

Connecting Social Value to Economic Value

Strategic Focus

In order to realize Vision 2030, Ushio will continue to fully embrace ESG management. Through our Five Management Focuses, we will continue to pursue the creation of both social and economic value.



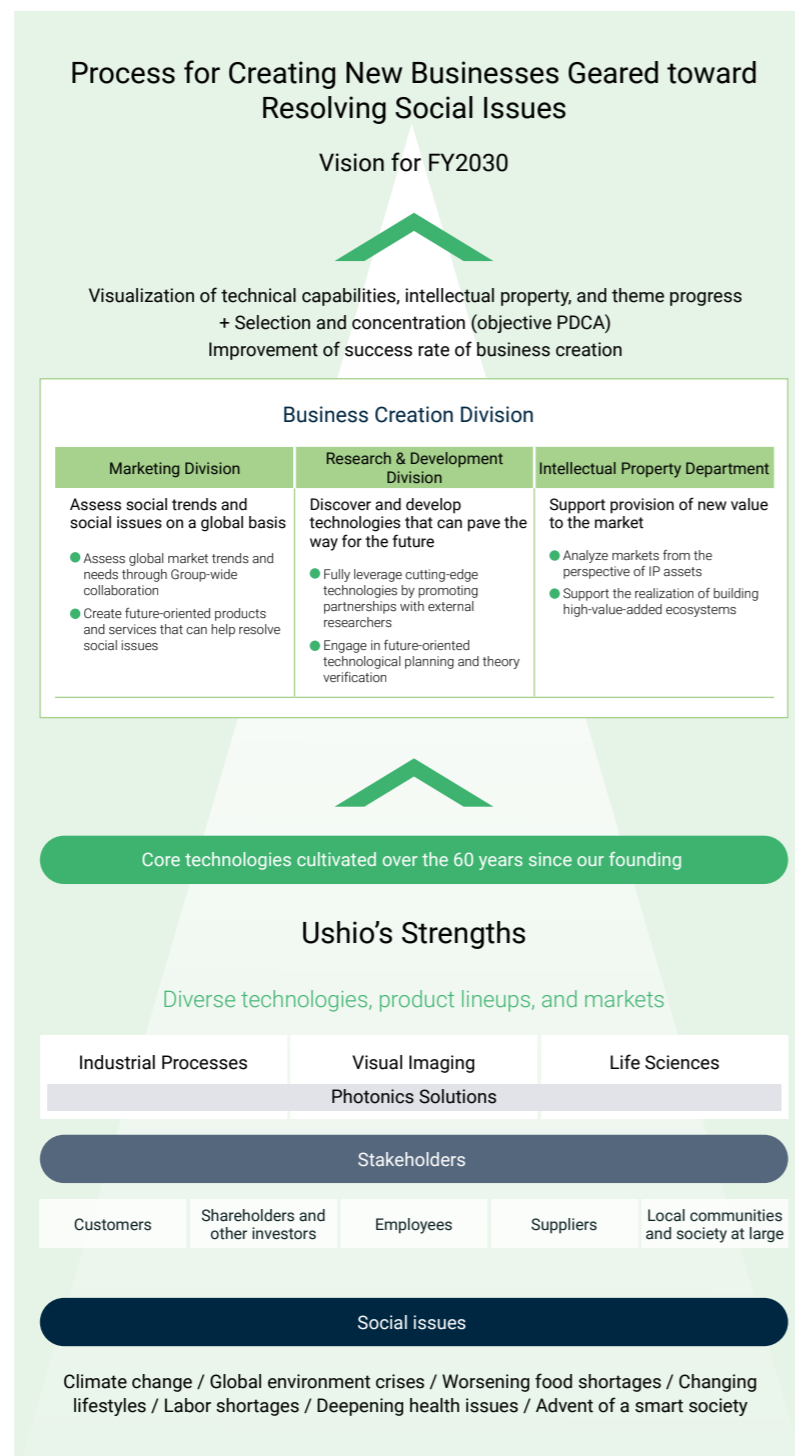
1 Creating Businesses with Greater Social Value

Vision for FY2030

- Create businesses that address the social issues of climate change countermeasures, food initiatives, healthy life expectancy extension, and realizing DX

Three-Pronged Structure for New Business Creation

We have established the Business Creation Division, which integrates R&D, marketing, and intellectual property functions, with a view to creating and providing new value. Through this division, we will accelerate new business creation aimed at resolving social issues.



Column



Profile

Nobuhiro Inosako
Senior Executive Officer
General Manager,
Business Creation
Division,
Ushio Inc.

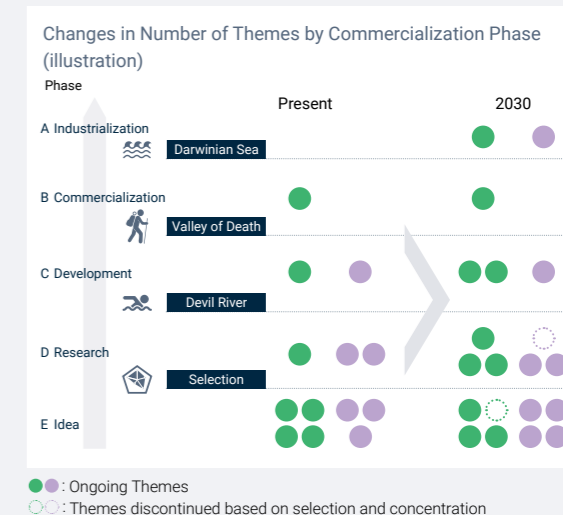
Message from the General Manager of the Business Creation Division

Setting a Business Creation Division MTP

The Business Creation Division was established in fiscal 2022, and we have been working towards our mission to “resolve social issues through the creation and provision of new value.” In order to realize Ushio Group’s Vision 2030, we must add to our current foundational businesses by creating and developing new businesses that can become core businesses to support the next generation. In carrying out this mission, the basic policies of the Business Creation Division remain unchanged from fiscal 2022. However, in fiscal 2023, we have also established the following Massive Transformative Purpose (MTP) as the Business Creation Division’s decision-making criteria for concrete implementation of policies. This MTP is, “Through an ongoing organizational approach with a realistic view of the future, we will generate and provide sustainable value by promoting innovation to solve social issues and improve the lives of people.” Put simply, in business creation, it is difficult to predict three years into the future, but by taking the plunge and looking further ahead, maybe 30 years into the future, the variables and approach can be simplified and it becomes possible to make general predictions. In this way, having a realistic view of the future and backcasting from there to the present enables us to make decisions regarding our current activities, for example, regarding which choices are reliable and will lead to a realistic future.

2022 ▶ 2023 ▶ Moving beyond time

Fiscal 2022 was the first fiscal year for the Business Creation Division, and in parallel with promoting commercialization action in line with various initiative themes, we visualized progress in each area using commercialization phases. In order to make effective use of resources through appropriate selection and concentration, we also focused on establishing a PDCA system based on objective criteria. The fact that it took longer than expected to obtain consensus from the people involved is one point for reflection in this area.



After that, we have been working to improve the reliability of new business creation by analyzing Ushio’s past new business creation activities, then improving on weaknesses and further enhancing strengths. We visualize trends regarding our technology and intellectual property along market and time axes and work to grasp the progress of each initiative theme from three major perspectives: marketing, merchandising and sales dynamics. Through this, we are improving our PDCA cycle based on the aforementioned objective criteria, enabling rotation on a monthly basis. These are just some of the actions we are taking to achieve the universal goals of the Business Creation Division, moving “beyond time” to “developing human capital and a system for sustainable, continuous business creation.” From the perspective of a race against time, creating new businesses requires flexible and timely responses to changes in market conditions, and we are promoting actions such as open innovation in order to proactively incorporate new knowledge and approaches both internally and externally, while also working to improve the speed with which we can provide new value to the market.

