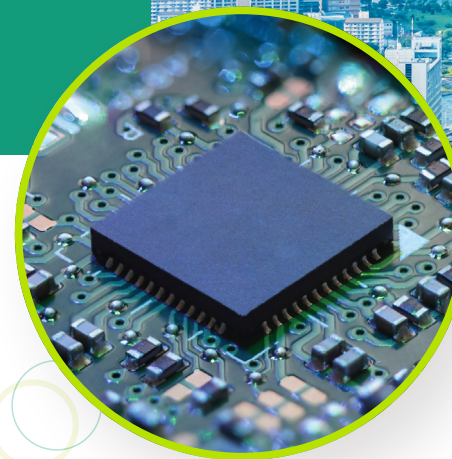


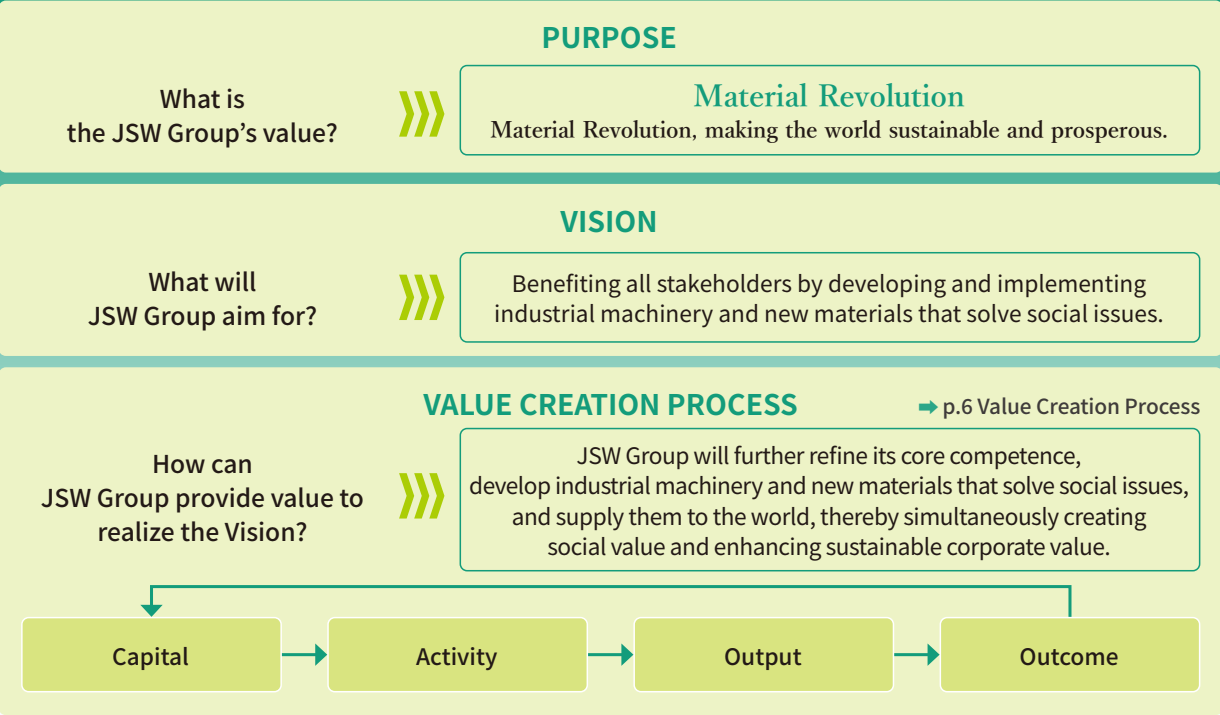


# JSW Integrated Report 2025





# Positioning of the JSW Group Philosophy System, starting with the Purpose and the Guiding Principles for Action



## An Organizational Culture That Ensures the Value Creation Process Functions Effectively and Smoothly

**JSW Group Five Guiding Principles for Action**

**Put everything into words and listen carefully to those words**  
Let's create a workplace where all employees, regardless of organizational boundaries, feel free to share their opinions. Each of your knowledge and experiences is the foundation of our work. The discomfort or confusion you feel is an opportunity for insight. Ideas and feedback will help expand our choices and possibilities.

**Try one thing, start by taking action**  
Let's create a workplace where each individual takes initiative and acts proactively. Thinking about things in advance doesn't guarantee success. Let's have the courage to take that first step and think as we move forward. Every step you take will help drive the company forward.

**Learn from failures and keep growing**  
Let's aim to create a workplace that values failure as a source of growth. Success is not about avoiding failure; it's about getting back up, no matter how many times you fall, learning from it, growing, and continuing to challenge yourself without giving up. Let's view failures that lead to learning as opportunities for growth.

**Face challenges with sincerity and build trust**  
Let's strive to be a person others can trust. The trust each individual builds will ripple from person to workplace, from workplace to company, ultimately enhancing the value we bring to society. Let's choose actions that are transparent and free from deception.

**Envision who you want to become**  
Embrace a life filled with "dreams" and living each day with purpose and fulfillment. Envision what you want to achieve and who you want to become, whether in your work, personal life, in the near future, or long term. Take positive steps toward realizing that vision.

**JSW Group Company Commitments**

**Toward sustainable growth,**  
we will support your development and continue to grow together.

**Toward creating innovation,**  
we highly value those who challenge themselves, and the organization will support the failures that come with those challenges.

**Toward creating a better workplace environment,**  
we will continue to create opportunities where everyone is respected and can freely share their opinions.

Ensure psychological safety

\* "Material Revolution" is a Japanese registered trademark of The Japan Steel Works, Ltd. (Japanese Trademark Registration Number 6650455).

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**Editorial Policy**  
Since fiscal 2021, The Japan Steel Works, Ltd. has been publishing an integrated report to inform all stakeholders, including shareholders and investors, of its initiatives for sustainably creating social value and enhancing medium-to-long-term corporate value.  
We hope that this report provides readers with deeper insight into JSW Group from both financial and non-financial perspectives.

**Reporting Period**  
April 1, 2024–March 31, 2025 ("Fiscal 2024" or "FY2024")  
Note: Certain activities and information are included from outside this reporting period.

**Reporting Scope**  
The Japan Steel Works, Ltd. and Group companies  
Note: Throughout this report, "JSW" or "the Company" refer to information relating to The Japan Steel Works, Ltd. and "JSW Group" or "the Group" refer to information relating to The Japan Steel Works, Ltd. and its consolidated subsidiaries.

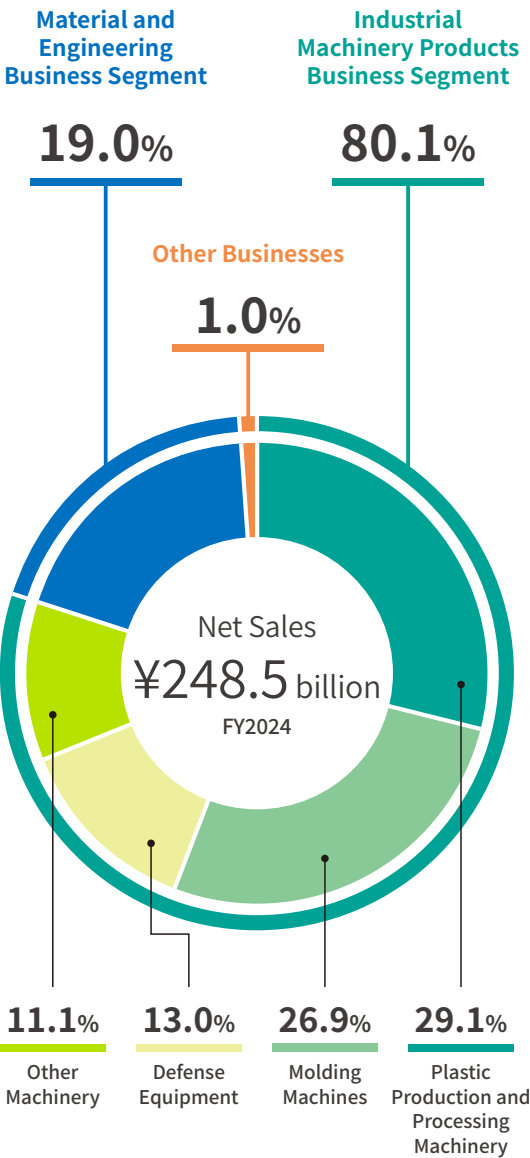
**Referenced Guidelines**

- International Integrated Reporting Framework, IFRS Foundation
- Guidance for Collaborative Value Creation 2.0, Japan's Ministry of Economy, Trade and Industry
- Environmental Reporting Guidelines 2018, Japan's Ministry of the Environment
- GRI Sustainability Reporting Standards, Global Reporting Initiative

**Note on Forward-Looking Statements**  
The performance forecasts included in this report are judgments based on the information that was available to JSW at the time the report was prepared and are subject to underlying risks and uncertainties. Actual results may differ significantly from these forecasts due to a variety of factors.



At a Glance



\* Figures are rounded and may not total precisely 100%.

Business Segments / Production Bases

Industrial Machinery Products Business Segment

Our Industrial Machinery Products Business Segment comprises four sub-segments: (1) Plastic Production and Processing Machinery, (2) Molding Machines, (3) Defense Equipment, and (4) Other Machinery (miscellaneous equipment related to, for example, electronic devices or infrastructure), and operates from three bases: the Hiroshima Plant, the Yokohama Plant, and the Meiki Plant.

With a lineup of plastic production and processing machinery, and plastic injection molding machines for a variety of applications, we offer many products that command a high market share worldwide, such as large pelletizers that process plastic raw materials into pellets. In this segment, which accounts for approximately 80% of JSW Group's net sales, we are working to further expand the scale of our business, especially in the mainstay plastic processing machinery market, by realizing a plastic-resource-recycling society and contributing to a low-carbon and super-smart society.



Hiroshima Plant



Yokohama Plant



Meiki Plant

Markets

Plastics

Mobility

Electronic Devices

Defense

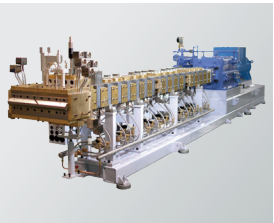
Products



Pelletizers



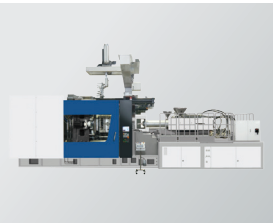
Film and sheet production systems



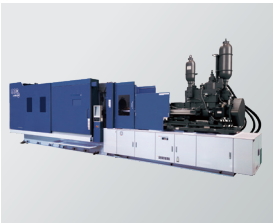
Twin-screw extruders (TEX)



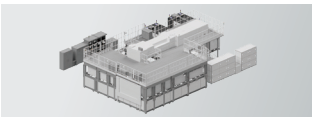
Injection molding machines



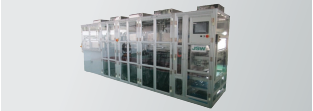
Injection molding machines (Special-purpose machines)



Magnesium injection molding machines



Excimer laser annealing (ELA) systems



Vacuum laminators



ECR deposition systems



Defense equipment (Maritime)



Defense equipment (Ground)

Material and Engineering Business Segment

Other Businesses

Our Material and Engineering Business Segment comprises two sub-segments: (1) Material Products and (2) Engineering Services, and is operated by Japan Steel Works M&E, Inc. (Muroran Plant), which was established as an operating subsidiary in April 2020.



Japan Steel Works M&E, Inc. (Muroran Plant)

In steel forgings, we are either the world's only manufacturer or have a high market share for products such as forgings for nuclear power generation equipment, large rotor shafts for power plants, and large components for offshore wind power generation construction. Perceiving the shift toward decarbonization as an opportunity, we are working to further strengthen our business structure. We are working to achieve profitability in photonics, one of our other business fields, in which we supply materials for semiconductors and optical devices such as synthetic quartz, lithium niobate (LN), and gallium nitride (GaN).

Power Generation Equipment

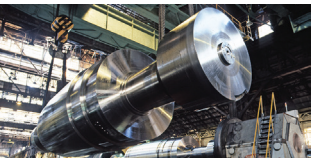
Renewable Energy

Infrastructure

Photonics



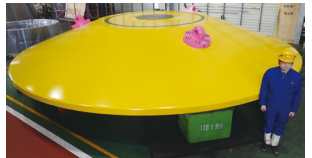
Forgings for nuclear power generation equipment



Rotor shafts for power plants



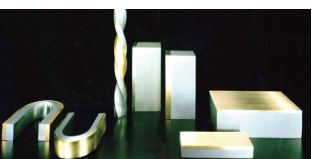
Rotor shafts for high-efficiency natural gas power generation



Large components for offshore wind power generation construction



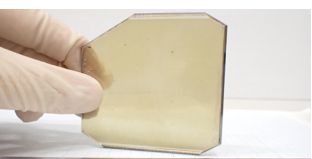
Steel pressure vessels for hydrogen storage



Clad steel plates



Steel rolls for steel mills



Gallium nitride (GaN) crystal materials

External Evaluations (as of the end of August, 2025)



CDP (climate change B, water security B-)



FTSE Blossom Japan Sector Relative Index



S&P/JPX Carbon Efficient Index



SOMPO Sustainability Index



DX Certification (METI Digital Transformation Certification)



Kurumin Certification (MHLW Childcare Support Certification)

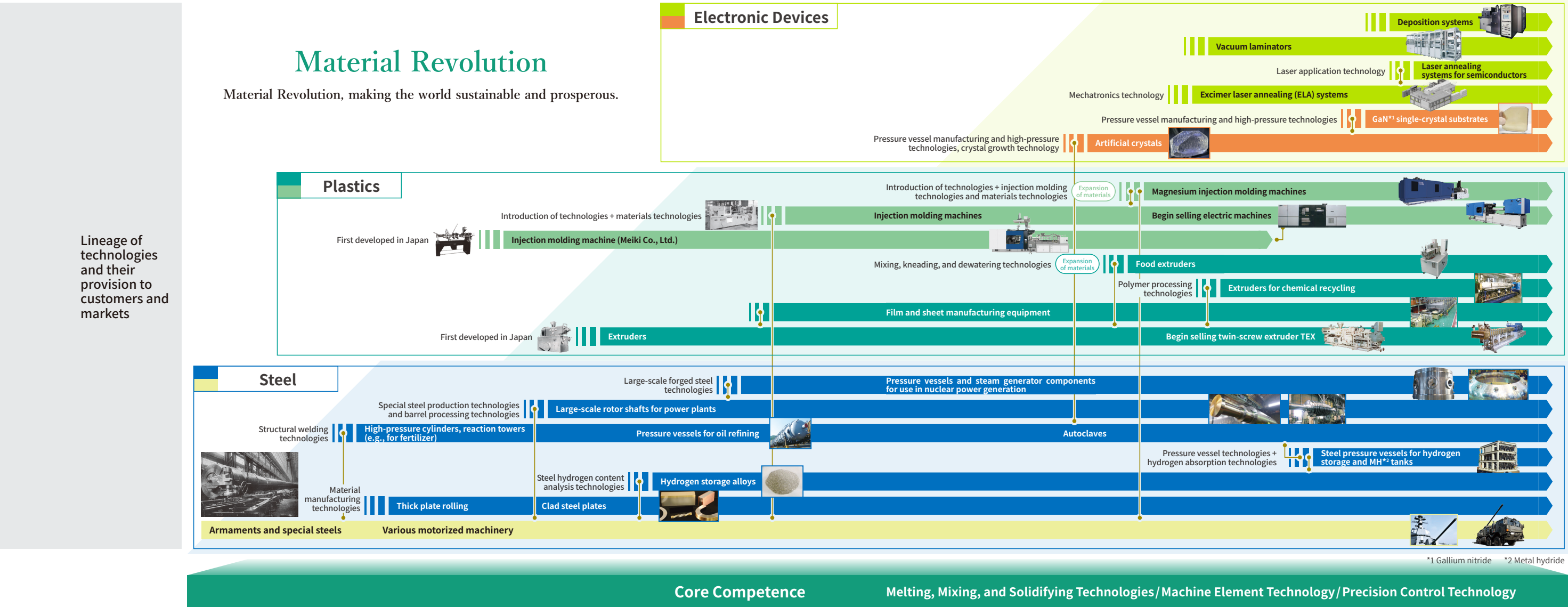
\* TEX is a Japanese registered trademark of The Japan Steel Works, Ltd.

Our History of Creating Value



Material Revolution

Material Revolution, making the world sustainable and prosperous.





# JSW Group Value Creation Process

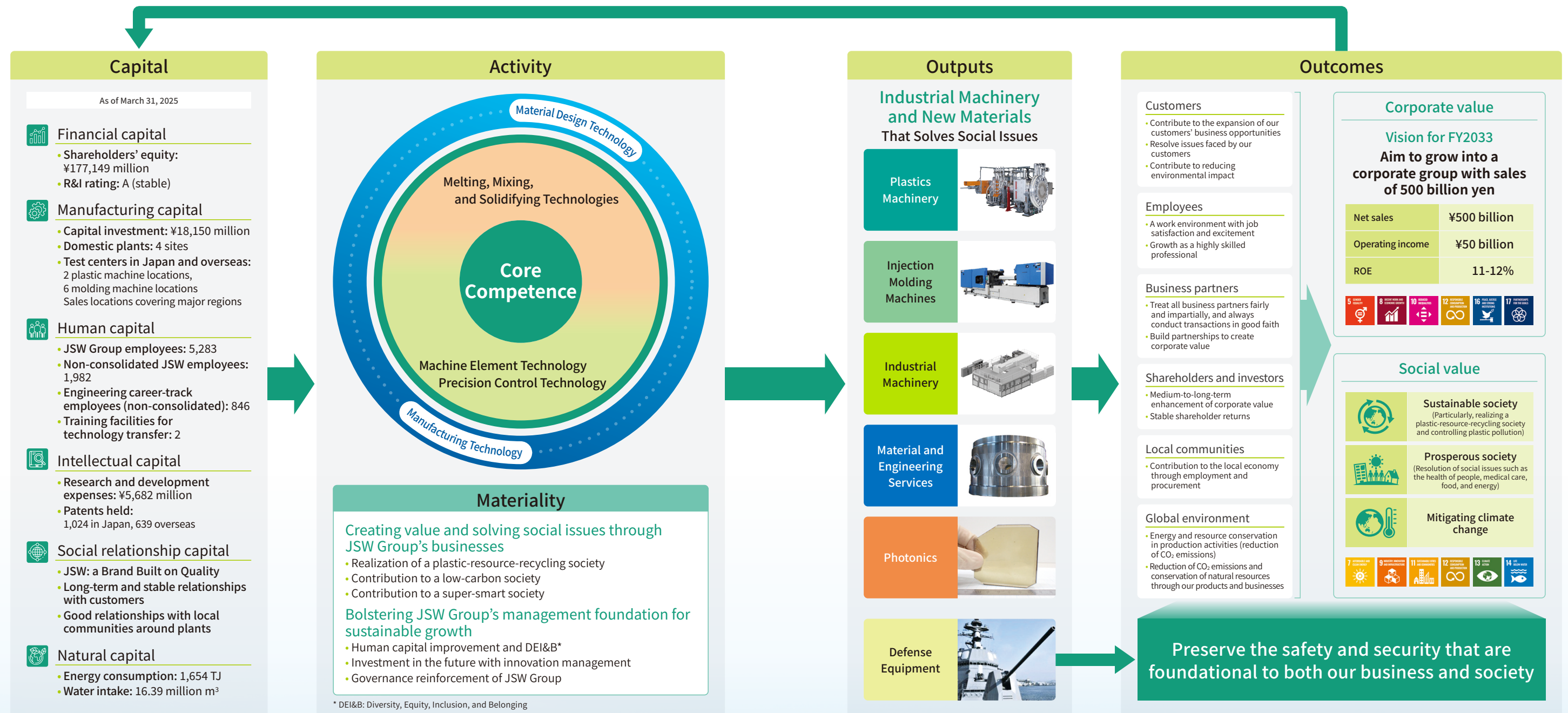
## Purpose

## Material Revolution

Material Revolution, making the world sustainable and prosperous

## Vision

Benefiting all stakeholders by developing and implementing industrial machinery and new materials that solve social issues.



## The Environment in Which JSW Operates

### The waste plastic problem

- Development of recycling and waste treatment businesses
- Reduction of fossil-fuel-derived plastics
- Conversion to non-fossil-fuel-derived plastics
- Growing discussion about maintaining ecosystems and natural capital

### Carbon neutrality by 2050

- Advancement of lithium-ion and other storage batteries
- Expansion of renewable energy such as solar power generation
- Expansion of hydrogen and ammonia businesses
- Phase-out of fossil fuels
- Renewed popularity of nuclear power generation

### Advancement toward digital transformation, AI, and IoT

- Transformation of our business models and work styles
- Full-scale investment in related infrastructure
- Economies emphasizing intangible assets and human capital

### Low birthrates and aging populations in developed countries

- Shrinking market and shrinking workforce in developed countries

### Global population growth

- Expansion and diversification of consumption, especially in emerging countries
- Food supply problems

### Heightened geopolitical risks

- Disputes between states
- US-China economic frictions



# Message from the President



**Toshio Matsuo**  
Representative Director &  
President  
The Japan Steel Works, Ltd.

Continuing to Transform and Take on  
Challenges with an Unwavering Focus on  
Growth Toward the Next Stage

## Embarking on a New Five-Year Growth Phase

The JSW Group has defined its Vision for FY2033 as simultaneously achieving a sustainability target of “contribute to the realization of a sustainable and prosperous world through the development and implementation of industrial machinery and new materials that solve social issues,” and a financial target of “aim to grow into a corporate group with sales of 500 billion yen.” In 2024, we formulated and announced a five-year medium-term management plan for achieving these goals, the JGP (JSW group Growth Plan) 2028.

Our shareholders and investors have asked, “On what basis do you expect to achieve 500 billion yen in net sales?,” a challenging target that is roughly double the net sales of fiscal 2023. While favorable business conditions do certainly provide a tailwind, more than anything I have emphasized our strong will to grow. I aspired to achieve dynamic growth by setting clear and ambitious quantitative targets.

Until then, our Group was much more inclined to pursue stability than growth, with net sales remaining at around 200 billion yen for nearly the past 20 years. The fact that we secured orders exceeding 300 billion yen in fiscal 2023 is, in my view, both an opportunity to propel our Group’s scale to the next level and a catalyst for change within JSW Group. I want my employees to feel a sense of fulfillment in their

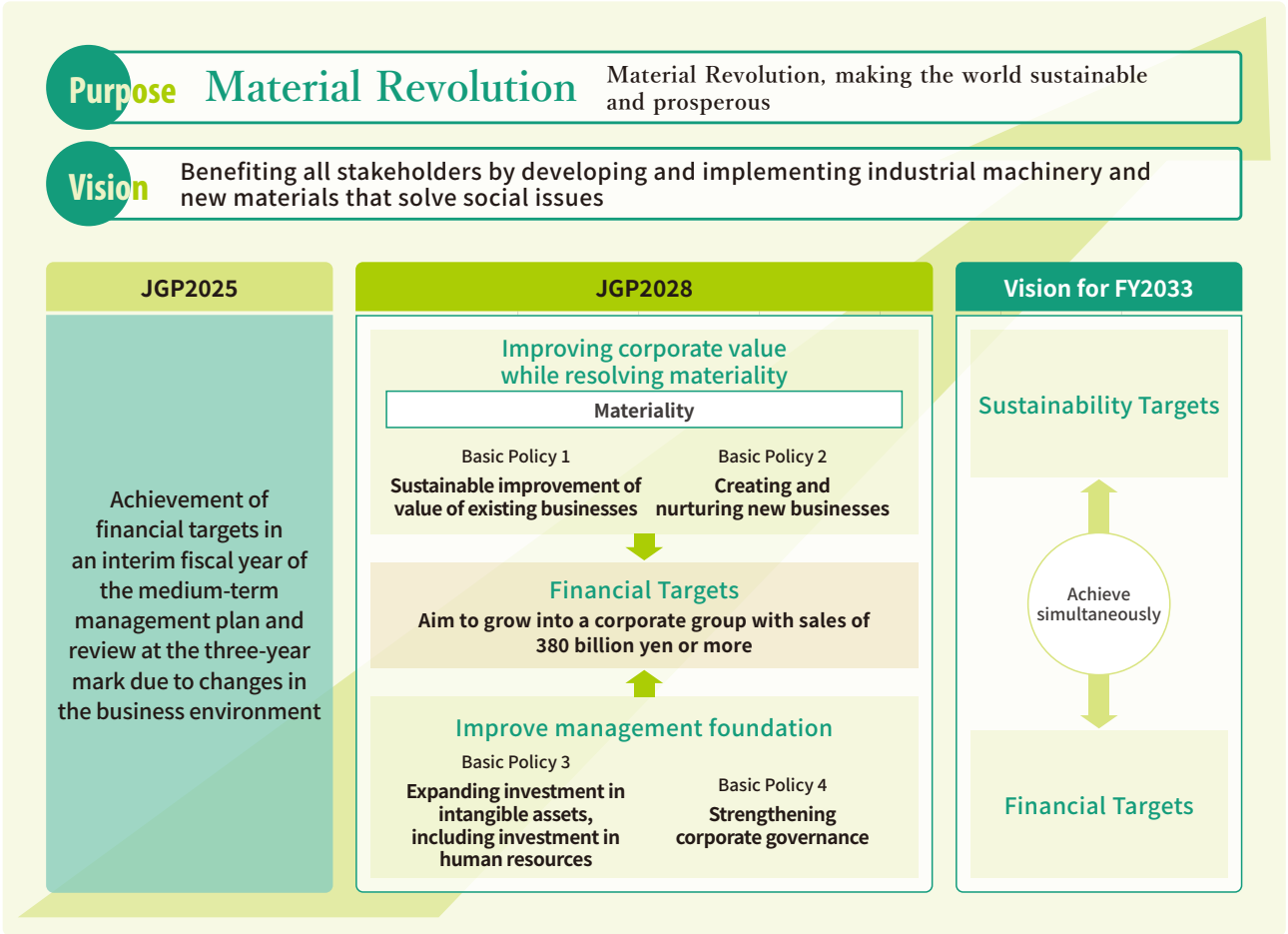
work by witnessing firsthand how striving to grow themselves drives the Company’s growth.

In its first year, JGP2028 was launched under the theme of “reforms and challenges for new growth,” and saw increased revenue in the Material and Engineering Business from projects related to, among other areas, nuclear and high-efficiency thermal power generation. However, the Plastics Machinery Business faced difficult market conditions due to factors such as slowing EV demand and the delivery of our equipment being carried over into the following fiscal year. As a result, net sales decreased 1.6% year on year to 248.5 billion yen. However, increased revenue in the Material and Engineering Business, together with such factors as higher production across other businesses, brought profit to 22.8 billion yen, a 26.7% increase year on year. Orders rose 7.4% year on year to 310.2 billion yen, while the year-end order backlog reached a record high of 396.9 billion yen.

In the first year, we have made progress on each of the four basic policies set forth in JGP2028.

Under the first basic policy, “sustainable improvement of value of existing businesses,” we made investments to increase production capacity for plastic machinery products at the Hiroshima Plant, improved production

### Transitions and Vision in the JGP Medium-Term Management Plan





efficiency for large-scale forged steel products for nuclear power generation and other applications at Japan Steel Works M&E, established systems for producing defense equipment at optimal sites, and expanded globally into markets such as India.

Under the second basic policy, “creating and nurturing new businesses,” we are advancing proactive research and development activities, focusing primarily on investments aimed at contribution to a super-smart society. We have also planned the establishment of a new research and development center and proceeded with site selection and other related preparations.

With respect to “expanding investment in intangible assets” and “strengthening corporate governance,” both aimed at fortifying our management foundation, we made steady progress on implementing measures such as raising employee compensation levels and revising the executive remuneration system. In addition, under our Organizational Culture Reform Project, we established the JSW Group Five Guiding Principles for Action to guide employee decision-

making and behavior, along with JSW Group company commitments to ensure a psychologically safe environment that encourages employees to take initiative. Through these initiatives, we aim to further foster an organizational culture that allows the value creation process to function more effectively and smoothly.

Thus the results achieved under JGP2028 in its first year and the progress made on our basic policy were both solid, and we feel confident about how the plan is coming along overall.

➡ p.16 JGP2028 Progress

	FY2024	JGP2028 Targets
Net Sales	248.5 billion yen	380 billion yen
Operating income	22.8 billion yen	37.0 billion yen
ROE	9.7%	10–11%

## Toward Achieving JGP2028

### Understanding of the External Environment

The external environment surrounding our Group continues to change at an ever-accelerating pace, driven by factors such as responses to climate change, the emergence of a society interconnected through the Internet of Things as symbolized by AI, and geopolitical risks. However, over the past three to four years, we recognize that there have been no major changes in the overall trends themselves. One such geopolitical risk, the US tariff policies, has only a limited impact, as exports to the United States account for roughly 3% of our Group’s total net sales. That said, we cannot rule out the possibility of our customers curbing their capital investment. We will continue to monitor the situation closely and take appropriate action as necessary.

### Reinforcing “Sustainable Improvement of Value of Existing Businesses”

**Expansion and Enhancement of Production Capacity**  
Improving the in-house production ratio and profitability of plastic machinery products and products for nuclear power plants through enhanced production capacity has been a pressing issue. We intend to carry out roughly half of the 100 billion yen capital investment program under JGP2028 in the first two years of the five-year plan to accelerate production capacity expansion. In fiscal 2025, our

investments will include among others new production facilities at the Hiroshima Plant and a new production line at the Muroran Plant. In addition, to meet growing demand for defense equipment, we are continuing to establish systems for production at optimal sites across multiple plants and working to expand production capacity by making our facilities mutually complementary.

➡ p.16 JGP2028 Progress

### Global Expansion

Global expansion is another key to sustainably improving the value of our current businesses. Over the past five years, our regional sales composition has been distributed at a ratio of about 4:3:3 for Japan, China, and other overseas markets. A characteristic of our Group is that among our sales overseas, there are many cases of Japanese companies using our products at their sites outside Japan. A closer look shows that the majority of the sales in the China and other overseas markets segments are to the overseas locations of Japanese companies. Viewing this from another angle, we recognize that a substantial number of non-Japanese corporate customers have not yet adopted our Group’s products. This represents significant untapped potential for future revenue growth.

Although we successfully entered the Indian market in fiscal 2024, we recognize that global expansion, including to markets beyond India, has not yet reached the optimal pace. There are still many markets we have not yet developed, and we are acutely aware that we must accelerate our efforts more than ever.

To advance global market development and marketing, we must also transform our traditionally passive approach to sales. It is important to first ensure that our existing Group products achieve broader recognition in overseas markets. Looking across the industry, there are Japanese companies whose product lineups have remained unchanged for years yet have nonetheless achieved impressive global expansion. Taking a cue from these companies, we are urging our sales teams to step out of their comfort zones.

For over a century, our Group has advanced its core competencies in technologies for melting, mixing, and solidifying materials such as steel and plastics, and in mechanical element technology and precision control technology. Today, our portfolio includes several products for which we enjoy strong competitive advantages, including large pelletizers used for producing plastic raw materials. However, consider the example of the ECR deposition system manufactured by JSW AFTY for the semiconductor industry: its performance and film quality surpass those of competing products, and it excels at niche applications, but there remains work to be done so that it is better recognized for its use in other applications. I believe we could further expand our business if, in addition to the performance of our equipment, customers came to recognize our product development capabilities and the technical advisory skills that contribute to final product quality.

We have great confidence in the capabilities and potential of our Group’s businesses. We firmly believe that by first establishing sales bases and from there conducting locally grounded sales activities to elevate the baseline recognition and brand strength of Japan Steel Works, we can develop potential customers and drive further growth.

We are currently putting this sales-base-driven approach to global expansion into practice in the Indian market, which we have designated as a priority region. Under the “Make in India” policy, efforts are underway to



expand capacity for polyolefin plastics and other materials for which India is highly dependent on imports. In addition, investment plans for increased automobile production are also progressing, and demand is expected to grow for pelletizers, extruders, injection molding machines, and other equipment. In view of these trends, our Group has assigned additional sales personnel and engineers to our local subsidiary in India and strengthened local hiring, while also expanding the number of sales and service agents for plastics machines and injection molding machines. In December 2024, we set up an after-sales service facility for plastics machines in collaboration with a local partner company. In 2025, we will establish a new Experience Center near our local subsidiary to showcase actual industrial machinery products from our lineup, and we will assign our Group engineers there so that the center can function as a hub for marketing activities while enhancing recognition of the Japan Steel Works brand.

First, we aim to establish sales bases, then expand to service bases and eventually to production bases, and achieve steady growth in both topline revenue and profitability.

### Products for Which JSW Group Enjoys a Strong Competitive Advantage (Excerpt)

Forgings for nuclear power generation equipment

Turbine rotors for high-efficiency natural gas power generation

Electric injection molding machines (clamping force up to 4,000 t)

Large pelletizers

ELA systems for displays

ECR deposition systems for semiconductor lasers





Transition to a Low-Carbon Society

The transition to a low-carbon society represents another important business opportunity for our Group.

