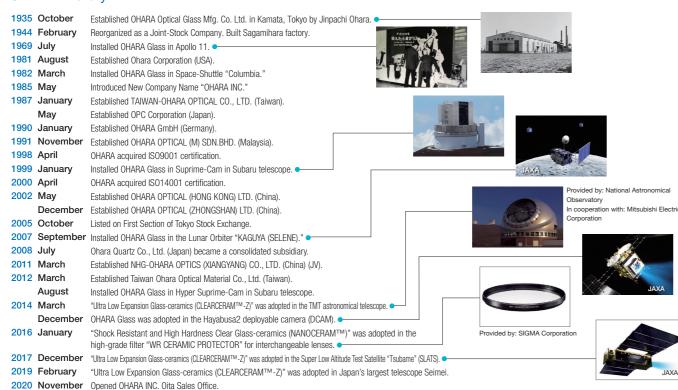
OHARA History



Corporate Profile

Corporate Profile (As of October 31, 2020)

OHARA INC.

15-30, Oyama 1-chome, Chuo-ku, Sagamihara-shi, Address:

Kanagawa, Japan

Established: October 1, 1935 5,855 million yen

Business Contents: Manufacture and sale of glass materials for optical

and electronics applications

Number of Employees: 439 (1,508 for the entire Group)

Member of the Board

President Chief Executive Officer	Hirokazu Saito
Director Senior Managing Executive Officer	Takashi Nakajima
Director Managing Executive Officer	Tetsuya Aoki
Director Managing Executive Officer	Naoyuki Goto
Outside Director	Makoto Ichimura
Outside Director	Go Tokura
Outside Director	Akira Nokina*
Outside Director	Yukako Makino*
Audit & Supervisory Board Member	Yoshihiro Harada
Audit & Supervisory Board Member (Outside)	Haruhiko Takagi
Audit & Supervisory Board Member (Outside)	Kazuhiko Nagashima
Audit & Supervisory Board Member (Outside)	Yoshinari lizuka*

Note*: Outside Directors, namely, Mr. Akira Nokina and Ms. Yukako Makino, and Audit & Supervisory Board Member (Outside) Mr. Yoshinari lizuka are independent officers based on the regulations of the Tokyo Stock Exchange.

Stock Information (As of October 31, 2020)

Status of Shares

Total number of authorized shares: 76,000,000 Total number of issued shares: 25,450,000 Number of shareholders: 8,344

Major shareholders

Name	Number of shares held	Investment ratio (%)
Seiko Holdings Corporation	4,702,722	19.32
Canon Inc.	4,694,380	19.29
Kyobashi Kigyo Kabushiki Kaisha	4,688,400	19.26
Sanko Kigyo Kabushiki Kaisha	1,651,400	6.78
TOPCON CORPORATION	673,600	2.77
Seiko Instruments Inc.	610,000	2.51
The Master Trust Bank of Japan, Ltd. (trust account)	421,400	1.73
Olympus Corporation	400,000	1.64
Custody Bank of Japan, Ltd. (trust account)	281,400	1.16
Custody Bank of Japan, Ltd. (trust account 5)	164,500	0.68
(Note) Treasury stock (1,110,978 shares) is deducted in calculating investm Treasury stock includes 88,500 of the company's shares held by th		, Ltd. (Trust E Ac-

count), in accordance with the introduction of the "Board Benefit Trust (BBT)" system.

Shareholding Composition

In	dividuals, etc. 18.09% —	Securities c	ompanies 0.34% —	Treasury stock
Other domestic corpo	orations	Financial ins	titutions 4.76%	Foreign companies 3.65%
Scope of Report ——	*The figures in	lidated OH, the financial	ARA INC. reports, how	
Reporting Period ——		,		ber 31, 2020 ctivities for FY 2021.
Date of Issue —	- February 2	021		
Reference Guidelines -	,		, ,	ing Guidelines Environmental

Reporting Guidelines 2012

OHARA Report 2021 Top Message Messages from Directors Feature Article: New Medium-Term Management Plan OHARA's Philosophy System OHARA Group Value Creation **OHARA Spirits** Business Introduction: Optical Business OHARA's CSR: Sincere Activities **Environmental Protection** Harmony with Society & Disclosure of Employee Respect Global Development Financial & Non-Financial Highlights **OHARA History & Corporate Profile** The Future Made Clear **OHARA**

CONTENTS

9

13

19

20

21





Hirokazu Saito

President, Chief Executive Officer

Looking Back on FY 2020 Operating Results

Loss posted amid worsening environment resulting from the COVID-19 pandemic

In FY 2020, the business environment deteriorated significantly, as the COVID-1 9 pandemic impacted client sectors amid the challenging situation resulting from the contraction in the digital camera market.

In the Optical business, demand for introductory single-lens reflex cameras declined while growth in mirrorless cameras slowed, resulting in a large drop in sales of interchangeable lenses. Outside of the digital camera realm, sales of newly-developed glass materials and processed lenses for sectors demanding high-definition products, including projectors, surveillance cameras and automotive cameras, were impacted by the restrictions on economic activity due to the COVID-19 pandemic, and the business was unable to make up for the decline in sales for digital cameras.

In the Electronics business, sales of filter materials for optical communications equipment grew due to firm data center-related demand in the semiconductor market, but sales of ultra low expansion glass-ceramics for FPD struggled to grow as a result of the delayed recovery in demand. In the mobile and mobility sector, we had expected sales to increase due to the start of mass production of shock resistant and high hardness glass-ceramics NANOCERAMTM for smartphone applications, but due to delays in evaluations of actual equipment and acquiring customer certifications as a result of the COVID-19 pandemic, contributions to operating results will be pushed back to FY 2021 and beyond.

On the production front, in the first and second quarters, operations were temporarily suspended due to lockdowns at our production facilities in China's Hubei and Guangdong provinces, as well as in Malaysia, while in the fourth quarter we shut down all melting furnaces at our domestic production facilities for approximately a month, thereby adjusting production. On the sales and marketing front, travel restrictions, exhibition cancellations and other impacts caused by the pandemic hampered our efforts to propose new products, launch projects on newly-received orders, and help overseas subsidiaries with their sales expansion initiatives.

As a result, consolidated net sales in FY 2020 were only 17,873 million yen, a 23.6% decline from the previous fiscal year. On the profit front, we posted an operating loss due to the large decline in operating rates in both the Optical business and the Electronics business. We also recorded a 4,243 million yen loss attributable to owners of parent, due to the posting of impairment losses on non-current assets held by the OHARA head office and our subsidiary in Taiwan.