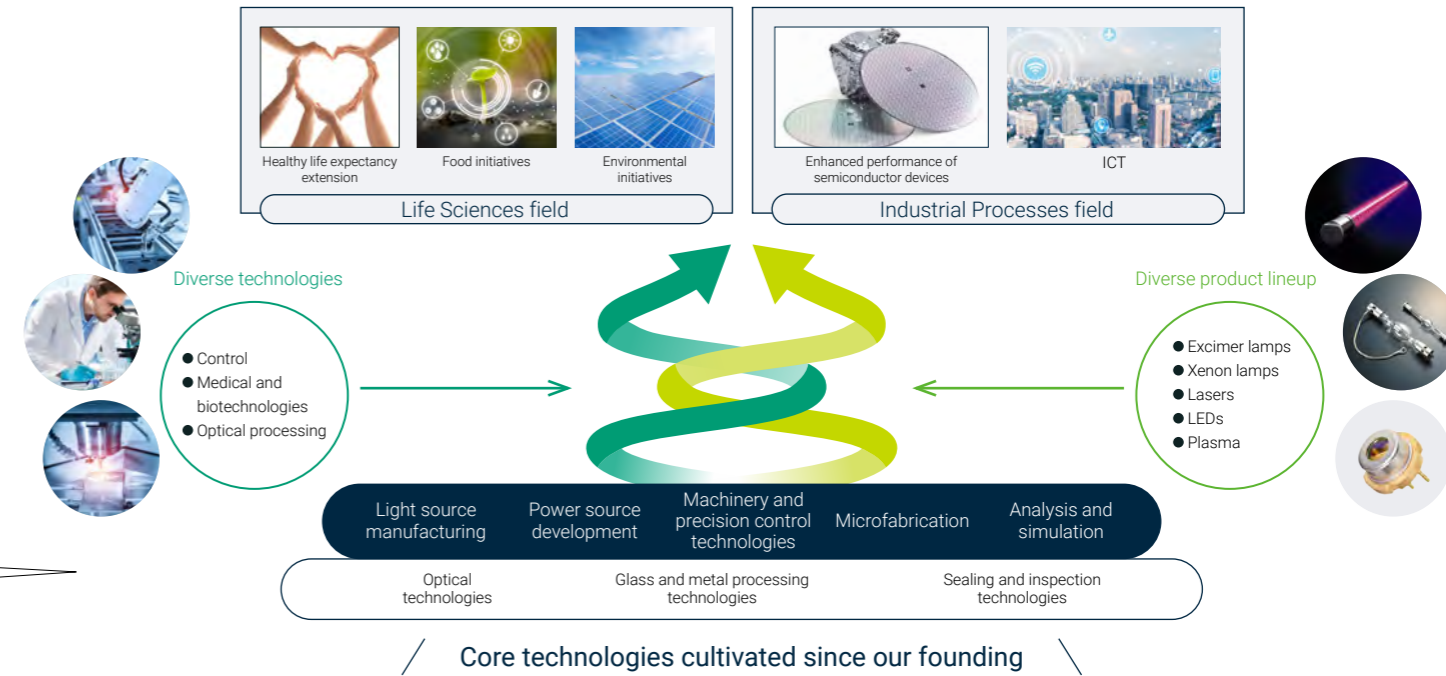
Creating Businesses with Greater Social Value

Ushio's Potential for Creating Businesses with Greater Social Value

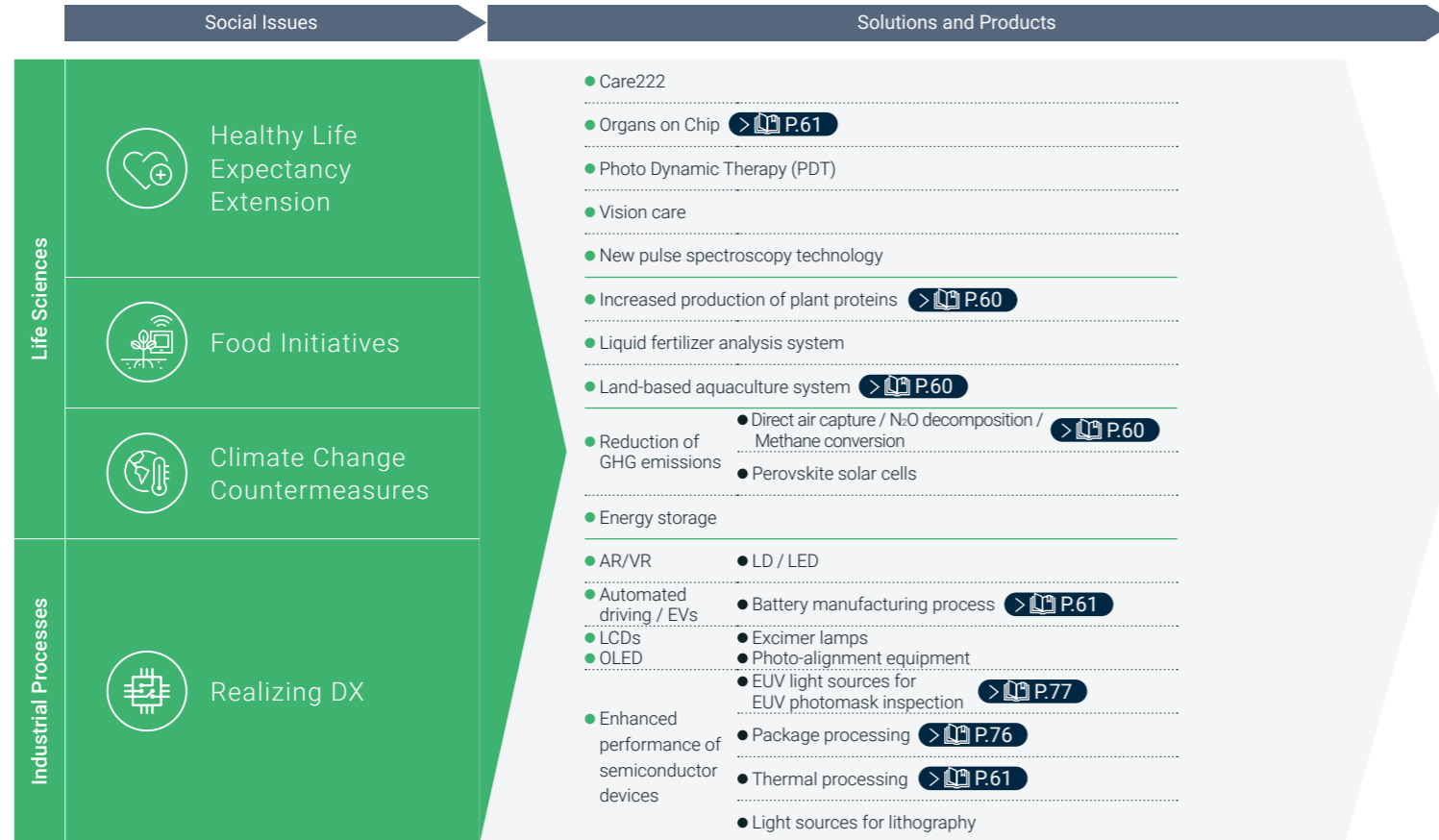
Ushio has created a vast array of products by leveraging the technologies it has cultivated since its founding. This product creation has been strongly supported by our core technologies for controlling light, and our keen ability to perceive social issues. Going forward, we will continue to utilize our core technologies to provide solutions that resolve social issues, thereby supporting human well-being and societal growth.

Through the Business Creation Division, we are drawing on our long-cultivated technologies, together with our various light sources (lamps, LEDs, lasers) and optical design capabilities, to establish a future business pillar through efforts to address issues in the Life Sciences domain, such as food initiatives, environmental issues, and healthy life expectancy extension.

We are also currently focusing on the Industrial Processes domain, specifically fields such as semiconductors and LCDs, which are our major businesses. We will contribute to this domain by leveraging our light source technologies, including LEDs, various kinds of lasers, and excimer lamps, thereby establishing it as a foundation for the manufacturing process of new products aimed at the future.



Importance of Issues



Core Technologies → New Technologies

	Owned Technologies						
	Light source manufacturing / Power source development	Analysis and simulation	Optical technologies	Equipment technologies	Optical processing technologies	Microfabrication technologies	Medical / Biotech
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To date, Ushio has expanded its business domains from Visual Imaging to Industrial Processes through the use of light as energy. Going forward, we will strive to combine our core technologies—light sources and analytical and optical technologies—with new ones in an effort to create businesses with greater social value centered on the Life Sciences domain.

Research and Development

R&D and IP Strategies to Create Businesses with Greater Social Value

We will help address the issues of society by continuing to create and provide new value.



