

# Our Value Creation Story

Since its founding, Ushio has contributed to societal growth by fully leveraging the power of light. Going forward into the future, Ushio will create even greater social value and achieve sustainable enhancement of its corporate value as a "light" solutions company.





# Ushio's Culture

At Ushio, we share a common desire as we move toward becoming a "light" solutions company.

Read on to learn about the activities that employees in various divisions are engaged in.

## Message 1 Stable Production of High-quality Products

I work with halogen lamps on the prototype line. I examine whether it is possible to manufacture products as designed by the Engineering Division and identify issues that may arise when shifting to mass production. Our customers expect high quality, and it is important to consider the entire production process, including elements such as whether stable production without fluctuations in quality can be achieved. If something seems even slightly off with a prototype, we consult with designers from the Engineering Division. Some of the points we put forward can seem overly meticulous, but the fact that whatever we come up with will be mass produced overseas is a constant reminder that we cannot afford to compromise on quality. When I learned that the products I am involved with have a worldwide market share of over 60%, it inspired me to take even greater pride in my work. I am taking on the challenge of collaborating with various departments within the Company in order to achieve evolutions that can further improve precision and our manufacturing processes. (Junko Hirayama)

## Message 2 Working to Bring Customers Reliable Products

I am involved in inspection work relating to products used in the Industrial Processes business. Inspection is the final confirmation process before products are shipped, and we are dedicated to carrying out thorough checks to ensure that faulty products cannot make it onto customer shipments. In order to carry out more accurate inspections, it is important to understand the manufacturing process. I try to take the initiative to go and see the actual production lines. Seeing where various products are made gives me awareness that I can make use of in my own work, and I strive to reflect this in areas such as our procedure manuals as we make daily improvements that enable more accurate, more consistent testing.

Factories as a whole are becoming increasingly automated, but there are some processes that only humans can do, and manufacturing is becoming increasingly multi-skill overall. Through lively discussions between team members, I hope we can provide more opportunities for everyone to improve their existing skills and learn new ones. (Emiko Iwakiri)

## Message 3 Resolving Social Issues as a Team

I work on promotion and branding in the Life Sciences market, which includes Care222 technology for disinfection and the UV purification technology Clean172. I am driven to help create a society in which people have safety and peace of mind.

When I joined Ushio Inc., I was initially involved in manufacturing before taking on the challenge of new jobs in the indirect and sales divisions. The approach to work in manufacturing and sales is vastly different, so I look to take inspiration from various areas to produce even better output every day. We exchange information and opinions not only within the sales division, but also with people in other divisions, including the technology & engineering division. Our team works to enhance their sensitivity to constant changes in the environment, including in terms of what customers are looking for and what society needs, as we aim to resolve social issues as a "light" solutions company. I feel that this is one of the great things about Ushio.

I am also involved in a diversity and inclusion project, and hope to help create an environment of mutual respect and understanding in which everyone can feel invigorated at work.



### Profile

#### Kyoko Saka

Section 2, Sales Department 2, HLS GBU, Life Science Division, Business Management Headquarters, Ushio Inc.



### Profile

#### Junko Hirayama

Section 2, Manufacturing Department 2, Manufacturing Division, Production Division, Business Management Headquarters, Ushio Inc.

### Profile

#### Emiko Iwakiri

Section 1, Manufacturing Department 3, Manufacturing Division, Production Division, Business Management Headquarters, Ushio Inc.

## Message 4 Delivering Excitement and Joy Around the World

I spent ten years working in sales promotion relating to xenon short arc lamps for cinema projectors. I am currently assigned to Ushio Philippines, Inc., where I provide support for production transfer in addition to my previous duties. Sales trends in the cinema industry have changed significantly both in scope and speed as a result of COVID-19. Faced with these circumstances, Group companies and factories have collaborated to collect and share customer information related to lamp demand and reflected this in production plans. As a result, we have built a foundation that is even more robust to change than before. Information sharing between Group companies is essential in order to achieve stable global supplies, and I feel the importance of that communication every day. In meetings between Japan and the Philippines, the language barrier makes it difficult to quickly and accurately communicate intentions and ideas when discussing production plans and delivery dates, and I make a conscious effort to increase exchanges outside of these meetings in order to further enhance communication. (Junko Nagayama)

Ushio's value and raison d'être are epitomized by continuing to produce xenon short arc lamps with stable performance in a timely manner as long as our customers require them. By giving customers the products they need when they need them, in addition to supporting the stable operation of movie theaters, we can help deliver excitement and joy to people who enjoy movies around the world. (Gladly Ramirez)



### Profile

#### Gladly Ramirez

Production Support Department, Ushio Philippines, Inc.

### Profile

#### Junko Nagayama

Sales Promotion Division, Ushio Philippines, Inc.



Ushio's Culture



We contribute to the resolution of issues by looking at society from customers' perspectives.

Profile

(Left)

**Keiko Kato**

Analysis Group, Fundamental Technology Department, Research and Development Division, Business Creation Division, Corporate Headquarters, Ushio Inc.



(Right)

**Takuma Yokoyama**

Optical Measurement System Group, New Technology Development, Research and Development Division, Business Creation Division, Corporate Headquarters, Ushio Inc.



**Takuma Yokoyama (TY)** After I joined Ushio, I was in charge of developing the initial EUV light sources. My experience after that includes work overseas, and I currently lead a team developing a new type of pulse spectroscopy technology. Ushio offers many opportunities to gain a wide variety of experiences.

**Keiko Kato (KK)** That's true. For my part, I have experience in areas such as sales administration and working as an assistant in lamp development, and I am now involved in analysis work. I have been able to take maternity and childcare leave while still amassing a wide range of experiences in various departments.

**TY** It seems to me that going from working as an assistant to working in analysis would be a big change, is that what you found?

**KK** That's right. When I was an assistant, I had never written a

report before and had no experience of setting up meetings myself, then carrying out work based on what was said during those discussions. However, I was eager to take on difficult challenges. Together with the help of those around me, that willingness enabled me to expand the scope of my work.

**TY** As a team leader, I work in a coordinating role. The team comprises people with various backgrounds, and I look to make the most of each team member's experiences to support them as we build an even better organization. In addition to internal relationships, our relationships with business partners are also important. Given the interests involved, it is necessary to strike a balance between emphasizing what our technology can accomplish and understanding what our customers truly need.

**KK** I don't have direct contact with customers, but it seems to me that the quality of the information we share with divisions that request analysis from us is improving year by year. We don't simply report the results of analysis, we provide detailed explanations of causal relationships, which may help people requesting analysis from us to think from the user's perspective and consider ways to resolve issues for their customers.

