HAMAMATSU

PHOTON IS OUR BUSINESS

HAMAMATSU PHOTONICS K.K. 2024 Integrated Report

Light is possibility itself.

Management Philosophy of the Hamamatsu Photonics Group

We are convinced that light holds unlimited possibilities.

Known as photonics, light technology is fundamental to
most markets with even further advancements underway.
However, the nature of light is still yet to be fully revealed.

Every day, we strive to pursue the unknown and unexplored.
Based on new technologies and knowledge exploring new opportunities,
we create markets that contribute to a better society and a healthier planet.
Honoring these commitments, we continue to build a sustainable,
stable and highly profitable structure.
We will continue to generously invest in both R&D and facilities,
as well as expand our business and increase our corporate value.

People, technology and knowledge are the foundation of our success.
Together, we will advance and grow to the next level.
We seek a collaborative spirit and learn from each other's strengths.
Through this spirit, known as "Wa"「和」in Japanese,
our endeavor is the continuous improvement of ourselves, united under one global entity.

MISSION

—

Photon is our business

We dedicate our efforts to the advancement of science and technology for a better society and a healthier planet.

VISION

—

We will pursue unknown and unexplored areas to create new markets harnessing photonics technologies.

VALUES

—

Challenge
"We never stop trying."

Integrated Report 2024

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Editorial Policy

The 2024 Integrated Report is a medium to inform our stakeholders about the Company's value creation story from both financial and non-financial perspectives. In preparing this Integrated Report, we referred to the "International <IR> Framework" by the International Integrated Reporting Council (IIRC) and the "Guidance for Integrated Corporate Disclosure and Company-investor Dialogue for Collaborative Value Creation" by the Ministry of Economy, Trade and Industry. Detailed information can also be found on our website.

Environment Social Governance
Guidance for Collaborative Value Creation

Reporting Organization

The 2024 Integrated Report focuses on reporting of information for Hamamatsu Photonics K.K. The scope of the financial information encompasses 37 companies (as of September 30, 2024), including Hamamatsu Photonics K.K., 32 consolidated subsidiaries, and 4 equity-method affiliates. From FY2021, the scope of non-financial information "Greenhouse Gases (Scopes 1 and 2)," "Water," and "Renewable energy" include Hamamatsu Photonics K.K., domestic consolidated subsidiaries, and overseas manufacturing consolidated subsidiaries.

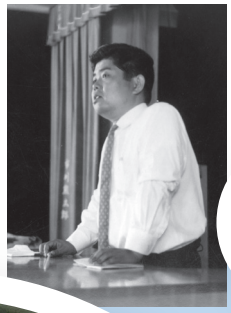
Reporting Period

The reporting period for this integrated report is FY2024 (October 2023 to September 2024).

WEB www.hamamatsu.com

Foundation of Our Management

The foundation of our Company is our bold spirit to challenge new frontiers head on, pursuing photoelectronic conversion technology and its applications and growing alongside advancements in photonics technology.



1960
Lecture by Teruo Hiruma

Light to electricity, electricity to light

Photonics technology will surely help society

The spirit of pursuing the unknown and unexplored - inherited from our predecessors

Professor Kenjiro Takayanagi is respectfully known as the "father of Japanese television." A certain deity was involved in Takayanagi's pursuit of the unknown. This was "Fortuna" - the goddess of fortune in Roman mythology. As told in the myths, Fortuna only had forelocks with no hair at the back of her head. One would have to be one-step ahead of her, wait for her to catch-up, and then turn around and seize her by her forelocks.
When trying to develop technologies to benefit society in the next ten or twenty years, we have to strive to go further ahead than people think is necessary.
This pioneering approach led to the success of the world's first electronic television.



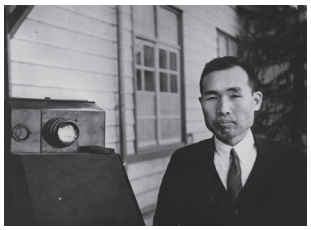
Carrying on the spirit of innovation in pursuit of the unknown and unexplored

Prof. Takayanagi passed on his spirit to create things that did not yet exist in the world to his student, our founding president, Heihachiro Horiuchi, and the second president, Teruo Hiruma. Our entire company fully embodies this spirit.
From almost immediately after the company's inception, Teruo Hiruma, who was mainly in charge of sales, encouraged everyone at Hamamatsu Photonics to make the world's best products. He established a system to engage with the research industry, and traveled the world in an effort to expand the market.
By inheriting the ideals of Prof. Takayanagi and Heihachiro Horiuchi, and through his actions, our organization has grown into a globally competitive enterprise.

1926
Prof. Takayanagi succeeded in receiving images on the world's first electronic cathode-ray tube. 「イ」 is derived from the "Iroha" order as the first character of the traditional Japanese syllabary. (The photograph is of the reproduction device.)

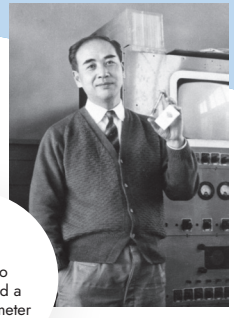
Pursuing the unknown and unexplored

Making the world's best products



1935
Prof. Takayanagi and the iconoscope television camera

Seize the forelocks of fortuna



1963
Heihachiro Horiuchi and a 1/2-inch diameter vidicon

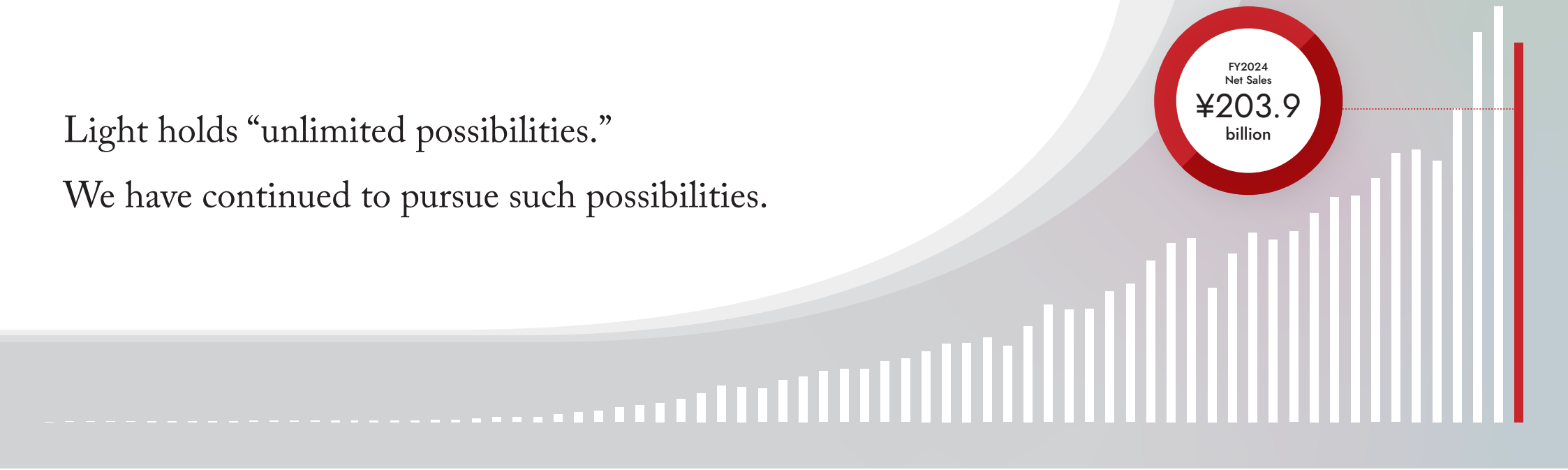
1978
Upon the 25th anniversary of Hamamatsu TV Co., Ltd. (now Hamamatsu Photonics K.K.), President Horiuchi handed over the presidency to Teruo Hiruma. Prof. Takayanagi, on the left, was in attendance.



What can we do with light?

Light holds “unlimited possibilities.”

We have continued to pursue such possibilities.



Using photonics technology to address societal, environmental, and human challenges

◦ 1953 to 1972

From Foundation to Product Development

Inheriting the spirit of Prof. Takayanagi, the first president Heihachiro Horiuchi established Hamamatsu TV Co., Ltd. together with the second president Teruo Hiruma and others. They devoted themselves to their work with the goal of developing the top products in the world and a spirit of “never stop trying!”

◦ 1973 to 1981

Expanding Applications of Photonics Technology

We established production systems with the construction of a new plant. Although analytical equipment was our products’ mainstay application at that time, we developed opto-semiconductors for X-ray CT scanners and swept the optical sensor market for X-ray CT scanners. The application of opto-semiconductors expanded from analytical and medical use to wide range of fields including industry, academic, and measurement fields.

◦ 1982 to 1989

Establishing the Current Management Base Through a Division System

Securing outstanding human resources is essential to superior planning and development. The company name was changed to “Hamamatsu Photonics K.K.” and company shares were offered in the over-the-counter market. Meanwhile, a divisional system was adopted to carry out flexible corporate activities, and the current management base was established.

◦ 1990 to 2008

A New Challenge: Pursue Unknown and Unexplored Realms

Achieving more ambitious company goals requires taking on challenges in realms unknown and unexplored by humanity. As specific examples of facing such challenges, we established the Central Research Laboratory, the Hamamatsu Medical Imaging Center which aims for the early detection of cancer and dementia, and the Graduate School for the Creation of New Photonics Industries to train human resources in photonics technology.

◦ 2009 to 2022

Expansion of the Photonics Industry

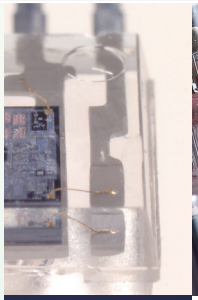
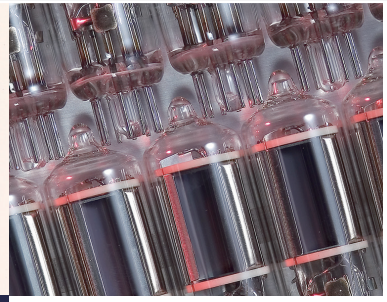
In addition to strengthening our core photonic devices, we established the Global Strategic Challenge Center (GSCC) and strived to expand the photonic industry by collaborating with start up companies and building an in-house venture function.

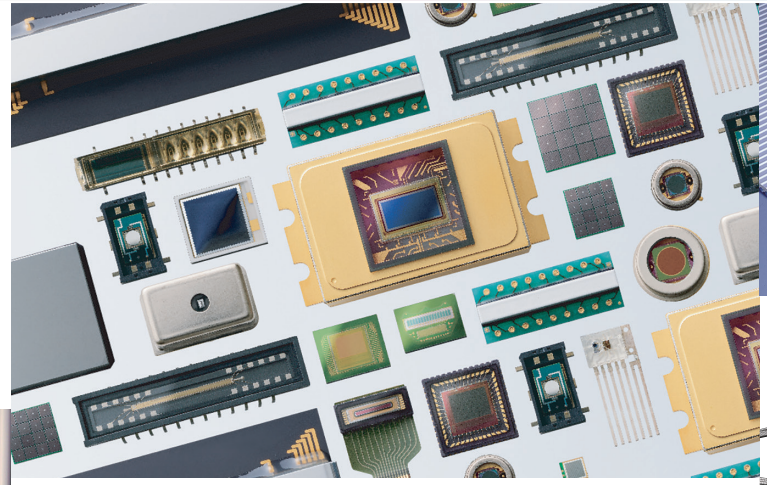
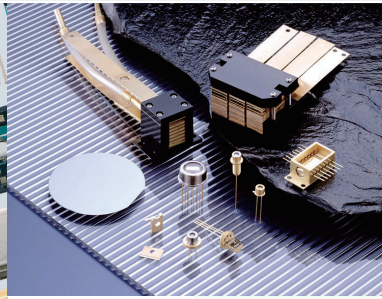
◦ 2023 Onward

Becoming a Social and Environmental Value Creation Company

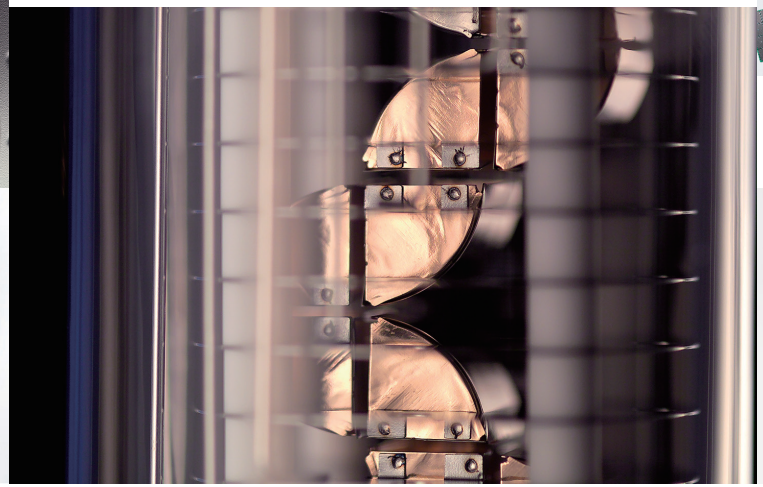
We will contribute to the creation of a prosperous society and environment by providing higher-value-added products through properly understanding not only customer needs but also social and environmental needs while also strengthening cooperation between divisions and with external organizations.

Our mission is to create new industries using light


What can we do with light?



Shedding light on the myriad problems humankind faces







This photonics technology is the path to new global possibilities

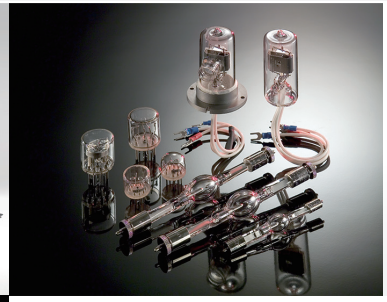
Business domain

Pursuing the possibilities of light since our founding

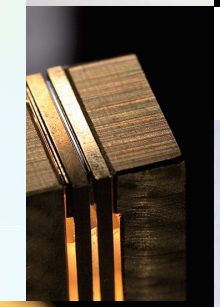
Hamamatsu Photonics has created exceptional value for society over a wide range of applications through our core businesses. These include our electron tube segment and opto-semiconductor segment, which develop and manufacture devices such as optical sensors and light sources, as well as modules that integrate these devices with dedicated circuits; our imaging and measurement instruments segment, which develops and manufactures a variety of systems that incorporate these devices; and our basic and applied research that expands the possibilities of our photonics technology. This fiscal year, we have added the laser segment as a core business to address a broader range of societal challenges and needs.

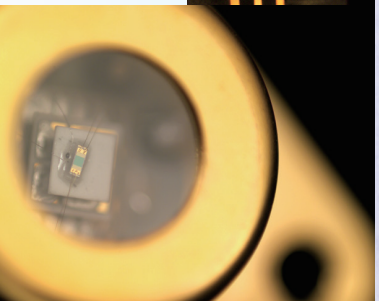
Applications of light extend to areas surpassing our imagination



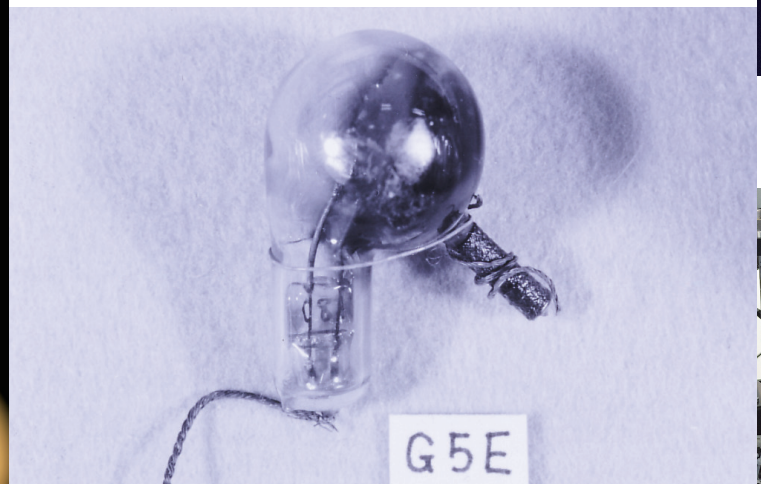


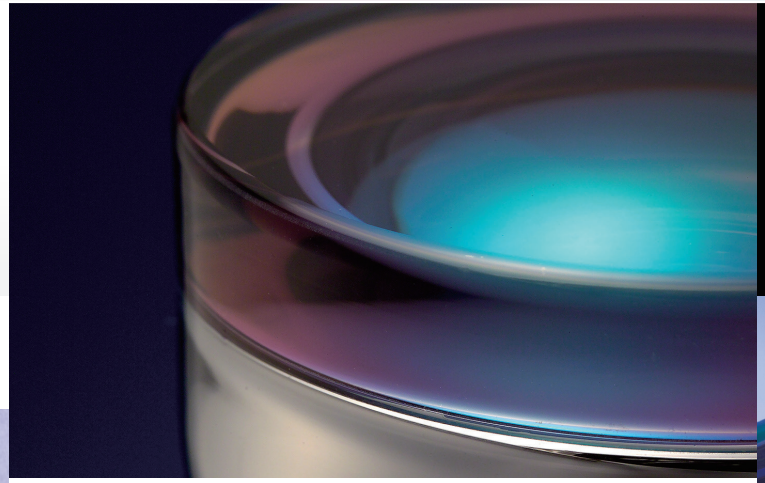




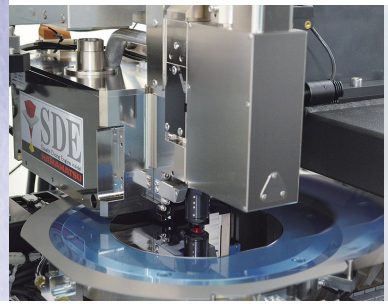


Contributions to photonics technology are contributions to humanity



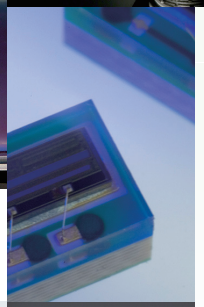


Anticipating needs before they arise











There is value in the unknown and unattainable

Electron Tube Segment

Develops and manufactures optical sensors such as high-speed, high-sensitivity photomultiplier tubes, highly stable and long-life lamps, as well as applied products in these areas. Pursuing the ultimate in performance guided by past experience in fabricating devices for academic research has led to applications in high-precision measurement such as in the medical, environmental, and measurement fields, and their use has even spread to manufacturing, supporting everyday life.

Main Products

Photomultiplier tubes, light sources (lamps), imaging devices, microfocus X-ray sources

Opto-Semiconductor Segment

Develops and manufactures opto-semiconductor devices such as photodiodes, photo ICs, and image sensors. Our opto-semiconductor products incorporate unique semiconductor process technology, mounting and packaging technology, and MEMS technology, and cover a wide range of wavelengths. They are used in diverse field such as medical care, scientific measurement, communications, consumer electronics, and automotive electronics.

Main Products

Si photodiodes, MPPC® (SiPMs), photo ICs, image sensors, infrared detectors, LEDs

Imaging and Measurement Instruments Segment

Develops and manufactures systems that integrate light detection, imaging, and image measurement technologies with optical sensors, such as opto-semiconductor devices and electron tube devices, as key components. We provide specialized systems that combine core products, such as cameras, with peripheral technologies and equipment.

Main Products

Cameras, digital slide scanner, failure analysis system

Laser Segment

Develops and manufactures laser products in-house, including excitation laser diode modules, customized laser application products, and laser engines. We leverage synergies with the technology of NKT Photonics, which was acquired in 2024, to deliver even higher-value-added products.

Main Products

Laser diode bar modules, solid state lasers, Stealth Dicing™ technology

Basic Research and Applied Research

Conducts a wide range of research including basic research to explore the essence of light as well as applied research to adapt the resulting technologies and knowledge for industrial use, with the aim of continuously exploring how to use light to address societal, environmental, and human challenges while expanding the possibilities of light.

Research Fields

Optical information processing and measurement, health and medical care, biophotonics, optical materials, energy

Business



Established

September 29, 1953

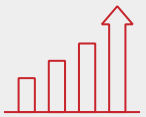
Hamamatsu TV Co., Ltd. was established by first president Heihachiro Horiuchi and others.



Consolidated net sales

¥203.9 billion

Down 7.9 %
compared to FY2023



Profit attributable to owners of parent

¥25.1 billion

Down 41.3 %
compared to FY2023

Features



Intellectual property holdings

9,126 items

(FY2024)

1,160 items
registered in FY2024



Capital investment

¥30.9 billion

Down 0.7 %
compared to FY2023



Research and development expenses

¥13.5 billion

Up 10.1 %
compared to FY2023

Global



Overseas sales ratio

77.4 %

Europe: 21.4 %,
North America: 26.2 %,
Asia: 29.7 %, Japan: 22.6 %



Number of consolidated employees

6,395

Up 600
compared to FY2023

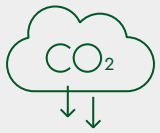


Number of overseas locations

30

17 in Europe,
the Middle East, and Africa,
4 in the U.S., 9 in Asia

Sustainability



Greenhouse gas emissions

7,379 t-CO_2

(FY2024)

Reduction of 17.7 %
compared to FY2023



Ratio of female managers

3.8 %

(FY2024)

Up 0.5 points
compared to FY2023



Consecutive certifications

Certified as a "2025 Health and Productivity Management Outstanding Organization (White 500)"

Certified as a "White 500" organization for 8 consecutive years (since 2018)



To Our Stakeholders

Representative Director and President
Tadashi Maruno

Continuing to challenge ourselves to solve problems

As we marked our 70th anniversary during FY2023, we reviewed our management philosophy to more clearly and concisely communicate our principles. This crystallized into the expression of our twin missions: to dedicate our efforts to the advancement of science and technology for a better society and a healthier planet and to contribute to the health and well-being of everyone. We will continue to push boundaries, pursuing unknown and unexplored areas to create new markets by harnessing photonics technologies, helping to solve the diverse challenges faced by our customers and society. Through these continued efforts, we will generate added value and ultimately contribute to society and humanity. To clarify these ideas, we rethought and reaffirmed our management philosophy.
These principles are a true representation of the founding spirit of Hamamatsu Photonics and are already well ingrained within the Company. In particular, the spirit of challenging ourselves and the belief that we must never stop trying—a core value of our management philosophy—were often quoted by our second president and founding member, Teruo Hiruma, and the echoes of his words reverberate in our hearts to this day.