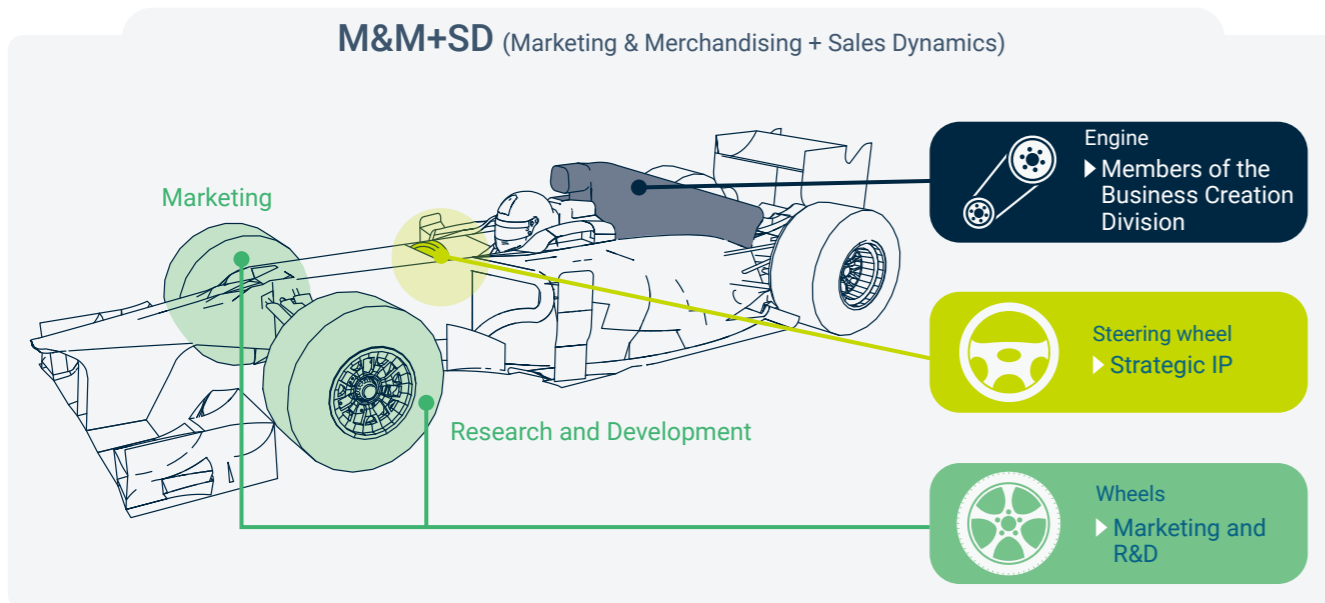
Research & Development System

The development of new business entails closely linking the marketing capabilities (the ability to identify social issues) and the technological capabilities (the ability to conduct R&D and manufacture products) necessary for creating new value. In order to establish a business based on the provision of this new value, we must focus on developing a sales mechanism based on sales dynamics, and ensure the management of intellectual property (IP).

Marketing and R&D are often compared to the wheels of a car while IP management is considered the steering wheel. Without strategic IP management, providing the market with the type of value expected would be extremely difficult, and the potential for developing new businesses is at its highest when these three essential elements are provided to the market in a timely manner.

The Business Creation Division converges these essential basic functions (marketing, R&D, and strategic IP) and, based on Marketing & Merchandising + Sales Dynamics (M&M + SD) as the action guideline, each member spurs the creation of new businesses by teaming up with Group affiliates and business partners.

Generally speaking, the creation of new businesses is not an endeavor with a high probability of success. However, through the self-help efforts of each team based on M&M+SD, we are working to steadily create even stronger businesses by refining our ability to capture the essence of issues, to uncover new technologies that contribute to resolving issues, and to quantitatively assess and ascertain the target market, with a focus on our core areas.



Fundamental Technology Department

This department's mission is to expand the possibilities of light by deepening Ushio's technologies and exploring new applications for these technologies in order to create new value. It is building a fundamental technology development system as part of our development processes while working to develop new analysis, simulation and optical process technologies as part of the strong technological foundation that will be needed in the future.

Analysis as a Fundamental Technology

Analysis and simulation technology is an area of core technology that Ushio has cultivated since its founding. Understanding the principles of science through technologies for analyzing molecules, atoms and surface conditions on a microscopic scale is an essential part of new product development and maintaining high quality standards. By developing proprietary analysis technology tailored to our products, we have elevated its position as a core technology.

In the field of light sources for EUV photomask inspection, we are currently developing analysis equipment to simulate the environment inside these light sources and properly understand the science of what occurs there in order to maintain and enhance our technological superiority in areas such as stable capacity utilization and performance.

Moving forward, we will continue working to develop new analytical technologies that will be needed in the future with the aim of creating and providing new value to resolve social issues while expanding Ushio's core competencies.

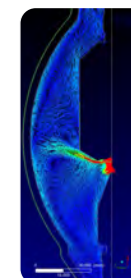


Ushio's analysis devices

Simulation Technology as a Fundamental Technology

In the process from research and development to commercialization, there are four issues that must be overcome: shortening development periods, reducing costs, improving design quality, and enhancing added value. Simulation technology is one means through which these issues can be addressed. For example, simulating numerous design factors and visualizing phenomena enables the creation of well-founded design ideas. This can also enhance the performance improvements that can be achieved in a short development period.

Ushio has built up a wealth of proprietary technologies by accumulating analysis technologies deployed in response to requests. We convert these proprietary technologies into design tools for provision to business divisions while working to develop new analysis technologies that provide analysis-based proposals to take on new challenges and issues. In addition to existing products such as ultra-high-pressure UV lamps and excimer lamps, we will continue to expand the scope of our analysis to include a wide range of new products, including light sources for EUV photomask inspection.



Simulation of convection inside a lamp

Optical Process Technology as a Fundamental Technology

We develop elemental technologies based on the keywords of surface modification and thin film modification as processing technologies (optical processes) that can maximize the strengths of light. When setting development themes, resolving social issues relating to climate change countermeasures and the realization of DX is essential, and we emphasize considerations based on science, including photochemistry, in our work. We focus on the environments where light is used and the materials that are irradiated as we work to understand the mechanisms of various phenomena associated with light irradiation and develop new optical processes. In addition, we actively present our results in academic forums, aiming to promote open innovation through discussions with a wide range of researchers from both industry and academia.

Through these efforts, we are going beyond providing light sources and equipment to also propose ways to utilize them, bringing us closer to our goal of being a "light" solutions company.

Major Activity Themes

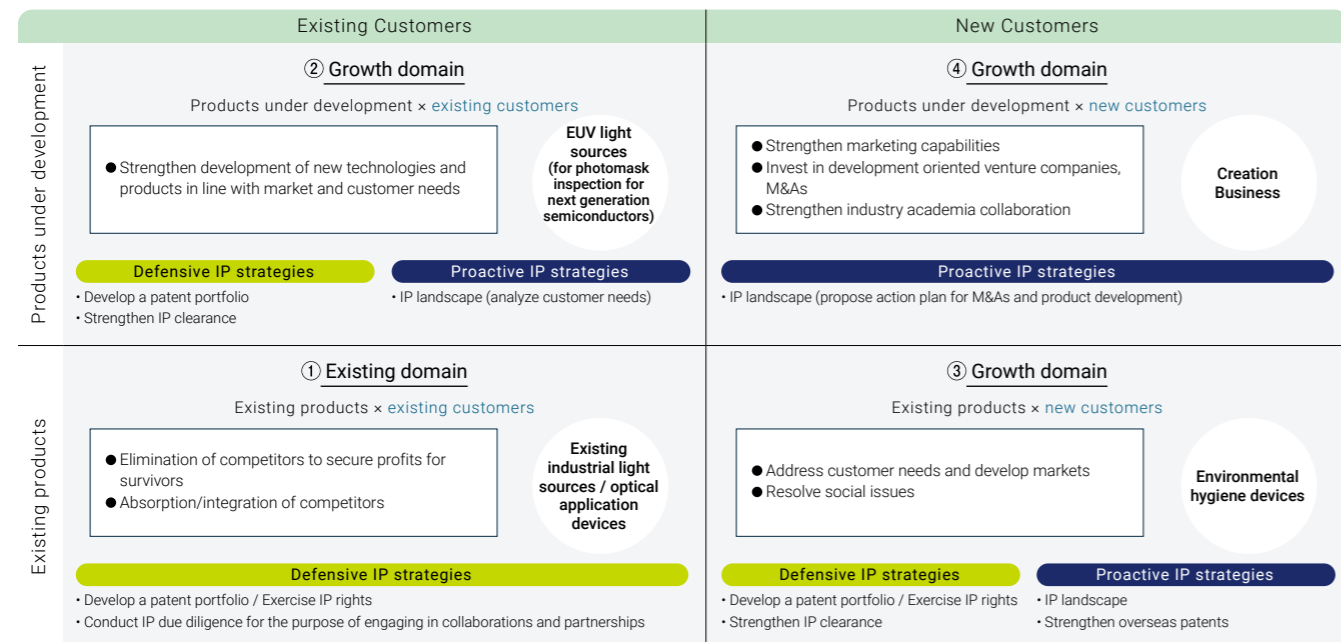
- Surface modification technology for next-generation (Beyond 5G/6G) high-frequency circuit boards
- Thin-film modification processes for perovskite solar cells
- Atmospheric pressure plasma reactors and related application processes

R&D and IP Strategies to Create Businesses with Greater Social Value

Intellectual Property Strategy

At Ushio, we are proceeding with IP strategies that are linked to the business strategies of each of our four regions, as described below, toward realizing Vision 2030.

By making optimal use of both proactive and defensive IP strategies according to the growth stage of each business, we help our customers realize sustainable growth and expand their businesses.