Summary of Long-Term Vision and Medium-Term Management Plan

Heading towards growth, but speed is an issue

The OHARA Group's Long-Term Vision 2020 covering the 12 year-period from FY 2009 to FY 2020 was divided into four medium-term management plans covering three years each in order to realize the goals of the vision.

Under the Long-Term Vision 2020, the OHARA Group aimed to grow the Electronics business and develop the environment and energy field as growth drivers following the Optical business, and build a base to achieve sustainable growth. In the first half of the period, due to the strong digital camera market, we increased optical glass production and advanced overseas expansion of the melting process in order to secure rare earth raw materials. From the middle of the period onward, as demand for compact cameras plunged amid the increasing use of smartphones, we focused on transforming our business structure and establishing new drivers of growth, but the challenges facing us continued.

In the fourth medium-term management plan phase (FY 2018 – FY 2020) which forms the final part of the long-term vision, positioning the mobile and mobility sector as a new priority market, we shifted OHARA's values from materials to "Materials & Solutions." Also, in addition to restructuring our production platform in line with the contraction in demand for optical glass, we strengthened our marketing function in order to accelerate the global expansion of the Electronics business. Furthermore, targeting the growth of the mobile and mobility sector, we worked on mass production of NANOCERAM™ and developed the lithium-ion conductive glass-ceramics LICGC™. However, our efforts were significantly impacted by the U.S.-China trade friction and COVID-19 pandemic, which partially led to our being unable to achieve sufficient success, and resulted in our operating results falling far short of our forecasts.

However, there have also been some achievements. We have planted the seeds for new growth, such as entering downstream businesses in the Optical business and product rollouts in the Electronics business, and we were able to see the beginnings of our implementation of business structural reforms.

The aims of the Long-Term Vision 2020, namely reducing our dependence on the Optical business and creating new growth in the Electronics business and the environment and energy field, were on target. However, I realize that the problem was that we did not move fast enough. In light of this, going forward, in addition to strengthening our own technologies, we will advance manufacturing utilizing expertise from outside the company, such as collaboration with back-end processing manufacturers, as we seek to deliver a more solutions-oriented value.

New Medium-Term Management Plan to Overcome the Difficult Situation

Recovering production volume of glass materials and getting back on a growth track

In the three-year period beginning FY 2021, we will execute a new medium-term management plan in order to escape the crisis that resulted in our massive losses and get back on a growth track. The key points of this plan will be "Managing with agility to keep up to date with market changes," and "Accelerating organizational metabolism." In order to recover the production volume of glass materials currently in significant decline to FY 2018 levels, the entire Group will work as one to advance its initiatives to acquire new projects.

As a sales strategy to realize these goals, during these three years we will cultivate business in the growth markets of the mobile, mobility and battery sector, and in the medical- and space-related markets, while also aggressively expanding our business in China's semiconductor market, where local production is gaining traction. In the Optical business, we will capture demand for high value-added downstream products, while

also focusing on seizing demand for applications other than digital cameras. In the Electronics business, we will promote expanded sales of stepper glass materials, quartz, and ultra low expansion glass-ceramics for China's semiconductor market, as well as bolster our sales base framework in order to launch NANOCERAMTM.

To All Stakeholders

Overcoming the crisis towards OHARA's 100th anniversary and beyond

Despite posting a large loss in FY 2020, we paid a year-end dividend of 10 yen per share (down 5 yen from the previous year) in line with our policy of maintaining a stable dividend over the long term. Going forward, we will steadily fulfill the new medium-term management plan, and by doing so, quickly recover profitability and increase the dividend level.

In recent years, the Sustainable Development Goals (SDGs) adopted by the U.N. to be realized by 2030 have become widely recognized, and much attention is being placed on companies' initiatives with respect to the SDGs. I believe that the OHARA Group can be involved in 13 of the SDGs when it comes to solving societal issues through business activities and creating social value. As a common theme with "the Society and the Future OHARA Desires" expressed in our Corporate Message, we will broaden and advance SDGs initiatives as an overall Group.

In today's world, only the truly strong survive, and right now the OHARA Group, which has kept the flames of its glass melting furnaces burning for 85 years, is facing the greatest crisis in our history. We view the acceleration of social change accompanying the COVID-19 pandemic as an opportunity to achieve significant transformation, and by generating the new values required by the times, we will survive as a company deemed critical by society.

We would like to ask for the continuing support of our stakeholders as we take on the challenges facing us towards our 100th anniversary and beyond.



Seeking a recovery in operating results and new growth prospects.

Over the course of the Long-Term Vision 2020 covering a 12-year period, the OHARA Group worked on transforming its business structure and advancing a growth strategy targeting new markets. Here, three executive officers in charge of the Group's key divisions summarize the initiatives undertaken thus far and discuss future plans.

We will work to recover operating results through the new medium-term management plan, sharing a sense of urgency with all members of the Group that we cannot survive unless we voluntarily change.

A number of significant events occurred over the 12-year period of the Long-Term Vision 2020, including unexpected natural disasters and social changes. We have responded to these events, but in the end our achievements have fallen short. As far as the corporate division is concerned, I regret that while we sought to transform our business structure, we did not successfully foster a corporate culture in which people take the initiative to make changes on their own. Going forward, we will seek to rectify this, sharing a sense of urgency with all members of the OHARA Group that we cannot survive unless we voluntarily implement changes.

During the course of this 12-year period, our capital efficiency has declined and ROE has fallen short of our targets as our operating results have fluctuated greatly from year to year. As we move forward, we will strengthen our financial front in order to secure the necessary funding for capital investment and quickly improve capital efficiency as we look to launch new businesses that will create even higher added value. We must keep a balanced business portfolio, making precise

decisions about investment risk and also searching for ways to collaborate with outside partners.

The new medium-term management plan which aims to return OHARA to a growth track will start from FY 2021. The corporate division plans to introduce and utilize outside expertise, including outsourcing certain business operations, in order to ensure sufficient agility to keep up with the speed of changes in the market. Based on our commitment to contribute to society, and by creating "unique and new values" as espoused in our Management Philosophy, the OHARA Group will work as one to engineer a recovery in operating results.

Takashi Nakajima

Director, Senior Managing Executive Officer In charge of Corporate Sector

We will tangibly demonstrate to customers the values we provide, build partnerships, and make proposals satisfying the needs of end users.

