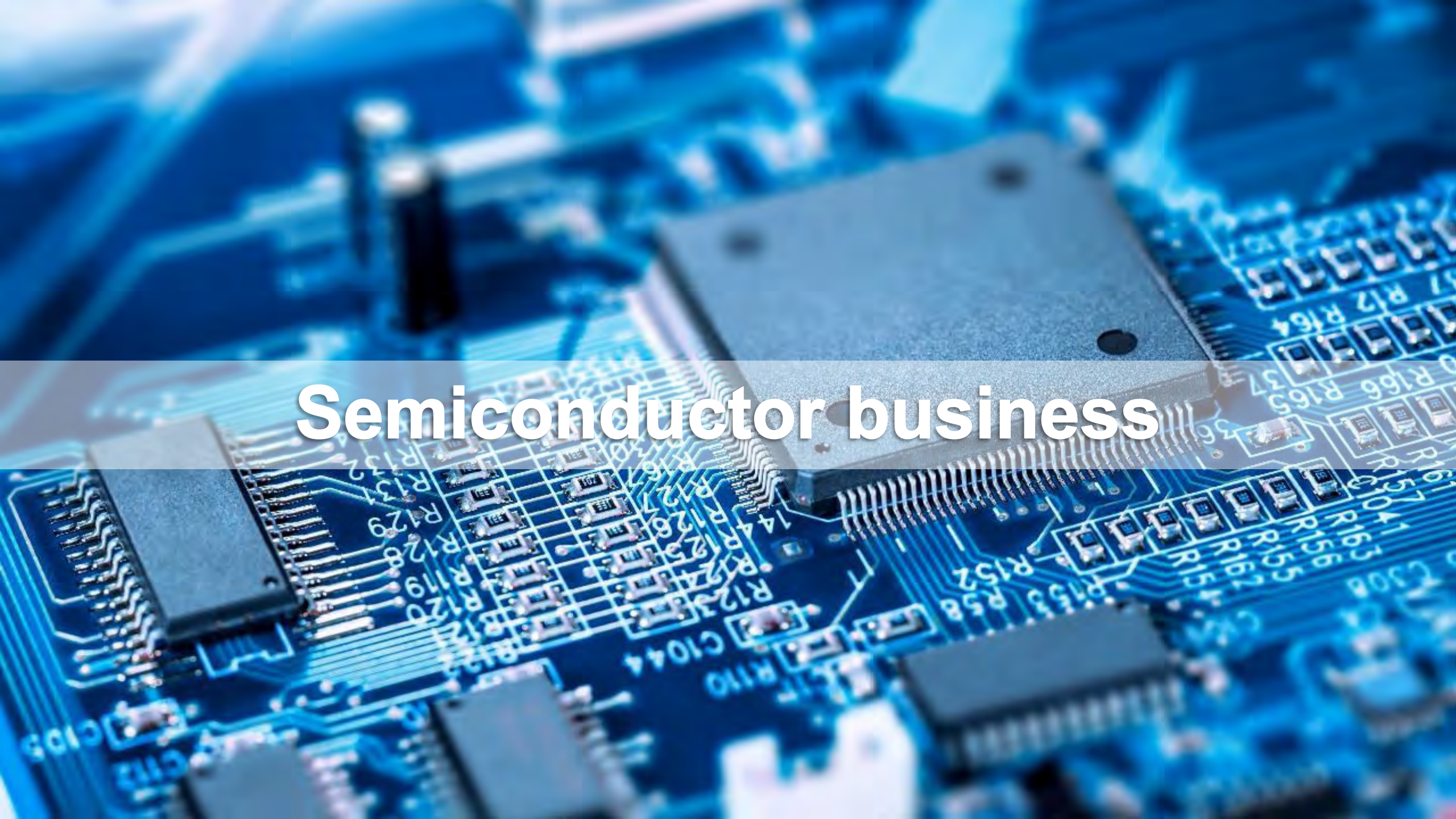


Healthcare

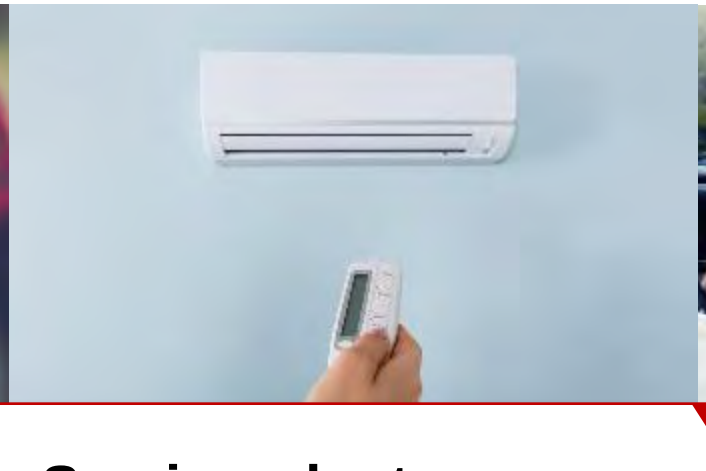
Frontier Technology

Semiconductor




Semiconductor business

[Semiconductor] Semiconductors in daily life


Semiconductors are an essential part of our lives



[Semiconductor]
Use of DUV lasers for semiconductor inspection

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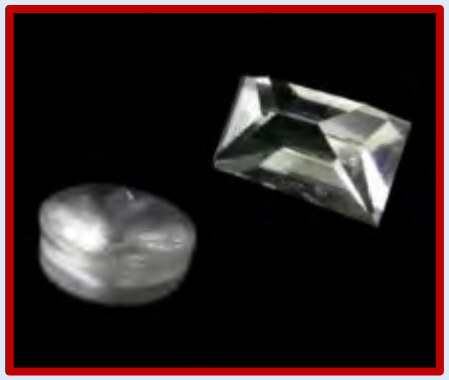
- OXIDE Corporation develops, manufactures and sells single crystals and DUV lasers used in semiconductor wafer inspection systems.
- During semiconductor production, silicon (Si) wafers undergo multiple inspection processes.
- We have achieved global market shares for frequency conversion single crystals and DUV lasers of 95% and 30% respectively , and continue to aim for incresed market share particularly in the field of ultraviolet lasers.



Frequency conversion single crystals
- BBO
- CLBO
- LBO

Global share: 95%

DUV lasers
- 355 nm
- 266 nm

Global share: 30%

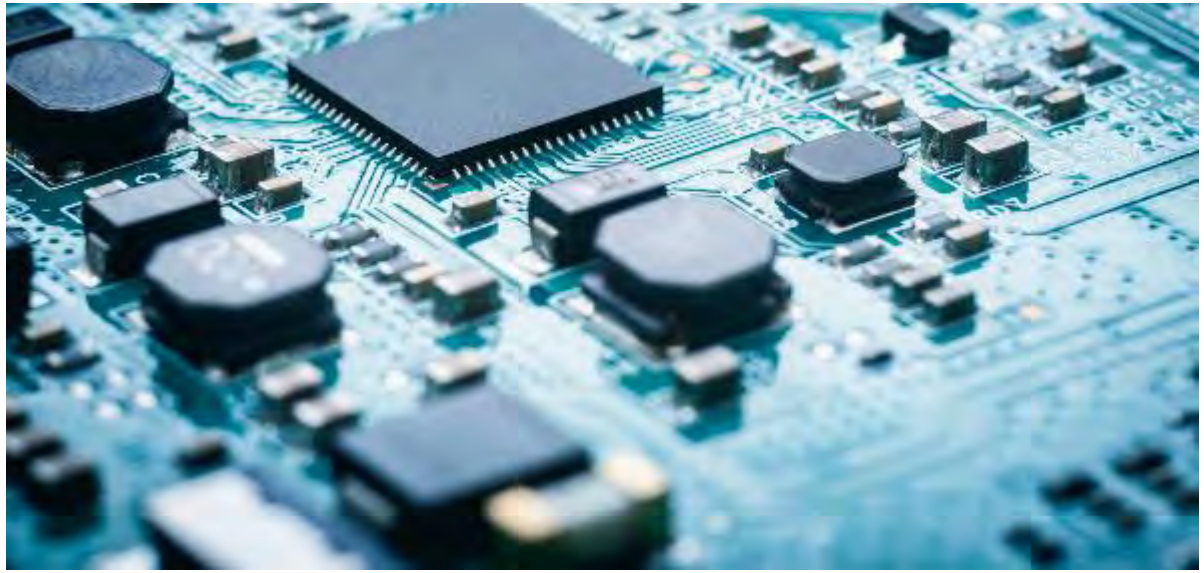
Semiconductor wafer inspection system

[Semiconductor] FY2/23

- The Semiconductor business was up 31.4% YoY, contributing significantly to increased sales.
- This was due to steady growth in new laser sales.

(Million yen)

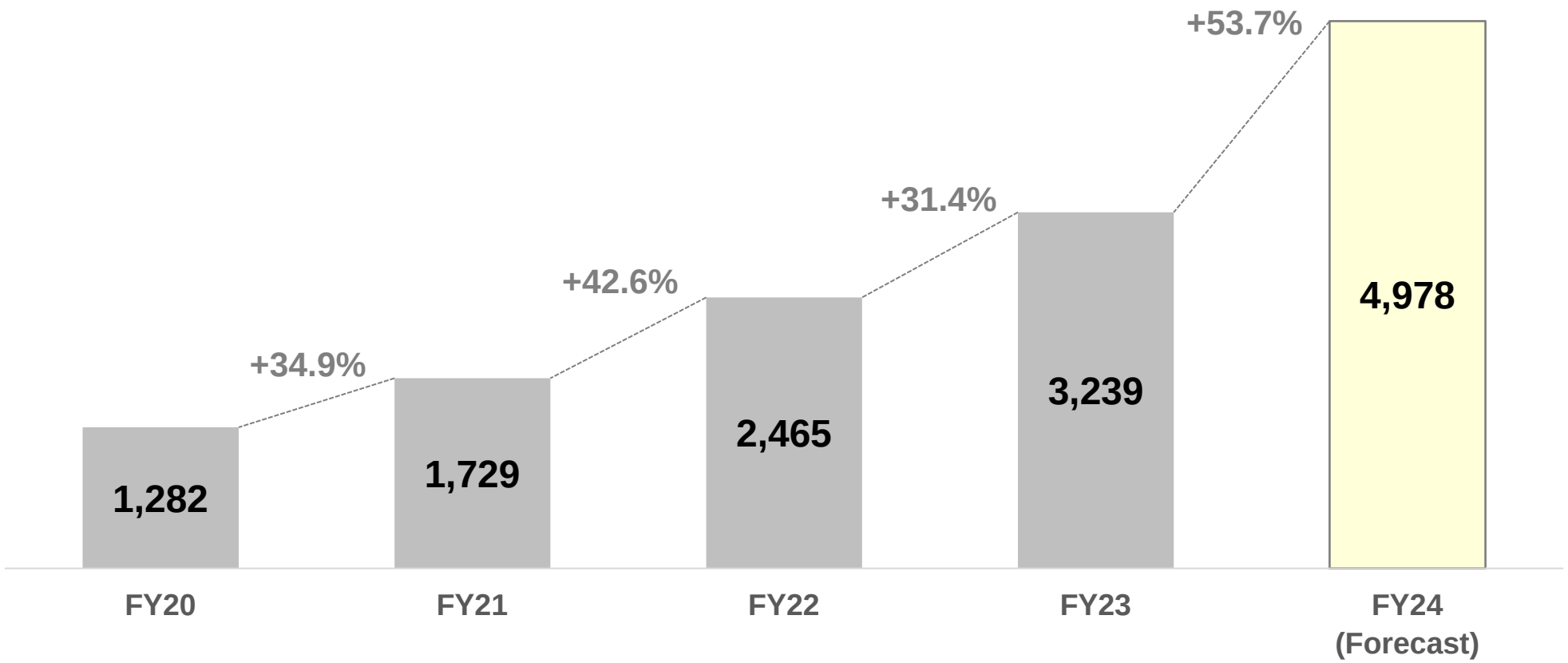
	FY2/22	1Q	2Q	3Q	4Q	FY2/23	YoY	Vs previous forecast	Previous forecast
Net sales	2,465	692	952	707	886	3,239	+31.4%	101.8%	3,181



[Semiconductor] Net sales forecast (Consolidated)

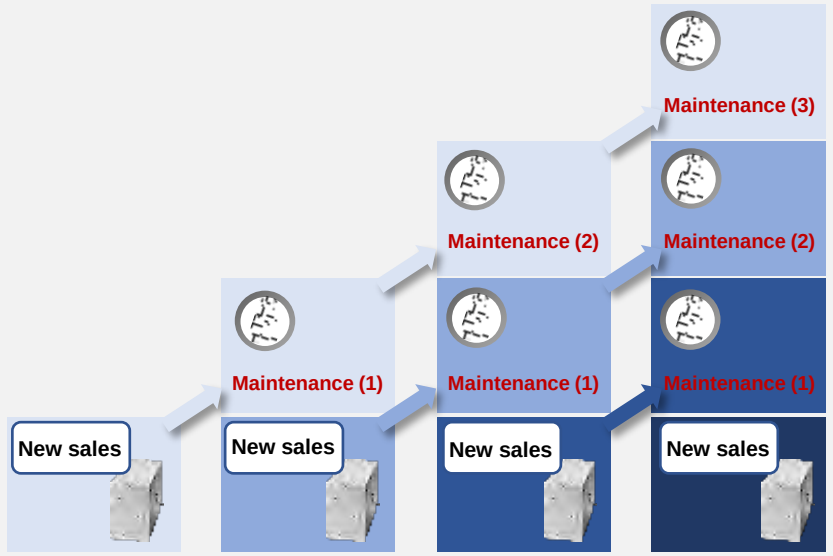
- **In addition to the increase in production capacity with Factory No. 4, the carry-over from the previous fiscal year will also contribute to the forecast of a 53.7% increase in net sales.**

(Million yen)

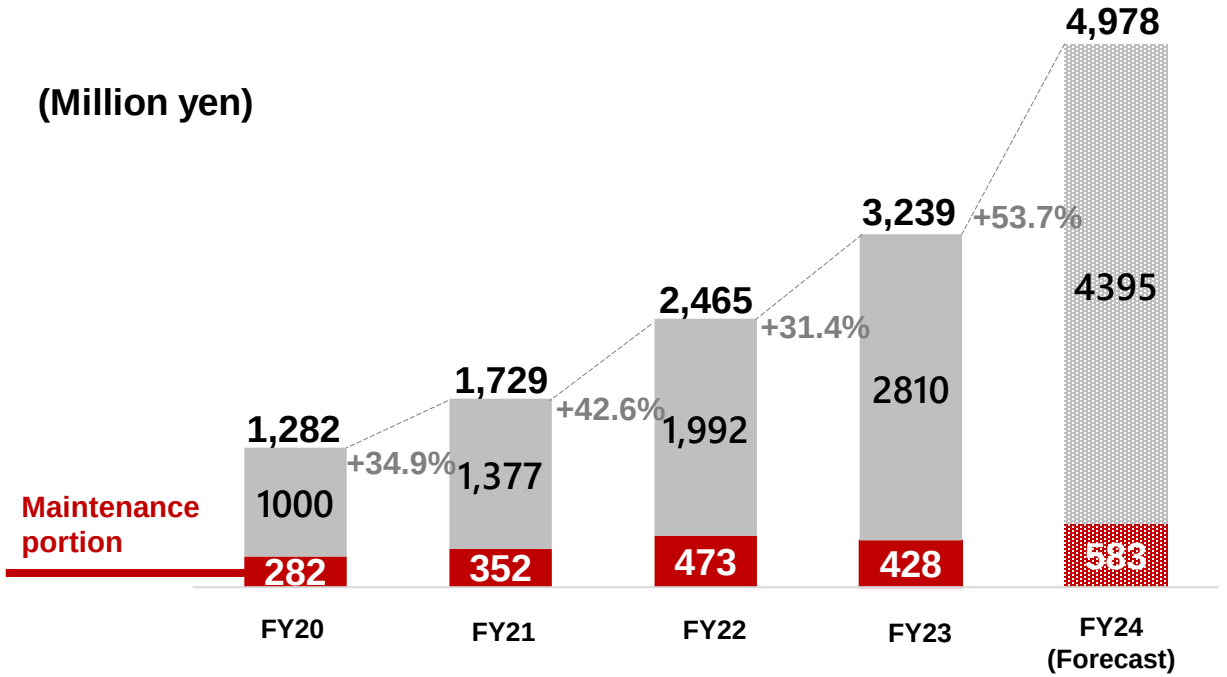


[Semiconductor]
Prospects for the expansion of the business

- Over the past three years the business has grown at an annual rate of more than 30%, and we expect increases in units shipped and continued growth going forwards.
- After every set period (1-2 years), the laser equipment we sell requires the single crystal and the optical unit to be replaced as a result of deterioration caused by normal usage.
- Following increases in the number of units in operation at semiconductor manufacturing facilities and new sales of equipment, we expect maintenance demand to increase as well.
- The business model has an element of recurring income, with maintenance sales increasing in cumulative fashion after new sales have been made.



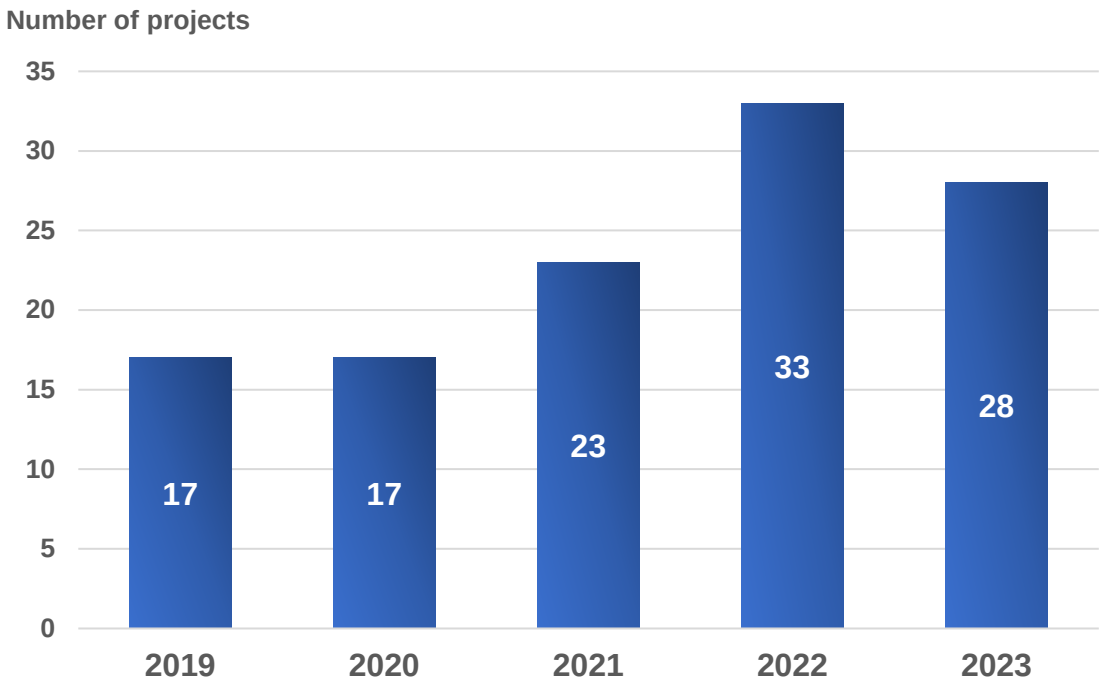
Semiconductor business: breakdown of DUV laser sales



Change in Semiconductor business net sales over time

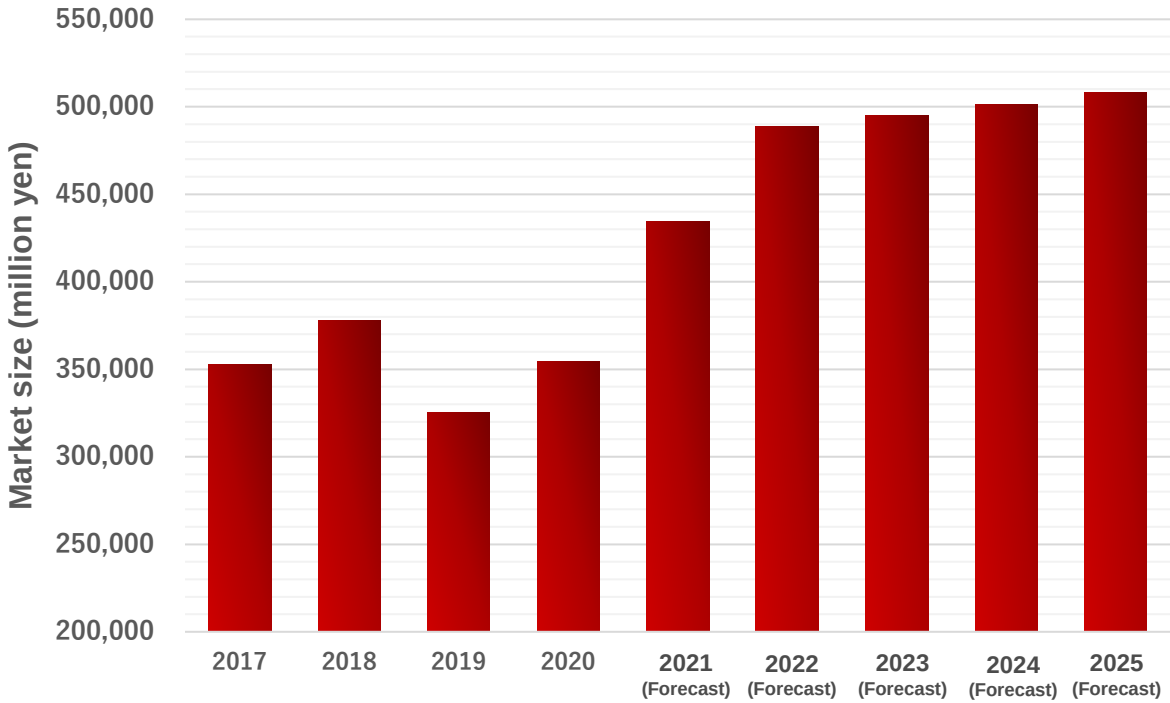
[Semiconductor]
Market environment for semiconductor wafer inspection systems