Countries and regions around the world are now implementing policies that more actively promote nuclear power generation to strengthen energy security and advance low-carbon and decarbonization goals. To achieve the goal proclaimed at COP28 of increasing global nuclear power generation capacity roughly threefold from its current levels by 2050, strengthening the supply chain for power plant construction will be essential.

Our decision in April 2025 to adopt a policy of aiming for an absorption-type merger of Japan Steel Works M&E into the parent company reflects our determination to effectively address this challenge by allocating managerial capital appropriately and strengthening our supply capacity for products related to nuclear power. We intend to respond to robust demand by investing in a refresh of core production equipment.

At the same time, there is a growing need to address the surge in demand for electricity driven by the widespread adoption of AI and other factors. In this context, natural gas power generation emerges as a compelling option. Natural gas plants have a shorter lead time from the start of construction to the start of operation than nuclear facilities, and they have lower CO<sub>2</sub> emissions compared with coal- and oil-fired power. Within the field of gas power generation, gas turbine combined cycle (GTCC) systems, which offer exceptionally high-power generation efficiency, are attracting particular interest. Rotor shafts with excellent durability under high-temperature conditions are required for GTCC systems, and we are developing this as a product that leverages our Group's strengths. We will continue to reliably fulfill our supply responsibilities amid vigorous demand and contribute to stable energy supply and the transition to a low-carbon society.

We are also working to reduce our own greenhouse gas emissions, and, in line with requirements such as compliance with the Financial Services Agency's SSBJ standards, we have calculated and disclosed Scope 3 CO<sub>2</sub> emissions information in addition to the Scope 1 and Scope 2 emissions we have disclosed to date. We are also working in parallel to investigate and disclose the extent to which and how effectively our Group's products have contributed to the shift toward a low-carbon society. As a corporate group that provides various components and inspection services supporting nuclear power generation infrastructure, we have reaffirmed our understanding that this form of power generation delivers a significant CO<sub>2</sub> reduction effect.

➡ p.32 Special Feature: Contribution to a Low-Carbon Society

**Investing in the Future to Facilitate Creating and Nurturing New Businesses**

**Contributing to a Super-Smart Society and Creating New Businesses**

Creating and developing new businesses will be indispensable for achieving the goals of JGP2028 and the vision for a future that lies beyond it. Over the five years of JGP2028, we plan to allocate a total of 41 billion yen to research and development investment. Given the favorable business environment for the materiality (key issue) of contributing to a super-smart society, these R&D activities will focus especially on electronic devices, AI-related technologies, and related areas. Ultra-high-speed, low-latency communication enabled by 5G and 6G networks, together with reduced power consumption, will be essential requirements for realizing a super-smart society. This in turn will require the next generation of semiconductors. Gallium nitride (GaN) produced by our Group is gaining attention as a next-generation material for power semiconductors. Compared with silicon (Si), the mainstay semiconductor material, GaN may be able to reduce power loss by about 85% — a dramatic improvement in energy-efficiency performance. Reduced heat generation also allows for simpler cooling systems, and the resulting potential for smaller and lighter communication equipment and devices is raising expectations even further. We have now increased GaN provision at the semi-commercial level, with an eye toward meaningfully contributing to performance in the latter half of the JGP2028 period.

➡ p.34 Special Feature: Contribution to a Super-Smart Society

**Looking Beyond our Vision for FY2033**

To achieve sustained growth as we look ahead to our Vision for FY2033 and the future that lies beyond it, sowing seeds in new domains and advancing technological development will be indispensable. The magnesium injection molding machines, excimer laser

annealing (ELA) system, defense-related railguns, and crystal business that drive our Group's activities today all evolved from research themes investigated at the Research Center for Advanced Technologies, which served as our R&D hub in the 1990s. In the not-too-distant future, robots equipped with AI, for example, may become more familiar and accessible than they are today. Looking even further ahead, space and deep-sea utilization may also become more advanced. We are confident that we can provide products that exceed expectations by combining our Group's strengths: our ability to innovate materials themselves, and our technologies for developing and manufacturing industrial machinery for implementation throughout society. While envisioning the future that lies beyond our Vision for FY2033, we are also planning a new research and development hub that will be tasked with developing innovative technologies. With our Purpose as our guiding compass and with our dream in mind, we will create in this facility an environment in which our technical members can push one another to improve and steadily advance research and development from a long-term perspective.

**Accelerating Investment in Human Resources**

The most important asset for our Group is our people. To advance to the next stage and sustain transformation and challenges in preparation for the future beyond it, investment in human resources is the most indispensable factor of all.

In 2024, we implemented the largest increase in employee compensation since Japan's postwar period of rapid economic growth, and we are introducing an even greater increase in 2025. We are also steadily implementing improvements to employee treatment, including enhancements to welfare benefits such as constructing

We believe that further advancing initiatives embodying our Material Revolution will be increasingly critical to achieving our sustainability target of "contribute to the realization of a sustainable and prosperous world through the development and implementation of industrial machinery and new materials that solve social issues," and to successfully grow into a corporate group with net sales of 500 billion yen.

Whether as a company or as individuals, surely the driving force behind our actions is our dreams. I consistently convey to employees that I want them to work with dreams, passion, and persistence, and I believe that with the passion to make those dreams come true and the persistence to see things through, anything can be achieved.

new company housing. In addition, with many new employees joining the Company, the average age of our employees is becoming younger, and the atmosphere within the organization is changing as well.

With the rejuvenation of the organization resulting from improvements in compensation levels and welfare, we recognize that our investment in human resources is progressing smoothly. However, we also recognize that continuing these efforts without letting up will be essential for the sustained growth of our Group.

**Management That Is Conscious of Cost of Capital and Stock Price**

As described above, the business environment is providing a tailwind, and our performance continues to trend upward. Looking at our PBR, we interpret it as an indication that the stock market is factoring in expectations for our Group's future growth.

We recognize that in order to achieve the ROE target of 10–11% set as a financial target of JGP2028, we must consider both further improving profitability and maintaining balance with equity. Of these, we believe that improved profitability can be achieved by following through on the initiatives set out in JGP2028.

Currently, our equity ratio is trending above 45%. During the JGP2028 period, we will accelerate investments in equipment, research and development, DX, and related areas, in addition to increased working capital needs for defense equipment. Consequently, we plan to utilize financial leverage to procure funding, and will continue to discuss financial soundness, including the equity ratio, in greater depth at meetings of the Board of Directors.

➡ p.18 Financial and Capital Strategy: Message from the CFO

**Passion and Persistence in Achieving Our Dream**

Recently, more of our employees have been brimming with confidence built through one successful experience after another, and improvement is also evident in our most recent engagement scores. An atmosphere in which taking on new challenges and difficult issues is viewed positively is steadily emerging within the Company. Going forward, as more employees truly feel their own growth together with the Company's growth, we aim to allow a challenging corporate culture to take hold across the entire Group.

We will continue to refine our Group's core competencies and create innovative industrial machinery and new materials that solve social issues, thereby achieving sustained growth while contributing to a more sustainable society. We ask all our stakeholders for their continued support and encouragement.

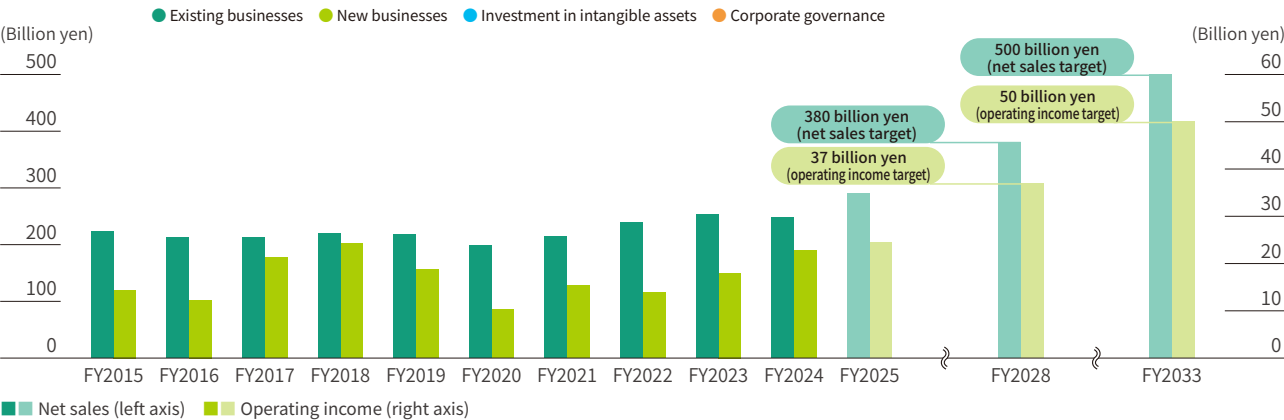


# Transitions and Vision in the JGP Medium-Term Management Plan

Under JGP2017, JSW employed “aggressive management” in the Industrial Machinery Products Business to actively utilize and invest in alliances and boost production capacity at major plants. JGP2020 aimed to “build a new foundation for growth,” promoting plastic processing machinery complexes in the Industrial Machinery Products Business and establishing Japan Steel Works M&E, Inc. in the Materials Business. JGP2025 set its sights on the long-term vision of becoming “a company where employees are excited to work” and “expanding and growing business to 300 billion yen,” with the goals of growing into the unprecedented

general manufacturer of plastic processing machinery in the world and securing consistent profit in the Materials Business. Through these efforts, continuous strengthening of the Industrial Machinery Products Business and improvement in profitability of the Materials Business bore fruit, and we formulated JGP2028 in fiscal 2024, before the final year of JGP2025. JGP2028 is positioned as “reforms and challenges for new growth,” aiming to sustainably increase corporate value while resolving material issues to achieve our vision for fiscal 2033.

	FY2015	JGP 2017	FY2017	FY2018	JGP 2020	FY2020	FY2021	JGP 2025	FY2023	FY2024	JGP 2028	FY2028	FY2033 Vision
Position		Great strides to becoming a global & niche top company			Build a foundation to achieve steady growth for the JSW Group over the next decade			Towards the unprecedented general manufacturer of plastic processing machinery in the world					
Basic Policy		<ul style="list-style-type: none"><li>● Increase profitability of existing businesses</li><li>● Foster new businesses and make them competitive as soon as possible</li><li>● Reinforce Group management and promote alliances</li></ul>			<ul style="list-style-type: none"><li>● Optimization of management resources and strengthening of alliances</li><li>● Strengthen service business</li><li>● Acceleration in exploration and development of new businesses</li></ul>			<ul style="list-style-type: none"><li>● Towards the unprecedented general manufacturer of plastic processing machinery in the world</li><li>● Make constant profit in Material and Engineering Business</li><li>● Create new core businesses</li><li>● Promotion of ESG management</li></ul>					
Major Results		<ul style="list-style-type: none"><li>● Boosted productivity and improved costs of industrial machinery products (Hiroshima Plant: factory reorganizations)</li><li>● Acquired of SM Plstek Co., Ltd. in South Korea (extruders)</li><li>● Business acquisition from Hitachi Plant Mechanics Co., Ltd. (simultaneous biaxial stretching device)</li><li>● Joint development of injection molding machines with Toyo Machinery &amp; Metal Co., Ltd. (platform standardization)</li></ul>			<ul style="list-style-type: none"><li>● Merger with Meiki Co., Ltd.</li><li>● Made GM Engineering Co., Ltd. A subsidiary (strengthened film and sheet manufacturing equipment)</li><li>● Merger with Nichiyu Machinery Co., Ltd. (strengthened film and sheet manufacturing equipment)</li><li>● Hiroshima and Europe: commenced operations of service centers</li></ul>			<ul style="list-style-type: none"><li>● Strengthened production capacity for film and sheet manufacturing equipment</li><li>● Meiki Plant and M&amp;E: strengthened production capacity for industrial machinery products</li><li>● Europe: established production base</li><li>● Established JSW Aktina System</li><li>● Obtained orders for proposal-based development of defense equipment</li></ul>					
Major Issues Still to Be Addressed		<ul style="list-style-type: none"><li>● Restructured Muroran Plant (boosted productivity)</li></ul>			<ul style="list-style-type: none"><li>● Established Japan Steel Works M&amp;E (“M&amp;E”)</li></ul>			<ul style="list-style-type: none"><li>● Improved profitability through proper sales prices</li><li>● Increased orders for power generation parts due to transitions in global energy policies</li></ul>					
		<ul style="list-style-type: none"><li>● Reorganized Research and Development Headquarters into New Business Promotion Headquarters</li><li>● Promoted companywide business development projects</li></ul>			<ul style="list-style-type: none"><li>● Established Muroran Copper Alloy Co., Ltd. with JX Advanced Metals Corporation</li><li>● Commercialized hydrogen-related business</li><li>● Focused on photonics, composites, and metals as new businesses to accelerate early-stage profit generation</li></ul>			<ul style="list-style-type: none"><li>● Established Innovation Management Headquarters</li><li>● Commenced operations of large-scale proof-of-concept equipment for gallium nitride (GaN) substrates</li><li>● Established JSW Group corporate philosophy</li><li>● Identified material issues</li></ul>					
		<ul style="list-style-type: none"><li>● Delays in developing new businesses</li><li>● Insufficient efforts to strengthen alliances</li></ul>			<ul style="list-style-type: none"><li>● Further promotion of plastic processing machinery complexes</li><li>● Create new core businesses beyond plastic processing machinery</li></ul>			<ul style="list-style-type: none"><li>● Increasing production capacity to meet sharp increases in orders and sales, and maintaining and improving in house production rate</li><li>● Promoting global expansion</li><li>● Investing on the aging core production facilities</li></ul>					

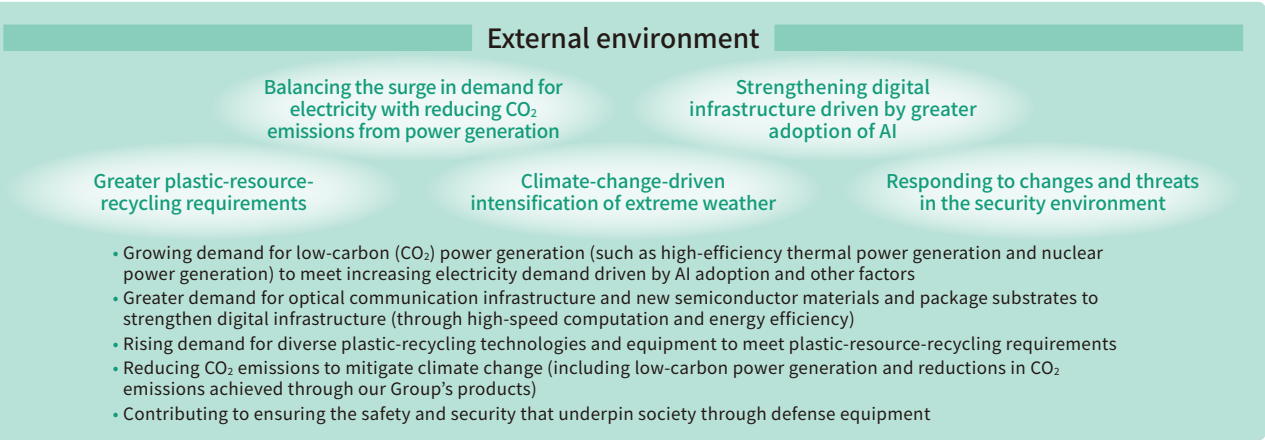
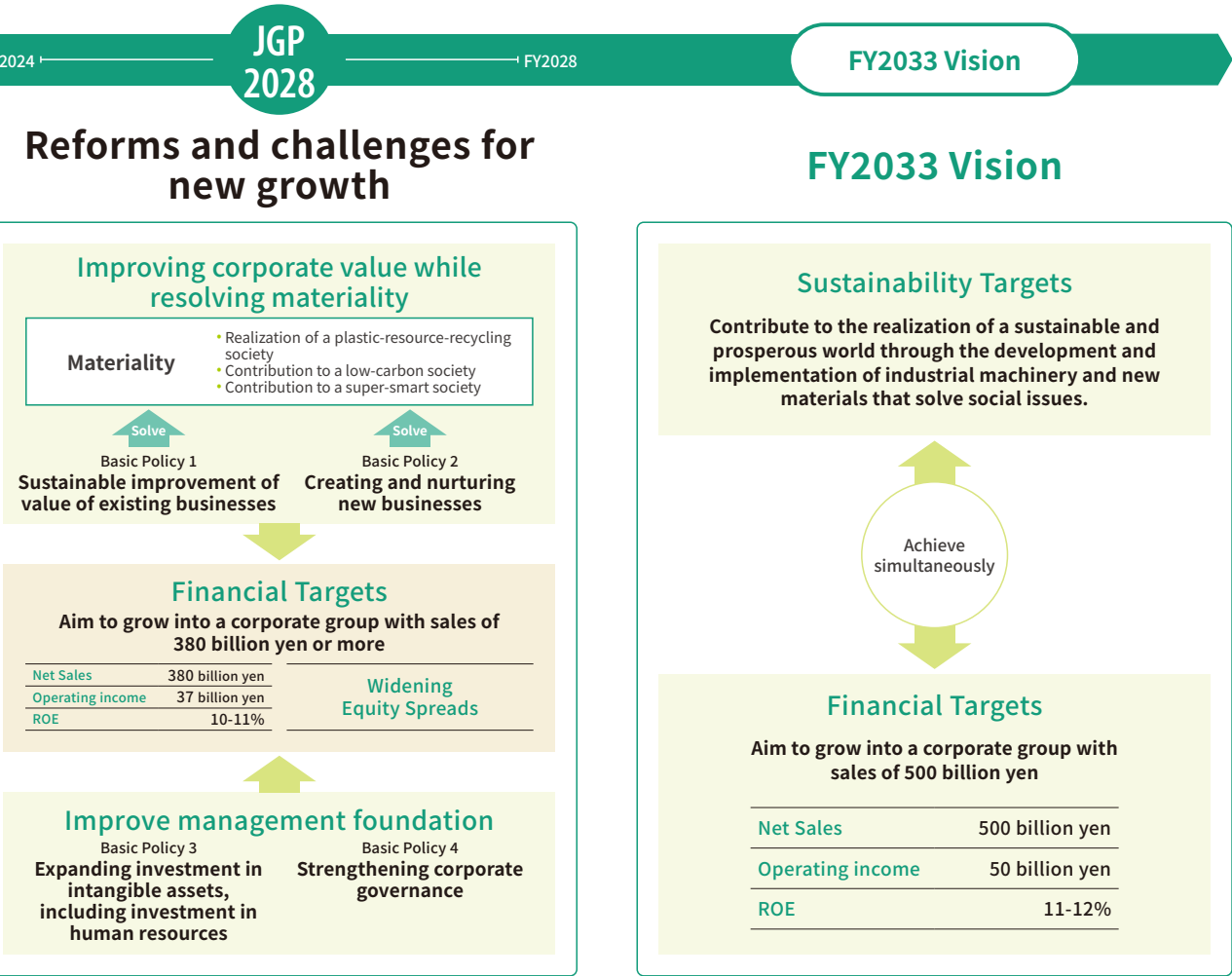


## Purpose Material Revolution

Material Revolution, making the world sustainable and prosperous

## Vision

Benefiting all stakeholders by developing and implementing industrial machinery and new materials that solve social issues





# JGP2028 Progress

## Progress Toward Financial Targets

For fiscal 2024, net sales were 248.5 billion yen and operating income was 22.8 billion yen. Although revenue declined year on year due to the postponement of large projects in the Industrial Machinery Product Business, the Material and Engineering Business recorded a significant increase in profit, resulting in lower revenue but higher profit compared with the previous year.

		FY2023: Results	FY2024: Results	FY2026: Plan	FY2028: Plan
Net sales		252.5 billion yen	248.5 billion yen	320 billion yen	380 billion yen
Operating income		18 billion yen	22.8 billion yen	26 billion yen	37 billion yen
Operating income ratio		7.1%	9.2%	8.1%	9.7%
ROE		8.5%	9.7%	9.0%	10–11%
Capital investment	Results	8.1* billion yen/year	18.1 billion yen/year		
	Plan	9.0 billion yen/year	20 billion yen/year		
R&D investment	Results	5.2* billion yen/year	5.6 billion yen/year		
	Plan	6.0 billion yen/year	8.2 billion yen/year		
Dividend payout ratio	Results	30.4%	35.2%		
	Plan	30%	35%		
DOE	Results	2.7%	3.7%		
	Plan	2.0% lower limit	2.5% lower limit		

\* Average of three years from FY2021 to FY2023

## 4 Basic Policies

Basic Policy	Strategy	Major Results
① Sustainable improvement of value of existing businesses	<ul style="list-style-type: none"><li>Expanding production capacity and improving the in-house production rates in the Industrial Machinery Product Business through major capital investments</li><li>Capital investment to improve sustainability of the Material and Engineering Business</li><li>Responding to defense equipment market needs</li></ul>	<ul style="list-style-type: none"><li>Completed construction of the 10th assembly plant at the Hiroshima Plant, expanding production capacity for plastic machinery products</li><li>Made progress on construction of the 3rd and 4th machinery plants at the Hiroshima Plant to enhance machining capacity and production efficiency for machine components</li><li>Expanded production capacity by manufacturing in optimal locations to meet surging demand for defense equipment</li></ul>
② Creating and nurturing new businesses	<ul style="list-style-type: none"><li>Strengthen existing businesses by developing elemental technologies and create innovative technologies through basic technology research</li></ul>	<ul style="list-style-type: none"><li>Advanced research and development activities centered on focused investments that help contribute to a super-smart society</li><li>Moved forward with a plan to establish a new research and development center responsible for developing innovative technologies</li></ul>
③ Expanding investment in intangible assets, including investment in human resources	<ul style="list-style-type: none"><li>Reform towards an organizational culture that encourages challenge</li><li>Spreading the Purpose and promoting DEI&amp;B</li></ul>	<ul style="list-style-type: none"><li>Promoted Organizational Culture Reform Project and established JSW Group Guiding Principles for Action to guide employee decisions and actions</li><li>Leveraged engagement surveys and reviewed measures and indexes to contribute to the growth of diverse individuals and maximization of organizational results</li><li>Promoted women’s careers through positive action</li><li>Certified by the Ministry of Economy, Trade and Industry as a DX-certified business</li><li>Deployed IoT solution J-WiSe that supports customers in shifting to smart factories</li></ul>
④ Strengthening corporate governance	<ul style="list-style-type: none"><li>Enhancing incentive effectiveness for medium-to-long-term improvement of corporate value and aligning interests with shareholders</li><li>Improving corporate value sustainably while reducing corporate management risks</li></ul>	<ul style="list-style-type: none"><li>Enhanced incentive effectiveness for medium-to-long-term improvement of corporate value through revisions to the executive compensation system</li><li>Established a Risk Management Group in the Corporate Planning Office to promote and oversee companywide risk management efforts</li></ul>

\* J-WiSe is a Japanese registered trademark of The Japan Steel Works, Ltd.

## Key Strategies | Improving Production Capacity and In-House Production Rates, Capital Investment

### Hiroshima Plant: Investment to improve production capacity and in-house production rates

- The 10th assembly plant began operation in December 2024. Investment to enhance assembly capacity for plastic machinery has been completed.
- Construction of the 3rd and 4th machinery plants is progressing to improve machining capacity and production efficiency for machine components.
- We will improve component machining capacity to increase our in-house production rates and improve profitability, and promote growth in the after-sales service business.

#### Investment Progress and Prospects at Hiroshima Plant

	FY2024	FY2025	FY2026	FY2027	FY2028
	2nd Half of FY	1st Half of FY	2nd Half of FY	1st Half of FY	2nd Half of FY
10th assembly plant	Completed in December 2024 and already in operation				
3rd machinery plant	Construction, equipment installation, etc.		Operation expected to start end of FY2025		
4th machinery plant	Construction, equipment installation, etc.			Operation expected to start 1st half of FY2027	



10th assembly plant, which has already begun operation



3rd machinery plant, under construction

### Muroran Plant: Investment to improve production efficiency of large-scale forged steel products for thermal and nuclear power generation

- Refresh investments (maintenance and preservation) in various production facilities
- Streamlining through the installation of new equipment in the steelmaking, forging, and inspection processes (manufacturing period optimization and labor savings)
  - Jigs for handling ultra-large steel ingots
  - 3D automated dimensional inspection equipment, automated UT equipment

## Promoting Global Expansion


To enhance and raise awareness of the brand strength of our Group’s industrial machinery products, we are making improvements in areas such as sales and service networks and increasing personnel counts. We would like to introduce our initiatives in India, where the Make in India policy is

driving the growth and leveling-up of the manufacturing sector and where demand for plastics is also expected to rise. We will also proactively expand into other regions where growth is anticipated.

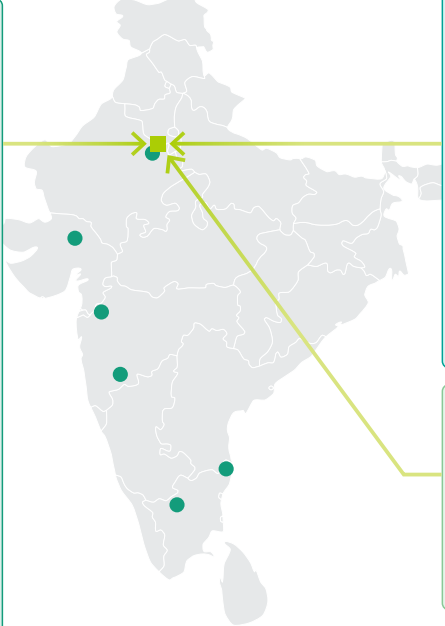
### Specific Expansion Example: Measures for the Indian Market

■ We have increased the number of personnel dispatched to our local subsidiary in Gurgaon, Haryana, adding sales staff and engineers for plastic machinery, molding machines, and other products. We are also strengthening local hiring to reinforce our sales and service systems.


■ In 2025, we opened the Experience Centre near this subsidiary. The facility will exhibit actual equipment such as twin-screw extruders and injection molding machines and will be staffed with engineers, thereby creating a stronger presence in India for our industrial machinery products, such as our presses for printed wiring boards.



The Experience Centre



■ In December 2024, we collaborated with our partner companies to establish an after-sales service plant for plastic machinery. This facility enabled swift dispatching of engineers and shorter turnaround times for repairs.



After-sales service facility (set up by UTT)

■ We are expanding our network of service agents for injection molding machines. We aim to further enhance our presence in the Indian market, including by strengthening our bases and establishing the Experience Centre.

● Injection molding machine sales and service agency location



# Financial and Capital Strategy: Message from the CFO

Top Message



### Widening Equity Spreads Through Active Investment while Maintaining Financial Soundness

Representative Director & Executive Vice President, CFO, in charge of Export Control Administration, in charge of Finance & Accounting Department, General Manager of Corporate Planning Office, in charge of Material and Engineering Business

## Hiroki Kikuchi

## Our Vision and the Business Environment

Based on its Purpose of “Material Revolution, making the world sustainable and prosperous,” JSW Group has designated the simultaneous achievement of its sustainability target of “contribute to the realization of a sustainable and prosperous world through the development and implementation of industrial machinery and new materials that solve social issues” and its financial target of “aim to grow into a corporate group with sales of 500 billion yen” as its vision for fiscal 2033. In order to realize this vision, we have also positioned the period through fiscal 2028 as a time of “reforms and challenges for new growth” under the medium-term management plan JGP2028, and we are implementing measures based on four basic policies.

From fiscal 2024, the first year of JGP2028, through the present, our immediate business environment has been characterized by strong interest in the Materials Business, driven by factors such as increasing demand for nuclear power and high-efficiency thermal power generation, while orders in the defense equipment business have also grown significantly, helping to drive the Group’s growth. Meanwhile, emerging markets offer significant growth potential in the Industrial Machinery Product Business, particularly for plastics machinery and Injection Molding Machinery Business, and we believe it is necessary to accelerate the globalization of the business beyond what was initially envisioned in the JGP2028 plan.

## Looking Back on FY2024 and Prospects for FY2025

Our backlog reached an all-time high in fiscal 2024, driven by such factors as growth in the defense equipment business. Net sales declined year on year to 248.5 billion yen due to such factors as the deteriorating market environment for plastic processing machinery in the Industrial Machinery Product Business and the considerable impact of a shift in the timing of revenue recognition for large projects. However, operating income rose year on year to 22.8 billion yen, supported by higher earnings in the Material and Engineering Business.

For fiscal 2025, we expect continued growth in orders in

## Financial Policy

The Group’s basic financial policy is to “widen equity spreads while maintaining financial soundness” as we continue to actively invest in both tangible and intangible assets in order to sustainably enhance corporate value. We regard the equity ratio and cash and deposits (i.e., ensuring an optimal level of cash and deposits) as especially important indicators for gauging financial soundness. Investment is concentrated in the first three years of JGP2028, during which interest-bearing debt is expected to

	FY2024 results	JGP2028 target
Net sales	248.5 billion yen	380 billion yen
Operating income	22.8 billion yen	37 billion yen
ROE	9.7%	10-11%
Equity spread	1.7%	2-3%
Equity ratio	48.5%	45% or more

increase. Even so, we intend to maintain an equity ratio of at least 45% and preserve an issuer rating of A from R&I.

# Management That Is Conscious of Cost of Capital and Stock Price

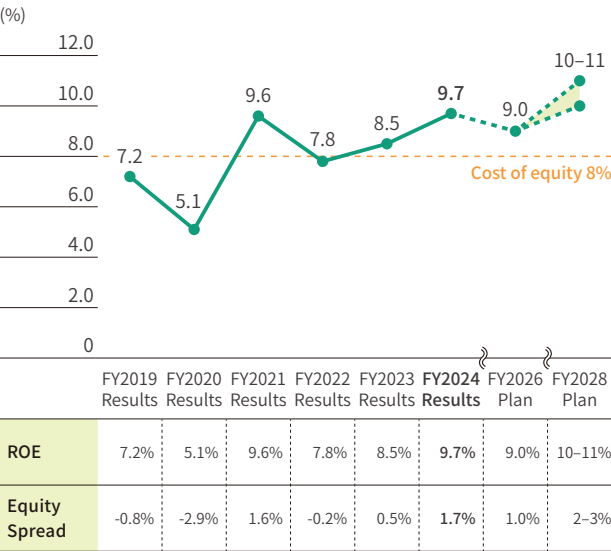
## Widening Equity Spreads

Of the main KPIs the Group has set in JGP2028—net sales, operating income, and ROE—the most important for our financial and capital strategy is ROE. For this reason, we have made it our policy to widen the equity spread (ROE – cost of equity) as a way to maximize shareholder value. The Group recognizes its current cost of equity, as 8.0% based on CAPM. The Group recognizes that its ROE of 9.7% in fiscal 2024 exceeded its cost of equity; however, through sustainable improvement of value of existing businesses and the creation and nurturing of new businesses, we will achieve ROE of 10–11% in fiscal 2028, the final year of JGP2028, and furthermore aim for 11–12% in fiscal 2033, sustainably widening our equity spread.

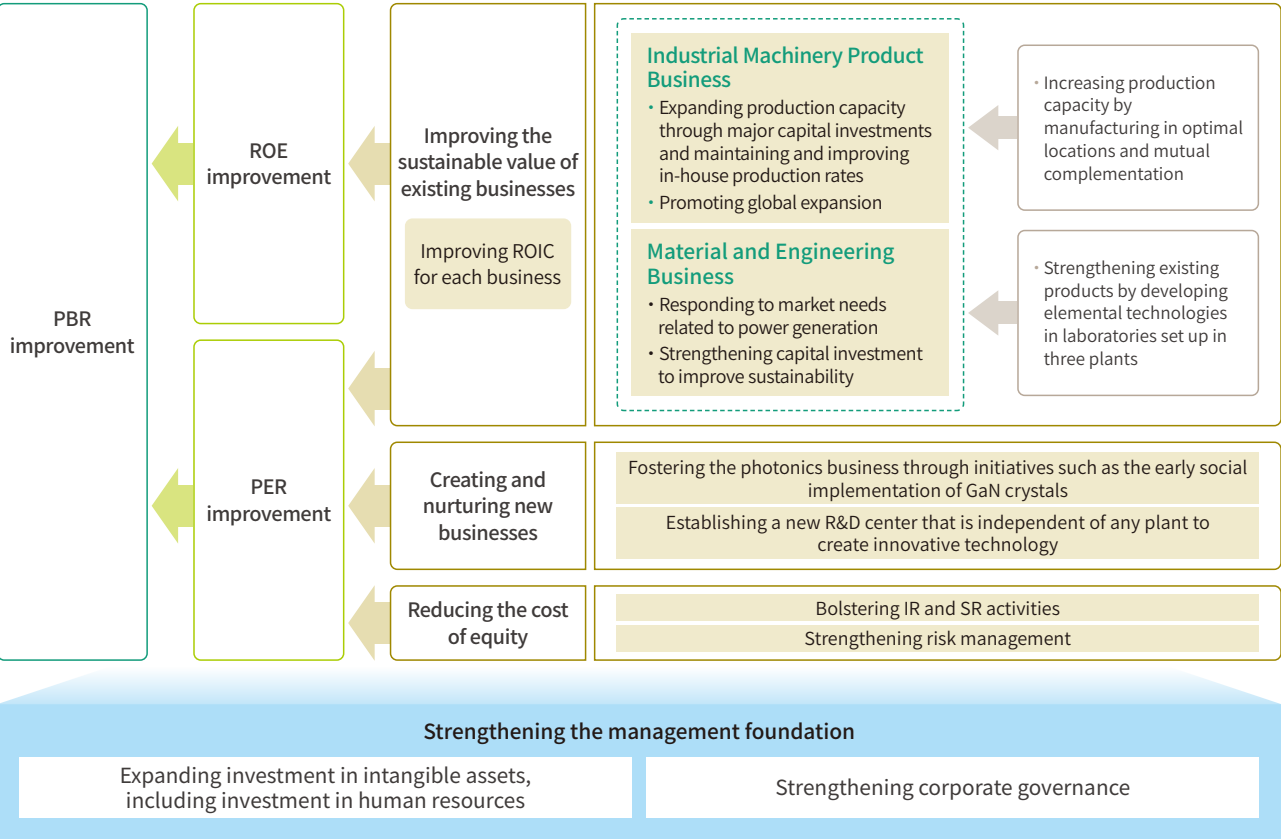
## Achieving Further Stock Price Increases

The Group has secured a reasonable PBR level of around three times, but it is important that we continue working to raise it further. Improvement in both ROE and PER is necessary to achieve this, but we are placing particular emphasis on measures to enhance ROE so that we may sustainably widen our equity spread. Specifically, in both the Industrial Machinery Product Business and the Material and Engineering Business, we will steadily put our business strategies in action while we increase production capacity by manufacturing in optimal locations and mutual complementation, and strengthen existing products by developing elemental technologies at

## ROE/Equity Spread



our laboratories, thereby improving ROIC in each business. In addition, we will create ROIC trees tailored to the characteristics of each business, clarify process KPIs, and work to instill and operate these within the Company. We recognize that it is important to constantly refine our growth strategies while ensuring that our shareholders and investors understand them by enhancing our information disclosure and our dialogue through IR and SR activities.