**TY** That's right, seeing things from the customer's perspective is critical when considering the reasons for the issues they're facing. Having that attitude across all departments at Ushio is more important than ever.

**KK** Mr. Yokoyama, in your work, it seems to me you don't just make products based on customer requests. You also need to

actively seek out needs based on resolving social issues, is that correct?

**TY** That's right. We are constantly looking for ways to apply our basic technologies. In order to envisage and create devices that have never been seen before, it is essential for us to be proactive with customers. Avoiding passivity in that way seems to be similar to your work, Ms. Kato. Would you agree with that?

**KK** Yes, I would. I also strive to go beyond simply conveying what is happening right in front of my eyes. Rather, I strive to understand the essence of the issue concerned when I talk to people requesting analysis, and to suggest alternative methods when appropriate.

**TY** When I have an issue and approach someone like you who works in analysis, it's really helpful when they can make suggestions about approaches and elements for consideration that I would never have thought of. Making the most of that advice and viewing technologies and phenomena from multiple perspectives makes it easier to come up with ideas to propose to customers.

**KK** It's important to be able to put forward a wide range of proposals. I see Ushio's mission as using light to solve customers' issues and create social value. Have you ever felt that you have helped resolve a social issue?

**TY** I worked on one project under the theme of issues relating to safety and peace of mind for people. We investigated the underlying causes and found that the existing processes did not meet the standards required to prevent issues from occurring in the first place. We are developing equipment that uses the power of light to resolve issues that have arisen in the past through new approaches. This is an example of the success of a problem-based approach, in which we started investigating the causes of various social issues, then looked for ways to use light to address them.

**KK** I hope that by providing support for analyzing the causes of issues and phenomena, I can contribute the future of society.

**TY** The desire to have a positive impact on society is great source of motivation at work. In order to create products that have never existed before and set the standard for the wider world, we need to break out of our shell and not be confined to a mold. Ushio offers an environment where we can take on new challenges, and I want to do that with conviction.

**KK** That's true, we have a culture of supporting people from all walks of life, and we don't discourage them from trying new things. We're able to take on new challenges in various areas.

**TY** Even if new ideas don't always come to fruition, taking on challenges can be rewarding. Above all, it makes work enjoyable.

**KK** Going forward, I hope we can continue to unite the strengths of Ushio's various divisions and take on the challenge of having a positive impact on society as a "light" solutions company.

## The DNA of Ushio—Guiding Us into the Future

Since its founding, Ushio has believed in the potential of “light.” Guided by this belief, Ushio has contributed to the resolution of social issues and to technological innovation across the globe by utilizing light as a means to provide not only illumination but also energy.

### 1964

Ushio Inc. was established in 1964. In the following year, Ushio established four basic principles based on the desire to create an indispensable company for all by drawing on the wisdom of employees in order to grow. After their establishment, these four principles continued to be passed down as the guideposts determining the direction in which the Company should head. With the addition of certain wording to illustrate Ushio's corporate social responsibility, these four basic principles were enshrined in the Ushio Group Management Philosophy, which serves as the foundation for all of Ushio's corporate activities.



Founder  
Jiro Ushio

#### Four Basic Principles at the Time of Our Founding

- 1 Build both a prosperous Company and prosperous employees.
- 2 Deliver products and services that are competitive in the global market.
- 3 Contribute to society through superior products and innovative research and development.
- 4 Show the world the true value of a medium-sized enterprise and, in doing so, secure stable profits.

## Culture and Strengths That Have Guided Us Since Our Founding

### > Leading Niche Position in Global Markets

In accordance with our basic policy, we began to build a business foundation in global markets directly after our establishment, upon which we built a global network. With a particular focus on specialized light sources, we fortified our brand power and carved out a unique position as a leading niche company that can compete on equal ground with the world's best-known companies. We also placed our focus on markets in which we could draw on the technological strengths of light based on an awareness of ourselves as a “global medium-sized enterprise” that emphasizes uniqueness over business scale. By doing so, we provided the world with numerous one-of-a-kind products with high added value.

### > Decision-Making Criteria That Emphasize Social Necessity More than Profitability

Facing the impact of the rapid decline in overall demand that directly followed the 1973 oil crisis, we were forced to respond in ways such as narrowing the types of products we offered. Meanwhile, we prioritized our responsibility of supply to our customers over Company sales by providing customers with replacement products made by other companies. In this way, we adopted social necessity more so than profitability as the basis of our decision-making. This approach has underpinned the Ushio brand and served as the foundation of our sustainability initiatives. Our Management Focus of “Creating businesses with greater social value” represents the natural extension of this decision-making approach.

### > Conviction to Build Both a Prosperous Company and Prosperous Employees

Soon after our founding, we began to pursue various initiatives to build both a prosperous company and prosperous employees, including formulating long-term plans that adopted policies to raise employee salaries and increase their number of holidays. This management approach of valuing employees remains at the core of the Company to this day and has led to the formulation of two of the Five Management Focuses that pertain to human capital.

## Present

The corporate activities that we have consistently promoted in accordance with the four basic principles and centered on “light” have helped us form our corporate culture and accumulate various strengths. These corporate activities are also embedded in our current philosophical framework as DNA that we must continue to pass on, while adding the perspective of “what needs to change” in order to realize sustainable corporate value enhancement into the future.

### Our Promise

“Applying Light to Life” is our promise to our customers, to our community, and to ourselves. To fulfill this promise, it is essential for each Ushio Group employee to believe in the possibilities of light, dream about the future, and live each day with excitement. We believe that our passion to pursue our dreams is the power that will enable us to create a future that goes beyond our imagination. Through the cycle of the Ushio Value Model, we will deliver innovation and fulfill our promise, working together with partners that share the same dream.

### Our Vision

#### The Light Innovation Company

We hope to resolve problems faced by our partners and society through light innovation to fulfill our promise of “Applying Light to Life.” As light professionals, we will support human well-being and societal growth by creating new light markets through further expansion of the functionality and application of light, including ultraviolet rays, visible light, infrared rays, and the surrounding wavelength range.

### Our Value

#### Ushio Value Model

In order to resolve social issues (Sustainability Oriented), Ushio takes fundamental elements of cutting-edge light technology developed through R&D (Technological Leadership) and turns them into reproducible technology, creating value for society and its customers (Business Development), while also offering proposals to society with our partner companies (Collaborative Partnership). These are our values.