- **Against the background of a global trend toward increased economic security and rising demand for semiconductors, construction of new manufacturing facilities is moving forward in various countries around the world.**
- **Following the increase in demand for semiconductors, demand for semiconductor wafer inspection systems is also rising.**



Global construction starts for new semiconductor manufacturing facilities

Source: SEMI



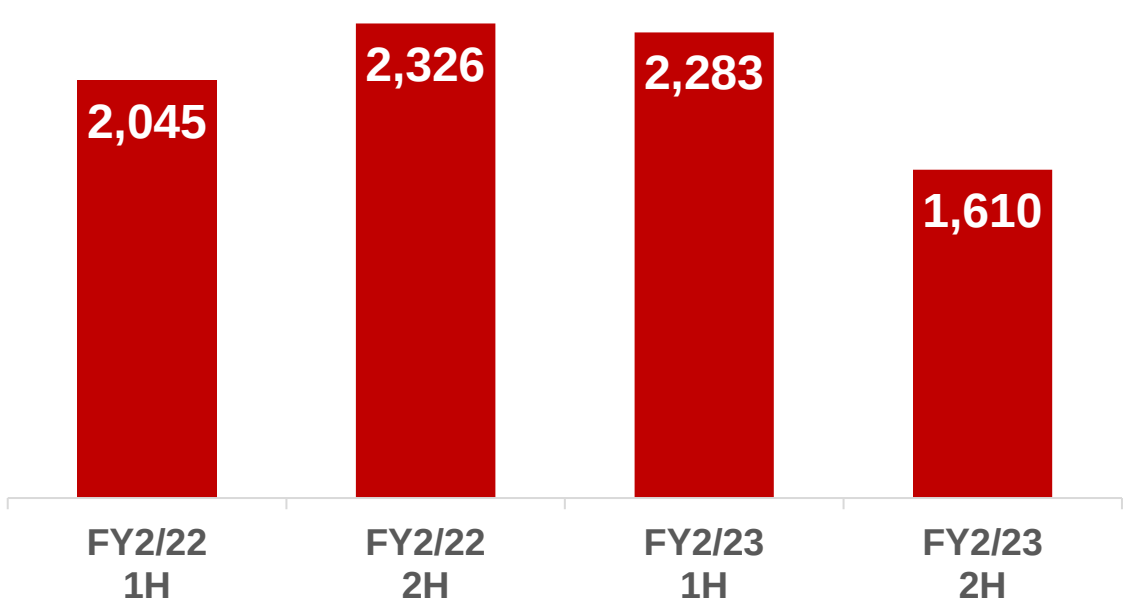
Global market forecast for semiconductor wafer inspection systems

Source: Global Semiconductor Production/Test/Inspection Equipment Market Yearbook 2021 (Global Net Corp.)

[Semiconductor] Orders received and order backlog

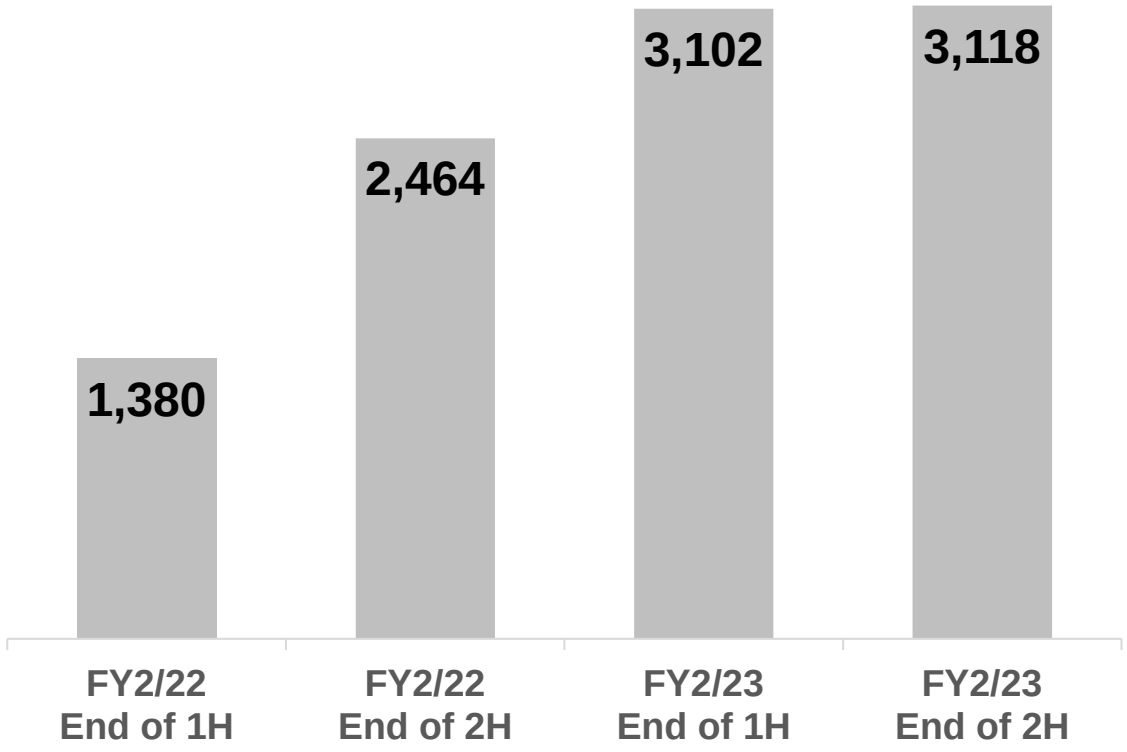
- Although pass rate of the acceptance test for externally procured parts temporarily declined in 3Q of FY2/23, it has been recovering since 4Q.
- Orders were temporarily adjusted to focus on solving the problem in 2H of FY2/23.

(Million yen)



Trend of total orders received

(Million yen)



Trend of order backlog

[Semiconductors] Strengthen structures for mass production and maintenance

- **Working to expand facilities and manufacturing space to address rising orders and increases in maintenance demand.**
- **Expanding the cleanroom at the Yokohama office and construction of Yamanashi Factory No. 4 are underway.**
- **Manufacturing facilities are also designed and manufactured in-house, and we strive to improve productivity and quality by incorporating day-to-day feedback from production sites to improve equipment.**

Yamanashi Factory No. 4

Construction completed in March 2023*
Increased capacity for laser equipment maintenance operations

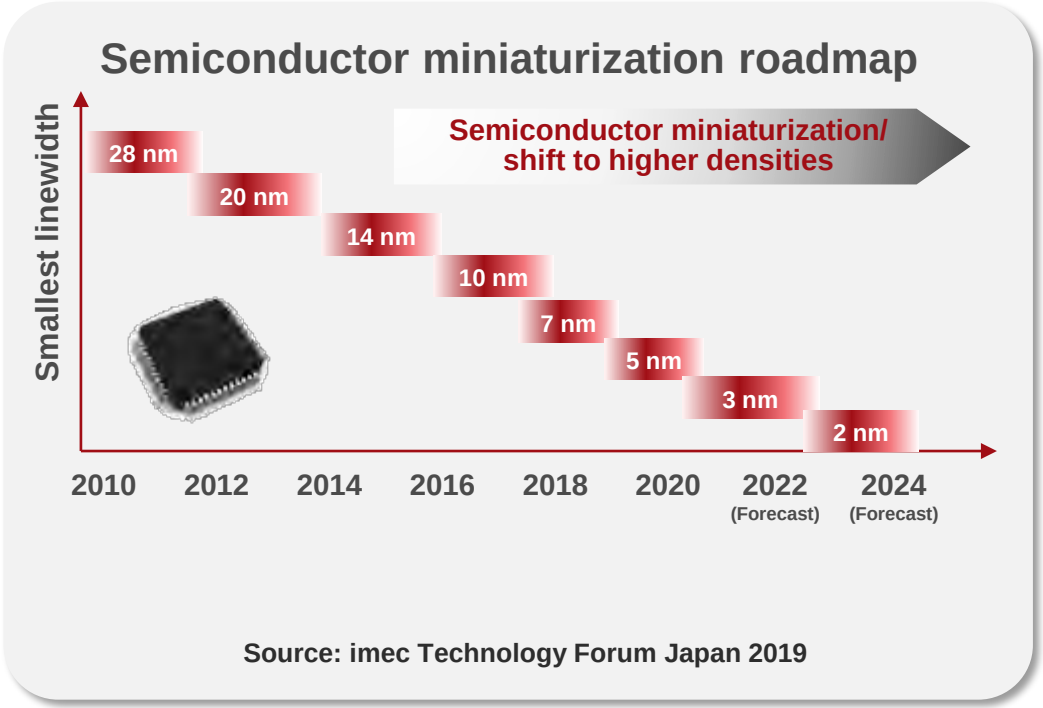
*First phase of construction completed in March 2023.
Second phase of construction projected for completion in February 2025.

Yokohama office

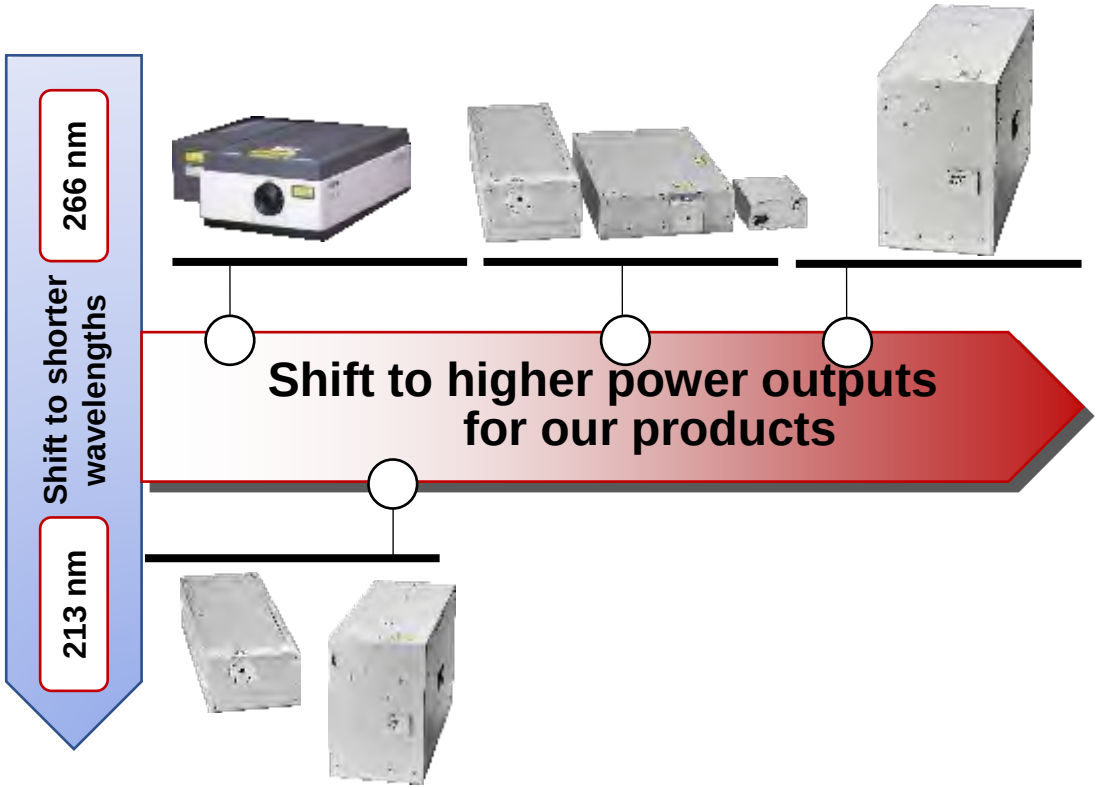
Relocated in May 2022
Move/increase in floor space driven by expansion of business
Expansion of cleanroom underway

[Semiconductor]
Technology trends in DUV lasers for semiconductor inspection

- Along with the miniaturization of semiconductors, it has become necessary to detect smaller defects in a short time.
- Two of the trends in laser light source technology are the moves towards shorter wavelengths and higher power outputs.
- Our 266 nm products are used in the world's most advanced inspection equipment.



Source: imec Technology Forum Japan 2019



[Semiconductor] Laser technology R&D

- For laser technology, in addition to strengthening existing products (semiconductor inspection), we are moving forward with research and development for cutting-edge/next-generation products.

Strengthening existing products

Semiconductor inspection

- CW 266 nm

Cutting-edge applications/ next-generation products

Photoemission spectroscopy

- Cutting-edge analysis and academic applications
  - 11 eV, CW 213 nm

Micromachining

- Micromachining, microLED
  - Femtosecond lasers

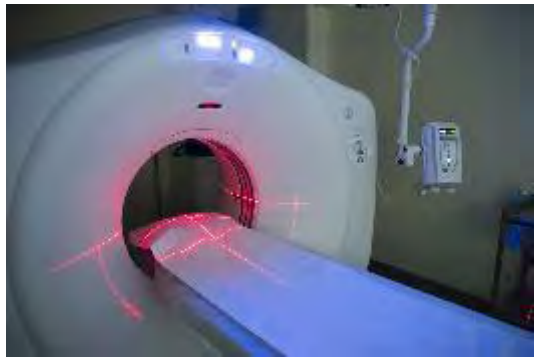
Next-generation measuring

- Next-generation measuring equipment
  - CW lasers

Healthcare business

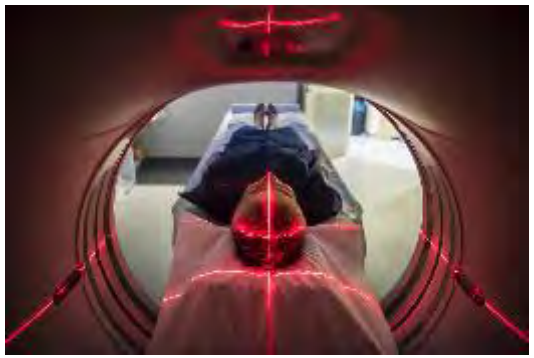
[Healthcare]
A more secure future thanks to OXIDE's crystal technology

OXIDE



From crystals to equipment

From tests to treatment



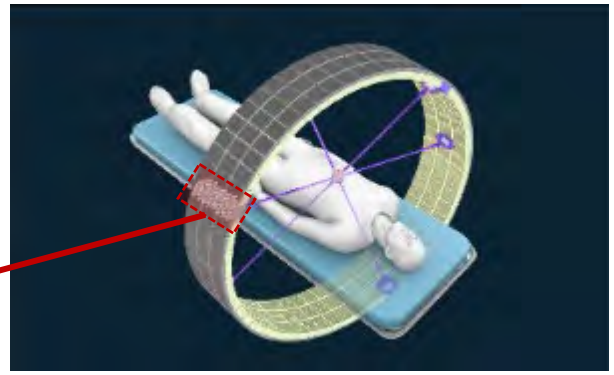
Towards a more secure future

[Healthcare]
Scintillator single crystals and PET scanning equipment used to diagnose cancer

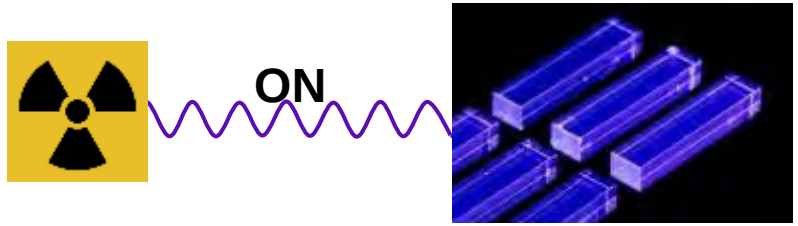
OXIDE

- PET scanning equipment is used to diagnose cancer by detecting radiation emitted by a radiopharmaceutical injected into the patient that forms concentrations in cancerous cells.
- A scintillator single crystal is a crystal that emits light in reaction to radiation, and is an absolutely essential material for the PET scanning equipment.
- OXIDE Corporation develops, manufactures, and sells scintillator single crystals , and continue to aim for increased market share.

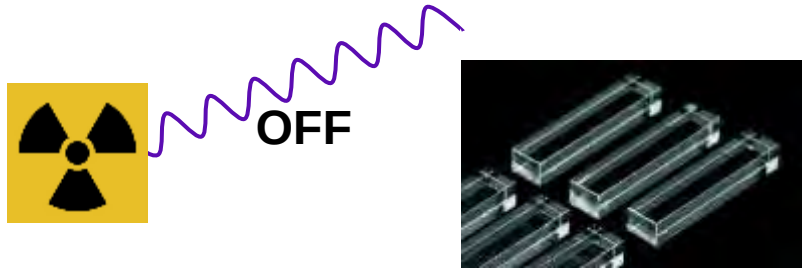
OXIDE Corporation products used in PET scanning equipment



PET scanner structure



High power output = high detection ability



Reduced decay time (switches off instantly) = enhanced image quality

[Healthcare]
Effects of improved scintillator single crystal performance

OXIDE

High-quality scintillator single crystal

Clearer diagnostic images

The images obtained from a PET scan are clearer, leading to more accurate diagnoses.

Reductions in the amount of radiopharmaceuticals used

Because diagnoses can be made even with smaller amounts of radiopharmaceuticals, the physical burden on the patient is reduced.

Reductions in scanning time

Because diagnosis can be made in a short time, the physical and mental burden on the patient is reduced.

[Healthcare] FY2/23

- 3Q net sales reached a record high, but 4Q sales were weak due to inventory and production adjustments by customers.

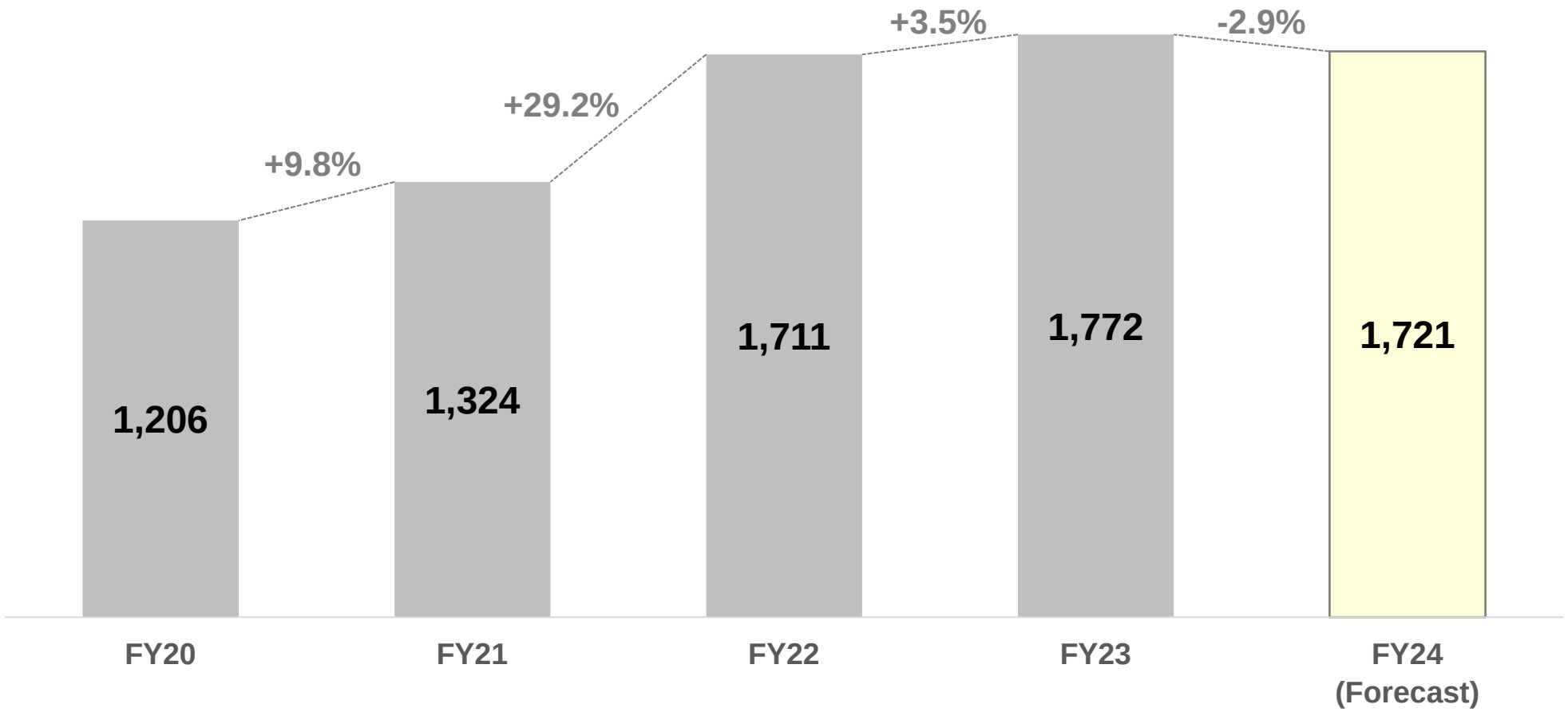
(Million yen)