Business Portfolio Strategy

Improving ROIC for each business is necessary to improve ROE. The Group has defined where each business should be positioned in a four-quadrant matrix based on capital profitability (ROIC spread) and sales growth rate by the final fiscal year of JGP2028. Appropriate resource allocation is indispensable when raising ROE by improving the ROIC of each business. Beginning in fiscal 2025, we have been holding discussions on our business portfolio twice a year at meetings of the Board of Directors in which we dynamically review resource allocation.

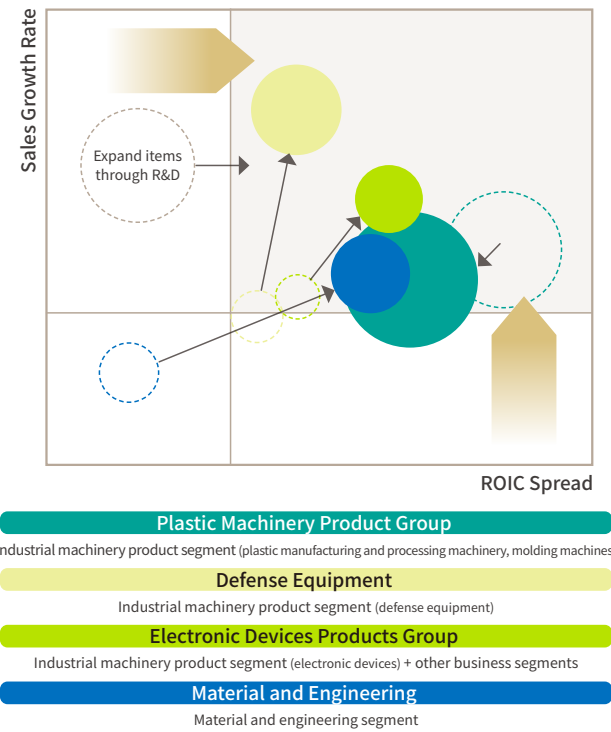
Business portfolio management, if carried out in isolation, yields only limited effect, so we are continuing our efforts to interweave it into our management processes. As an example of how this is done, the Board of Directors and the Executive Board, taking the view that allocated resources must be recovered, regularly verify the recovery status of funds for large-scale production expansion investments after the investments have been made. We also identify underperforming businesses at an early stage, and have established a rule under which capital investment plans are frozen until a performance improvement plan is approved by the Executive Board. This rule is enforced rigorously.

Cash Allocation

The Group’s basic approach to cash allocation is to allocate funds generated from operating activities to investment in growth, with a focus on capital investment, as well as to shareholder returns. Our plan is to fund an increase in working capital, mainly for defense equipment, with existing cash and deposits and by monetizing investment securities, with any shortfall covered through additional interest-bearing debt.

The Group considers the optimal level of cash and deposits to be the sum of two months’ worth of the following fiscal year’s sales plan plus roughly 10 billion yen for unexpected

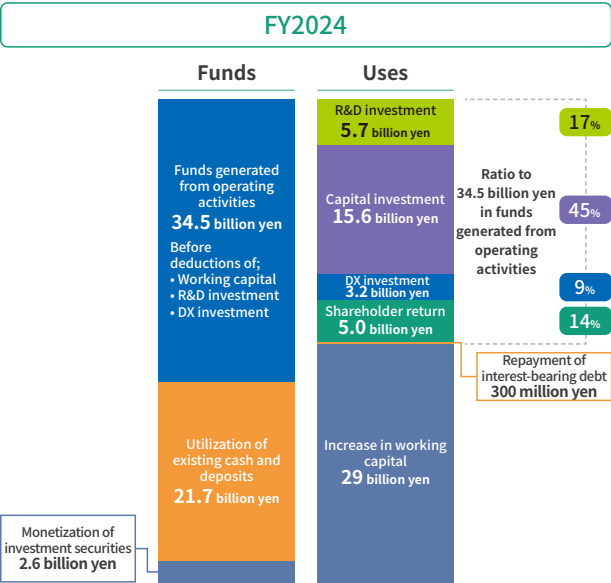
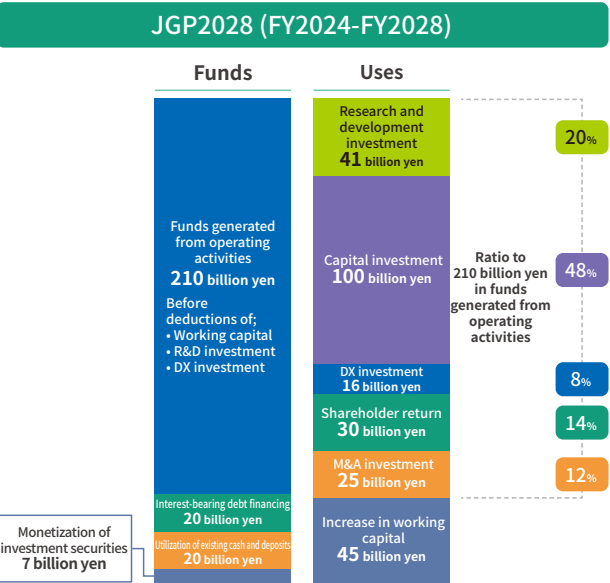
Business Portfolio Plan (Dotted circles show average from FY2021 to FY2022)



funding needs, and intends to maintain this same level throughout JGP2028.

In fiscal 2024 as well, we allocated most of the funds generated from operating activities to growth investment and shareholder returns. Excluding M&A investment, for which there were no actual expenditures, the allocation was in line with the cumulative allocation under JGP2028. Capital investment aimed at increasing production capacity and improving productivity is also progressing largely as planned.

Looking ahead to fiscal 2025, we expect an increase in



\* Figures in this graph are rounded and may not match amounts shown elsewhere.

working capital for the defense equipment business, as well as an increase stemming from revisions to the Subcontract Act that mandate faster payment to subcontractors. However, our basic approach remains unchanged. Investment in growth consists mainly of capital investment, R&D investment, and DX investment. Of these, we plan to invest roughly three-quarters of the 100 billion yen total allocated for capital investment by the third year of the JGP2028 period. We will

Shareholder Return Policy

Our basic policy regarding the return of profits to shareholders is to pay stable and continuous dividends and to improve them.

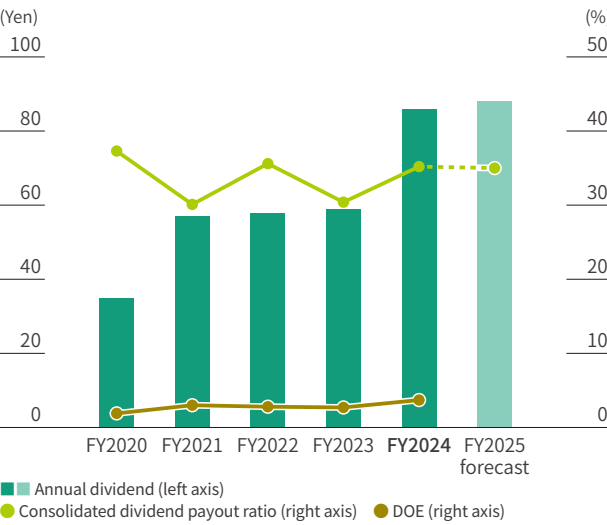
The Group has traditionally used consolidated dividend payout ratio as its performance-linked dividend indicator and DOE (dividend on equity) as its stable dividend indicator and will boost shareholder returns during JGP2028 by raising both ratios.

Specifically, to achieve optimal balance between shareholder returns and proactive investment to increase corporate value, the Group has raised its consolidated dividend payout ratio target from 30% or more to 35% or more and its DOE lower limit from 2.0% to 2.5%.

While the annual dividend per share was 86 yen in fiscal 2024, the Group plans to pay an annual dividend of 88 yen per share in fiscal 2025.

carry out investments for the Industrial Machinery Product Business, such as those to increase production, as planned, further accelerate the already solid growth of the Materials and Engineering Business through refresh investments, and also consider investments aimed at strengthening supply capacity. We also plan to accelerate R&D investment in line with the construction of our new research and development center.

Annual Dividend/Consolidated Dividend Payout Ratio/DOE



Engagement with Shareholders and Investors

In meetings with institutional investors, we received many questions about the long-term outlook for each of our businesses, including inquiries about the status of orders for material products for nuclear power plants and GTCC (gas turbine combined-cycle) power generation. Through these dialogues, we came to recognize that our share price reflects expectations for achieving the targets set out in JGP2028. To meet these expectations, we believe it is necessary to both steadily advance the growth strategies set forth in JGP2028 and continually refine our strategies in pursuit of further growth.

The strong expectations institutional investors have for our long-term growth have also been reported to the Board of Directors, together with summaries of the discussions held in our meetings.

To Our Shareholders and Investors

Our Group will continue to make proactive investments aimed at sustainably strengthening our competitive advantage, while adhering to our basic financial policy of “widen equity spreads while maintaining financial soundness.”


In fiscal 2025, investment cash flow is expected to exceed operating cash flow due to increased working capital driven mainly by growth in the defense equipment business and the acceleration of investment in growth.

Even so, we will continue to carry out JGP2028 while maintaining a balanced approach to investment in growth, shareholder returns, and financial discipline, and we will also implement early-stage initiatives toward realizing our vision for fiscal 2033. We will actively work to provide information and engage in dialogue with our shareholders and investors, and we ask for your continued support.



# Innovation Management Strategy

Top Message



Shigeki Inoue

Director & Senior Managing Executive Officer  
CTO, in charge of Quality Management, in  
charge of Intellectual Property Department,  
in charge of New Business Promotion  
Headquarters, General Manager of Quality  
Management Office, General Manager of  
Innovation Management Headquarters

For our Group to embody our Purpose “Material Revolution, making the world sustainable and prosperous” over the long term, we must continually develop and implement industrial machinery and new materials that address social issues. We believe it is essential for the Innovation Management (IM) Headquarters to serve as the vanguard in making this Purpose a reality and to lead the way for an appropriate IM strategy.

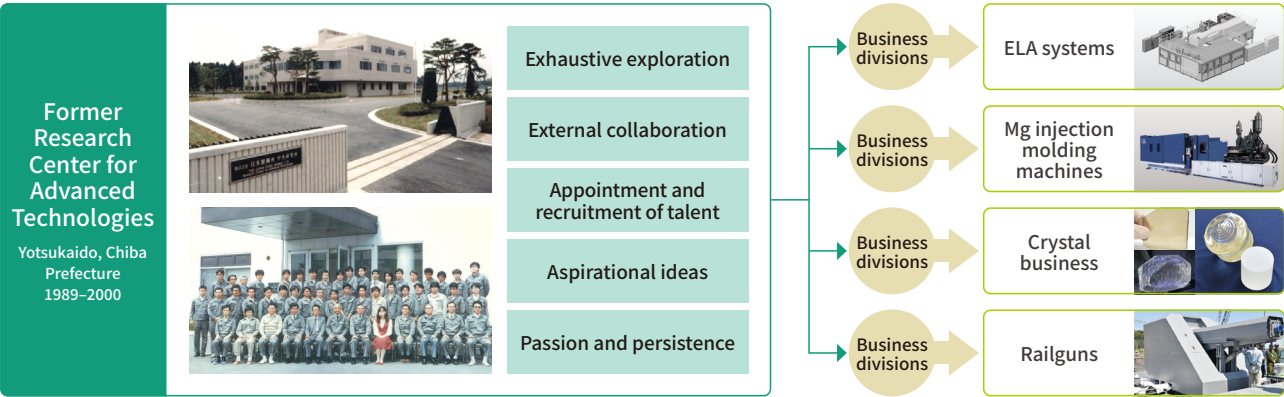
Although recent changes in the external environment have created opportunities for several of our Group’s businesses, we will not rest on our laurels despite these advantages. Under JGP2028 and our longer-term vision for fiscal 2033 of achieving net sales of 500 billion yen, we are not only working on the short- and medium-term measures that have been our focus to date, but also expanding measures aimed at creating the products and businesses that will support the Group over the next ten years and well beyond, into our next 100 years. One such measure is the creation of a new research and development hub that we will position as a flagship for the Group. This report introduces part of that effort.

## Former Research Center for Advanced Technologies

Our Group previously operated the former Research Center for Advanced Technologies in Yotsukaicho, Chiba Prefecture, from 1989 to 2000. Several of the research and development themes pursued there were handed over to the business divisions for potential commercialization, and products and businesses that resulted from these efforts included excimer laser annealing (ELA) systems, magnesium (Mg) injection molding machines, our crystal business, and railguns. Our success rate for innovation exceeded the commonly cited benchmark of “3 successes out of 1,000 attempts,” and we believe this outcome was attributable to

exhaustive exploration, collaboration with external partners, appointment and recruitment of talent, aspirational ideas, passion, and persistence. We aim to carry forward these practices and approaches to our new research center as well, where we will further strengthen them to spark innovation.

With the new center, it is vital that we strengthen our innovation management approach to raise efficiency and the likelihood of success of commercializing the R&D themes we undertake. This must include highly ambitious innovation activities in new fields not confined by existing products and businesses or our current core competence.



## Main Roles of the New Research Center

Within the IM Headquarters, the Advanced Technology Laboratory, the Device Technology Laboratory, and the Material Technology Laboratory each possess distinctive technological strengths, which we continuously work to enhance and advance. These technologies are central to our core competencies and essential to addressing material issues, but creating innovative technologies that go beyond

these domains is also a responsibility of the IM Headquarters.

In preparation for opening the new research and development center, each laboratory has formed teams to explore cutting-edge ideas, who are currently undertaking related activities. Through these activities, we will identify new market domains to prioritize and use them as our guiding compass as we take on challenges related to diverse social issues.

Introduction

How We Create Value

Foundations for Creating Value

Data

Main Roles of New Research Center

- Location environment set apart from our plants to promote the creation of new technologies and new products, unconstrained by our existing products, that will underpin our Group’s future
- Building an environment that enables us to pursue new technology and business domains
  - Environment that facilitates accelerated collaboration with universities, startups, and research institutions / Attractive location that facilitates access to diverse information and talent
- A diversity-driven space that sparks innovation
  - Acquisition of diverse talent (expertise, gender, nationality) / Open innovation with academia and other companies / Development of global talent

	Advanced Technology Laboratory (Hiroshima)	Device Technology Laboratory (Yokohama)	Material Technology Laboratory (Muroran)
Technology We Possess	AI/IoT, MBD technology, control technology, mechanical element technologies	Deposition technology, plasma technology, laser application technology	Material development technology, inspection technology, crystal formation technology
Market Domain	Plastics, automobiles, electronic devices, home appliances	Electronics, information communication	Energy, electronic device materials

Bringing together the technologies and expertise of the three laboratories

Elemental technology and product development leveraging core technologies\*

New R&D Center

Creating new technology and new products unconstrained by core technologies

Venturing into innovative technologies and new market domains

Diversity-driven space

New Market Domains

Energy-saving technology, resource-conserving technology, material technology, AI technology, biotechnology, quantum technology, health and medicine, harsh environments, food and agriculture, forestry and fisheries, etc.

Realization of a Plastic-Resource-Recycling Society

Contribution to a Low-Carbon Society

Contribution to a Super-Smart Society

Taking on Diverse Social Issues

Embodying Our Purpose

Material Revolution, making the world sustainable and prosperous.

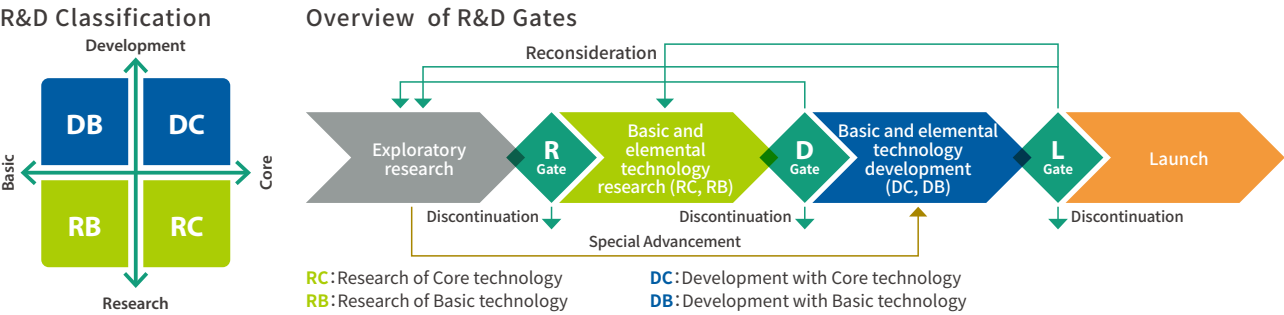
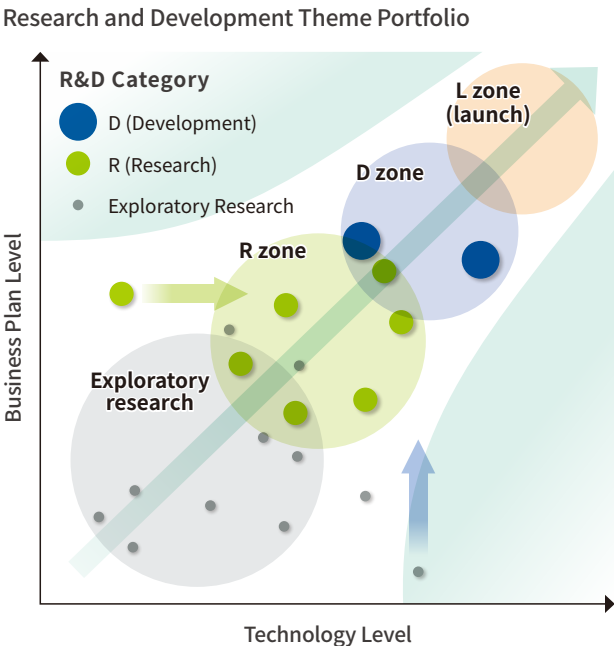
\* Core technologies: Current core competencies, current products and businesses

## Operation of Research and Development Gates to Improve the Success Rate of Innovation Activities

We have enhanced IP analysis in collaboration with the Intellectual Property Department to refine the planning of research and development themes.

We also established criteria for quantifying each research and development theme, which are assessed at both the technology level and at the business plan level. This allows us to classify research and development themes at the time of initiation into exploratory research, R (Research) levels (RC, RB), or D (Development) levels (DC, DB). In addition, we conduct periodic research and development gate reviews, with business division directors, headquarters directors, and the CTO serving as decision-makers. Research and development themes that pass the R gate, D gate, and L (Launch) gate are then advanced to the next higher research and development category. Decisions are also made regarding reconsideration, discontinuation, or special advancement.

We employ this framework to appropriately identify and evaluate multiple research and development themes at various levels, and to provide criteria for determining how to effectively allocate management resources according to each level.





# DX Strategy

## Top Message



**Seiji Umamoto**

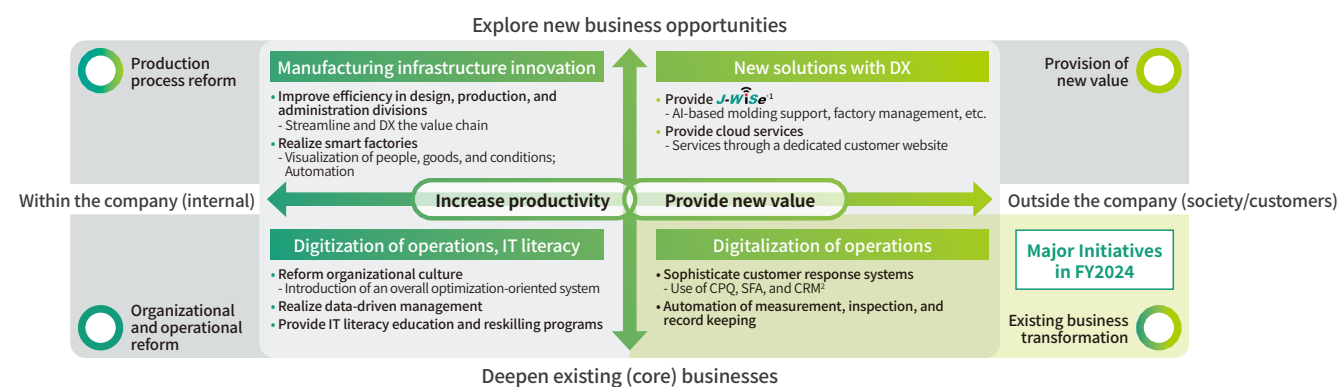
Director & Senior Managing Executive Officer  
CISO  
In charge of Office of Information Technology & Office of Digital Transformation, General Manager, Business Development Office, In charge of Industrial Machinery Products Business Segment

Launched in fiscal 2022, the digitization project D-Pro has steadily unfolded as set out in its roadmap-based action plan, with a focus on rebuilding the core system of head office sales departments and our plants. In fiscal 2024, we built a foundation for reforming our business processes by introducing platforms such as Salesforce for our core sales system and leveling-up our customer-response systems. We are also systematizing everything from test and inspection records to the preparation of results certificates, and sequentially building assurance systems for quality data, starting with those for high-priority products, with the aim of ensuring the reliability of quality data. In addition to steadily advancing reforms to our business processes, we plan to commence full-fledged implementation of initiatives to further enhancement of the functioning of our value creation process by pursuing data-driven management through initiatives such as venturing into digital marketing to accelerate global expansion and promoting the leveraging of data.

## JGP2028 Basic Policy③: Expanding Investment in Intangible Assets, Including Investment in Human Resources (DX Strategy)

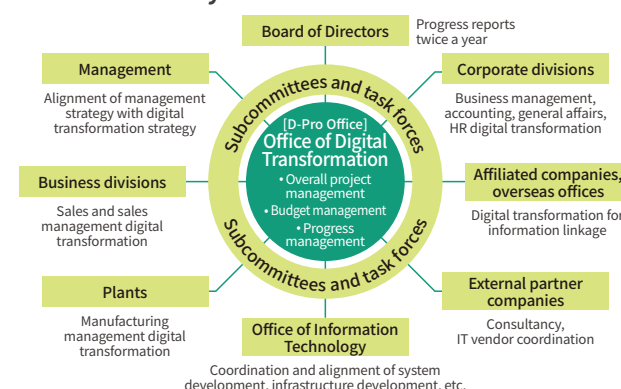
A basic policy closely tied to “improving our management foundation” in the JGP2028 medium-term management plan is “expanding investment in intangible assets, including investment in human resources.” One of the strategies for achieving this is our DX strategy. JGP2028 positions itself as “reforms and challenges for new growth,” and provision of new value and increasing productivity will be indispensable

to achieving this. Thus we classify our DX initiatives into four quadrants along two axes—new and existing businesses, and internal and external—and are implementing DX measures aimed at providing new value, transforming existing businesses, reforming production processes, and reforming organization and operations. In fiscal 2024, we mainly worked on transforming our existing businesses.



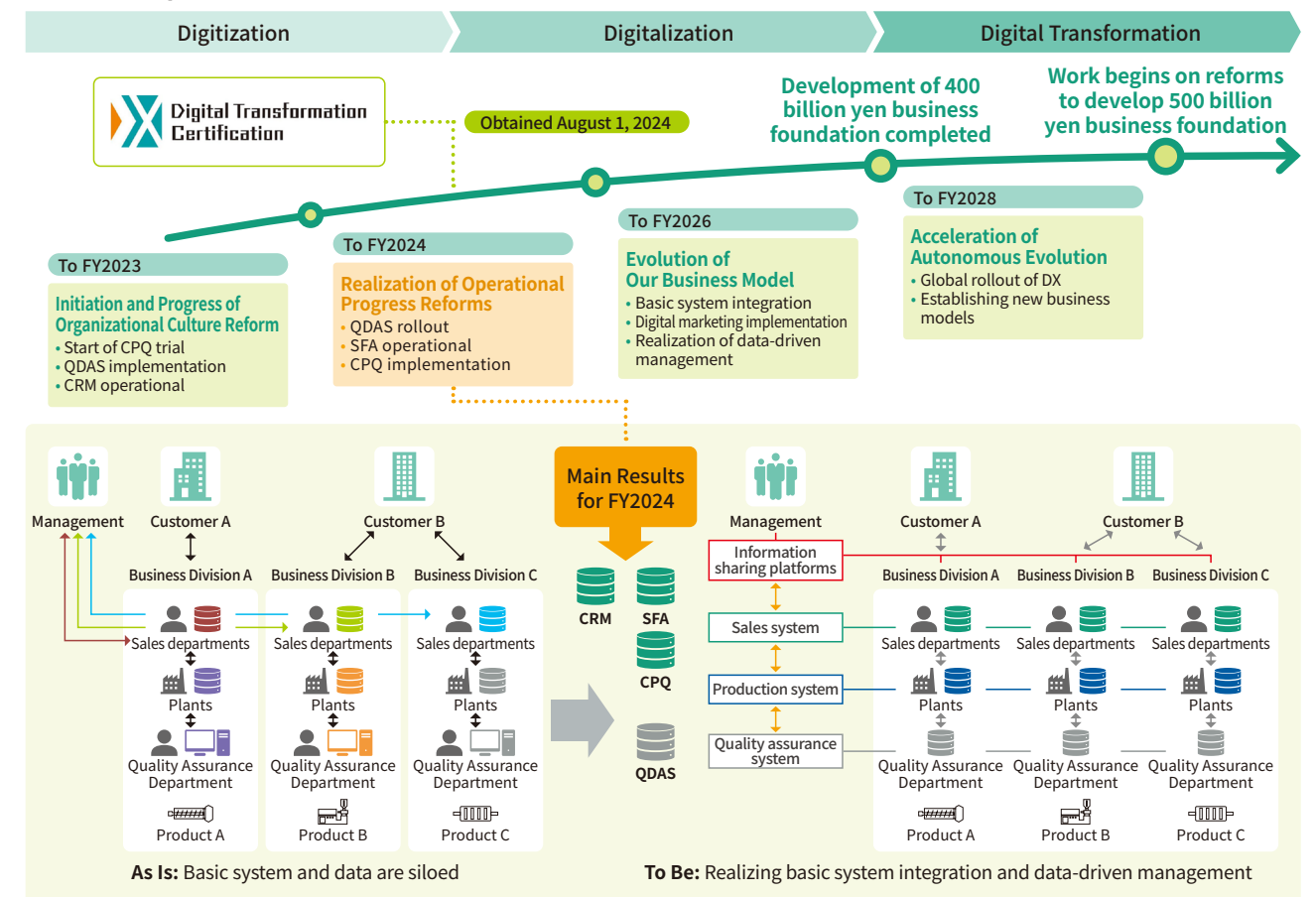
1. J-WiSe is an IoT solution that supports customers in shifting to smart factories. It consists of Production Control, Service/Maintenance, Operation Support, and a Production Automation System.  
2. CPQ: Configure Price Quote SFA: Sales Force Automation CRM: Customer Relationship Management

## DX Promotion System



We established the Office of Digital Transformation in July 2022 as an organization dedicated to promoting D-Pro in coordination with departments across the entire Company (see figure at left). We also began holding D-Pro General Meetings to review and advance the execution of each project in line with the roadmap. In the General Meeting, we have established subcommittees and smaller working groups for each project, and members from the business units that will benefit from the system implementations participate as subcommittee owners and in other roles. This enables an implementation framework that delivers highly effective results.

## DX Roadmap and Main Initiatives for FY2024



## QDAS<sup>3</sup>: Quality Data Assurance System

We centrally manage manufacturing process quality data (primarily test and inspection records) together with its revision history, and automatically generate and issue highly reliable results certificates to ensure transparency in quality management while simultaneously improving operational efficiency.

<sup>3</sup> QDAS: Quality Data Assurance System

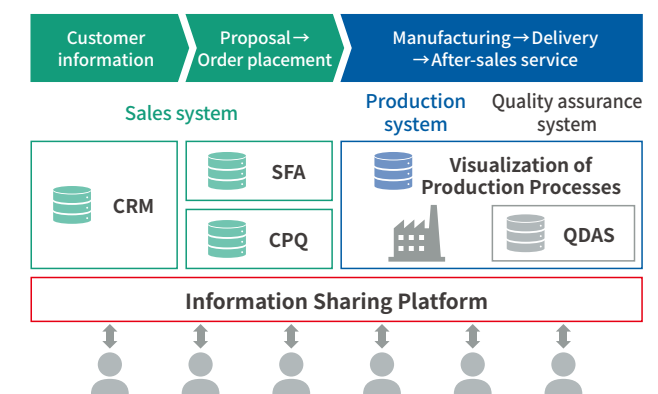
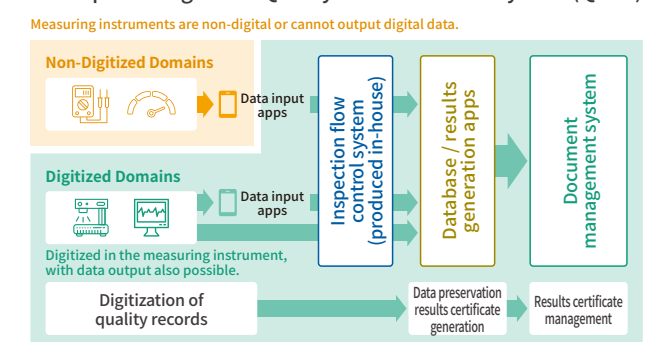
## CPQ: Quote Support System

CPQ (configure, price, and quote) is a system for speeding up selection of product configurations and specifications required by customers and proposing quotation amounts. The system promotes standardization in design and pricing and prevents over-reliance on the abilities and expertise of specific individuals, thereby enabling swift customer response and supporting decision-making.

## Information Sharing Platform

By operating CRM (customer management), CPQ (quotation support), and SFA (sales force automation) on a single platform, we provide services through an integrated framework covering everything from managing customer information to manufacturing and delivering products after receiving orders.

## Conceptual Diagram of Quality Data Assurance System (QDAS)





# Human Capital Strategy

Top Message



Tadashi Chimura

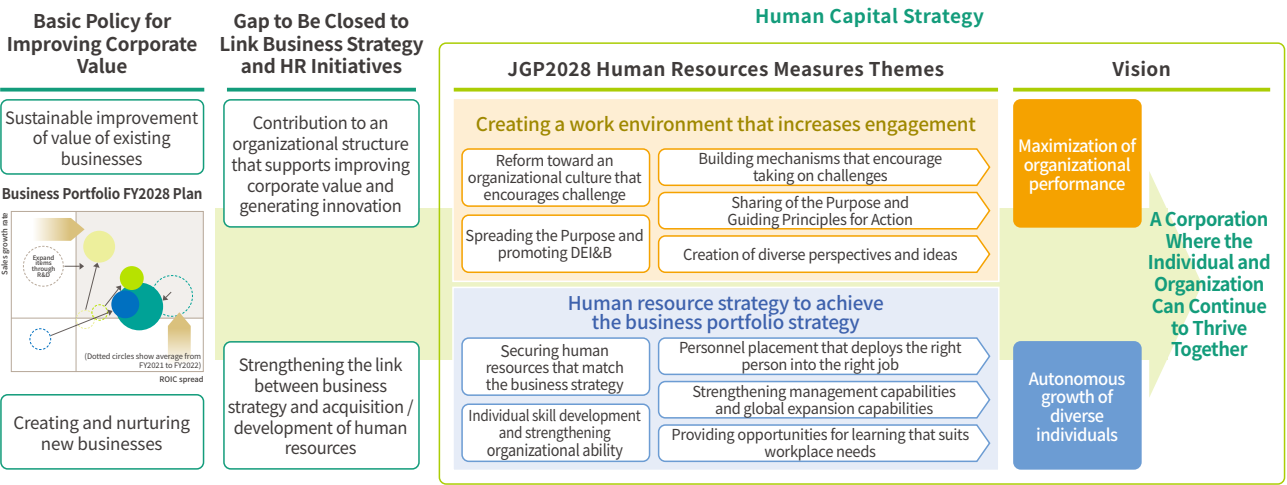
Executive Officer  
In charge of Health & Safety  
Management, in charge of CSR &  
Risk Management; General  
Manager, Personnel Department

Based on the belief that human capital is indispensable for our Group to practice sustainability management in embodying our Purpose and achieving our Vision over the long term, we have identified “human capital improvement and DEI&B” as a material issue. With the recognition that the individual and the organization are equals, we have formulated a human capital strategy to address this material issue. While ensuring and improving diversity is the foundation of this approach, value cannot be created merely by bringing together different individuals. We believe that considerations that enable people with different individual characteristics to achieve results, mutual recognition and respect, and a sense of affinity with the organization that inspires employees to make contributions foster diverse perspectives and ideas, which form the groundwork for innovation. Moreover, given that this approach also helps prevent discrimination based on individual differences, we position it as a foundation for respecting human rights.