> We will achieve sustainable growth and enhance corporate value by implementing the Added Value Creation Cycle



Contributions to photonics technology are contributions to humanity

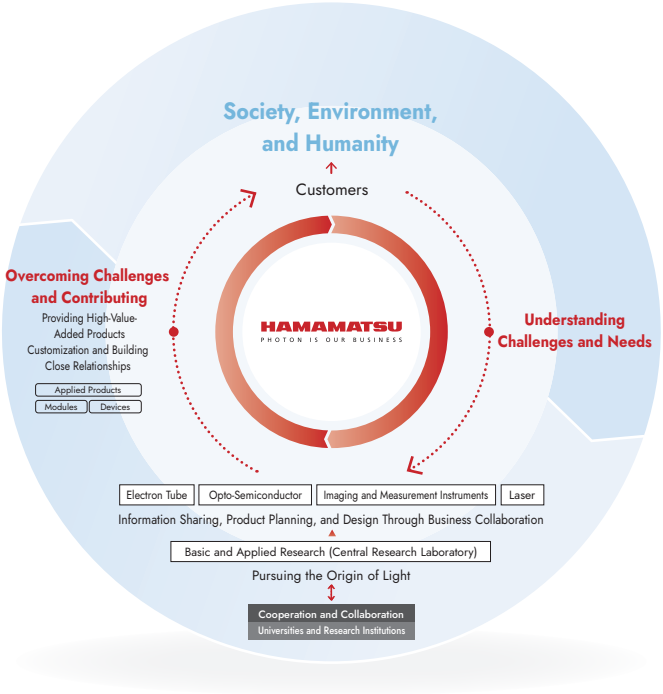
The concept of contributing to the health and well-being of everyone is an abstract and large-scale endeavor, which may lead people to ask how it can be practically implemented. When asked, I like to highlight laser fusion and positron emission tomography (PET) as examples of how photonics can directly benefit humanity.
Laser fusion is a technology that we have been researching for 30 years. As the global population continues to increase, there are concerns about a future food crisis.

Plant factories will become important for increasing food production, which requires strong light sources, and we expect lasers to be used in this field. However, lasers use large amounts of electricity, so it is essential to develop more cost-effective methods to supply that power. One possibility with great potential is laser fusion power generation. Laser research can help solve the global food crisis facing humanity while contributing to humankind through electricity supply.
We have also been researching PET technologies for 40 years, and PET cancer screenings can help people live longer by detecting and treating cancer as early as possible. PET scans contribute to the early diagnosis of dementia including Alzheimer's disease. Through the use of PET technology, many people will be able to live longer and healthier lives. This is a fundamental contribution to humanity.

People tend to grasp this point well when I explain it at lectures and other events. The phrase "contributing to humanity" is not an exaggeration, and through our track record, we want to demonstrate that we are actually putting our management philosophy into practice.

Implementing the Added Value Creation Cycle

Society, the environment, and humanity all continue to face innumerable challenges. Our Company is committed to fostering strong relationships with our customers, understanding their challenges and needs, and delivering products that leverage our photonics technology to address and solve these issues. The profits we generate by providing high-value-added products as a solution provider are reinvested to further contribute to society, the environment, and humanity, creating a continuous cycle. This is what we call our Added Value Creation Cycle.
Rather than focusing solely on short-term profits, our goal is to reap the benefit of contributing to our customers, as well as to society, the environment, and humanity, an approach that we have already been taking. It is important that we continue down this path. Our sustainable growth can only be achieved if all our employees work together to contribute to society through our business activities. To support this principle, we have established our corporate philosophy and the Added Value Creation Cycle.



Each of our business entities builds close relationships with customers to understand their needs, makes plans, invests in prototype development, and supplies products. To accurately respond to our customers' needs, we must have our own manufacturing line and customization service based on our in-house manufacturing capabilities, leading to high-value-added devices and modules. Previously, this cycle was run according to each segment. However, in the future, we will strengthen cooperation among segments, providing higher-value-added products. We will also anticipate and address social and industrial needs that our customers may not be unaware of to provide them with higher-value-added products. This is an extremely important cycle for achieving sustainable growth, and we view it as a form of social contribution through our core business activities.

Operating profit ratio as an indicator of corporate value

We achieved record net sales and profits in FY2023, but both sales and profits decreased in FY2024. This was due to a decline in orders received in FY2024, following the recoil from special demand for certain products during the COVID-19 pandemic as well as some customers having surplus inventory after placing advance orders in response to the global parts shortage.
For FY2027, the final year of our three-year, medium-term plan started in FY2025, we are aiming for net sales of ¥259.1 billion, operating profit of ¥37.7 billion, and an operating profit ratio of 14.6 %. Our goal for FY2030 is net sales of ¥300 billion, operating profit of ¥60 billion, and an operating profit ratio over 20 %.
There is a reason we include the operating profit ratio in our targets. We primarily provide custom products leveraging a business model that tailors product specifications to each customer's unique needs to deliver the best possible solution. Rather than mass-producing standardized products, we engage with and listen carefully to our customers, and continuously deliver products that perfectly meet their needs while providing the greatest value. This business approach drives our high operating profit ratio.
Although there were concerns that we might shift toward mass production and small-margin, high-volume sales in response to recent major investments in semiconductor front- and back-end processes, we have no intention of taking that approach. Going forward, we will continue to provide custom and small-lot, high-mix products with high added value, and firmly maintain our corporate value by doing so.

We are in a period in which depreciation from large-scale investment and R&D expenses are overlapping, which has resulted in a slight decline in the operating profit ratio in the short term. However, we want to clearly state our goal of a high operating profit ratio, so we have included the target figure in our plan.

Creating growth markets by developing new fields

As stated in our management philosophy, we are convinced that light holds unlimited possibilities and see a future with myriad opportunities for the photonics industry. Photonics has already found homes in a wide range of fields, and our mission and path to growth are in creating new industries using light. By understanding the challenges facing our customers and society, and by continually thinking of new ways to use light, new industries will naturally emerge.
We are continuing our explorations at the cutting edge of terahertz wave technology at the Central Research Laboratory. These electromagnetic waves have frequencies between radio waves and visible light, and are expected to replace X-rays in imaging and other fields. There have not yet been any significant applications due to the lack of technologies to generate and detect terahertz waves, but we are now successfully developing both. This is a completely new field, and we are excited to pursue its development in the future.

Changing risks into opportunities

One risk that we face is the possibility that our photonics technologies that we have developed over the years may become commodities. Other companies may enter markets in which we provide high added value by offering lower prices. Rather than participating in price competition, we will differentiate ourselves by developing technology that is always one or two steps ahead. To continue delivering products with new added value that cannot be imitated, it is essential that we maintain our strong R&D structure. While this poses a risk, it also creates opportunities.

We also recognize the need to keep a close eye on U.S.-China relations. In the semiconductor field, China is building its own supply chain, and the U.S. and Europe are trying to complete a supply chain of their own. As a result, plants are currently being constructed in China, the U.S., and Europe. Our products are at the core of semiconductor manufacturing and inspection equipment, and since they are in demand in each of these regions, we expect good growth in the semiconductor market business going forward.

NKT Photonics acquired to expand and strengthen the laser segment

Another factor expected to drive future growth is NKT Photonics, which we acquired in May 2024. The company's laser technology and markets are unique, and we expect this acquisition to drive synergies of the development of new technologies and the markets.

One such market is the field of cataract laser treatment. While our photonics technology had been used for diagnosis, it has not been directly applied to treatment. By adding NKT Photonics to our Group, we are now able to expand the scope of our business from diagnosis to treatment, and we have high expectations for new developments made possible by combining our detection technology with the laser technology of NKT Photonics. In addition, laser treatment in medical equipment requires high precision and stability, making it a field with long-term profitability and significant barriers to entry.

NKT Photonics' laser technology can also be used to detect, track, and neutralize drones. This technology could help prevent drones from being used in terrorist acts, such as attacks on public facilities.

These security applications open the door to entirely new markets that were previously out of reach.

While NKT Photonics has impressive technologies, they are currently in the upfront investment stage, and efforts are underway to establish technologies and capture the market. We are planning for growth over the long term.

On track to enhancing business efficiency with our general headquarters system

In terms of our organization, we introduced a general headquarters system in April 2023 to formulate and manage company-wide strategies that transcend boundaries among divisions. At Hamamatsu Photonics, each division has its own general affairs, purchasing, and quality control functions, which are managed independently. The general headquarters system aims to strengthen cross-division collaboration, improve efficiency, and promote cooperation where divisions learn from each other and work together. Under this system, we began personnel transfers and brought together employees from each division to exchange opinions, building momentum toward transforming the Company into a truly global corporation. These efforts are now bearing fruit, and our new form is starting to take shape.

An important key in achieving a truly global corporation is implementation of Enterprise Resource Planning (ERP) to centrally manage and optimize our management resources. Our Group operates in over 30 locations worldwide, and currently each local subsidiary and business has its own ERP, resulting in insufficient collaboration across the Group. To address this, we are moving forward with a project to build a single platform that will integrate all of these systems. Once this platform is complete, we will be able to centrally manage information from around the world and leverage it to make management decisions for R&D, manufacturing, and sales, leading to a more efficient cycle that drives growth.

We expect it to take from three to five years to complete, and we will work on it with a long-term perspective as an important step in achieving true globalization of the Group.

Promoting a workplace environment where women can work comfortably

Our Group has identified material issues and goals to be addressed (Materiality) that we must address to realize a sustainable world and future through photonics technology. The foundation of our framework for contributing to society and the environment through business is, above all, human resources. In terms of key issues, we are working to create a happier employment system and workplace and develop human resources to support the Group's growth and contribution to society.

Providing comfortable working environments for our employees is paramount in terms of human capital investment, and we are pursuing various initiatives to implement this. In particular, we are focusing on building environments where women who are raising children can play active roles. We are a technology-based company with a history of many male engineers, and the majority of our employees are male. Recently, the number of female engineers is increasing, and childbirth and child-rearing should not be a burden or disadvantage for women in the workplace. Our priority now is to create comfortable workplaces for all employees including women. We are working on new initiatives, such as testing out in-house childcare for school-age children.

On the other hand, we have a high employee retention rate, and I believe this is largely due to our workplace environment. Traditionally, development at our Company is from the bottom up. If employees want to pursue something, we encourage them to give it a try. Even failures may become seeds that grow into future successes. In this environment, employees can work with pride in creating products needed by society, and that is surely one factor for our high retention rate. We will continue to uphold and improve upon this culture, which embodies our management philosophy of challenging ourselves and that we must never stop trying.



Fostering talent to support growth of the Group

Human resources are a key asset to realizing growth of the Group. We are looking for future core talent who can collaborate across divisions throughout the organization, demonstrate incisive foresight, have a global perspective, and continually think about technologies and solutions that are needed. We seek people who have strong convictions and firm opinions, and can discuss issues in English on a global stage.

We believe that there are, in fact, many people with such aspirations. Previously, it was difficult to reach beyond the boundaries of business divisions. This is an issue related to the Company's structure. We are now moving in the direction of eliminating these divisional boundaries throughout the Group, and we want to create an environment in which each person's individuality can thrive.

Going forward, it will be important to secure new talent in a wide range of fields including IT and software. To proactively approach talented individuals, we are developing systems and plans that allow students to talk directly to our engineers and experience the workplace firsthand. Our past approach was to assign new employees to the frontline for on-the-job training, but we are now shifting to a system of providing training for a certain period after joining the Company and education to a certain level before assigning them to a position.

Through recruitment, training, and creation of a positive workplace environment, we are working to develop human resources that can support the Group's growth and contributions to society.

Stimulating discussions with the Board of Directors

We are also working diligently to strengthen corporate governance. The Company has many executives and directors who started out as engineers, so there are many officers with development skills while other areas of the skill matrix are lacking. To compensate for this bias, we select Outside Directors and Audit & Supervisory Board Members (Outside) with backgrounds in law and financial institutions in order to ensure a balance both inside and outside the Company.
The Board of Directors is working to stimulate discussion to avoid one-sided reporting and approval. They receive opinions and advice from Outside Directors and Audit & Supervisory Board Members (Outside) based on their expertise and experience, which are then used to chart our course forward. The Board of Executive Officers is working to strengthen governance from diverse and multifaceted perspectives, such as by exchanging opinions and holding discussions, rather than only relying on reports.

Continuing growth well after our 100th anniversary

Each of our business entities builds close relationships with customers to understand their needs, followed by investment in planning and development to manufacture and deliver products. To accurately respond to our customers'needs, we must have our own manufacturing line and customization service based on our in-house manufacturing capabilities, leading to high-value-added devices and modules. By strengthening collaboration among businesses and anticipating customer needs, we provide products with even higher added value. This is an extremely important cycle for achieving sustainable growth, and we view it as a form of social contribution through our core business activities.
2023 marked the 70th anniversary of the Company. Our commitment to providing higher value-added solutions through continuous self-challenge and a focus on contributing to humanity is the foundation on which the Company and our philosophy were built. It remains strong today and will continue unchanged into the future. We will continue to grow well after our 100th anniversary. We want our customers to see us not just as an electronics components manufacturer, but as a unique company.
To earn this respect, we will continue to value the foundation and mindset we have created, while making necessary changes, and focus on becoming a company that creates social and environmental value supported by the Added Value Creation Cycle.



TOPICS

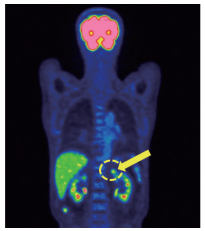
Eliminating cancer-related deaths and alleviating the burden of dementia

From basic to clinical PET research and beyond

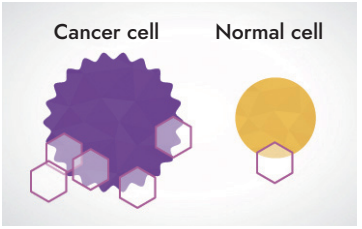
Unlike computed tomography (CT) and magnetic resonance imaging (MRI), positron emission tomography (PET) visualizes cellular and tissue activity through cross-sectional imaging. It has gained attention as an effective tool for diagnosing diseases of the brain and heart, as well as detecting cancer, the leading cause of death in Japan.
At Hamamatsu Photonics, we are working to build a society of health and longevity not only by developing and manufacturing detectors for PET devices but also by conducting applied research from multiple perspectives, including verifying the effectiveness of PET devices and PET tracers, as well as exploring cancer screening methods using PET scans.

What is positron emission tomography?

Positron emission tomography (PET) is an imaging technique that detects pairs of gamma rays produced when positrons annihilate with electrons. Hamamatsu Photonics began PET research at the Central Research Laboratory in the 1980s with the aim of better understanding brain functions. In 2002, the Hamamatsu Medical Imaging Center, managed by the Hamamatsu Medical Photonics Foundation, was established with the goal of eliminating cancer-related deaths and alleviating the burden of dementia in the Enshu region of west Shizuoka Prefecture. Today, the Center continues to deliver results through an integrated PET development and validation system, from basic research to clinical application.



▲ Photo provided by the Hamamatsu Medical Imaging Center



▲ Cancer cells consume three to eight times more glucose than normal cells.

PET cancer screening takes advantage of the fact that cancer cells consume more glucose than normal cells. When a glucose-like compound labeled with a positron-emitting radionuclide (fluorodeoxyglucose: FDG) is injected into a vein, it distributes throughout the body, and is preferentially absorbed by cancer tissues. By detecting the gamma rays produced through positron annihilation, which correspond to the concentration of FDG, it is possible to identify the location of cancer within the body.

PET cancer screening contributes to early cancer detection

Early cancer detection significantly improves a high five-year relative survival rate, and many patients are now living longer even after a cancer diagnosis. The Hamamatsu Medical Imaging Center offers comprehensive PET cancer screening that combines multiple imaging diagnostics, contributing to early detection. In a study evaluating the effectiveness of PET cancer screening, the cancer mortality rate among participants was reduced to one-fifth compared to non-participants. In addition, medical expenses, outpatient visits and hospitalization days were reduced, demonstrating the benefits of PET cancer screening.

Brain function PET contributes to the diagnosis of dementia

The Hamamatsu Medical Imaging Center has been working on PET scans that visualize the accumulation of substances in the brain, such as amyloid-beta and tau proteins, both of which are associated with the causes of Alzheimer's disease. In recent years, therapeutic agents targeting amyloid-beta have been approved by insurance coverage, highlighting the growing importance of PET imaging in both the diagnosis of dementia and the development of new drugs. In addition, by collecting FDG-PET cancer screening data from cancer screenings and building a unique database of brain glucose metabolism in healthy individuals, we are also working on the early detection and diagnosis of dementia.

PET-related research

Hamamatsu Photonics conducts R&D based on four approaches to achieve a society of health and longevity.

Development of PET devices

We have developed the HIAS-29000 brain PET scanner, featuring new embedded motion correction technology that ensures clear PET scan images even when the patient moves during the scan.



Development of PET tracers

We have successfully developed a PET probe for measuring mitochondrial function. Using this probe, we are working towards the ultra-early detection of dementia and the early identification of declining organ function throughout the body.

Development of AI-based image processing methods

We are conducting research on AI-based image processing methods that does not require pre-training data, with the aim of improving the reliability of PET scans and lowering the cost of the PET system.

Development of innovative imaging methods

Using ultra-high-precision time-resolved gamma ray measurements, we have developed a novel medical imaging technology that does not require image reconstruction. This is expected to lead to the development of a completely new device for simple and rapid diagnosis.

Research on brain PET and AI applications
Scan here for more information on our research. ▶

https://www.hamamatsu.com/jp/ja/our-company/business-domain/central-research-laboratory/health-and-medical-care/hias.html

Hamamatsu Photonics employs a cycle that creates social value through photonics technology.

VISION

We will pursue unknown and unexplored areas to create new markets harnessing photonics technologies.

VALUES

Challenge
"We never stop trying."

Business model of Hamamatsu Photonics

Input

FY2024 results

Human capital
Number of employees: 6,395
Overseas employee ratio: Approx. 25 %

Financial capital
Total assets: ¥434.6 billion
Cash and deposits: ¥97.0 billion

Manufacturing capital
Capital investment: ¥30.9 billion
Manufacturing locations: 15

Intellectual capital
Research and development expenses: ¥13.5 billion
Research and development topics: Approx. 200

Social capital
Number of customers: Approx. 10,000

Natural capital
Electricity usage: 140 GWh

Material Issues and Goals to be Addressed (Materiality)

01

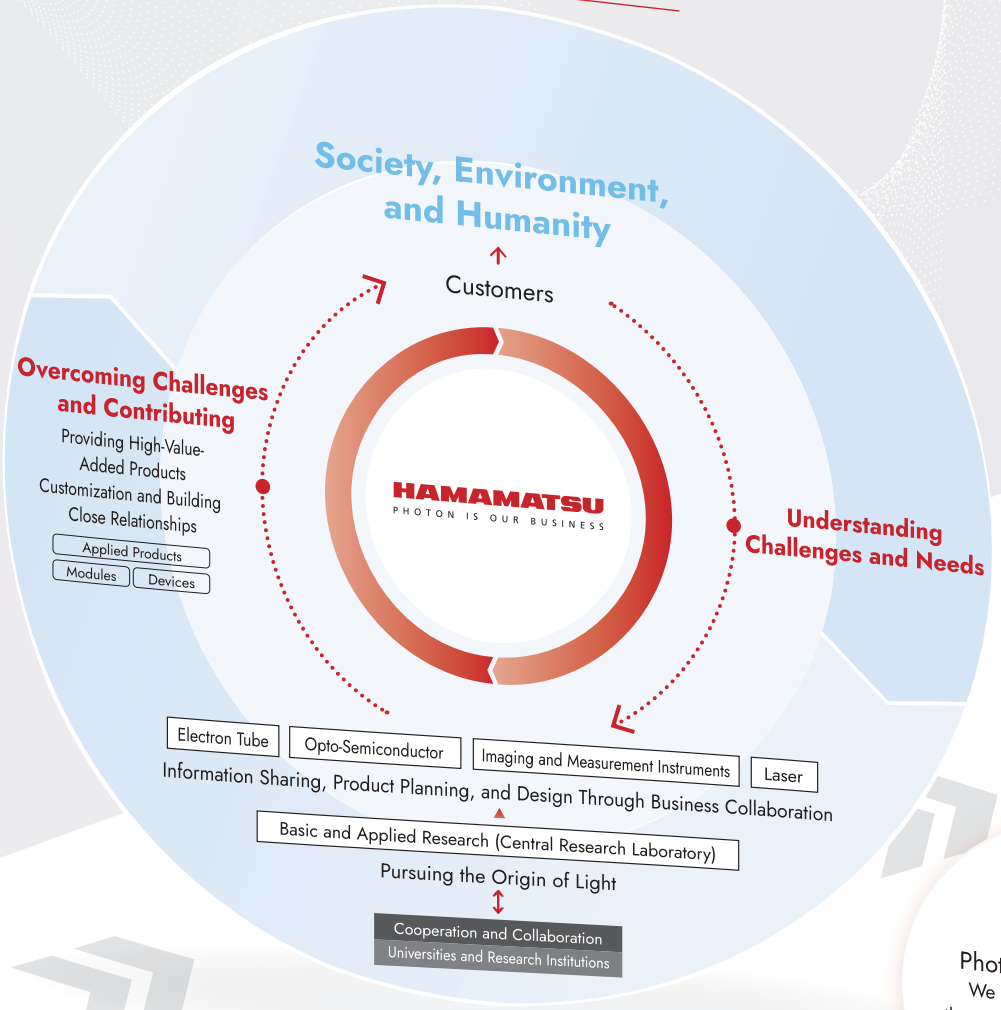
Creating social and environmental values throughout our business

- Contributing to the enhancement of social and environmental values with light-powered innovation
- Contributing to the realization of a stable and prosperous economy and society through sustainable, highly profitable management
- Contributing to customers' value by providing superior safety, quality, and service

02

Strengthening our business base / Meeting CSR and fulfilling expectations

- Promote earth-friendly business practices that coexist in harmony with our planet
- Creating a happier employment system and workplace
- Developing human resources to support the Group's growth and contribution to society
- Promote governance and management that ensures stability and growth in value creation
- Establish a stable supply system and responsible supply chain for products



Output

FY2024 results

Products and services

	Net sales
Medical-bio instruments	¥64.9 billion
Industrial instruments	¥66.3 billion
Analytical instruments	¥20.4 billion
Academic research	¥16.4 billion
Measuring instruments	¥10.2 billion
Transport instruments	¥5.6 billion

- Electron Tube Segment
- Opto-Semiconductor Segment
- Imaging and Measurement Instruments Segment
- Laser Segment

Outcome

FY2024 results

Human capital
- Average years of service: 15.4 years
- Turnover rate: 1.0 % (FY2023)