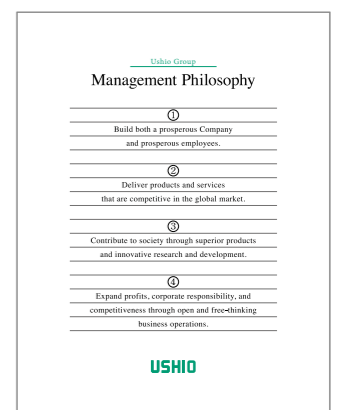
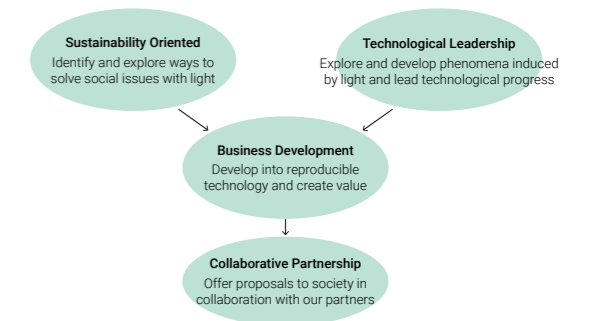
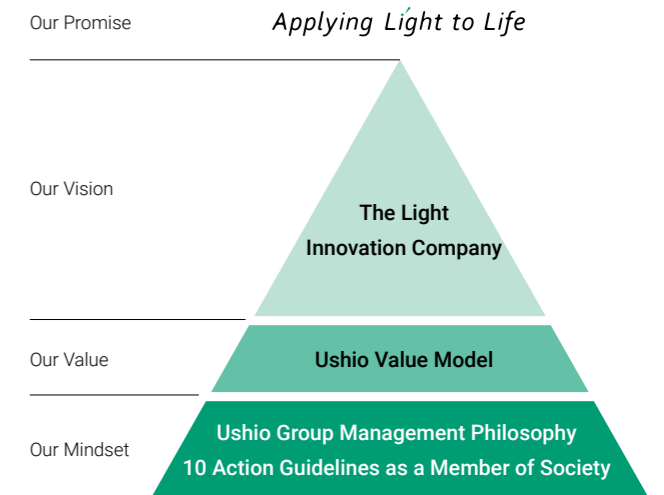
### Our Mindset

#### Ushio Group Management Philosophy

The Ushio Group Management Philosophy represents the foundation for all of our activities as a company.

We established four basic principles in 1965, the year after our founding, based on the desire to create an indispensable company for all by drawing on the wisdom of employees to grow. Our current Management Philosophy centers on these four basic policies and has had certain wording added to it that illustrates Ushio's corporate social responsibility.

### Philosophical Framework





# Value Creation through Implementation of Our Management Philosophy (History)

Net Sales  
¥175.0  
Billion

## Using light as illumination and energy

As light professionals, Ushio has utilized light to resolve issues with technological innovation around the world.

Note: Non-consolidated sales are shown for the period between fiscal 1965 and fiscal 1980, with consolidated sales shown from fiscal 1981 onward.

### Background of Each Era

- Contributed to the transition from black and white to color
- Office automation trend
- Osaka Expo
- Japan's national space development plan
- Increasing popularization of laptop computers (1980s)
- Increasing popularization of LCD TVs (1990s)
- Development of digitization in movies
- Increasing popularization of new electronic devices, including smartphones
- Advancements in IoT and AI

Ushio's Accomplishments

### 1960

#### Development of First Halogen Lamps in Japan

Brightening lamps means that they don't last long. Extending their lifespan makes them dimmer. Halogen lamps, which were considered to be the most advanced incandescent electric lamps at that time, had overcome these contradictory conditions. The inception of this halogen lamp development began by acquiring the license for using iodine lamps, which are the technological base for halogen lamps, from a U.S. corporation. Following this, Ushio commenced development of lamps unrestricted by royalties and was successful in 1966, the second year of the Company's establishment. This was the beginning of Ushio's history as a pioneer of domestically-produced halogen lamps.



Halogen lamps

### 1970

#### Development of UV Lamps for Use in Semiconductor Lithography

After the oil crisis in 1973, energy conservation became extremely valuable and a trend emerged in a shift from a structure emphasizing sheer scale, to one that emphasizes compactness and flexibility. Japan as a nation promoted the development of semiconductor lithography technology. Amid these changes, Ushio developed deep-UV lamps for semiconductor lithography in the face of increasing needs for lamps that use shorter wavelengths and have a higher output than previous ones in light sources used for exposure of very large scale integrated circuits (LClS). The technology for increasing output has become the base for increasing the illumination of super-high-pressure UV lamps in the future.



Deep-UV lamps for semiconductor lithography

### 1980

#### Development of the World's First Excimer Lamp

In 1993, Ushio developed the world's first excimer lamp. Excimer lamps emit high-energy, short-wavelength vacuum UV (VUV) light through intense plasma discharge, based on newly conceived light emission principles not found in traditional discharge lamps. Ozone cleaning equipment equipped with these excimer lamps was introduced mainly for cleaning liquid crystal display (LCD) panels and today it has taken hold as standard processing equipment in the manufacturing process of LCD panels.



Excimer irradiation units for cleaning panels

### 1990

### 2000

#### Development of Digital Cinema Projectors

Christie Digital Systems (CDS), a leading manufacturer of film-based cinema projectors, became one of the first companies to market digital cinema projectors before the major technological shift from film to digital cinema. Additionally, by developing, manufacturing, and marketing xenon lamps, which are the light sources for digital cinema projectors, Ushio has become the only manufacturer with the vital light sources and projectors for digital cinema.



Digital cinema projector

### 2010

#### Development of Photo-Alignment Equipment

Smart devices, such as smartphones, are required to be even higher resolution, even slimmer, even more energy saving, and have even faster responses than LCD TVs. Liquid crystals can be displayed by aligning liquid crystal molecules in the same direction, however there were numerous issues with conventional alignment, in terms of not only environmental and cost aspects but also key image quality aspects. These issues have been addressed through Ushio's optical alignment technology. By aligning liquid crystals in a non-contact state with special light, Ushio has prevented a reduction in yield rate due to contaminants or static electricity. At the same time, Ushio has reduced costs, improved contrast, enhanced the response speed of liquid crystal molecules, and significantly reduced electricity consumption as a result of reducing man-hours.