In addition, to contribute to the achievement of our objectives under JGP2028, we will link our business strategies with our HR initiatives to achieve both the autonomous growth of diverse individuals and the maximization of organizational performance, thereby achieving sustainable enhancement of corporate value. To achieve this, we will create an environment in which diverse individuals can acquire and fully demonstrate the skills needed to execute our business strategies according to their needs, and we will advance organizational transformation by enhancing engagement and fostering a culture that encourages taking on challenges.

Based on a shared foundation of embodying our Purpose through the practice of the Five Guiding Principles for Action of the Japan Steel Works Group and company commitments that ensure psychological safety, all officers and employees with different personalities will maximize and demonstrate their potential and, by stimulating healthy discussion, will use this as a driving force for improving productivity and breeding innovation.

The corporate image we seek is a company where “individual self-realization” and “sustainable growth of the organization” mutually circulate, and the individual and organization continue to thrive together. We will implement a variety of measures so that our daily efforts help solve social problems, so that we remain a company with value to society, and so that we can feel this for ourselves.



## Human Capital Strategy Indicators and Targets

In order to quantitatively assess progress on “autonomous growth of diverse individuals” and “maximization of organizational performance,” we established the J-IS Index (JSW Ikiiki (“Motivated”) Status Index) using selected indicators from our engagement survey. Taking fiscal 2022, the first year of implementation, as a 100 point baseline, the score for fiscal 2024 rose to 104 points, boosted by improvements in organizational culture.

Autonomous growth of diverse individuals

+

Maximization of organizational performance

=

**J-IS Index**  
JSW Ikiiki (“Motivated”) Status Index

## Our Human Capital Strategy

In formulating our human capital strategy, we identified the gaps that must be addressed to contribute to realizing the basic policies of JGP2028 (“sustainable improvement of value of existing businesses” and “creating and nurturing new businesses”) as “strengthening the link between business strategy and human-resource acquisition and development measures” and “contributing to the development of an organizational culture that supports enhancing corporate value and generating innovation,” and proposed various measures accordingly.

### Creating a Work Environment That Enhances Engagement

#### Reform toward an organizational culture that encourages challenge

In a rapidly changing business environment full of volatility, achieving sustainable growth for the Group requires us to continuously innovate. To that end, we must transform our organizational culture into one where employees feel encouraged to pursue challenges without fear of failure, backed by a high level of psychological safety.

Starting in fiscal 2023, the Organizational Culture Reform Project Team, comprising employees with a passion for driving change, has been working closely with management as the driving force behind cultural reform efforts, promoting these activities through both bottom-up and top-down approaches. In April 2025, we established the Japan Steel Works Group Five Guiding Principles for Action to encourage

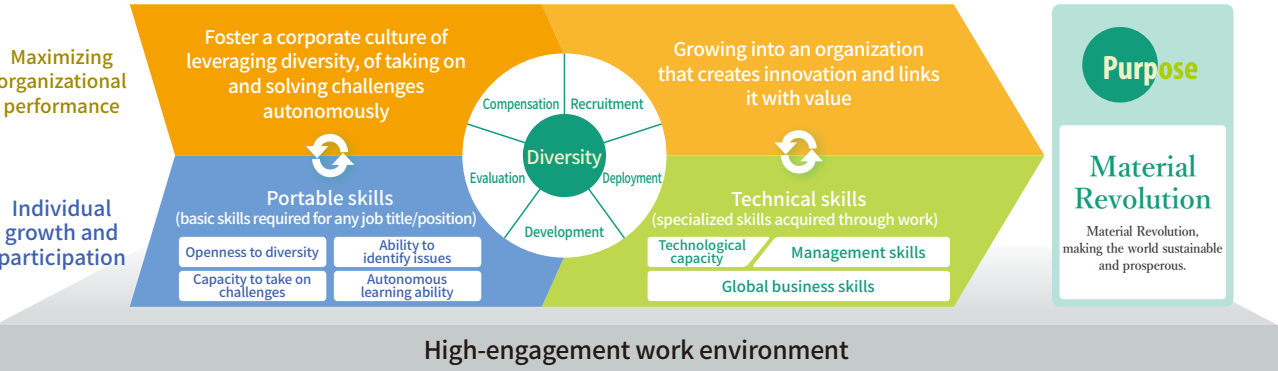
employees to take on challenges.

In our human resources system as well, managers are required to set “challenge goals” within their annual targets to drive changes in mindset and promote action.

### Spreading the Purpose and promoting DEI&B

Efforts are currently underway to help the Purpose resonate with all officers and employees. At workplaces, organizational managers lead workshops to discuss the connection between the Purpose and daily operations to instill this among workers.

The Group also recognizes that leveraging diverse talent to connect different perspectives and ideas to new value is essential in executing its management strategy. Accordingly, we have identified “promotion of DEI&B” as a materiality and are advancing related initiatives.



### Human resource strategy to achieve the business portfolio strategy

#### Acquisition of human resources that match our business strategy

JSW Group’s workforce includes many highly skilled mid-tier personnel in their 30s to 40s who have plenty of experience. In order to execute our business strategy and achieve sustainable growth, we need to maintain and increase the depth of this cohort, and therefore we are working with the business divisions to enhance hiring. In addition, even as we focus on hiring new graduates as young employees who will grow into the middle tier of the future, we actively recruit experienced employees throughout the year.

We are also working to build a system that visualizes the skills our employees possess and are developing an environment enabling personnel placement that deploys the right person into the right job in line with our business strategies.

### Developing individual skills and strengthening organizational (management) capabilities

We believe that leveraging diversity and having workers autonomously take on challenges breeds innovation and maximizes organizational results. In our human capital strategy, which aims to achieve this, we focus first on developing the abilities of the individual (portable skills—foundational skills required regardless of role or position—and technical skills—specialized abilities acquired through work experience) and are working to enhance these skills through various initiatives. In particular, for younger employees, we will implement systematic rotations to encourage growth through diverse work experiences.

To connect increased individual skills to organizational success, increasing management ability in the workplace is vital. Starting in fiscal 2024, we have begun implementing training for organizational managers to drive organizational transformation and promote management skills that encourage workers to take on challenges by ensuring psychological safety.



Materiality Management

To simultaneously achieve the sustainability and financial targets that the JSW Group aims to realize by fiscal 2033, we believe that resolving the six key issues (materiality) identified in November 2022 is essential. To help stakeholders understand how the Group’s products are positioned within the three materialities for “Creating value and solving social issues through JSW Group’s businesses,” how we are contributing to their resolution, and how we plan to further enhance our contributions going forward, we have prepared special feature pages for each (see the linked pages below).

Details on the three materialities related to “Bolstering JSW Group’s management foundation for sustainable growth” are provided on the corresponding linked pages.



**Purpose** **Material Revolution** Material Revolution, making the world sustainable and prosperous.

**Vision for FY2033**

**Sustainability Targets**

Contribute to the realization of a sustainable and prosperous world through the development and implementation of industrial machinery and new materials that solve social issues.

**Financial Targets**

Aim to grow into a corporate group with sales of 500 billion yen

Net Sales	Operating income	ROE
500 billion yen	50 billion yen	11-12%

**Achieve simultaneously**

**Vision** Benefiting all stakeholders by developing and implementing industrial machinery and new materials that solve social issues

Materiality	Reasons why considered to be of high importance	State of major initiatives	Related SDGs
Creating value and solving social issues through JSW Group's businesses			
Realization of a Plastic-Resource-Recycling Society	As a general manufacturer of plastic processing machinery, JSW Group believes it extremely important to supply society with all manner of plastics processing machinery that achieves the 3Rs and is renewable.  Leveraging our core competence to the maximum, we can demonstrate our strengths in the development and creation of plastic processing machinery that meets the demand of society. This is also a high priority business expansion opportunity.	<b>Renewable Reduce</b>  <b>Recycle</b>  – Twin-screw extruders (TEX) for biodegradable plastics – Physical foaming injection molding machines (SOFIT, MuCell) – Plastic injection molding machines for ultra-thin molding – TEX for biocomposites such as wood biomass  – TEX for chemical and mechanical recycling – Injection molding machines, blow molding machines, and film/sheet production equipment compatible with recycled materials – Twin-screw extrusion dechlorination system – Mono-material film manufacturing equipment	9 INDUSTRIAL INNOVATION AND INFRASTRUCTURE 12 RESPONSIBLE CONSUMPTION AND PRODUCTION 14 LIFE BELOW WATER
➔ p.30 Special Feature: Realization of a Plastic-Resource-Recycling Society			
Contribution to a Low-Carbon Society	The realization of a low-carbon society is one of the most important challenges worldwide. Products created by JSW Group's industrial machinery and products featuring its new materials have contributed to the reduction of CO <sub>2</sub> emissions. Demand for such products is expected to increase in the future, which makes it a matter of high importance for the Group.  In addition, our responsibilities include the reduction of energy consumption of our industrial machinery products and the curbing of CO <sub>2</sub> emissions from the operations of our manufacturing sites.	<b>Zero CO<sub>2</sub> emissions</b>  <b>Reduce CO<sub>2</sub> emissions</b>  – Materials for major nuclear power generation components – Separator film manufacturing equipment for LiB in electric vehicles – Pelletizers for solar panel protection sheet materials – Materials for offshore wind turbine construction  – All-electric plastic injection molding machines (reduced power consumption) – All-electric rubber injection molding machines (reduced power consumption) – Materials for high-efficiency GTCC power generation key components (GTCC: Gas Turbine Combined Cycle) – Large injection molding machines for large automotive parts (plastic/Mg) – Reduce CO <sub>2</sub> emissions from business activities (Scope 1, 2)	7 AFFORDABLE AND CLEAN ENERGY 13 CLIMATE ACTION
➔ p.32 Special Feature: Contribution to a Low-Carbon Society			
Contribution to a Super-Smart Society	In a super-smart society, such social issues as environmental problems and declining birthrates are expected to be resolved. JSW Group's industrial machinery and new materials are involved in the manufacturing of electronic devices that make up digital infrastructure. Robotics with AI and intelligent industrial machinery will also play a central role in a super-smart society. That is why the Group's product lines could serve as an essential part of a super-smart society. This is also considered to be a highly important business expansion opportunity for the Group.	<b>Electronic Devices</b>  <b>Industrial Machinery</b>  – Excimer laser annealing (ELA) systems for displays – Vacuum laminators and vacuum press for electronic circuit boards – 3-stage vacuum laminators for semiconductor package substrates – Laser heat treatment equipment for power semiconductors – Micro LA systems for sensors – Deposition systems for 5G-compatible LCP flexible substrates – Lithium niobate (LN), synthetic quartz materials – Gallium nitride (GaN) crystal materials  – <i>J-Wise</i> * equipped injection molding machines, film and sheet manufacturing equipment – AI robotics and industrial machinery (under development)	11 SUSTAINABLE CITIES AND COMMUNITIES
➔ p.34 Special Feature: Contribution to a Super-Smart Society			

\* JSW Worldwide IoT Solutions of Enhancement: IoT solutions that support customers in achieving smart factory operations

Materiality	Reasons why considered to be of high importance	State of major initiatives	Related SDGs
Bolstering JSW Group's management foundation for sustainable growth			
Human Capital Improvement and DEI&B	The diversification and expansion of our human capital, including the human resources capable of driving the Group's growth, generating innovation, and creating value, is a matter of the highest priority and importance for strengthening JSW Group's management foundation. It is also important to create a work environment that enhances engagement.	<b>Human resource strategy to achieve the business portfolio strategy</b> Securing human resources that match the business strategy – Year-round hiring of young employees and experienced workers with different backgrounds and attributes <b>Developing individual skills and strengthening organizational (management) capabilities</b> – Management training focused on strengthening organizational ability to promote “taking on challenges” <b>Creating a work environment that increases engagement</b> <b>Reform towards an organizational culture that encourages challenge</b> – Include challenge targets in managers' annual goals (revision of evaluation system) <b>Spreading the Purpose and promoting DEI&amp;B</b> – Strengthen DEI&B initiatives such as creating work environments where workers can demonstrate individuality in work and development measures to accommodate individuality	5 GENDER EQUALITY 8 DECENT WORK AND ECONOMIC GROWTH
➔ p.26 Human Capital Strategy, p.54 Human Capital Management			
Investment in the Future with Innovation Management	In order for JSW Group to continue contributing to society, it is essential to maintain and strengthen its technological superiority by refining its core competence and expanding its business.  Innovation is an essential factor for sustainable growth. It is important to promote digital transformation which supports data-based, rapid decision-making, business model innovation, and the creation of new value.	<b>Innovation management</b> <b>Established Innovation Management Headquarters (April 2023)</b> <b>Strengthen existing businesses through elemental technology development</b> – Build companywide system for formulating business-specific IP strategies – Partner with domestic and international universities and research institutes, obtain doctoral degrees (develop human resources, strengthen technological ability) <b>Create innovative technologies through basic technology research</b> – Formulate plans to establish a new R&D center for developing innovative technologies – Strengthen IP landscape system for efficient new product and market development  <b>Promote DX</b> – Continue promoting DX strategy following DX certification acquisition in August 2024	12 RESPONSIBLE CONSUMPTION AND PRODUCTION 17 PARTNERSHIPS FOR THE GOALS
➔ p.22 Innovation Management Strategy, p.24 DX Strategy			
Governance Reinforcement of JSW Group	For the sustained growth of JSW Group, it is important not only to further strengthen compliance and governance, but also to engage in dialogue with stakeholders.  And supplying society with industrial machinery and new materials of high quality and superior reliability is the very foundation of JSW Group's business and important to the further strengthening of its quality assurance structure and system.	<b>Corporate governance</b> – Review officers' remuneration system – Increase diversity of Board of Directors and Audit & Supervisory Board (outside officers and female officers) – Establish Risk Management Group in Corporate Planning Office – Reduce cross-shareholdings  <b>Strengthen quality assurance system</b> – Continue implementing measures for quality assurance system reform, organizational culture reform, process reform, and governance reform	10 REDUCED INEQUALITIES 16 PEACE, JUSTICE AND STRONG INSTITUTIONS
➔ p.60 Corporate Governance, p.52 Quality Management			



# Special Feature: Realization of a Plastic-Resource-Recycling Society

Plastics come in a wide variety of raw materials and grades to accommodate the diverse characteristics required for different products. This feature introduces a typical lifecycle of plastics, trends in plastic waste volume, and the technologies held by JSW Group.

Please refer first to the figure on the right, “Flow of Plastic Resource Recycling.” In the molding process for components, materials generated during secondary processing, such as scrap and defective parts, are crushed and returned to raw material form. Many of these materials are mechanically (materially) recycled and then remolded into products (① in the figure). For products that cannot undergo mechanical recycling due to the presence of coloring agents, surface treatments, or printed coatings, chemical recycling is an effective alternative. This process thermally decomposes plastics into their chemical components for reuse in the production of new plastic raw materials (②).

After disposal, some items, such as PET bottles for which collection and logistics systems are already established, are mechanically recycled (③). However, the majority are discarded as mixtures of various raw materials, known as mixed waste plastics, which are difficult to recycle because they are not made from a single raw material.

A portion of these mixed waste plastics is effectively utilized as reducing agents in blast furnaces to save energy and reduce CO<sub>2</sub> emissions in steelmaking processes, or as solid fuel in power plants. JSW Group’s extrusion technologies play an active role in these processes as well (④).

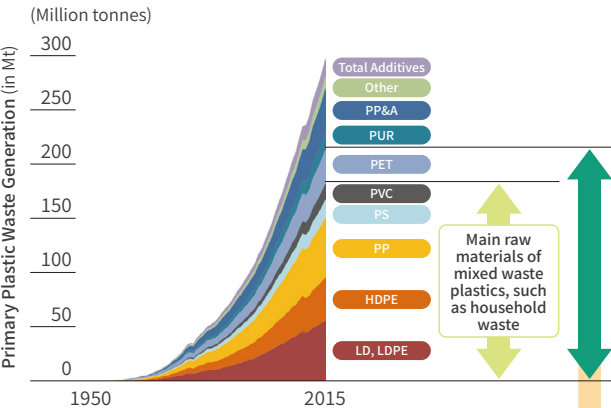
The table below summarizes JSW Group’s track record for representative resins. Beyond these examples, our

technologies also contribute to recycling crosslinked rubber and utilizing ASR (automobile shredder residue), among many other initiatives toward bringing about a society that recycles resources of a variety of materials.

In addition to recycling, JSW Group’s technologies contribute to “Reduce” efforts—such as lightweighting and volume reduction through thin-film and foam technologies, and waste reduction through automation and predictive control of equipment—as well as to “Renewable” initiatives, including the development and application of biodegradable and biomass plastics.

Going forward, we will continue to pursue technological development and research with unwavering commitment to achieving a stable and sustainable resource-recycling society.

Trends in Global Plastic Waste Volume by Raw Material



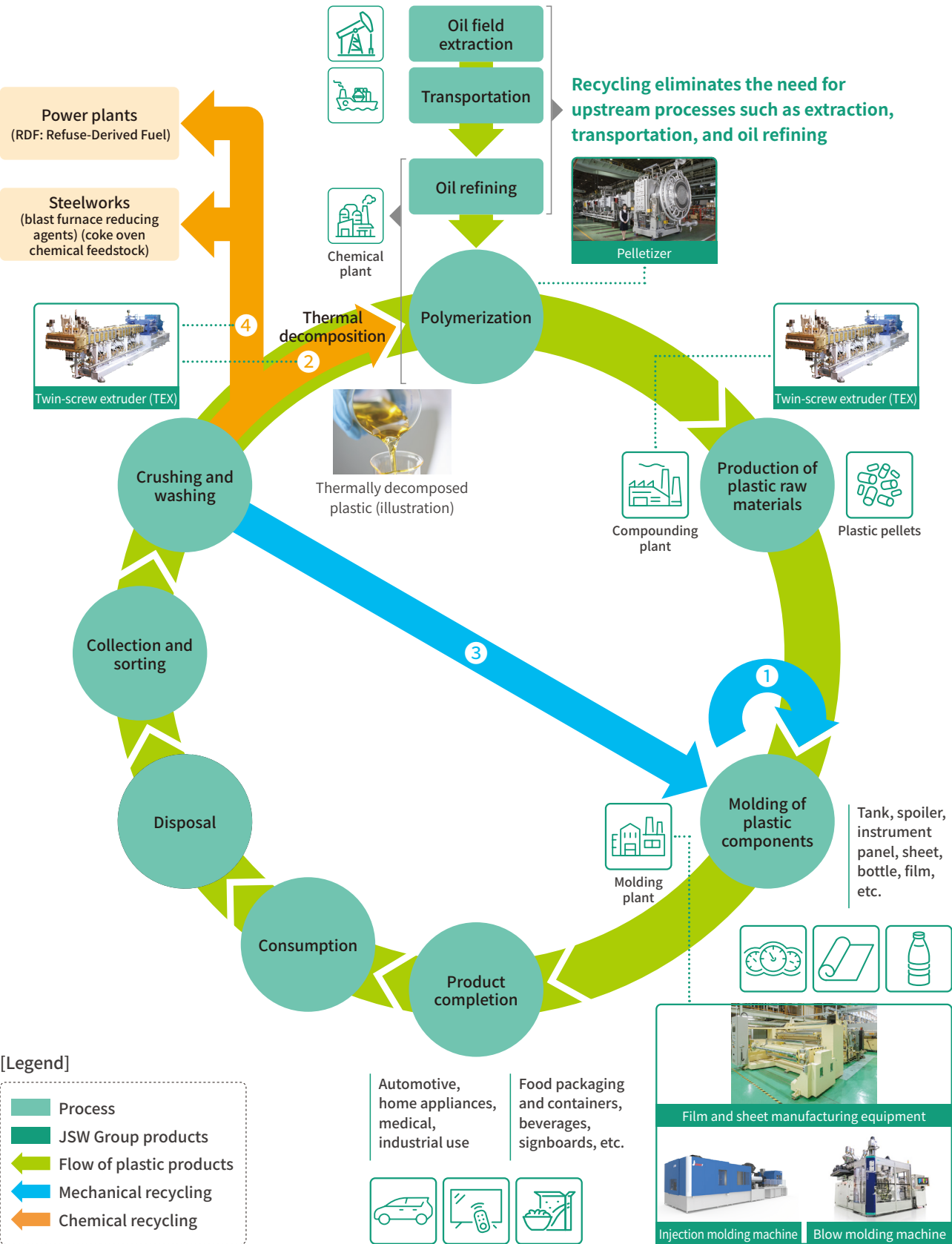
## Contributing to most recycling technologies for waste plastics

Overview of JSW Group’s contributions to a plastic-resource-recycling society (a summary of representative recycling technologies utilizing extruders)

Resin type	Main applications	Realization of recycling				Realization of reduction	
		Chemical recycling		Mechanical (material) recycling		Reduction in plastic usage	Defect reduction
		②	④	①	③	Thinner films/foam, etc.	Automation, efficiency improvement
PMMA (Polymethyl methacrylate)	Signboards, lighting covers, water tanks						
PET (Polyethylene terephthalate)	Beverage bottles, food containers	○	—	○		Optimization of equipment such as screw design;	J-WiSe
PS (Polystyrene)	Trays, expanded polystyrene					new physical foaming technology SOFIT;	M-Navi.
PVC (Polyvinyl chloride)	Agricultural films, pipes, hoses	Although these general-purpose resins are used in large volumes, their applications are wide-ranging, and they are discarded in mixed form, so they are not separated				high-load, high-speed injection specification EHD	Tela-TEX
PP (Polypropylene)	Food containers, electrical appliance components						Repex
PE (Polyethylene)	Plastic bags, containers, pipes						ezDRIVER
Mixed waste plastics (various resins mixed)	Mainly PP, PE, and PVC	○	○				

\* SOFIT, J-WiSe, M-Navi., Tela-TEX, Repex, and ezDRIVER are Japanese registered trademarks of The Japan Steel Works, Ltd. Each is an example of an IoT solution for automation and efficiency improvement, or an equipment specification tailored to operating conditions. For details, please refer to our website or contact us.

## Flow of Plastic Resource Recycling






# Special Feature: Contribution to a Low-Carbon Society

JSW Group has established CO<sub>2</sub> reduction targets for its own emissions from manufacturing activities for FY2025 and FY2030 and is advancing initiatives in line with these goals, while supporting and disclosing information in accordance with the TCFD.

Many of our industrial machinery and material products operate in the upstream of the supply chain. To accurately understand the value our products deliver to society, we

 **Website** <https://www.jsw.co.jp/ja/sustainability/environment/socialimpact.html>

determined that it is necessary to assess not only upstream but also downstream impacts. To ensure fairness and objectivity, we collaborated with The Japan Research Institute, Limited to assess the impact of our products on society and the environment across the entire supply chain, including downstream processes, and organized these findings into a social impact report.

Reduction of in-house emissions	<ul style="list-style-type: none"><li>• CO<sub>2</sub> emission reduction targets (Scope 1, 2) 45% reduction by FY2025, 60% reduction by FY2030 * Compared with FY2013</li><li>• Renewable energy introduction targets 25% or higher by FY2025, 40% or higher by FY2030</li></ul>						
Reduction of emissions during customer use	<ul style="list-style-type: none"><li>• Reduced power consumption through all-electric injection molding machines</li><li>• Hydrogen accumulators and hydrogen storage alloy tanks</li></ul>						
Reduction of emissions through customer products	<table border="0"><tr><td><b>Examples of customer products that achieve emission reductions</b></td><td><b>JSW products supplied</b></td></tr><tr><td>• Solar power generation</td><td>← Pelletizers for solar panel protection sheet materials</td></tr><tr><td>• Nuclear power plants</td><td>← Materials for critical components</td></tr></table>	<b>Examples of customer products that achieve emission reductions</b>	<b>JSW products supplied</b>	• Solar power generation	← Pelletizers for solar panel protection sheet materials	• Nuclear power plants	← Materials for critical components
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• Nuclear power plants	← Materials for critical components						

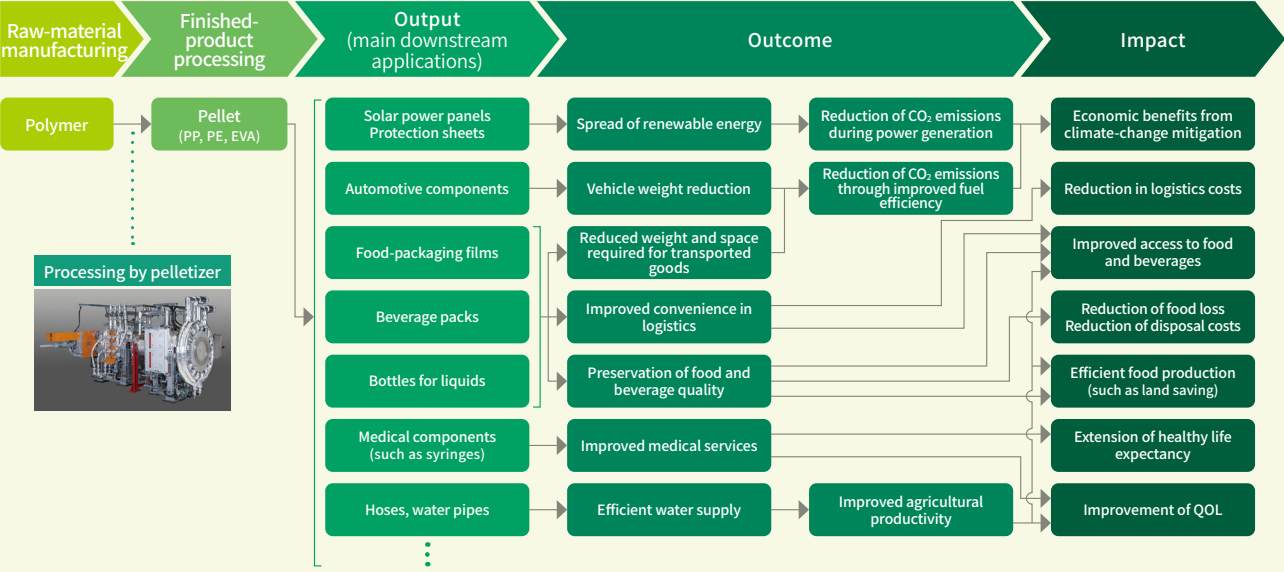
Contribution to a low-carbon society

## Estimating CO<sub>2</sub> Reduction Effects Through Pelletizers Used for Solar Panel Protection Sheet Materials

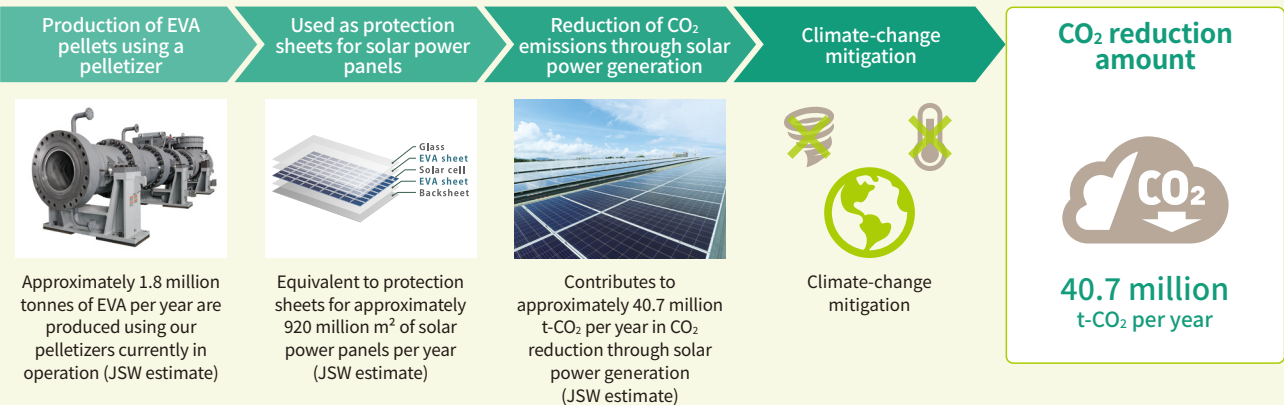
Pelletizers are machines used to produce plastic pellets—the raw material for molding plastic products. They are used in the production of polypropylene (PP), polyethylene (PE), ethylene-vinyl acetate (EVA), and other resins.

Plastic pellets produced by pelletizers have a wide range of

downstream applications. Key applications that generate social impact include automotive components and food-packaging films. In recent years, demand has been growing for their use in protection sheets for solar power generation panels.



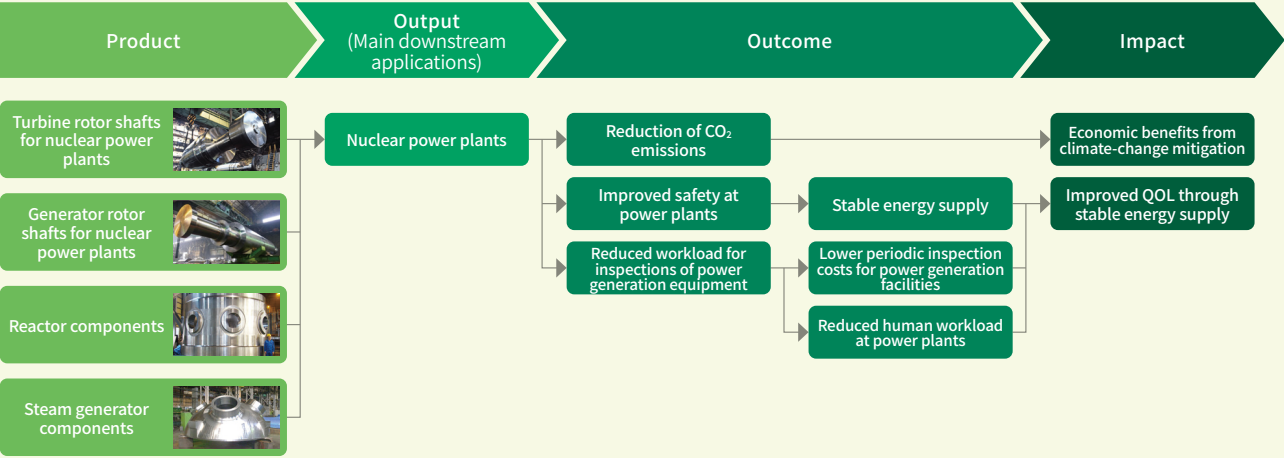
Visualization example  
EVA resin material for solar power panels



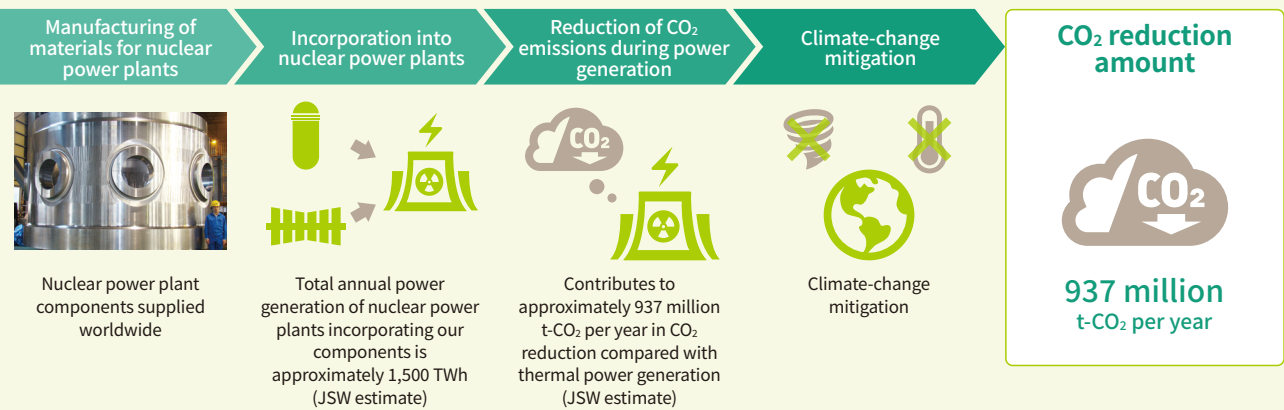
## Estimating CO<sub>2</sub> Reduction Effects Through Materials for Nuclear Power Plants

JSW Group supplies materials for major components used in nuclear power plants. Nuclear power generation significantly reduces CO<sub>2</sub> emissions compared with thermal power generation and offers stable energy supply compared with renewable energy sources, which are easily affected by weather and natural conditions.