Financial capital
- Net sales: ¥203.9 billion
- Operating profit: ¥32.1 billion
- Operating profit ratio: 15.7 %

Manufacturing capital
- High-performance, high-quality products that meet global needs

Intellectual capital
- Patents held: 7,834

Social capital
- Contribute to healthcare by preventing the spread of infectious disease
- Contribute to semiconductor manufacturing

Natural capital
- Greenhouse gas emissions: 7,379 t-CO_2 (17.7% reduction from the previous fiscal year)
- Water usage: 855,000 m^3 (7.0% reduction from the previous fiscal year)

MISSION

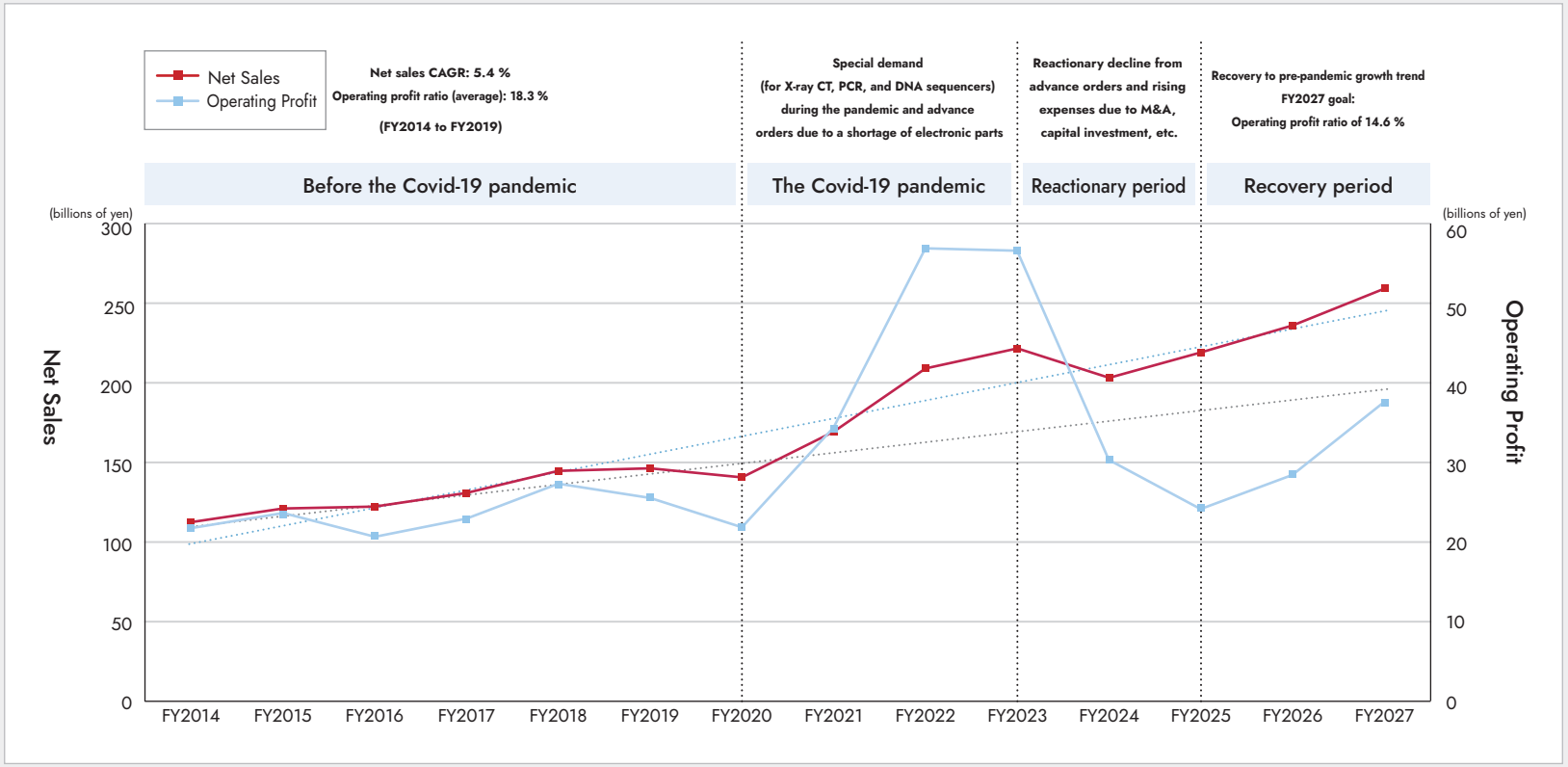
Photon is our business
We dedicate our efforts to the advancement of science and technology for a better society and a healthier planet.

Medium-Term Plan

We aim to grow in our existing markets while expanding our business through the acquisition and creation of new markets.

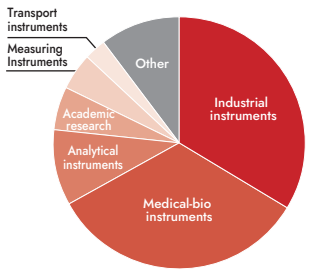
FY2027 Target

Net Sales ¥259.1 billion | Operating Profit ¥37.7 billion (Operating profit ratio: 14.6 %) | EBITDA ¥62.0 billion (EBITDA margin: 24.6 %) | ROE Over 8 %



Medium-Term Plan FY2027 Planned Net Sales

Sales (billions of yen)



Industrial instruments	87.2
Medical-bio instruments	86.4
Analytical instruments	25.6
Academic research	14.5
Measuring instruments	11.8
Transport instruments	7.2
Other	26.4
Total	259.1

Electron Tube Segment

Review of FY2024



Microfocus X-ray sources

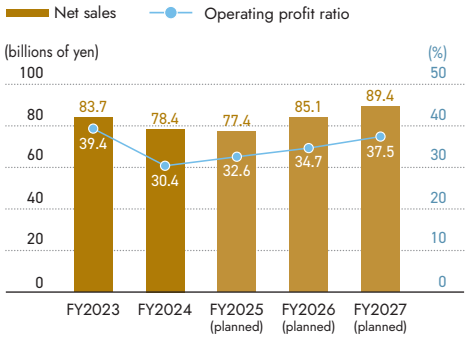
Sales significantly declined due to the stagnation of the EV market.



Deuterium lamps

Sales declined due to stagnant demand for drug ingredient analysis, etc.

Segment profit and loss



Opto-Semiconductor Segment

Review of FY2024



Si photodiodes for X-ray CT

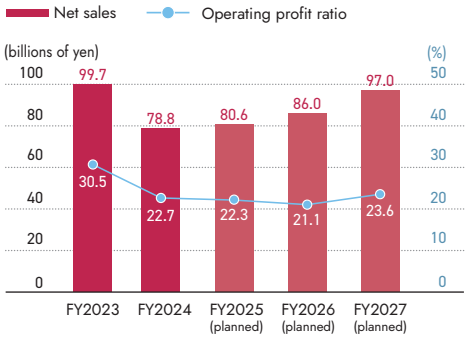
Sales declined due to a rebound from the surge in orders following the parts shortage up until the previous year.



Flat panel sensors for dental diagnostic equipment

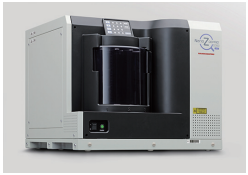
Sales declined due to intensified price competition following the emergence of overseas rival manufacturers.

Segment profit and loss



Imaging and Measurement Instruments Segment

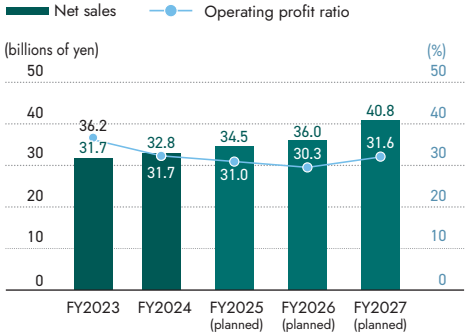
Review of FY2024



Digital pathology slide scanners

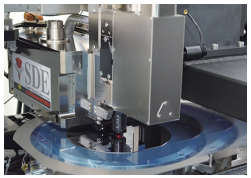
Sales increased due to a rise in domestic demand.

Segment profit and loss



Laser Segment

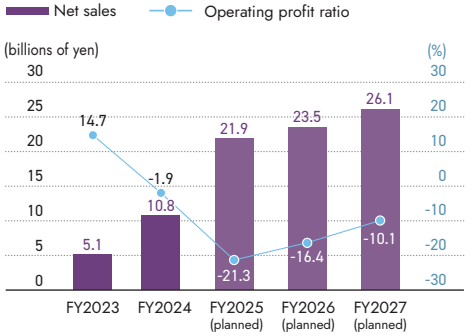
Review of FY2024



Stealth Dicing™

Sales increased due to favorable capital investment in generative AI.

Segment profit and loss



Growth Strategy

Leveraging our strengths to grow in existing markets

1

- Introduce new technologies in a timely manner to capture emerging trends and secure a strong, unwavering position.
- Utilize in-depth market knowledge, customer networks, and high market share.

Industry | Medical (Diagnosis)

Growing with a new business model

2

- Introduce high-value-added modules.
- Integrate in-house technologies to ensure high profit margins with a new business concept.

Modules

Growing in new markets

3

- Fully leverage the synergies from the NKT Photonics acquisition.
- Create synergies through light detection and emission technologies.
- Accelerate growth in new markets held by NKT Photonics.

Quantum Technology | Medical (Treatment) | Security

Establishing new markets with the results of the Central Research Laboratory

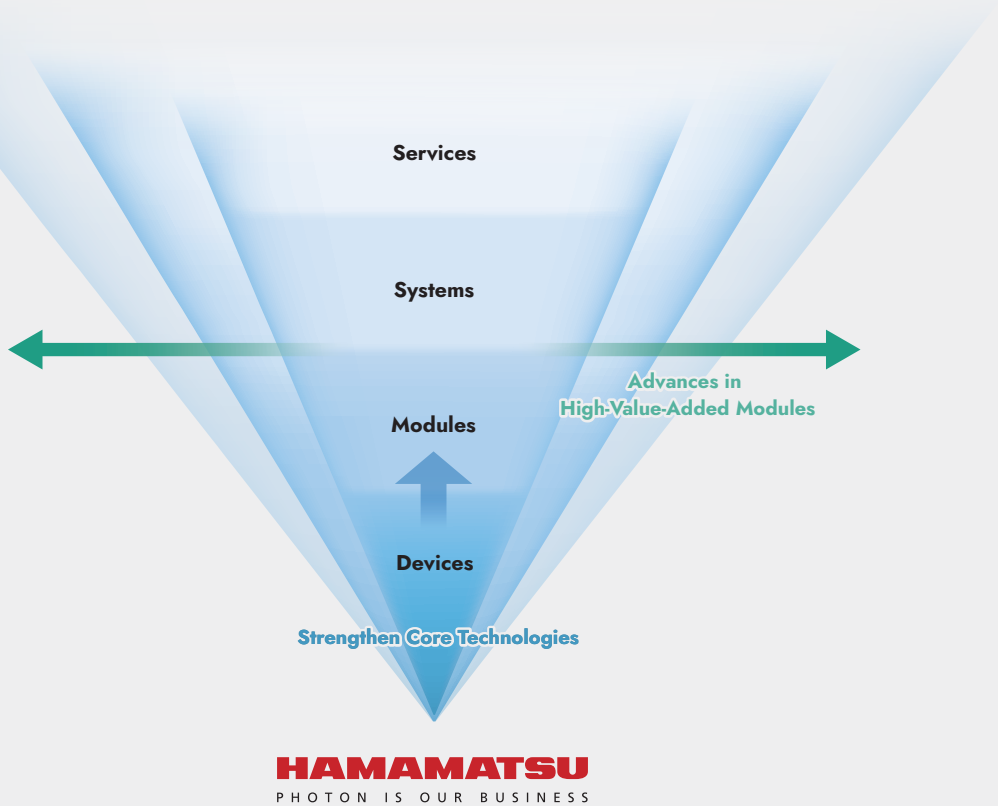
4

- Bring the fruits of the Central Research Laboratory to the market.
- Create new markets in photonics as a medium- to long-term strategy.

Terahertz Spectroscopy | Laser Processing

Creating and Expanding the Photonics Industry

The photonics industry is an inverted pyramid structure with devices at the base. We supply devices that form the foundation of this structure, such as optical sensors and light sources, modules that add value to these devices, and specialized systems that apply these to specific applications. Going forward, we will expand the photonics industry by focusing on the innovative evolution of our core device technologies, which drive our competitiveness, and expanding our business in high-value-added modules and systems, customized through the advanced integration of light detection and emission technologies, while also creating solutions and new industries that meet customer and market demands.



Medical-bio Instruments

Introduce new technologies in a timely manner to capture emerging trends and secure a strong, unwavering position

In-depth market knowledge | Strong customer network | High market share

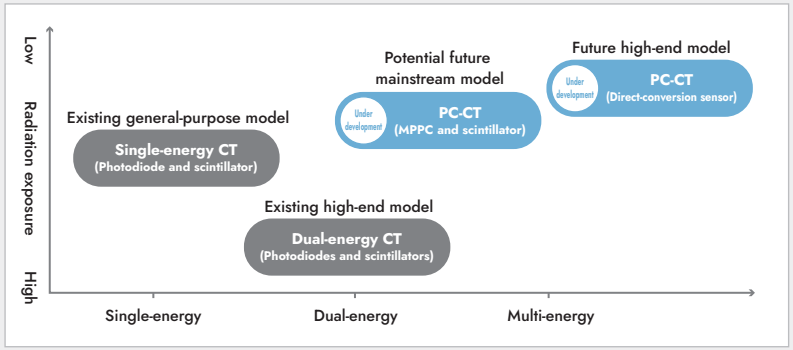
X-Ray CT

Trend: Low radiation exposure and improved spatial resolution

Developing a high-sensitivity (photon-counting CT) detector

Photon-counting CT (PC-CT) is the latest medical imaging technology that provides images with extremely high spatial and energy resolution while significantly decreasing radiation exposure during scans. Currently, many medical device manufacturers and research institutes are advancing the development of X-ray direct current elements such as cadmium telluride (CdTe) and cadmium zinc telluride (CdZnTe or CZT). However, we are advancing the development of a Si-based detector for PC-CT with consideration for the environment.

1. We are developing a Cd-free Si-based detector for PC-CT with consideration for the environment and introducing new products to meet demand for low radiation exposure.



2. We built a new process line for 8-inch Si wafers.

This will enable efficient production.

New No. 5 Main Factory



Scheduled to begin operation in FY2026

PET

Trend: Improved PET imaging resolution and contrast

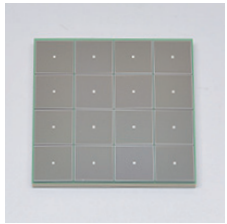
Developing a high-time resolution detector for PET

Time-of-flight (TOF)-PET is a technology that measures the time difference when two gamma rays enter the detector to more accurately estimate the point of origin. Since the effect increases with the size of the object, image quality degradation in PET images caused by the body is expected to improve.

We are promoting modules with value added to high-performance MPPC®.

MPPC Photodetector MPPC array

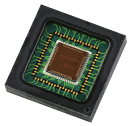
The MPPC array achieves low afterpulsing, low crosstalk, and low dark count. Hole wire bonding is used to minimize the area around the photosensitive region that lacks sensitivity.



MPPC® Multi-Pixel Photon Counter

ASIC ASICs

ASICs, TDCs, FPGAs, and other signal processing circuits required for processing photon-counting signals in TOF-PET are mounted on a compact circuit board.



MPPC modules for PET

MPPC + LYSO + ASIC + Power

We provide comprehensive modules optimized for PET applications by integrating MPPC arrays, scintillators, ASICs, and power supply units.

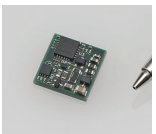
LYSO Scintillators

The lutetium scintillator features high light yield and fast decay time. This enables construction of excellent PET images.



Power Power supplies

Our high-voltage power supplies feature a temperature compensation function to ensure stable operation of the MPPC. This enables operation of multiple MPPCs with a single power supply.



Industrial Instruments

Introduce new technologies in a timely manner to capture emerging trends and secure a strong, unwavering position

In-depth market knowledge | Strong customer network | High market share

For Semiconductor Manufacturing Equipment

Trend: 3D structuring of devices

Company Initiatives

Stable supply of our products, which are essential for semiconductor manufacturing and testing equipment

Mask blanks/ Mask Inspection

EUV light source for inspection



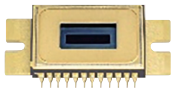
Optical critical dimension measurement

Laser-Driven Light Sources (LDLS)



Optical endpoint detection plasma emission spectroscopy

CCD image sensor for spectroscopic measurement



Wafer detect inspection/Metrology

Xenon lamps



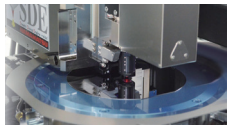
Photomultiplier tubes



TDI-CCD image sensors



Stealth Dicing™



Introduce new technology (module products) needed for future semiconductor manufacturing equipment

OPAL-Luxe® high dynamic range spectrometer

NEW



Features: High dynamic range
Applications: Endpoint monitors

QPM optical modules

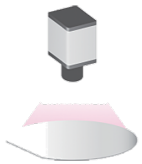
NEW



Features: Uses interference microscopy technology
Applications: Wafer detect inspection/Metrology

Wafer thickness mapping

Under development



Features: Enables bulk wafer measurement
Applications: Wafer thickness measurement

Laser engine for edge trimming

Under development



Features: Applies distinctive laser technology
Applications: Wafer edge trimming

Industrial Instruments

Introduce new technologies in a timely manner to capture emerging trends and secure a strong, unwavering position

In-depth market knowledge | Strong customer network | High market share

Failure Analysis Systems

Trend: Using full-automation control to automate analysis and improve accuracy of failure analysis

Company Initiatives

Failure Analysis Systems

Demand for analysis in automated lines

Full automation support

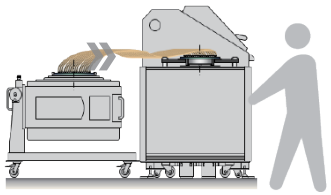
Multifaceted failure analysis is made possible by multifunctional equipment with various analytical methods tailored to different failure conditions, such as detecting heat and weak light emission, or stimulating the device with laser irradiation to capture signals resulting from the failure.



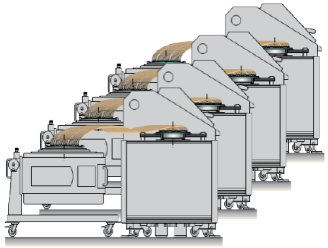
New technology (heat generation analysis) enables the expansion of applications from device manufacturers to foundries

For memory (High-bandwidth memory (HBM) for AI)

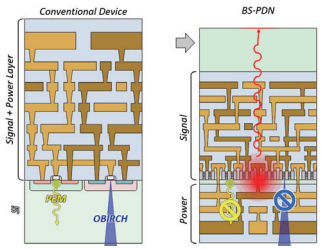
Failure analysis
Sampling inspection



Yield analysis
Wafer full-chip analysis



For logic



Since wiring layers are stacked on both sides of the silicon, failure analysis was difficult using conventional analysis methods, but it is now possible with the new technology of heat generation analysis.

Concept

- Integrate in-house core technologies
- Provide superior new devices as high-value-added modules

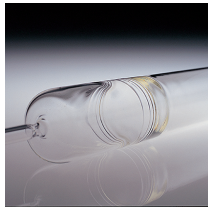
Establish high-value-added modules as a new business model

Electron Tube Segment

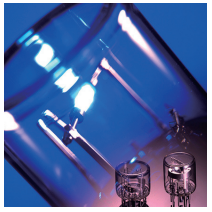
Photocathode technology



Glass processing technology

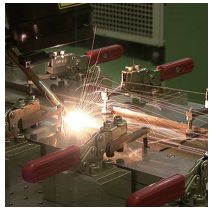


Discharge technology

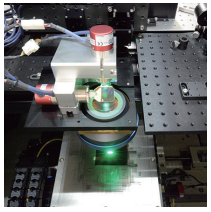


Laser Segment

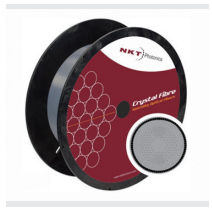
Lasers for thermal processing



Lasers for non-thermal processing



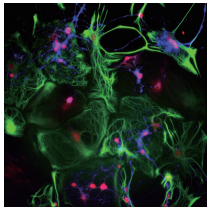
Photonic crystal fibers



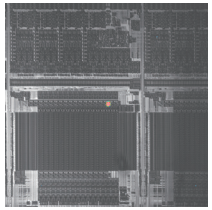
Value

Imaging and Measurement Instruments Segment

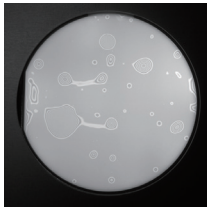
Microscope imaging technology



Failure analysis technology

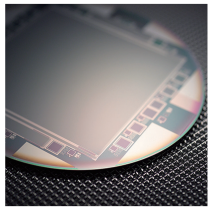


Internal observation technology



Opto-Semiconductor Segment

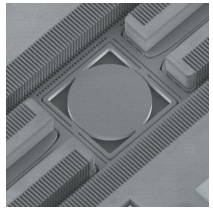
Semiconductor process technology



Assembly technology



MEMS technology

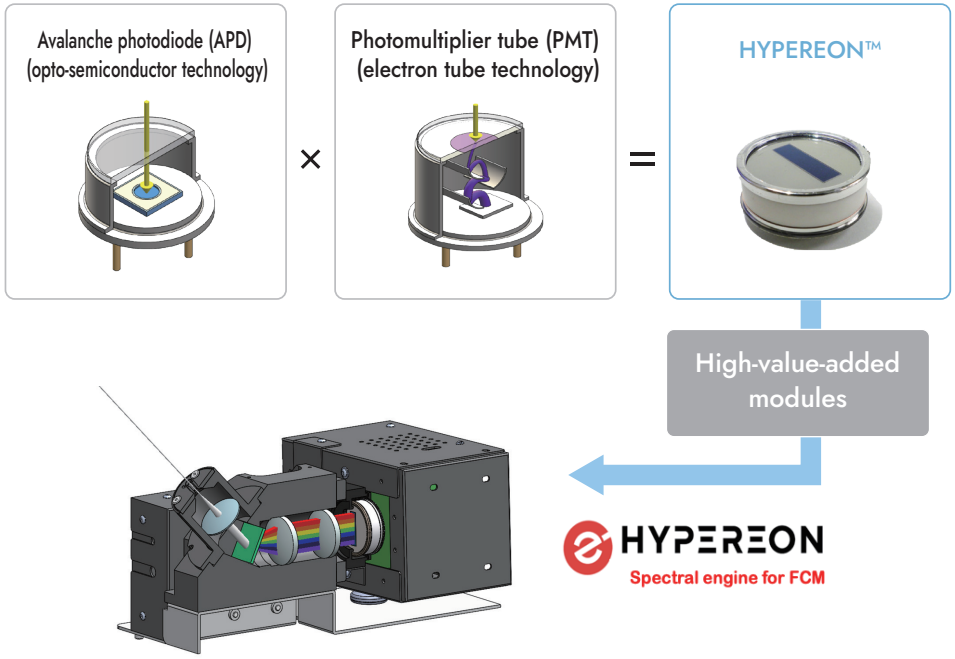


Case Studies of Business Collaboration Custom Modules

Innovative New Devices

Case study: Spectroscopic module for flow cytometer

Flow cytometry is a technique for obtaining various types of cellular information by measuring scattered light and fluorescence. The device used to make these measurements is called a flow cytometer.
Fluorescence labeling with specific antibodies can be used to detect intracellular and extracellular markers and quantitatively assess cell populations based on multiple parameters, such as cell type, activation state, and cell cycle state.