	FY2/22	1Q	2Q	3Q	4Q	FY2/23	YoY	Vs previous forecast	Previous forecast
Net sales	1,711	490	467	598	216	1,772	+3.5%	90.9%	1,950

[Healthcare] Net sales forecast (Consolidated)

- **Sales of PET scanners for cancer diagnosis are expected to decline by 20% due primarily to the slowdown of the U.S. economy. On the other hand, sales of PET scanners for Alzheimer's disease diagnosis are expected to increase, making the overall decline minor.**

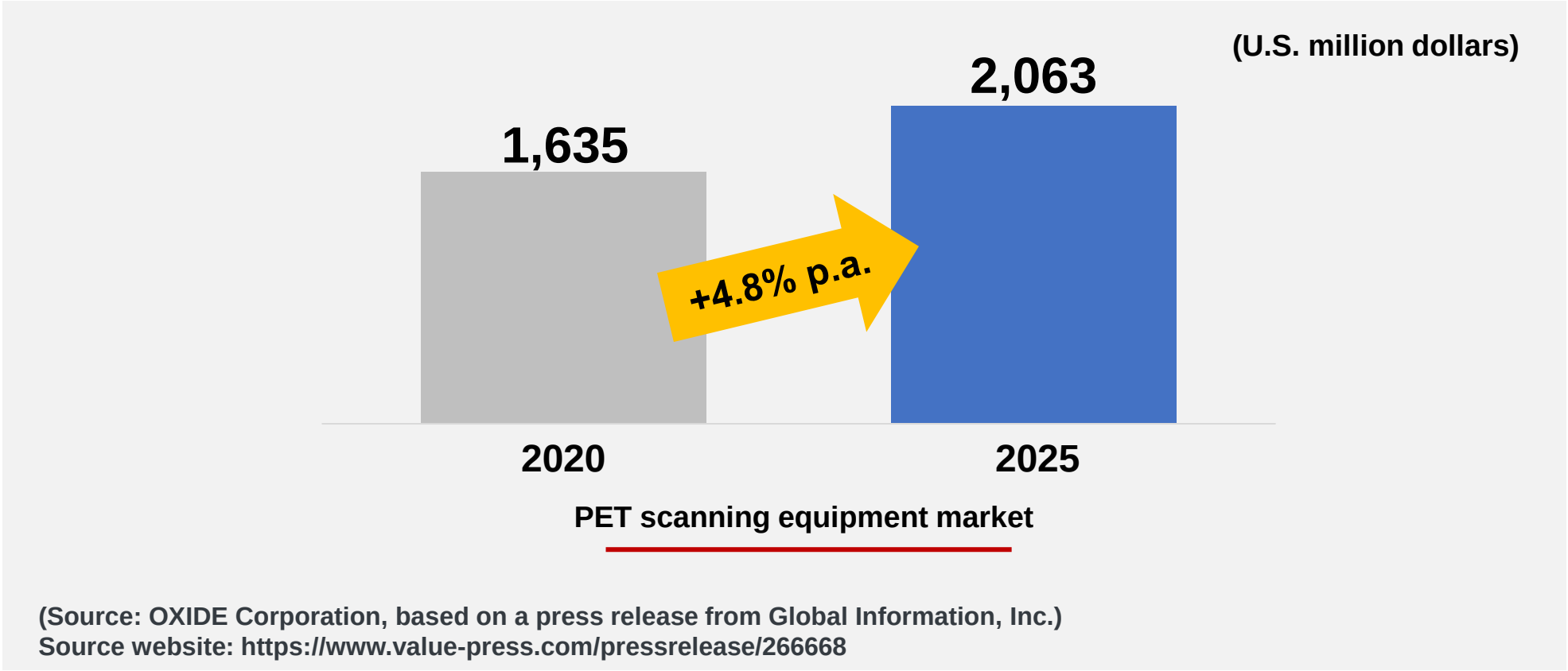
(Million yen)



[Healthcare]
Market environment for PET scanning equipment

OXIDE

The market for PET scanning equipment is expected to grow steadily at a compound annual growth rate of 4.8%.



(Source: OXIDE Corporation, based on a press release from Global Information, Inc.)
Source website: https://www.value-press.com/pressrelease/266668

[Healthcare] New market challenges ahead

Expectations for brain PET (1)

- **Brain PET scans are one of the methods used to detect the amyloid beta substance that is the cause of Alzheimer's disease, a type of dementia.**
- **In Alzheimer's disease, PET scans play an important role in early detection, diagnosis, and in monitoring progression.**
- **PET scans are expected to be used to provide objective metrics for determining the onset and progression of Alzheimer's disease.**

Early detection

- Mini-mental state examination (MMSE)
- Blood tests
- **PET scans**

Treatment

- Administration of drugs

Diagnosis

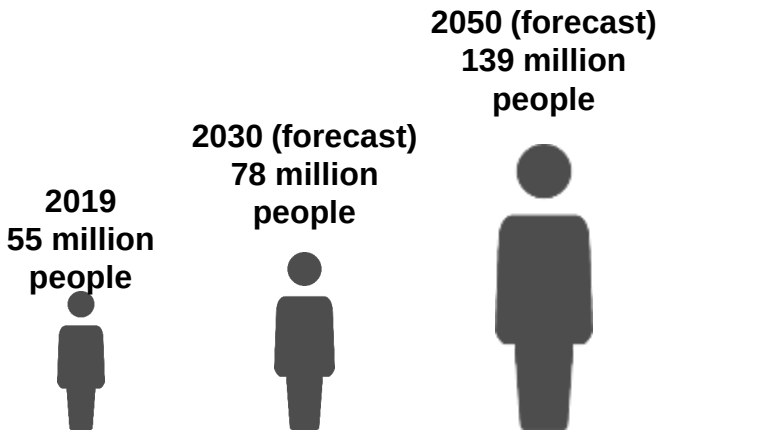
- **PET scans**
- Neuropsychological tests

Prognosis management/ monitoring of progression

- **PET scans**
- Questionnaire-based evaluation of severity

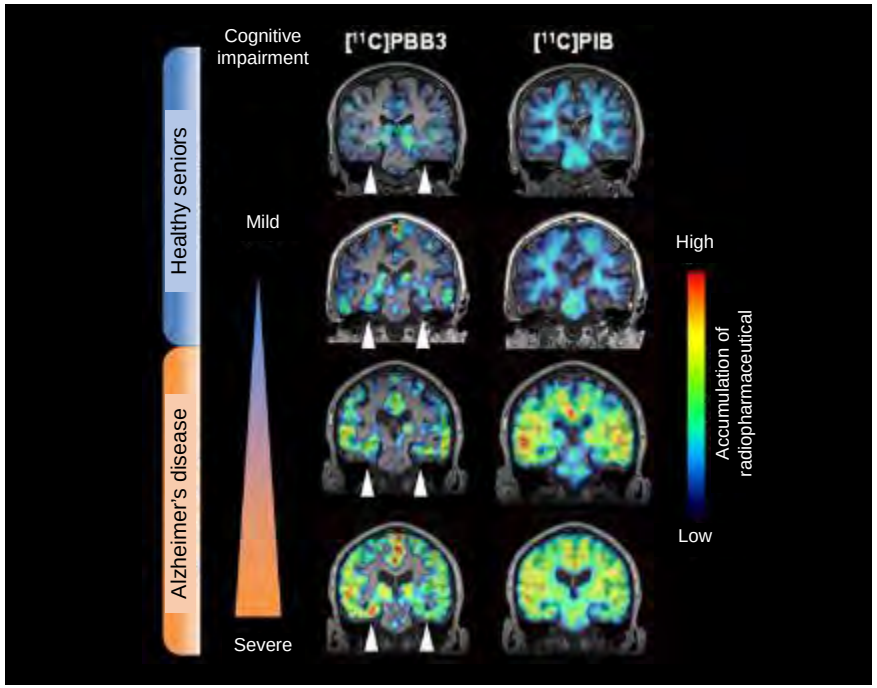
[Healthcare] New market challenges ahead
Expectations for brain PET (2)

- The number of dementia sufferers is more than four times that of cancer victims, and brain PET scanners are expected to grow in popularity.
- Alzheimer's disease medication Lecanemab was granted accelerated approval by the FDA in the U.S. in January 2023.
- The increased use of medication is expected to lead to a rise in demand for scanning.
- We are engaging in sales activities aimed at achieving the adoption of our scintillator single crystals in brain PET scanners.



Global number of patients with Alzheimer's disease

Source: WHO fact sheets, 20 September 2022



Changes in accumulation of PET radiopharmaceuticals following onset and progression of Alzheimer's disease

Source: National Institutes for Quantum Science and Technology press release


Frontier Technology business

[Frontier Technology] Overview

- **Leveraging its core technologies, the Company has researched and developed new fields and applications, and is selling some products.**
- **In addition to engaging in its own research, OXIDE Corporation receives R&D on a consignment basis from companies and university research bodies from around the world.**
- **Using its vertically integrated business model, it offers optimal solutions to customers in such areas as single crystal growth, wafers machined from single crystals, chips, optical components, and laser light source equipment.**

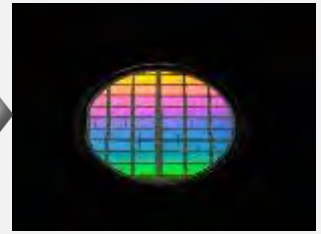
Optical single crystal

Single crystals for frequency conversion

Phosphor single crystals

Single crystals for optical isolators

Single crystals for lasers



Wafers

Chips

Optical components

Laser light source equipment

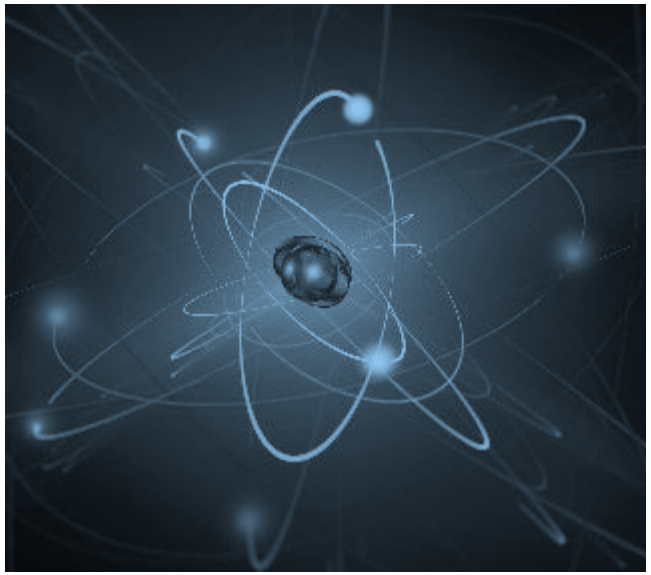
[Frontier Technology] FY2/23

OXIDE

- **Spot sales to research institutes contributed to a 27.9% YoY increase.**

(Million yen)

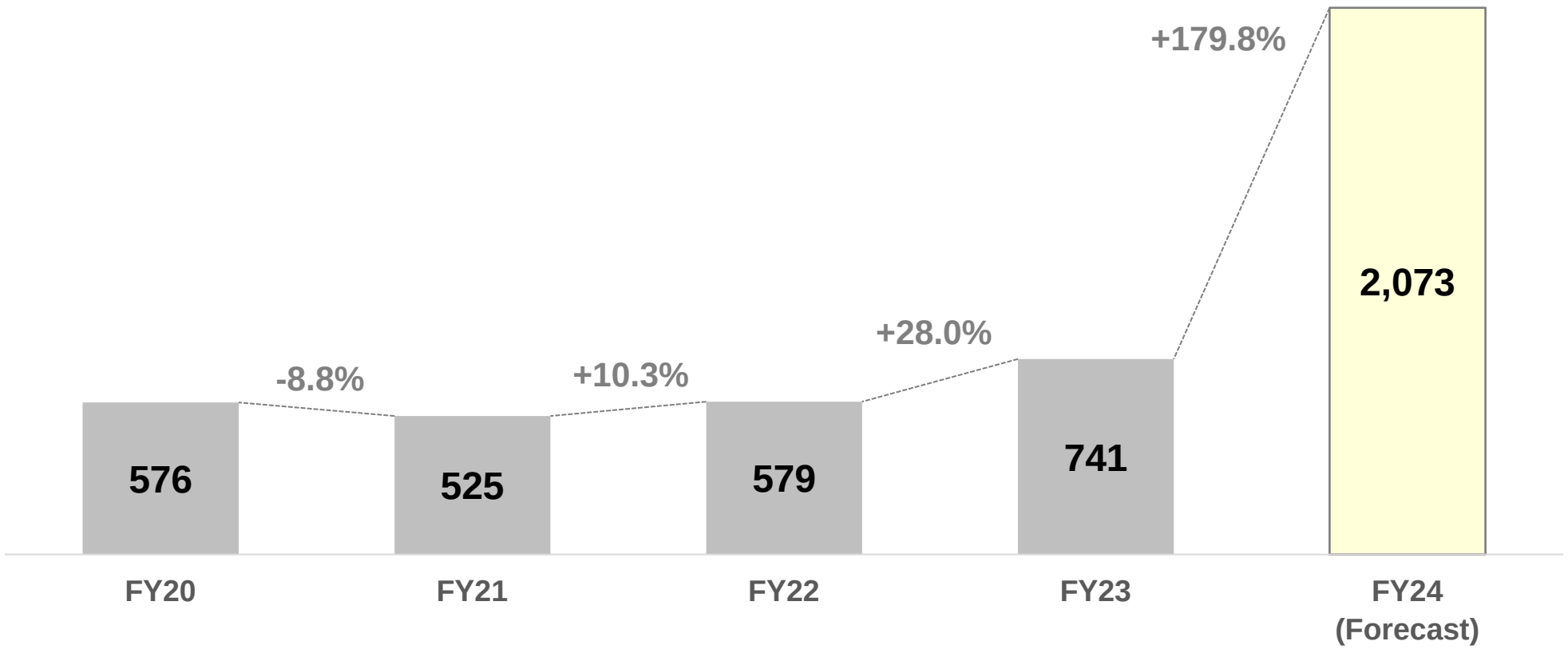
	FY2/22	1Q	2Q	3Q	4Q	FY2/23	YoY	Vs previous forecast	Previous forecast
Net sales	579	236	123	153	228	741	+27.9%	100.3%	739



[Frontier Technology] Net sales forecast (Consolidated)

Net sales will increase 179.8% in FY2/24 now that Raicol is a subsidiary.

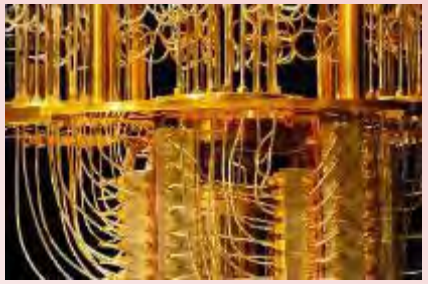
(Million yen)



Mainstay fields of business and R&D activity

- OXIDE Corporation focuses on the fields of quantum Physics and Power Semiconductors.
- By making Raicol a subsidiary, we have added the fields of Space & Defense, Energy, and Medical Aesthetics.

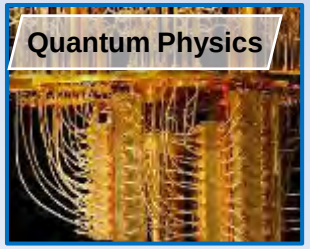
Mainstay fields

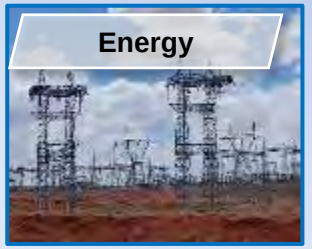


Quantum entanglement light source modules (Quantum communication devices)

Power semiconductors (SiC single crystals/single crystals for GaN substrates)

Raicol's 4 businesses





Global niche market

5G (Single crystals for optical isolators)

Radioactive contamination monitors (GPS single crystals)

Mass market where we have competitive advantages

Laser illumination (Phosphor single crystals/devices)

MicroLED (Femtosecond lasers)

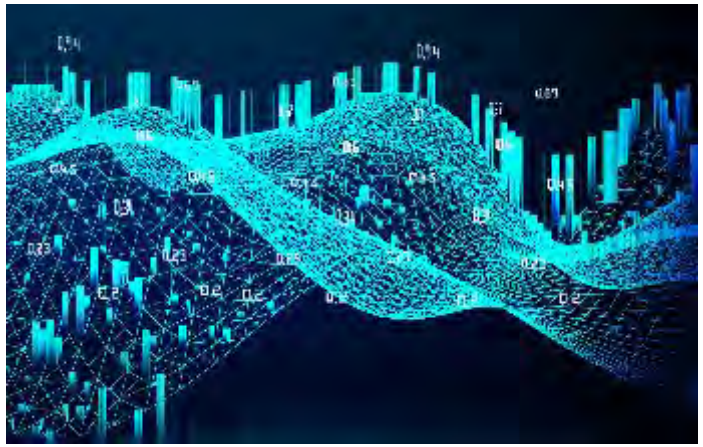
Photomasks (mask writing lasers)

[Quantum Physics] Quantum technology

- **“Quantum” is a general term for extremely small units of energy and matter (e.g. photons, atoms).**
- **“Quantum technology” is a next-generation technology that makes use of the special characteristics of quantum.**
- **Quantum technology is expected to drive the expansion of a wide range of industries, including finance, energy, defense, drug discovery, and transport.**

Quantum computing
Ultra-high-speed

Quantum communications
Ultra-secure



Quantum sensing
Ultra-high-sensitivity/precision

[Quantum Physics]
Working on quantum cryptography communication with LQUOM

OXIDE

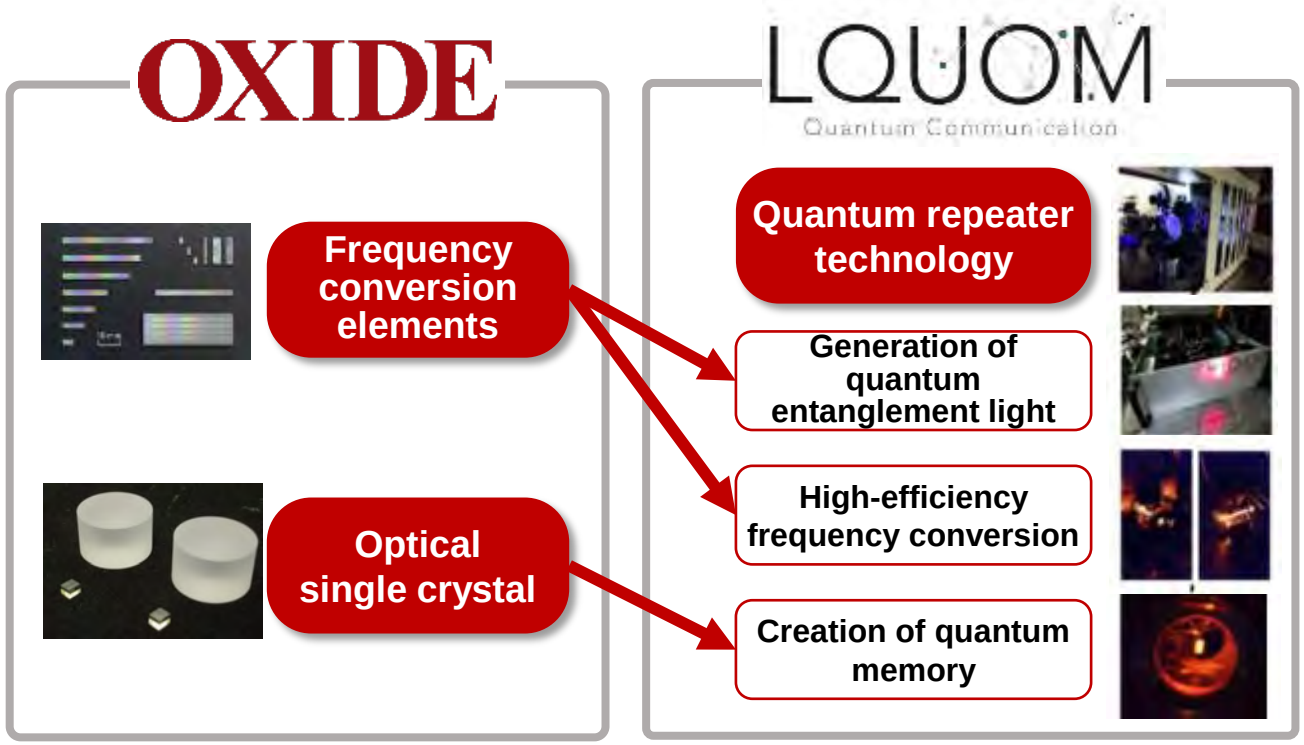
- There is a risk that when quantum computers become a reality, it will become possible to instantaneously decrypt existing encrypted communications.
- As a countermeasure, work is progressing on the commercialization of new encryption methods that use quantum communications (quantum cryptography communication)
- In partnership with LQUOM, which is working to achieve long-distance quantum communications, we aim to realize a quantum cryptography communications network.