Photo-alignment equipment

### 2020

#### Expanding Development and Sales of Projection Lithography Equipment

With recent advancements in IoT technology, 5G, and mobility, the quantity of information processed has increased sharply. As a result, further evolutions in semiconductor technology are essential, an issue that requires next-generation semiconductor package substrates to resolve. In response to increases in the number of layers and size of package substrates, high productivity and high yields are required. Our lithography equipment, which has a 90% market share among steppers for cutting-edge IC package substrates, rises to this challenge. Even with recent surges in demand, we have retained our high market share by developing and introducing next-generation equipment.



Large field stepper for cutting-edge IC package substrates

Impact on Society

#### Promotion of OA Trends

At first, halogen lamps were not used in general lighting and we targeted and rolled out products into professional markets, including plain paper copiers, vehicles, and studio lights. Among these markets, there was progress with the technological innovations in the photocopying machine domain, such as the shift from wet printing (blue-printing photocopyers and blue copies) to dry printing through UV light, and from photosensitive paper to plain paper. Ushio's halogen lamps have contributed to the spread of plain paper copiers as a light source for original exposure and a heat source for fixing toner. While competitors have adopted a standard strategy, Ushio's customizable strategy has produced results and has been adopted by various photocopying machine manufacturers. Accordingly, this became a foothold for promoting the shift to office automation (OA).

#### Significant Contribution to the Technological Innovation of Semiconductors

Printing substrates, which previously took several minutes, has been shortened to only a few seconds due to Ushio's deep-UV lamps for semiconductor lithography. This has greatly increased productivity.

Shortening the wavelength of light sources and increasing input contributes to increased intensity and innovation of production technology, and has become the cornerstone of today's development in the electronics market.

#### Contribution to the Spread of LCD Displays

Compared to conventional cleaning methods, excimer irradiation units for cleaning panels provide higher cleaning capability, higher speed cleaning, lower power consumption, and lower temperature treatment which reduces damage to substrates. Through this technology, Ushio has addressed serious LCD panel manufacturing issues. In addition to excimer irradiation units, development of UV lamps for use in LCD color filters that expose large substrates in line with the increase in size of LCD panel substrates and development of curing equipment for bonding large LCD panels has led to enhanced productivity and lower costs for LCD panels.

Ushio has greatly contributed to the spread of LCD displays.

#### Contribution to the Spread of Cinema Complexes and Expansion of Market Scope

In 1999, Star Wars: Episode I – The Phantom Menace, which was at the forefront of digital cinema, was first released in the U.S. through CDS cinema projectors. The end of 2009 also saw a sudden acceleration to the digitalization of cinema projectors due to the massive hit 3D movie Avatar. Following this, there has been an increase in popularity for cinema complexes and today they have spread around the world as new entertainment bases where customers can enjoy watching not only movies but also sports and concerts in real time.

#### Acceleration of Spread of Smart Devices

Ushio's light, such as photo-alignment equipment, touch panel bonding equipment, and lithography equipment for package substrates, supports the production of smart devices, including smartphones. As a result, Ushio has enhanced the productivity of smart device production and the performance of panels, meeting global demand for smart devices and contributing to the increased resolution and functionality of panels.



#### Acceleration of IoT Through 5G and Contribution to Advancement in AI

Advances in both miniaturization technology, which is primarily involved in front-end semiconductor processes, and packaging technology in back-end processes enable high-speed processing and management of large amounts of data relating to servers and electronic devices. This is supported by Ushio's large field steppers for cutting-edge IC package substrates. Through this, we hope to accelerate progress towards an IoT society and advancements in areas such as AI.



### Future Possibilities > P.54-55

## Our Long-Cultivated Strengths

As light professionals, we will continue to draw on the five major strengths we have cultivated since our founding in order to enhance corporate value in a sustainable manner. By doing so, we will contribute to the growth of the society of the future.

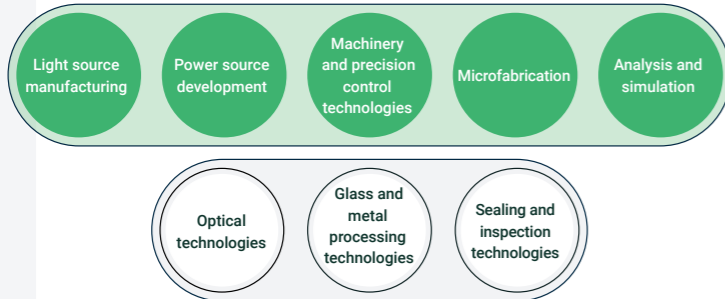
### > Power to Control Light

At the time of Ushio's founding, light was primarily only used as a source of illumination and the Company made it its mission to create new markets by utilizing light not just in this way but also as a source of energy. Based on this mission, we have harnessed the power of light to realize products such as light sources and optical and imaging equipment, and also peripheral services in accordance with the needs of our customers at the time. These products and services enabled us to resolve various issues impeding the progress of technological innovation. By working to leverage our long-cultivated light technologies and also discover new uses for them, we are further pursuing the potential of light and creating new technologies and products.

For more details on these initiatives, please see the following pages:

- > P.22-23 Value Creation through Implementation of Our Management Philosophy (History)
- > P.26-27 Ushio's Constant Pursuit of the Potential of Light

#### Core Technologies That Unlock the New Potential of Light



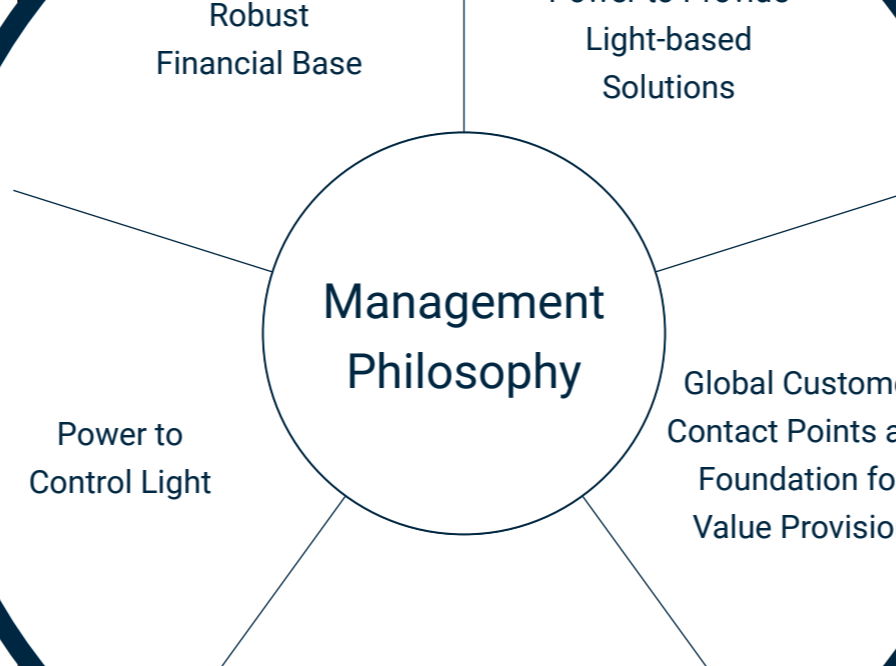
### > Power to Provide Light-based Solutions