One of the characteristics of JSW Group's materials for nuclear power plants is the ability to manufacture large, integrated shapes that help reduce the number of welds. Reducing weld points contributes to outcomes such as lower periodic inspection costs and reduced burden on inspectors.



Visualization example  
Materials for nuclear power plants



The total annual power generation of nuclear power plants incorporating JSW's materials is approximately 1,500 TWh. When compared with the CO<sub>2</sub> emissions that would be generated by producing the same amount of electricity through thermal power generation, this represents an estimated annual reduction of approximately 937 million t-CO<sub>2</sub>.



# Special Feature: Contribution to a Super-Smart Society

A super-smart society is built on multiple digital industries. Electronic devices that support each digital industry include user-interface devices such as smartphones, tablets, and wearable devices, as well as mobility applications, industrial machinery, and robots. In addition, digital infrastructure—

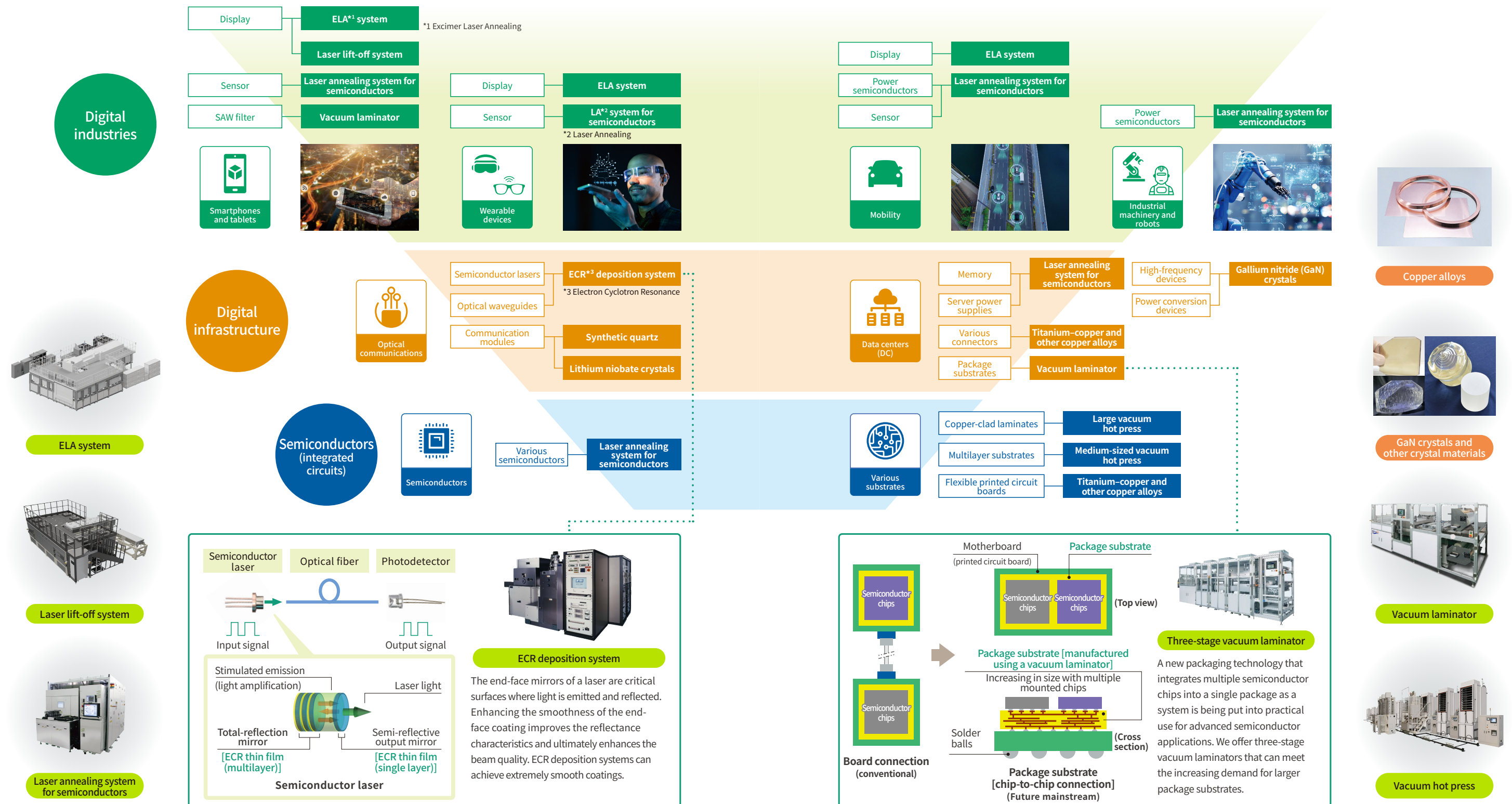
technologies, equipment, and networks that form the foundation of digital industries—such as data centers and optical communications, incorporates a wide range of electronic devices.

Our Group's industrial machinery and crystal materials

contribute to the manufacturing of many of these electronic devices, as well as semiconductors and various substrates that are indispensable for the functioning of digital infrastructure.

By contributing to the realization of a super-smart society, we help address social issues such as environmental challenges

and the declining birthrate and aging population, while also supporting improvements in quality of life (QOL) and advances in disaster response, thereby contributing to a safe and secure society and the sustainable enhancement of our Group's corporate value.



→ p.40 Strategy by Business – Industrial Machinery Business

→ p.40 Strategy by Business – Industrial Machinery Business



# Plastics Machinery Business

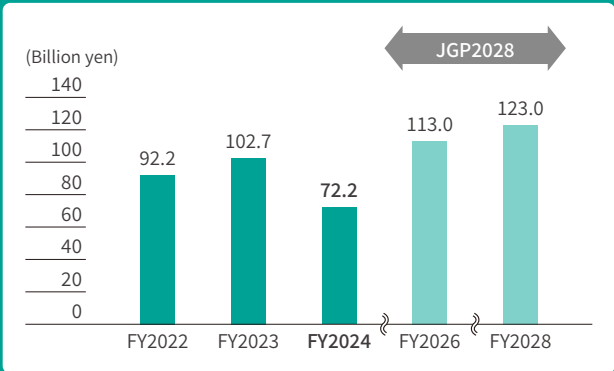
## Business Overview

The Plastics Machinery Business Division manufactures, sells, and provides maintenance services for plastic production machinery and plastic process machinery. The former includes pelletizers and twin-screw extruders (TEX) that produce plastic pellets used in the primary processing of plastic, as is the latter, which includes film and sheet manufacturing equipment used to heat plastic and turn the malleable material into films. We take pride in our high global market share for pelletizers and other equipment.

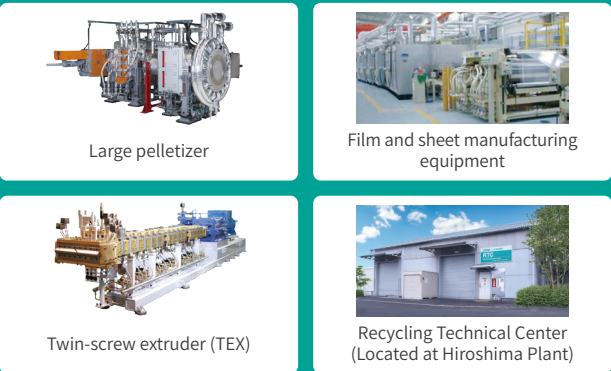
Plastics are used in a wide array of products, from IT products like smartphones to electronic devices such as

semiconductors, automotive parts, food packaging, medical equipment, and solar cells. Recently, we have expanded our focus to machinery that can recycle used plastics and produce films that can be easily recycled. Through those business activities, we will achieve the realization of a plastic-resources-recycling society and contribute to a low-carbon society (e.g., boosting fuel efficiency through mobility weight reduction and promoting the social implementation of renewable energy power generation), while enhancing social value and increasing corporate value.

## Trends in Net Sales



## Representative Products and Equipment



## Analysis of Current State

**S Strengths**

- Ability to respond to customer needs through proprietary technologies accumulated over many years
- Broad product lineup compatible with a wide range of resins
- High capacity for producing high-quality, low-cost products backed by an exceptionally high in-house production rate
- Availability of skilled service technicians with a wealth of experience

**W Weaknesses**

- Longer delivery times resulting from customization
- Global Standard machines were introduced later than at other companies
- The in-house production rate for film manufacturing equipment is low
- Service system in Europe and the United States has room for improvement (film)

**O Opportunities**

- Growth in plastics demand, driven by population growth
- Expansion and revitalization of markets in India and the Middle East
- Growing demand for recycling
- Demand for mono-materialization of packaging films
- Expansion of after-sales service demand

**T Threats**

- The possibility of tighter global restrictions on plastics use
- Slowing Chinese market and promotion of Chinese domestic production
- Growing presence of low-priced machines from China and other countries
- Foreign exchange risks caused by rapid yen appreciation
- Growing geopolitical risks

## Sources of Strengths and Challenges

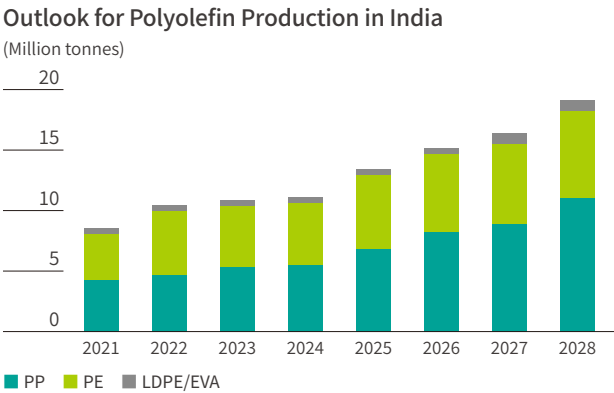
We are proud to possess the world’s most advanced melting, mixing, and solidifying technologies for plastics. Our pelletizers handle polypropylene (PP) and polyethylene (PE), while our twin-screw extruders cover a wide range, from general-purpose to high-performance plastics, and various recycling applications. The proprietary technologies for melting, mixing, and molding control that we have developed and accumulated at our technical centers in Japan and overseas enable us to respond flexibly to customer needs.

Another strength lies in our ability to design, manufacture, and process all key components of our equipment in-house. By integrating independently developed wear- and corrosion-resistant materials, flow analysis, and AI/IoT technologies into our equipment and processes, we provide highly original products and services tailored to customer requirements.

We are also addressing our weaknesses (W). For our later entry into the Global Standard machine market, we are expanding into new markets by utilizing our company-wide overseas network to deliver rapid sales and service, while strengthening technical development and support in collaboration with other Group companies.

## Operating Environment

It is estimated that global plastic consumption will rise from approximately 460 million tonnes in 2019 to around 1.2 billion tonnes by 2060. The regions expected to see the highest growth rates are India and the Middle East. Although China’s growth rate is expected to slow somewhat, it is projected to remain the world’s largest market. Focusing on these key regions, we will strengthen our sales and service networks to capture customer needs with greater precision.



## Growth Strategies and Initiatives

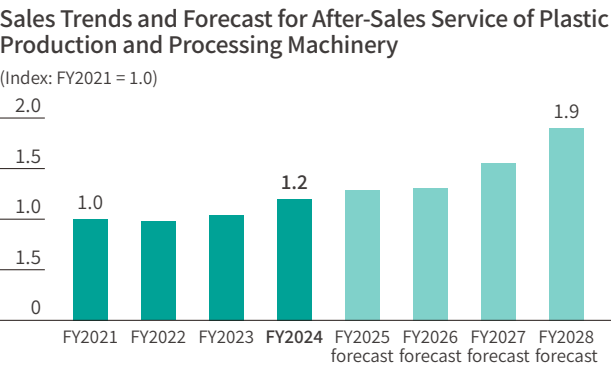
**1. Promoting Globalization**  
By leveraging our global network of overseas bases and introducing Global Standard models of TEX and sheet manufacturing equipment, we are expanding sales in new global growth markets, including India and the Middle East, in addition to China. To enhance the presence of our Group’s products in India, we have established the Experience Centre.

We are also expanding the technologies accumulated at our technical centers to capture the growing demand for plastic recycling.

**2. Strengthening After-Sales Service**  
Leveraging our ability to meet a broad range of customer needs, we aim to expand sales in the increasingly active markets of India and the Middle East.

In addition, we are strengthening our global service

network by increasing the number of personnel, including engineers, at our local subsidiary in India, one of our key focus regions, to enhance responsiveness and improve customer satisfaction.



### Message from the Head of the Division

Plastic plays an essential role in our lives due to its ease of processing and versatile properties. In our Plastics Machinery Business, we leverage our world-leading technical center to develop technologies for recycling, energy conservation, and weight reduction, helping with the realization of a plastic-resource-recycling society and contribution to a low-carbon society.

In fiscal 2024, business conditions for separator film manufacturing equipment, one of our main product lines, slowed due to rapid changes in market conditions. However, our service business remained steady not only in China but also in growth markets such as India and the Middle East, allowing us to secure both sales and profits.

In the current fiscal year, we will formulate and swiftly implement new growth strategies in response to changing market conditions to achieve renewed growth. In particular, we will expand our overseas sales and service bases to strengthen our presence in global growth markets. We will also continue proactive capital investment, including the establishment of a new machinery plant at the Hiroshima Plant to handle large and service parts, thereby enhancing the production capacity and in-house production rate of our medium-sized and large extruders—our core strength—while improving profitability and expanding our service business. Furthermore, by strengthening collaboration with affiliated companies, we aim to expand the market share of our existing product lineup and further grow JSW Group’s Plastics Machinery Business.



**Kengo Takeya**  
Executive Officer  
Director of Plastics  
Machinery Business Division

# Injection Molding Machinery Business

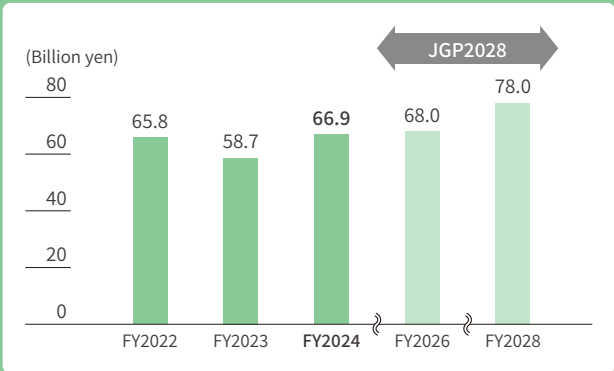
## Business Overview

The Injection Molding Machinery Business Division manufactures, sells, and provides maintenance services for plastic injection molding machines and blow molding machines used for the primary processing of plastic raw materials, as well as magnesium (Mg) injection molding machines used for the primary processing of magnesium alloys, known for being the lightest practical metals with the highest specific strength.

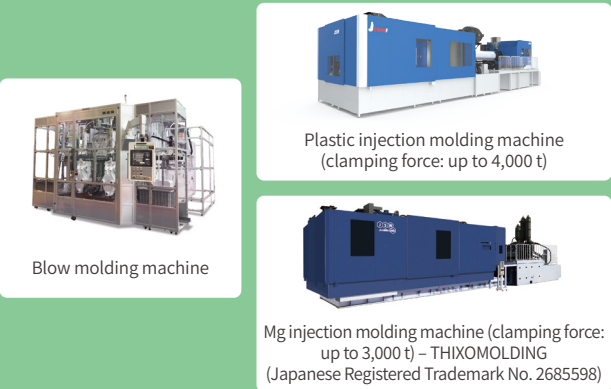
Our plastic injection molding machines feature: (1) electrically powered machines with excellent environmental performance; (2) a range of sizes, from compact models with a mold clamping force of 30 tonnes to extra-large models

with a mold clamping force of 4,000 tonnes; and (3) the industry’s top lineup, including vertical injection molding machines and special-purpose machines to meet the diverse needs of our customers. Mg injection molding machines utilize the thixomolding method, allowing the molding of high-precision, high-density parts. Both plastics and Mg contribute to the weight reduction of automobiles as in-vehicle parts. We are proud to have the highest shipment value of plastic injection molding machines in Japan. We are the top manufacturer of one-of-a-kind Mg injection molding machines, and blow molding machines with over 80% share of the direct blow molding machine market in Japan.

## Trends in Net Sales



## Representative Product Lineup



## Analysis of Current State

### S Strengths

- In-house development of key components and high in-house production rate
- Mass customization production (technical capabilities to meet customer needs based on extensive experience and proven performance)
- Well-developed domestic and international sales and service network
- Extensive experience and proven track record in magnesium injection molding machines

### W Weaknesses

- Low brand recognition in overseas markets
- Later entry into the market for extra-large machines
- Ability to handle large orders
- Lack of experience in supporting overseas standards for some models

### O Opportunities

- Expanding demand for magnesium
- Growing market in India
- Increasing demand for larger components in the automotive field
- Rising need for electrification in Europe

### T Threats

- Potential tightening of global plastic regulations
- Slowing Chinese market and the promotion of domestic production in China
- Increasing geopolitical risks

## Sources of Strengths and Challenges

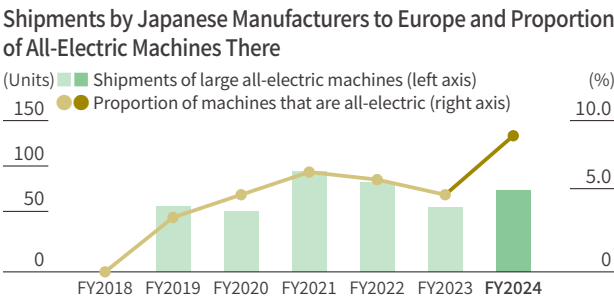
Building on the material design technology cultivated through our founding Materials Business, we develop and manufacture wear- and corrosion-resistant screws and cylinders, as well as control boards for controllers. We also perform in-house processing and assembly of components. In recent years, the automotive sector has seen further advancements in integrated molding and larger components, aiming to improve productivity. We regard this trend as an opportunity for business expansion, as we excel in large all-electric machines, and we are working to expand our lineup of extra-large models.

Our plastic and magnesium (Mg) injection molding machines are delivered through a global network consisting of 22 locations—10 in Japan and 12 overseas—supported by sales companies and distributors that provide both products and after-sales service. In Europe, which we position as a growth region, we are strengthening information dissemination for large all-electric machines capable of integrated molding and producing large components, and that also offer superior energy efficiency. As a result, the electrification rate improved in FY2024 (see the figure on the right). In another key growth region, India, we are enhancing our visibility through proactive information outreach, including the establishment of the Experience Centre.

## Operating Environment

All plastic injection molding machines in our Group have been converted to fully electric models. Still, in Europe, hydraulic machines remain prevalent, with the electrification rate for large machines being only a few percent. However, the recent increase in electricity prices and the growing imperative to reduce CO<sub>2</sub> emissions are expected to drive demand for updating and replacing hydraulic machines with more energy-efficient electric injection molding machines.

In addition, as the need to reduce vehicle weight—including for battery electric vehicles (BEVs)—continues to grow, the number of plastic and magnesium (Mg) components is increasing. At the same time, further weight reduction is promoting the use of larger components.



## Growth Strategies and Initiatives

In addition to our Group’s strength in mass customization, we are leveraging our world unified service system supported by IoT solution *J-WiSe* to enhance our presence in the Indian market, where medium-to-long-term growth in demand is expected. To this end, we have expanded our service network and opened the Experience Centre. The center regularly hosts seminars to attract new customers, strengthen our brand image, and drive sales growth.

In the automotive sector, demand for integrated and larger components is expected to increase for both plastic and magnesium (Mg) molded parts. In June 2025, we launched the industry’s first 4,000-tonne clamping force all-electric plastic injection molding machine. For Mg injection molding

machines as well, we have expanded our lineup to include models equipped with electric clamping units that deliver an industry-leading clamping force of 3,000 tonnes, further strengthening our presence in the large-machine segment.

On the production side, our ability to develop and manufacture key components in-house enables us to respond flexibly even amid global supply-chain disruptions and to address customer customization requests promptly, thereby improving customer satisfaction. This flexibility is made possible by our high rate of in-house production, which is a crucial factor in our business operations. We will continue to further strengthen this capability.

\* J-WiSe is a Japanese registered trademark of The Japan Steel Works, Ltd.

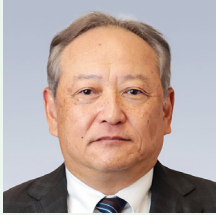
### Message from the Head of the Division

In FY2024, as supply shortages of components were resolved, automobile production recovered, and the year began with a gradual rebound led by the domestic market. However, production cuts due to automobile certification inspection irregularities caused capital investment to stagnate once again. In FY2025, the pace of investment recovery is expected to remain slow due to the deceleration of electric vehicle (EV) adoption and the impact of tariff policies in the United States.

Amid such conditions, in FY2024, we worked to secure sales while improving profitability, achieving certain progress such as an improved profit margin. We will continue pursuing further improvement in FY2025.

Our division’s products contribute to the realization of a low-carbon society by enabling both lighter components and enhanced energy efficiency and productivity of manufacturing equipment. As demand for integrated molding of larger components increases, we are advancing the development of even larger machines to complement our existing, which spans from small to large models. In FY2024, we added an ultra-large Mg injection molding machine, followed by an ultra-large plastic injection molding machine in FY2025.

We are also accelerating the global rollout of our products by advancing remote maintenance using IoT and launching products that comply with international standards. Building on our proven track record as Japan’s No. 1 manufacturer, we will further expand our global business operations and continue to contribute to the realization of a low-carbon society.



**Shoji Nunoshita**

Managing Executive Officer  
In charge of Meiki Plant,  
Director of Injection  
Molding Machinery  
Business Division



# Industrial Machinery Business

## Business Overview

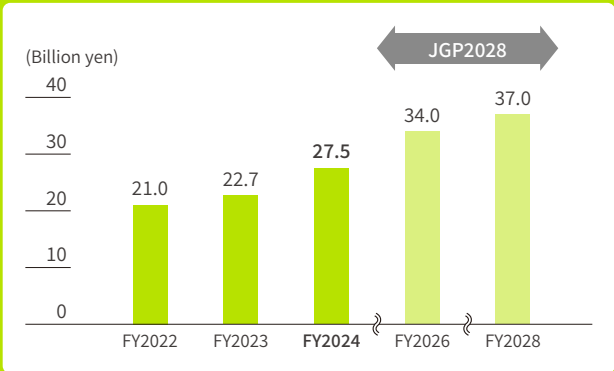
The Industrial Machinery Business Division contributes to the realization of a sustainable and prosperous smart society through the manufacture, sales, and after-sales service of electronic-device-related equipment, including laser deposition systems, ECR (Electron Cyclotron Resonance) deposition systems, vacuum presses, and vacuum laminators, and infrastructure-related equipment such as couplers, draft gears, and starting gates.

In particular, our electronic-device-related equipment is used in the production of high-definition flat panel displays (FPDs), power semiconductors, semiconductor lasers, SAW

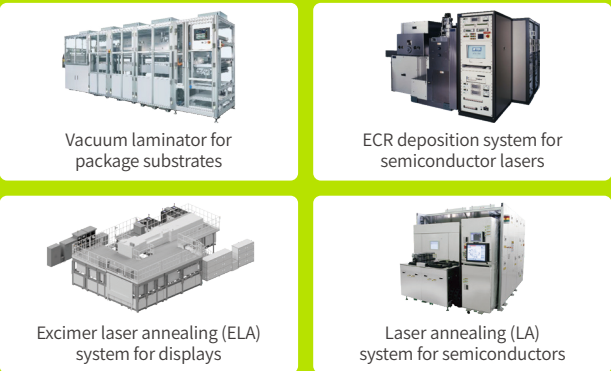
filters, electronic circuit boards, and package substrates, thereby contributing to the creation of digital social infrastructure and improved energy efficiency in a super-smart society.

Each of our electronic-device-related equipment lines possesses unique strengths. In this report, we focus on analyzing two businesses with increasingly active market environments—ECR deposition systems and vacuum laminators—as examples of how we are contributing to a super-smart society.

## Trends in Net Sales



## Representative Product Lineup



## Analysis of Current State (ECR Deposition System Business for Semiconductor Lasers)



→ p.34 Special Feature  
—Contribution to a Super-Smart Society

Strengths	Weaknesses
<ul style="list-style-type: none"><li>Product performance that enables low-damage, dense, and flat film deposition</li><li>Extensive knowledge and proven track record in process development</li><li>Possession of a demonstration unit for ECR systems for optical waveguides</li><li>Abundant personnel well-versed in cleanroom operations and clean assembly</li></ul>	<ul style="list-style-type: none"><li>Low productivity due to slow deposition rate</li><li>Limited recognition of ECR deposition technology in Europe</li><li>Higher equipment cost compared with alternative process systems</li></ul>
Opportunities	Threats
<ul style="list-style-type: none"><li>Growing demand for semiconductor lasers and laser diodes (LDs) for data centers, driven by the expansion of high-speed, high-capacity communications</li><li>Increasing adoption of photonics-electronics convergence devices and rising demand for optical waveguides</li></ul>	<ul style="list-style-type: none"><li>Emergence of new deposition systems and alternative processes offering higher productivity at lower cost</li><li>Export restrictions arising from trade frictions</li></ul>

## Analysis of Current State (Vacuum Laminator Equipment Business for Package Substrates)



→ p.34 Special Feature  
—Contribution to a Super-Smart Society

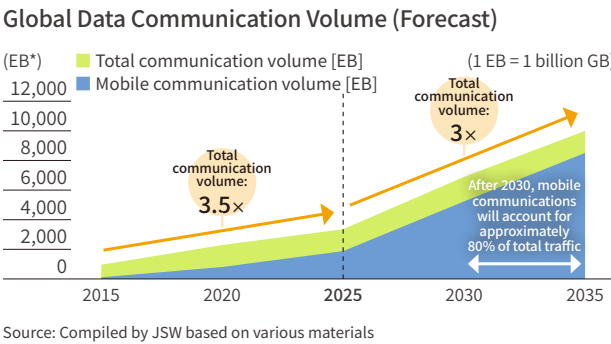
Strengths	Weaknesses
<ul style="list-style-type: none"><li>Extensive experience and proven delivery record</li><li>Product lineup tailored to diverse customer requirements</li><li>Customer development support through the Technical Center (demo facility)</li></ul>	<ul style="list-style-type: none"><li>Late entry into the high-end package market</li><li>High dependence on outsourcing</li></ul>
Opportunities	Threats
<ul style="list-style-type: none"><li>Transition to next-generation products (larger sizes, higher density, new base materials and films, etc.)</li><li>Government subsidies for the semiconductor industry</li></ul>	<ul style="list-style-type: none"><li>Market volatility (high degree of fluctuation)</li><li>Intense competition in product development and cost reduction</li><li>Export restrictions arising from trade frictions</li></ul>

## Sources of Strengths

JSW Group possesses extensive expertise in ECR deposition processes and provides products capable of diverse film deposition. In recent years, by responding to robust demand from laser diode (LD) manufacturers, the Group has established itself as the world's only manufacturer of ECR deposition systems capable of high-end film formation.

In the vacuum laminator business for package substrates, we leverage our demonstration facilities to support customers' development aimed at producing high-end substrates.

## Operating Environment



## Growth Strategies and Initiatives

With the rapid increase in data traffic, demand for optical communications, which offer far higher frequency bands than electronic signals and enable the ultra-high-speed transmission of massive volumes of data, is expected to expand. Optical communications are also utilized in data centers that handle large volume data storage, processing, and distribution, where semiconductor lasers play a key role. Since ECR deposition systems are used in manufacturing these semiconductor lasers, we are strengthening our production framework to capture this growing demand. In addition, to prepare for the future spread of photonics-electronics convergence technology, we are developing

ECR-based equipment for optical waveguides, where demand is expected to increase, and will work to expand sales.

In the electronic circuit board business, which is experiencing brisk demand driven by the growth of AI servers, we are capturing demand for vacuum presses used in manufacturing multilayer substrates, while leveraging our strength in providing development support through demonstration facilities. By delivering laminators for next-generation high-end package substrate development and providing subsequent customer support, we aim to expand our presence in this market.

### Message from the Head of the Division

Net sales in the Industrial Machinery Business for FY2024 were nearly in line with our initial plan. Operating profit fell short of plan due to the weaker-than-expected performance of high-margin products. However, we successfully delivered the first mass-production model of a laser heat treatment system for SiC (silicon carbide) power semiconductors, a key step toward entering the power semiconductor market, to a leading SiC device manufacturer as scheduled. The system achieved productivity exceeding customer expectations and received high evaluations.

Regarding key initiatives under JGP2028, we shipped the world's first F-ELA\* system for G8 (8th-generation) substrates for FPD applications and successfully brought it into operation. While the vacuum press business remains active, the vacuum laminator business has slowed due to market weakness. Despite these differences among products, the business is performing steadily overall.

In fiscal 2025, we will leverage our track record with the world's first G8 F-ELA shipment to secure major investment projects for new G8 plants and drive significant growth in this business. We will also advance the growth strategies and initiatives outlined above for deposition systems and electronic circuit boards.

Within infrastructure-related equipment, we will work to capture demand for overseas projects from Japanese railway car manufacturers, building on our strong track record in the railway business.

Through these initiatives, we will steadily implement our FY2025 measures toward achieving JGP2028.

\* F-ELA: Float-type ELA



Miki Sawai

Executive Officer  
Director of Industrial Machinery Business Division

# Material and Engineering Business

## Business Overview

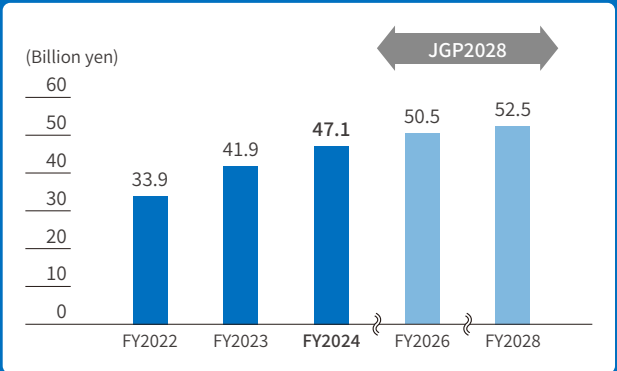
Japan Steel Works M&E (hereinafter referred to as M&E) engages in the development and manufacture of a wide range of products as a materials manufacturer (M: Materials), including large components for power plants, where it holds the world's top market share (primary and secondary nuclear system components (nuclear reactor components, steam generator components, rotor shafts, generator shafts, etc.), high-efficiency gas turbine power generation (GTCC\* and other) rotor shafts). As for renewable energy, the company also supplies components for offshore wind power construction (anvils, ram weights, etc.), and various forged products for general industrial applications, such as rolls for rolling mills

and forged steel pipes, as well as clad steel plates used in pressure vessels. Additionally, M&E develops and manufactures non-ferrous metals and carbon-fiber-reinforced plastic (CFRP) materials.

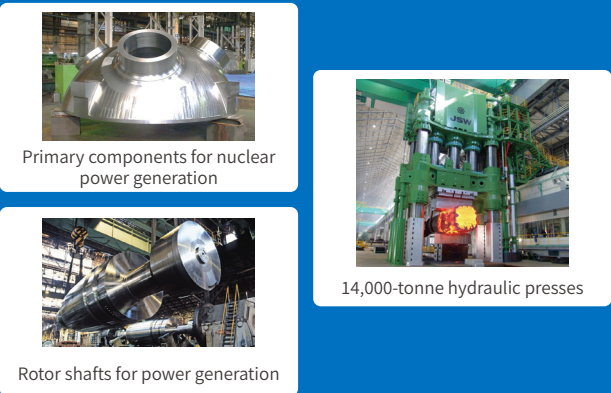
In the Engineering Business (E: Engineering), the company leverages its expertise in welding, construction, non-destructive testing, hydrogen storage, and high-temperature/high-pressure technologies to provide a range of plant maintenance services, develop hydrogen utilization technologies, and advance new technology development, thereby contributing to social safety and progress.