HYPEREON™: A new optical sensor technology combining opto-semiconductor and electron tube technologies

This technology converts light to electrons using electron tube technology and amplifies them using opto-semiconductor technology, enabling high-sensitivity detection of weak light.
It maximizes the synergistic effect of the uniformity in measurements achieved through our developed opto-semiconductor technology and the high-sensitivity, ultra-low noise, and high-speed response features of our electron tube technology. As a result, it is possible to accurately and quickly capture weak light and slight differences in intensity that could not be measured until now.

We aim to provide modules that are tailored to applications in various fields, including medical-bio, industrial and analytical instruments.



HAMAMATSU
PHOTON IS OUR BUSINESS × NKT Photonics

In May 2024, our Group acquired NKT Photonics A/S. This Danish company has the world's most advanced fiber lasers and fiber technology (photonic crystal fibers) to amplify laser light. Photonic crystal fiber technology is used to bundle 1,000 hollow glass tubes, each stretched to 1/10,000th the thickness of a human hair, to amplify laser light with high precision. Ultra-high brightness laser light sources using this technology are employed in various fields including industry and life sciences.

Business domain

Development, manufacture, and sale of laser equipment and laser equipment components

Products

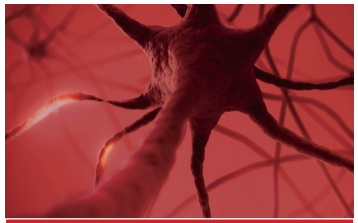
- White light lasers
- Single-frequency fiber lasers
- Ultra-short pulsed lasers
- Photonic crystal fibers (PCF)

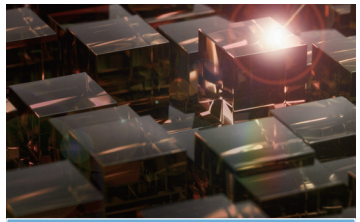
Core technology: Photonic crystal fibers (PCF)

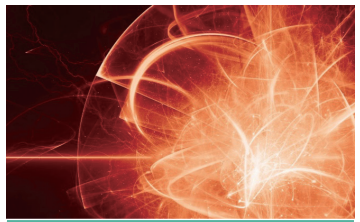
- World's only laser light amplification technology
  World's only optical fiber technology capable of amplifying ultrashort pulsed laser
- Sole manufacturer with mass production and supply system for PCF
- Capable of transmission and guidance of ultra-high brightness light



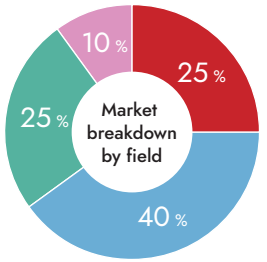
Markets


Medical and life sciences


Industrial


Quantum and nanotechnology


Security



New markets created through synergy with NKT Photonics

- Quantum computing → Provide key devices to determine performance
- Ophthalmic laser treatment → Provide high-quality, highly stable lasers
- Security measures for public facilities → Use lasers to contribute to drone tracking and neutralization

Basic and Applied Research at Hamamatsu Photonics

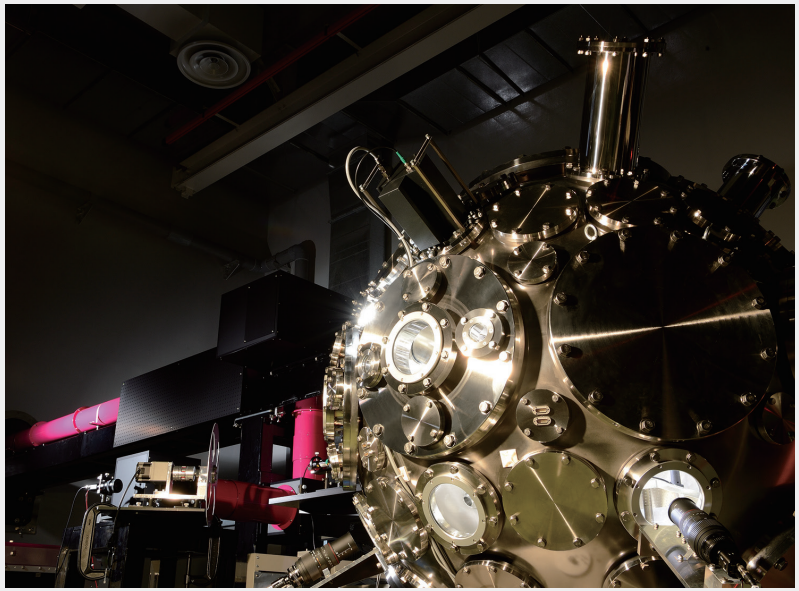
At the foundation of our Company is the desire to harness science and technology to realize products that are useful to society.
Based on the concept that true value lies in new knowledge, we pursue the endless possibilities of light, with a fundamental approach to research and development to solve major challenges in society and contribute to the well-being of everyone.

Laser fusion

Energy is one of many challenges facing modern society that must be resolved. Currently, more than 80 % of Japan's primary energy comes from fossil fuels but the energy resources on our planet are limited.
Amid this situation, fusion power generation, which can extract energy from hydrogen isotopes found in inexhaustible quantities in seawater, is said to be a secret weapon for solving global energy issues and environmental challenges such as global warming, and is expected to be realized soon.
We are working on multifaceted research and development to establish laser technologies, with laser fusion power generation at their core, for application in power reactors.

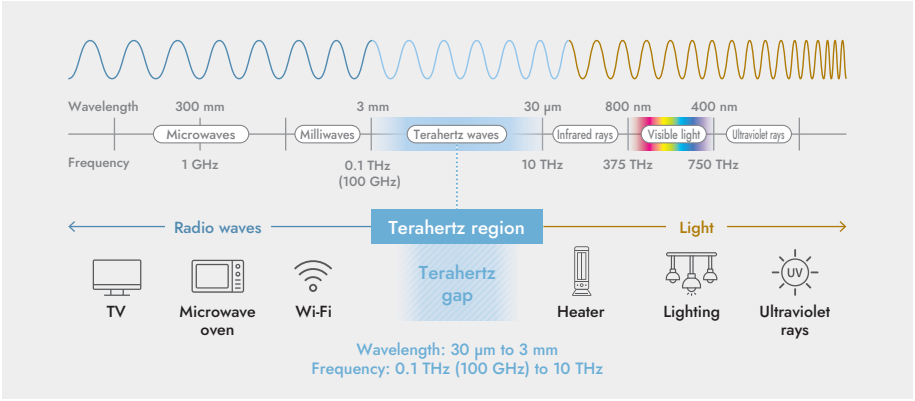
Scan here for more information on laser fusion. ▶

https://www.hamamatsu.com/jp/en/our-company/business-domain/central-research-laboratory/energy/laser-fusion-research.html

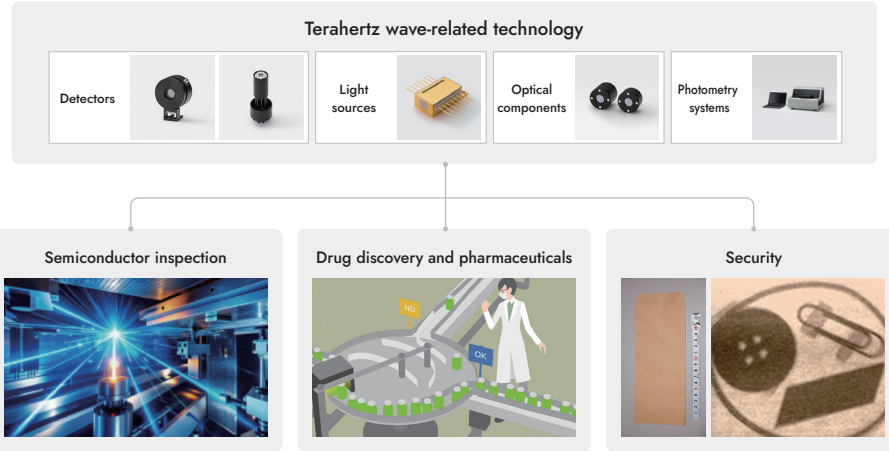


Strengthening our efforts to create new markets through basic research

Application of Terahertz Waves

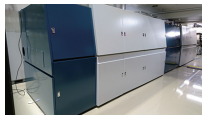


Terahertz (THz) waves lie between light and radio waves and have properties of both. Until now, this region saw limited progress toward practical application, and it has been called the "THz gap," but in recent years, it has been gaining attention as one of the most promising areas of photonics. To pioneer this THz wave region, we are developing both light source and detector devices in an effort to create new markets using THz spectroscopy and THz imaging technology.

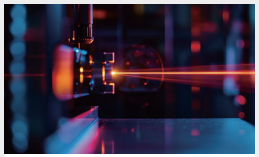


Application of High Power Lasers

For 30 years, we have been working on the development of high power laser technology to realize laser fusion. We are also aiming to apply the laser technology developed through this process to industry and society, and continue to take on new challenges with a multifaceted approach.


100 J-class pulsed solid state laser

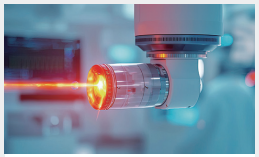
Expected applications of high power lasers


Material analysis

Creation and analysis of new materials under ultra-high temperature and pressure conditions

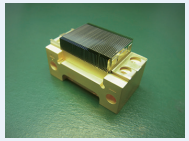

Decommissioning work

Demolition of large concrete structures and shortening the lifespan of high-level radioactive waste


Medical applications

Radiation therapy using a compact particle accelerator

Development of Highest-Density LD Module as a pump source of 1-kJ Laser used for Fusion Research



We have established proprietary technology that vastly improves the manufacturing precision of semiconductor laser modules or laser diode (LD) modules. This in-house technology has led to successful development of a new LD module with a power density of 23 kW/cm^2. This is about 4 times greater than our current LD modules and the world's highest level among light sources for pumping* lasers in laser fusion applications.

* Pumping is the process by which electrons in an atom or molecule are raised to a higher energy level through light absorption.

Scan here for more information. ▶

https://www.hamamatsu.com/jp/en/news/products-and-technologies/2024/20241105000000.html

Message from the Finance Officer

Aiming for a financial strategy as the foundation for sustainable growth



Director, Managing Executive Officer
Chief of Finance and Accounting General Headquarters

Kazuhiko Mori

FY2024 results and FY2025 outlook

In FY2024, net sales totaled ¥203.9 billion (down ¥17.5 billion from the previous fiscal year), and operating profit totaled ¥32.1 billion (down ¥24.5 billion from the previous fiscal year). This was mainly due to a decline in sales resulting from the special demand during the pandemic that continued until the previous fiscal year, as well as a reactionary decline from advance orders due to the shortage of electronic parts. In terms of profitability, the sharp decline in sales led to a decline in gross profit, and rising expenses such as depreciation and personnel expenses impacted earnings, contributing to lower profits.
For FY2025, we are aiming for net sales of ¥218.9 billion (up ¥15 billion from the previous fiscal year) and operating profit of ¥24.1 billion (down ¥8 billion from the previous fiscal year). While we expect a contribution of sales from NKT Photonics and demand to recover in many industries, leading to revenue growth in the second half of the fiscal year, profits are expected to decline due to increased upfront costs related to capital investment and acquisitions.

Three-year capital allocation plan

Total capital of ¥317 billion over a three-year period will be used as shown on the left side of page 28. We will secure sufficient funds for growth investments to ensure sustainable and stable management, while maintaining a balance with shareholder returns. The flexible allocation of ¥30 billion will prioritize strategic investment projects, such as M&A, and any surplus funds will be considered for additional shareholder returns.

Our shareholder return policy

Our dividend policy is based on working to steadily increase dividends, with a target payout ratio of 30 %. We plan to return ¥55 billion to shareholders over the next three years. To further clarify our commitment to stable dividends for long-term shareholders, we have decided to add dividend on equity ratio (DOE) as a lower limit to our existing dividend policy. This approach is less affected by single-year performance, ensuring stability amid significant short-term fluctuations.

My goal as Finance Officer

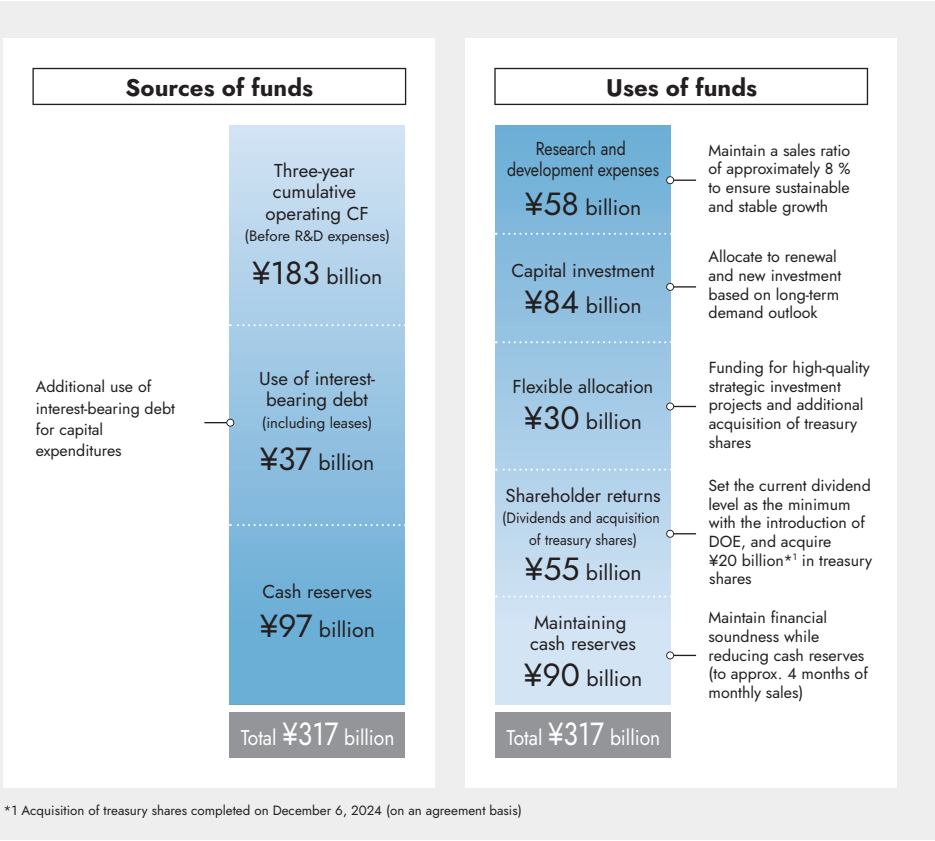
To adapt flexibly and appropriately to environmental changes and enhance corporate value, we will pursue management that prioritizes capital cost awareness while aiming to put our future growth strategy into practice through strategic resource allocation.
While our ROE for FY2025 is expected to be 5.5 %, which is below our estimated cost of equity capital of 6 to 7 %, we are targeting net sales of ¥300 billion, operating profit of ¥60 billion, and operating profit ratio of over 20 % by FY2030. We believe an operating profit ratio of 20 % will lead to achieving an ROE of over 10 %, and we will do our best to achieve this. As Finance Officer, I will strive to effectively manage our balance sheet and improve capital efficiency while appropriately allocating necessary funds to support the foundation for sustainable growth within the Group.

Financial Strategy

Capital Allocation Plan

FY2025 to FY2027

We will secure sufficient funds for growth investments to ensure sustainable and stable management, while maintaining a balance with shareholder returns.



*1 Acquisition of treasury shares completed on December 6, 2024 (on an agreement basis)

Shareholder Return Policy

To further clarify our commitment to stable dividends, we have added dividend on equity ratio (DOE), which is less affected by single-year performance, as a lower limit to our existing dividend policy.

Dividends

Basic policy	Minimum policy
Payout ratio*2	Dividend on equity ratio
Target of 30 %	3.5 %

- The existing policy of a payout ratio of 30 % will be maintained.
- However, in situations where profitability temporarily decreases due to factors such as amortization, a stable dividend will be maintained by adopting a 3.5 % dividend on equity ratio as a minimum policy.
- The 3.5 % dividend on equity ratio is set as the minimum for the current dividend level.

Acquisition of treasury shares

¥20 billion*3 + Flexible implementation

- Decisions on flexible implementation will be made based on a comprehensive consideration of the following:
  - ▶ Surplus funds generated through improved capital efficiency
  - ▶ Trends in implementing strategic investment projects (such as M&As)

*2 Dividends / profit attributable to owners of parent
*3 Acquisition of treasury shares completed on December 6, 2024 (on an agreement basis)

Message from the Sustainability Officer

Unlocking and harnessing the possibilities of light to continue to create social and environmental value



Director, Managing Executive Officer
Chief of Global Management and
Planning General Headquarters

Ken Nozaki

Sustainability management of Hamamatsu Photonics Group

Driven by our mission to advance science and technology for a better society and a healthier planet and to contribute to the health and well-being of all, we engage in research, development, and manufacturing of photonics technologies and products guided by our management philosophy, exploring new frontiers of light and creating new markets through the power of photonics. Our sustainability management is based on achieving sustainable growth as a company that unlocks and harnesses the infinite possibilities of light to create social and environmental value. In order to better implement the Added Value Creation Cycle of building close relationships with customers to identify and assess their needs, followed by planning and development to manufacture and deliver products, we have reexamined issues facing the Group. In 2023, we identified eight material issues and goals to be addressed (Materiality) that will create social and environmental value through photonics technologies, and are promoting multifaceted initiatives to achieve these. These initiatives embody our sustainability management practices to ensure sustainable growth well beyond our 100th anniversary.

Becoming a social and environmental value creation company

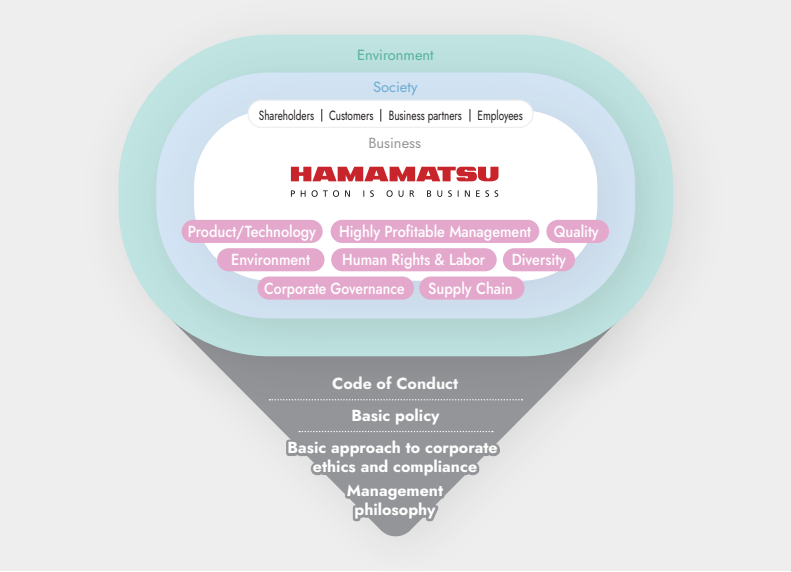
Our photonics products are used as key devices in applications that require advanced performance and precision in a wide range of fields, such as medical care, industry, analytical, and academic research. It is our firm belief that providing these products directly contributes to the creation of a better society and environment through advanced innovation by our customers. To enable that innovation, our products must incorporate advanced photonics technologies and deliver outstanding safety, quality, and service, and each of our workers continues to take on challenges every day to achieve this. The key to achieving this is a stable and sustainable highly profitable structure. Such a structure will establish a cycle of proactive research and development and capital investment, in turn enhancing our technological capabilities and allowing us to anticipate the evolving needs of an advanced and sophisticated society, while delivering effective solutions. These efforts are built on a foundation of trust with our customers and our many stakeholders, and we are committed to providing accurate information to bring these efforts to fruition.

As mentioned in the message from the president (page 10), our Group aims to contribute to humanity through photonics technology, and we have long been working on laser fusion and application research of positron emission tomography (PET). While laser fusion is expected to liberate the planet, environment, and humanity from energy constraints, PET will lay the foundation for people to lead healthy, fulfilling lives in society. These two frontiers of research are representative of our commitment to contributing to the future of the planet through our business in the photonics industry.

The foundation of our success lies in people, technology, and knowledge. To strengthen this foundation and fulfill our corporate social responsibilities, we will develop human resources that support the Group's growth and contribution to society, create a happier employment system and workplace for this development, promote governance and management that enhances and protects our technology and knowledge with a corporate culture of stable value creation, and promote earth-friendly business practices that coexist in harmony with our planet as part of our role as a member of society while establishing a stable supply system and responsible supply chain for products.

Backed by these eight material issues and goals to be addressed (Materiality, Page 30), which have been defined and organized based on our management philosophy, our Group will implement specific activities under the guidance of the Board of Directors to push forward toward new frontiers of light and pursue unexplored areas of photonics technologies. In doing so, we aim to maintain sustainable growth and continue to be a company that creates social and environmental value.