In addition to the light sources themselves, we develop and manufacture equipment that incorporates them. Our ability to internally manufacture light sources, a key component of such equipment, provides us with a major source for differentiation. Also, engaging in the development, manufacture, and sale of equipment brings us closer to end users, which in turn helps us acquire useful information on future trends. As a result, not only are we able to resolve the issues facing our customers, we are also able to provide them with high-value-added solutions.

Furthermore, by focusing our efforts on core technologies related to light as well as on securing and cultivating human capital with experience in a vast array of academic fields, we are enhancing our ability to foresee issues that may affect our customers in the future. Going forward, we will draw on this ability to comprehensively resolve social issues through both the provision of products and peripheral services.

For more details on these initiatives, please see the following pages:

- > P.54-55 Ushio's Potential for Creating Businesses with Greater Social Value



**Leading Niche Position in the Light Market**

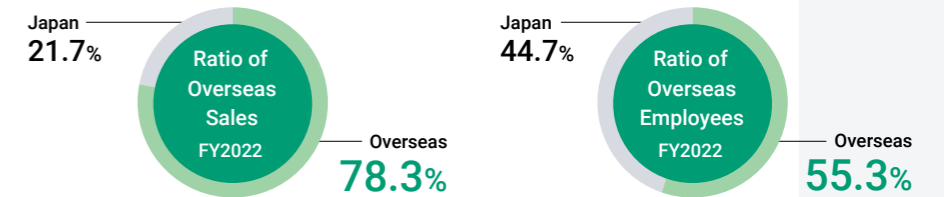
### > Robust Financial Base

It is imperative that we expand resources, which we may lack at times, if we are going to be able to continue to draw on the power to control light and the power to provide light-based solutions. For example, there are times where we need to leverage external resources, in addition to enhancing internal ones, in order to achieve differentiation not just in terms of hardware but also the settings in which our light sources and equipment are utilized. Our robust financial base provides us with the strength to procure the necessary external resources to do so through such means as M&A, collaboration with business partners, and the promotion of mid-career hires.



### > Global Customer Contact Points and Foundation for Value Provision

With the aim of becoming a global medium-sized company, we have promoted global business development from a very early stage for a company within the manufacturing industry. Our overseas net sales already account for 70%-80% of total net sales, with overseas employees making up roughly 60% of our total employee base. By establishing this kind of global business foundation, we have been able to swiftly and accurately grasp the needs of customers and markets across the globe and, in turn, develop high-value-added solutions to meet these needs. Our global foundation has also helped us join forces with various business partners and mitigate the risk of supply chain disruptions.



### > Power to Retain Light

Through our unique light technologies, we have helped resolve issues impeding the progress of technological innovation. In addition, we have been providing not only light sources but also equipment and after-sales services on a global basis. This has enabled us to work with a diverse range of customers within the value chain of each market while exploring solutions to various social issues through our customer contacts. We are also reinforcing our after-sales support in order to ensure that the light solutions we provide continue to operate optimally for our customers in a stable, and sustainable manner. This approach enables us to offer highly trusted products in each of our business domains over long periods of time, and this is one of our strengths. In this way, supported by our trust-based relationships with our customers, we strive to identify customer issues even more promptly and accurately, thereby developing new technologies and enhancing our awareness of social issues.

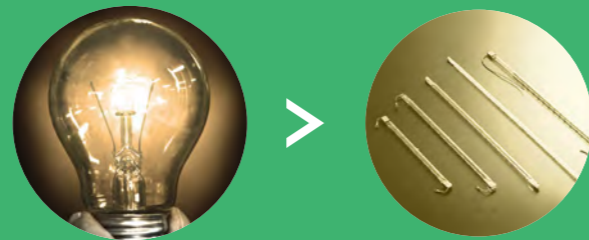


## Ushio's Constant Pursuit of the Potential of Light

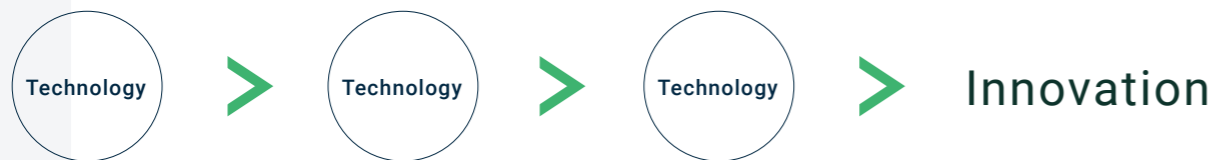
Seeking the power to control light as light professionals, Ushio develops light sources and their peripheral technologies. In addition, Ushio continues to create new technologies and products by combining these technologies and developing new applications for them.

### Using Lamps as a Source for Energy

After becoming the first company in Japan to successfully develop halogen lamps, Ushio was referred to as the "trailblazer of domestic halogen lamps." At the time, rather than use halogen lamps as general lighting, we aimed to use them as a light source for scanning documents and a heat source for affixing toner within photocopying machines, which were becoming more technologically advanced. This expanded application of halogen lamps marked the first step toward realizing our mission of creating new markets by utilizing light not just as a source of illumination but also of energy, which we adopted at the time of our founding.



### Horizontal Expansion of Technologies



#### Excimer Light Source Technology



In 1993, we developed the world's first excimer lamp, which enabled the emission of high-energy vacuum UV light by applying the light emission principle to plasma discharge. These lamps realized the non-contact removal of organic substances that became attached to LCD panels and semiconductors during the manufacturing process, which had previously been an extremely difficult task. Compared with conventional wet cleaning using water or chemicals, this non-contact removal via excimer lamp enabled cleaning that was over 10 times faster and more thorough while only requiring one-third of the power consumption.