\* GTCC: Gas turbine combined cycle power generation plant

## Trends in Net Sales



## Representative Products and Equipment



## Analysis of Current State

**S Strengths**

- Large-scale mono-block forging manufacturing equipment and manufacturing technology
- Capacity to develop materials and manufacturing technologies for special steels such as high-strength alloy steel
- High quality and safety honed in electric power and nuclear power products
- Development technology for high-temperature-, high-pressure-, and hydrogen-embrittlement-resistant materials
- Capacity to respond to global market demand

**W Weaknesses**

- Limits to in-house machining capabilities due to constraints on large-scale machining facilities
- Difficulties with production leveling due to our build-to-order system
- Not enough automation of tasks
- Capacity to accommodate new demand for small and medium-sized products and small lot production (compared to the large-sized products handled by M&E)

**O Opportunities**

- Increasing importance of high-efficiency thermal power generation (including GTCC) as an adjustable power source to address global warming countermeasures and growing power demand
- Expansion of the hydrogen economy as well as the renewable energy power generation market toward carbon neutrality
- Changes in the external environment relating to nuclear power generation
- Withdrawal/downsizing of competitors, industry reorganization trend

**T Threats**

- Difficulty in securing personnel due to decrease in the local population and falling birthrate
- A sudden slowdown in demand due to tighter regulations related to the environment and such
- Shrinking market for oil- and gas-related products (rapid shift to renewable energy generation)

## Sources of Strengths and Challenges

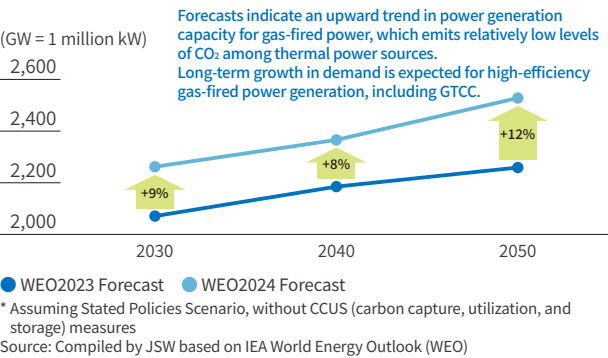
Our greatest strength lies in the development capabilities, expertise, and achievements we have cultivated and refined for over 110 years in the processes of melting, mixing, and solidifying steel. At the Muroran Plant, we can produce steel ingots weighing up to 670 tonnes—the largest in the world—and manufacture ultra-large products such as primary and secondary components for nuclear power generation and components for high-efficiency thermal power generation using a 14,000-tonne large press and ultra-large machine tools capable of handling workpieces up to 400 tonnes. These technologies are among the most advanced in the world. In addition, the safety and quality of our products, established through many years of experience, are highly regarded by customers. Our quality assurance system, which enables the stable supply of high-quality products, is another major strength of the company.

On the other hand, leveling production capacity and automating operations are key challenges for improving productivity at the Muroran Plant going forward, and we are continuously examining various improvement measures. We are also pursuing new demand opportunities, including for small and medium-sized products, as part of our forward-looking initiatives.

## Operating Environment

Global energy demand is projected to increase under all climate change scenarios anticipated by the International Energy Agency (IEA). During the transition toward a carbon-neutral society, natural gas (LNG) thermal power generation, which emits relatively low levels of CO<sub>2</sub>, is expected to play an increasingly important role as an adjustable power source. Accordingly, further growth in LNG and high-efficiency thermal power generation, including GTCC, is anticipated.

### Power Generation Capacity from Natural Gas (Forecast)



## Growth Strategies and Initiatives

Leveraging our long-cultivated manufacturing facilities and technologies for large, integrated forged products, together with our high-level quality assurance system, we aim to capture demand to the greatest extent possible for the construction and refurbishment of nuclear power plants supporting the transition to a carbon-neutral society, as well as for LNG and high-efficiency thermal power generation (including GTCC), which play an increasingly important role during this transition period. As an immediate initiative, we will make refresh investments to replace aging equipment and upgrade facilities with low productivity, further capitalizing on our strengths. Given the globally strong demand for electric power, including data centers for generative AI, we have already begun studies to expand production and improve productivity. With a focus on leveling our production

system and automating operations, we will systematically invest in capital to eliminate bottlenecks, expand our outsourcing partners, and promote labor savings through digital transformation (DX) investment and the introduction of automated measuring instruments and the automation of inspection and documentation processes.

In addition, we are tackling technological challenges to achieve a carbon-neutral society, such as the development of hydrogen utilization technologies and autoclaves (pressure vessels) for gallium nitride (GaN) growth, which enable ultra-high-efficiency devices and contribute to reducing CO<sub>2</sub> emissions. Through these initiatives, we aim to create social value and achieve sustainable enhancement of corporate value.

### Message from the Head of the Division

Leveraging our extensive manufacturing expertise, particularly in steel for over 110 years, our company delivered high-quality, reliable products worldwide. In response to the growing global initiatives to secure stable energy and achieve carbon neutrality, there is a huge demand for us to play a significant role in supporting the world's energy supply and advancing a decarbonized society. Under our medium-term management plan, JGP2028, launched in fiscal 2024, we are focusing on stabilizing quality and improving productivity for our core large forged products. In addition, we are implementing refresh investments to maintain and enhance equipment integrity, allowing us to flexibly respond to a wide variety of customer needs. Construction work related to these capital investments is progressing smoothly, and we expect to see the effects begin to materialize in earnest by the end of the current fiscal year.

A year has passed since the formulation of this medium-term plan, during which time the market environment for the electric power and nuclear power sectors has remained firm, with upward trends in demand. Customer requests for increased production continue to grow, particularly for components used in GTCC, where significant expansion in demand is anticipated. We have begun discussions on how much to increase production capacity at our manufacturing facilities to meet this demand.

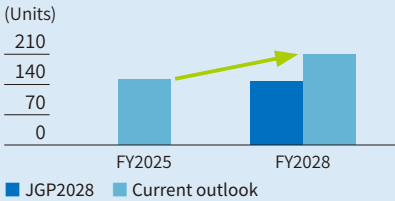
As demand rises for large forged components and forged parts designed to withstand high temperatures and pressures—areas of strength for our company—we are steadily improving both productivity and profitability.



Sou Ueda

Specialist Managing Senior Councilor  
President, Japan Steel Works M&E Co., Ltd.

### Demand Outlook for Rotors for Power Plants Forecast of Rotor Shipments





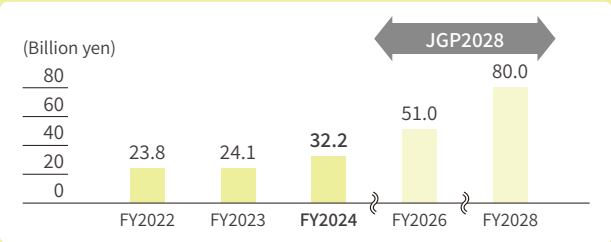
# Defense Equipment Business

## Business Overview

The Defense Equipment Business is JSW's founding business, and today we remain Japan's only manufacturer of artillery. We manufacture and supply a range of defense equipment, including howitzers, tank guns, main guns for escort vessels, and automatic cannon, as well as missile canisters. These products are delivered to the Japan Ground Self-Defense Force, the Japan Maritime Self-Defense Force, and the Japan Coast Guard.

By utilizing the Muroran Plant's unique material development and manufacturing technologies, and through an integrated system at the Hiroshima Plant that encompasses everything from equipment system development and design to manufacturing and final product assurance, we have established a comprehensive structure for defense production. In addition, our Group

Trend in Net Sales



companies design and manufacture electrical equipment, while also providing maintenance and repair services after delivery. Through this integrated process, from material development to product manufacturing and after-sales service, we contribute to the safety and security of Japan.

## Recent Initiatives

### Next Wheeled Armored Vehicle (AMV): Production system being established smoothly

- December 2022: AMV selected as the successor to the Type 96 Wheeled Armored Personnel Carrier (Ministry of Defense)
- August 2023: License agreement concluded between Patria and JSW
- 2024: Delivery contract for 26 AMVs concluded
- 2025: Delivery contract for 28 AMVs concluded

The establishment of an optimal production structure utilizing the Muroran Plant is progressing steadily, and we are working toward delivering the contracted units.

### Response to research and prototyping of future equipment

- Contract record**
- 2022: Research and prototype contract for Future Railgun (Phase 1)
  - 2023: Research and prototype contract for Future Railgun (Phase 2)
  - 2024: Research and prototype contract for Future Railgun (Phase 3)

Research and prototyping are progressing smoothly, and we will continue to respond by leveraging the knowledge and technologies we have cultivated to date.



Next Wheeled Armored Vehicle (personnel carrier type)  
Image (Photo: Ministry of Defense website)



Prototype railgun installed on the test ship Asuka  
(Photo: Self-Defense Fleet website)



Type 19 Wheeled Self-Propelled 155 mm Howitzer



120 mm Tank Gun for Type 10 Main Battle Tank  
Photo: Japan Ground Self-Defense Force website



62-caliber 5-inch Naval Gun  
Photo: Provided by Japan Maritime Self-Defense Force

## Production Bases



# Photonics Business

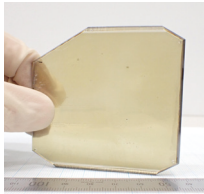
## Business Overview

The Photonics Business focuses on the growth and processing of functional crystal materials, including synthetic quartz, lithium niobate (LN), and gallium nitride (GaN). Synthetic quartz represents the origin of JSW's crystal technology, boasting a history of nearly 40 years. Over the years, we have developed a diverse lineup of products, including optical low-pass filters, quartz wafers, and wave plates, while building up advanced expertise in both crystal growth and processing. Drawing on this accumulated knowledge, we are now also focusing on crystal businesses involving new materials such as LN and GaN. For GaN in particular, the New Business Promotion

Headquarters is collaborating with various partners to develop technologies for the mass production of large, low-defect single crystals. We are currently moving forward with mass-production verification and providing sample substrates to customers in preparation for future market expansion. Synthetic quartz is manufactured by Fine Crystal Co., Ltd. (FCC), while LN is produced by Fine Crystal Iwaki Co., Ltd. In recent years, we have also focused on bonding technologies that join dissimilar materials, expanding into the field of bonded substrates for optical communications and advanced electronics applications.

## Analysis of Current State: Source of Strengths and Challenges

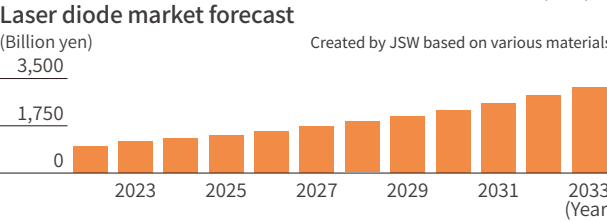
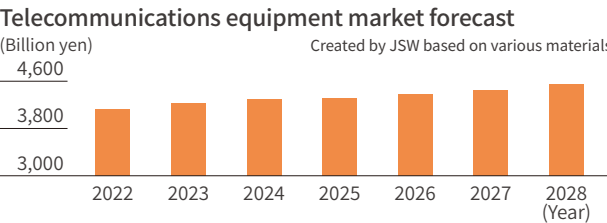
Our core competencies in the crystal growth process lie in the fundamental operations of melting and solidifying. Alongside the growth and processing technologies developed over many years, we possess a unique strength in designing and manufacturing autoclaves, a crucial component of crystal growth, utilizing our own proprietary high-heat-resistant and high-corrosion-resistant alloys. In addition to manufacturing our own crystal materials, such as synthetic quartz and LN, we are also preparing to establish an integrated in-house system that covers all processes, from cutting and polishing to bonding dissimilar materials. This capability enables us to provide high-value-added solutions, from improving crystal quality and ensuring stable production to securing optimal performance in the final product according to application needs. It will serve as a significant competitive advantage going forward.



GaN crystal material

## Analysis of Current State: Operating Environment

With the advancement of digital infrastructure, there is an increasing demand in the communications sector for both higher speeds and lower power consumption in optical communication and optical modulator substrates, as well as high-radiofrequency (RF) devices. This, in turn, heightens the importance of ensuring a stable supply of high-quality crystal materials and substrates. GaN, in particular, offers characteristics that cannot easily be replicated by other materials in laser diode (LD) applications and is also attracting growing attention in advanced lighting fields. The ammonothermal method employed by JSW Group offers a significant competitive advantage in terms of both crystal quality and productivity, positioning us well to respond to future market growth.



### Message from the Head of the Division

Amid the increasingly severe security environment surrounding Japan, efforts to fundamentally strengthen the nation's defense capabilities are advancing. In the Defense Equipment Business, we are expanding our operations beyond artillery systems to include armored vehicles, future railguns, and other research and development programs. Going forward, we will continue to contribute to Japan's safety and security by providing equipment that meets current requirements and supports the enhancement of Japan's deterrence capabilities.



**Takeshi Shinmoto**

Managing Executive Officer  
Director of Ordinance Business Headquarters

### Message from the Head of the Division

Our Photonics Business originated with the manufacturing and processing of synthetic quartz crystals by Fine Crystal, established in 1988. Until the 2010s, we focused on products that made use of the birefringent properties of quartz and LN. In recent years, we have been developing products that leverage diverse electrical and optical characteristics. With our lineup of three crystal materials—quartz, LN, and GaN—we aim to provide optimal solutions in the fields of optical devices, optical communication devices, and power electronics.



**Takumi Hanamura**

Specialist Managing Senior Counselor  
Director of New Business Promotion Headquarters  
General Manager, Photonics Office, New Business Promotion Headquarters (concurrently)



Masayuki Aoyama  
Executive Officer  
In charge of Promoting ESG,  
In charge of Environmental Management



Message from the Officer in Charge of Promoting ESG

In 2022, we established our Purpose, “Material Revolution, making the world sustainable and prosperous,” and identified six material issues as priority themes to address to realize this Purpose.

However, we received feedback that it was not clear how our products contribute to a sustainable society. Accordingly, in this Integrated Report, we outline how our products and technologies contribute to the realization of a plastic-resource-recycling society, a low-carbon society, and a super-smart society, along with the social impact of our representative products. Going forward, we will further enhance this content by incorporating additional details and new technologies to illustrate the progress of our materiality initiatives amid a rapidly changing environment.

In April 2025, in conjunction with the revision of the Group’s Basic Sustainability Policy, we introduced the Five Guiding Principles for Action, which were primarily established by young managers as part of the Organizational Culture Reform Project. These principles serve as principles for realizing the “reforms and challenges for new growth” stated in the medium-term management plan JGP2028 and are closely linked to addressing our material issues. By promoting the widespread adoption of these guidelines, we will strengthen sustainability management, enabling us to achieve the goals of the medium-term management plan and enhance corporate value as we pursue further growth over the next five to ten years.

Foundations for Creating Value: Contents

Environment		Social		Governance	
48	Environmental Management	52	Quality Management	60	Corporate Governance
50	Response to Climate Change	54	Human Capital Management	66	Management Team
		57	Occupational Health and Safety	68	Roundtable Discussion with Outside Directors
		58	Respect for Human Rights	72	Risk Management
		58	Supply Chain Management	73	Compliance

The Japan Steel Works Group Basic Sustainability Policy

Based on its Purpose—“Material Revolution, making the world sustainable and prosperous”—JSW Group will contribute to stakeholders as follows through the development and implementation of industrial machinery and new materials that solve social issues, and simultaneously ensure thorough organizational crisis management as it works to create social value and sustainably enhance its corporate value.

For Our Customers and Society	Through our supply of highly reliable products that emphasize quality and appropriate levels of communication, we aim to solve the problems faced by customers and society, and to realize a sustainable and prosperous society.
For the Global Environment	We will strive to reduce the environmental impact of our business activities and the entire supply chain and contribute to enhancing a circular economy and curbing a climate change.
For Our People Working Together	As well as developing ways of working that raise individual capabilities and respect diversity, we respect human rights and provide a healthy, safe, and open working environment where everyone can find their work rewarding.
For Our Business Partners	Through fair and equitable transactions, we create social value together and build partnerships for co-existence and co-prosperity.
For Local Communities	We engage actively in community involvement activities and contribute to community development as a good corporate citizen.
For Shareholders and Investors	We will ensure the transparency, soundness, and efficiency of management, and strive to continuously improve corporate value. In addition, as well as striving to disclose appropriate corporate information in a timely and appropriate manner, we undertake constructive dialogue with stakeholders.


In putting the above into practice, we will respect human rights and strive to ensure compliance, and in addition to clarifying these, work to enhance corporate governance.

Governance and Promotion System for Sustainability

Sustainability promotion activities are carried out by the ESG Promotion Committee, which was established in April 2021 and chaired by the officer in charge of promoting ESG.

In addition to considering strategies related to climate change, the committee also discusses all manner of ESG-related issues. The Board of Directors exercises appropriate oversight on the basis of input such as reports on the ESG Promotion Committee’s activities.

In April 2022, we established our ESG Promotion Office as an organization dedicated to promoting ESG activities throughout the entire Group. The ESG Promotion Committee plays a central role in the Group’s climate change response and ESG-related activities, which are promoted through the ESG Promotion Office in cooperation with head office divisions, business divisions, plants and Group companies.

 Visit our website to view the ESG Activities Promotion Organization Chart.  
Sustainability Management: [https://www.jsw.co.jp/en/sustainability/sustainability\\_management.html](https://www.jsw.co.jp/en/sustainability/sustainability_management.html)



# Environmental Management

## Basic Approach

Our Group has established the JSW Group Basic Sustainability Policy, under which we pledge to reduce the environmental burdens generated by our business activities and entire supply chain and to contribute to the creation of a recycling society and the mitigation of climate change. The specific policies are set out in the Environmental Policy. For details on the Environmental Policy, please refer to our website.

 **Environmental Management:** <https://www.jsw.co.jp/en/sustainability/environment/ems.html>

## Targets and Progress of the Medium-Term Environmental Plan

Priority Issues	FY2024 Targets	FY2024 Actual Results	Achievement Level	Medium-Term Environmental Plan FY2025 Targets
Environmental Management	Maintain existing ISO 14001 certifications	Maintenance of existing ISO 14001 certifications	◎	Maintain existing ISO 14001 certifications Obtain new ISO 14001 certification of domestic manufacturing Group companies
Climate Change Measures	41.3% reduction in CO <sub>2</sub> emissions (compared with FY2013)	46.5% reduction in CO <sub>2</sub> emissions (compared with FY2013)	◎	CO <sub>2</sub> emission reduction targets relative to FY2013 levels 45% reduction by FY2025, 60% reduction by FY2030
	Improvement of 1% or more in energy usage intensity (year-on-year and average change in intensity over 5 fiscal years)	0.6% worsening from the previous fiscal year 5.2% improvement over average change in intensity over 5 fiscal years	△	Improvement of 1% or more in energy usage intensity (year-on-year and average change in intensity over 5 fiscal years)
Promotion of Resource Conservation and Recycling	Recycling rate of 95% or higher (excluding slag and refractories)	Recycling rate of 96.6% (excluding slag and refractories)	◎	Recycling rate of 95% or higher (excluding slag and refractories)
Management of Chemical Substances	Improvement of 1% or more emissions and transfers intensity of chemical substances subject to the PRTR <sup>*1</sup> law (year-on-year and average change in intensity over 5 fiscal years)	5.0% worsening from the previous fiscal year Improvement of 4.5% in the average change in intensity over 5 fiscal years	△	Improvement of 1% or more emissions and transfers intensity of chemical substances subject to the PRTR law (year-on-year and average change in intensity over 5 fiscal years)
Compliance	Legal or regulatory violations: 0	Legal or regulatory violations: 0	◎	Legal or regulatory violations: 0 <sup>*2</sup>
	Treat low-concentration PCB waste by March 2027	Progressing appropriately	◎	Treat low-concentration PCB waste by March 2027
Raising Environmental Awareness	Issuance of integrated report Conduct training for employees	Issuance of integrated report Conduct training for employees	◎	Disclose environmental management activities in an integrated report Conduct training for employees

<sup>\*1</sup> PRTR: Pollutant Release and Transfer Register  
<sup>\*2</sup> In FY2025, a violation of environmental regulations was identified, and we are taking appropriate corrective action. No penalties, fines, or other sanctions have been imposed in association with this violation.

## Environmental Management Structure

The Environmental Management Committee, headed by the officer in charge of environmental management who is appointed by the Board of Directors, formulates groupwide annual environmental management policies and action plans, and oversees and evaluates the progress of environmental management activities. Each plant has its

own environmental supervisory committee and works to promote environmental management activities as part of JSW Group’s unified approach to reducing its environmental impact. In addition, all of the Company’s plants and several of its Group companies have obtained ISO 14001 certification. Please refer to our website for more details.

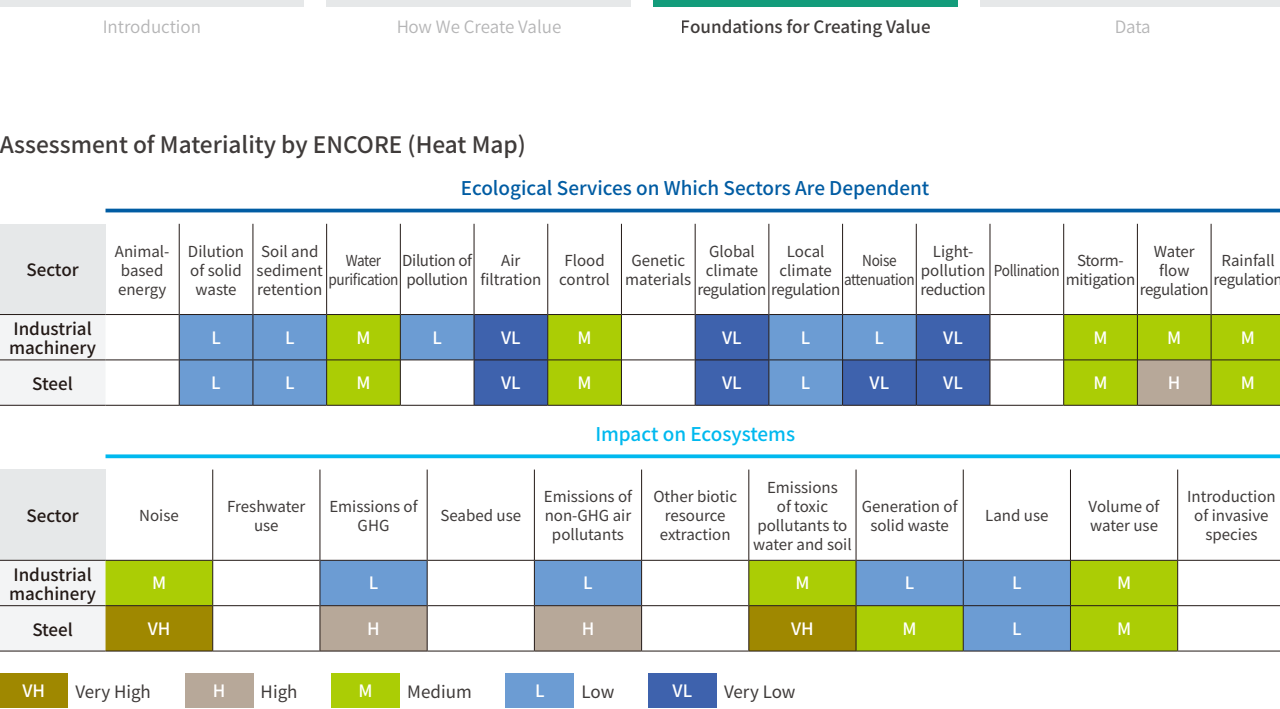
 **Environmental Management:** <https://www.jsw.co.jp/en/sustainability/environment/ems.html>

## Dependence and Impact Related to Biodiversity

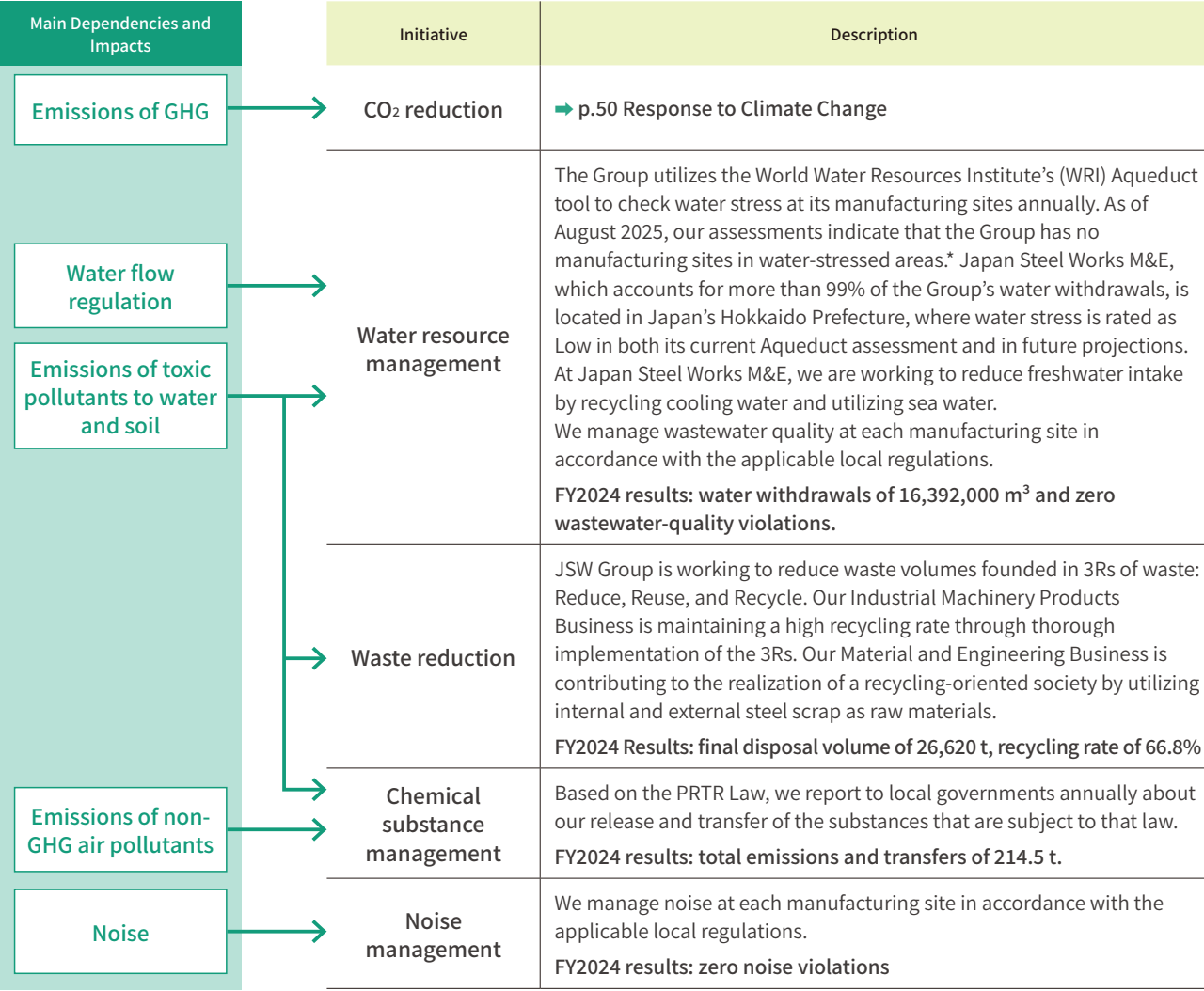
We used the latest version of ENCORE<sup>\*1</sup> as recommended by the TNFD to assess JSW Group’s dependence and impact on the ecosystem services relevant to the industrial machinery and steel sectors<sup>\*2</sup> in which our Group operates.

<sup>\*1</sup> ENCORE (Exploring Natural Capital Opportunities, Risks and Exposure) is a tool for assessing business sectors and production processes for their dependence and impact on natural capital. ENCORE was developed under the leadership of the Natural Capital Finance Alliance in collaboration with United Nations Environment Programme (UNEP), the World Conservation Monitoring Centre (WCMC) and other organizations.  
<sup>\*2</sup> The sector names corresponding to industrial machinery and steel in ENCORE are as follows:  
Industrial machinery: Manufacture of special-purpose machinery Steel: Manufacture of basic iron and steel

Achievement Level:  
◎ Fully achieved  
○ 80% or more achieved  
△ Less than 80% achieved



The assessment confirmed that our operations are dependent on water-related ecosystem services, and significantly impact ecosystems with noise, emissions of GHG, emissions of non-GHG air pollutants, and emissions of toxic pollutants to water and soil. We will keep these findings in mind as we continue to take action to manage our environmental impacts and dependencies.



\* Areas rated with High or Extremely High water stress by Aqeduct.


Only key results are shown in the table above. For details, please refer to our website.

 **Non-financial data:** <https://www.jsw.co.jp/en/sustainability/esgdata.html>

# Response to Climate Change

## Support for the TCFD Recommendations

Please refer to our website for details.

 **Climate change response:**  
<https://www.jsw.co.jp/en/sustainability/environment/climatechange.html>



## Governance

JSW Group considers climate change as an important management issue, and in June 2022, we expressed our endorsement for the recommendations of the TCFD (Task Force on Climate-related Financial Disclosures). In the same year, we completed a scenario analysis and impact assessment. In accordance with the TCFD’s disclosure framework, we analyze and consider the impact of climate-related risks and opportunities on the Group’s business activities and earnings, and disclose the resulting information.

## Strategy

As stated in Indicators and Targets, we were able to achieve our Scope 1 and 2 reduction targets for fiscal 2025 one year ahead of schedule. We were able to do this through various measures such as electrifying equipment at each production site and introducing green power. Accordingly, we have revised reputational risk downward. Regarding opportunities, we have revised the impact of those for which significant changes in the external environment are prompting an ongoing course correction in business strategy.

### Financial “Risk” Impact Assumed for FY2030 (Extracted)

Impact on annual operating income: Minor (less than ¥100 million); Moderate (¥100–1,000 million); Major (¥1,000 million or more)

Category	Type	Details	Degree of Impact	
			2°C	4°C
Transition risks	Policies and regulations	Imposition of a carbon tax	Moderate	—
		Introduction of border adjustment tax	Minor	Minor
	Technology	Cost of switching fuels at production facilities and R&D	Moderate	Moderate
	Markets	Decrease in demand for the products due to the reduction in the construction of conventional thermal power plants	Minor	Minor
		Decrease in demand for the products due to the reduction in the construction of conventional thermal power plants	Moderate	Moderate
	Reputation	Damage to our ESG evaluation and reputation due to delays in CO <sub>2</sub> emission reduction measures at the product manufacturing stage	Minor	Minor

### Financial “Opportunity” Impact Assumed for FY2030 (Extracted)

Impact on annual operating income: Minor (less than ¥100 million); Moderate (¥100–1,000 million); Major (¥1,000 million or more)

Category	Type	Details	Degree of Impact	
			2°C	4°C
Opportunities	Markets	Expansion of the EV market	Moderate	Minor
		Expansion of power electronics market and 5G infrastructure market	Moderate	Moderate
	Energy sources	Increased demand for renewable energy power generation	Moderate	Moderate
	Resource efficiency	Tax relief after the introduction of carbon pricing on CO <sub>2</sub> emissions from production facilities	Moderate	—
	Products and services	Expansion of products and services that contribute to the demand for the reduction of CO <sub>2</sub> emissions (shafts for high-efficiency thermal power plants, pelletizers for producing raw materials for solar panel protective sheets, and magnesium injection molding machines that contribute to weight reduction in automobiles)	Major	Major
		Response to the demand for plastic recycling, contribution to social implementation of non-fossil-fuel-derived plastics	Minor	Minor
		Response to demand for nuclear power plants	Major	Major

## Assessment of Risks

### Imposition of Carbon Tax

The revised GX Promotion Act (Act on the Promotion of Smooth Transition to a Decarbonized Growth-Oriented Economic Structure) was enacted in May 2025, and the Japanese government has mandated that companies whose direct CO<sub>2</sub> emissions (Scope 1) exceed 100,000 tonnes per year (averaged over the most recent three years) participate in the emissions trading system GX-ETS, which is to be rolled out in full from April 2026. Since the average Scope 1 emissions of our Group for the three years from 2023 to 2025 (latest forecast) is approximately 60,000 tonnes, our Group is not expected to be obliged to participate in GX-ETS under this legislation. However, to achieve the target we set out in Indicators and Targets of reducing our Scope 1 and 2 emissions by 60% by fiscal 2030, we will, in addition to various other energy-saving measures, continue to introduce renewable energy power

generation, expand solar power generation facilities, and plan and develop non-carbon-emitting facilities that utilize hydrogen and ammonia as fuel.

In fiscal 2024, the Group increased the percentage of electricity generated from green energy sources to 45% of Scope 2 at the Hiroshima Plant, 27% at the Yokohama Plant, and 20% at the Meiki Plant. Furthermore, the Hiroshima Plant continued to expand its solar power generation facilities in fiscal 2024.



Solar power generation facilities at the 9th assembly plant



Solar power generation facilities at the 10th assembly plant

## Assessment of Opportunities

### Response to Demand for Nuclear Power Generation and Expansion of Products and Services That Contribute to Meeting Demand for Reduction of CO<sub>2</sub> Emissions

Europe, seeking to break its dependence on imported natural gas from Russia and pursue decarbonization, is actively promoting the construction of nuclear power plants. Construction of 1.6-million-kW class large reactors in the UK and France is progressing smoothly, and new 1-million-kW class nuclear power plants are being planned for Eastern European countries such as Poland and Bulgaria.

In North America, licensing to extend the operating life of existing nuclear power plants (to 80 years) is moving forward.