Progress of Material Issues and Goals to be Addressed (Materiality)



Material issues and goals to be addressed (Materiality)

Creating social and environmental values throughout our business

1	Product/Technology	Contributing to the enhancement of social and environmental values with light-powered innovation
2	Highly Profitable Management	Contributing to the realization of a stable and prosperous economy and society through sustainable, highly profitable management
3	Quality	Contributing to customers' value by providing superior safety, quality, and service

Strengthening our business base / Meeting CSR and fulfilling expectations

4	Environment	Promote earth-friendly business practices that coexist in harmony with our planet
5	Human Rights & Labor	Creating a happier employment system and workplace
6	Diversity	Developing human resources to support the Group's growth and contribution to society
7	Corporate Governance	Promote governance and management that ensures stability and growth in value creation
8	Supply Chain	Establish a stable supply system and responsible supply chain for products

Hamamatsu Photonics Group has identified eight material issues aimed at creating social and environmental value, taking into account the impact of our business activities on society and the environment. We have set these as material issues and goals to be addressed (Materiality), and together with the Hamamatsu Photonics Group Basic Policy of Sustainability (page 31), we believe they will serve as the foundation for promoting a wide range of sustainability activities. The following are the major activities implemented by the Group during the fiscal year.

Key initiatives by material issue

Quality

- Provided quality compliance training to all employees.
- Established and operated a quality management system in compliance with ISO 9001. Page 32

Environment

- Disclosed information based on TCFD recommendations. Page 34
- Formulated a transition plan toward achieving carbon neutrality and started carbon neutral project activities. Page 35
- Took action to protect water resources.
- Implemented cleanup activities in support of the Hamamatsu Biodiversity Strategy.
- Assessed the water risk at domestic and overseas manufacturing sites and took necessary measures. Page 36
- Implemented various environmental initiatives at locations of overseas subsidiaries. Page 37

Corporate Governance

Intellectual property
- Accumulated intellectual property of key technologies that support business strategies.
- Stimulated in-house IP communication such as by holding invention consultation sessions where inventors talk directly with patent attorneys. Page 33

Compliance
- Conducted compliance training. Page 49

Human Rights & Labor

Human resource development
- Provided education and training for various groups such as young employees and management. Page 38

Human rights
- Promoted human rights due diligence. The first step was to analyze and identify human rights risks within the Company (non-consolidated). Page 39
- Conducted human rights training and provided education focused on harassment.

Health management
- Implemented various health measures, including physical fitness assessments, nutrition education, distribution of health-related videos, dental exams, sleep education, and body design school. Page 41
- Conducted PET research screenings (PET cancer screenings) for interested employees 40 years or older in cooperation with the Hamamatsu Medical Imaging Center of the Hamamatsu Medical Photonics Foundation.

Diversity

- Continued to provide seminars focusing on women's specific health issues for all employees, and held internal events for International Women's Day on March 8.
- Implemented initiatives to deepen understanding of LGBTQ issues through e-learning education and internal awareness surveys. Page 40

Supply Chain

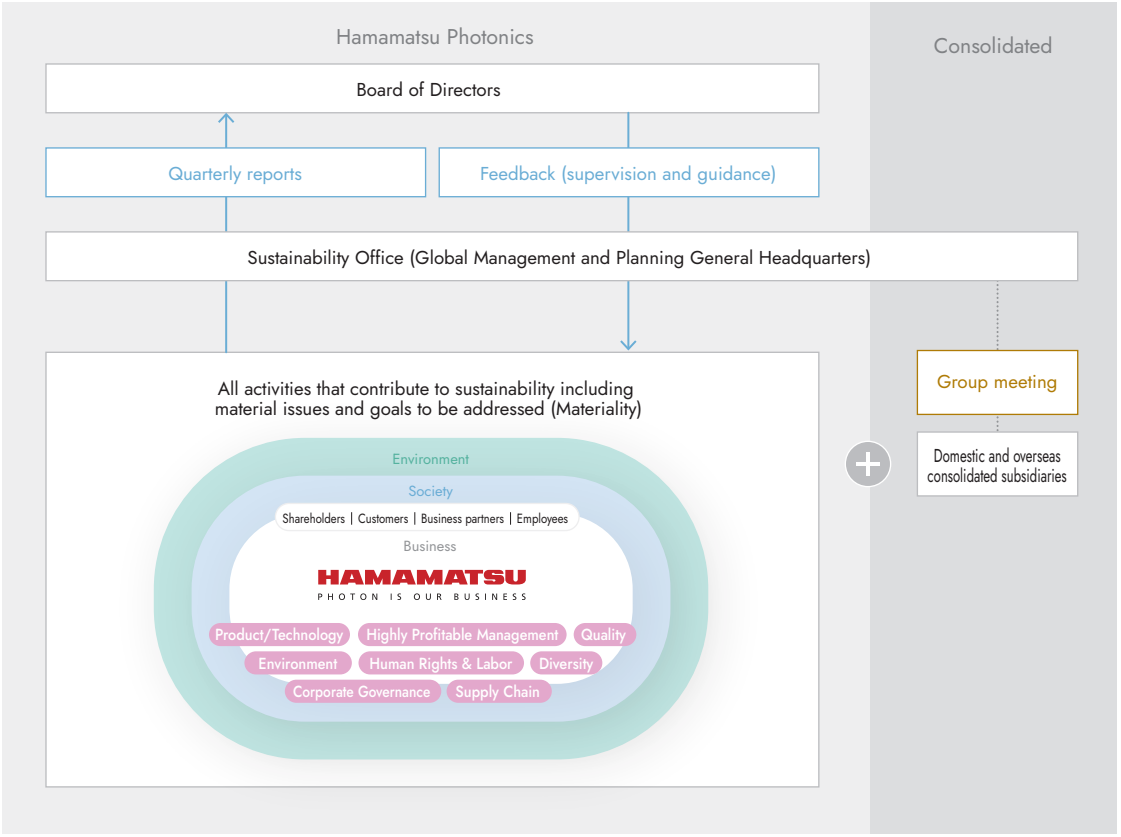
- Revised our Supply Chain Code of Conduct.
- Practiced responsible minerals sourcing. Page 42

Sustainability Initiatives

URL
https://www.hamamatsu.com/all/en/our-company/sustainability/approach-to-sustainability.html

Sustainability Promotion Structure

In April 2023, the Global Management and Planning General Headquarters was launched to further promote sustainability management while addressing Group-wide issues that could not be covered under the previous structure. The Global Management and Planning General Headquarters will serve as the Sustainability Office, overseeing all activities contributing to sustainability, including the material issues and goals to be addressed (Materiality), as established in August 2023. Quarterly reports will be submitted to the Board of Directors, which will provide feedback in the form of supervision and guidance to advance Group initiatives.



Hamamatsu Photonics Group Basic Policy of Sustainability

The Hamamatsu Photonics Group is dedicated to exploring the unknown and unexplored aspects of light. We are committed to creating new markets that contribute to a better society and a healthier planet by utilizing new technologies and knowledge to discover new opportunities. Aiming to grow as a company that is sound and trusted, we will maintain high awareness of sustainability and compliance, and work together with all stakeholders to promote business.

1. We will strive to pursue the unknown and unexplored of light, and aim to establish new industries.
2. We will contribute to social and human development by offering safe and high-quality products and services with photonics technology.
3. We will ensure corporate ethics and foster the corporate culture that all employees conduct the right behaviors as members of society.
4. We will strictly abide by all relevant laws, regulations, and conventions, be they local, national, or international, in letter and in spirit.
5. We will conduct fair transactions, appropriately manage information, and prevent unauthorized access, information leakage, and unauthorized use.
6. We will provide appropriate and accurate information to our stakeholders in a timely manner.
7. We will conduct ecologically-sound and sustainable business activities, considering the environment and contributing to its preservation.
8. We will give consideration to people who are affected by our business activities, and respect human rights.
9. We will respect our employees, support their development, and provide a pleasant and safe work environment.
10. We will continue to serve as a philanthropic partner within our local communities.

Established as the Basic Policy of Sustainability on October 22, 2021 by resolution of the Board of Directors
Revised on May 24, 2024 by resolution of the Board of Directors

Strengthening Engagement within the Group

To advance our sustainability initiatives through the activities of each employee, we launched an internal portal site in October 2024 with the aim of disseminating sustainability-related information. We are planning to share a variety of content to spark conversations among employees about what is needed in our activities moving forward to achieve a sustainable future.
Furthermore, in a Group-wide meeting held in November 2024, we discussed the status of our sustainability initiatives and our future overall approach with representatives of consolidated subsidiaries in Europe, the U.S., and Asia. We reaffirmed our commitment to advancing unified activities based on respect for the diversity of countries, regions, languages, culture, and individuals.

Quality

URL
https://www.hamamatsu.com/all/en/our-company/sustainability/quality-control.html

Hamamatsu Photonics Group Quality Policy

The Hamamatsu Photonics Group pursues customer satisfaction, and the realization of the development of science and technology to contribute to a better society and a healthier planet through our Quality Policy.

1 **Compliance with laws and regulations relevant to quality**
We will abide by all relevant product laws and regulations, individual contracts and voluntary requirements.

2 **Continuous improvement of quality management systems**
We will continuously improve our quality management systems, and provide customers with high-quality, safe products, and levels of service that meet their expectations.

Promotion Structure

The Quality Headquarters Council, a cross-sectional body within the company, has been established to share information on quality, standardize quality-related documents, and provide education to suppliers (supply chain). The committee also supports the quality management of our manufacturing subsidiaries, and strives to maintain and improve the quality of the Hamamatsu Group.

Detailed Initiatives

Quality compliance training

We conduct e-learning training and post information on our internal website to deepen each employee's understanding of quality compliance. We strive to enhance the awareness of employees through education and foster a corporate culture that prevents quality non-compliance.

Training details

- Severity of quality non-compliance
- Causes and measures
- Case studies

Quality management system

Each division has established and operates its own Quality Management System in compliance with ISO 9001. In this system, items that are basic requirements are formalized in a "Quality Manual" and rules for design, development, purchasing, manufacture, inspection, shipping, and after-sales service are set down in document form to create a consistent quality assurance system.

Status of Quality Management System Certification

Certified unit	Site	Certified in
Electron Tube Division	Toyooka Factory Tenno Glass Works	February 1997
Solid State Division	Main Factory Mitsue Factory Shingai Factory	January 1998
Systems Division	Joko Factory	June 1998
Laser Division	Miyakoda Factory	March 2016

Intellectual Property

URL
https://www.hamamatsu.com/all/en/our-company/sustainability/governance/intellectual-property.html

Basic Approach

The management philosophy of the Hamamatsu Photonics group states, "Every day, we strive to pursue the unknown and unexplored. Based on new technologies and knowledge exploring new opportunities, we create markets that contribute to a better society and a healthier planet." Knowledge, demands and technologies that are acquired through the process of creating Photonics industries is the foundation of our business. Results acquired are supplied as our products in a stable manner, through which we contribute to society. At the same time, we believe that supporting our business activities indirectly by safeguarding these results by intellectual property rights, is essential.
To carry out corporate activities under this management philosophy, a corporate code of conduct was established in order to earn the trust and understanding of society by complying with the letter and spirit of laws, and acting with high ethical outlook and a sense of responsibility.
Our group manages our intellectual properties based on the approach laid out in our corporate code of conduct, which specifies that mutual intellectual property rights are to be respected in transactions. We respect the intellectual property rights of others, take care not to infringe their rights, and take appropriate actions in managing intellectual property.
At the same time, we will also utilize our intellectual property rights and take necessary and legitimate action against any conduct that would interfere with stably supplying our products of high quality.

Promotion Structure

In October, 2023, we established the Intellectual Property Headquarters to actively promote intellectual property activities across the Company. This headquarters consists of the Intellectual Property Planning and Management Department, which is responsible for managing intellectual property across the entire Group, including contracts and negotiations, and the Intellectual Property Strategy Department, which collects information on the technology, markets and intellectual property of each division and research laboratory, develops intellectual property strategies aligned with business and research strategies, and is responsible for patent filing, rights acquisition, and responses to patents of other companies. The aim of the headquarters is to strengthen the Group's intellectual property portfolio and promote its strategic utilization.

Intellectual Property Headquarters

Intellectual Property Planning and Management Department	Intellectual Property Strategy Department
· IP management, contracts, and negotiations · Disputes with other companies · IP information dissemination inside and outside the Company	· Information gathering · IP strategy planning · Invention discovery to patent filing and rights acquisition · Countermeasures against other companies

Detailed Initiatives

■ Intellectual property activities that support business strategies

We pursue the endless possibilities of light and are dedicated to contributing to the advancement of science and technology for the health and well-being of everyone, and we are striving to research, develop, and produce optical applications and devices for the future. By securing rights to the intellectual property created in this process and turning that into know-how, we are accumulating and passing on our technology.
Through the accumulation of intellectual property of key technologies that support our business strategies, such as laser, image processing, spectroscopic, optical control, and low-light-level detection technologies, we are working to solve various issues facing our ever-changing society and humanity.

■ Stimulating internal communication

We believe that the mindset of each of our engineers and researchers is essential to realizing our management philosophy. In October 2023, we significantly increased compensation for patent, designs, and know-how to motivate engineers and researchers, while fostering a virtuous cycle of generating new business.
In addition, we are stimulating in-house communication, such as by holding invention consultation sessions where inventors talk directly with patent attorneys, and we are proactively supporting our consolidated subsidiaries.

Environment

URL
https://www.hamamatsu.com/all/en/our-company/sustainability/environment.html

Hamamatsu Photonics Group Environmental Policy

1. Providing environmentally friendly products

Develop and provide products that contribute to environmental improvement and reduce the impact throughout the product life cycle.

2. Actions to address environmental activities

Encourage all our employees to take environmentally friendly actions, and strive to achieve our environmental goals based on the identification of risks and opportunities that can influence our business activities, products, and services.

3. Protection of the environment, prevention of pollution

Address climate change mitigation and adaptation, resource circulation, energy saving, waste reduction, chemical management, biodiversity protection, water conservation, and pollution prevention.

4. Compliance with environmental regulations

Comply with domestic and international legal requirements, individual agreements, and other requirements to which we subscribe voluntarily.

5. Continuous improvement of the environmental management system

Make every effort to improve our environmental performance through the continuous improvement of our environmental management system, by evaluating our environmental impact at regular intervals.

6. Promoting environmental communication

Promote environmental awareness and open communication with stakeholders and employees by sharing environmental information both internally and externally.

Promotion Structure

In our environmental management system (EMS), we set environmental targets and action plans each fiscal year, evaluate the results, report and deliberate on various issues and propose solutions, and strive to continually improve the EMS through management reviews. We have established the Headquarters Environmental Committee chaired by the General Environmental Management Representative (environmental management executive officer) to serve as the decision-making body of the EMS. This committee consists of four environmental working groups, the environmental committees belonging to each division or business site, and the Headquarters Environmental Committee Secretariats. By establishing similar structures in each division or business site, we are able to implement comprehensive environmental activities across the Group.

Detailed Initiatives

■ Disclosure of information based on TCFD recommendations

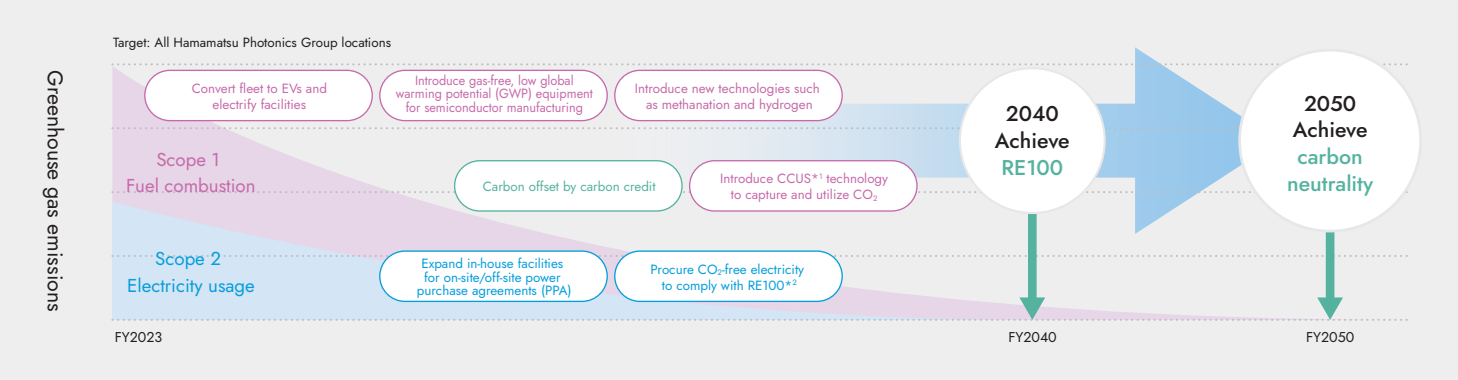
URL https://www.hamamatsu.com/all/en/our-company/sustainability/environment/carbon-neutrality.html

TCFD TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

In August 2020, we endorsed the Task Force on Climate-related Financial Disclosure (TCFD) recommendations and analyzed the risks, opportunities, and financial impacts that climate change will have on the Group's business. We disclosed some of the results of our investigation based on TCFD recommendations on our website.

■ Transition plan toward achieving carbon neutrality

We launched our carbon neutral project and began activities to achieve operations with 100 % renewable energy by 2040 and carbon neutrality by 2050. We will promote activities to reduce Scope 1 and 2 emissions across the Group. We will reduce Scope 2 emissions by procuring CO_2-free electricity and introducing solar power generation facilities. To reduce Scope 1 emissions, we are exploring the introduction of new technologies such as methanation and hydrogen, in addition to our ongoing initiative of converting our fleet to EVs.



*1 Carbon dioxide capture, utilization and storage *2 RE100 is a global initiative aimed at operating businesses using 100 % renewable energy.

■ Global warming prevention targets and results

SCIENCE BASED TARGETS
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

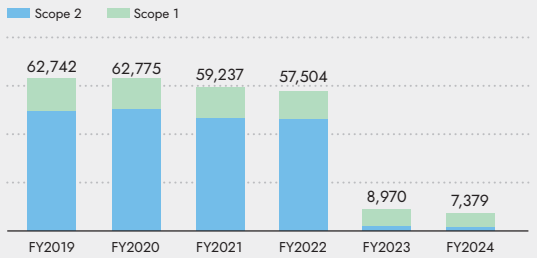
Our greenhouse gas reduction targets have been certified as Science Based Targets (SBT) based on scientific evidence aligned with the Paris Agreement's goal to hold the increase in global average temperature to well below 2°C above pre-industrial levels.

⊙ SBT-certified greenhouse gas reduction targets

Scopes 1 and 2	**Reduce greenhouse gas emissions by 30 % by FY2031 compared to FY2019 levels.**
Scope 3	**Category 11: Reduce emissions from use of sold goods and services by 15 % by FY2031.**
	Category 1: Promote the request and sharing of science-based reduction targets with major suppliers who account for 76 % of emissions from purchased goods and services by FY2026.

Note: Scope 1 emissions refer to direct emissions from fuel use and city gas.
Scope 2 emissions refer to indirect emissions from purchased electricity use.
Scope 3 emissions refer to other indirect emissions generated throughout the Group's value chain, such as those from raw material procurement, logistics, sales, and disposal.

⊙ Actual greenhouse gas emissions (Scopes 1 and 2) (t-CO_2)



The scope of calculation includes Hamamatsu Photonics K.K. and domestic and overseas consolidated subsidiaries*.
* Figures up to FY2023 are only manufacturing sites, and figures for FY2024 and beyond include non-manufacturing sites.

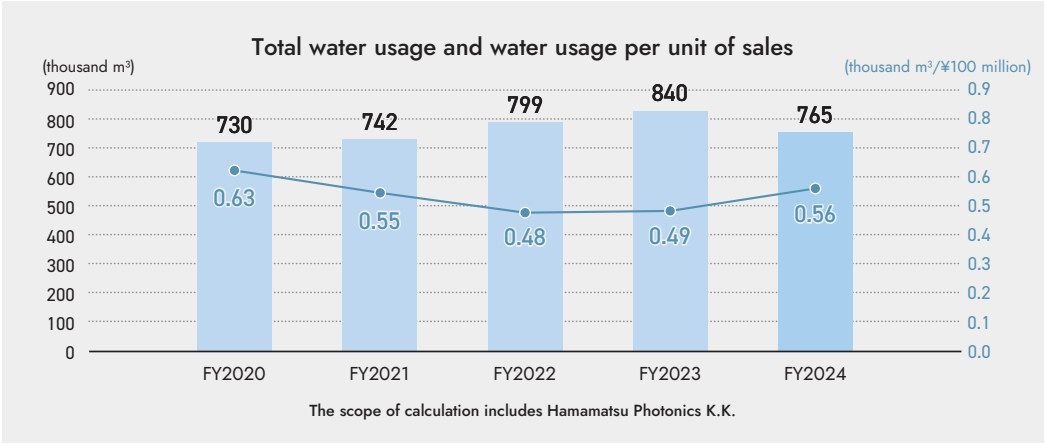
Greenhouse gas emissions (FY2019)

Reduced by 88.2 %

In FY2023, we were able to significantly reduce greenhouse gas emissions by converting all purchased electricity at our domestic manufacturing locations to CO_2-free electricity.

■ Water resource conservation initiatives

As a medium- to long-term goal, we are working to reduce our water usage per unit of sales by 10 % from FY2020 levels by FY2030, and our short-term goal is to reduce that by 1 % year on year.
In FY2024, we succeeded in reducing our water usage per unit of sales on a non-consolidated basis by 12 % from FY2020 levels, achieving our medium- to long-term goal. However, this represented a 13.3 % year-on-year increase, falling short of our short-term goal.



The scope of calculation includes Hamamatsu Photonics K.K.

■ Cleanup activities in support of the Hamamatsu Biodiversity Strategy

As part of our biodiversity conservation efforts, we support the Hamamatsu Biodiversity Strategy and participate in and raise awareness of conservation activities in our local community where we do business, as well as the city and prefecture. Each year, we take part in the Lake Hamana Cleanup Campaign to protect the local biodiversity and ensure a flourishing natural environment for the future. In FY2024, we conducted 15 local community cleanup activities. In addition to the Lake Hamana Cleanup Campaign, we also participated in the cleanup along Toyoda River and planting at the Hamamatsu business flowerbed display at Hamamatsu Station for a total of five community activities. A total of 624 employees joined in helping protect the biodiversity of our community.