Putting this excimer lamp to use, we went on to develop excimer lamps with peak wavelengths of 308nm in the UV range. We also internally developed excimer filters that removed wavelengths in which erythema (redness of the skin) can easily occur. By applying this filter to these

#### Excimer Light Source for LCD and OLED Glass Cleaning (172nm)



#### TheraBeam UV308® Series of UV Phototherapy Devices (308nm)



308nm excimer lamps, we were able to develop the TheraBeam UV308® Series, UV phototherapy devices that enable effective treatment of autoimmune disorders in the dermatology domain, such as vitiligo and psoriasis. In these ways, we promoted the utilization of light in the Life Sciences domain. After the development of the TheraBeam UV308® Series, we pursued the combination of unique optical filters with excimer lamps that have peak wavelengths of 222nm. By doing so, we were able to develop Care222, a Far UV-C disinfection technology using 222nm excimer lamps combined with an optical filter, which blocks wavelengths above 230nm that can be potentially harmful to human skin and eyes. Through Care222, we aim to create a world without infectious diseases by enabling the use of UV rays, which are highly effective at reducing bacteria, in environments occupied by people.

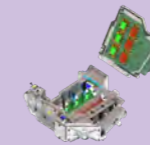
#### Care222, Far UV-C disinfection technology (222nm)



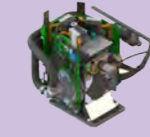
#### Wide Color Gamut / High-output Light Sources



#### Optical Technologies



#### Light Modulation Technologies



#### Video Signal Processing Technologies



### Digital Cinema Projectors



Digital cinema projectors require the widest possible color gamut and high-output light sources. As a specialist light manufacturer, Ushio boasts the highest worldwide share in the xenon lamp market and has been an industry leader in the adoption of RGB lasers that can efficiently extract only the required wavelengths. In addition to continuous enhancements to energy saving and light utilization efficiency, we are working to further improve the lifespan of our products. Our RGB laser projectors

also efficiently concentrate light from the light source and use a proprietary drive method starting from the video signal to enable smooth projection with depth. In addition, in order to prevent theft of video signal data through means such as copying, our systems protect the video signal data with encryption that requires a screening permission key to decrypt.

### Technological Combinations



#### High-Output UV Light Sources



#### Optical Technologies



#### Material Handling Technologies



#### Wafers and Substrate Control Technologies (Alignment Technologies)



### Lithography Equipment



The lithography process, which involves the etching of circuit patterns, is an essential part of manufacturing the substrates and electrical components that are found in all kinds of electrical devices today. Our lithography equipment is actively being utilized in this process.

Our lithography equipment makes use of the solar simulator technology that we first developed shortly after our founding. Specifically, this equipment is realized through the combination of technologies such as "high-output UV light sources," which we develop and manufacture

completely in-house; "optical technologies," which comprise mirrors and lenses that effectively concentrate light emitted from light sources and irradiate it in a highly uniform and parallel manner; "material handling equipment," which responds to irradiated materials (substrates); and "wafer and substrate control technologies," which align the light irradiation position to within an accuracy of several micrometers (roughly one-fiftieth the size of strand of hair).

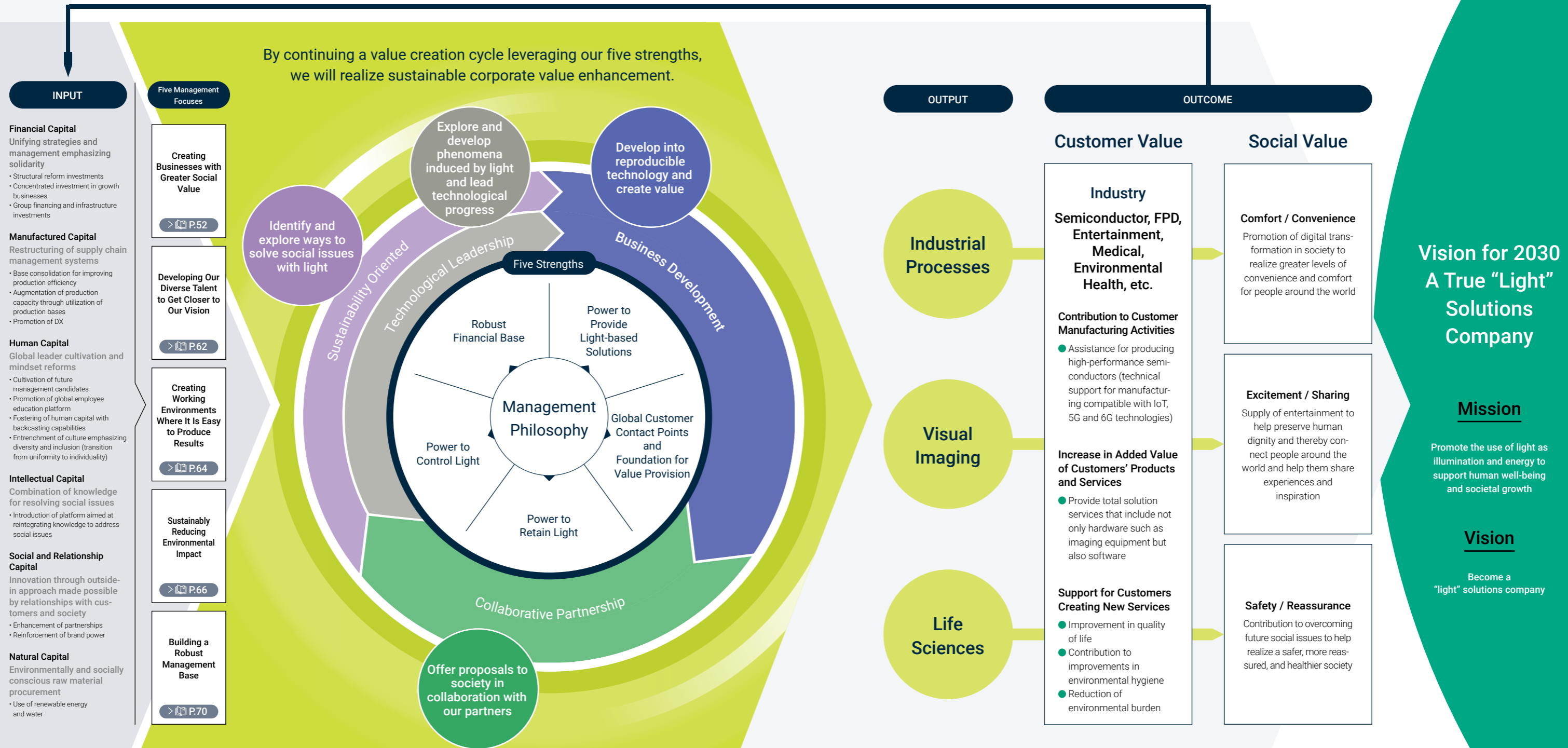
## Ushio's Value Creation Process

We aim to be a "light" solutions company that continues to create both social and economic value by resolving social issues through our unique light technologies.