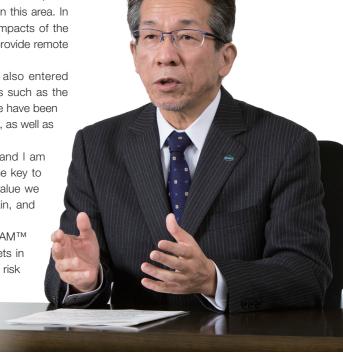
Up until now, the OHARA Group's sales bases in Japan and overseas have mainly specialized in, and optimized their functions for, the Optical business. As a result, our literacy with respect to sales activities targeting new markets has been insufficient, and over the past three years we have been focusing on how we can improve in this area. In FY 2020 in particular, there were many obstacles in our way due to the impacts of the COVID-19 pandemic, such as restrictions on sales activities and having to provide remote sales support from the head office.

In addition, in the mobile and mobility field, many competitors have also entered the market, and there is already excessive competition in certain markets such as the automotive-related market. In order to establish a competitive advantage, we have been upgrading our sales tools, centered on efforts by the Global Marketing Office, as well as narrowing our targets as we pursue values based on "Materials & Solutions."

The mobile, mobility and battery field has enormous growth potential, and I am confident in our ability to manufacture high-quality products in this field. The key to the OHARA Group's survival is tangibly demonstrating to customers the value we can offer, building partnerships with outside entities within the supply chain, and delivering proposals that meet the needs of end users.

Going forward, we will rebuild our sales base strategy, get the NANOCERAM™ business on track, especially in the China market, and also cultivate markets in Southeast Asia and South Asia. We will waste no time in proactively taking risk to enter new markets.

Tetsuya Aoki
Director, Managing Executive Officer
In Charge of Business Sector



The production and technology division will fulfill its mission of bolstering competitiveness and improving profitability, and seek to contribute to society by providing new materials.

A key theme of the fourth medium-term management plan phase was ensuring growth through the mass production of NANOCERAM™ and developing the LICGC™ business. Unfortunately, we encountered many difficulties in terms of execution, and were unable to generate significant achievements during the period. The problem faced by the production and technology division was that it took considerable time to establish the processing technologies to realize the material formats to deliver to customers, such as the sheet formation process for NANOCERAM™ and the powdering process for LICGC™. The OHARA Group, which operated only in the optical glass field for many years, is a new entrant in the field of developing new materials for the Electronics business, and these are the some of the growing pains in this process.

NANOCERAM™ is used in end products after going through the supply chain, from processing manufacturers, to display manufacturers, and finally to finished product manufacturers. By working with finished product manufacturers and contacting end users, we were able to build the system needed for developing processing technologies and production technologies. For LICGC™, we changed our strategy anticipating end products, and are advancing initiatives for having our powder used as an add-in material. We must move away from doing everything on our own and respond to customers' needs in a timely manner by working with outside partners and introducing technologies from outside the company.

Going forward, we plan to grow the production line for NANOCERAMTM, as we increase the production speed by developing high-temperature melting furnaces and establish molding technologies for strip glass. The production and technology division will fulfill its mission of bolstering competitiveness and improving profitability, and seek to contribute to society by providing new materials.

Naoyuki Goto

Director, Managing Executive Officer In charge of Production and Technology Sector Chief Officer of Material Production Center





Looking Back on the Previous Medium-Term Management Plan (FY 2018 – FY 2020)

The OHARA Group's "Long-term Vision 2020" is a plan for the 12-year period from FY 2009 through FY 2020. As milestones during that time, we have promoted our growth strategy while altering our trajectory in four phases of the three-year medium-term management plans. FY 2020 was the final year of the fourth phase.

In the fourth phase, under the policy of transforming from a materials supplier to a "Material & Solutions provider" and shifting "from a company that melts glass to a company that melts away customers' issues to provide solutions," we aimed to change our behavioral patterns and return to the growth trajectory.

In the digital camera market, a temporary recovery in demand was seen owing to the release of new mirrorless camera models. However, we were not able to achieve our targets due to delays in developing new markets and acquiring programs of NANOCERAM™, as well as the severe global economic downturn resulting from the COVID-19 pandemic.

	Initial Target (announced Dec. 2017)	Revised Target (announced Dec. 2018)	Forecast (announced Dec. 2019)	Result (FY 2020)
Net Sales	30 billion yen or higher	30 billion yen or higher	22.8 billion yen	17.8 billion yen
Operating Income	2.4 billion yen or higher	3.5 billion yen or higher	0.8 billion yen	(1.7) billion yen
ROE (Return on equity)	5.0% or higher	8.0% or higher	1.4%	-
Rate of Interest-Bearing Liabilities to Total Assets	8.0% or lower	8.0% or lower	9.0%	14.3%
Sales Ratio of the Electronics Business	40.0% or higher	45.0% or higher	45.2%	46.7%

New Medium-Term Management Plan (FY 2021 - FY 2023)

As FY 2020 was the final year of both the "Long-term Vision 2020" and the "fourth medium-term management plan phase," we intended to develop and announce a new long-term vision. However, COVID-19 has had a broad impact on the economy and corporate activities, and it is, therefore, difficult to forecast the status of the spread of COVID-19 and the timing of its containment. We believe that future society will change more drastically than we have ever imagined and there is a need to reconsider various possibilities. Consequently, we have decided to postpone the announcement of our long-term vision.

In the newly-formulated medium-term management plan for the period from FY 2021 through FY 2023, we have adopted the policy of "Managing with agility to keep up to date with market changes" and "Accelerating organizational metabolism." Under this policy, we will rebuild our business structures and improve our profitability, with the aim of recovering our business performance that had been sluggish due to the impact of the COVID-19 pandemic. We will announce our new long-term vision as soon as we have overcome the current difficulties.

Transformation Phase

"Managing with agility to keep up to date with market changes"

"Accelerating organizational metabolism"

Recovery of profitability

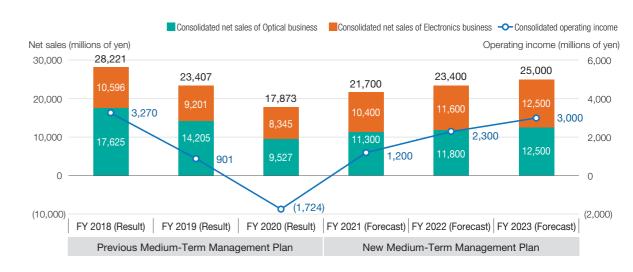
Improvement of competitiveness

Strengthening of financial conditions

Implement measures for the recovery of business performance that remained sluggish due to the impact of COVID-19 Rebuild business structures and improve profitability

The global economy in FY 2021 is projected to recover slowly despite differences in the pace of recovery in each country and region and concerns over the resurgence of COVID-19.