Lake Hamana Cleanup Campaign (2024)



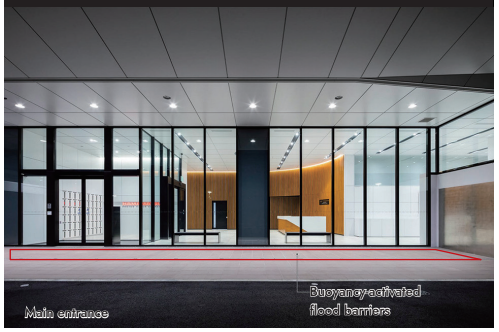
Cleanup activity along Toyoda River (2024)

■ Water-related risk assessment and countermeasures

Since 2016, Hamamatsu Photonics has participated in the CDP* Water Security, reporting our water-related risks. We use the WRI Aqueduct tool to assess water-related risks at manufacturing sites both in Japan and overseas. As of January 2025, we confirmed that there are no significant water-related risks at any domestic manufacturing or research sites.
In addition to using WRI Aqueduct, we also use local hazard maps, such as the Hamamatsu City disaster prevention map and Tsukuba City comprehensive disaster prevention guide and map, to assess flood risks at manufacturing and research sites in Japan. Our results show that Shingai Factory near the Tenryu River is at risk of flooding. As flood control measures, we installed buoyancy-activated flood barriers and floodwalls at Shingai Factory Building No. 2 completed in August 2020.

* CDP is an international non-profit organization that promotes corporate disclosure of environmental activities.

Installation of buoyancy-activated flood barriers



Installation of floodwalls



Initiatives at Overseas Subsidiaries

HVAC control using environmental thermostats

HAMAMATSU PHOTONICS ITALIA S.R.L. installed environmental thermostats on all floors of its facility. These thermostats enable automatic control of the HVAC system and are easy to install. They can be programmed to control the HVAC system on a daily or weekly basis, and can also be switched to manual operation. The use of these thermostats has created a more comfortable workplace environment for employees and has the benefit of saving both energy and costs.



New HVAC thermostat at Italian subsidiary

Purchasing of green power certificates

Our local subsidiary in China, Beijing Hamamatsu Photon Techniques Inc., is working toward using 100 % green electricity by 2040 in order to achieve RE100. As part of these efforts, it is promoting the purchase of green power certificates. It is also taking various initiatives to reduce its environmental impact. To help realize carbon neutrality, the subsidiary aims to fully transition its fleet from fossil fuel vehicles to clean energy vehicles by 2050, and plans to contribute to CO_2 emissions reduction through participation in reforestation activities.



Green power certificate purchased by Chinese subsidiary

Installation of EV charging stations

We installed EV charging stations at local subsidiaries HAMAMATSU CORPORATION in the U.S., HAMAMATSU PHOTONICS FRANCE S.A.R.L. in France, and HAMAMATSU PHOTONICS DEUTSCHLAND GMBH in Germany. In addition, our local subsidiary in France updated its company vehicle policy, setting CO_2 emission thresholds for vehicles selected for its fleet.



EV charging station at U.S. subsidiary

Introduction of renewable energy

To help realize carbon neutrality, we introduced solar power generation facilities for self-consumption at local subsidiaries HAMAMATSU CORPORATION in the U.S., HAMAMATSU PHOTONICS DEUTSCHLAND GMBH in Germany, and HAMAMATSU PHOTONICS UK LIMITED in the UK. Together, these facilities generate a total of approximately 1.16 Megawatts of energy.


Solar panels at U.S. subsidiary

Human Resource Development

Basic Approach

High value-added products are vital to drive growth of the Group, and developing human resources to achieve this is a major challenge. We are fostering talent to explore the unknown and unexplored aspects and promoting collaboration across divisions, and by continuing to actively invest in research and development, we believe that providing opportunities for hands-on challenges through daily work serves as the foundation for developing this talent. For example, through our in-house venture system, we support the launch of new businesses with the aim of creating new opportunities in photonics and nurturing the next generation of leaders.

Promotion Structure

We have established a promotion structure aimed at encouraging self-directed learning for employees, improving and streamlining design quality, and fostering the next generation of leaders.
Measures examined by internal departments are reported and deliberated at the Board of Executive Officers, and we promote initiatives aimed at developing human resources in line with our management strategies.

Targets and Results

Risks and opportunities	Countermeasure policy	Results for the current fiscal period
Strengthening talent to explore the unknown and unexplored (opportunity)	· Foster young leaders to drive next-generation management. · Provide opportunities for hands-on challenges through investment in research and development. · Examine personnel systems that leverage outstanding expertise.	· Examine measures for developing next-generation talent and conduct tests. · Examine the introduction of a professional management system.
Strengthening talent to promote collaboration across divisions (opportunity)	· Develop capabilities of young talent through divisional training at the time of hiring. · Objectively verify measures to develop young employees.	· Implement measures to develop young employees (by reviewing training) and identify challenges through interviews.
	· Implement department head training to strengthen management personnel and expand the scope of positions eligible for training.	· 88 employees received training (98 % attendance) for a total of 246 employees.

Detailed Initiatives

■ Education for young employees

We prioritize training of young employees as a way to develop talent that contributes to collaboration across divisions. In addition to learning about our work styles and basic knowledge, new employees with career positions rotate through each division and laboratory over a six-month period after joining the Company, with the aim of gaining a broad understanding of our technologies and operations while also building a person network within the organization. We offer a voluntary in-house training system that places importance on self-motivated learning and enables employees to serve as instructors, and we also hold prototype presentations that encourage employees to go beyond the boundaries of their division. In addition, we continue to develop the capabilities of our young employees even after they have been assigned to a division, by providing patent training in their second year and follow-up training in their third year.

■ Strengthening management personnel

We also provide managerial training at the departmental and group levels to strengthen effective organizational management and promote collaboration across departments.
In FY2024, we invited outside instructors and held management training for new hires. In addition to learning about management concepts and practices, participants conducted a self-assessment of their own departmental management after the training, gaining new insight through the process. Going forward, we are working to develop and strengthen effective talent by broadening the scope of the participants and enhancing the training content.
Through this education and training, we aim to strengthen and standardize our project execution capabilities by enhancing communication skills, business coordination, and negotiation skills, thereby fostering talent capable of managing across divisions in the future.

Human Rights

URL

https://www.hamamatsu.com/all/en/our-company/sustainability/social/human-rights-and-labor.html

Hamamatsu Photonics Group Human Rights Policy

We will respect the International Bill of Human Rights, the International Labor Organization (ILO) Declaration on Fundamental Principles and Rights at Work, and strive to avoid having a negative impact on human rights or increasing human rights risks through compliance with the UN Guiding Principles on Business and Human Rights.
We are also a signatory to the UN Global Compact and support the Ten Principles of the UN Global Compact.
In the event of a conflict between local laws and regulations and international human rights norms, we will pursue ways to respect internationally recognized human rights principles.

Promotion Structure

We have established a promotion structure to fulfill our responsibility to respect human rights. The Global Management and Planning General Headquarters serves as the Sustainability Office, and each department, led by the General Affairs Headquarters, Procurement Headquarters, Quality Headquarters, and Legal and Compliance Department, is responsible for promoting human rights.
The main activities related to respect for human rights are reported and discussed at internal meetings and are also reported and discussed at the Board of Directors meetings on a quarterly basis.
In addition, we exchange opinions and information throughout the entire Group, including overseas subsidiaries, at Group meetings and other events.

Detailed Initiatives

■ Promotion of human rights due diligence

Human rights due diligence is the process of a company assessing and managing human rights risks and impacts. This is an important activity for companies to respect human rights and prevent their infringement.
We plan to implement human rights due diligence in three steps, separately for the Company, its consolidated subsidiaries, and major suppliers. Specifically, we aim to build a human rights due diligence process that includes key suppliers by March 2027.
As our first step in FY2024, we focused on the Company and conducted a human rights awareness survey for all employees in September 2024. Based on the survey results, we will identify human rights risks and take measures to mitigate and prevent negative impacts. To continuously monitor our human rights due diligence, we conduct internal audits to assess the appropriateness and effectiveness of our efforts.

■ Human rights training

We regularly conduct human rights training with the aim of preventing human rights violations. As part of our education focused on harassment, we carried out three in -person training sessions in FY2024 for new managers and harassment counselors.
In September 2024, we conducted e-learning training for all employees using human rights awareness videos produced by the Ministry of Justice's Human Rights Bureau, with 81.9 % of employees completing the program.
We plan to conduct continuous training to deepen employee's understanding of human rights and raise awareness of the importance of respecting them.

Diversity

URL
https://www.hamamatsu.com/all/en/our-company/sustainability/social/diversity.html

Basic Approach

We believe that people are one of the foundations for management. In addition to respecting human rights, we also value individual diversity based on the idea that everyone is different, and we aim to create a workplace where everyone can be themselves with a sense of fulfillment in the Group. Furthermore, we believe that utilizing diverse talent enhances creativity and promotes innovation. In our Company, which operates in the electronics and electrical fields, there have historically been few female specialists. However, in recent years, we have been actively hiring women in the science and engineering fields. To increase the ratio of women in managerial positions in the future, we will provide opportunities for all employees to enhance their skills and advance their careers regardless of gender, while fostering a workplace where everyone can thrive. In FY2024, we launched the Workstyle Reform Working Group to address company-wide issues symbolized by workstyles, job satisfaction, and diversity, with the goal of creating a work environment where employees can find happiness in their work.

Promotion Structure

To address issues symbolized by workstyles, job satisfaction, and diversity, we launched the Workstyle Reform Working Group, a project that transcends business sites where diverse members, regardless of age or gender, work to change awareness within the Company. Meanwhile, the Human Resources Department of the General Affairs Headquarters is taking the lead in examining the development of a system aimed at improving workstyles, and is driving initiatives to promote diversity through both a change awareness and system design. In addition, various measures are being implemented through resolutions, discussions, and reports at the Board of Executive Officers and other meetings.

Targets and Results

Risks and opportunities	Countermeasure policy and future goals	Results for the current fiscal period
Securing outstanding talent through enhanced diversity (opportunity)	· Identify the promotion rate to managerial positions and other figures, and promote initiatives to increase opportunities for female employees.	Ratio of female managers: 3.8 %
	· Increase the number of female managers 10 % from March 2024 to 31.	28 female managers
	· Achieve a rate of at least 20 % for new female hires.	20 %
	· Achieve an employment rate of at least 2.5 % for people with disabilities (legal employment rate).	2.5 % (as of October 2024)
	· Promote diversity through activities led by the Workstyle Reform Working Group and Human Resources Department.	Conducted e-learning focusing on the LGBTQ* community and caregiving.

* LGBTQ is an acronym representing sexual minorities, standing for lesbian, gay, bisexual, transgender, questioning/queer.

Detailed Initiatives

■ Promoting women's active participation

We believe that women's further participation is essential to improving corporate value and realizing a sustainable society, and to that end, we hold ongoing seminars on health issues to promote diversity. We implement this initiative for all employees, with a focus on health issues specific to women, to support working women in maintaining both physical and mental well-being while staying motivated in their work.

- We provide a video messages from a gynecologist on managing menstruation, and we hold a quiz to promote an understanding of menstrual health.
- Since 2024, we have held events celebrating International Women's Day on March 8 as an initiative promoting gender equality.

In addition, we actively promote the hiring of females in the science and engineering fields with the aim of improving the female employment rate in the future. As part of this initiative, we participate in the Riko Challenge, a STEM event led by the Gender Equality Bureau Cabinet Office, to stimulate interest in science and engineering among female junior and senior high school students and help them choose their future careers. Going forward, we will continue to conduct activities to create an environment where women can play an active role in these fields.

■ Diversity-related education

In 2024, we began an initiative to deepen understanding of the LGBTQ community.

- To deepen understanding of the challenges faced by the LGBTQ community and how to address them, we invited outside experts to give lectures and conducted diversity training for our harassment counselors.
- We provided e-learning training for all employees to ensure accurate understanding and foster a culture that respects individual differences.
- We conducted internal awareness surveys to better understand employees' perception of LGBTQ issues. We will incorporate issues identified in the survey results into future initiatives.

Health Management

URL

https://www.hamamatsu.com/all/en/our-company/sustainability/social/health-management.html

Hamamatsu Photonics Group Health Management Policy

Hamamatsu Photonics Group strives to pursue the unknown and unexplored. By leveraging photonics technology to establish new industries, we build corporate value and contribute to a better society and a healthier planet based on new technology. In order to achieve this goal, we believe that people, technology, and knowledge are the foundation of our business, so we seek a collaborative spirit and learn from each other's strengths. Through this spirit, known as "Wa"「和」in Japanese, our endeavor is the continuous improvement of ourselves, united under one global entity. To this end, it is essential that we invest in maintaining and improving the physical and mental health of our employees, to ensure that all employees can continue to work energetically while achieving a balance between work and family life. With these goals in mind, we are implementing a variety of measures in cooperation with related organizations, such as the health insurance society, as well as with in-house specialized staff.

Promotion Structure

We promote health management based on our Health Management Policy, led by the Employee Welfare Group within the General Affairs Department of the General Affairs Headquarters, in cooperation with the Health Insurance Society. The Employee Welfare Group is also responsible for managing external matters. In addition, various measures are being implemented through resolutions, discussions, and reports at the Health and Safety Committees (located at headquarters and branches) and Board of Executive Officers.

Targets and Results

To address the management challenge of preventing declines in labor productivity due to physical or mental illness and sick leave, we have established and assess the following indicators as part of our health management efforts.

(Number of respondents/response rate)

	Reduce absenteeism	Reduce presenteeism	Improve work engagement (average score of Ultrashort Version of Utrecht Work Engagement Scale)
FY2024 targets	Less than 1.62 %	Less than 7.52 %	Greater than 2.66
FY2024 results	1.45 % (4,165/100 %)	7.33 % (3,995/96.9 %)	2.64 (3,495/81.9 %)

Detailed Initiatives

We actively promote health management based on the belief that people, technology, and knowledge are the foundation of our success and that the Company cannot grow without the physical and mental well-being of all employees.
Our health management efforts started some 60 years ago. Until 2000, we held a health management event called Greek Day during working hours on two Saturdays each month, at a time when Saturday work was still the norm. Although Greek Day is no longer held, we continue to implement a variety of health measures today in the same spirit. One of these initiatives is a physical fitness assessment, which includes tests for grip strength, sitting forward bending, standing on one leg with eyes closed, and squats. This event, held in cooperation with the Health Insurance Society, aims to increase employee health awareness, help them better understand their physical condition, and encourage exercise to maintain their health.
We also provide nutrition education to our young employees as part of their new employee training. This program targets young employees, as health checkup results have revealed nutritional imbalances among the younger generation, with notable trends in weight gain. We conduct PET research screenings (PET cancer screenings) for interested employees 40 years or older in cooperation with the Hamamatsu Medical Imaging Center managed by the Hamamatsu Medical Photonics Foundation. We also implement additional health measures such as distribution of 10-minute health-related videos, dental exams, sleep education, and body design school.

Supply Chain Management

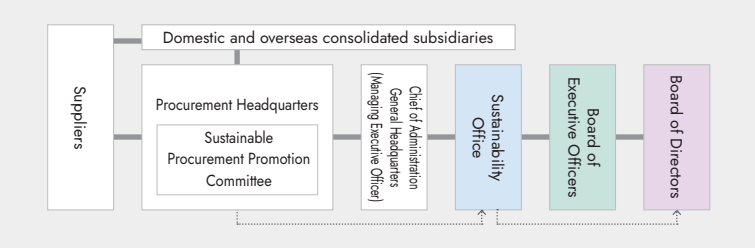
URL
https://www.hamamatsu.com/all/en/our-company/sustainability/social/supply-chain.html

Hamamatsu Photonics Group Supply Chain Policy

As a responsible member of the global supply chain, the Hamamatsu Photonics Group promotes sustainable procurement that considers environmental protection, human rights and labor, safety and health, and corporate ethics. This commitment extends not only to our own companies or groups but throughout our entire supply chain, grounded in mutual trust with suppliers. As part of our sustainability efforts, we have distributed the Hamamatsu Photonics Supply Chain Code of Conduct to our suppliers. This document helps them understand the Hamamatsu Photonics Group's Basic Policy of Sustainability and supports the promotion of Corporate Social Responsibility (CSR) activities. We believe that formulating and promoting activities for our Business Continuity Plan (BCP) is essential to fulfilling our responsibility to provide consistent and reliable products to society.

Promotion Structure

We established a supply chain management system headed by the Chief of Administration General Headquarters (Managing Executive Officer) and overseen by the Procurement Headquarters. Measures related to sustainable procurement are reported and discussed at the Sustainable Procurement Promotion Committee under the Procurement Headquarters, along with other committees, and progress on their activities is reviewed.
The Sustainability Office reports on important issues, targets, progress, and other items to the Board of Directors on a quarterly basis, which then provides direction and instruction.



Detailed Initiatives

■ Operation of the Hamamatsu Photonics Supply Chain Code of Conduct

We reviewed and revised our earlier Supply Chain CSR Promotion Guidelines, and in October 2024, we published the Hamamatsu Photonics Supply Chain Code of Conduct with expanded content on our policy of respecting human rights. Suppliers are required to understand and practice this Code of Conduct.

■ Supplier assessment and improvement

We conduct surveys using self-assessment questionnaires based on our Code of Conduct to ensure sustainable procurement. These surveys help us understand and assess the status of suppliers' initiatives, and based on these results, we collaborate with suppliers to discuss improvements and necessary measures. (We survey suppliers that account for at least 90 % of the procurement value of materials used in our products.)

■ Conclusion of basic sales and purchase agreement

We conclude basic sales and purchase agreements with suppliers, stipulating compliance with laws and regulations, respect for human rights, and environmental protection, and require them to comply with these items. (94 % of major suppliers have signed the basic sales and purchase agreement.)

■ Responsible minerals sourcing

Based on our Responsible Minerals Sourcing Policy, we conduct due diligence using the Conflict Minerals Reporting Template (CMRT) and Extended Minerals Reporting Template (EMRT)* in accordance with OECD Due Diligence Guidance, ensuring that our sourcing of tin, tantalum, tungsten, gold, cobalt, and other minerals does not contribute to human rights abuses or conflicts in high-risk areas around the world.

* These are reporting templates published by the Responsible Minerals Initiative (RMI).

FY2024 mineral survey results	
CMRT	87 companies responded, 99 % response rate
EMRT	87 companies responded, 99 % response rate

Note: This data is accurate as of March 14, 2025.



Takaaki Kimura
Outside Director

Kaoru Minoshima
Outside Director

Takuo Hirose
Outside Director

Kazue Kurihara
Outside Director

Akira Utsuyama
Audit & Supervisory Board Member (Standing)

Michihito Suzuki
Audit & Supervisory Board Member (Standing)

Shoji Nakano
Audit & Supervisory Board Member (Outside)

Seidai Hirai
Audit & Supervisory Board Member (Outside)

Ken Nozaki
Director, Managing Executive Officer

Takayuki Suzuki
Representative Director, Senior Managing Executive Officer

Tadashi Maruno
Representative Director and President, Chief Executive Officer

Hisaki Kato
Representative Director and Vice President, Chief Operating Officer

Kazuhiko Mori
Director, Managing Executive Officer

Naofumi Toriyama
Director, Managing Executive Officer

Executive Officer

Managing Executive Officer
Kazuya Suzuki

Senior Executive Officer
Hiroyuki Okada

Senior Executive Officer
Fumio Iwase

Executive Officer
Koichi Nagumo

Executive Officer
Shuichi Osada

Executive Officer
Haruyoshi Toyoda

Executive Officer
Shinji Ito

Executive Officer
Masato Tsutsumizaki

Executive Officer
Hiroshige Takada

Executive Officer
Takashi Ogasawara

Executive Officer
Kazuo Ueno

Executive Officer
Toshimichi Ishizuka

Executive Officer
Naoki Uchiyama

URL
https://www.hamamatsu.com/all/en/our-company/corporate-profile.html

Directors

Tadashi Maruno
Representative Director and President, Chief Executive Officer

Apr. 1983	Joined the Company
Dec. 2017	Director
	Division Director, Systems Division
Dec. 2019	Managing Director
Dec. 2020	Director
	Managing Executive Officer
Dec. 2021	Representative Director
	Senior Managing Executive Officer
Dec. 2022	**Representative Director and President (present)**
	Chief Executive Officer (present)

Hisaki Kato
Representative Director and Vice President, Chief Operating Officer

Mar. 1981	Joined the Company
Jan. 2018	Deputy Division Director, Electron Tube Division
Dec. 2018	Director
Dec. 2020	Managing Executive Officer
	Division Director, Electron Tube Division
Dec. 2022	**Representative Director and Vice President (present)**
	Chief Operating Officer (present)

Takayuki Suzuki
Representative Director, Senior Managing Executive Officer

Jul. 1989	Joined the Company
Oct. 2017	Deputy Division Director, Solid State Division
Dec. 2017	Director
Dec. 2019	Managing Director
Dec. 2020	Director
	Managing Executive Officer
	Division Director, Solid State Division (present)
Dec. 2022	**Senior Managing Executive Officer (present)**
Dec. 2023	**Representative Director (present)**

Kazuhiko Mori
Director, Managing Executive Officer

Apr. 1979	Joined The Kyowa Bank (currently Resona Bank, Limited)
Jul. 2009	General Manager, Shibuya Branch, Resona Bank, Limited
Jul. 2011	Transferred to the Company
	General Manager, Finance Division
Dec. 2012	Audit & Supervisory Board Member (Standing)
Dec. 2017	Director
	General Manager, Accounting Division
Dec. 2020	Senior Executive Officer
Dec. 2022	**Director (present)**
Apr. 2023	**Chief of Finance and Accounting General Headquarters (present)**
Dec. 2024	**Managing Executive Officer (present)**

Ken Nozaki
Director, Managing Executive Officer

Apr. 1991	Joined the Company
Oct. 2013	General Manager, President Office
Jul. 2020	General Manager, Business Mentor Bank, Global Strategic Challenge Center
Dec. 2020	Executive Officer
	General Manager, Collaboration Supporting Department
Dec. 2022	**Managing Executive Officer (present)**
Apr. 2023	**Chief of Global Management and Planning General Headquarters (present)**
Dec. 2024	**Director (present)**

Naofumi Toriyama
Director, Managing Executive Officer

Mar. 1981	Joined the Company
Oct. 2012	General Manager, Business Promotion Department, Electron Tube Division
Feb. 2014	General Manager, Domestic Sales Division
Dec. 2015	Director
Oct. 2018	**Division Director, Business Headquarters (present)**
Dec. 2020	Senior Executive Officer
Dec. 2021	**Managing Executive Officer (present)**
Dec. 2024	**Director (present)**

Kazue Kurihara
Outside Director

Apr. 1997	Professor, Institute for Chemical Reaction Science, Tohoku University (currently Institute of Multidisciplinary Research for Advanced Materials, Tohoku University)
Apr. 2010	Professor, Advanced Institute for Materials Research, Tohoku University
Apr. 2016	**Professor Emeritus, Tohoku University (present)**
Apr. 2017	**Professor, New Industry Creation Hatchery Center, Tohoku University (present)**
Dec. 2020	**Outside Director of the Company (present)**
Jan. 2022	**Director, SMILEco Instruments Corporation (present)**
Jun. 2023	**Outside Director, MITSUBISHI GAS CHEMICAL COMPANY, INC. (present)**