### What Is a "Light" Solutions Company?

<p><b>Shared Targets</b></p> <p>"Promote the use of light as illumination and energy to support human well-being and societal growth" as established in Our Mission</p>	<p><b>Concept</b></p> <p>Provide light solutions focused on addressing social issues</p>	<p><b>Business Model</b></p> <p>Resolving the issues facing customers and society at large by providing comprehensive solutions, including not only hardware but also processes and services</p>
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Understanding of Issues That Serves as the Starting Point for Capital Circulation and Value Creation





## Five Management Focuses—Important Issues for ESG Management

Ushio promotes ESG management in order to realize its management policy alongside the aim of achieving the shared goal to “support human well-being and societal growth.”






In order to realize our Vision to become a “light” solutions company that resolves the issues facing society, Ushio has been implementing its Five Management Focuses, centered on ESG management, and has been promoting a balanced management approach that address each of these focuses.

### Identification Process of Five Management Focuses

- STEP 1** **Identifying candidate themes for key issues**  
 We investigated media, publicly-disclosed sustainability information, and expert reports. At the same time, we examined the medium- to long-term direction of our management.
- STEP 2** **Evaluating and mapping out level of importance (order of priority)**  
 We evaluated the importance level of items pertaining to our businesses and mapped these items out based on business and social relevance.
- STEP 3** **Evaluating appropriateness**  
 We held meetings with external experts to verify our management direction and identified focus points that matched with the expectations of our external stakeholders.
- STEP 4** **Promoting internal approval procedures**  
 The Corporate Strategy Meeting and Board of Directors held discussions on the Five Management Focuses and relevant KPIs and approved them accordingly.

### Five Management Focuses

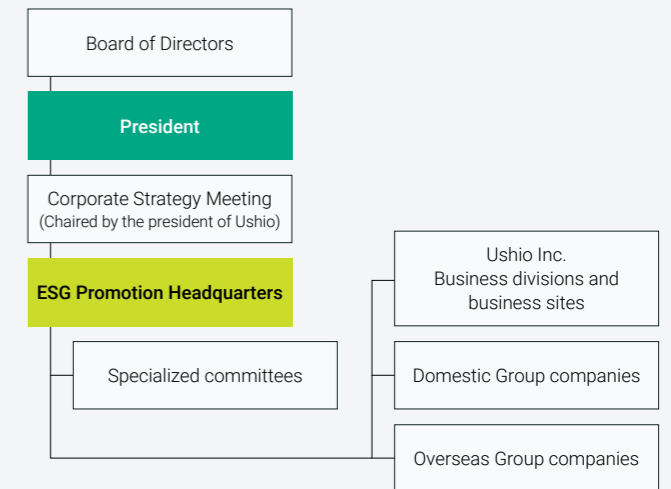
**E**: Environmental   **S**: Social   **G**: Governance

- 1**  **Creating Businesses with Greater Social Value**  
 > P.52
- 2**  **Developing Our Diverse Talent to Get Closer to Our Vision**  
 > P.62
- 3**  **Creating Working Environments Where It Is Easy to Produce Results**  
 > P.64
- 4**  **Sustainably Reducing Environmental Impact**  
 > P.66
- 5**  **Building a Robust Management Base**  
 > P.70

### Promotion Structure for the Five Management Focuses

We have established the Corporate Strategy Meeting, chaired by representative director and president of Ushio Inc., which comprises directors, executive officers, and other members of management. The Corporate Strategy Meeting determines the details and direction of initiatives toward ESG management. In accordance with said determined direction, the ESG Promotion Headquarters, which fulfills an alignment function between management and the front lines, develops relevant plans and measures in collaboration with each business division, business site, and Group company, and works to promote and instill ESG management within Ushio Group.

In addition, we disseminate and share relevant information internally through individual committees, which share the sustainability initiatives of each specialized committee and business site. Major ESG-related issues are also reported to the Board of Directors.



### Column



#### Profile

#### Tetsuo Nakano

Director  
 Managing Executive Officer  
 General Manager,  
 ESG Promotion  
 Headquarters,  
 Ushio Inc.



### ESG Promotion Headquarters Initiatives

In a highly uncertain business environment, corporations are now required to transition from a management approach that solely emphasizes profits to one that generates both economic and social value. Ushio has written a value creation story that enables both sustainable growth and the resolution of social issues through its business, and we aim to be a company that is chosen by institutional investors who have a high level of interest in ESG investment and similar areas.

The ESG Promotion Headquarters implemented the three following initiatives in fiscal 2022.






- 1. Enhanced engagement:** In terms of internal engagement, we conducted analysis based on engagement surveys (using correlation and factor analysis to identify combinations of questions that strongly impact engagement) in order to visualize the characteristics of Ushio as a whole and individual departments, then identify important areas to focus on. This is leading to improved dialogue and other forms of communication. With regards to external engagement, we have positioned FTSE, an ESG investment index, as our top priority in terms of external assessment due to its utility from a global perspective. We have set goals based on our unique perspective on the relationship between FTSE scores and market expectations, and started working to improve our evaluation results.
- 2. Understanding of strategies:** In consideration of the results of our engagement survey, President Koji Naito carried out visits to all business sites of Ushio Inc. and Group companies in Japan as an opportunity to engage in dialogue. In fiscal 2023, he is carrying out similar visits to overseas Group companies. This is also being extended to dialogue on a business division and headquarter level throughout Ushio. Furthermore, in addition to holding ESG management briefing sessions and distributing ESG concept videos to all Group companies, we are also gradually rolling out e-learning programs and other resources.
- 3. Future-oriented initiatives:** In addition to continuing to work with the Business Creation Division to analyze initiatives and make recommendations from an ESG perspective, we conduct analysis based on megatrends and ESG keywords unique to Ushio in order to explore social issue areas that we should work on from an ultra long-term perspective, and will continue to examine and make proposals for areas of future growth.

Under our medium- to long-term ESG plan, fiscal 2023 is the first year of the period for instilling the 2<sup>nd</sup> Medium-Term Management Plan across the Company (fiscal 2023 to fiscal 2025). In collaboration with all Group companies, we will advance activities leading to the realization of Vision 2030 and enhanced corporate value. In line with this, we have changed the icon of the ESG Promotion Headquarters' slogan "With!" based on our consciousness of building connections on a global scale.