Under such circumstances, the digital camera market is expected to continue facing difficulties in the long run. On the other hand, new lifestyles after the spread of COVID-19 are expected create new demand that did not exist before. We will develop customers in the medical and China's semiconductor markets in addition to the mobile, mobility and battery market, and increase sales of existing products as well as new products, mainly focusing on NANOCERAM™. In this way, we will first get back on a recovery track by improving the operating rates of our melting facilities, and then expedite activities to shore up our revenue base to attain perpetual growth.



	Result (FY 2020)	New Medium-Term Management Plan Target (FY 2023)
Net Sales	17.8 billion yen	25 billion yen or higher
Operating Income	(1.7) billion yen	3 billion yen or higher
ROE (Return on equity)	_	6.5% or higher
Sales Ratio of the Electronics Business	46.7%	50% or higher

OHARA's Philosophy System

Aiming to become a "company of choice for the future" as a corporation with a 100-year history, the OHARA Group will contribute to the "future of people and society" using technologies and quality it has cultivated as All OHARA.

Management Philosophy

The OHARA Group is honored to keep on creating unique and new values in order to establish a strong company structure for its employees' happiness and for the prosperity of the society.

Corporate Message

Brand Slogan

The Future Made Clear

The Society and the Future OHARA Desires

A secure and healthy life. A society that cultivates creativity and aspirations. Sustainable well-being of our planet.

OHARA's Mission

developing new materials fo

Pursue opportunit

every era.

Form alliances with diverse partners to elevate lifestyles and cultures and promote innovation. Advancement of new frontiers and improvement of the global environment.

OHARA's Values

Outstanding materials that exceed expectations and facilitate our customer's success.

Culture

Proceed with integrity Craftsmanship without compromise

Initiate a continuous cycle of challenge Work together as 'All OHARA' Respect, transformation & growth

The OHARA Group is committed to act with social common sense in engaging in corporate activities to fulfill its corporate social responsibility.

CSR as Conceived by OHARA

Realization of OHARA's philosophy based on our corporate principles

Management Philosophy
Corporate Message

Sincere Activities

See **p. 15-16** for details

Environmental Protection

See **p. 17** for details

Harmony with Society

See **p. 18** for details

Philosophy based on our corporate principles

Disclosure of Information

See **p. 18** for details

Employee Respect

See **p. 19** for details

OHARA Group Value Creation

As a material manufacturer positioned upstream in the supply chain, the OHARA Group believes that we can broadly contribute to solving various social problems as well as issues related to the 13 Sustainable Development Goals (SDGs) by turning materials into reality in cooperation with our partners.

We will pursue opportunities by developing new materials for every era and provide new values.



Various social problems Feedback

Research and Development (+) (+)

New material development



Manufacturing technology

Analysis & measurement technology development



Pursue opportunities by developing new materials

Cooperation with partners



The Future Made Clear

Commitment to Society through the Value Chain





: Enhance positive impact : Minimize negative impact

The Society and the Future **OHARA Desires**

A secure and healthy life. A society that cultivates creativity and aspirations. Sustainable well-being of our planet.

OHARA's Mission

Contributing to "Elevation of lifestyles and cultures" "Advancement of new frontiers" and

"Improvement of the global environment"

Optical Glass



Optical components for various cameras and sensors

⊕ ► (±±)

Synthetic Quartz Glass

Semiconductor manufacturing equipment Measurement devices/Inspection equipment High-powered lasers/High-intensity lamps Physics and chemistry/Medical devices/ Biotechnology

⊕ > (±±)

(+)

⊕ ▶ ∰

(+) (+)



Semiconductor exposure equipment FPD exposure equipment



LICGC™

Next-generation lithium-ion battery Next-generation capacitors CO2 sensors Lithium-ion recovery in seawater

High Transparent Glass





Endoscopes

⊕ > ⊞



WMS™-15

Filters for DWDM optical communications

Photocatalytic Crystallized Glass (product under development)

⊕ ► (III) CLEARCERAM™-Z



Semiconductor exposure equipment FPD exposure equipment

High-powered telescopes

⊕>⊕



Air purifier Water purification

 $NANOCERAM^{TM}$



Various sensors/ Cover glass for mobile devices Glass for Art



Art and art objects

Raw materials

Resource conservation & recycling

Po

Suppliers **Inbound Logistics**

Manufacturing

⊕ ▶ 0

⊕ ▶ (±±)

Resource conservation & recycling ()



Recycling of glass waste and

Use of Products

Disposal of Products

Reduction of environmentally hazardous substances in glass products





()

Recycling of glass

⊕ ▶ (±±)

Non-use of conflict minerals $\bigcirc \triangleright \bigcirc$





Production technology innovation

Energy efficiency through high-temperature high-speed melting

refractory waste

Talent development

Activities for promotion of

women's participation

CSR Activities Underpinning the Business

Initiatives to strengthen ethics and compliance



Seminar on export control Internal education on laws and regulations Ethics and compliance seminar

Human rights initiatives







Commitment to local communities



Sponsoring activities of residents' associations Participating in local cleanup activities (Sagami River Cleanup Operation) Accepting factory tours and work experience students







(+) ←(+)



⊕▶⊕ Safety and health activities



Work style reform

Childcare support

Hourly paid leave

Environmental management ⊕ ▶ (‡‡)





Proper control over chemical substances "No Car Day" campaign

countermeasures



Soil and groundwater pollution



Relevant SDGs







We introduce "research and development," "quality assurance," and "production process" that support the business activities of the OHARA Group.

Research and Development

Based on its material development capabilities cultivated over the course of its 85-year history, OHARA has created special glass and various other high-performance glass

High-performance glass materials are used in various electronics devices, automotive radars, and sensing devices such as image sensors, and as energy-related functional materials.

High-performance glass materials are said to be difficult to handle, and require production under stringent conditions. OHARA has introduced ultra-high temperature melting technology into its melting methods, the core technology of the Group, and aims to achieve speedier melting and higher efficiency in its melting processes and improve productivity, while establishing production technologies for special materials that are difficult to produce.

High-temperature high-speed melting

Mixing Raw Materials









••• Staff's Voice

Through a series of meetings with related parties inside and outside the company, we determine the specifications of melting furnaces and ancillary systems and anticipate potential issues that may arise during trial melting to draw up test plans. It is tough to convert ideas into reality with various related parties, but I feel it is worthwhile because it allows me to expand my technical knowledge and perspectives. I will contribute to productivity improvement by establishing a high-efficiency melting furnace that adds new technologies to OHARA's existing melting methods.



Hirotsugu Soida Research and Development Dept Material Production Center

Quality Assurance

The "pursuit of the highest quality" is in OHARA's DNA. It leads us to technology that allows us to provide products and services which satisfy our customers, as well as develop and manufacture new world-class materials.