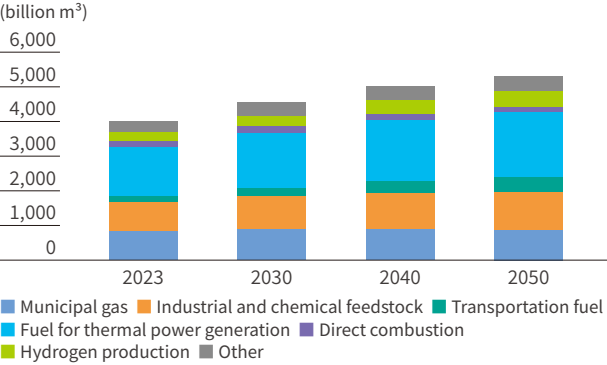
Amid the rapid growth of data centers and the semiconductor industry and the resulting long-term increase in worldwide electricity demand, high-efficiency gas-fired power generation using liquefied natural gas, which emits relatively little CO<sub>2</sub> for thermal power generation, is expected to be in high demand in the medium to long term as a means of transitioning to carbon neutrality by 2050 and as a dispatchable power source that can compensate for fluctuations in renewable energy output.

In this market environment, demand is expected to be strong for primary and secondary components for nuclear power plants, to rise due to replacement cycles in North America for ultra-large turbines and generator shafts, and to remain stable for rotor shafts used in high-efficiency thermal power generation such as GTCC.\* To meet this vigorous

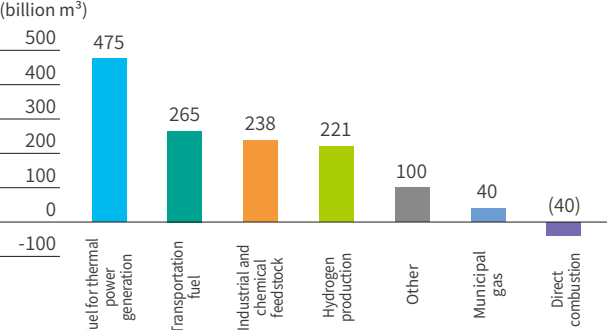
\* GTCC: gas turbine combined-cycle power generation

demand, Japan Steel Works M&E is proceeding with refresh investments in its facilities and is giving active consideration to further increases in production capacity.

### Global Natural Gas Demand Forecast by Sector



### Increase by Sector (2023→2050)



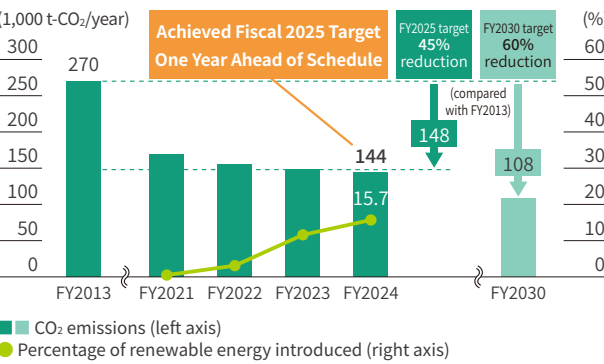
Source: Global Gas Outlook 2050 by Gas Exporting Countries Forum, March 2025 Version, prepared in-house

## Indicators and Targets

Classification	Management Indicator	Target	
		FY2025	FY2030
Reduction of CO <sub>2</sub> emissions in production activities (Scope 1, 2)	CO <sub>2</sub> emissions reduction rate (compared with FY2013)	45% reduction	60% reduction
Promotion of the introduction of renewable energy	Percentage of renewable energy among all energy used (Scope 1, 2)	25% or more	40% or more

For Scope 1 and Scope 2, our Group achieved a 45% reduction from the base year (fiscal 2013) in fiscal 2024, one year ahead of the fiscal 2025 target. We have disclosed three years of Scope 3 emissions (upstream and downstream emissions in the supply chain).

### CO<sub>2</sub> Emissions (Scope 1 and 2) Reduction Plan



### Scope covered by CO<sub>2</sub> emissions calculations:

Head office and the Group’s main manufacturing sites [Hiroshima Plant, Yokohama Plant, Meiki Plant, Japan Steel Works M&E (including affiliated companies on Company premises)]

### Scope 3 Emissions Calculation Results for FY2022 to FY2024

Unit: 1,000 t-CO<sub>2</sub>/year

Category	FY2022	FY2023	FY2024
1 Purchased products and services	543	509	523
2 Capital goods	22	36	51
3 Energy-related activities	23	22	25
4 Transportation and distribution (upstream)	21	28	15
5 Waste generated in operations	2	1	2
6 Employee business travel	2	4	5
7 Employee commuting	3	3	3
9 Transportation and distribution (downstream)	7	13	10
11 Use of sold products	3,650	3,618	3,293
12 End-of-life treatment of sold products	1	1	1
13 Leased assets (downstream)	3	1	1
Scope 3 total	4,275	4,236	3,929

### Scope covered by CO<sub>2</sub> emissions calculations:

Head office and the Group’s main manufacturing sites [Hiroshima Plant, Yokohama Plant, Meiki Plant, Japan Steel Works M&E (including affiliated companies on Company premises)] (includes CO<sub>2</sub> volumes from overseas activities such as overseas procurement and exported products)



# Quality Management

## Quality Management Approach and System

At JSW Group, divisions collaborate to conduct quality management activities at the plant level with the aim of providing meticulous support for each product. In order to strengthen the corporate monitoring and supervision functions for these activities at each plant, we established the Quality Management Office, headed by an officer in charge of quality management, in September 2022.

Our quality assurance system ensures neutrality across plants and eliminates bias by having members of the Quality Management Office concurrently serve as heads of the quality

assurance departments at each plant, including M&E. The participation of these plant quality assurance department heads, who also serve as Quality Management Office members, in plant-level quality management activities ensures the effectiveness of the oversight function. We also established the Muroran Branch of the Quality Management Office in April 2023 and the Hiroshima Branch in April 2025, further strengthening supervision and guidance functions for quality management activities.

JSW Group

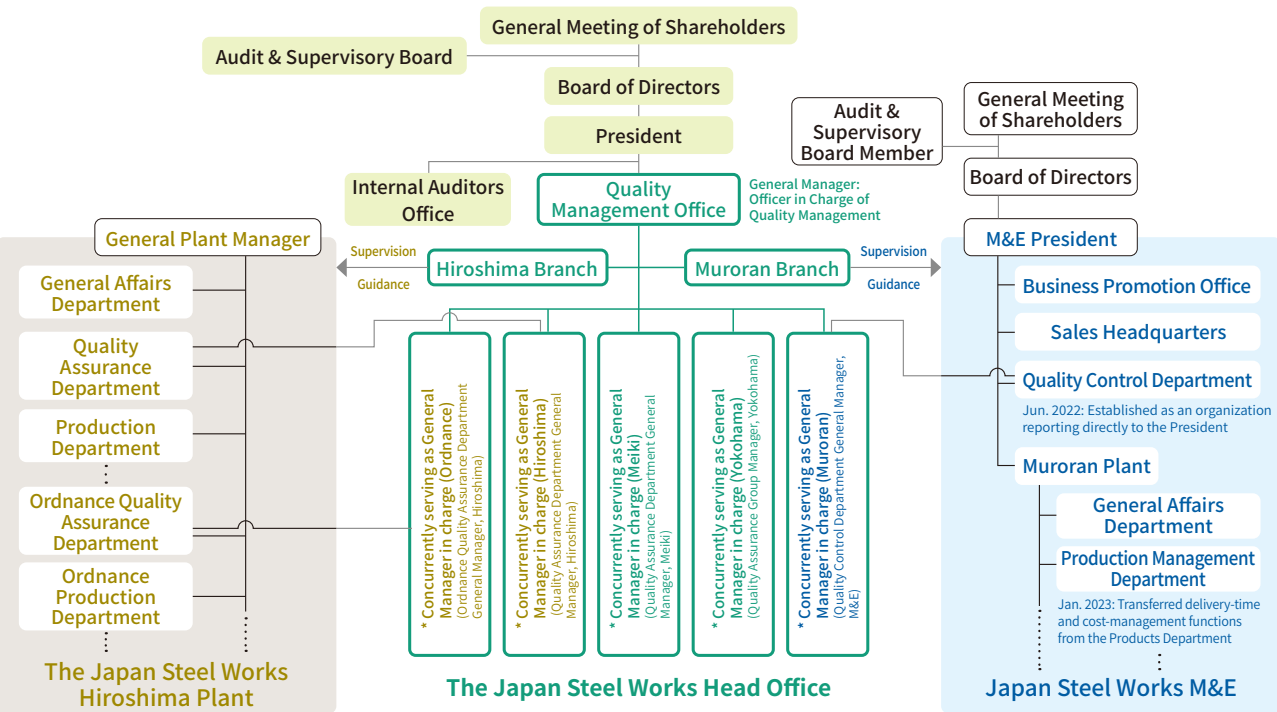
Quality Policy and Quality Code of Conduct

Quality Policy

JSW Group contributes to sustainable and prosperous lives for people around the world by providing products of high quality and superior reliability.

Quality Code of Conduct

1. Uphold strong ethics and ensure full compliance with laws, regulations, customer requirements, and internal rules.
2. Take your role seriously and foster a sense of safety and trust.
3. Continually strive to maintain, improve, and deliver appropriate quality.
4. Enhance awareness of quality through the transfer of technology and skills and through the development and education of personnel.
5. Contribute to society through your own growth.



Note: The three research institutes not shown in the diagram, as well as affiliated companies that manufacture products and issue inspection records and inspection certificates, are also subject to quality audits and other reviews.

## Continuous Efforts to Strengthen Quality Management

Measures initiated in response to inappropriate conduct in quality inspection practices are now implemented on a regular basis to enhance quality management under everyday conditions. We are continuously strengthening our efforts from the four perspectives of “quality assurance system,” “organizational culture,” “quality assurance process,” and

“governance,” and, as shown in the table below, advancing these initiatives as a unified Group. The Quality Management Office provides supervision and direction as the second line in the implementation of these measures, and the Internal Auditors Office is the third line, auditing progress periodically and reporting results to the Board of Directors.

Category	Measure	Main Initiatives in Past Year
Quality Assurance System	Building and bolstering the system	<ul style="list-style-type: none"><li>Established Hiroshima Branch (Apr. 2025)</li></ul>
	Strengthening and improving compliance consciousness	<ul style="list-style-type: none"><li>Key activities during Quality Compliance Month (May) and Quality Month (November) (two months designated as activity enhancement months each year to promote initiatives across the entire Group)<ul style="list-style-type: none"><li>Communication of message from top management (May: the president; November: officer in charge of quality management)</li><li>Created quality compliance posters in May and displayed these until the end of the fiscal year</li><li>Formulated quality compliance statements for workplaces in May and displayed these until the end of the fiscal year</li></ul></li><li>Quality audits conducted by the Quality Management Office (3 plants, 3 research institutes, and 15 affiliated companies (including M&amp;E))</li><li>Conducted quality compliance video training and e-learning education<ul style="list-style-type: none"><li>Created materials in English and Chinese versions in addition to Japanese; conduct education that included international locations</li></ul></li><li>Quality workshop training (face-to-face) (September: Yokohama, M&amp;E; January: Meiki, Hiroshima)</li><li>Held human error prevention training (inculcate materiality of errors and mistakes; 10 sessions)</li><li>Implemented mutual monitoring of quality (guided as autonomous activities by each department to promote interdepartmental cooperation)</li><li>President town meeting (factory tour, lunch meeting, exchanges of opinion)</li><li>Confirmed status of quality compliance invocation via surveys (to strengthen measures)</li></ul>
	Organizational culture	<ul style="list-style-type: none"><li>Organizational culture reform<ul style="list-style-type: none"><li>Implemented a project to raise awareness of the Purpose<ul style="list-style-type: none"><li>Workplace small meetings (about 4,500 employees of the Company and affiliates in attendance)</li><li>Purpose training (training of candidates for leaders to raise awareness of the Purpose at Hiroshima Plant and Muroran Plant)</li></ul></li><li>Promote Organizational Culture Reform Project</li><li>Launched the Culture Renewal Review Group with ten young managers to formulate new behavioral standards<ul style="list-style-type: none"><li>January: Presented draft Guiding Principles for Action to Management / April: Five Guiding Principles for Action went into effect</li></ul></li></ul></li></ul>
Quality Assurance Process	Digitize inspection work	<ul style="list-style-type: none"><li>Digitized test and inspection records and began partial operation of the QDAS* automated report-generation system</li></ul>
	Deploying appropriate management resources	<ul style="list-style-type: none"><li>Increased quality assurance personnel at M&amp;E (twice the June 2022 level) and promoted greater personnel mobility</li><li>Capital investment to enhance inspection operations efficiency (automation of various inspection processes)</li></ul>
Governance	Strengthening internal controls	<ul style="list-style-type: none"><li>Strengthened internal audit functions<ul style="list-style-type: none"><li>Conducted self-inspections and evaluations of the establishment and operation of internal controls for the Company and its affiliated companies</li></ul></li><li>Strengthened the whistleblowing system<ul style="list-style-type: none"><li>Distributed a compliance handbook and pocket cards to all employees</li><li>Added internal sanction mitigation regulations for voluntary self-reporting of violations</li></ul></li><li>Formulated and enforced escalation regulations</li></ul>

\* QDAS: Quality Data Assurance System. Manages quality data (mainly test and inspection records) and revision histories digitally from a centralized base, and enhances the reliability of performance reports.



President town meeting



Human error prevention training



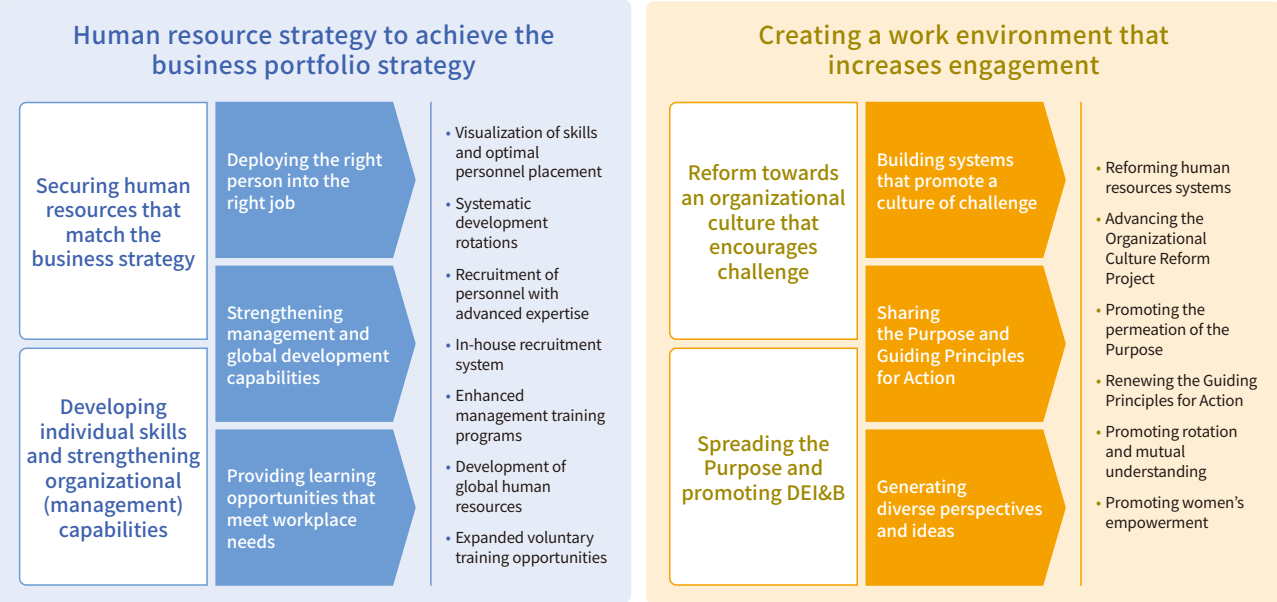
Quality workshop training

# Human Capital Management

The corporate image that JSW Group is aiming for is one where “individual self-realization” and “sustainable growth of the organization” mutually circulate, and the individual and organization continue to thrive together. To this end, we are linking various human resources initiatives based on business strategies to achieve autonomous growth and active participation of diverse individuals and maximizing of

organizational performance, thereby realizing sustainable growth and improved corporate value. In addition, as a foundation for implementing these strategies, we are promoting measures to increase engagement, thereby creating a work environment where employees can reach their full potential.

## JGP2028 Human Resources Initiatives



## Human Resource Strategy to Achieve the Business Portfolio Strategy

### Deploying the Right Person into the Right Job

To ensure that we deploy the right person into the right job in executing our business strategies, we are developing a talent management system. By visualizing not only employees’ career histories but also their individual skills, we will promote the optimal allocation of personnel to address a wide range of business challenges.

In addition, while taking into account each individual’s aptitude and personality, we are systematizing personnel rotations based on a medium-term development vision to achieve placements best suited to business execution.

In addition, we are embarking on initiatives that will promote autonomous career development, including implementing planned internal open recruitment in certain divisions, with the aim of developing personnel by encouraging them to take on the challenge of developing new businesses.

In recruiting new graduates from science and engineering backgrounds, we offer opportunities during the selection process for applicants to meet with senior employees, thereby deepening their understanding of our business. In

the actual interviews, department heads from the divisions where candidates are expected to be assigned after joining the Company serve as interviewers, ensuring the recruitment of students who are expected to contribute actively to our business operations. For new graduates from humanities backgrounds, we also emphasize applicants’ willingness to take on the global business challenges the Company is pursuing as part of our selection criteria.

When recruiting candidates who already have experience in the requisite field, interviewers are selected from business divisions to ensure alignment between applicants’ career backgrounds and aspirations and the direction of our business.

Going forward, we will also focus on expanding the recruitment of personnel with advanced expertise directly connected to business needs, such as those holding doctoral degrees.

### Strengthening Management and Global Development Capabilities

Based on the results of the engagement survey, we believe that to raise the level of performance for the organization as

a whole, it is important to enhance the skills of organizational managers who drive the workplace to achieve strategic goals.

Firstly, we consider it important for the organizational managers to develop the skills to enhance the psychological safety and job satisfaction of workplace members, and therefore have strengthened the training to acquire management skills with a view to contributing not only to improved engagement but also to organizational change and innovation.

We also implement educational programs, particularly for young employees, to help them acquire global business skills. In addition to improving skills such as negotiating and giving presentations in English, this training also gives participants the opportunity to learn styles of thinking that have global resonance.

Moreover, we provide the basic and specialized education required for global business, such as language training including study abroad, and workplace rotation for personnel development, including to the Company’s international locations, to drive the global expansion of the Group’s business.

Going forward, we will increase opportunities for employees to acquire management skills that encompass the formulation and execution of growth strategies, the establishment of corresponding management structures, and knowledge of M&A.

## Providing Learning Opportunities That Meet Workplace Needs

Since personnel composition and challenges differ across workplaces, we believe that expanding diverse educational content to meet various learning needs—rather than relying solely on uniform company-wide training—will enable timely and appropriate educational opportunities suited to each workplace’s actual circumstances. To this end, we are expanding our lineup of voluntary training programs. In addition, to support self-development, we have established an online learning platform to create an environment where employees can learn the skills they wish to acquire.

As part of the Group’s ongoing DX initiatives, we are also focusing on DX education. All employees have been categorized into levels according to responsibilities and IT skills, and the target percentage of employees at each level has been set. As we work to achieve these percentages, we are developing an environment to provide appropriate educational content to employees with various skill levels, thereby working to improve IT literacy throughout JSW Group. In addition to the foregoing, we will also work to develop department leaders, familiar with business as well as IT, who will promote digitization of business operations to derive concrete results from DX activities.

Beyond education and training programs, we also actively fast-track young high performers into management in anticipation of future advancement to senior management. We also actively conduct development measures through internal recruitment and rotation.

Indicators	FY2022	FY2023	FY2024
Training cost per employee (thousands of yen)	53.3	58.8	65.8
Number of participants in job level-specific training	266	317	305
Completion rate of job level-specific training (%)	98.1	98.1	98.0
Number of employees newly certified under The National Trade Skill Test & Certification (NTSTC)	100	98	104

## Creating a Work Environment That Increases Engagement

### Building Systems That Promote a Culture of Challenge

### Sharing the Purpose and Guiding Principles for Action

We have been advancing organizational culture reform activities since the fiscal 2023, and to further accelerate these efforts, we established the Five Guiding Principles for Action in fiscal 2025. These guidelines serve as principles for employees’ daily decisions and actions, fostering a culture where all employees are encouraged to take on challenges with courage and to grow through failure rather than fear it.

We are also reviewing our personnel systems to incorporate mechanisms that evaluate and reward employees who take on

challenges. We are currently developing plans to revise the management position system, after which we plan to update the personnel system for general employees.

Regarding the Purpose established in fiscal 2022, we are implementing initiatives led by organizational managers to ensure that all officers and employees can empathize with and internalize it. Since its establishment, organizational managers at each workplace have taken the lead in conducting workshops where employees discuss the relationship between the Purpose and their daily work, thereby promoting a more profound understanding and adoption throughout the organization.



Generating Diverse Perspectives and Ideas

The Group recognizes that the execution of its business strategy hinges on the active participation of diverse human resources that can bring about new added value through a variety of thinking styles and ideas. As a foundation for achieving this, in addition to securing a diverse workforce, we are promoting DEI&B based on the belief that it is essential to ensure equity that enables individuals with different personalities to perform equally well, foster inclusion by creating environments where differences are respected, and cultivate a sense of belonging that inspires strong motivation to contribute to the team through empathy with the Company’s Purpose and Vision.

To ensure diversity in attributes, we are focusing our energies on increasing the ratio of female employees, which currently remains low. In particular, we are working to increase the ratio of female recruits by having female employees actively provide follow-ups to female candidates during the selection process. We also obtained Kurumin certification in fiscal 2025. We are likewise advancing initiatives to recruit persons with disabilities and foreign nationals by utilizing multiple channels and emphasizing alignment between each applicant’s career aspirations and the Company’s opportunities.

To promote diversity in terms of qualities, we launched the Special Talent Recruitment Course for new graduates in fiscal 2024—a recruitment track designed to attract unique individuals through a selection process that differs from conventional methods. This has enabled us to hire students with distinctive experiences and backgrounds that we had not previously been able to reach. We are also strengthening our recruitment of individuals who already have experience in the requisite fields, welcoming those with a wide range of experience, backgrounds, and skills, thereby enhancing workforce diversity. Furthermore, through a rotation system centered on developing young employees and promoting personnel exchange, we are creating an environment where employees with diverse career paths inspire one another as they work toward shared goals.

To ensure that employees with diverse personalities and circumstances can thrive, we continue to promote flexible workstyles while implementing initiatives to enhance communication and mutual understanding within workplaces.

We also provide opportunities for managers to acquire organizational development skills and conduct onboarding programs for recruits with experience to support their smooth integration and success. When hiring individuals with disabilities, we provide pre-hiring training to the receiving departments to ensure a thorough understanding of the necessary considerations.

While we already have female managers active in departments such as sales, technology, and corporate functions, we are further enhancing career training programs for female career-track employees to foster the next generation of leaders.

In addition, we hold roundtable discussions between female employees and female directors and Audit & Supervisory Board members to collect opinions on workplace environments and further improve conditions for women.

As part of our DEI&B initiatives, we also conduct unconscious bias training for all employees to ensure that individuals with diverse personalities and circumstances do not unconsciously restrict their own or others’ opportunities to succeed.



Indicators	FY2022	FY2023	FY2024
Percentage of female new graduate hires for career-track positions (%) <sup>1</sup>	15.6	25.0	22.4
Percentage of women among assistant managers (%)	10.1	10.1	10.1
Number of employees who took childcare leave	38	60	61
Percentage of employees with disabilities (%) <sup>2</sup>	2.46	2.42	2.61

1. The percentage of female new graduate hires for career-track positions is based on the number of women who were offered employment during the fiscal year in question and who joined the Company on April 1 of the next fiscal year.  
2. As of June 1 of each fiscal year



Occupational Health and Safety

Policy for Health and Safety Activities

In JSW Group, which operates primarily in manufacturing, ensuring the health and safety of employees has always been a top priority. We consider our health and safety initiatives to be part of a corporate foundation and corporate culture rooted in

an emphasis on human capital and respect for human rights. We are carrying out these activities in accordance with the policy below, with the aim of maintaining and improving the health of employees and preventing occupational accidents.

1. Basic Philosophy

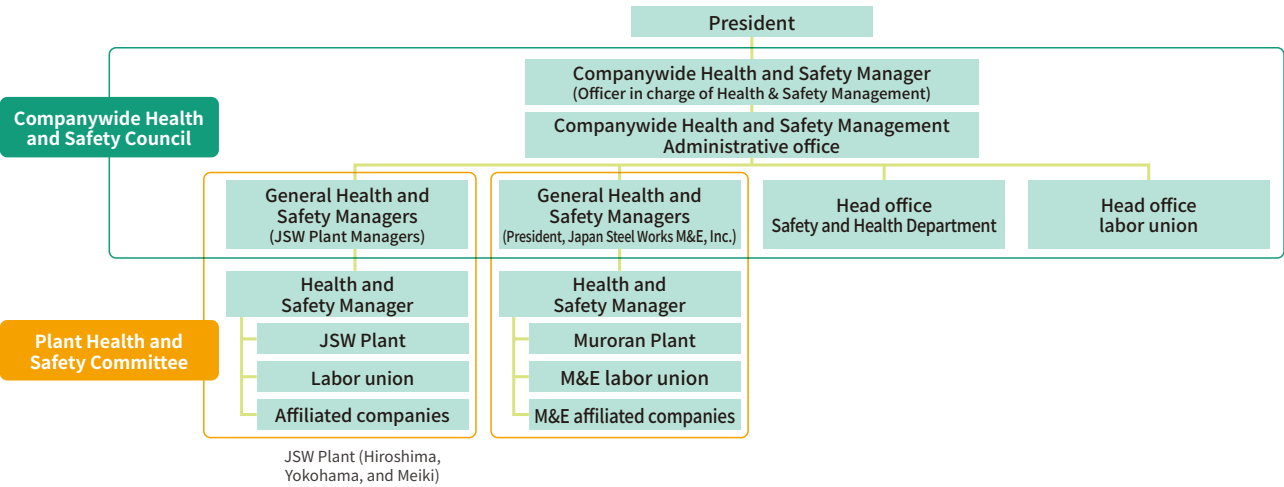
- To fulfill our social responsibility, we have positioned health and safety as a vital part of our management policy, and work to ensure the health and safety of everyone involved in our business.
- We have established and operate an occupational health and safety management system, and prioritize health and safety in all of our business activities to foster workplaces where employees can work safely and with peace of mind.

2. Basic Policy

- (1) We will comply with health- and safety-related laws and regulations, as well as internal standards, and steadily promote their establishment as rules, customs, and culture.
- (2) Based on strong leadership from top management, employees, the labor union, and JSW Group will work in unison to establish a safety management system to prevent occupational accidents and health hazards.
- (3) We will invest the resources necessary for effective workplace improvements.

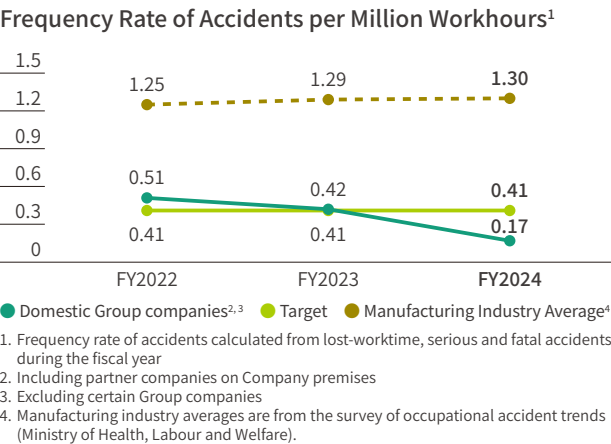
Health and Safety Promotion Structure

The promotion structure for health and safety activities in JSW Group is as follows.



Health and Safety Initiatives and Results

In JSW Group, we specify priority items for health and safety activities each fiscal year, and the Group (as well as the labor union) and suppliers of each plant work together on activities aimed at achieving zero occupational accidents. Our major sites have acquired certification for their occupational health and safety management systems, and are enhancing the effectiveness of their activities. To promote employee health, including mental health care, the Group conducts periodic stress checks and strives to properly manage working hours, among other activities.



Site	Certification	Date Acquired/ Renewed
Hiroshima Plant	ISO 45001	August 27, 2024
Japan Steel Works M&E	ISO 45001	July 10, 2024

# Respect for Human Rights

JSW Group respects internationally recognized codes such as the International Bill of Human Rights and the ILO Declaration on Fundamental Principles and Rights at Work. We also promote efforts to respect human rights based on international guidelines such as the United Nations' Guiding Principles on Business and Human Rights.

In accordance with these, we have established The Japan Steel Works Group Human Rights Policy, which clearly prohibits discrimination, harassment, child labor, and forced

labor; indicates our respect for basic labor rights; and expresses our commitment to respecting all human rights in all aspects of our business activities.

As stated in the supplier survey results, according to the CSR Procurement Survey conducted in fiscal 2023 and the individual confirmations conducted in fiscal 2024, no serious human rights risks were identified among the major suppliers that responded to the questionnaire.

[Respect for human rights: https://www.jsw.co.jp/en/sustainability/social/diversity.html](https://www.jsw.co.jp/en/sustainability/social/diversity.html)

# Supply Chain Management

## Our Perspective and Basic Procurement Policy

JSW Group has established the JSW Group Basic Sustainability Policy, which expresses our commitment to co-creating social value through fair and equitable transactions. In addition, to promote the procurement of goods and services that take into account human rights, labor practices, health and safety, the environment, and information management in pursuit of a sustainable society, we have established the JSW Group Basic Procurement Policy. As a supplementary document, we have also formulated the Request to Business Partners, which outlines

the specific initiatives we ask suppliers to undertake. These policies and requests are disclosed on our website, and through the supplier survey described later, we confirmed the agreement of suppliers who responded. Going forward, we will continue to ensure thorough awareness of these policies and requests, while advancing activities to assess the sustainability initiatives of key suppliers. When necessary, we will also conduct dialogue and other forms of engagement with suppliers to further strengthen risk management and sustainability across the supply chain.

[Supply Chain: https://www.jsw.co.jp/en/sustainability/social/supplychain.html](https://www.jsw.co.jp/en/sustainability/social/supplychain.html)

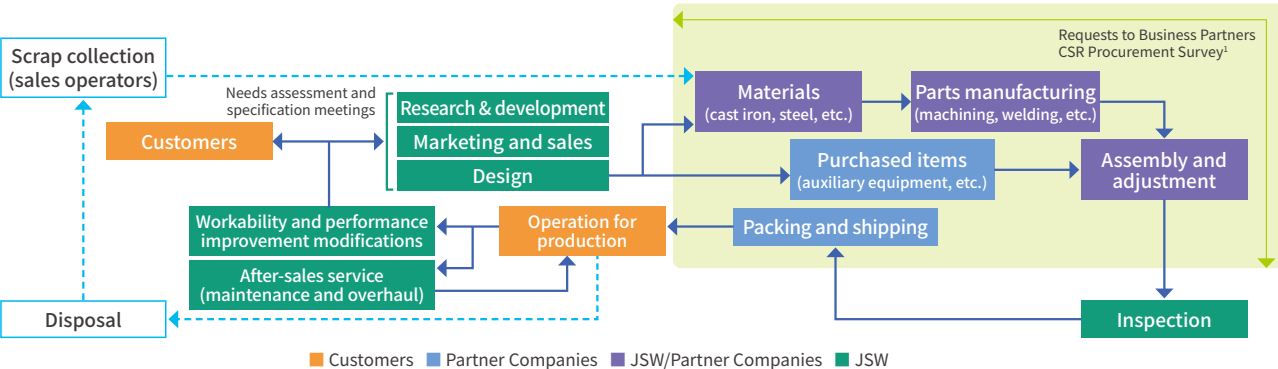
## Supply Chain of the Industrial Machinery Product Segment

An overview of the supply chain for the industrial machinery product segment is shown in the diagram below.

The Group's products are generally manufactured by incorporating customer needs into standardized series of equipment.

We promote in-house production mainly for large-scale and specialized processing, while combining this with the facilities of partner companies to deliver equipment of

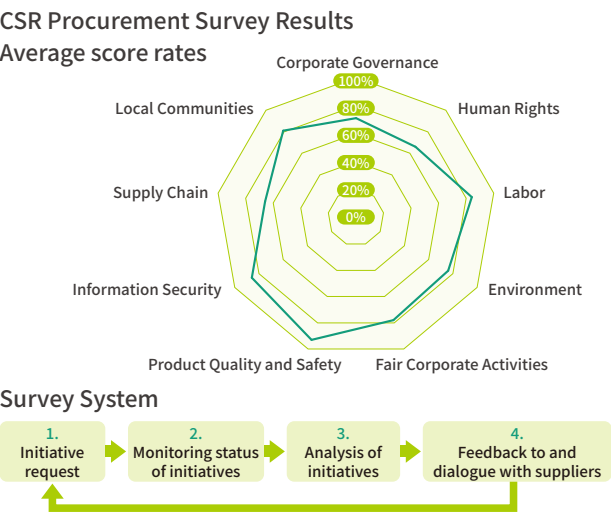
consistently high quality to our customers. To ensure our products continue contributing to production over the long term after delivery, we also place strong emphasis on after-sales services. Some components, once they have fulfilled their function and been disposed of, are reused as materials. Details on how the Muroran Plant manages major raw materials as part of the Group's recycling initiatives are presented on the facing page.