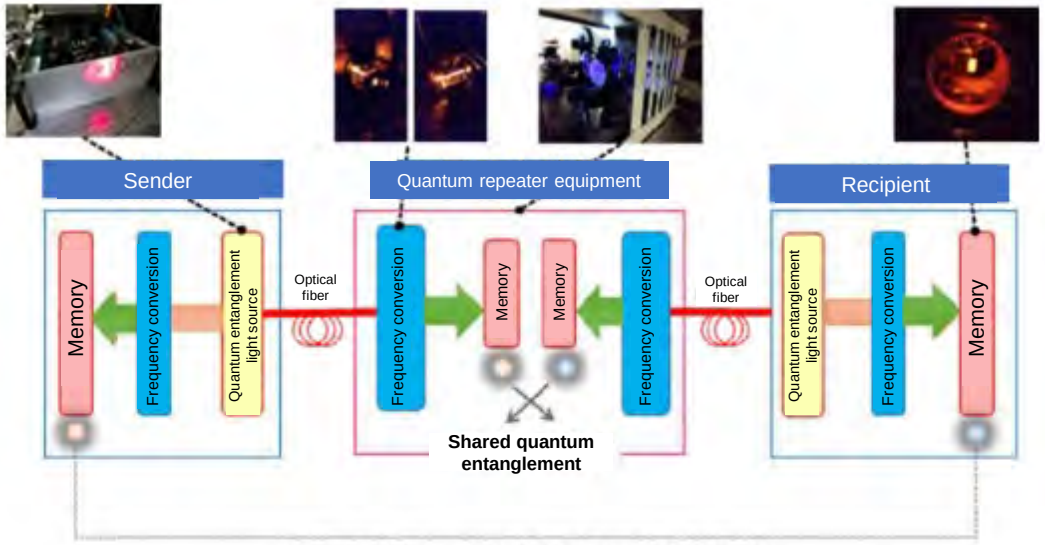
Highly secure next-generation network

[Quantum Physics]
Compatibility with LQUOM in the area of long-distance quantum communications

OXIDE

- LQUOM has core technology related to quantum repeater equipment that will enable long-distance quantum communications.
- OXIDE Corporation has core technologies related to optical single crystals and frequency conversion elements that are required for long-distance quantum communication systems.
- By blending the technologies of the two companies, we will accelerate our entry into the market.





Enables shared quantum entanglement over long distances (500 km or more)

LQUOM's quantum repeater technology

Source: LQUOM

[Quantum Physics] Synergies with Raicol

- We can provide almost every frequency conversion element used in the field of quantum communications.
- Fusing the elements and modularization technology of the two companies enables us to aim at entering the market for light sources used in quantum communications.
- The opening up of new customers will proceed more efficiently, and our expansion into the quantum technology field as a whole will take place over a broader front.

Frequency conversion elements/electro-optical elements

Modularization

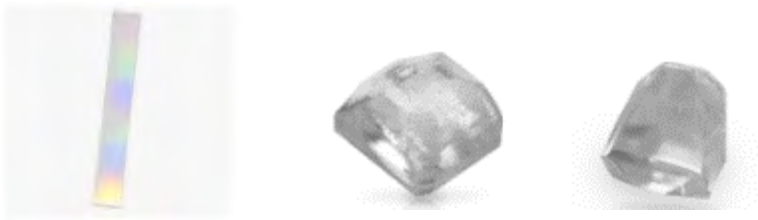
OXIDE

PPLN | PPLT

Frequency conversion modules

RAICOL CRYSTALS

PPKTP | KTP | RTP



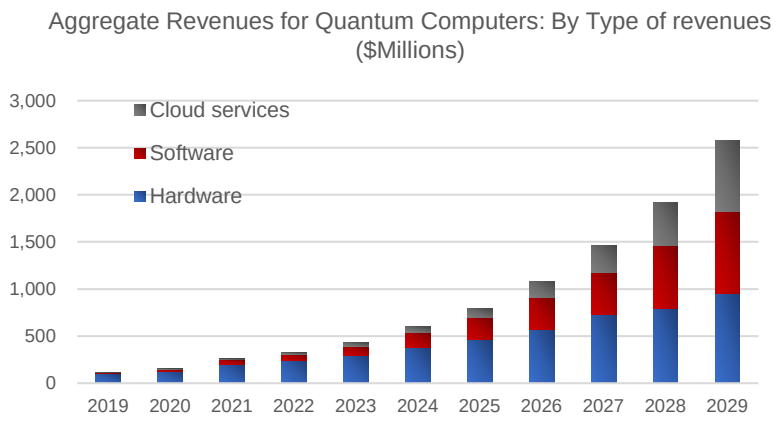
Electro-optical modules

Source: Raicol

[Quantum Physics] Market forecast for the quantum technology field

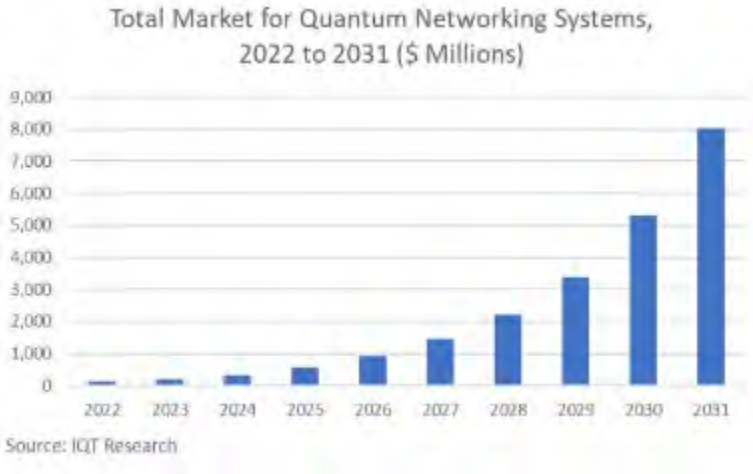
- **Working with LQUOM, OXIDE Corporation aims to accelerate the development of the quantum cryptography communications field and expand into downstream applications.**
- **In addition, through our collaboration with Raicol, we will not only address cryptography communications but also establish control over the market for core components upstream of the quantum technology field.**

Quantum computer market

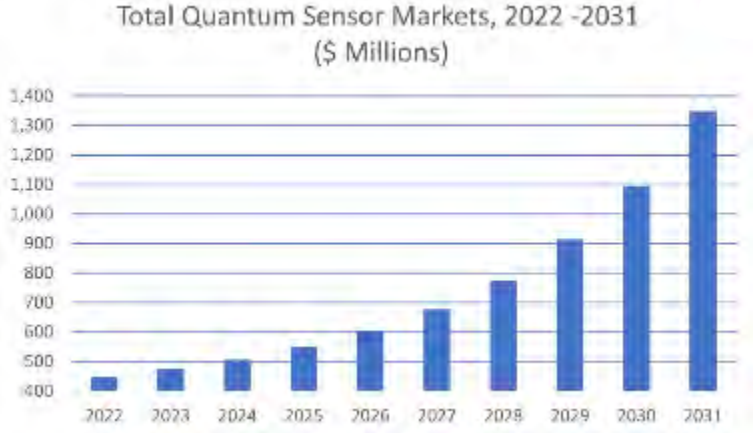


Source: OXIDE Corporation, based on Inside Quantum Technology materials

Quantum communication systems market

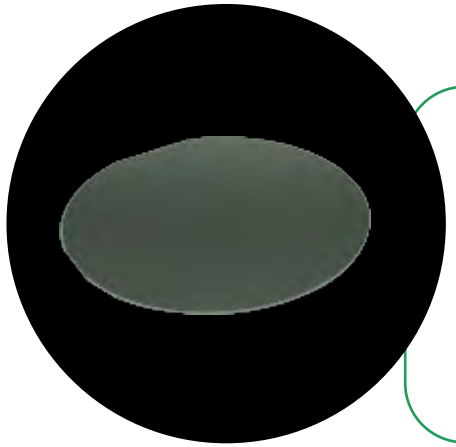


Quantum sensor market



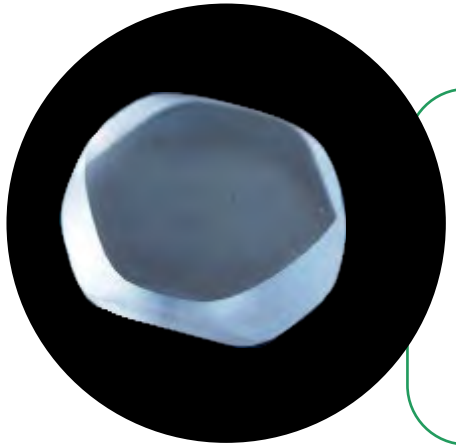
Source: Inside Quantum Technology

[Power Semiconductors] Next-generation power semiconductor materials



SiC single crystals

Supporting social infrastructure through High-breakdown voltage and Low loss performance

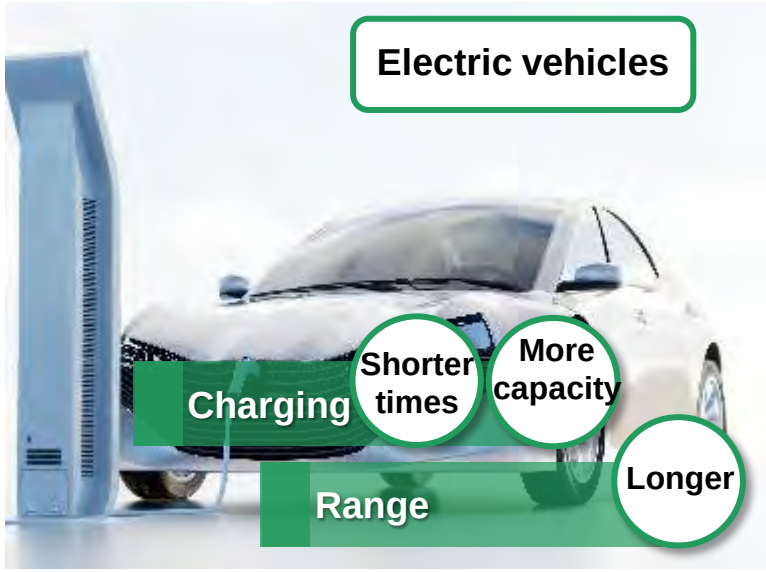


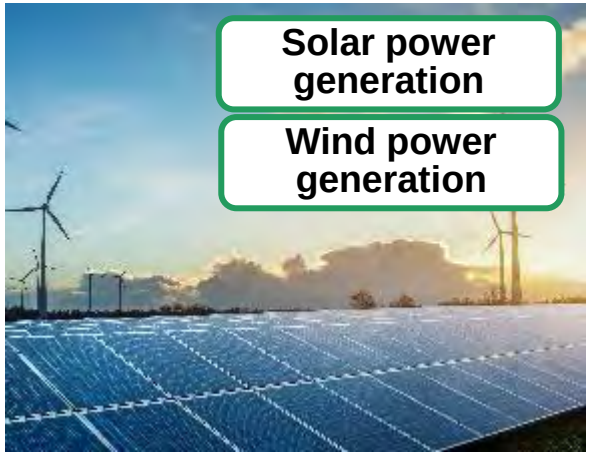
Single crystals for SAM-GaN substrates

Supporting information infrastructure through High-speed and High-frequency performance

[Power Semiconductors] Power semiconductors in everyday life

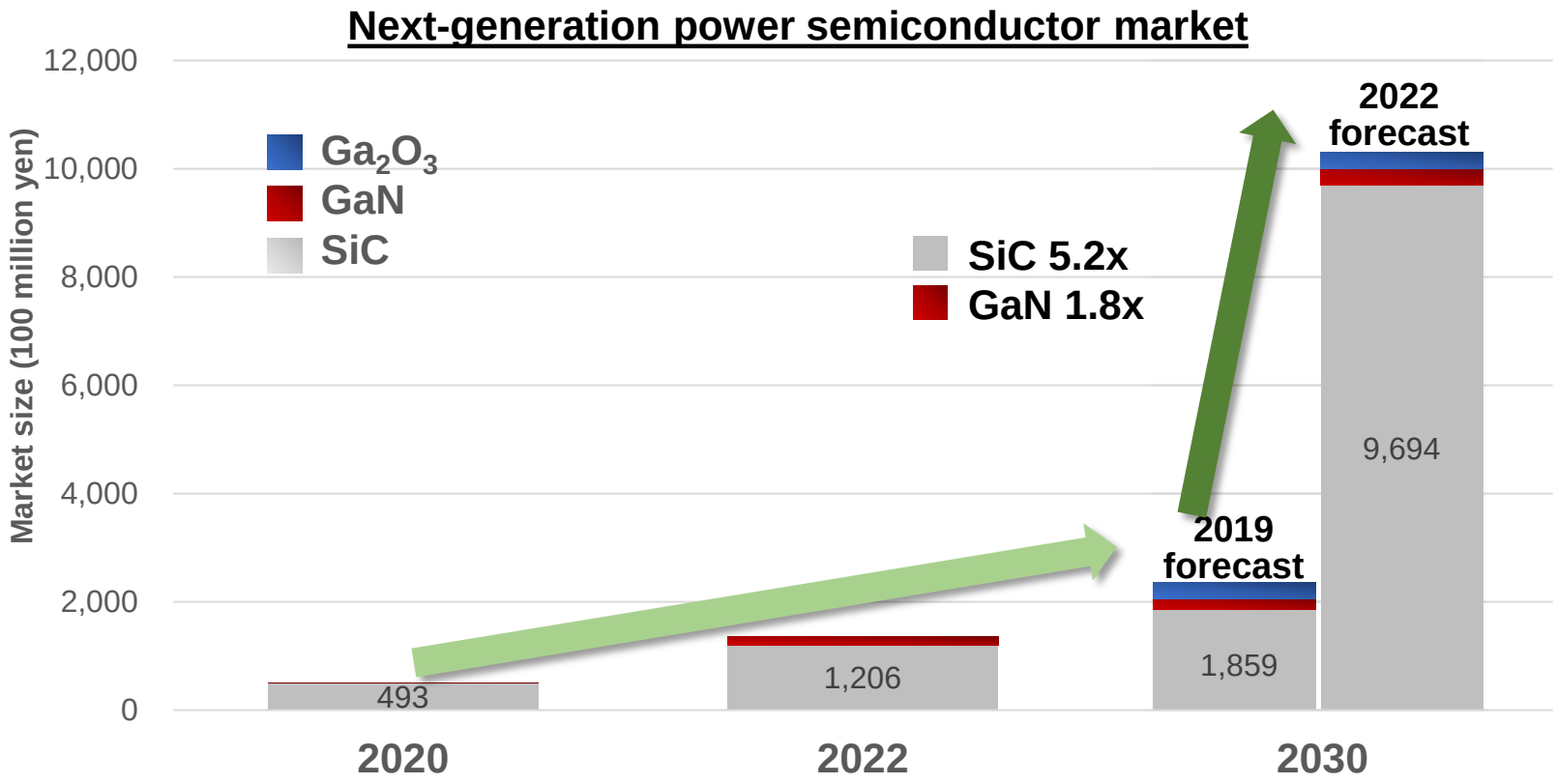
Next-generation power semiconductors to achieve carbon neutrality





[Power Semiconductors] Rapid growth in power devices market

- The global power semiconductor market is growing rapidly.
- FY2022 forecasts for the SiC device market in 2030 were revised up to 5.2 times that of the FY2019 forecast for 2030.

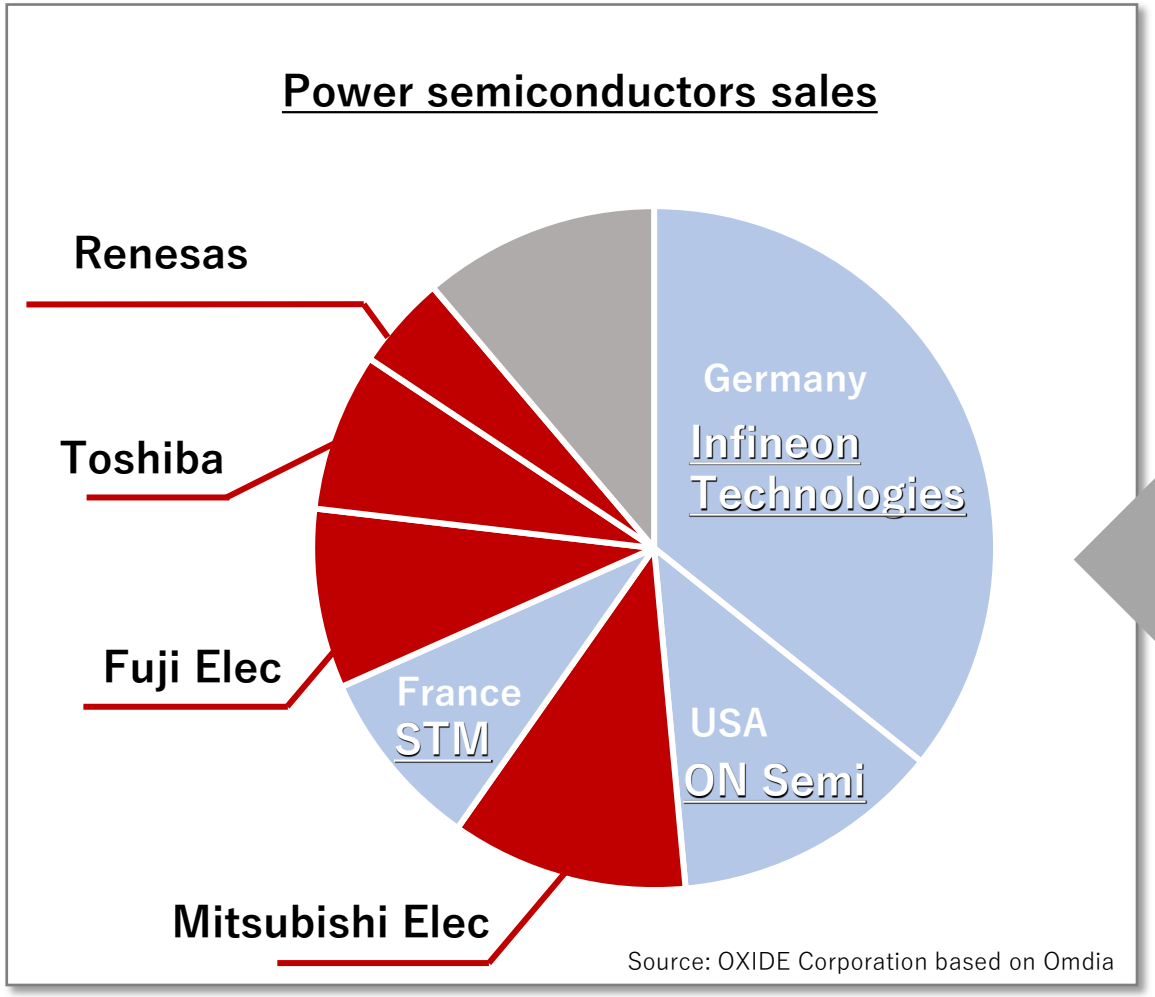


Source: OXIDE Corporation based on Fuji Keizai Group Co., Ltd. materials

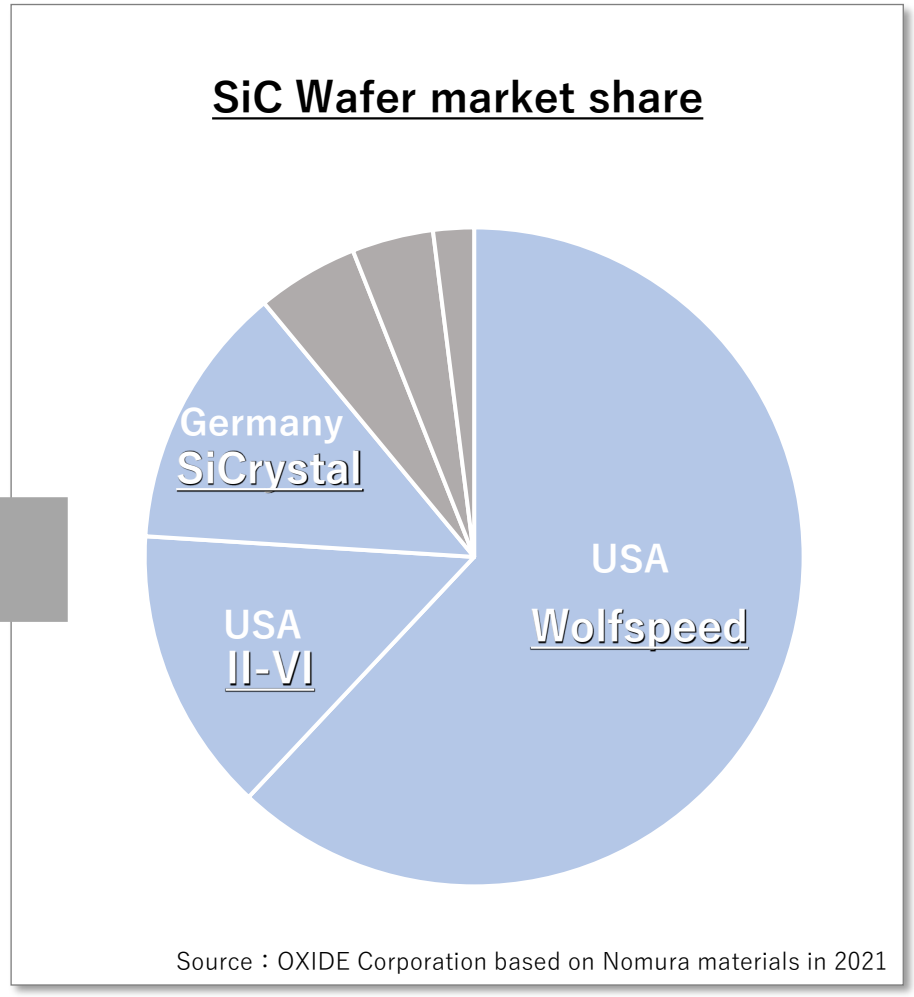
Power semiconductors

Importance of domestic production of SiC single crystal wafer

OXIDE



Supply



Overseas maker　Domestic maker　Others

The Green Innovation Fund business and "next-generation digital infrastructure construction" project

Development of ultra high quality, 8-inch, low-cost SiC wafers

Business Objectives and Overview

By 2030, through the development of SiC crystal growth technology utilizing solution growth method and process informatics technology and the development of processing and evaluation technology for large diameter SiC wafers, ultra high quality 8-inch SiC wafers for next-generation power semiconductors will be manufactured and sold to device manufacturers for implementation in society.