Our quality policy states that we will constantly strive to gain greater trust and satisfaction from customers, and we must fully understand the customer's request first. We facilitate our customers' success by basing the quality assurance on the "customer first" stance under which quality is determined by the customer and realizing desired results with various global partners. Also, our certification for the ISO9001:2015 international standard has been approved through an inspection by a third-party certifying body. By aligning our quality management system with corporate strategy policies, we have resolved risks and issues that would affect quality, allowing us to provide products and services trusted by customers. High-accuracy quality assurance techniques will be offered for products for new customers using the material evaluation technology cultivated thus far.

Quality Goals

- Realize the Corporate Message
- Improve quality of operations
- Manage with agility to keep up to date with market changes
- global environment
- from stakeholders • Contribute to improving the • Improve customer satisfaction

Reduce number of complaints



Staff's Voice

We are responsible for Group-wide activities to assure the quality of the products we provide to our customers.

In the event of quality issues, we conduct thorough investigations and inquiries into the cause, and standardize and improve quality control to prevent

Although developing a system to improve quality and bring benefits to the company entails a lot of work, I am proud to be engaged in this task.



Shinichi Matsuki

Production Processes

We conduct production activities, aiming to provide our customers with the products highly recognized in the market at the quality and price the customers seek. To efficiently produce products at low costs while maintaining a high level of quality, the production division works as one to make improvements on a daily basis.

OHARA has an 85-year track record in producing optical glass. Based on insight gained from this experience, we have improved our technologies and mass-produced optical glass with superior properties. In recent years, we have also mass-produced and released special glass with world-class properties into the market, based on our optical glass technologies. To ensure that these products meet the needs of our customers and satisfy them in all elements of QCDE (quality, cost, delivery, environment), we are constantly promoting technological innovation. We will continue to supply products our customers need by combining the knowledge and ideas of each and every staff member.



Glass after drain

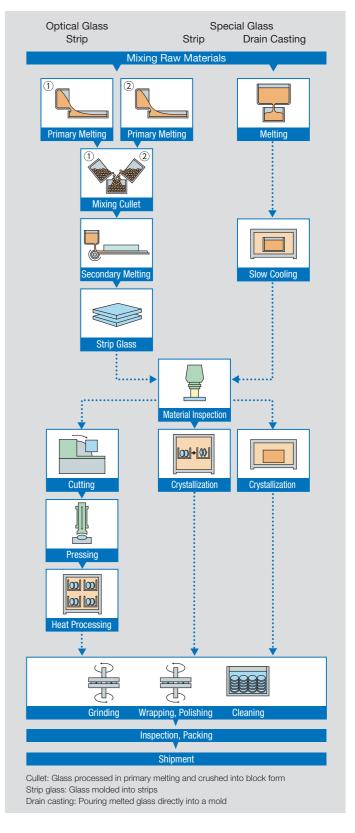


••• Staff's Voice

We anticipate the needs of the everchanging market and strive on a daily basis to offer enhanced quality, shorten lead time, and produce new products for the next generation, to improve our customers' satisfaction levels. We also produce some of the highest quality glass in the world by upgrading the technologies we have cultivated to date through individual wisdom and organizational Teruyuki Hirakawa coordination. We will continue to develop Material Manufacturing Dept innovative technologies and implement Material Production Center environmentally conscious production practices.



Manufacturing Methods and Processes









Relevant SDGs





Optical Business

Optical glass is used in various optical devices such as digital single lens reflex cameras, projectors, television cameras, automotive cameras, security cameras and medical devices. At OHARA, we meet all optical design needs with a line-up of over 150 types of optical glasses with the characteristics that enable optical devices to attain higher performances, miniaturization and cost reduction.

The cutting-edge glass materials of the highest quality that OHARA provides support people around the world in their smiles and sense of wonder.

Optical Glass Products

The optical parts of optical devices are composed of combinations of optical components, including spherical lenses, aspherical glass mold lenses, prisms and filters, which are made with multiple types of optical glass with characteristics in its refractive index and/or its transmittance. In order to attain optical designs for various optical devices, OHARA deals with over 150 types of optical glasses and meets the needs of a wide variety of optical designs for optical devices to enable higher performances, miniaturization, weight reduction and cost reduction. In addition, depending on requests from our customers, we supply lens blanks in a suitable shape to be processed, finished lenses and so on. OHARA provides customers with optical glass products in a wide variety of types, from glass materials to optical components.



Product Types



Reheat Pressings

Products molded in heat press to shapes suitable for spherical polished lenses and prisms



Spherical Lenses

Finished lenses produced by polishing, centering and coating



Polished Preforms

Spherically polished product in a suitable shape to be processed into aspherical glass mold lenses



Aspherical Glass Mold Lenses

Products fabricated by heating and softening polished preforms and transferring it in an ultra-high accuracy aspheric mold and then supplied after centering and coating

Topics

Development of a 55 mm-Diameter Large-Aperture Aspherical Glass Mold Lens

A "large-aperture concave meniscus lens*" is one product that meets the diverse needs of our customers, used mainly as a camera or projector lens for its ability to capture and significantly refract large amounts of light. Manufacturing a "large-aperture concave meniscus lens" using the glass molding technique is technically challenging, but we have continued to work on developing this technology and have finally succeeded in producing a large-aperture concave meniscus lens with a diameter of 55 mm and an inclination angle of 45 degrees. We will continue to work on technological developments to meet the diverse needs of our customers.

*Meniscus Iens (Meniscus means a crescent

A meniscus lens is a lens that has a convex surface on one side and a concave surface on the other. A lens that is thicker at the edges than it is in the middle is called a concave meniscus lens, while a lens that is thinner at the edges than it is in the middle is called a convex meniscus lens.

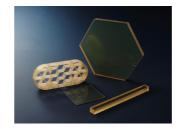


Electronics Business

Special glass, developed using technology acquired from optical glass, is applied in a wide range of market sectors such as space industries, semiconductors/FPD exposure equipment, optical communications, measurement, and the environment and energy.

OHARA will continue to develop new products and improve the quality of products for use in cutting-edge areas.

Ultra Low Expansion Glass-ceramics (CLEARCERAM™-Z)



Glass-ceramic of zero-expansion, developed by our knowledge of the homogeneous glass melting and nanocrystallization technologies.

This product is used as a mirror material for semiconductor exposure equipment and high-powered telescopes requiring a high degree of precision.

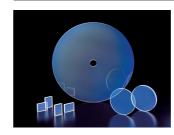
Shock Resistant and High Hardness Clear Glass-ceramics (NANOCERAM™)



Glass-ceramic which we have further improved OHARA's nanocrystallization technology, achieving both superior shock resistance and high transmittance.

This product is used in covers for automotive sensors and cover glass for smartphones where high strength is required.