■ Intellectual Property strategies □ Business strategies

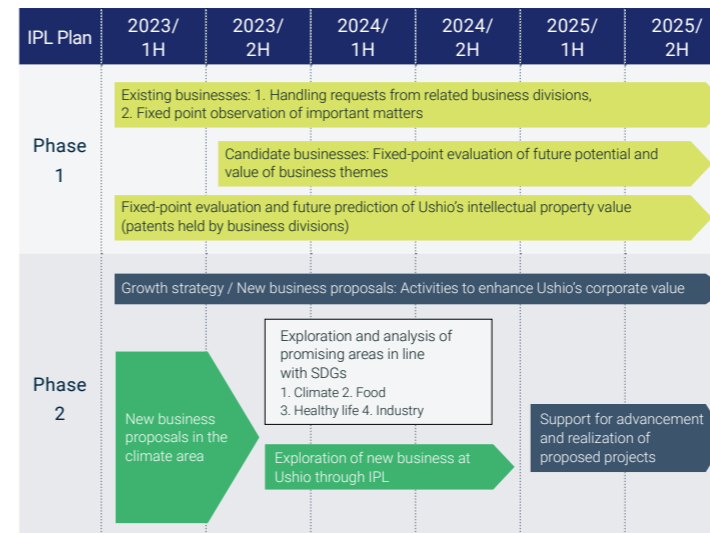
In-House Courses on Intellectual Property

We believe the inspiration behind the strength of our IP rights, which ensure a competitive edge over our rivals, is the method in which we resolve technical issues, which has been shaped through the process of hardships we have endured in pursuit of their resolution. Continuing to improve the intellectual property capabilities of all technical staff is essential in order to transform problem-solving methods created by researchers and development staff into impactful patents. Based on this idea, Ushio has established the following intellectual property training courses, and plans to provide training to approximately 400 technical employees over the three years from fiscal 2021 to 2023.

Employee Training Sessions	Executive Training Sessions
Why companies file patents	Avoiding risks relating to patents held by other companies
Tips for reading patents quickly	Utilization of rights (in order to make successful legal arguments)
How to derive technical information from patents	Case studies (examples of the Company's successes and failures)
Introduction to and use of invention and idea creation methods	Applications and fees outside of Japan
Summarizing inventions from developed products	
Tips for presenting arguments to examiners	
Case studies of items that can be patented	

Research and Development

IP Landscapes



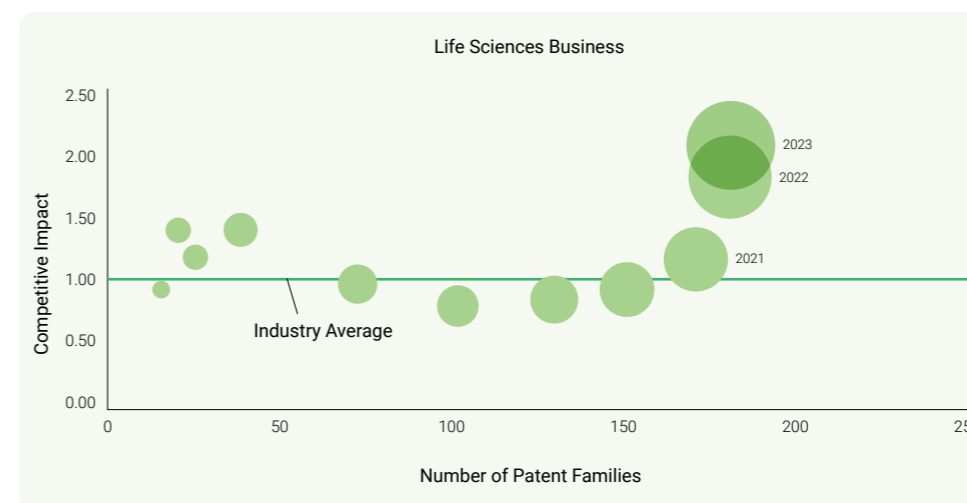
IP landscapes (IPLs) are a useful tool for resolving management issues. Taking patent information with high objective fairness as a starting point before adding other information and supplementary analysis, they provide a bird's-eye view of industries and support strategic recommendations, such as lines of attack, based on a company's position. Ushio has divided its IPL into two phases with different content and purposes. Phase 1 aims to deepen existing businesses, while Phase 2 explores new themes that can generate synergies with the Company's core technologies. To advance our use of IPLs, we have established IPL projects with the IP Department at the center and the participation of in-house technical departments and external experts. In fiscal 2022, two new development themes directly linked to resolving social issues based on awareness of the SDGs were proposed to management, and we are working to explore new themes further in fiscal 2023.

The Ushio Group's Intellectual Capital

01

The number of patents that Ushio holds in the business areas of Industrial Processes, Visual Imaging, Life Sciences and Photonics Solutions is shown in the table on the right. The percentage of core patents is over 10% in all areas, and the patent group is structured to cover foundational, growth, and creation businesses.

Business domain	Core patents / All patents	Core patent ratio
Industrial Processes	70/447	15.7%
Visual Imaging	13/67	19.4%
Life Sciences	44/155	28.4%
Photonics Solutions	38/200	19.0%



Based on research conducted by LexisNexis using PatentSight (until March 2023). The size of each circle represents the competitive advantage and overall strength of the patent portfolio.

02

Under the Creation Business, which has been an area of focus for Ushio in recent years, the quality of patents as measured by the Competitive Impact (CI) value in the Life Sciences business, in which environmental hygiene is a central field, has increased rapidly over the past three years and is significantly above the industry average (CI = 1). This indicates that the patent group is well-balanced in terms of both quality and quantity.

Creating Businesses with Greater Social Value

Examples of Business Creation with Greater Social Value

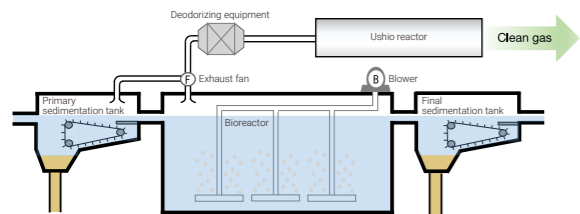
Climate Change Countermeasures

Promoting technological development aimed at reducing GHG

In terms of action against climate change, we have established a vision based on creating a world where global net zero carbon emissions and the wellbeing of people are in harmony with each other. We aim to help mitigate climate change through light and electrical discharge technologies. We have selected several climate change countermeasure themes in consideration of carbon and nitrogen circulation with the aim of reducing greenhouse gas (GHG) emissions. Under each of these themes, we are engaged in co-creation with numerous companies and organizations as we work towards their commercialization.

Promoting technological development to reduce N₂O levels

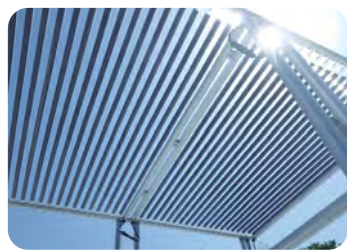
In order to reduce levels of nitrous oxide (N₂O, which has high global warming potential), Ushio has been working on ways to use its excimer lights to decompose N₂O. In addition to progress in terms of performance and academic collaboration, this project was selected as the FY2023 Research Theme for Sewers Application Research by the Ministry of Land, Infrastructure, Transport and Tourism of Japan.



Installation of gas decomposition reactor in sewage treatment (illustration)

Promoting social application of solar batteries

As part of the social application of cylindrical solar batteries, Ushio is working with and promoting the Tokyo Metropolitan Government's fiscal 2022 University Researcher Business Proposal System. We are also working to contribute to the creation of next-generation solar batteries through research on technology that utilizes light in manufacturing processes.



Research on technology that utilizes light in manufacturing processes.

Cylindrical solar battery verification testing

Food Initiatives

Shift to sustainable food production systems and providing sufficient stable food supplies for human development

With the global population projected to rise to approximately 9.7 billion by 2050, demand for food is expected to increase significantly. Against this backdrop, serious food shortages due to limited water supplies and the impact of agricultural land development and chemical fertilizers on global warming are areas of concern. In the future, the creation of new food production systems that increase productivity while being eco-friendly will be crucial. Ushio has started by aiming to produce soya beans, which have high utility as an alternative source of protein, in plant factories, and we are developing optical technology to improve resource efficiency and crop functionality. We will continue working to create systems capable of producing large quantities of food all year regardless of the climate in the country concerned.



Plant cultivation using 100% artificial light and liquid fertilizer management

Contributing to the establishment of sustainable land-based aquaculture systems and global food security

The proportion of people who include fish in their diet is growing worldwide, and there have been continuous efforts to increase global aquaculture production. At the same time, Japan has seen annual fishing catches decrease due to factors such as aging workforces in the fishing industry. Ushio launched its land-based aquaculture project to do what we can to improve this situation. We collaborate with large companies considering land-based aquaculture, working to resolve issues they are facing with the aim of counteracting falling catch rates in Japan. By applying our specialist optical technology, we will continue to contribute to food security and the widespread adoption of land-based aquaculture in Japan and beyond.