1. Development of ultra high quality SiC wafers by solution growth method
2. Processing and evaluation of large diameter SiC wafers

Business Size, etc.

Total of three projects including this project
Business scale: about 25,800 million yen
Support scale*: about 18,600 million yen
* Including incentive amount. There is a possibility of change in response to business progress through stage gate and such.
Subsidy rate: 9/10 consignment → 2/3 subsidy → 1/2 subsidy (incentive rate is 10%)

Consortium

Basic research

Nagoya University
of Tokai National Higher Education and Research System

Results of large diameter AI element technology development

Reconsignment

1. Development of ultra high quality SiC wafers by solution growth method

OXIDE

8-inch high quality SiC wafer mass-production technology

2. Processing and evaluation of large diameter SiC wafers

mipox

SiC wafer mass-production processing technology and evaluation technology

Reconsignment

UJ-Crystal
Process optimization

Alxtal
Process informatics

AIST
(National Insitute of Advanced Industrial Science and Technology)
Crystal evaluation and epitaxial growth

SiC Wafer Manufac-ture

8-inch high quality N-type / P-type SiC wafer

Sales

Social implementation of devices

- Mitsubishi Electric Corporation
- Hitachi, Ltd, etc.

Inverter for EVs

Inverter for renewable energy

Transmission and distribution power converter

[Power Semiconductors]
Advantages of SiC single crystals created using the solution growth method

OXIDE

- OXIDE Corporation is working with UJ-Crystal, a startup spun off from Nagoya University, on SiC single crystal growth using the solution growth method.
- The solution growth method is expected to enable the manufacture of SiC single crystals with fewer defects compared to those produced by the other growth methods, which involve sublimation.
- SiC single crystals produced using the sublimation growth method are of n-type, but the solution growth method can be used to produce both n-type and p-type crystals, leading to an expansion of applications.
- Because crystal growth can be performed at low temperatures, energy savings are expected at the manufacturing stage, making it an environmentally friendly growth method.

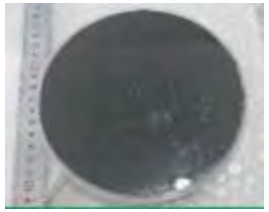
Previous growth method

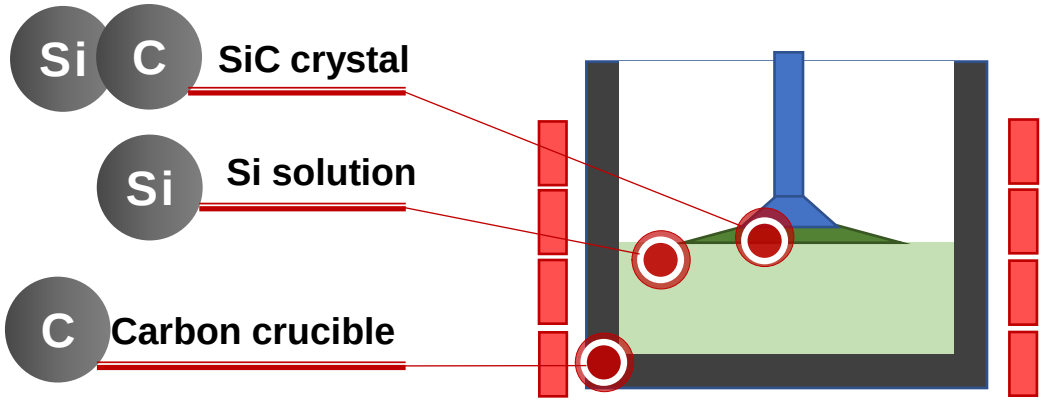
Sublimation method

New growth method

Solution growth method

6-inch SiC single crystal





Larger diameter

Enables larger diameters without thermal strain.

Low defect density

Small temperature gradients result in few defects.

Growth speed

The speed of growth is limited by the speed of carbon supply, and temperature gradients are not necessary.

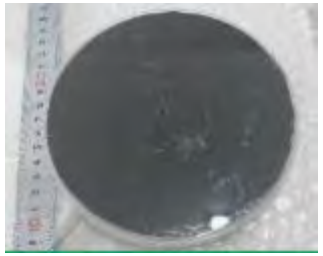
Low environmental impact

Crystal growth temperature is lower relative to that of other growth methods, and is environmentally friendly.

[Power semiconductors]
Progress in development of SiC single crystals

OXIDE

- **Research and development is proceeding according to plan in collaboration with consortium member UJ-Crystal.**



6-inch SiC single crystals

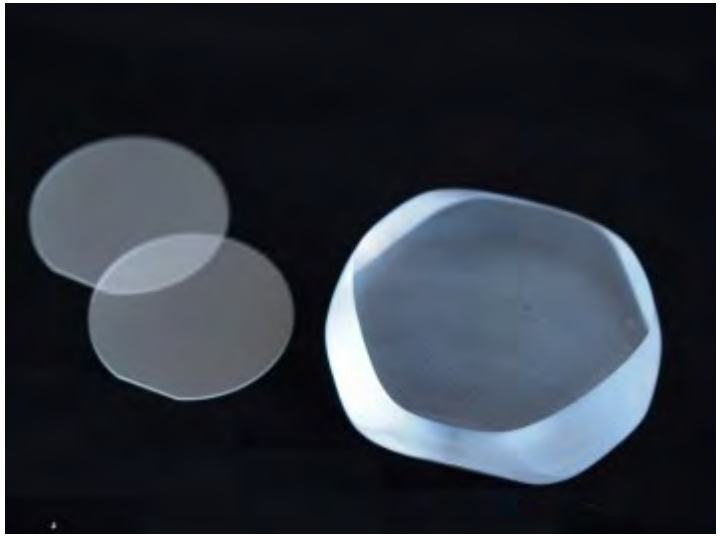
- ✓ **Growth conditions were optimized using AI machine learning techniques in an growth environment.**
- ✓ **We discovered parameters that reduce defects specific to the solution growth method.**
- ✓ **Based on these, we are working to increase crystal length and speed up growth.**

Factory No. 5

- ✓ **We have completed construction of Factory No. 5 next to the Yamanashi head office, for the purpose of promoting SiC R&D.**
- ✓ **10 or so items of growing equipment have been installed, and we will accelerate development.**
- ✓ **We have committed additional engineers to reinforce the structure for accelerating research.**

[Power Semiconductors] SAM business area

- The SAM ($ScAlMgO_4$) material manufactured by OXIDE Corporation is used as a substrate material for growing power semiconductors (GaN).
- SAM is also expected to be used as a substrate material for growing high-brightness LEDs (InGaN).



SAM GaN/InGaN substrate single crystals

Expected fields of application

Power semiconductors (GaN)

Laser illumination (InGaN)

[Radioactivity measurement]
Gadolinium PyroSilicate (GPS) as a next-generation single-crystal scintillator

OXIDE

- GPS ($Ce:Gd_2Si_2O_7$) is a high-performance, next-generation scintillator single crystal.
- The LGSO crystal that constitutes the mainstay product of the Healthcare business is especially suited to the detection of gamma radiation, but GPS has excellent detection performance for beta and alpha radiation as well as gamma radiation.
- With its high temperature resistance, it enables stable measurements even in environments where traditional scintillators cannot be used.

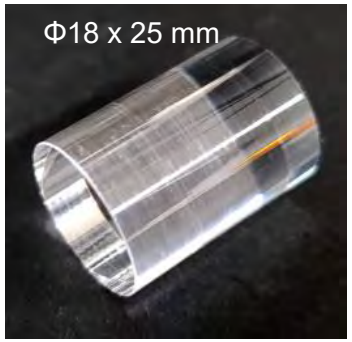
Expected fields of application

Resource exploration
(radioactivity logging)

Radioactive contamination monitoring

Scintigraphy
(diagnostic equipment)

R&D activities



- ✓ Increasing the number of customer evaluations in radioactivity contamination monitoring applications
- ✓ Developing large crystals in response to customer requests

[R&D activities] Progress made in FY2023

Product	Progress
SiC single crystals	• Promoted R&D collaboration with UJ-Crystal • Made progress with construction of Factory No. 5, strengthened R&D structure
GaN substrate single crystal	• Under evaluation by customers  Crystal growth Cutting and polishing  Wafer products • Published research papers co-authored with collaborating universities (Meijo University, Kyoto University)
Quantum communication devices	• Commenced R&D collaboration with LQUOM • By making Raicol a subsidiary, we strengthened our lineup of crystals and devices required for the field of quantum physics

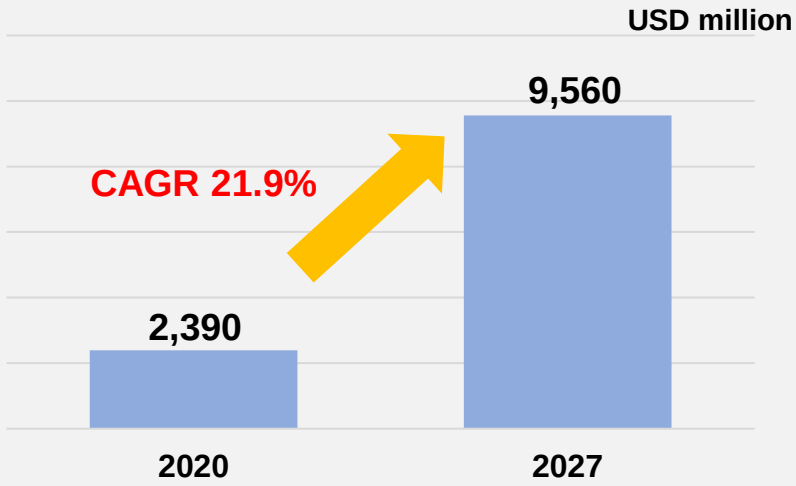
Space & Defense field

Space & Defense

Main applications : Altimeters for artificial satellites
Laser rangefinders
Laser sights

Products : KTP crystals, RTP crystals

Size of global market for rangefinders



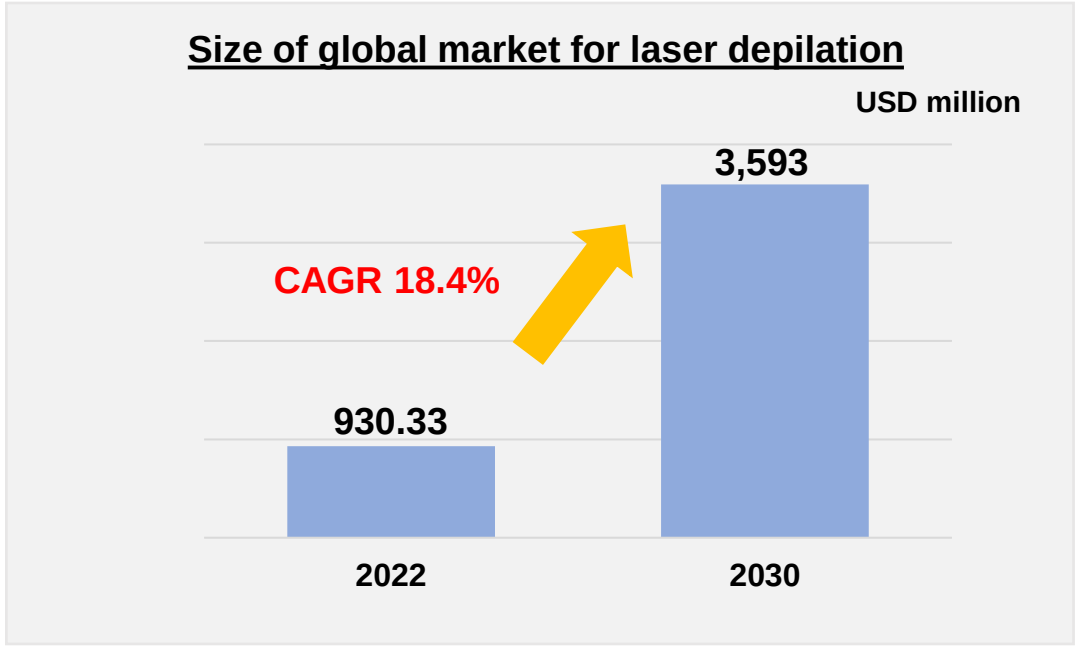
(Source: OXIDE Corporation, based on market research report by Report Ocean)

Medical Aesthetics field

Medical Aesthetics

Main applications : Lasers for depilation
Lasers for treating skin pigmentation
Lasers for tattoo removal

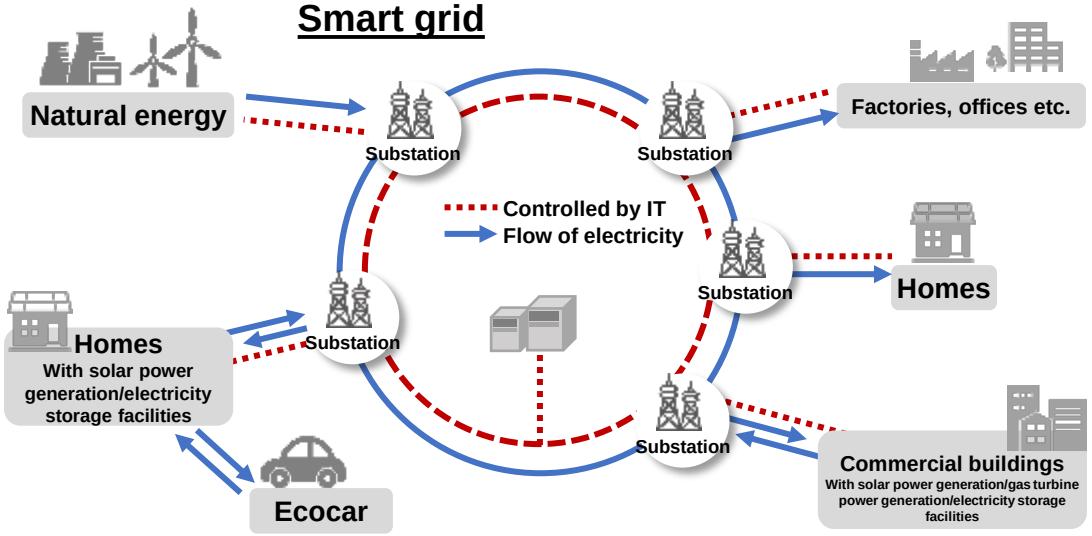
Products : KTP crystals, LBO crystals



(Source: OXIDE Corporation, based on market research report by Grand View Research)

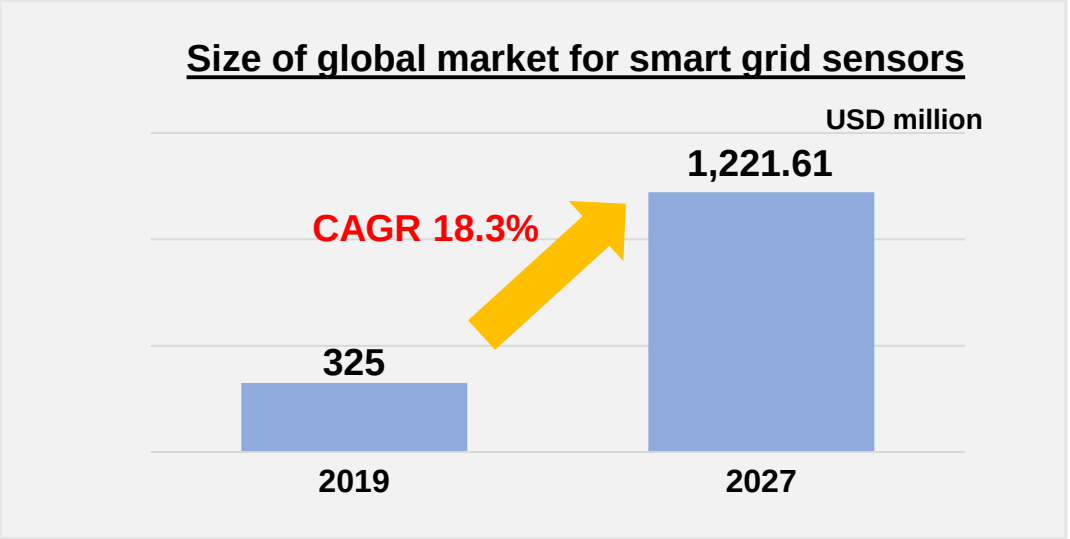
Energy field

Energy



Main applications: **Electric field sensors used in smart grids* (for measuring electric current in transmission lines)**

Products: **RTP crystals**

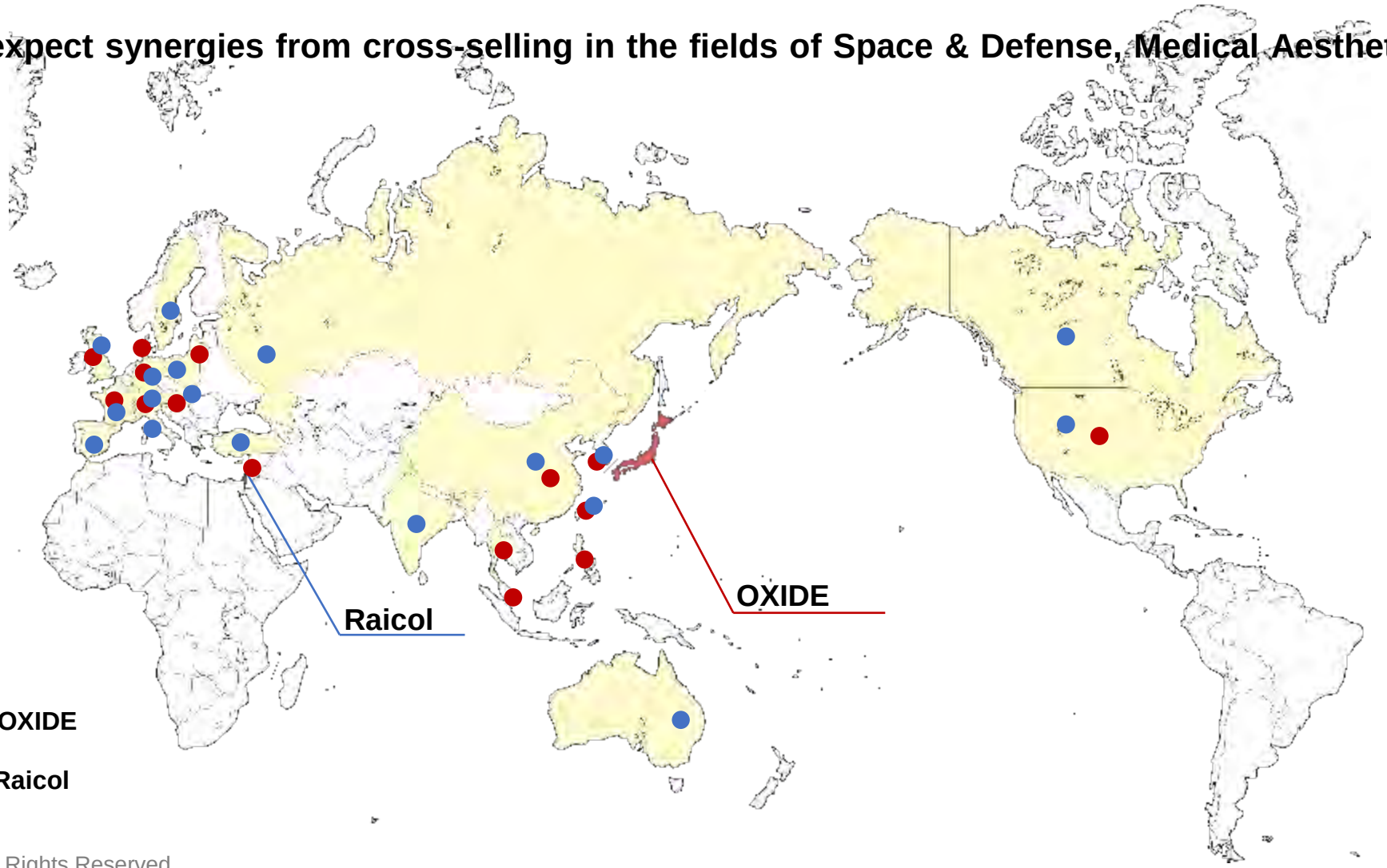


(Source: OXIDE Corporation, based on market research report by Global Information, Inc.)

*A “smart grid” is a transmission network that can be optimized by controlling the flow of electric power both on demand and supply sides. This is referred to as a next-generation transmission network, and has an important role to play in the promotion of green innovation.