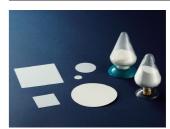
Glass-ceramic Substrate for DWDM Thin-Film Filters (WMS™-15)



Glass-ceramic which achieved the best thermal expansion coefficient and the optimal Young's modulus for multilayer filters.

This product is an ideal material for DWDM filter substrates for optical communications.

Lithium-ion Conductive Glass-ceramics (LICGC™)



Glass-ceramics with top class ion conductivity from its oxide-based solid electrolyte materials, and high levels of chemical stability and water resistance.

This product is expected to be applied in solid-state batteries, which are attracting attention as next-generation batteries, and as a cathode additive.

i-Line High Homogeneity Glass



Optical glass with excellent internal transmittance and optical homogeneity.

This product is used for lenses for semiconductor exposure equipment and high-precision inspection devices where homogeneity of the refractive index is crucial.

Synthetic Quartz Glass



Synthetic quartz glass with high purity and high quality that has excellent properties from deep ultraviolet to far infrared, developed from manufacturing technologies of optical fiber.

This product is used in semiconductor/FPD exposure equipment and as a semiconductor substrate material

Topics

Non-Browning Optical Glass

Non-browning optical glass is optical glass with high radiation durability. Ordinary glass turns brown when exposed to high levels of radiation, making it difficult to use for optical applications. In contrast, non-browning glass tints less and maintains its transparency.

In the space industry, which is expected to grow in the future, there is a need for materials that can be used in space with its high levels of radiation. For example, if the optical glass lenses, which are the eyes of a satellite, turn brown, they cannot capture images.

Non-browning glass will be a material that supports mankind's frontier development.

Glass discoloration when exposed to radiation (Total dose: 2 MGy*)



Non-Browning Optical Glass

Ordinary Glass

Gy = gray

A unit of energy absorbed by the human body and other objects as a result of exposure to radiation.



Sincere Activities

We will endeavor to develop and provide useful products and services for the benefit of humanity, and to gain the satisfaction and trust of our customers. To achieve this goal, we will observe all laws and regulations. We will respect the culture, customs, and traditions of local societies. We will conduct socially suitable corporate activity through fair, transparent competition, and business dealings.

Basic Views on Corporate Governance

OHARA's Management Philosophy is that "The OHARA Group is honored to keep on creating unique and new values in order to establish a strong company structure for its employees' happiness and for the prosperity of the society," and we conduct our business activities in accordance therewith.

OHARA endeavors to streamline internal organizational structure and administrative schemes and take necessary measures to realize above Management Philosophy. Moreover, toward our various stakeholders including shareholders, customers, employees and local communities, OHARA strongly believes that fulfilling responsibility as a public instrument of society will maximize our corporate value, and management with transparency and soundness in line with our corporate philosophy is the best approach to corporate governance.

Initiatives to Enhance Corporate Governance

Basic Policies on Corporate Governance

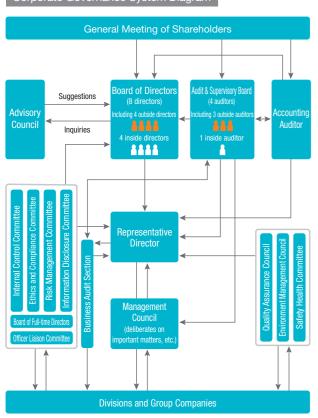
Based on the intent and spirit of the Corporate Governance Code, OHARA has established the "Basic Policies on Corporate Governance," with the objective of pursuing the best corporate governance and its enhancement, for the sustainable growth and the improvement in the corporate value of the OHARA Group.

*For the "Basic Policies on Corporate Governance," please visit our website (In Japanese only)

Corporate Governance System

OHARA has streamlined an organizational structure with the aim of making prompt managerial decisions as well as strengthening business execution function and supervisory function.

Corporate Governance System Diagram



Analysis and Evaluation concerning the Effectiveness of the Board of Directors

OHARA, in its Basic Policies on Corporate Governance, states that "The Board of Directors shall annually analyze and evaluate the effectiveness of the Board of Directors as a whole, and disclose the summary of the result." Accordingly, we conducted a survey for all directors, which was followed by related analysis and evaluation. In the FY 2019 evaluation, it was noted that there is room for further improvement in the deliberation time at the Board of Directors' meetings, which has been recognized as an issue for some time. In light of this evaluation result, we are working to address issues and further strengthen our corporate governance system.

*For the "Summary of Analysis and Evaluation concerning the Effectiveness of the Board of Directors," please visit our website. (In Japanese only)

Successor Training for CEO (Representative Director), etc.

OHARA develops leaders who fulfill the responsibilities of CEO as well as other managerially important posts. We provide potential successors with training, including giving them experience in key positions to improve their management skills at the Group level.



< Requirements for OHARA's Managerial Human Resources>

- Experience in business operation and operating location management, or Group-wide business experience such as strategic planning, etc.
- Determination and fortitude as a manager Ability to take risks, make decisions, and execute decisions with an aim to achieve the improvement in the corporate value.
- 3. Ability to reform Ability to heighten the morale of an organization and reform an organization to realize what OHARA aims to be, with a perspective not bound to industrial common practice, organizational common sense, or past customs.

Initiatives to Strengthen Ethics and Compliance

Compliance Promotion System

OHARA has established the "Guidelines of Conduct" in accordance with OHA-RA's philosophy based on our corporate principles. The Ethics and Compliance Committee holds a variety of in-house seminars in accordance with such Guidelines on a continuous basis in order to ensure that directors and all employees comply with laws and regulations and execute business activities with a high sense of ethics and in a fair and proper manner.

In-house Seminar on Export Control

OHARA regularly conducts internal training to deepen the knowledge of laws and regulations and internal procedures related to security export control.

Seminar on Laws and Regulations

To ensure compliance with laws and regulations, we hold seminars on laws and regulations. In FY 2020, we gave seminars on the Subcontract Act to related departments.

Compliance Seminar for All Employees

Compliance seminars are held regularly for all employees working at OHARA.

In FY 2020, we held seminars on preventing power harassment (workplace bullying) incorporating case studies in the form of short videos.