Research on photoresponsivity in fish

Healthy Life Expectancy Extension

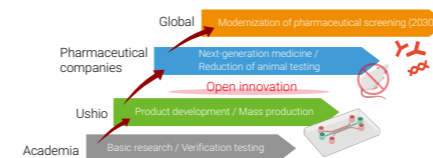
OoC: Providing a platform to speed up drug development

With intensifying competition in new drug development and the shift to the latest biopharmaceutical products, the challenges faced by pharmaceutical companies in terms of drug development are growing greater year by year. This makes reducing development periods and efficient drug development testing crucial issues. Conditions for OoC*1 are also growing more favorable due to developments such as the passing of the FDA Modernization Act 2.0*2 in the United States at the end of 2022, enabling alternative testing methods to be used for new drug registrations by removing the requirement for animal testing.

Against this backdrop, our OoC projects are also moving forward with development aimed at pharmaceutical companies in Europe, the United States and Japan. We have received inquiries from several major pharmaceutical companies, with the potential to lead to significant sales. We are also actively engaged in awareness-raising activities, such as cosponsoring OoC-related events, in which pharmaceutical companies participate, in Japan and overseas, and holding exhibitions of the development results and chip workshop*3 initiatives.

In Japan, we are participating in a group led by the Tohoku Institute of Technology as part of an AMED*4 project related to the practical application of OoC and have established our position as an OoC manufacturer. We are working on the social application of OoC through a system of industry-academia-government collaboration that includes pharmaceutical companies. Ushio has also been cited as a domestic OoC manufacturer in a report by Japan's Ministry of Economy, Trade and Industry*5, one example that shows how our OoC initiatives are gaining recognition, including among major pharmaceutical companies in Japan and overseas.

*1 OoC: Organs On Chip
 *2 U.S. Food and Drug Administration (FDA) Modernization Act 2.0
 *3 A service offering dialogue-based joint development of original chips for pharmaceutical companies
 *4 AMED: Japan Agency for Medical Research and Development
 *5 Second interim evaluation committee of the Foundational Technology Development Project for the Promotion of Regenerative Medicine and Gene Therapy Industrialization



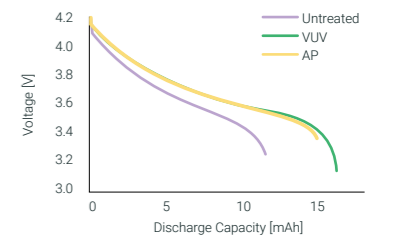
Collaboration with pharmaceutical companies and academia leading to next-generation drug development

Focus Areas for Contributing to the Realization of DX

Battery manufacturing processes: Contributing to improved performance through surface treatment technology

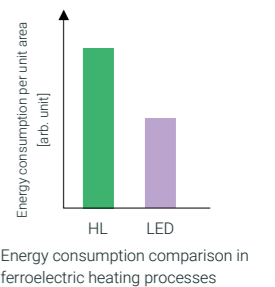
Lithium-ion batteries are manufactured using a combination of different materials. One such material is aluminum positive electrode current collector foils, and the graph below shows the results of applying Ushio's excimer vacuum UV (VUV) and atmospheric plasma (AP) surface treatment technologies to this material. It shows that the discharge capacity after VUV/AP treatment increases compared to an untreated surface.

This is due to the cleaning effects of VUV/AP treatment and can contribute to improving the cruising range of electric vehicles. We will continue to develop processes for solid-state and other next-generation batteries, and will keep improving manufacturing technologies and performance.



Semiconductor thermal processing: Contributing to energy saving in semiconductor manufacturing processes

As semiconductor performance advances, more power is required to manufacture them, resulting in high demand for energy saving. In response, we have demonstrated that energy saving in heating processes can be achieved by combining specific materials with LED heating, and presented our results at an international academic conference. The graph below shows a comparison of energy consumption in ferroelectric heating processes, which are expected to have applications in next-generation memory materials. It shows that using LEDs can lead to significant energy savings compared to conventional halogen lamps (HL). We will continue to pursue the possibilities of photoheating in areas beyond energy saving as we aim to contribute to next-generation semiconductor manufacturing processes.



2

Developing Our Diverse Talent to Get Closer to Our Vision

Vision for FY2030

- Practice Group management with diverse personnel who can contribute to the achievement of Vision 2030 and provide systematic training opportunities for further development
- Realize global mobility and enable borderless employee activity through human capital management

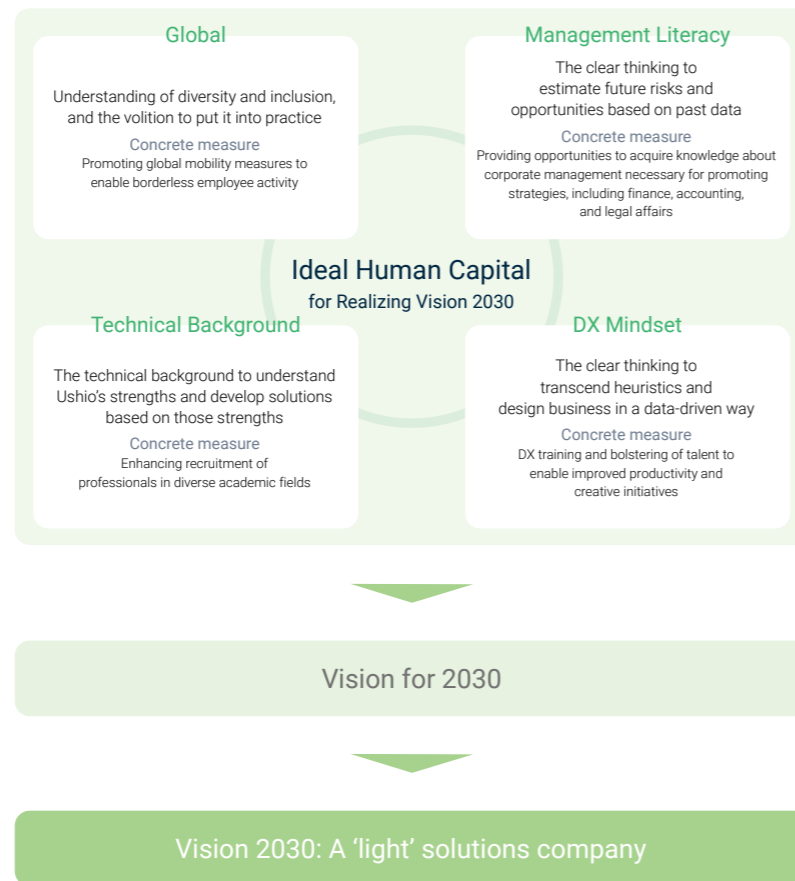
Human Capital Strategy and Connection to Corporate Value

In addition to Ushio's major businesses of Industrial Processes, Visual Imaging, Life Sciences and Photonics Solutions, we continue to take on new challenges to resolve social issues through the creation of new businesses. In order to achieve this, it is essential that our employees adopt a global and logical mindset. We will continue to create new value through organic connections between diverse personnel.

Specifically, we are aiming to expand our pool of talent with both the technical background and the mind for business to understand Ushio's strengths and develop solutions based on knowledge from various academic fields. In terms of education and training, in addition to our existing selective human capital development program "Ushio College," we started to offer the self-selected learning program "Ushio Learning Place" in September 2022 as a way to support employees seeking self-driven learning.

From a recruitment perspective, in addition to hiring new graduates, we are also focusing on attracting mid-career hires through means such as direct recruiting. Over the past three years, we have expanded our diverse talent through a hybrid approach, with our intake comprising 67% new graduates and 33% mid-career hires.

Human Capital Strategy to Realize Vision 2030



Revised System for Older Workers

With a super-aging society and a shrinking working population, circumstances for older workers in Japan are changing significantly.

Ushio has enhanced conditions for employees aged 60 and over, and in April 2023, we also introduced a system to further support the activities of these employees, based on the twin pillars of "contributing to organizational goals," and "succession, handing down, training, and support (succession and handing down of technology, skills, know-how, etc., and training and support of younger employees based on abundant experience and knowledge.)"

In order to support the diverse working styles and values of these employees and enable them to allocate time to activities such as nursing care and volunteering, we have also introduced a dual-track employment system and a selective system specifically for older employees. This enables employees to choose to work three days a week or take on side jobs under certain conditions.



A career seminar for mid-career employees

Launch of Human Capital Development Committees

Starting with the 2nd Medium-Term Management Plan, Ushio has transitioned from the term "human resources" to "human capital," positioning employees as important assets that enhance the Company's corporate value. Among this work, selective human capital development is a particularly important initiative, and Ushio College, which was introduced during the 1st Medium-Term Management Plan, is playing a central role in our systematic approach to developing the talent who will shape Ushio's future.