Takuo Hirose
Outside Director

Apr. 1997	Registered as an attorney at law
	Joined, Tomotsune, Kimura & Mitomi Law Firm (currently Anderson Mori & Tomotsune LPC)
May 2004	Registered as an attorney at law in the state of New York
Jan. 2005	**Partner, Anderson Mori & Tomotsune LPC (present)**
Jun. 2018	**Audit & Supervisory Board Member (Outside), Cyfuse Biomedical K.K. (present)**
Mar. 2021	**Outside Director (Audit & Supervisory Committee Member), Core Concept Technologies Inc. (present)**
Dec. 2021	**Outside Director of the Company (present)**

Kaoru Minoshima
Outside Director

Apr. 2013	**Professor, the University of Electro-Communications (present)**
Apr. 2021	**Director, Institute for Advanced Science, the University of Electro-Communications (present)**
Apr. 2022	Vice-President (Academic Research Data Utilization), the University of Electro-Communications
Dec. 2023	**Outside Director of the Company (present)**
Apr. 2024	**Vice-President (Global Outreach Development), the University of Electro-Communications (present)**
	Deputy Member of the Board of Directors, the University of Electro-Communications (present)

Takaaki Kimura
Outside Director

Apr. 1976	Joined Yamaha Motor Co., Ltd.
Apr. 2002	Senior General Manager, AM Operations, Yamaha Motor Co., Ltd.
Jun. 2003	Executive Officer, Yamaha Motor Co., Ltd.
Mar. 2005	Director, Yamaha Motor Co., Ltd.
Mar. 2007	Senior Executive Officer, Yamaha Motor Co., Ltd
Jan. 2009	Chief General Manager, Marine Business Operations, Yamaha Motor Co., Ltd.
Nov. 2009	Representative Director, Yamaha Motor Co., Ltd.
	Managing Executive Officer, Yamaha Motor Co., Ltd
Mar. 2010	Senior Managing Executive Officer, Yamaha Motor Co., Ltd.
Jan. 2012	Chief General Manager, Technology Center, Yamaha Motor Co., Ltd.
Mar. 2014	Executive Vice President, Yamaha Motor Co., Ltd.
Mar. 2018	Executive Advisor, Yamaha Motor Co., Ltd. (Retired in Mar. 2021)
Dec. 2024	**Outside Director of the Company (present)**

Audit & Supervisory Board Members

Akira Utsuyama

Audit & Supervisory Board Member (Standing)

Apr. 1983 Joined the Company
Jul. 2006 General Manager, Intellectual Property Division
Dec. 2017 Audit & Supervisory Board Member (Standing) (present)

Michihito Suzuki

Audit & Supervisory Board Member (Standing)

Mar. 1980 Joined the Company
Oct. 2010 Domestic Sales Manager, Tokyo Sales Office of Domestic Sales Division
Oct. 2012 Chief Manager, General Affairs of Laser Business Group (currently Laser Division)
Oct. 2016 Deputy General Manager, Compound Semiconductor Fabrication Center
Dec. 2020 Audit & Supervisory Board Member (Standing) (present)

Shoji Nakano

Audit & Supervisory Board Member (Outside)

Apr. 1980 Joined The Bank of Tokyo, Ltd. (currently MUFG Bank, Ltd.)
Jun. 2007 Executive Officer, The Bank of Tokyo-Mitsubishi UFJ, Ltd. (currently MUFG Bank, Ltd.)
May 2010 Managing Executive Officer, The Bank of Tokyo-Mitsubishi UFJ, Ltd. (currently MUFG Bank, Ltd.)
Jul. 2012 Managing Executive Officer, Mitsubishi UFJ Financial Group, Inc.
Nov. 2014 Representative Director and Deputy President, Mitsubishi UFJ Research and Consulting Co., Ltd.
Jun. 2016 Director and Vice president, BOT Lease Co., Ltd.
Jun. 2017 Chief Executive Officer and President, BOT Lease Co., Ltd.
Jun. 2022 Senior Advisor, BOT Lease Co., Ltd. (present)
Dec. 2024 Audit & Supervisory Board Member (Outside) (present)

Seidai Hirai

Audit & Supervisory Board Member (Outside)

Apr. 1981 Joined Hamamatsu Shinkin Bank (currently Hamamatsu Iwata Shinkin Bank)
Jun. 2013 Director, Hamamatsu Shinkin Bank
General Manager, Credit Supervision Division, Hamamatsu Shinkin Bank
Jun. 2015 Managing Director (in charge of Credit Supervision Division and Business Support Division), Hamamatsu Shinkin Bank
Jun. 2020 Senior Managing Director (in charge of Branch Management Division, Corporate Business Division, and Retail-Banking Division), Hamamatsu Iwata Shinkin Bank
Jun. 2021 Senior Managing Director (in charge of SDGs Promotion Division, Business Management Division, and Solution Support Division), Hamamatsu Iwata Shinkin Bank
Jun. 2023 Senior Managing Director (in charge of Strategic Planning Division, Digital Promotion Division, and Systems Division), Hamamatsu Iwata Shinkin Bank (present)
Dec. 2024 Audit & Supervisory Board Member (Outside) (present)

Skill Matrix

Name	Position	Expertise and Experience							
		Management Strategy		Technology Research & Development	Finance & Accounting	Legal Compliance	Sales & Marketing	Communication	Sustainability
		Business Company(ies)	Public Interest Corporation(s), Other Organization(s)						
Tadashi Maruno	Representative Director and President	●		●			●	●	
Hisaki Kato	Representative Director and Vice President	●		●			●	●	
Takayuki Suzuki	Representative Director	●		●			●		●
Kazuhiko Mori	Director				●			●	
Ken Nozaki	Director		●						●
Naofumi Toriyama	Director						●	●	
Kazue Kurihara	Outside Director		●	●					
Takuo Hirose	Outside Director	●				●			
Kaoru Minoshima	Outside Director		●	●					
Takaaki Kimura	Outside Director	●							●
Akira Utsuyama	Audit & Supervisory Board Member (Standing)					●			
Michihito Suzuki	Audit & Supervisory Board Member (Standing)					●	●		
Shoji Nakano	Audit & Supervisory Board Member (Outside)	●			●				
Seidai Hirai	Audit & Supervisory Board Member (Outside)		●		●				●

Note: Expertise and experience in business execution and supervision from a global perspective are not listed in the skill matrix, as all members should possess them.

Corporate Governance

URL

https://www.hamamatsu.com/all/en/our-company/sustainability/governance/corporate-governance.html

Basic approach

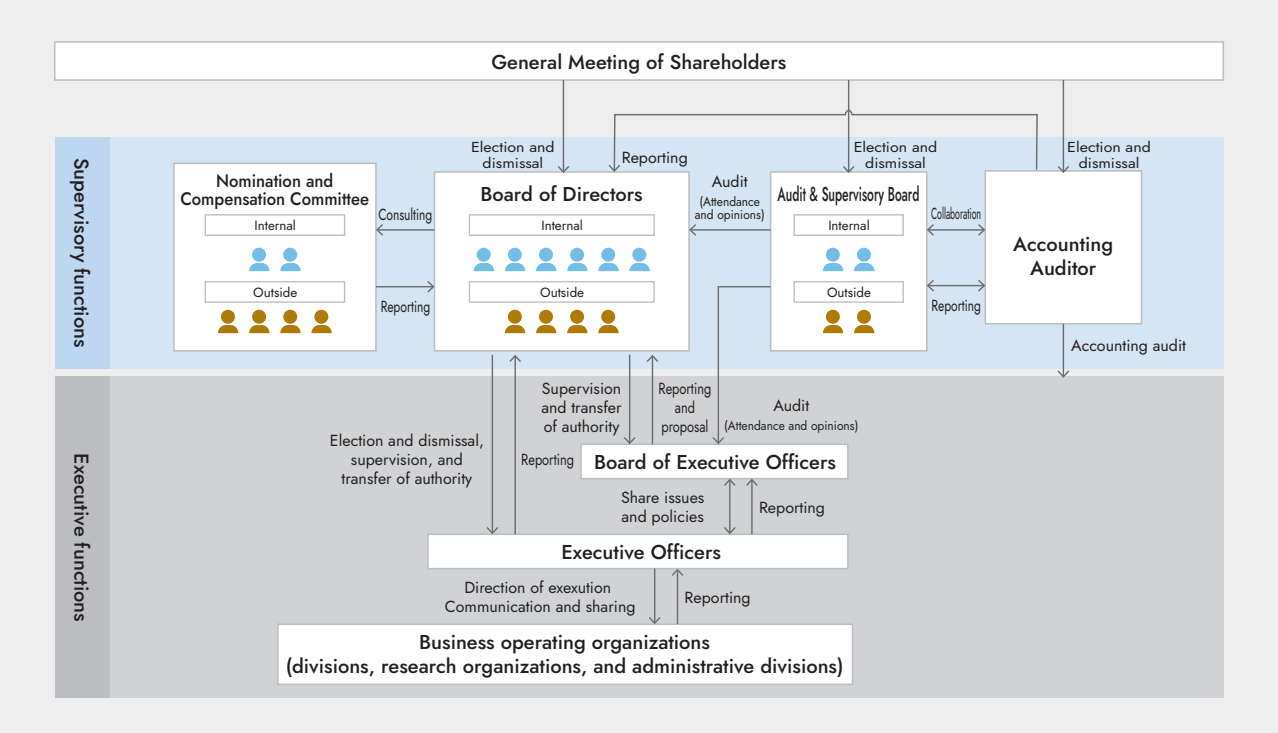
To achieve our management philosophy of advancing science and technology for a better society and a healthier planet by pursuing unknown and unexplored areas of light, we believe it is essential to be a company trusted by all stakeholders, including shareholders and investors. To this end, in line with our Basic Policy on Corporate Governance, we are committed to implementing effective corporate governance by ensuring transparency and sound corporate decision-making, and by establishing a framework that enables sustainable growth and enhances corporate value over the medium to long term through timely and appropriate decision-making.

Basic Policy on Corporate Governance

https://www.hamamatsu.com/content/dam/hamamatsu-photonics/sites/documents/01_HQ/csr/governance/h-csr-governance-governance-230324-en.pdf

Basic structure

Schematic diagram of our corporate governance structure



General Meeting of Shareholders

To deepen shareholders' understanding of the Group and foster meaningful communication, we strive to provide materials in advance and enhance their content and explanations. When necessary, the president directly communicates the direction and vision of the Group. Video of the business reports presented at the General Meeting of Shareholders held in December 2024 is available for viewing on the website (Japanese only and scheduled to be available until mid-December 2025).

IR library

Click here for video from the General Meeting of Shareholders, shareholder reports, and integrated reports.

https://www.hamamatsu.com/all/en/investor-relations/ir-library.html

Board of Directors and Board of Executive Officers

Certain matters that were previously discussed and resolved at the Board of Directors have been delegated to the Board of Executive Officers or individual executive officers, enabling the Board of Directors to focus more on essential management discussions, including statutory resolutions, future plans, divisional strategies, and investment and M&A matters. This has stimulated the Board of Directors, strengthened supervisory functions, and accelerated business decision-making.

Organization	Number of times held (FY2024)	Main discussion items	Structure
Board of Directors	16 times	· Performance, market trends · Financial strategy · Research and development, product development · M&A and subsequent PMI activities · ESGs and sustainability promotion activities · IR matters · Group governance	Ratio of female directors 20 %

Nomination and Compensation Committee

This committee was established to ensure fairness, transparency, and objectivity in determining director candidates and director remuneration. The Nomination and Compensation Committee regulations stipulate that a majority of its members shall be Outside Directors and that the Board of Directors shall respect the reports of the Committee.

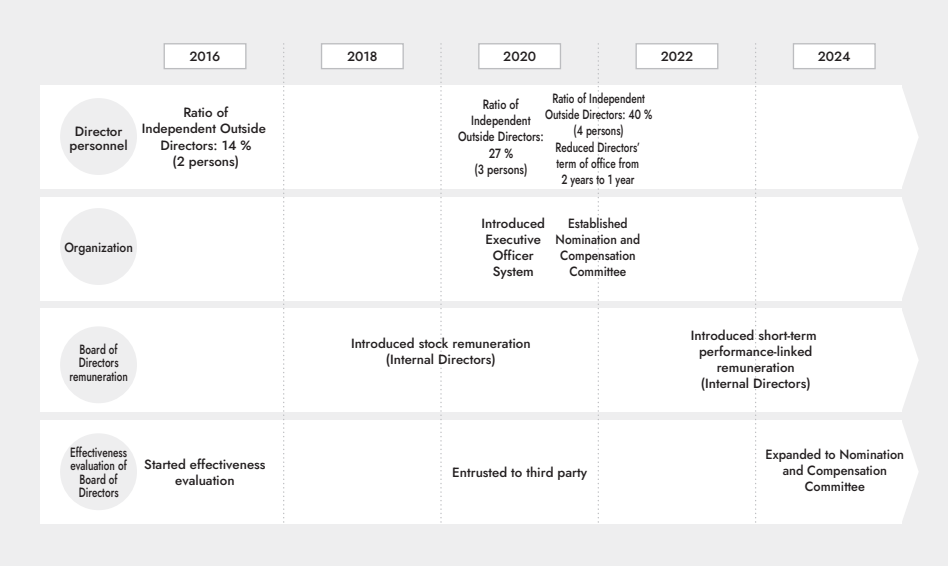
Organization	Number of times held (FY2024)	Main discussion items	Structure
Nomination and Compensation Committee	4 times	· Remuneration for directors by position · Revision of remuneration policy · Selection of director candidates · Revision of skill matrix	Ratio of female directors 33 %

Audit & Supervisory Board

In accordance with the audit policy and implementation plan established by the Audit & Supervisory Board, the Audit & Supervisory Board Members audit the execution of duties by Directors by attending key internal meetings, including the Board of Directors, gaining an understanding of the status of management execution, and interviewing executive departments regarding the status of business execution.

Organization	Number of times held (FY2024)	Main discussion items
Audit & Supervisory Board	7 times	· Important audit matters, such as organizational changes, globalization efforts, large-scale investment projects, subsidiary management, and personnel systems · Implementation status of matters resolved by the Board of Directors and Board of Executive Officers

Initiatives to strengthen corporate governance



Revision of skill matrix

In 2021, we formulated a skill matrix and appoint members to the Board of Directors taking into account the overall composition of knowledge, experience, capabilities, and diversity. In 2024, marking three years since the introduction of the skill matrix, the Board of Directors, after consultation with the Nomination and Compensation Committee, revised the matrix to reflect changes in the issues to be addressed by the Board. The revised skill items and the reasons for their revision are outlined below. See page 45 for the Board of Directors' skill matrix.

▼ Before revision

Corporate Management Management Strategy	Technology Research & Development	Finance & Accounting	Legal Compliance	Sales & Marketing	Global

▼ After revision (revised parts shown in blue)

Management Strategy		Technology Research & Development	Finance & Accounting	Legal Compliance	Sales & Marketing	Communication	Sustainability
Business Company(ies)	Public Interest Corporation(s), Other Organization(s)						

New Public Interest Corporation(s), Other Organization(s)

"Management Strategy" is listed in two separate areas. While knowledge and capabilities for formulating and executing strategies at business companies such as listed companies are important, we equally value knowledge and capabilities to lead organizations that are of a certain scale, even if they are not listed, or of high public interest.

New Communication

As a research and development-based company, we value further strengthening collaboration with the government and academic institutions, accurately communicating Group ideas and strategies to stakeholders, and having knowledge and capabilities to appropriately communicate feedback within the Company.

New Sustainability

We believe that sustainability is the foundation for enhancing corporate value over the medium to long term. We value the knowledge and capabilities required to formulate strategies and drive initiatives aimed at addressing the eight materiality issues we have identified.

Deleted Global

"Global" has been removed from the skill matrix, as all Officers of the Company with a high overseas sales ratio should execute and supervise business from a global perspective.

■ Effectiveness evaluation of Board of Directors

We evaluate the effectiveness of the Board of Directors to improve its functionality and enhance corporate value. With the support from a third party organization and by continuously implementing a cycle of surveys, analysis, and improvement, we aim to ensure a more objective and effective Board of Directors.
The effectiveness evaluation conducted in September 2024 received generally positive feedback, including a good understanding of the items to be discussed by the Officers through the early provision of Board of Directors materials and holding of advance briefing sessions. As such, we believe that the effectiveness of the Board as a whole has been maintained.
In the effectiveness evaluation conducted in September 2023, there was a shared recognition of issues including the need to review agenda items and deliberation time for Board of Directors. Since then, we have reviewed materials for regular reporting items and changed them to focus on key points, while also working on improvements such as allocating more time to key management agenda items. We believe results are steadily emerging.

Overview

Target: Directors and Audit & Supervisory Board Members
Type: Self-evaluation using a five-grade evaluation and free-form descriptive questionnaire
Managed by: Third party organization

Survey items

- Overall operations and discussion items
- Support system for Directors and Audit & Supervisory Board Members
- Monitoring function
- Dialogue with investors
- Operation of the Nomination and Compensation Committee

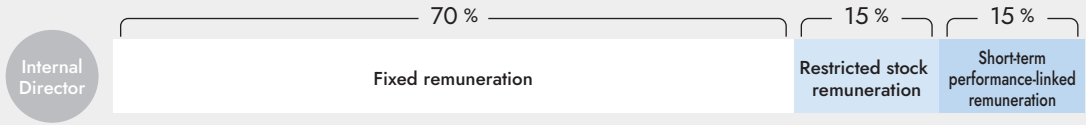
Process

Survey implemented → Results analyzed by a third party → Results reported to Board of Directors for discussion → Improvements

■ Remuneration scheme for directors

We expect Directors to achieve results from a medium- to long-term perspective instead of a short-term perspective, and therefore, we use fixed remuneration as a base. In addition, for Internal Directors, we have introduced restricted stock remuneration with the aim of contributing to the sustainable enhancement of corporate value over the long term while aligning their perspective with that of shareholders. Furthermore, to meet the expectations of shareholders, we have also introduced short-term performance-linked remuneration based on consolidated operating profit, as it is necessary to achieve stable performance improvements each fiscal year. Remuneration based on individual roles and positions is determined by the Board of Directors following consultation with the Nomination and Compensation Committee.

Remuneration scheme for Internal Directors



Note: Short-term performance-linked remuneration will vary based on the performance of the fiscal year and will be weighted according to the position. As a result, the actual remuneration composition may fluctuate.

- Fixed remuneration: Determined by position taking into account industry benchmarks through surveys conducted by a third party organization.
- Restricted stock remuneration: Determined on an individual basis so as to constitute approximately 15 % of the Director's total remuneration.
- Short-term performance-linked remuneration: Determined on an individual basis by multiplying a base amount by a separately determined coefficient based on the consolidated operating profit for the fiscal year and a position-based coefficient.

Remuneration amounts for Directors and Audit & Supervisory Board Members (FY2024)

	Number of members	Fixed remuneration	Restricted stock remuneration	Total remuneration
Directors	11	¥314 million	¥59 million	¥374 million
(Outside Directors)	5	¥33 million	—	¥33 million
Audit & Supervisory Board Members	4	¥55 million	—	¥55 million
(Audit & Supervisory Board Members (Outside))	2	¥14 million	—	¥14 million

Notes: The above figures include one Outside Director who retired on December 22, 2023.
Short-term performance-linked remuneration will start in FY2025.

■ Basic policy on cross-shareholdings

Our policy on cross-shareholdings is to hold them to a minimum. We verify the appropriateness of such holdings by carefully examining whether the business benefits and risks align with our capital costs, and retain them only when they are deemed to contribute to the Company's sustainable growth and enhancement of corporate growth over the medium to long term.
For major cross-shareholdings, the Board of Directors assesses and discusses the appropriateness of holding them in accordance with the above policy, and determines whether to continue holding or to sell the shares.

Compliance

URL

https://www.hamamatsu.com/all/en/our-company/sustainability/governance/legal-and-corporate-compliance.html

Basic approach

We have established the Basic Approach to Corporate Ethics and Compliance based on our Basic Policy on Corporate Governance, and this has been shared on our internal and external websites to raise awareness among Group employees.
The light in which our Group is involved represents a wide range of unknown and unexplored areas. To pursue those areas, each employee must seek out the truth. As a company is the sum of the actions of its people, we expect all employees to respect human rights, comply with applicable laws, regulations, and international rules as well as uphold both their letter and "spirit".
By fostering a workforce with a strong sense of ethics, we aim not only to ensure stable management but also to grow and thrive as a corporation trusted by its stakeholders.

Compliance promotion structure

We believe that compliance entails both adherence to laws and practice of sound corporate ethics. Promoting compliance and other non-financial activities is the foundation for creating future corporate value of our Group. Accordingly, under the leadership of the Global Management and Planning General Headquarters, which is responsible for formulating and promoting non-financial strategies, we are implementing the following initiatives to ensure thorough compliance across the Group.

Officer in Charge of Compliance: Koichi Nagumo, Executive Officer, Deputy Chief of Global Management and Planning General Headquarters

Detailed initiatives Promoting compliance awareness

- A message from the president is shared with employees at the headquarters and subsidiaries, communicating the Group's expected mindset, including the importance of thorough compliance.
- Suitable compliance training is provided for new employees, career-track employees in their third year, and promoted employees. (440 employees received compliance training in FY2024.)
- Awareness surveys are conducted across all Group employees to assess their awareness of compliance and understanding of various regulations.
- Compliance awareness materials are made available on the internal portal site, and compliance newsletters are emailed to all employees.



Compliance training

Whistleblower program

In 2016, we began operation of a whistleblower program. We accept reports of compliance issues that cannot be resolved internally and have designated the Officer in Charge of Compliance as the lead for whistleblower cases, with the Audit & Supervisory Board, General Affairs Headquarters, and Legal and Compliance Department serving as points of contact for these reports. The regulations on whistleblower reports stipulate that the rights of the whistleblowers must be protected, including ensuring that they do not suffer any disadvantage as a result of making a report. The regulations also require that all information, including personal details, be kept confidential, and that investigations be carried out fairly and impartially. These regulations are made available on the internal portal site so that employees can always access them.
In addition, a Group-wide whistleblower program that is available to each Group company and our business partners has been established to further strengthen compliance across the Group.

Matters to be reported

Illegal provision of benefits, bribery, fraud, unfair transactions, involvement with anti-social forces, criminal acts, harassment, human rights violations, matters that violate laws and public interests, etc.