Compliance seminar for all employees

Codes of Conduct: Guidelines

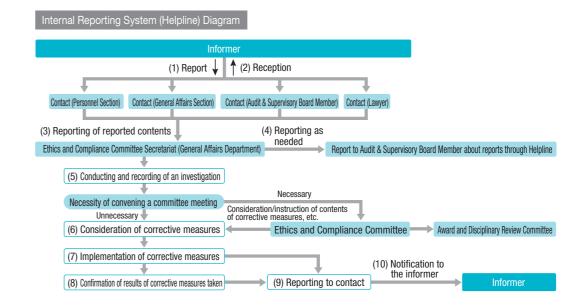
Based on OHARA's philosophy given our corporate principles and the Guidelines of Conduct, OHARA has stipulated the Codes of Conduct: Guidelines, which specify major points of laws and regulations, response policies and matters of caution to be complied with in conducting business activities and has been holding compliance seminars and providing educational activities for all employees using the intranet.

Human Rights Initiatives

Internal Reporting System (Helpline)

OHARA has established an internal reporting system (Helpline) in which a person seeking advice (or informer) can report directly to the Ethics and Compliance Committee. We also created and disseminated the "Internal

Reporting (Helpline) Operation Guidelines" to ensure proper operation of the internal reporting system.



Issues for FY 2021

In order to strengthen ethics and compliance, in-house seminars need to be held repeatedly on a continual basis. On the other hand, repeated training on the same topics may result in the loss of a feeling of freshness. Therefore, we believe that we need to continue devising contents to maintain a high degree of effectiveness without losing freshness, even after repeated training.







Environmental Protection

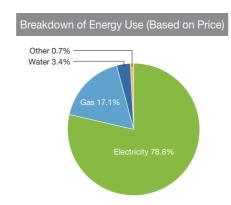
We cherish our one precious earth. In all phases of our company activities the preservation of our environment is strongly emphasized. We strive to accomplish this through independent and positive activities.

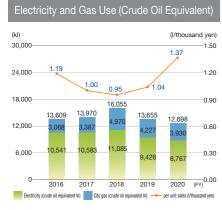
Environmental Management

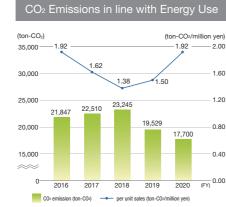
OHARA is promoting a variety of activities with the philosophy and policies for environmental management, aiming at harmony between corporate activities and the global environment.

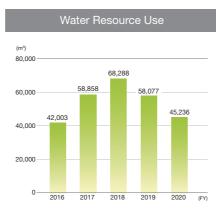
Energy and Resource Conservation Initiatives

Glass manufacturing requires the consumption of many resources (in the form of electricity and city gas). To keep the consumption of the limited resources to a minimum, we have been working on switching equipment to energy-saving types, and promoting efficient production. We will continue promoting various activities aimed at saving energy and resources, which are linked to curbing energy use.



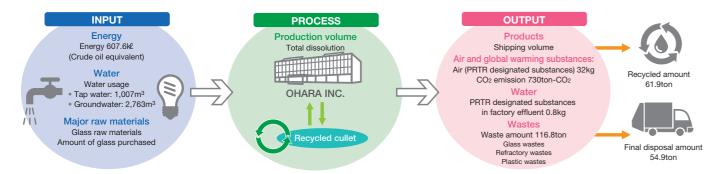






Material Balance

OHARA develops environmental protection activities by quantitatively understanding the amount of energy and resources used in OHARA's business activities (INPUT) and products or substances that burden the environment generated from such activities (OUTPUT).



Issues for FY 2021

We will appropriately operate our Environmental Management System, reducing industrial waste, improving recycling rates, efficiently using limited resources (energy conservation initiatives), and thoroughly adhering to each country's environmental laws and regulations, to protect the global environment on a Group-wide basis.

Harmony with Society

We will maintain proper company activities so that harmony with local and international societies can be sustained. As "a good corporate citizen," OHARA is determined to contribute to society.

Social Contribution Activities

Donating Calendars

We donated calendars we no longer needed to a nearby nursery school as part of our local social contribution activities. The teachers were pleased with the calendars as they are very useful when the children draw pictures and do crafts.



Some of the donated calendars

Collecting Old Stamps

We regularly collect old stamps within our company and donate them to a volunteer association in Sagamihara City.

The donated stamps are exchanged for cash and used for operating handicabs (wheelchair accessible vans).



Old stamps collected

Other Social Contribution Activities

We accept students from nearby elementary schools for factory tours and junior high students for work experience, and also participate actively in the Sagami River Cleanup Operation.

(In FY 2020, these activities were canceled due to the impact of the COVID-19 pandemic.)

Issues for FY 2021

Although the impact of the COVID-19 pandemic has prevented us from actively conducting activities, we will continue to value our community relations and social contribution.

Disclosure of Information

To secure the understanding and support from society, we are prepared to maintain a dialogue with the community and, if necessary, to make our company information public.

Communication with Stakeholders

Communication with Shareholders and Investors

At the annual general meetings of shareholders held in late January each year, we make efforts to explain our strategy to shareholders in a manner that is easy to understand, and we also send out the "OHARA Report," a comprehensive report, once a year. Also, in addition to holding financial report

briefing sessions four times a year (including telephone conferences) for institutional investors and securities analysts, the IR division also responds to individual interviews as needed.



Telephone conference

Issues for FY 2021

Net sales and operating income for FY 2020, the final year of the medium-term management plan based on the "Long-Term Vision 2020" formulated in 2009, regrettably did not meet the targets. In light of this, we intend to promote measures for future growth and explain them thoroughly.

Record of IR Activities

- Thu., January 30, 2020 111th Annual Meeting of Shareholders
- Thu., March 12, 2020 Announcement of financial statements and telephone conference for the first guarter FY 2020
- Thu., June 11, 2020 Announcement of financial statements and telephone conference for the second quarter FY 2020
- Thu., September 10, 2020 Announcement of financial statements and telephone conference for the third guarter FY 2020

Annual IR Calendar



Communication with Individual Investors

On our website, we disclose timely disclosure materials, as well as notices of convocation for general meetings of shareholders and presentation materials of financial report briefing sessions. In addition, we held briefings for individual investors at securities companies. Furthermore, information relating to opinions received at these briefings and the like is promptly shared with the management, and referred to for corporate activities.







Employee Respect

The human rights and individual personalities of our employees will be observed and protected. Comfortable working conditions must be arranged. Through an open and fair atmosphere in our workplace, we will be able to create solid corporate principles.

Training for the Promotion of Women's Participation

In an effort to promote the active participation of women, we are making a better company environment as well as developing female talents. By getting employees to reflect on their past achievements and find the source of their motivation to work, we help them deepen their understanding of themselves, clarify the direction of their future careers, and play important roles regardless of their gender.

Utilization of Global Talent

As OHARA's business expands to global markets, our business activities need to be coordinated not only within Japan but also with our overseas bases. By proactively recruiting global talent with high potential in language skills and adaptability to foreign cultures, we aim to improve our competitiveness as an organization and become a group that can fight together as "All OHARA."