Under the 2nd Medium-Term Management Plan, we established five Human Capital Development Committees within our headquarters and business divisions, based on two priority issues: visualizing the effects of training and connecting to business needs. These committees are chaired by the general managers of each headquarters and business division. The HR Department acts as a business partner to each department's Human Capital Development Committee, promoting the development of selected talent in line with the nature of their work. Human capital development policies in each division are discussed by Human Capital Development Committees and shared at the Global Human Capital Committee (GHCC), which discusses Company-wide human capital strategies, and are connected to human capital initiatives such as the rotation of talent between headquarters.

Establishment of Global Mobility Section

Visualizing human capital within the Group and creating truly rewarding work environments in line with each person's career vision is crucial if we are to take on the challenges posed by social issues around the world.

In order to identify and resolve social issues that differ between regions, it is important for Ushio employees around the world to express their own opinions while ultimately finding ways to move in a unified direction.

In addition, the fact that using the Internet to connect and work with colleagues around the world has become the norm could be considered a positive byproduct of COVID-19. The implementation of working styles whereby an employee can be based in the United States while working as a business leader for the Group and connect with teams in Japan and other countries has begun, and we hope to promote global personnel transfers that do not involve relocation in future.

To accelerate these activities, we established a new Global Mobility Section within the Human Resources Department of Ushio Inc. in April 2023. Online networking between human resource personnel from Group companies in Japan and overseas has begun, and our talent visualization efforts have commenced.



Members of the Global Mobility Section

3

Creating Working Environments Where It Is Easy to Produce Results

Vision for FY2030

- Build a corporate culture of mutual respect that embraces diversity
- Implement health and productivity management that enables employees to be physically and mentally healthy and enjoy their work
- Achieve high engagement levels that enable the Company and employees to grow together

D&I

Promoting Diversity and Inclusion (D&I) is an important initiative in order to achieve "Creating Working Environments Where It Is Easy to Produce Results," the third of our Five Management Focuses. We have stated that we will aim to create "a global workplace culture in which a diverse range of background and values, in addition to diverse attributes, are acknowledged and respected." As part of our work to achieve this, we are carrying out the D&I Project through the support of volunteer employees, and initiatives are being developed in collaboration with relevant departments. In fiscal 2022, we carried out activities to align with the needs of employees in the field, such as career- and nursing care-related seminars and surveys of employees who work from home and employees with disabilities.

In addition, in the fiscal 2022 Annual Securities Report, we disclosed the proportion of women in managerial positions, the rate of men taking childcare leave, and differences in remuneration between men and women. The proportion of women in managerial positions was 16.7% for the Group and 4.3% for Ushio on a non-consolidated basis. In response, we have set 2025 targets of maintaining a proportion of 15% or more as a Group and 10% on a non-consolidated basis. We are making efforts to raise this ratio at Ushio while maintaining Group-wide levels.



Please see the following URL for more details.
<https://www.ushio.co.jp/en/sustainability/society/employee/diversity.html>



Health and Productivity Management

We believe that "human capital" is the most important asset underpinning the sustainable growth of the Company. To that end, we are striving to create safe, secure, and employee-friendly work environments through such means as adjusting work hours, promoting a work-life balance, supporting employees returning from childcare leave, and promoting measures for balancing work with medical treatment.

We were certified as a 2023 Health & Productivity Management Outstanding Organization (Large Enterprise Category) in recognition of such efforts, the second consecutive year in which we have received this distinction.

We have received particularly high praise for our efforts in supporting employees returning from leave and balancing work with medical treatment, adjusting work hours and promoting a work-life balance, and effectiveness and verification in response to issues.

Moving forward, through our strategic map for health and productivity management, we will visualize management issues and the health issues that must be resolved to tackle them, maintain and improve the physical and mental health of all employees, and further develop work environments that allow employees to continue to take on challenges with a sense of fulfillment and feeling of growth. To achieve this, we have set specific numerical indicators for each of the three health goals of "improving lifestyles (physical health)," "improving mental health," and "increasing productivity (work-related health)" and will promote data-driven quantitative goal setting and awareness, raising activities.



Please see the following URL for more details.
https://www.ushio.co.jp/en/sustainability/society/employee/health_and_productivity.html



Introduction of Employee Stock Compensation System

We are taking various measures with the aim of achieving high engagement levels that enable the Company and employees to grow together in line with Vision 2030.

In fiscal 2023, we introduced an employee stock compensation system through an employee stock ownership plan covering Group companies in Japan. Under this system, employees receive shares in the Company as compensation for the positive impact of achieving the required targets of the 1st Medium-Term Management Plan and as a means of supporting collaboration between management and employees under the 2nd Medium-Term Management Plan, which started in fiscal 2023.

In addition to further increasing employees' investment in business performance and enhancing motivation to work with management to improve medium-to long-term corporate value, we will look to encourage uptake of the employee stock ownership plan as a means to help employees build assets.

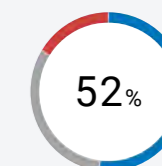
Engagement Survey

Survey Implementation and Taking Results on Board

We have carried out engagement surveys since fiscal 2021 as a means to visualize employee engagement. At Ushio, we define engagement as "a state of feeling valued through relationships with the Company and co-workers and feeling motivated to make an active contribution." The engagement score indicates the percentage of employees who answered affirmatively to questions indicating that this is the case for them. This was carried out for Ushio Inc. in fiscal 2021 and was expanded to domestic and overseas Group companies in fiscal 2022. Based on the survey results in the first fiscal year, we have come to understand that "understanding of strategies," "provision of growth opportunities," and "embracing of diversity" are three key themes strongly correlated with employee engagement. Our efforts to enhance understanding of strategies with the aim of further improving engagement have included town hall meetings with the president and the development of e-learning and other tools.

Ushio's engagement score for fiscal 2022 was 52%. There is still progress to be made in our efforts to improve engagement, and we will continue our activities as we work to achieve our target of a 10 point increase compared to fiscal 2022 during the period of the 2nd Medium-Term Management Plan.

Engagement Scores for Fiscal 2022



Initiatives of fiscal 2023

1. Enhancement of strategy-related communication

We continue to hold town hall meetings with the president, have expanded their scope beyond Japan to include overseas locations, and now also hold town hall meetings with other top management personnel in addition to executives. Through this, we aim to foster closer communication over a wide range of areas.



An overseas town hall meeting

2. Understanding of and empathizing with strategy and Five Management Focuses

We have created a workbook as a support tool to encourage employees to take ownership of our strategies, and are using this workbook as a basis for workshops within each department. We are developing a system and tools that help employees to consider their own careers and feel the connection between their own work and the Five Management Focuses.



Building Together Ushio Group 2030 Workbook

3. Connection between our Vision and careers

As part of efforts to promote autonomous career development for employees, we have introduced workshop-based talent support and Self-career Dock System.

4

Sustainably Reducing Environmental Impact

Vision for FY2030

- Establish a resource circulation model and a model for coexistence with nature, based on promoting biodiversity conservation activities
- Resolve social issues by cutting GHG emissions across the value chain
- Offer products and services that lower environmental impact

Environmental Policy

Basic Philosophy

We at Ushio recognize symbiosis with the global environment to be one of today's most important challenges for enterprises. We pledge to contribute to the creation of a sustainable society by incorporating measures for environmental protection into every aspect of our business activities.

At Ushio, we have promoted initiatives to reduce our environmental impact based on the aforementioned basic philosophy and periodically review our efforts in consideration of the global situation and business environment. Reducing our environmental impact is one of the important issues covered by our Five Management Focuses. We have established a vision for 2030 and work to achieve it by setting short- and medium-term goals through backcasting.

The impacts of climate change extend across all businesses. In terms of activities at business locations, we are making concerted efforts to mitigate these impacts in consideration of Japanese government policy and global trends. As part of this, we are furthering our efforts to improve productivity and use renewable energy.

In addition, for manufacturers providing products that use energy, including Ushio, the proportion of climate change impact that results from product use tends to be high, which poses a significant risk. However, while various companies are working to combat climate change, we believe that this is an opportunity to become the company that customers choose if we can develop products that reduce the impact on the environment.

We have expanded our theme of creating safe, secure, and green solutions to cover all business areas, including products, development, and services. To promote green design and development that contributes to energy saving, we have established energy saving as one of the certification criteria for our proprietary super green products. We will continue to contribute to energy conservation by promoting the sale of these products.

Selected as a Modal Shift Initiative Excellent Business Operator

Our Gotemba Division was selected by the 2022 Eco-ship Modal Shift Business Execution Committee as an Excellent Business Operator, being recognized by the Eco-ship Mark Certification program for the first time.