## List of Five Management Focuses, Key Challenges, and Goals

Ushio has established its Five Management Focuses. These represent important issues for the Company to address on a daily basis in order to improve its value as a corporation by working to resolve social issues over the long term. Using a backcasting method, which involves establishing a future vision and thinking in reverse on how to achieve that vision, we determined KPIs with a focus on 2030 and are steadily promoting initiatives toward their achievement.

Five Management Focuses	Economic Value Connection	Vision for FY2030	Key Performance Indices for FY2025	Initiatives for FY2023 to FY2025
<p><b>1</b></p>  <p><b>Creating Businesses with Greater Social Value</b></p> <p>We believe our mission is to put the light technologies we have cultivated as a "light innovation company" to use in resolving the issues facing society in the future.</p> <p>E S G</p>	<ul style="list-style-type: none"> <li>Expand revenue and earnings by creating new businesses</li> </ul>	<ul style="list-style-type: none"> <li>Create businesses that address the social issues of climate change countermeasures, food initiatives, healthy life expectancy extension, and realizing DX</li> </ul>	<ul style="list-style-type: none"> <li>R&amp;D structure that constantly generates new value, with some themes on track for commercialization</li> </ul>	<ul style="list-style-type: none"> <li>Enhancement and acceleration of business creation actions, including selection and concentration</li> </ul>
<p><b>2</b></p>  <p><b>Developing Our Diverse Talent to Get Closer to Our Vision</b></p> <p>We establish and provide enhanced human capital development programs in order to support the individual growth of our employees. By doing so, we aim to develop our talent on a Group-wide basis with the goal of getting closer to our Vision.</p> <p>E S G</p>	<ul style="list-style-type: none"> <li>Bolster talent to create new value that generates profits and accelerates growth strategies</li> </ul>	<ul style="list-style-type: none"> <li>Practice Group management with diverse personnel who can contribute to the achievement of Vision 2030 and provide systematic training opportunities for further development</li> <li>Realize global mobility and enable borderless employee activity through human capital management</li> </ul>	<ul style="list-style-type: none"> <li>Human capital bolstered, with focus on global / technical / managerial literacy capabilities</li> <li>Human capital identified through talent map that meets business needs, with rational management system in place</li> </ul>	<ul style="list-style-type: none"> <li>Promotion of selective human capital development through the Global Human Capital Committee (GHCC) and Human Capital Development Committee</li> <li>Promotion of personnel exchanges within the Group</li> <li>Expansion of the scope of identification of Group management personnel through the creation of the Global Mobility Section (building a Group-wide network responsible for human capital)</li> </ul>
<p><b>3</b></p>  <p><b>Creating Working Environments Where It Is Easy to Produce Results</b></p> <p>To realize our Management Philosophy and achieve Vision 2030, we aim to be a highly engaged organization that embraces contributions from and the development of both the Company and its employees</p> <p>E S G</p>	<ul style="list-style-type: none"> <li>Provide attractive workplaces and work practices for diverse personnel to boost engagement and productivity</li> </ul>	<ul style="list-style-type: none"> <li>Build a corporate culture of mutual respect that embraces diversity</li> <li>Implement health and productivity management that enables employees to be physically and mentally healthy and enjoy their work</li> <li>Achieve high engagement levels that enable the Company and employees to grow together</li> </ul>	<ul style="list-style-type: none"> <li>Proportion of women in managerial positions: 15% and 10% on consolidated and non-consolidated bases, respectively</li> <li>Employee engagement score up 10 percentage points from FY2022</li> </ul>	<ul style="list-style-type: none"> <li>More active participation by female employees and employees with disabilities</li> <li>Continuous initiatives for wide-ranging workplace environment improvements</li> <li>Consideration and provision of attractive working conditions (harassment education, compensation system, etc.)</li> </ul>
<p><b>4</b></p>  <p><b>Sustainably Reducing Environmental Impact</b></p> <p>From a long-term perspective, we will pursue efforts to reduce our environmental burden, including within the supply chain.</p> <p>E S G</p>	<ul style="list-style-type: none"> <li>Strengthen deployment of green products that reduce environmental impact</li> <li>Maintain and expand corporate value through fulfillment of corporate social responsibilities</li> </ul>	<ul style="list-style-type: none"> <li>Establish a resource circulation model and a model for coexistence with nature, based on promoting biodiversity conservation activities</li> <li>Resolve social issues by cutting greenhouse gas (GHG) emissions across the value chain</li> <li>Offer products and services that lower environmental impact</li> </ul>	<ul style="list-style-type: none"> <li>Reductions of in-house GHG (Scope 1 and 2) emissions: At least 30% from FY2017 level</li> <li>Reductions of GHG emissions (Scope 3 cat. 11) from company's products: At least 30% from FY2017 levels</li> <li>Measuring and conveying benefits of products helping shrink customers' environmental footprints</li> </ul>	<ul style="list-style-type: none"> <li>Systematic introduction of renewable energy (Scope 1 and 2)</li> <li>Effective utilization of water resources</li> <li>Development of products that contribute to reducing environmental impact in society (reducing GHG emissions, reuse/recycling, effective utilization of water resources, reducing use of chemical substances, etc.)</li> <li>Promotion of efforts to extend the lifespan, improve the efficiency and reduce the power consumption of products</li> </ul>
<p><b>5</b></p>  <p><b>Building a Robust Management Base</b></p> <p>We will work to establish a robust management foundation, which will in turn underpin the four other focus points of management.</p> <p>E S G</p>	<ul style="list-style-type: none"> <li>Establish a stable revenue base</li> <li>Safeguard corporate value</li> </ul>	<ul style="list-style-type: none"> <li>Visualize and achieve management, business, and employee goals</li> <li>Manage business portfolio through timely efforts to identify management resources</li> <li>Clarify business risks and deploy Group-wide risk responses</li> <li>Create a corporate culture and framework for respecting human rights across the value chain</li> <li>Reinforce and deepen governance</li> </ul>	<ul style="list-style-type: none"> <li>Starting Group-wide activities to respond to social demands and earning recognition from external evaluation organizations and stakeholders through appropriate disclosure of information</li> </ul>	<ul style="list-style-type: none"> <li>Establishment of KPI management</li> <li>Construction of a global risk management system</li> <li>Enhancement of measures to prevent bribery and corruption</li> </ul>