[Raicol] Synergies from cross-selling

- Raicol already has extensive sales channels in all regions of the world, primarily in the US and Europe, as well as a variety of knowledge and experience.
- In particular, we expect synergies from cross-selling in the fields of Space & Defense, Medical Aesthetics, and Energy.



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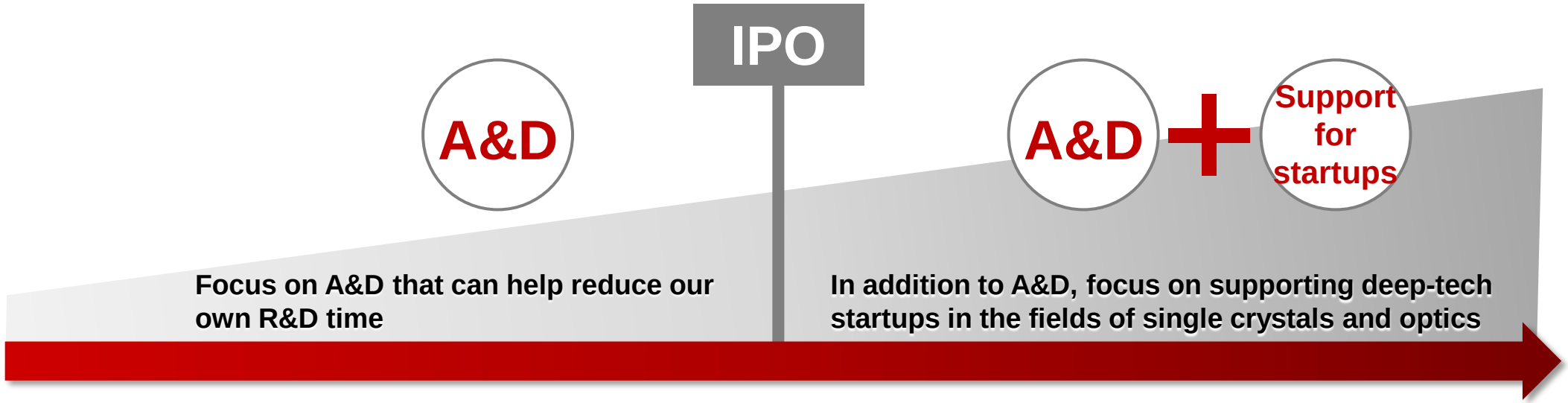
A&D and M&A initiatives to accelerate growth

A&D
Acquisition and Development

M&A
Mergers and Acquisitions



Initiatives to support startups

Objectives

One of OXIDE Corporation's management philosophies is to use the results of outstanding research from universities and national institutes of research to benefit society, and we seek to provide support for commercializing the results of research, and to startups.

Approach

We focus on the distinctive length of time required in the deep-tech field from basic research to commercialization, and consider investments and support measures tailored to the stage of business.

Nagoya University spin-off

Investment in UJ-Crystal

Field of application	Power semiconductors (SiC single crystals)
Stage	Basic research, mass production
Technology field	Single crystal growth technology

Yokohama National University spin-off

Investment in LQUOM

Field of application	Quantum cryptography communications
Stage	Basic research
Technology field	Single crystal, frequency conversion technology

Clemson University spin-off

Investment in HTCS

Field of application	New materials
Stage	Basic research
Technology field	Single crystal growth technology

Support for startups from NIMS

- **OXIDE Corporation has signed a memorandum with NIMS to provide support for startup spun off from NIMS.**
- **By using the management techniques that we have developed for deep-tech startups for the benefit of others, we aim to help the commercialization of new technologies and materials.**

オキサイドと NIMS、スタートアップ支援に向けて連携覚書を締結

株式会社オキサイド（本社：山梨県北杜市武川町牧原 1747 番地 1 代表取締役社長 古川保典 以下「オキサイド」）と国立研究開発法人物質・材料研究機構（所在地：茨城県つくば市千現 1-2-1 理事長 宝野和博 以下「NIMS」）は、スタートアップ支援に向けた連携覚書を締結しましたのでお知らせします。

OXIDE NIMS

オキサイドと NIMS は、これまでも、NIMS 発スタートアップに対する経営相談や、スタートアップ支援制度への助言などを NIMS がオキサイドから受けるという協力関係にありましたが、今回、両者でオキサイドの NIMS スタートアップ支援の覚書を正式に締結することにいたしました。今後、NIMS が持つ技術の社会実装をより加速させることを目指し、オキサイドは NIMS のシード技術の育成から会社設立後の経営サポートを積極的に行ってまいります。

オキサイドは、自身も NIMS 発のベンチャー企業であり、ディープテック分野におけるスタートアップ固有の経営ノウハウを後進のスタートアップに還元することは社会貢献としての意味合いも強いと考えております。今回の連携により日本の基礎研究をベースにしたスタートアップが更に活躍し、テクノロジーを通して様々な社会課題を解決する一助になればと考えております。

また NIMS は、物質や材料科学の基礎研究・基盤的研究開発に特化した国立研究開発法人であり、材料科学分野では世界トップレベルの研究成果を創出しています。NIMS の研究成果からは、オキサイドを含めこれまで 18 社のベンチャーが創業されましたが、我が国の素材・化学産業の更なる発展を支えるべく、より一層の優れたスタートアップの創出とそのための支援強化が求められています。

今回の連携により NIMS 発ベンチャーであるオキサイドの過去20年にわたる成長と経営の経験ノウハウを新たなスタートアップに取り込むことで、新材料・新技術の社会実装を強力に後押しするだけでなく、素材・化学分野での新産業創出を推進してまいります。

OXIDE Corporation press release, March 24, 2023

OXIDE

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SDG initiatives (1)

- In accordance with our corporate philosophy, we will promote the development of products that resolve social problems, and contribute to the development of society.
- The Company has formulated the OXIDE Code of Conduct as an SDG initiative, and seeks to maintain growth through the development of technologies and products that are of use to the world, in preparation for a sustainable society.

OXIDE Corporation's SDG initiatives

Reduce environmental impacts/contribute to society/contribute to communities

- Promote the further development and expansion of products and services that resolve social problems
- Take steps to reduce CO_2 emissions
- Engage actively in social contribution activities, including donations and volunteer work

Cultivate a positive organizational culture and diverse human resources

- Launch initiatives to revitalize the organization by addressing mental health issues and introducing health management
- Draw up a three-year plan for human resources development

Put in place structures for adapting to laws and regulations and for environmental management

- Establish structures and frameworks aimed at fully instilling our approach to compliance with laws and regulations
- Establish risk management systems to enable business continuity

SDG initiatives (2)

Toward a carbon-neutral future through the power semiconductor business

- **Green Innovation Fund**
  Next-generation Digital Infrastructure Construction project

We aim for a carbon-neutral future through R&D into ultra-high-quality SiC wafers for next-generation power semiconductors.

- **Participation in the Ministry of Economy, Trade and Industry's GX League Basic Concept**

OXIDE Corporation has endorsed the Basic Concept, and seeks to build a future in which a carbon-neutral society and economy can coexist.

GX League 2022

The GX League was established in 2022 as a space for discussions between the government and private-sector companies to facilitate market creation and rulemaking, with the aim of forming a sustainable vision for carbon neutrality by 2025. (Full-fledged operation beginning in April 2023)

SDG initiatives (3)

Fostering a positive organizational culture in which diverse human resources can actively participate

- **OXIDE Corporation has obtained the Yamanashi Erumin certification as a company that is working to promote female empowerment**

“Yamanashi Erumin” is a unique certification awarded by Yamanashi Prefecture to companies who work to promote female empowerment.

Our initiatives

Equal working opportunities

At OXIDE Corporation we offer equal opportunities to all, and our recruitment activities place great importance on individual characteristics such as skills and personality, regardless of sex.

Creation of a comfortable working environment

The Company is engaged in creating a working environment that is comfortable, beginning with working hours. Figures for FY2021 show that the average for combined overtime hours and hours worked on days off was less than 45 hours for all months.

Formation of diverse careers

There are multiple examples at OXIDE Corporation of non-regular employees converting their employment to regular status. It is also possible to choose a pattern of working tailored to the lifestyle of the individual.

Corporate Social Responsibility

Results of our activities in FY2023

Provision of support to Yamanashi YMCA International Charity Run

The Yamanashi YMCA International Charity Run is a relay race competition that aims to not only support children with disabilities, but to raise social understanding and interest in disabilities. OXIDE Corporation is a supporter of this competition.

Provision of support to Mount Fuji Innovation Camp

The Mt. Fuji Innovation Camp is a startup festival that targets entrepreneurs and other people wishing to develop new businesses. OXIDE Corporation supports this event with the objective of providing support to startups.

Donations to the Yamanashi Green Scholarship Foundation

The Yamanashi Green Scholarship Foundation offers a scholarship system to support children who find it difficult to attend high school due to their family circumstances or other factors.

Donations to Yamanashi schools (Mukawa Elementary School and Hokuto High School)

In order to further enrich school educational facilities and the teaching environment, OXIDE Corporation has made donations to local educational bodies. This is an initiative to set up environments to nurture those who will become the next generation of the community by increasing the number of spaces where each and every child has the opportunity to demonstrate their abilities freely and to achieve rapid personal growth.

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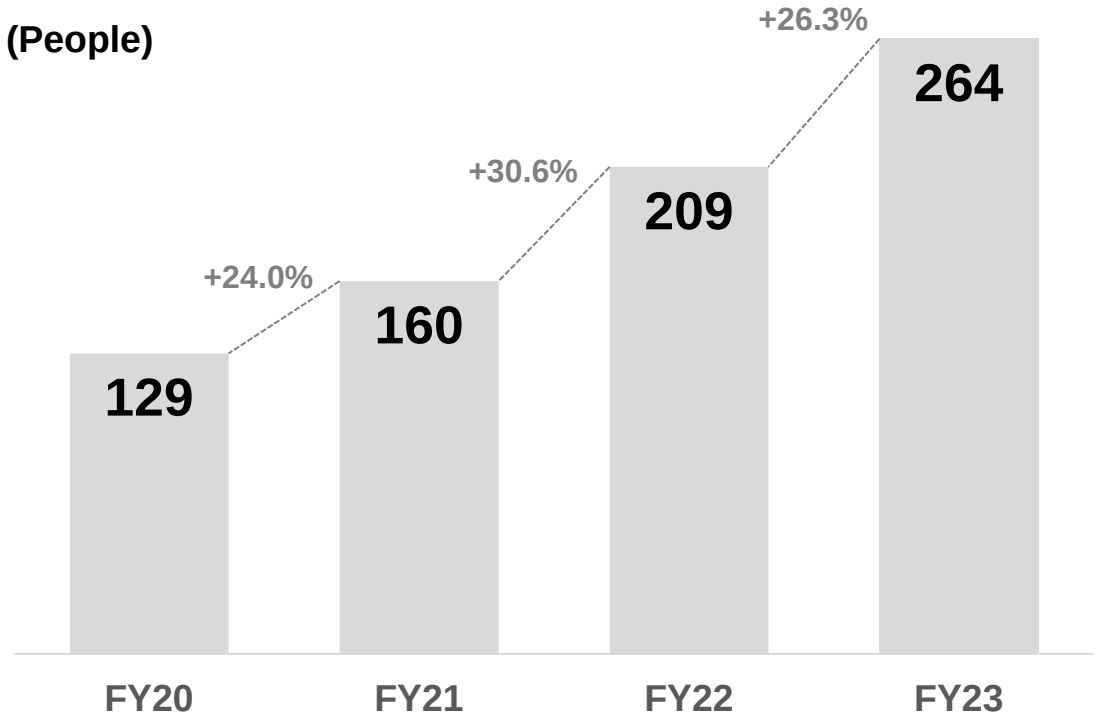
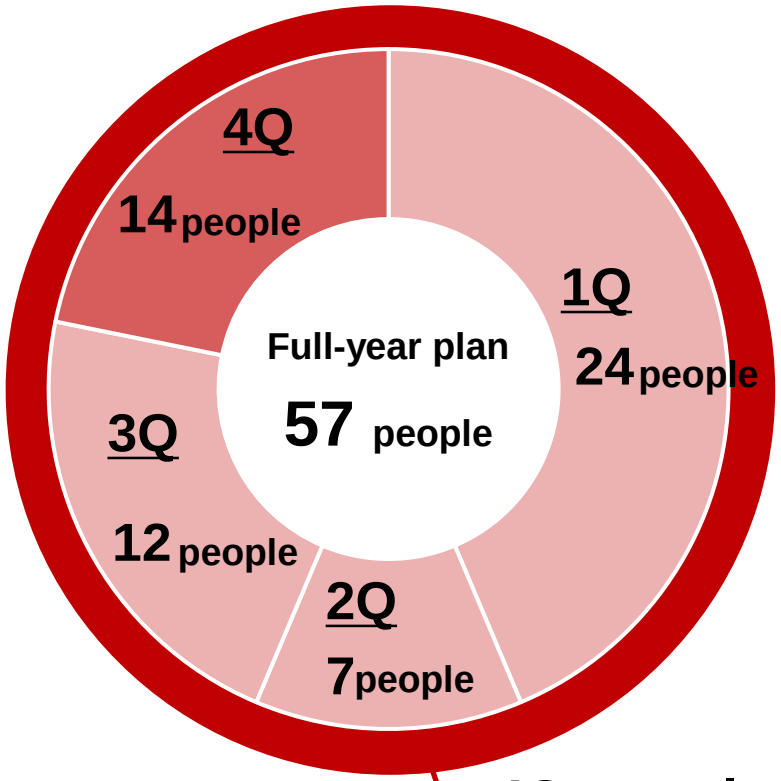
Results vs plan [Personnel] FY2/23

OXIDE

- Hiring was in line with the plan and mainly allocated to the Semiconductor business.



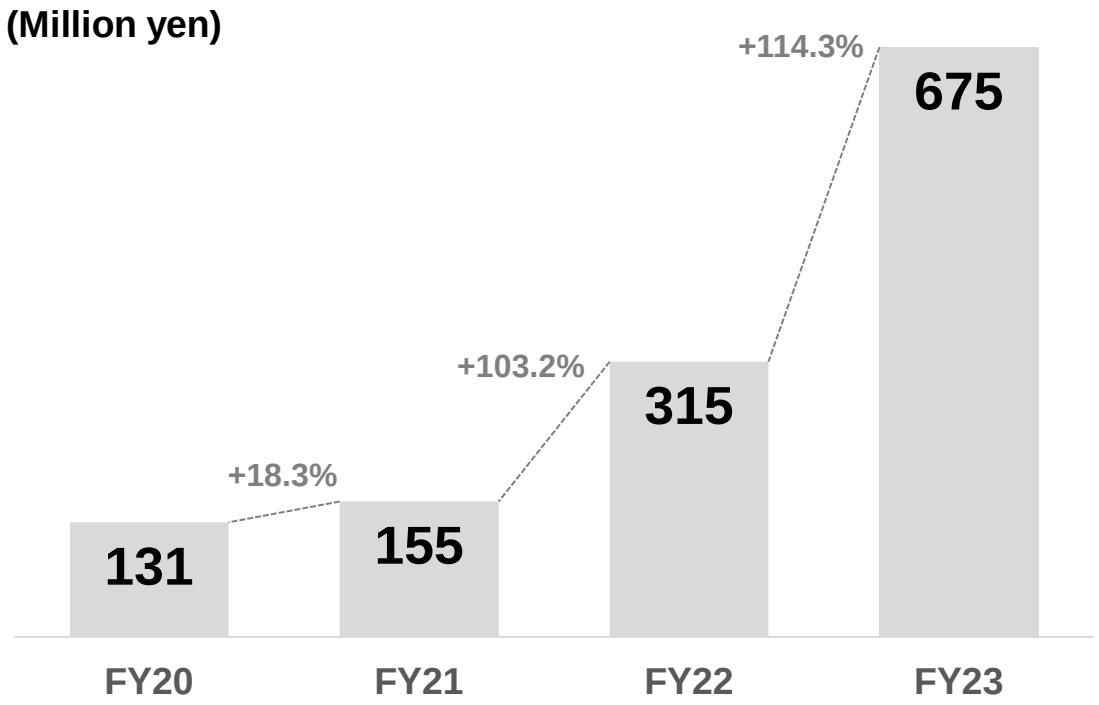
Number of employees at end of each fiscal year



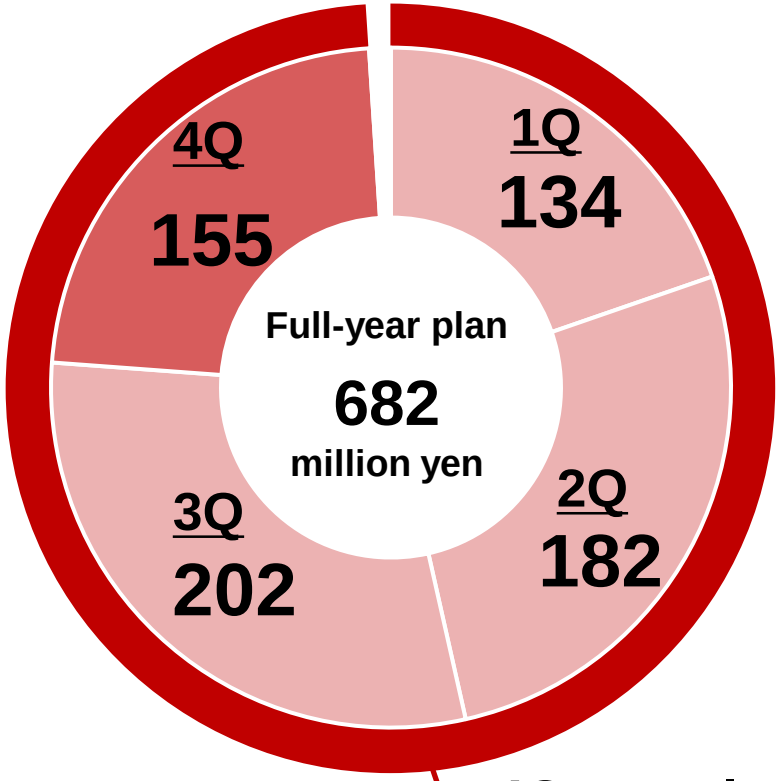
4Q cumulative total:
57 people

Results vs plan [R&D Expense] FY2/23

- We invested 675 million yen, up 114.3% from the fiscal year ended February 28, 2022, mainly to boost R&D related to power semiconductors.



R&D expense

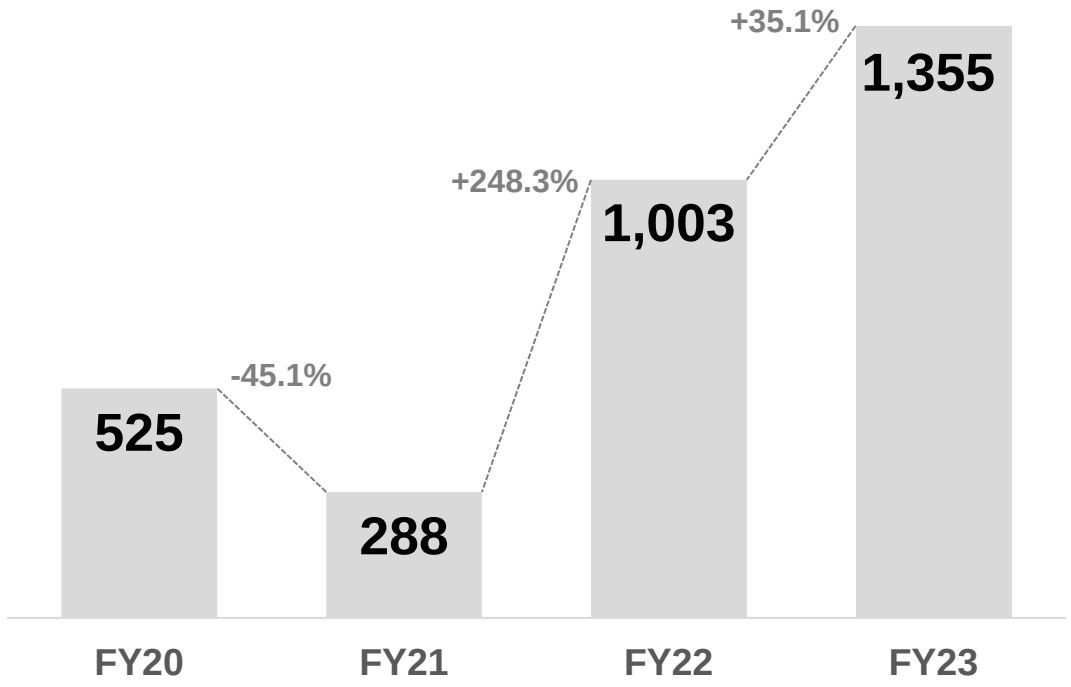


4Q cumulative total:
675 million yen

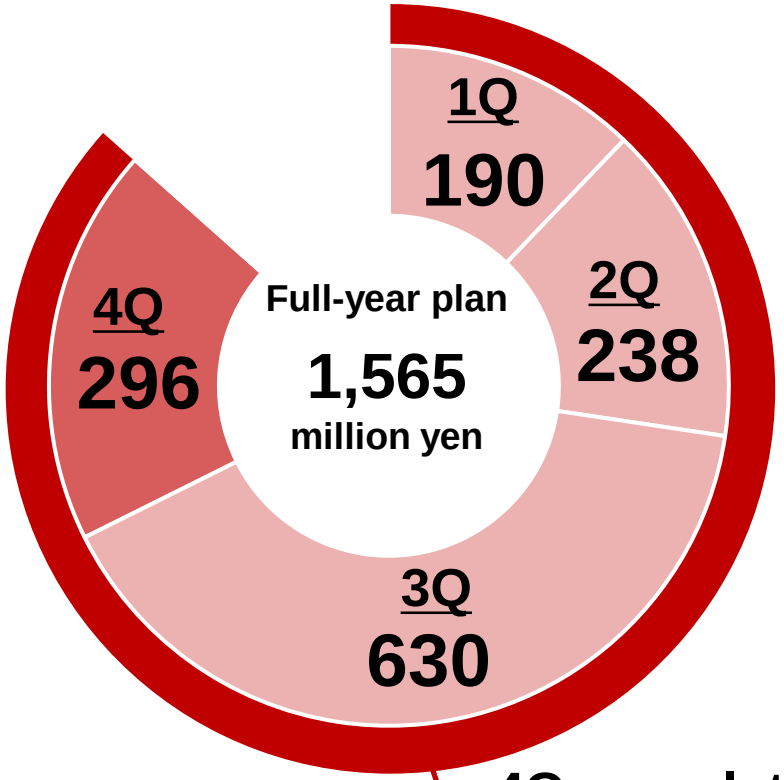
Results vs plan [Capital investment expense] FY2/23

- We invested 1,355 million yen, up 35.1% from the fiscal year ended February 28, 2022.
- Some parts of the plan are scheduled to be implemented in the fiscal year ending in February, 2024.