The Eco-ship Mark Certification program was launched in fiscal 2008 to promote the switch from land transport to sea transport, which has lower CO₂ emissions and is highly energy efficient. The Eco-ship Modal Shift Business Execution Committee, comprising members from organizations such as the Maritime Bureau of Japan's Ministry of Land, Infrastructure, Transport and Tourism and ferry operators, certifies shipping and logistics companies that use sea transport at or above a certain rate with the Eco-ship Mark as proof of their contribution to environmental efforts.

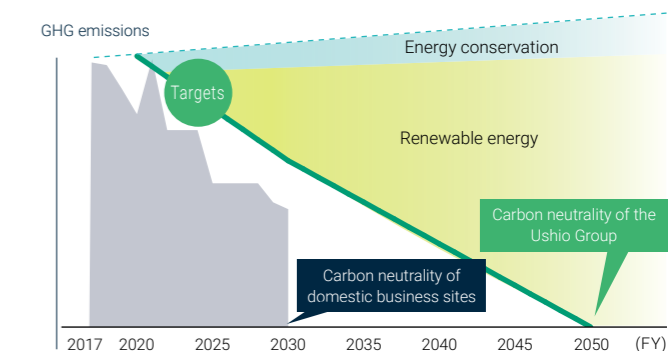
Where transportation had only been carried out with trucks, we succeeded in creating an integrated system that also incorporates sea-based transportation. We also reduced the number of shipments by consolidating lots, resulting in lower CO₂ emissions and transportation costs.



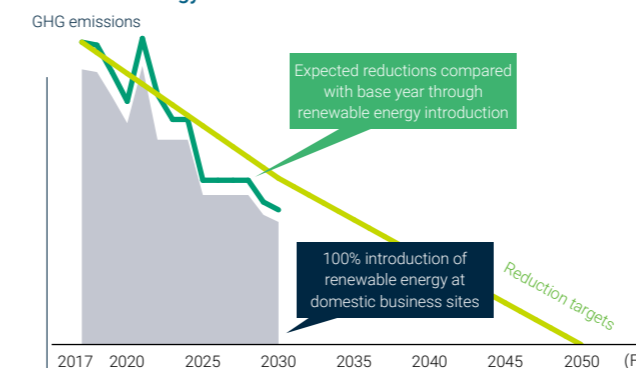
Efforts to Realize a Carbon-Free Society

Efforts to address climate change are an important aspect of achieving our Five Management Focuses. To that end, we have created a vision to work toward with a view to 2030, and have established targets accordingly. However, revisions to these targets have become necessary due to the constantly changing global environment. We have set targets for reducing CO₂ emissions from our business sites (Scope 1 and Scope 2) that have been certified by the Science Based Targets initiative (SBTi) and have formulated long term plans to realize these reductions. In 2018, we set a target of a 21% reduction in Scope 1 and Scope 2 emissions by 2030, compared with fiscal 2017. This is in accordance with the SBTi guidelines, and subsequently received SBTi certification. In 2020, we revised this target to a 33% reduction by 2030, compared with fiscal 2017. This new target aims to limit the increase in global temperature from the previous 2°C level to well below 2°C. However, giving consideration to the Special Report on Climate Change of 1.5°C, issued by the Intergovernmental Panel on Climate Change (IPCC) in 2018, the discussions held at the 2021 United Nations Climate Change Conference (COP26) in 2021, the revisions to SBTi certification standards, and the Net-Zero Standard of the SBTi, we raised this target to a 45% reduction by 2030, compared with fiscal 2017, with the overall goal of becoming carbon neutral by 2050. With the establishment of this target, we have been steadily implementing initiatives to reduce GHG emissions on Group-wide, aiming to realize a carbon-free society.

Path to Becoming Carbon Neutral by 2050



Expected Emissions Reductions through the Introduction of Renewable Energy



Establishment of Targets for Renewable Energy Introduction

One extremely important initiative in order to become carbon neutral by 2050 is the introduction of renewable energy. To that end, we have established targets for renewable energy introduction and are working to accomplish these targets in tandem with our other environmental initiatives. As one of these targets, we aim to realize the 100% introduction of renewable energy at all domestic business sites by 2030, and we are examining the formulation of similar targets at our overseas business sites.

Specifically, we are continuing to gradually introduce solar power generation through measures such as installation on the roofs of buildings at our Harima and Gotemba divisions. We are moving to replace existing purchased electricity with renewable energy, and our Harima Division has switched its purchased electricity to CO₂-free electricity.

In addition, we continue to monitor GHG emission reduction targets for the entire Group. In particular, we will promote initiatives with the aim of realizing the 100% introduction of renewable energy at all domestic business sites by 2030.

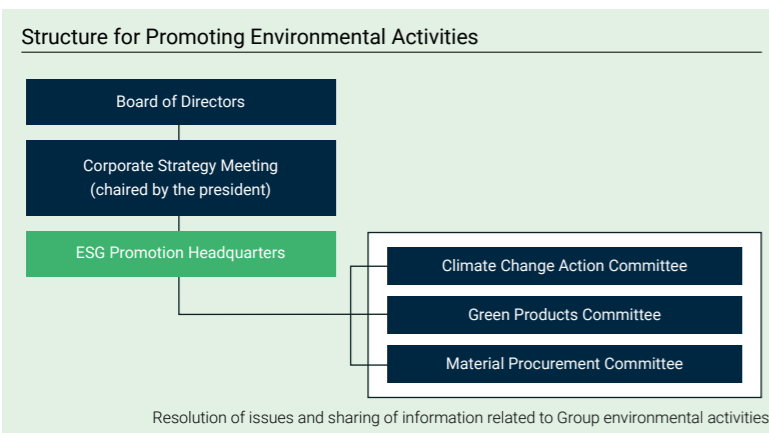
4 Sustainably Reducing Environmental Impact

Information Disclosure in Accordance with the TCFD Recommendations

Ushio declared its support for the aims of the Task Force on Climate-Related Financial Disclosure (TCFD) recommendations in 2021 and recognizes that climate change will impact the Company's sustainable growth. Moving forward, we will continue to use the TCFD recommendations as a basis for analyzing the risks and opportunities that climate change poses to our business and reflect this in management strategies while continuing to disclose relevant financial and management information.



Governance



With regard to the climate-related issues examined by the ESG Promotion Headquarters and relevant committees, the Corporate Strategy Meeting, chaired by the president, meets more than four times a year to discuss such issues. It reports the results of these discussions to the Board of Directors at least once a year. In addition, the Board of Directors establishes targets for climate-related issues and monitors the progress the Company is making toward achieving those targets.

Strategies

Selection of Climate Change Scenarios

We have selected the 1.5°C to 2°C scenarios and the 4°C scenario from among the climate change scenarios disclosed by the International Energy Agency (IEA) and other organizations. Based on these scenarios, we analyzed the impact of climate change on our business up through 2050.

Analysis Process

We organized the major climate change-related risks and opportunities that impact our businesses based on external information, and collected data on future forecasts pertaining to each of these risks and opportunities. In accordance with this organization, we estimated the business impacts of transition risk and opportunities associated with the shift toward a carbon-free society, and physical risks stemming from climate change. We then identified important risks and opportunities that could impact our business up through 2050.



Results of Scenario Analysis

As a result of analyzing the financial impacts of risks and opportunities of high importance, we identified that flooding and other natural disasters would have a significant impact on our production bases, especially under the 4°C scenario. Meanwhile, we confirmed that we could mitigate the impact of climate change-related risks by making appropriate insurance arrangements at the applicable production bases.

Major Climate Change-Related Risks and Opportunities		Time Frame	Financial Impact of Climate Change-Related Risks and Opportunities	
Transition risks and opportunities	Carbon pricing, carbon emission reduction targets, and policies in each country	Carbon tax	Medium-term	Enactment of a carbon tax on GHG emissions would increase operating costs by ¥200 million under the 1.5°C scenario and by ¥160 million under the 2°C scenario.*
	Rise in cost of raw materials	Copper price	Long-term	Demand for minerals could tighten following the increased demand for low-carbon technologies (solar power, EV batteries, etc.). As a result, mineral prices and raw materials prices could rise.
		Zinc price		
Molybdenum price				
Physical risks	Water shortages	Profit losses due to drought	Medium-term	Product production could be delayed or suspended due to restrictions on water intake in the wake of water shortages, and profit losses could occur as a result.
	Intensification of abnormal weather	Property damage and profit losses caused by floods	Short-term	Product production could be delayed or suspended due to damage to our production bases caused by floods. The related property damage costs and profit losses would total ¥6.68 billion under the 4°C scenario. However, ¥6.67 billion of this amount could be covered by insurance.
		Increased insurance rates	Short-term	Insurance rates and costs could increase due to greater risk of damages at production bases resulting from the intensification of floods and typhoons.