	FY2022	FY2023	FY2024
Number of reports	1	4	2

Consolidated Performance Indicators

	(Unit)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
Net sales	Millions of yen	130,495	144,338	145,912	140,251	169,026	208,803	221,445	203,961
Cost of sales	Millions of yen	65,670	70,385	71,916	71,774	85,631	96,421	101,439	100,077
Selling, general and administrative expenses	Millions of yen	30,199	33,857	35,520	34,577	37,709	44,128	51,025	58,215
Research and development expenses	Millions of yen	11,776	12,830	13,071	12,147	11,367	11,269	12,304	13,551
Operating profit	Millions of yen	22,849	27,263	25,403	21,752	34,318	56,983	56,676	32,118
Ordinary profit	Millions of yen	24,037	28,088	26,277	22,692	34,648	58,879	59,415	34,512
Profit attributable to owners of parent	Millions of yen	17,777	21,222	19,918	16,523	25,053	41,295	42,825	25,145
Capital expenditures	Millions of yen	13,572	14,221	17,412	20,337	12,982	20,427	31,170	30,941
Depreciation	Millions of yen	10,010	11,386	12,110	12,781	13,678	13,661	14,734	17,737
Cash flows from operating activities	Millions of yen	26,154	23,579	30,875	23,321	39,913	45,126	34,253	38,051
Cash flows from investing activities	Millions of yen	(13,198)	(8,880)	(16,086)	(16,215)	(16,778)	(13,331)	(32,897)	(73,699)
Cash flows from financing activities	Millions of yen	(5,707)	(16,323)	(6,681)	(6,508)	(4,475)	(7,759)	(11,913)	12,558
Cash and cash equivalents at end of the period	Millions of yen	63,385	61,824	68,521	68,773	90,008	123,065	114,419	92,579
Total assets	Millions of yen	239,331	244,914	259,694	271,615	301,676	366,177	402,921	434,634
Equity capital	Millions of yen	186,939	193,317	202,957	212,680	236,522	280,563	318,645	331,307
Working capital	Millions of yen	51,262	59,031	60,254	63,901	72,172	91,445	108,856	112,934
Total number of issued shares	Thousands	167,529	165,011	165,011	165,027	165,041	165,052	165,065	165,083
Operating profit ratio	%	17.5	18.9	17.4	15.5	20.3	27.3	25.6	15.7
ROA	%	7.8	8.8	7.9	6.2	8.7	12.4	11.1	6.0
ROE	%	10.0	11.2	10.1	8.0	11.2	16.0	14.3	7.7

Per share indicators

Earnings per share	Yen	113.00	136.50	128.67	106.73	161.82	266.70	276.56	162.38
Dividends	Yen	34	37	40	40	48	72	76	76
Payout ratio	%	30.1	27.1	31.1	37.5	29.7	27.0	27.5	46.8

Non-financial data

Average years of service (males)	Years	16.2	16.4	16.4	16.4	16.3	16.2	15.9	15.7
Average years of service (females)	Years	15.7	15.1	15.3	14.9	14.9	14.9	14.6	14.1
Average years of service (total)	Years	16.1	16.2	16.2	16.1	16.1	16.0	15.7	15.4
Turnover rate	%	0.7	0.8	0.9	0.8	1.1	0.8	1.0	—
Parental leave return rate	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	—
Greenhouse gas emissions (Scopes 1 and 2)*1	t-CO_2	56,539	57,945	62,742	62,775	59,237	57,504	8,970	7,379
Water*2	Thousand m^3	703	704	749	730	822	879	919	855
Renewable energy*2	kWh	7,188	6,754	6,050,667	7,099,740	11,544,463	19,855,218	132,529,360	137,503,153
	(Unit)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024

*1 From FY2019, this includes Hamamatsu Photonics K.K., domestic consolidated subsidiaries, and overseas manufacturing consolidated subsidiaries. For FY2024, this also includes overseas non-manufacturing consolidated subsidiaries.
*2 From FY2021, this includes Hamamatsu Photonics K.K., domestic consolidated subsidiaries, and overseas manufacturing consolidated subsidiaries. For FY2024, this also includes overseas non-manufacturing consolidated subsidiaries.

Consolidated Balance Sheet

(millions of yen)

		As of Sep. 30, 2023	As of Sep. 30, 2024
Assets	Current assets		
	Cash and deposits	119,128	97,021
	Notes and accounts receivable - trade	50,471	45,717
	Securities	2,393	2,854
	Merchandise and finished goods	18,146	15,458
	Work in process	36,014	39,897
	Raw materials and supplies	21,394	25,214
	Other	13,546	13,248
	Allowance for doubtful accounts	(245)	(402)
	Total current assets	260,850	239,009
	Non-current assets		
	Property, plant and equipment	113,648	132,895
	Intangible assets	5,136	35,731
	Investments and other assets	23,286	26,997
	Total non-current assets	142,071	195,624
	Total assets	402,921	434,634
Liabilities	Current liabilities		
	Notes and accounts payable - trade	7,931	6,558
	Electronically recorded obligations - operating	9,238	6,795
	Short-term borrowings	5,854	25,281
	Current portion of long-term borrowings	1,094	3,114
	Income taxes payable	6,631	955
	Provision for bonuses	7,265	6,933
	Other	30,484	31,096
	Total current liabilities	68,500	80,734
	Non-current liabilities		
	Long-term borrowings	5,535	8,522
	Retirement benefit liability	6,383	7,758
	Deferred tax liabilities	336	231
	Other	2,107	4,374
	Total non-current liabilities	14,362	20,888
	Total liabilities	82,862	101,623
Net assets	Shareholders' equity		
	Share capital	35,095	35,146
	Capital surplus	34,374	34,426
	Retained earnings	247,922	261,277
	Treasury shares	(20,798)	(20,798)
	Total shareholders' equity	296,594	310,052
	Accumulated other comprehensive income		
	Valuation difference on available-for-sale securities	1,109	1,096
	Foreign currency translation adjustment	19,173	18,071
	Remeasurements of defined benefit plans	1,768	2,086
	Total accumulated other comprehensive income	22,051	21,255
	Non-controlling interests	1,413	1,704
	Total net assets	320,059	333,011
	Total liabilities and net assets	402,921	434,634

Consolidated Statement of Income

(millions of yen)

	Fiscal year ended Sep. 30, 2023	Fiscal year ended Sep. 30, 2024
Net sales	221,445	203,961
Cost of sales	101,439	100,077
Gross profit	120,006	103,884
Selling, general and administrative expenses	63,330	71,766
Operating profit	56,676	32,118
Non-operating income	2,981	3,125
Non-operating expenses	242	731
Ordinary profit	59,415	34,512
Total extraordinary income	534	1,956
Total extraordinary losses	1,429	1,033
Profit before income taxes	58,520	35,435
Income taxes - current	17,144	10,052
Income taxes - deferred	(1,663)	(18)
Total income taxes	15,480	10,034
Profit	43,039	25,401
Profit attributable to non-controlling interests	214	256
Profit attributable to owners of parent	42,825	25,145

Consolidated Statement of Comprehensive Income

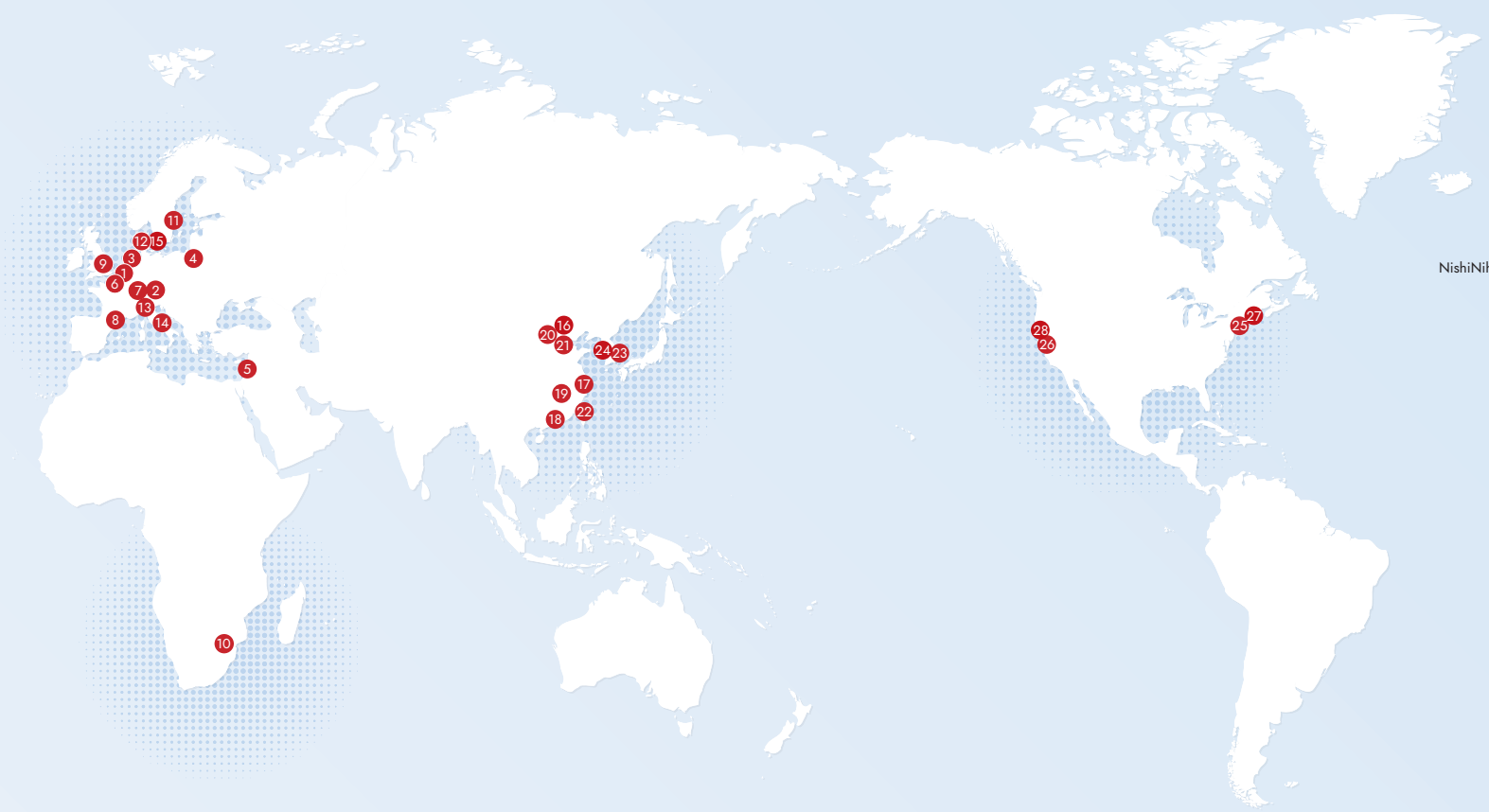
(millions of yen)

Profit	43,039	25,401
Other comprehensive income		
Valuation difference on available-for-sale securities	188	(12)
Deferred gains or losses on hedges	274	—
Foreign currency translation adjustment	3,816	(1,111)
Remeasurements of defined benefit plans, net of tax	3,434	318
Share of other comprehensive income of entities accounted for using equity method	35	84
Total other comprehensive income	7,749	(720)
Comprehensive income	50,788	24,680
Comprehensive income attributable to		
Comprehensive income attributable to owners of parent	50,552	24,349
Comprehensive income attributable to non-controlling interests	236	331

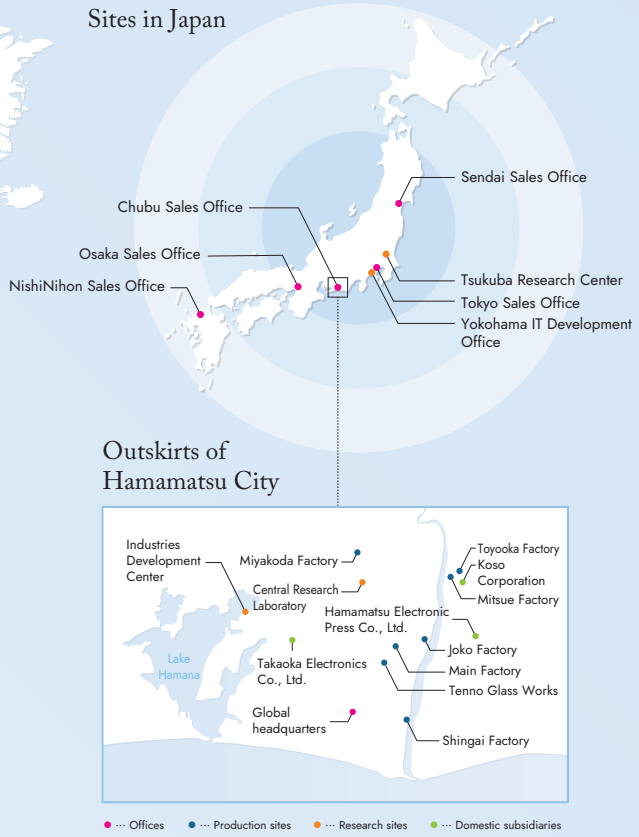
For more information about these financial statements, click the following link.

https://www.hamamatsu.com/content/dam/hamamatsu-photonics/sites/documents/01_HQ/ir/financial-information/quarterly-financial-reports/h_ir_fr2024-year.pdf

List of Locations



Sites in Japan



Europe/Middle East/Africa

1 **PHOTONICS MANAGEMENT EUROPE SRL**

2 **HAMAMATSU PHOTONICS EUROPE GMBH**

HAMAMATSU PHOTONICS DEUTSCHLAND GMBH
- 2 Main Office
- 3 Netherlands Office
- 4 Poland Office
- 5 Israel Office (HAMAMATSU PHOTONICS ISRAEL LTD.)

HAMAMATSU PHOTONICS FRANCE S.A.R.L.
- 6 Main Office
- 7 Swiss Office
- 1 Belgian Office
- 8 Spanish Office

HAMAMATSU PHOTONICS UK LIMITED
- 9 Main Office
- 10 South Africa Contact

HAMAMATSU PHOTONICS NORDEN AB
- 11 Main Office
- 12 Danish Office

HAMAMATSU PHOTONICS ITALIA S.R.L.
- 13 Main Office
- 14 Rome Office

15 **NKT PHOTONICS A/S**

Asia and Oceania

HAMAMATSU PHOTONICS (CHINA) CO., LTD.
- 16 Main Office
- 17 Shanghai Branch
- 18 Shenzhen Branch
- 19 Wuhan Branch

BEIJING HAMAMATSU PHOTON TECHNIQUES INC.
- 20 Main Office
- 21 Langfang Factory

HAMAMATSU PHOTONICS TAIWAN CO., LTD.
- 22 Hsinchu Office

HAMAMATSU PHOTONICS KOREA CO., LTD.
- 23 Main Office
- 24 Dongtan Plant

Americas

25 **PHOTONICS MANAGEMENT CORP.**

HAMAMATSU CORPORATION
- 25 Main Office
- 26 California Office

27 **ENERGETIQ TECHNOLOGY, INC.**

28 **FAIRCHILD IMAGING, INC.**

Corporate Profile (As of September 30, 2024)

Company name	Hamamatsu Photonics K.K.
Established	September 29, 1953
Global headquarters	325-6 Sunayama-cho, Chuo-ku, Hamamatsu City, Shizuoka Prefecture, 430-8587, Japan
Capital	35,146 million yen
Number of employees	4,225 (non-consolidated), 6,395 (consolidated)
Main product lines	Photomultiplier Tubes, Imaging Devices, Light Sources, Opto-Semiconductors, Imaging and Analyzing Systems, Laser Equipment, Laser Equipment Components
Net sales (consolidated)	203,961 million yen (FY2024)
Fiscal year	October 1 to September 30
General meeting of shareholders	December
Listings	Tokyo Stock Exchange, Prime Market
Securities code	6965
Accounting auditor	Ernst & Young ShinNihon LLC



Sites in Japan

Global headquarters	Hamamatsu, Shizuoka Prefecture
Factories	Main Factory, Shingai Factory, Tenno Glass Works, Joko Factory, Miyakoda Factory (Hamamatsu City); Toyooka Factory, Mitsue Factory (Iwata City)
Sales offices	Tokyo Sales Office, Sendai Sales Office, Chubu Sales Office (Hamamatsu City), Osaka Sales Office, NishiNihon Sales Office (Fukuoka City)
Laboratories	Central Research Laboratory, Industries Development Center (Hamamatsu City); Tsukuba Research Center (Tsukuba City); Yokohama IT Development Office

Main Subsidiaries

Japan

- Koso Corporation
- Takaoka Electronics Co., Ltd.
- Hamamatsu Electronic Press Co., Ltd.
- Iwata Grand Hotel, Inc.
- Hamamatsu Ventures, Japan Co., Ltd.

Overseas

Americas
- Photonics Management Corp.
- Hamamatsu Corporation
- Energetiq Technology, Inc.

Europe
- Photonics Management Europe SRL
- Hamamatsu Photonics Europe GmbH
- Hamamatsu Photonics Deutschland GmbH
- Hamamatsu Photonics France S.A.R.L.
- Hamamatsu Photonics Norden AB
- Hamamatsu Photonics Italia S.R.L.
- Hamamatsu Photonics UK Limited
- NKT Photonics A/S

Asia and other regions
- Hamamatsu Photonics (China) Co., Ltd.
- Beijing Hamamatsu Photon Techniques Inc.
- Hamamatsu Photonics Taiwan Co., Ltd.
- Hamamatsu Photonics Korea Co., Ltd.

Information About Shares

(As of September 30, 2024)

○ **Total number of authorized shares (common stock)**
500,000,000

○ **Total number of issued shares**
165,083,770 (including 9,945,961 treasury shares)

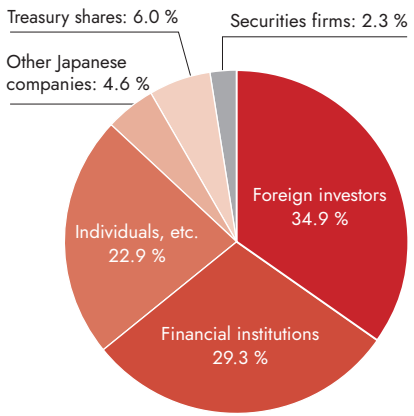
○ **Number of shareholders**
48,967

○ **Transfer agent and registrar**
Sumitomo Mitsui Trust Bank, Limited

Major shareholders	Shares held	Shareholding ratio (%)
The Master Trust Bank of Japan, Ltd. (Trust Account)	24,916,500	16.1
Custody Bank of Japan, Ltd. (Trust Account)	10,485,500	6.8
Hamamatsu Photonics K.K. employees	4,224,214	2.7
STATE STREET BANK AND TRUST COMPANY 505025	3,919,362	2.5
JP MORGAN CHASE BANK 385632	3,869,900	2.5
The Nomura Trust and Banking Co., Ltd. (Investment Trust)	2,943,500	1.9
STATE STREET BANK AND TRUST COMPANY 505001	2,870,733	1.9
JP MORGAN CHASE BANK 385864	2,735,000	1.8
STATE STREET BANK WEST CLIENT - TREATY 505234	2,709,787	1.7
JP MORGAN CHASE BANK 385781	1,813,316	1.2

Notes 1. The company holds 9,945,961 treasury shares excluded from the shares of the major shareholders listed above.
2. The percentage of total shares outstanding is calculated by excluding treasury shares. Units less than that shown above are rounded off.
3. The total number of issued shares increased by 17,822 as a result of the issuance of common stock as restricted stock remuneration on January 19, 2024.

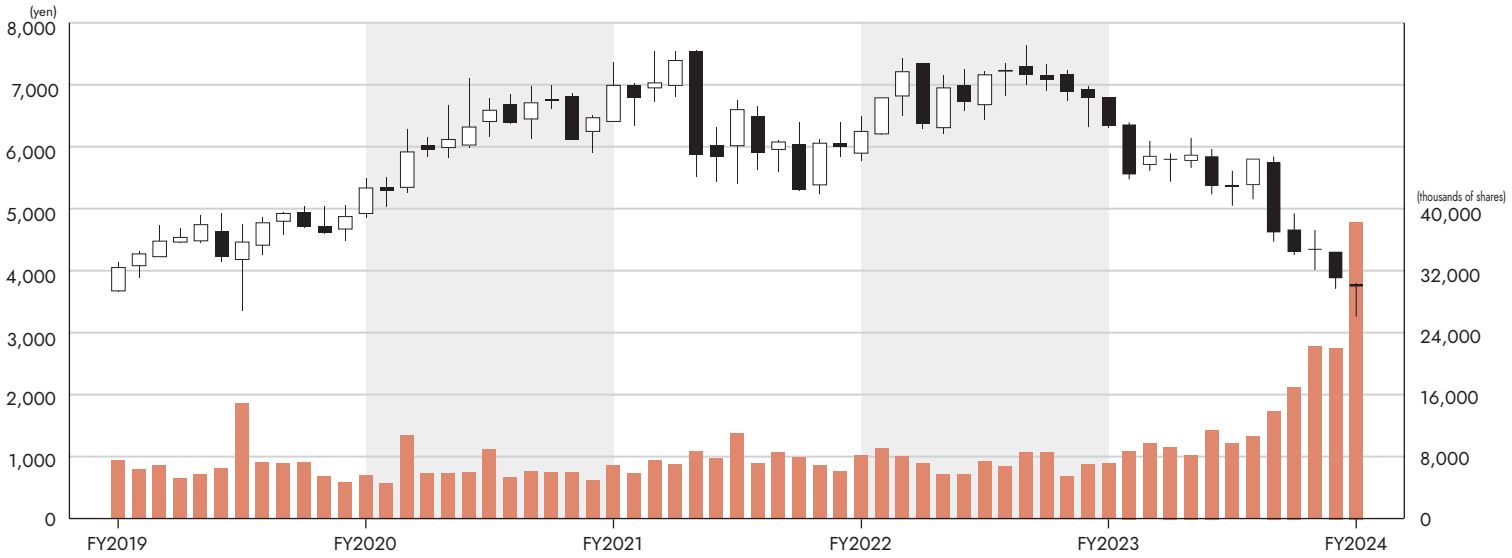
■ **Distribution of shares by shareholder**



■ **There is no information relevant to the Company's share acquisition rights and similar matters.**

Changes in Share Price and Yield

(As of September 30, 2024)



For information about this report, refer to the links below.

- IR library
(integrated reports and other documents)
https://www.hamamatsu.com/all/en/investor-relations/ir-library.html

- Sustainability
https://www.hamamatsu.com/all/en/our-company/sustainability.html

- Products
https://www.hamamatsu.com/all/en/product.html

HAMAMATSU

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