(Million yen)



Capital investment expense



4Q cumulative total:
1,355 million yen

Financial forecasts (Non-consolidated) for FY2024

OXIDE

- **We expect a 26.8% increase in net sales, a 26.8% increase in operating profit, and a 37.4% increase in ordinary profit.**

(Million yen)

	FY2/23	1Q	2Q	3Q	4Q	FY2/24	YoY
Net sales	5,752	1,315	1,718	2,011	2,250	7,294	+26.8%
Gross profit	2,279	368	650	788	971	2,777	+21.8%
SG&A	1,742	582	506	518	490	2,095	+20.3%
Of which, R&D expense	675	243	196	205	170	813	+20.5%
Operating profit	537	-214	144	270	481	681	+26.8%
Non-operating income/loss	150	85	-9	176	11	263	+74.9%
Ordinary profit	687	-129	135	446	492	945	+37.4%
Total depreciation and amortization	356	107	122	139	147	514	+44.3%

Financial forecasts (Consolidated) for FY2024

OXIDE

Profit and loss from Raicol are included from 2Q. Operating profit is concentrated in 2H.

(Million yen)

	1Q (Non-consolidated)	2Q (Consolidated)	3Q (Consolidated)	4Q (Consolidated)	FY2/24 (Consolidated)	Reference: FY2/23 (Non-consolidated)
Net sales	1,315	2,183	2,527	2,745	8,773	5,752
Gross profit	385	890	1,053	1,222	3,554	2,279
SG&A	576	655	693	679	2,603	1,742
Of which, R&D expense	242	256	289	252	1,039	675
Additional expenses associated with consolidation*	38	145	145	147	476	—
Operating profit	-229	90	215	395	471	537
Non-operating income/loss	68	-34	158	-11	181	150
Ordinary profit	-161	56	373	384	652	687

Calculated based on an exchange rate of 130 yen to the dollar and 37.7 yen to the new shekel.

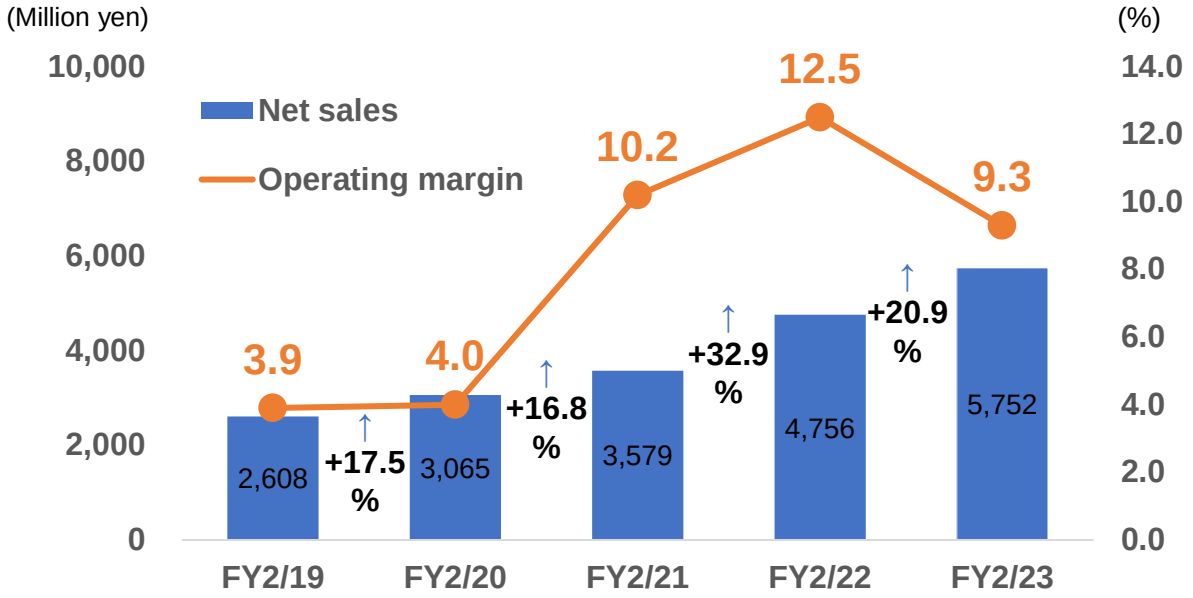
* Additional costs associated with consolidation include amortization of goodwill (206 million yen), stock compensation expense (158 million yen), PMI-related expenses (68 million yen), and differences in accounting standards (43 million yen).

Management indicators

Management indicators

- **Net sales growth: 20%**
  Since the Company was founded 22 years ago, we have roughly doubled sales every five years. We believe that maintaining or raising this same rate of growth going forward is important, and have designated net sales growth as a management indicator.
- **Operating margin: 10%**
  This is widely used for management analysis among manufacturing companies in Japan, and we have thus designated the operating margin as a management indicator.

Results



Factors behind divergence from FY2/23 forecasts
(announced April 13, 2022)

■ **Net sales growth (forecast: 33.3%; actual: 20.9%)**

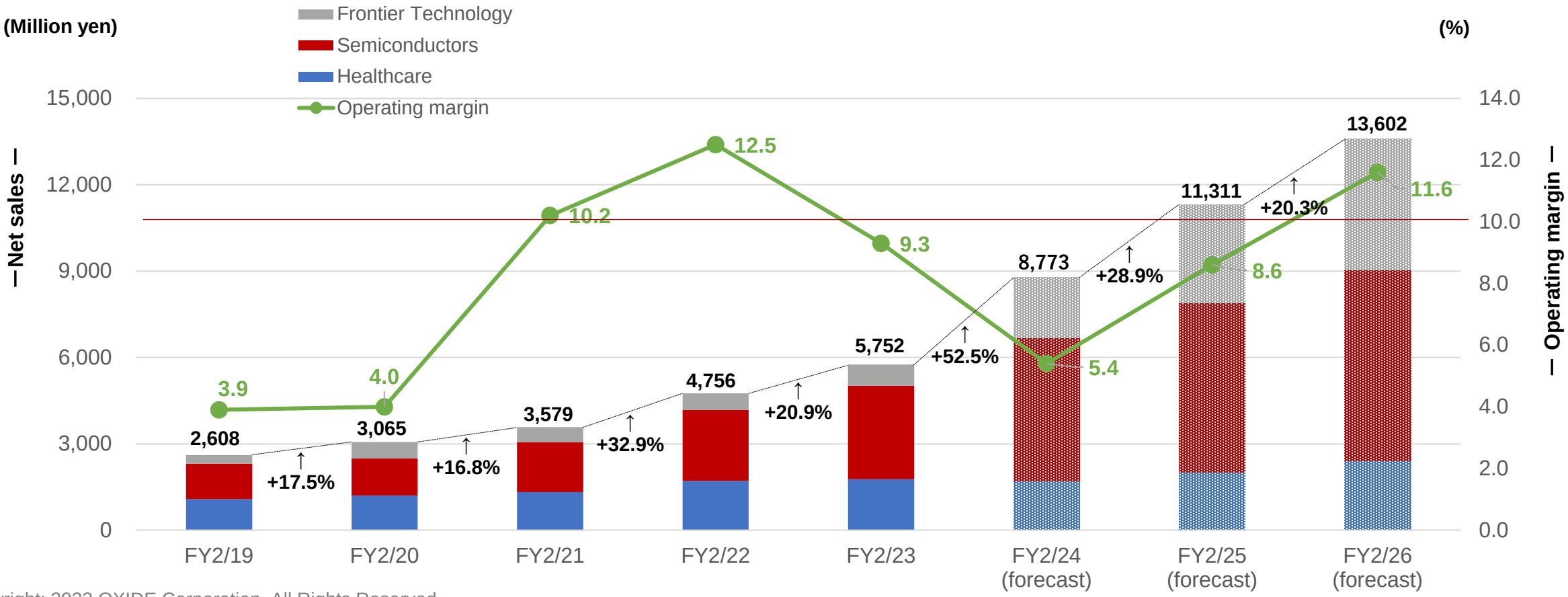
In the Semiconductors business, a decline in pass rates for certain procured components in 3Q led to a slump in sales of laser products, and a shortfall of approximately ¥400 million.
In the Healthcare business, inventory and production adjustments at a major customer resulted in limited growth in net sales in 4Q.
As a result, the net sales growth fell short of expectations by 12.4 points, to 20.9%.

■ **Operating margin (forecast: 11.1%; actual: 9.4%)**

In 1Q and 2Q the operating margin increased due to improvements in productivity in the Semiconductors business and an upward revaluation of inventory in the Healthcare business caused by rising raw material costs. However, the increase in procurement volumes that we implemented to minimize the impact of lower pass rates for procured components in 3Q and maintain production significantly depressed profitability.
As a result, the operating margin fell short of expectations by 1.7 points, to 9.4%.

Medium-Term (FY2024-FY2026) Management Plan (Consolidated)

- We forecast a substantial increase in sales, resulting in a record high in FY2/24.
- Sales are expected to increase in the Semiconductors business as a result of the effects of capital investment.
  In the Healthcare business, while we project steady growth in sales for PET scanning machines for cancer diagnosis, we also expect a certain contribution from sales of PET scanning machines for diagnosis of Alzheimer's disease.
  We also expect the Frontier Technology business, which includes the business of Raicol, to contribute to increased sales of the Group as a whole.
- The operating margin in FY2/24 will decline due to M&A-related expenses, but we plan to achieve an operating margin in excess of 10% in FY2/26.



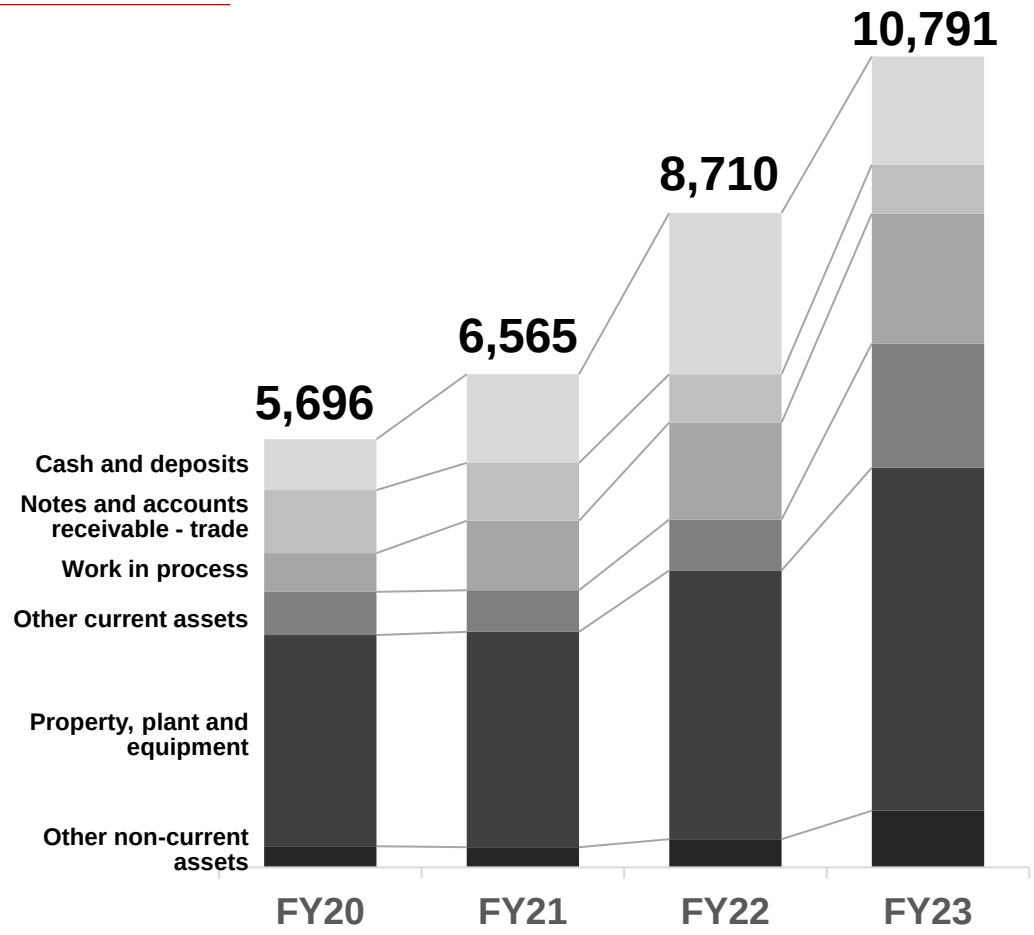
Balance sheet

OXIDE

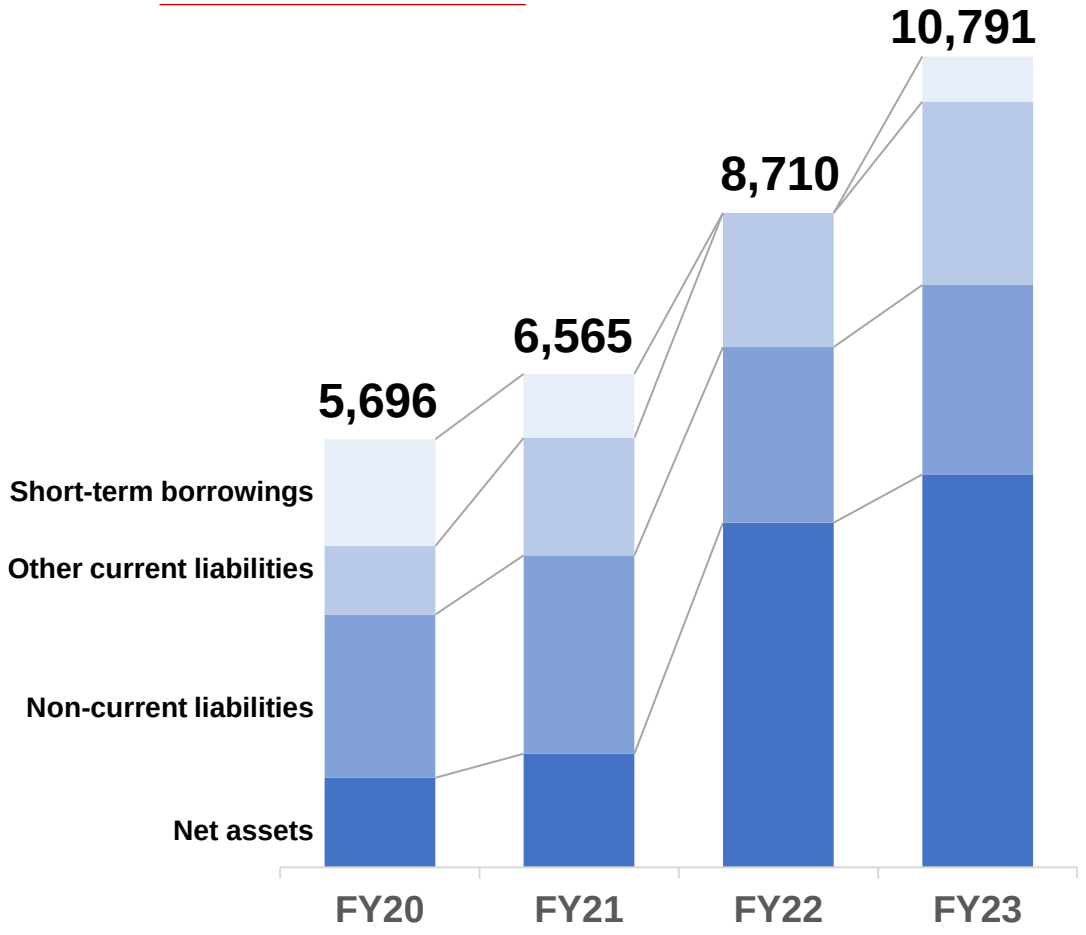
Total assets increased by 2,081 million yen.

(Million yen)

Assets



Liabilities/net assets

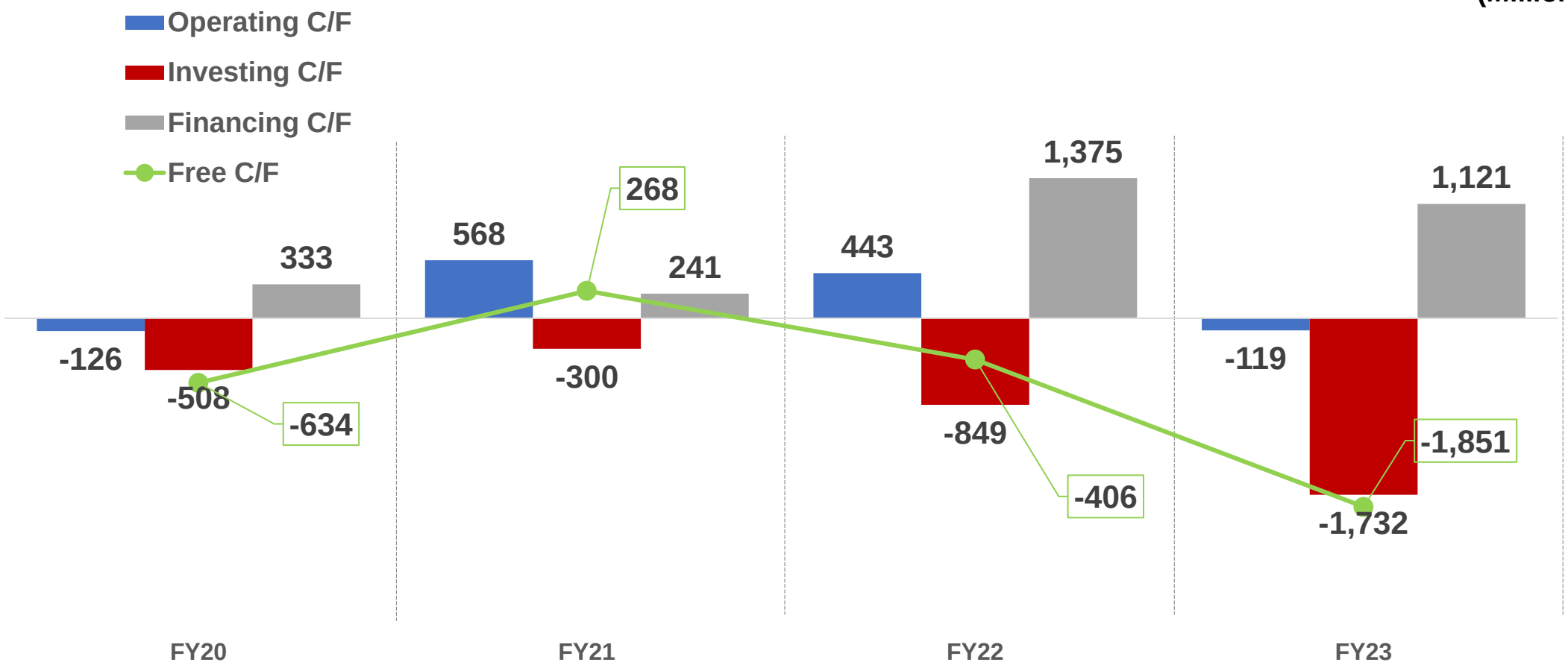


Cash flows

OXIDE

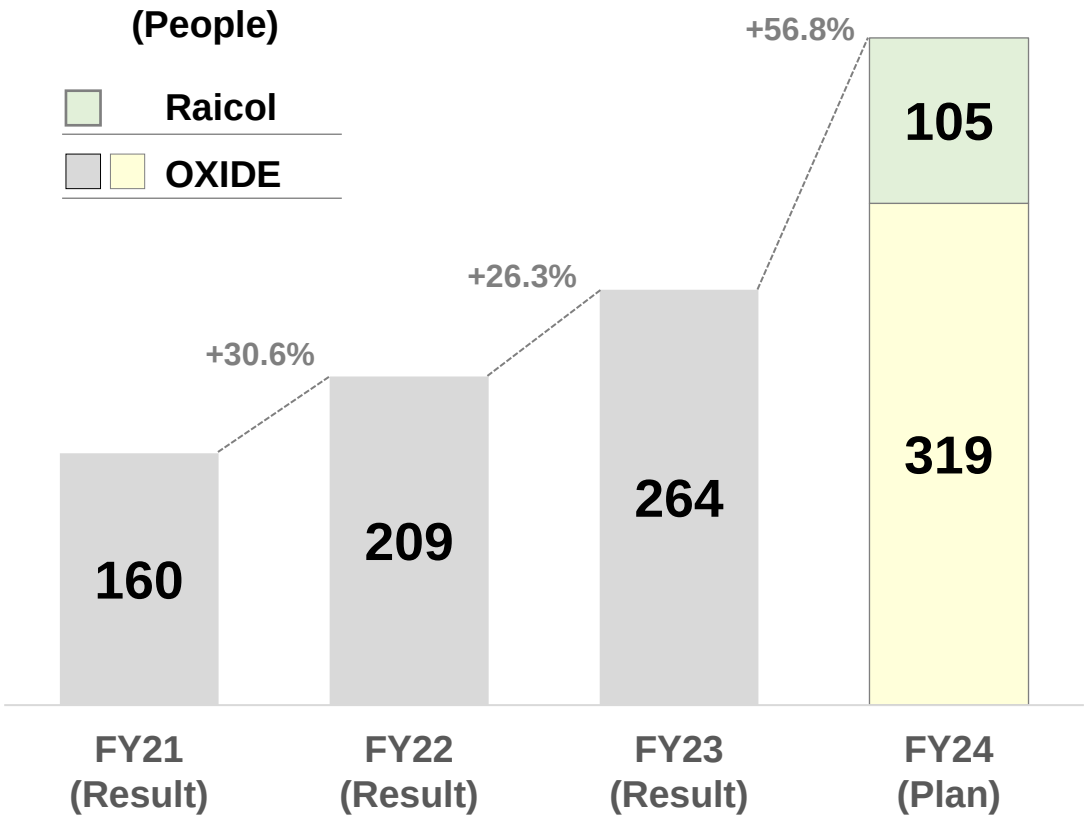
Financial cash flows were positive to cover the negative operating and investing cash flows.