Childcare Support System

We have been working to create a work environment where employees can balance "work" and "childcare" so that all employees can adequately demonstrate their capabilities. Many employees, both male and female, make use of the childcare leave system and shorter work hours for childcare system (valid until the employee's child enters elementary school).

Awards System

Awards systems have been introduced for the anniversary foundation ceremony, the nationwide safe week and the nationwide labor health week. We motivate our employees by presenting awards in appreciation of their daily activities and contribution to the company, and will continue to value a corporate culture in which all employees share in the joy of seeing each other grow.

Hourly Annual Paid Leave System

To enable employees to take time off flexibly according to their various circumstances, on November 16, 2020, we began operating an hourly annual paid leave system on a trial basis as part of our work style reform.

By allowing employees to take paid leave by the hour, we aim to improve the paid leave acquisition rate for a better work-life balance among our employees.

••• Staff's Voice



Tomoko Hara
Optical Product
Manufacturing Dept.
Optical Product Div.

After the Training

I was given the opportunity to think about how I will implement my future career plan in specific detail. We have recently faced a situation where the future outlook is uncertain due to the COVID-19 outbreak. I would like to comply with the wishes of our customers and contribute to creating a better future and society, to pave the way for a bright society and future through our engagement with our customers.

••• Staff's Voice



Natsuko Sato
Planning & Administration
Dept.
Planning & Finance Center

Using the Childcare Support

It takes me more than an hour to commute to work so I use the shorter work hours for child-care system to take my child to and from nursery school. This system gives me more time to spend with my child in the morning and evening, and has allowed me to continue balancing work and childcare. I am very grateful for this environment made possible thanks to OHARA's childcare support system and the understanding of my colleagues.

🐪 Staff's Voice



Yuji Nakano Business Audit Sec.

Receiving the Achievement Award

Although I would be classed as being in the "middle-aged and older" age group, I am still very happy to be selected for such an honorable award. I feel that OHARA values this award system which recognizes the efforts of all its employees. I have come this far in my career, not solely because of my personal achievements, but also because of the support of my colleagues around me. I intend to continue pushing forward with a sense of gratitude.

Issues for FY 2021

As work styles diversify, we will make sure all our employees can continue to work positively in their own way by providing an hourly annual paid leave system and implementing various other measures, while promoting flexible work styles and diversity.

Global Development

Global Development

The OHARA Group develops global business in the fields of optical and electronics products.

OHARA GmbH (Germany)



OHARA OPTICAL (HONG KONG) LTD. (Hong Kong)



NHG-OHARA OPTICS (XIANGYANG) Co., LTD. (China)



OHARA OPTICAL (ZHONGSHAN) LTD. (China)



OHARA OPTICAL (M) SDN.BHD. (Malaysia)



Overseas employees ratio

61.9%

FY 2020 employee composition 1,508

OHARA INC.

(Japan)



Ohara Corporation (East Office) (USA)

OPC Corporation

(Japan)



Ohara Quartz Co., Ltd.



OHARA INC. Oita Sales Office (Japan)



Ohara Corporation (West Office) (USA)



TAIWAN OHARA OPTICAL CO., LTD. (Taiwan)



Taiwan Ohara Optical Material Co., Ltd. (Taiwan)



Financial & Non-Financial Highlights

	2016	2017	2018	2019	2020 (FY)
Main Financial Results (millions of yen)					
Net sales	21,329	24,628	28,221	23,407	17,873
Gross profit	5,091	7,237	9,290	7,012	3,568
Gross profit-to-net sales ratio (%)	23.9	29.4	32.9	30.0	20.0
Operating income	143	1,715	3,270	901	(1,724)
Operating income-to-net sales ratio (%)	0.7	7.0	11.6	3.8	(9.6)
Ordinary profit	(84)	2,242	3,705	1,146	(1,319)
Ordinary profit-to-net sales ratio (%)	(0.4)	9.1	13.1	4.9	(7.4)
Profit attributable to owners of parent	(372)	1,513	3,220	466	(4,243)
Profit-to-net sale ratio (%)	(1.7)	6.1	11.4	2.0	(23.7)
Net assets	37,040	41,204	44,040	41,813	36,183
Total assets	50,161	54,433	58,221	55,036	49,621
Net cash provided by (used in) operating activities	1,447	1,960	3,016	1,927	2,479
Net cash provided by (used in) investing activities	(850)	(1,410)	(937)	(335)	(2,405)
Net cash provided by (used in) financing activities	(354)	(1,736)	(1,158)	(1,013)	1,380
Depreciation	1,594	1,590	1,560	1,664	1,791
Purchase of property, plant and equipment	(1,620)	(1,004)	(1,129)	(2,144)	(659)
R&D expenses	813	888	944	949	952

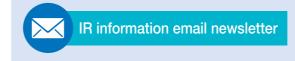
Per Share Data (yen)					
Net assets	1,522.70	1,693.90	1,810.47	1,717.98	1,485.94
Net profit	(15.31)	62.23	132.37	19.16	(174.34)
Dividend	10.00	20.00	30.00	15.00	10.00

		2016	2017	2018	2019	2020 (FY)
Main Indicators (%)						
Equity capital ratio		73.8	75.7	75.6	76.0	72.9
ROA (return on asset)		(0.2)	4.3	6.6	2.0	(2.5)
ROE (return on equity)		(0.9)	3.9	7.6	1.1	(10.9)
PER (price earnings ratio	p)	-	35.64	18.02	78.49	-
Payout ratio		-	32.1	22.7	78.3	-
Average exchange rate	USD (yen)	110.43	112.04	110.46	109.68	107.61
	EUR (yen)	122.35	124.46	131.13	123.30	121.18

Segment Data (millions of yen)							
Optical business	Net sales	14,418	15,334	17,625	14,205	9,527	
	Operating income	(107)	688	1,373	118	(1,000)	
	Operating income- to-net sales ratio (%)	(0.7)	4.5	7.8	0.8	(10.5)	
Electronics business	Net sales	6,911	9,294	10,596	9,201	8,345	
	Operating income	251	1,027	1,897	782	(724)	
	Operating income- to-net sales ratio (%)	3.6	11.1	17.9	8.5	(8.7)	



The items marked with an asterisk (*) are non-consolidated figures of OHARA.



To receive our IR news such as the latest timely disclosure information and news release by e-mail, sign up with your email address using the QR code on the right. URL https://www.magicalir.net/5218/mail/



OHARA's basic dividend policy is to return profits to shareholders in a stable, continuous manner through a year-end dividend, while also accumulating the necessary internal reserves for strengthening management foundations and future business expansion.