* Estimation based on forecasts for carbon pricing by the IEA and the amount of GHG emissions in each country

Risk Management

In terms of risk management, the Company appoints a responsible division as well as a responsible director or executive officer to manage individual risks. Climate-related risks are identified, evaluated, and monitored on a regular basis under a Company-wide risk management structure. Risks deemed to be significant under quarterly Company-wide risk assessments are reported to the Board of Directors.

Indicators and Targets

Indicators

We have established the following two indicators and are monitoring our progress on climate change-related initiatives accordingly.

- GHG emissions (Scope 1, 2, and 3)*1
- Net sales of green products and super green products*2

*1 The Company's GHG emissions are displayed on its corporate website on a consolidated basis and by region and scope. Amounts have been calculated based on the GHG Protocol.

*2 We certify products with enhanced environmental performance as "green products." Among these products, we certify those that make use of innovative green technologies that sets them apart from existing products as "super green products."

Certified as a "super green product," our HL63520HD high-output red laser diode has received an Encouragement Award from the Laser Society of Japan.



Targets

In consideration of recent global trends related to climate change, we set targets in 2018 that were approved by the SBTi. Since then, we have made several revisions to these targets, and we currently aim to achieve a 45% reduction in Scope 1 + Scope 2 emissions by fiscal 2030, compared with fiscal 2017, and a 33% reduction in Scope 3 emissions. Additionally, we are examining specific issues we need to tackle in order to reach our target to become carbon neutral by 2050. In order to achieve these targets going forward, we will not only reduce CO₂ emissions from the activities at our business sites but also pursue the development of green products. By doing so, we will actively reduce Scope 3 emissions during the product use stage.



5

Building a Robust Management Base

Vision for FY2030

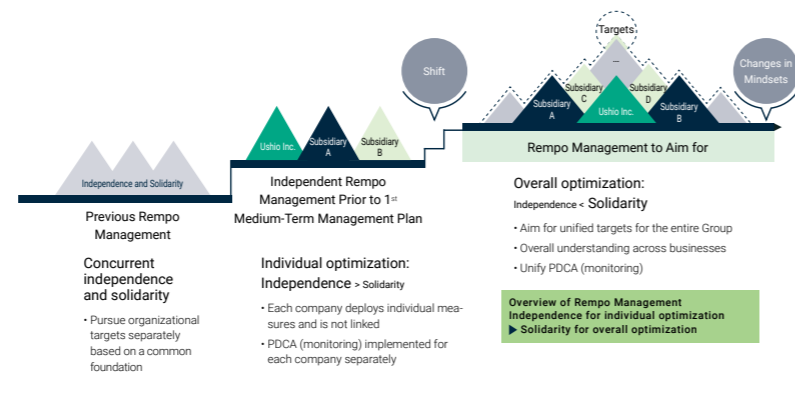
- Visualize and achieve management, business, and employee goals
- Manage business portfolio through timely efforts to identify management resources
- Clarify business risks and deploy Group-wide risk responses
- Create a corporate culture and framework for respecting human rights across the value chain
- Reinforce and deepen governance

Strengthening Solidarity-Based Rempo Management

At Ushio, we aim to build a system that enables us to allocate resources and ascertain cost structures on a consolidated basis and supports optimized Group-wide management decision-making, including the generation of synergies, and business portfolio management. We are also working to establish mechanisms that visualize the contribution of all Group company employees to the achievement of Group-wide targets and enable us to work as one to achieve targets for overall optimization. To achieve these goals, we have introduced and are operating a system that allows for Group-wide consolidated accounting.

In fiscal 2022, this enabled us to improve the accuracy of data from Group companies and enhance our analysis, contributing to the multifaceted understanding of business plans, including product-based and business-based perspectives, when formulating the 2nd Medium-Term Management Plan.

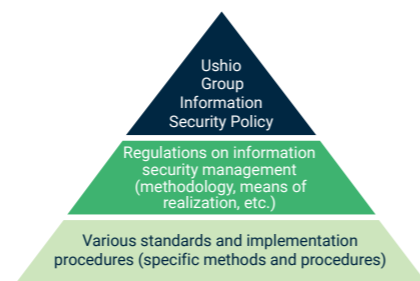
In fiscal 2023, we will create a balance sheet management system and enhance our business portfolio management. In these ways, consolidated Group accounting will help Ushio Group become more unified and provide a foundation for improving profitability and management efficiency, thereby leading to the realization of Vision 2030.



Bolstering Group Information Security Governance

We understand that information assets are extremely valuable business assets that help us maintain and enhance our competitiveness as a company. To build strong trust-based relationships with all of our stakeholders, we aim to utilize and manage information assets in a safe and appropriate manner. Accordingly, we have formulated an integrated Ushio Group Information Security Policy and are working to establish and reinforce information security governance based on a system of Group-wide monitoring and management.

We carried out security assessments of each Group company, which were completed in the fiscal 2022. This enabled us to properly assess and objectively evaluate the current status of information security governance at each Group company as well as identify issues. Based on the results, we are carefully examining common Group-wide issues and issues faced by individual companies, and are working on organizational, technical, personnel, and physical security measures.



In fiscal 2023, we will carry out training and awareness-raising activities in line with each Group company's security level in order to enhance understanding of the integrated Ushio Group Information Security Policy and will work to improve information security literacy.

We will also take measures to protect against ransomware, including strengthening information security by adopting endpoint detection and response (EDR) tools with high detection rates and monitoring services.

Strengthening Compliance

Enhancing Tax Transparency

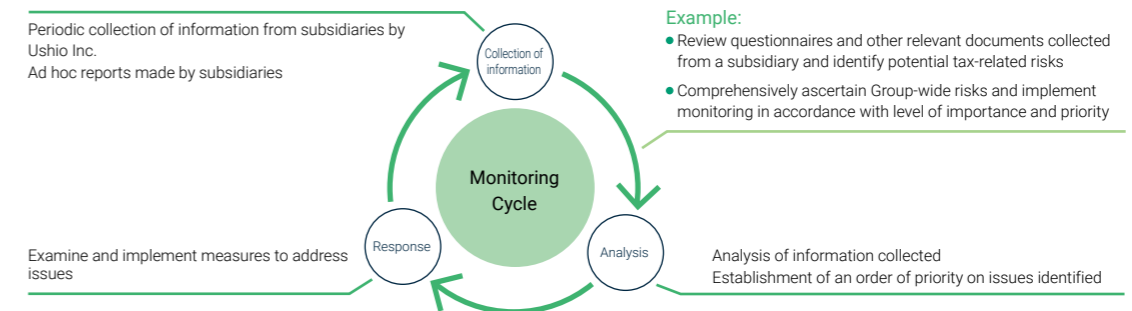
As tax-related duties are significantly impacted by the tax regulations of each country, these duties are primarily handled on an individual Group company basis, with Ushio Inc. working to ascertain Group-wide tax costs and establish tax management systems. We position global tax governance as a key issue for enhancing our corporate governance and are working to enhance Group-wide tax transparency.

In fiscal 2022, we strengthened the application of our Group-wide tax management regulations. Specifically, we collect and check information on the status of tax returns, trends in tax audits, and responses to tax

system revisions at all Group companies. In addition, transfer pricing documentation for each Group company is now managed at Ushio Inc. In fiscal 2023, in addition to strengthening cooperation with Group companies and appropriately managing tax risks through the establishment of a management cycle, Ushio Inc. will take the lead in ensuring appropriate compliance with the transfer pricing tax systems in each country, and strive to optimize tax costs through appropriate compliance with the preferential tax systems of each country.

Monitoring Cycle of Tax Status Management

► Importance placed on establishing and operating a monitoring cycle that analyzes and responds to collected information to ensure sustainable management of tax status



Preventing Corruption

We have established enhancement measures to prevent bribery and corruption as a theme under "Building a Robust Management Base," the fifth of our Five Management Focuses. Our Vision 2030 describes "a state in which the entire Ushio Group remains highly aware of issues such as bribery and corruption prevention and ensures fair, just transactions," and this theme is intended to create concrete initiatives to achieve this goal.

As stated in our 10 Action Guidelines as a Member of Society, Ushio conducts business transactions in a fair, impartial manner, and we take thorough measures to prevent bribery and corruption. We also signed the Ten Principles of the UN Global Compact, which includes anti-corruption principles, in 2010 and support the prevention of bribery and corruption in various business activities.

Ushio has formulated a new Ushio Global Anti-corruption Policy, which was announced in February 2023 as a specific code of conduct that complements our 10 Action Guidelines as a Member of Society. Through this, the aim is to further strengthen our anti-corruption efforts, ensure more thorough Group-wide bribery and corruption prevention, and continue fulfilling our social responsibilities.

The Anti-corruption Policy is intended for executives, employees, and other business personnel of all Ushio Group companies worldwide, and is provided in English and Chinese in addition to Japanese. We are also working to promote awareness of the policy within the Group through briefing sessions for Ushio Group companies in Japan and overseas.