(Million yen)



[Personnel] (Consolidated)

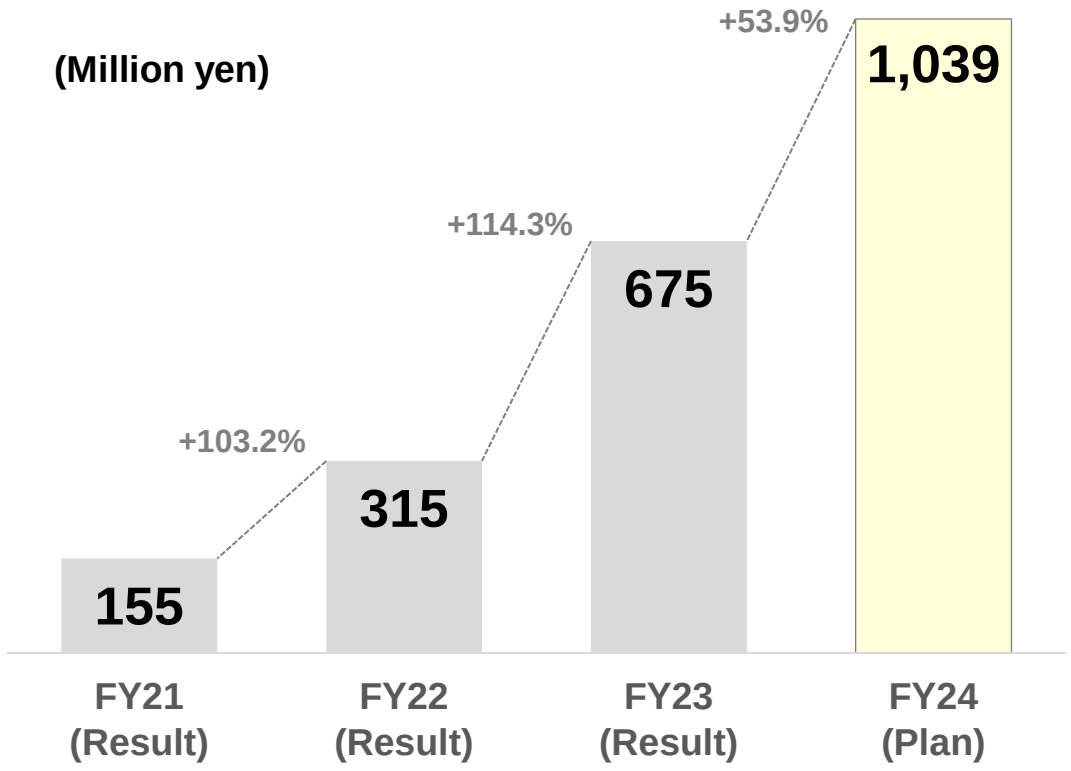
- **In FY2/24, we plan to increase personnel by 65 people. We will increase personnel in the Semiconductor business.**

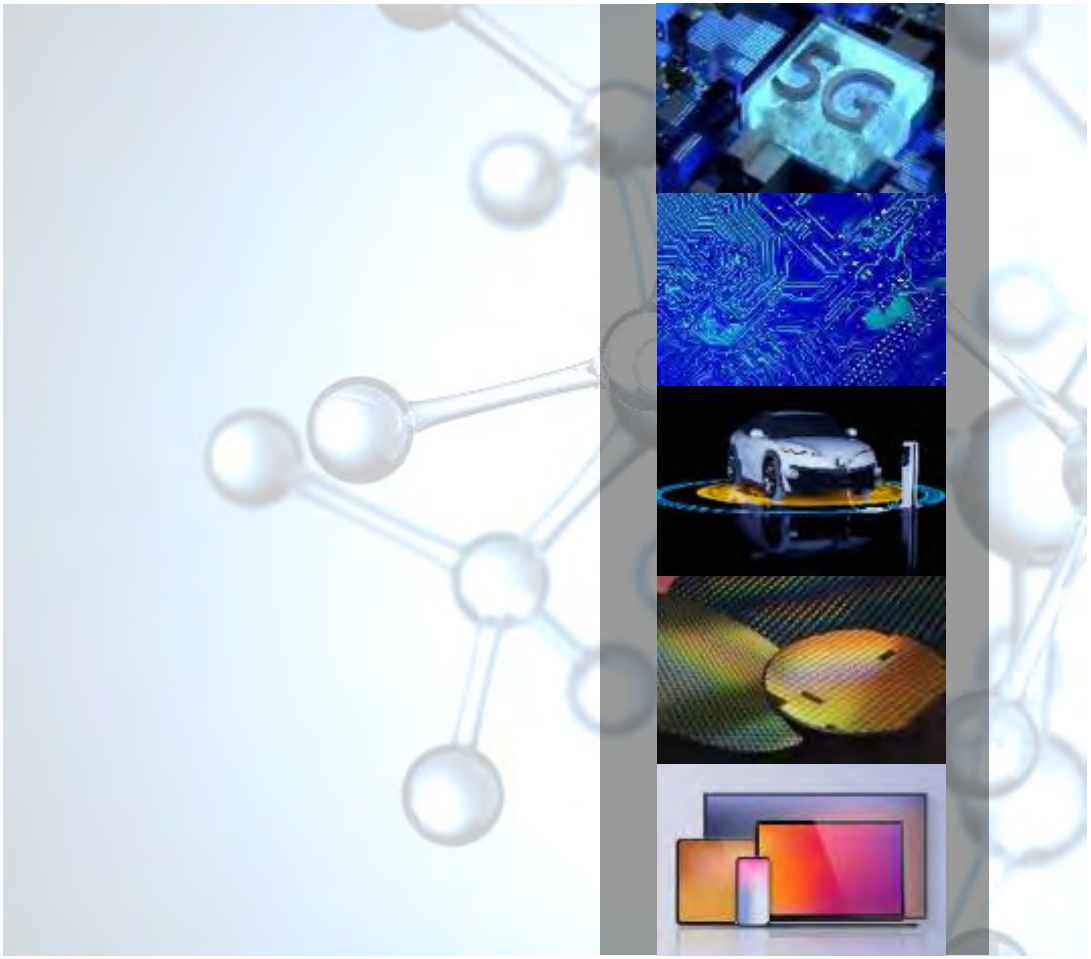


Number of employees at end of each fiscal year

[R&D expense] (Consolidated)

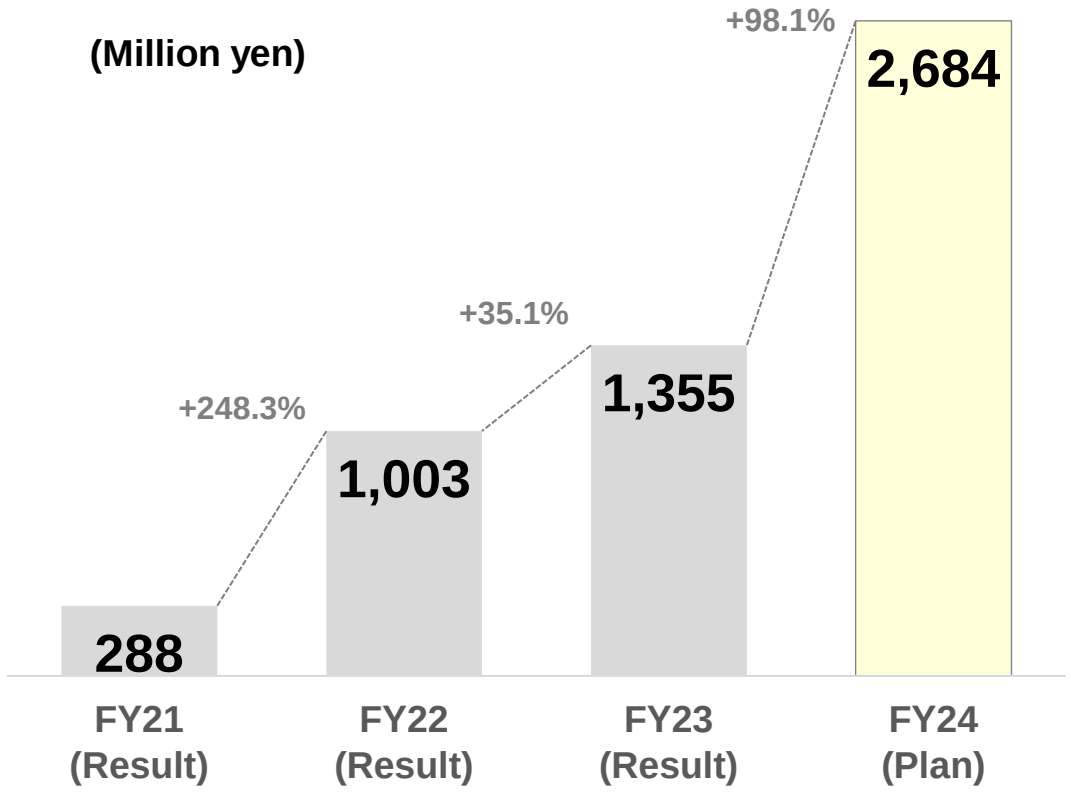
- In FY2/24, we plan to spend 1,039 million yen on R&D.





[Capital investment expense] (Consolidated)

- **In FY2/24, we plan to spend 2,684 million yen on capital investments.**



Use of Funds Provided by Listing of the Company's Stock (as of February 28, 2023)

- The proceeds of new shares issued at the time of the listing of the Company's stock have been allocated in accordance with the original plan.
- Investment in Factory No. 4 has been partly delayed due to delays in the delivery of construction materials for the building.

(Million yen)

Use of funds	Planned allocation amount	Amount and timing of allocation		
		FY2/2022	FY2/2023	FY2/2024
Factory No. 3	500	500	—	—
Factory No. 4	1,223	0	334	889 (planned)
Total	1,723	500	334	889

*Our policy is to manage funds in stable, low-risk financial instruments, etc. until the time comes for actual allocation.

Risk information (1)

We consider the following to be particularly significant risks that could hinder the growth of our business.

Risks caused by customer trends					
Likelihood of occurrence	High	Impact	High	Risk assessment/Year on year change	Particularly significant/Unchanged
Risk details	Our customer base is spread over manufacturers of medical devices, semiconductors, lasers and other products, located all over the world. We conduct sales activities targeting a variety of industrial sectors, and make efforts to minimize the impact of changes in the business situation of individual customer companies. However, our financial results could be negatively affected by these industries as a whole due to significant fluctuations in exchange rates, geopolitical developments, and other factors. The nature of demand for our products is that it always tracks up-front investment into next-generation products, but delays by customers in converting up-front investments to products could have a negative impact on our financial position and results.				
Countermeasures	Because we consider it a strength to provide products to a wide range of industrial sectors, including medical devices, semiconductors, and lasers, we seek to diversify risk in response to changing economic trends in Japan and overseas by further bolstering our business portfolio to avoid dependence on specific industries.				

Risk of dependency on specific customers					
Likelihood of occurrence	High	Impact	High	Risk assessment/Year on year change	Particularly significant/Unchanged
Risk details	In FY2022 and FY2023 the Company sold product to more than 120 companies, but 6 specific customers accounted for more than 80% of sales. For this reason, in the event of changes related to business or outsourcing policy by these customers or a deterioration in financial results at these customers resulting in a reduction in the amount of business transacted with OXIDE Corporation, our financial position and results could be affected.				
Countermeasures	In order to achieve its business plans and ensure future growth, OXIDE Corporation works continuously to reorganize its portfolio of customers and clarify which of them are key customers. The proportion of net sales to the 6 specific customers in FY2023 decreased by 0.2 percentage points year on year. While continuing to expand net sales to these 6 specific customers, the Company seeks to continuously create and enter markets for new applications, and to open up new customers in order to further increase net sales to other key customers, thus mitigating the risk of dependency on the previously mentioned specific customers while increasing overall net sales.				

Risk information (2)

Risks related to procurement of materials					
Likelihood of occurrence	**High**	**Impact**	**High**	**Risk assessment/Year on year change**	**Particularly significant/Increasing**
Risk details	**The Company purchases and uses a variety of raw materials, optical parts and other items, some of which are specialized in nature. We work to ensure stable levels of manufacture and supply by taking such measures as purchasing from multiple vendors for important items and building up inventory, but for some of these there are no substitutes available. In particular, the lutetium oxide used for the manufacture of scintillator single crystals in the Healthcare business is produced in countries such as China and Australia, and OXIDE Corporation itself procures its supply from China. Accordingly, in the event that procurement problems arise due to state policy in China or for other reasons, OXIDE Corporation's production plans could be hindered, and our financial position and results could be negatively affected. In addition, some parts and materials used in the lasers that are the mainstay product of the Semiconductor business can only be manufactured to the quality required by OXIDE Corporation by a few companies in Japan and overseas. If the Company became unable to secure these materials, opportunity losses could result. Also, in the event that we are unable to secure materials that meet our quality standards there is the risk that this could lead to a reduction in yields, and if we were unable to pass on any resulting increases in raw material costs to customers, this could affect our financial results.**				
Countermeasures	**We work to ensure stable levels of manufacture and supply by taking such measures as purchasing from multiple vendors, using trading companies and others to get an early understanding of trends in markets from which we purchase product, and building up inventory. For mainstay materials for which there are limited suppliers, in addition to strengthening cooperation by coordinating closely with such companies, we promote initiatives to ensure a stable supply chain by revising procurement specifications and implementing regular monitoring of the supply situation.**				

Risk of fluctuations in raw material prices					
Likelihood of occurrence	**High**	**Impact**	**High**	**Risk assessment/Year on year change**	**Particularly significant/Unchanged**
Risk details	**Among the raw materials used in manufacturing by oxide corporation, the lutetium oxide used for the manufacture of scintillator single crystals in the Healthcare business is a rare earth. Rare earth prices are extremely volatile, and in the event that we are unable to pass on these fluctuations in prices to customers, our financial position and results could be negatively affected.**				
Countermeasures	**On the Management Council and the Board of Directors we seek to gain an understanding of rare earth price trends, and have built a system to enable management to make prompt decisions, such as buying raw materials ahead of the usual schedule, in the event that we detect signs of price fluctuations. We are also working to implement a mechanism whereby we can pass on increases in raw material prices to customers.**				

Risk information (3)

Risks related to the overseas expansion of the business					
Likelihood of occurrence	High	Impact	High	Risk assessment/Year on year change	Particularly significant/Increasing
Risk details	OXIDE Corporation engages in overseas transactions that include the procurement of materials and parts, and the export of our products. Approximately 74% of our net sales was derived from overseas in the fiscal year under review. Most of our sales are made to the United States, but the Company expects transactions with Asian countries, including China, to trend upward going forwards. Accordingly, in the event of sudden changes such as unexpected revisions to taxation or to laws and regulations, political or economic instability, outbreaks of terrorism or conflict, or natural disasters in the countries with which we do business, our financial results could be affected. In particular, if relationships between the United States and China were to deteriorate going forward due to trade friction between the two countries, resulting in difficulties in shipping product to China, this could affect OXIDE Corporation's financial results.				
Countermeasures	In addition to regularly monitoring the state of the business and periodically reviewing our business strategy based on risks such as changes in the international situation and in overseas economies, the Management Council and the Board of Directors strive to grasp the situation in the respective countries to which the Company sells product, and respond appropriately to changing circumstances. <The situation in Ukraine> OXIDE Corporation has no business locations in Russia or Ukraine, and is not engaged in business in either that region. Moreover, our understanding is that the proportion of our main customers' business related to this region does not account for a large proportion of the total. Accordingly, at this point in time we judge the probability of the situation in Ukraine having a significant effect on our business and financial results to be low.				

Risk of goodwill impairment losses					
Likelihood of occurrence	Moderate	Impact	High	Risk assessment/Year on year change	Significant/ -
Risk details	In March 2023, OXIDE Corporation acquired the shares of Raicol Crystals Ltd., which is now a consolidated subsidiary of the Company. Goodwill arose during the purchase of this company, but in the event that excess earning power declines sharply due to a deterioration in financial results compared to expectations at the time the shares were acquired, the financial results of OXIDE Corporation may be affected by the recording of impairment losses on goodwill.				
Countermeasures	OXIDE Corporation takes a multifaceted, whole-company approach to corporate acquisition that considers business strategy compatibility, market trends, business risks, the appropriateness of investment amounts and the investment plan, and other factors, with decisions taken only after full deliberation by the Board of Directors. In addition to holding periodic strategy meetings in each division to strengthen post-acquisition cooperation, such as engineering and marketing, we work to mitigate risk by having an officer/employee of OXIDE Corporation involved in the management of Raicol Crystal Ltd. as a board member, and by establishing a structure for administration and business promotion.				

Risk information (4)

Risks related to fluctuations in foreign exchange rates					
Likelihood of occurrence	**Moderate**	**Impact**	**High**	**Risk assessment/Year on year change**	**Significant/Increasing***
Risk details	**OXIDE Corporation uses currencies other than Japanese yen for some overseas transactions. In the event of sharp fluctuations in these currencies, the business of the Company could be affected. In addition, consolidated subsidiary Raicol Crystal Ltd. closes its accounts in the local currency, the Israeli new shekel, and in the event that sharp fluctuations occur in this currency, the balance sheet and statement of income could be affected during the consolidation of the accounts.** ***When the Company conducts overseas transactions a weaker yen tends to increase profit, so the recent trend of yen depreciation has had a positive impact on financial results, but because we have not reduced the level of risk from the viewpoint of the impact of exchange rate volatility on the business, we consider the risks to be unchanged year on year. On the other hand, because the assets, liabilities, and particularly the net sales and profit or loss of consolidated subsidiary Raicol Crystal Ltd. are affected by fluctuations in the local currency, our assessment is that the risk has increased year on year.**				
Countermeasures	**When conducting overseas transactions, the Company denominates transactions with its main customers in Japanese yen. The Management Council and the Board of Directors also strive to grasp trends in foreign exchange rates, and have built a system to enable management to make prompt decisions in the event of signs of a negative impact on the Company's financial position and results. With regard to consolidated subsidiary Raicol Crystal Ltd., we continue to implement appropriate management measures in accordance with the risk hedging policy, with the objective of reducing risk.**				

For other risks, please refer to "Business and Other Risks" in the OXIDE Corporation securities report.

Disclaimer

- These materials contain forward-looking statements related to the Company's outlook, plans, objectives, and other matters. These forward-looking statements are based on judgments formed by the management of the Company that were derived from the information available to it at the time these materials were created, and incorporate certain assumptions (hypotheses). Accordingly, these assumptions (hypotheses) may be affected by a variety of risks and uncertainties, and actual results may differ significantly from those expressed or implied in the materials.

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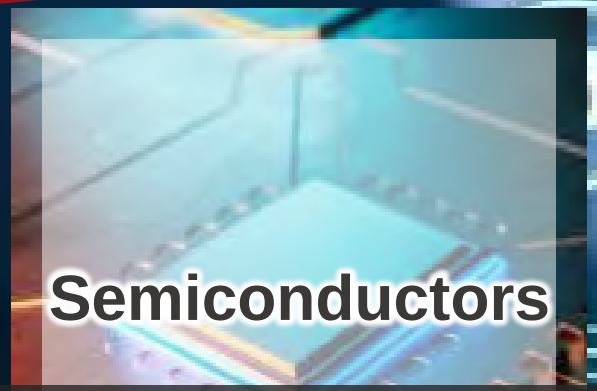
- The next Business Plan and Disclosure of Matters Related to Sustainability of Growth is scheduled to be published in April 2024.



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