**\*1 CSR Procurement Survey (Supplier Survey Results)**

In fiscal 2023, we conducted a CSR Procurement Survey with 40 business partners in Japan and overseas, and received responses from 31 companies. As shown in the chart on the right, the results for “Human Rights” and “Supply Chain” were relatively low. We contacted the business partners that scored low on questions that could indicate potential serious risks, and confirmed that the low scores were attributable to differences in interpretation or underestimation of their own initiatives, rather than the presence of any serious risks.

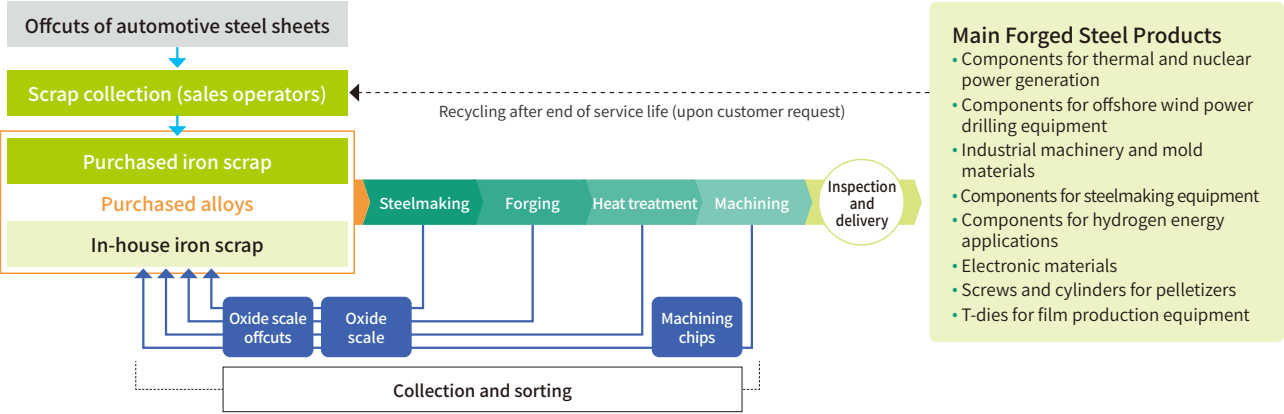
Going forward, we will work to establish a regular survey framework, including revisions to make the questions easier to understand and periodic updates to the survey targets.



## JSW M&E Muroran Plant – Iron Scrap Recycling Chain

At JSW M&E's Muroran Plant, iron scrap is melted in an electric furnace to produce ingots weighing up to 670 tonnes. These are forged, heat-treated, and machined to supply forged steel products of the shapes and qualities required by customers. Because the iron scrap used must be of high

purity, we purchase offcuts generated during steel sheet processing at automobile manufacturers, and also collect, sort, and reuse cutting scraps, oxide scale, and machining chips generated during production within the Muroran Plant (see diagram below).



In addition to iron scrap, we purchase and use alloys such as nickel, chromium, and tungsten. We require suppliers that provide these alloys to ensure strict management to prevent the use of conflict minerals.

## Initiatives for Stable Procurement

To respond to various risks surrounding the supply chain, such as major earthquakes, other natural disasters, and geopolitical risks, we are working to establish a more stable procurement framework.

Through regular discussions at the Risk Management Committee, procurement departments at our production sites take the lead in promoting initiatives to reduce

procurement risks.

In addition, for raw materials and components essential to business continuity, we are implementing a multi-supplier strategy to transition from single-source to multiple-source purchasing, thereby enhancing both the diversification and stability of our procurement activities.



Corporate Governance

Basic Approach

Based on our Philosophy and the JSW Group Basic Sustainability Policy, the Group recognizes that it is essential to earn the trust of all stakeholders, including shareholders, customers, business partners and employees, in order to simultaneously create social value and enhance sustainable corporate value. We therefore continue to strengthen corporate governance to ensure the transparency, soundness and effectiveness of management.

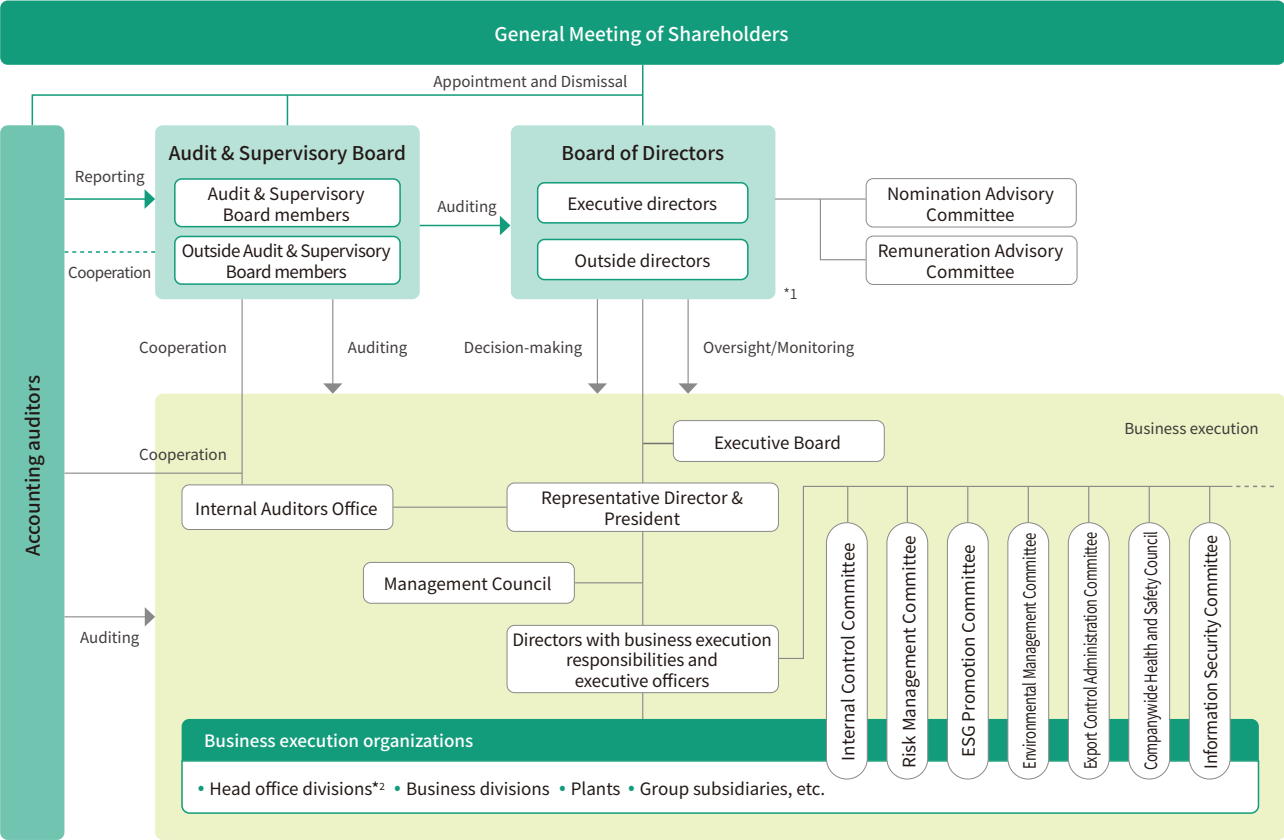
Overview of Corporate Governance Structure

The Japan Steel Works, Ltd. (“the Company”) has adopted the structure of a company with an audit and supervisory board. The Board of Directors consists of ten directors (five of whom are outside directors) and the Audit & Supervisory Board consists of four Audit & Supervisory Board members (two of whom are outside Audit & Supervisory Board members).

The term of office for directors is set at one year. The Company has also introduced an executive officer system that separates management decision-making and supervisory functions from business execution functions conducted by executive officers, thereby speeding up decision-making, strengthening supervision and improving business execution. The Company has implemented a system that, in principle, ensures that in the case of head office divisions directors and executive officers, and for business divisions executive officers and other employees, are each responsible for oversight and business execution for the tasks they are delegated or assigned by the Board of Directors. This clearly delineates business execution of the business divisions from supervision by the Board of Directors.

Audit & Supervisory Board members attend important meetings including those of the Board of Directors, the Executive Board and the Management Council. Once every fiscal half in principle they visit plants, sales locations and Group companies, and receive reports on necessary information from each division. They also exchange opinions with directors, executive officers and other keypersons, and based on these exchanges, advise management from an objective and impartial standpoint, while strictly monitoring the execution of duties by directors.

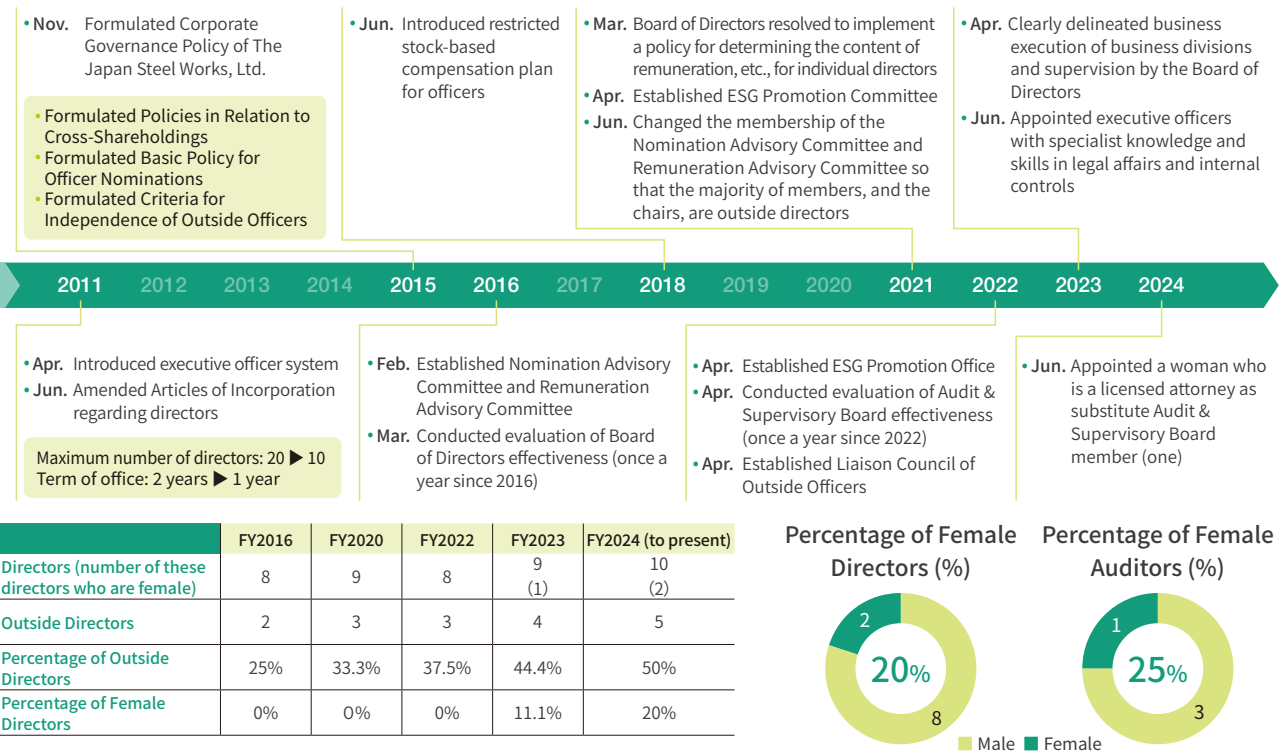
Corporate Governance Structure



\*1 The Liaison Council of Outside Officers was established as a venue to provide outside officers with advance explanations about the agenda for Board of Directors meetings, and as a forum for outside directors and executive officers to verify, report on, and exchange opinions about business execution.

\*2 The quality assurance system involves the Quality Management Office, a head office division, overseeing and guiding quality management activities at the business division or plant level, including those of Japan Steel Works M&E.

Building a Stronger Governance System



Role and Composition of Governance Bodies (As of June 30, 2025)

		Board of Directors	Audit & Supervisory Board	Nomination Advisory Committee	Remuneration Advisory Committee
Composition	Attendees (with voting right)	Directors (5 inside, 5 outside)	Audit & Supervisory Board members (2 inside, 2 outside)	President (1) Officer in charge of Personnel Department (1) Outside directors (5)	
	Attendees (no voting rights)	Audit & Supervisory Board members (2 inside, 2 outside)	—	—	
	Chairperson/Committee Chair	President	Internal auditor	Outside director	
Objectives and Areas of Authority		Decides and reports on basic management policies, matters stipulated by laws and regulations, and other important management matters, and monitors the execution of duties by directors and executive officers	Reports, discusses and makes resolutions on important matters relating to auditing; this does not preclude the exercise of individual Audit & Supervisory Board members' authority	As an advisory body to the Board of Directors, deliberates on matters relating to the nomination and dismissal of directors, Audit & Supervisory Board members and executive officers, and reports the results to the Board of Directors	As an advisory body to the Board of Directors, deliberates on matters relating to the remuneration of directors and executive officers, and reports the results to the Board of Directors
Meetings in FY2024		14	14	6	4

		Executive Board	Management Council	Liaison Council of Outside Officers
Composition	Attendees	Inside directors (5) Non-director executive officers (6)	Inside directors (5) Inside Audit & Supervisory Board members (2) Non-director executive officers (8) Business division directors and business division deputy directors, general plant managers, head office division managers	Directors (3 inside, 5 outside) Audit & Supervisory Board members (2 inside, 2 outside)
	Observers (no voting rights)	Inside Audit & Supervisory Board member (1)	—	—
	Chairperson	President	President	President
Objectives and Areas of Authority		Deliberates and decides on important management matters and matters that have a significant impact on the Company's profit and loss	Coordinates and reports on the following important management matters and shares management information	Gives advance explanation of the resolution matters and deliberation matters of the Board of Directors, and reports on the status of operations and important management matters of the Company and the Group
Meetings in FY2024		42	11	12

Major Matters Discussed at the Board of Directors Meetings in FY2024

<ul style="list-style-type: none"><li>• Formulation of new medium-term management plan JGP2028</li><li>• Basic business portfolio policy</li><li>• Executive appointments and governance structure</li><li>• Reviewing our organizational design</li><li>• Annual activity plan for Board of Directors</li><li>• Evaluation of the effectiveness of the Board of Directors</li><li>• Changes to rules for approval requests</li><li>• Status of operations of internal control systems</li><li>• Report on the status of compliance line operations</li><li>• Risk management</li><li>• Verification of the rationale for cross-shareholdings</li></ul>	<ul style="list-style-type: none"><li>• Analysis of voting results</li><li>• Feedback on IR/SR activities</li><li>• Medium-term personnel plan</li><li>• Analysis of engagement survey results</li><li>• Report on intellectual property activities</li><li>• IT governance policy</li><li>• Progress status of new businesses</li><li>• Measures to prevent recurrence of inappropriate conduct</li><li>• Integrated report</li><li>• Corporate governance report</li></ul>
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Evaluation of Board of Directors’ Effectiveness

The Board of Directors continues to enhance its functions by conducting an annual questionnaire-based analysis and evaluation. The following is a summary of the analysis and evaluation for fiscal 2024.

Analysis and evaluation methodology

- (1) During January 2025, an anonymous questionnaire was administered to all directors and Audit & Supervisory Board members. The planning of the subjects covered and the collection and tabulation of the survey results were outsourced to a third-party organization.

(2) The Board of Directors Secretariat compared the results of the questionnaire with previous evaluations, and recompiled and analyzed the results, including identifying subjects given low evaluations and extracting important comments from the open-ended responses. In addition, the secretariat compiled and analyzed data on discussion times in fiscal 2024 and verified differences between annual activity plans and actual results.
- (3) At the March 2025 Board of Directors meeting, the board discussed its effectiveness from the perspective of improving the medium-to-long-term corporate value of the entire Group, based on the compiled results of the questionnaire, the re-tabulation and analysis of those results by the Board of Directors Secretariat, and advice from a third-party organization.

Questionnaire content

- I. Appropriateness of purpose, structure, and management of the Board of Directors
- II. Adequacy of monitoring and deliberation by the Board of Directors
- III. Director performance
- IV. State of information sharing and disclosure, including shareholder response

Analysis & Evaluation Results and Future Initiatives

Our Board of Directors has been advancing initiatives to address the issues identified in the effectiveness evaluation for fiscal 2023, as shown in the table below. We confirmed in the effectiveness evaluation for fiscal 2024 that this has resulted in steady improvement on each issue and that the effectiveness

of the Board of Directors is generally being ensured.

We also shared the view that, in fiscal 2025, we should continue to examine the issues listed in the table below in greater depth and pursue them on an ongoing basis to further strengthen the effectiveness of the Board of Directors.

Issue	Initiatives in FY2024	Deep-Dive Issues and Initiatives for FY2025
(1) Enhancement and strengthening of human capital, and verification and discussion through visualization	<ul style="list-style-type: none"><li>• Formulation of a medium-term personnel plan addressing talent acquisition amid declining birthrates, promotion of greater diversity through more proactive hiring of women, reinforcement of employee training systems, and related initiatives from a medium-to-long-term perspective</li></ul>	<ul style="list-style-type: none"><li>• Reviewing further advancement of our human capital strategy, including systemic revisions, based on analysis of the engagement survey results</li><li>• Ramping up positive action to promote women’s careers</li></ul>
(2) Enhancement, strengthening, verification, and discussion of value creation capabilities and innovation management	<ul style="list-style-type: none"><li>• Formulating and disclosing 5-year medium-term management plan JGP2028</li><li>• Laying the groundwork for business transformation through the use of digital technologies and recognition as a DX Certified Company by METI</li><li>• Progress report on the current status of new business development</li></ul>	<ul style="list-style-type: none"><li>• Supervision by the Board of Directors of progress under the medium-term management plan and whether execution of individual businesses and our strategy are aligned</li><li>• Initiatives to expand production capacity through capital investment, manufacturing in optimal locations, and mutual complementation</li><li>• Reviewing establishment of a new R&amp;D center to develop innovative technologies</li></ul>
(3) Current analysis and evaluation of capital profitability as well as the creation, implementation, verification, and discussion of plans to achieve management with an awareness of stock prices	<ul style="list-style-type: none"><li>• Calculating ROIC for each business division and verifying the appropriateness of the capital profitability business portfolio</li></ul>	<ul style="list-style-type: none"><li>• Conducting biannual reviews of the business portfolio and reporting to and deliberating with the Board of Directors</li><li>• Conducting regular follow-up on resolution matters of the Board of Directors</li><li>• Selecting and selling designated holdings to reduce cross-shareholdings</li></ul>

Introduction	How We Create Value	Foundations for Creating Value	Data
Issue	Initiatives in FY2024	Deep-Dive Issues and Initiatives in FY2025	
(4) Enhancement, verification, and discussion of information disclosure and dialogue with stakeholders, including shareholders and employees	<ul style="list-style-type: none"><li>• Expanding reporting to the Board of Directors on SR/IR meetings from twice yearly to quarterly based on the policy under the new medium-term management plan and providing feedback from investors to the Board of Directors</li><li>• Conducting shareholder surveys to understand the needs of individual shareholders</li></ul>	<ul style="list-style-type: none"><li>• Improving engagement through frequent dialogue with shareholders and investors and reflecting the insights gained in business strategy and capital policy through detailed reporting to the Board of Directors</li><li>• Publicly communicating the status of dialogue with shareholders and investors</li><li>• Strengthening English-language disclosure and bringing forward its timing</li></ul>	
(5) Enhancement, strengthening, verification, and discussion of Group governance, compliance, internal control, risk management, and organizational culture reform efforts	<ul style="list-style-type: none"><li>• Discussion by the Board of Directors on the optimal organizational design at present, including whether to transition to a company with committees</li><li>• Revising approval standards and enhancing delegation of authority to executive officers to facilitate faster decision-making involving business execution</li><li>• Establishing the Risk Management Group, bringing to light potential risks and recognizing issues in each division, and institutionalizing regular reporting to the Board of Directors</li><li>• Establishing Five Guiding Principles for Action and Company Commitments to facilitate cultural renewal</li></ul>	<ul style="list-style-type: none"><li>• Strengthening internal control promotion activities</li><li>• Reinforcing the Group’s governance structure, including at international locations</li><li>• Rolling out new whistleblowing systems at international locations</li><li>• Establishing an IT Governance Committee, strategically leveraging IT, and strengthening information risk management</li></ul>	

Evaluation of the Audit & Supervisory Board’s Effectiveness

The Audit & Supervisory Board conducts an annual effectiveness evaluation to improve the quality of its audits and its effectiveness overall. In the evaluation in fiscal 2024, the four Audit & Supervisory Board members, the president, one outside director, and the general manager of the Internal Auditors Office, answered a questionnaire about the effectiveness of the board’s responsibilities, composition, and operations; Group audits; interaction with the Board of Directors; its three-way audits; and internal controls.

Fiscal 2024’s evaluation results verified that audit activities were generally implemented appropriately and effectively in response to the areas for improvement, which were (1) ensuring sufficient opportunities for deliberations by the Audit & Supervisory Board, (2) auditing of divisions and locations at the middle and end of the fiscal year, (3) sharing group issues with outside directors (by holding exchange of opinion meetings four times a year), (4) exercising rigorous judgment regarding compensation for accounting auditors, (5) verifying the full-scale rollout of the enterprise risk management (ERM) system, (6) confirming that employees are fully aware of the establishment and enforcement of the escalation regulations,

and (7) verifying the information security systems at overseas subsidiaries. The results also identified additional areas that if improved would allow the Audit & Supervisory Board to be even more effective, which among others included (1) utilizing outside experts in the Audit & Supervisory Board, (2) enhancing internal control system auditing at Group companies, (3) bolstering cooperation with the Internal Audit Division, and (4) strengthening auditing of ERM activities.

As audit policies for fiscal 2025, we are actively (1) auditing internal controls of the corporate group from the perspective of group management and group governance, (2) verifying proper companywide risk control based on the three lines model to support efforts toward the goal set forth in JGP2028, (3) focusing on the construction and operation status of internal controls and the state of efforts in each division to address issues during the term, and on follow-up and the execution status of the PDCA cycle in business execution at the end of the term, (4) developing a cooperative system with JSW Group auditors, and (5) bolstering cooperation with the Internal Auditors Office and accounting auditors.

Skill Matrix

We recognized the importance of materiality and selected the skills needed to implement management initiatives aimed at resolving the associated issues. During the selection of candidates for directors at the Annual General Meeting of Shareholders in June 2025, we increased and strengthened

human resources with a global perspective and broad marketing skills and knowledge, and are working to create value through our Group’s businesses and resolve social issues.


➡ p.66 Management Team

Reasons for Appointment of Outside Directors

JSW believes that the function and role of outside directors in corporate governance is to strictly supervise the execution of duties by directors and to make management judgments and decision-making from a neutral and objective standpoint with no conflict of interest with the Company, and from an

independent standpoint with no risk of conflict of interest with general shareholders. To that end, the Company has appointed five outside directors.

The roles expected of outside directors are stipulated in the Corporate Governance Policy.

 For information on the Corporate Governance Policy of The Japan Steel Works, Ltd., please refer to our website.

[https://www.jsw.co.jp/pdf/sustainability/governance/governance/GovernancePolicy\\_en.pdf](https://www.jsw.co.jp/pdf/sustainability/governance/governance/GovernancePolicy_en.pdf)



Officers’ Remuneration

The Company’s policy for determining the directors’ remuneration (the “policy for determining”) was partially revised at the Board of Directors meeting held on April 5, 2024, with the aim of enhancing incentive effectiveness for achieving the medium-term management plan JGP2028 and further promoting shared interests with shareholders.

(Outline of the revision of the policy for determining and review of the officers’ remuneration system)  
The Company has eliminated bonuses across the board and increased the proportion of stock-based remuneration as a long-term incentive for representative directors. The Company has also changed evaluation indicators for performance- and results-linked remuneration (variable remuneration) to include consolidated operating income, consolidated ROE (return on equity), and results of medium-to-long-term initiatives. These changes are designed to fortify incentives (short and medium-to-long term) to achieve the JGP2028 medium-term management plan.

Analysis and Evaluation Method

1 Basic Policy for Directors’ Remuneration

The maximum amount of directors’ remuneration is decided by resolution of the General Meeting of Shareholders. Remuneration is positioned as an incentive for executing sustainability management to realize our Purpose and Vision. The basic policy is to set remuneration at a level corresponding to respective roles and responsibilities, ensure objectivity and transparency in the decision-making process, and establish a remuneration system that aligns the interests of directors with those of shareholders.

The Company regularly verifies the appropriateness of the level and composition of directors’ remuneration based on benchmarks from companies of similar size and relevant industry/type and salary levels of the Company’s employees.

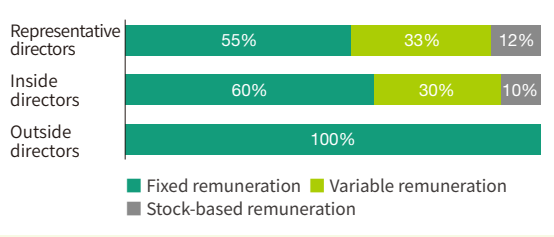
2 Procedures for Determining Directors’ Remuneration

The directors’ remuneration is determined by the Board of Directors after receiving a report from the Remuneration Advisory Committee. However, the allocation of annual remuneration by position and individual allocation may be delegated to the president by resolution of the Board of Directors. In this case, the president makes decisions in accordance with the content of the report.

3 Composition of Directors’ Remuneration

The composition and percentage breakdown of directors’ remuneration are as follows:

- (1) **Representative director & president and representative director & executive vice president**  
The composition shall be annual remuneration (1) base portion, (2) companywide performance-linked portion, and (3) efforts to improve medium-to-long-term corporate value and stock-based remuneration. The approximate ratio of fixed remuneration (1) base portion: variable remuneration (2) and (3): stock-based remuneration is 55:33:12.
- (2) **Inside directors**  
The composition shall be annual remuneration ((1) base portion, (2) companywide performance-linked portion, (3) results-linked portion, and (4) efforts toward medium-term action plan items and quality/safety/compliance initiatives as medium-to-long-term measures) and stock-based remuneration. The approximate ratio of fixed remuneration ((1) base portion): variable remuneration ((2), (3) and (4)): stock-based remuneration is 60:30:10.
- (3) **Outside directors**  
Outside directors, who are responsible for supervisory functions, shall be paid only fixed remuneration (base portion of annual remuneration) in consideration of their independence from management, objectivity, and in light of their supervisory duties, which include mutual checks on directors.



4 Matters Relating to the Method of Calculation of Directors’ Remuneration, etc.

The summary of each type of remuneration is as follows. Variable remuneration is calculated by comparing actual performance against quantitative evaluations such as companywide performance and results-linked portions, as well as qualitative assessments of efforts contributing to medium-to-long-term growth and other indicators, and multiplying the percentage of achievement by the base amount of remuneration for each position.

- (1) **Base portion**  
The base portion is fixed remuneration determined on the basis of the particular position.
- (2) **Companywide performance-linked portion**  
The companywide performance-linked portion is variable remuneration that is determined on the basis of the consolidated performance of the previous fiscal year and consists of a consolidated operating income portion and a consolidated ROE (return on equity) portion.  
This indicator was selected because of its importance in terms of indicating how performance directly links to the companywide performance targets in the medium-term management plan.
- (3) **Results-linked portion**  
The portion linked to results is determined as variable remuneration based on the performance evaluation for the previous fiscal year of the division for which the director is in charge.
- (4) **Evaluation of representative directors’ efforts to improve medium-to-long-term corporate value**  
The Company consults the Remuneration Advisory Committee on the results of efforts to achieve materiality (Creating Value and Solving Social Issues through JSW Group’s Businesses and Bolstering JSW Group’s Management Foundation for Sustainable Growth), which it then reviews and incorporates into remuneration.
- (5) **Evaluation of inside directors’ efforts toward medium-to-long-term measures**  
The Company consults the Remuneration Advisory Committee on the results of efforts toward medium-term action plan items and quality/safety/compliance initiatives, which it then reviews and incorporates into remuneration.
- (6) **Stock-based remuneration**  
Stock-based remuneration is granted in the form of restricted transferable shares as remuneration for the purpose of providing medium-to-long-term incentives to increase corporate value and to further the sharing of value with shareholders. The number of shares to be allocated shall be the number of shares obtained by dividing the standard amount by position according to the director’s position by the closing price of the Company’s shares on the Tokyo Stock Exchange on the day before the date of resolution by the Board of Directors regarding the execution of the restricted stock remuneration allocation agreement. Moreover, in consideration of the period of time it takes management measures to contribute to business performance, the restricted transfer period is set by the Board of Directors in advance for a period between three and five years (currently five years in accordance with the five-year medium-term management plan JGP2028).

5 Remuneration for Audit & Supervisory Board Members, etc.

The remuneration of each Audit & Supervisory Board member shall consist only of fixed remuneration (base portion of annual remuneration) from the viewpoint of emphasizing independence and objectivity with respect to management.

Group Governance

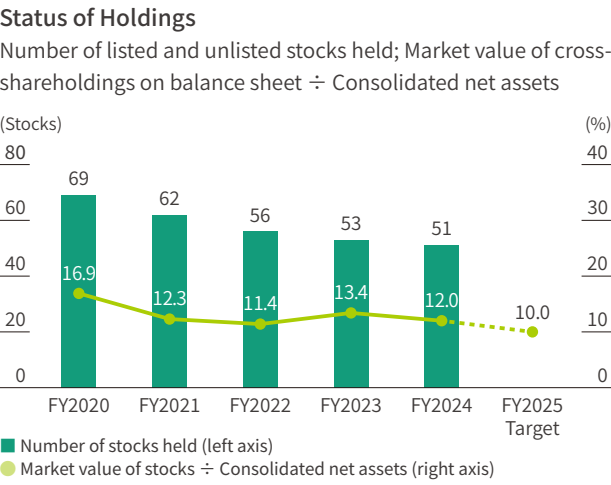
For Group companies, the JSW business division with primary responsibility leads the formulation of management policies and management plans and monitors their progress. In order to enhance the effectiveness of these efforts, we assign full-time or part-time directors or Audit & Supervisory Board members with the responsibility of supervising and auditing the execution of duties at Group companies, in principle, thereby ensuring that the execution of duties at Group companies complies with laws and regulations and the Articles of Incorporation. In addition, regarding risks relating to specific functions, such as quality control, health and safety, environmental management, and export control administration, each Group company participates in the various committees formed by the relevant divisions of the Company, or follows the regulations developed by the Company, and appropriately manages these risks. We also intend to carry out the absorption-type merger of Japan Steel Works M&E, a major subsidiary of our Group, into the parent in April 2026, thereby further strengthening governance

through the unification of corporate functions.  
Each company in the Group also appoints individuals to be in charge of general affairs, accounting, and IT matters related to internal control. The appointed individuals receive guidance and training from the Internal Control Committee Office and conduct self-assessment of implementation and operation of internal control in step with risk assessment. The status and results of the self-assessment of internal control operations are systematically reported to the office and each company. The Internal Audit Division also monitors the governance and risk management status of each company by directly or indirectly auditing the status of each company and the methods and results of self-assessments.  
In addition to domestic Group companies, the whistleblowing system has been deployed in Group companies in China and South Korea, and in the future we intend to roll out the system sequentially in other overseas Group companies in countries such as the United States.



Cross-Shareholdings

1 Policy on Cross-Shareholdings	The Company holds shares that it judges to be necessary for policy purposes through regular confirmation and review and that contribute to the Company’s businesses over the medium to long term in ways such as maintaining and strengthening sound, ongoing relationships with business partners, forming business alliances, and supporting the sound development of investee companies.
2 Regular Confirmation and Review of Shareholdings	Each year, the Company confirms the purpose of individual cross-shareholdings and current transaction status, etc., and the Board of Directors verifies whether shareholdings are appropriate by comprehensively considering the significance and purpose of the Company’s acquisition and holding of the shares, as well as the safety, profitability, economic viability, risks and other factors associated with the shareholdings.
3 Policy on Exercise of Voting Rights	The Company makes decisions on the exercise of voting rights by confirming the details of each proposal from the standpoint of the business conditions of the investee company, its business relationship with the Company, improvement in its medium-to-long-term corporate value, and its social responsibilities, while following predetermined voting rights exercise standards.

Based on the Corporate Governance Policy of The Japan Steel Works, Ltd., we regularly confirm and review the significance of our cross-shareholdings, and we are gradually selling shares whose significance has diminished.  
In addition, the medium-term management plan JGP2028 sets forth a cash allocation plan to ensure an appropriate balance between investment in growth and shareholder returns in order to sustainably increase corporate value, and as part of this, the Company plans to reduce its cross-shareholdings to less than 10% of net assets by the end of fiscal 2025. We report and review the status of this initiative regularly at meetings of the Board of Directors.



## Directors / Audit & Supervisory Board Members

							
<div>Hisao Mitsui</div> <div>Director <span>Independent Officer</span></div>	<div>Junko Kawamura</div> <div>Director <span>Independent Officer</span></div>	<div>Yasuyuki Kuriki</div> <div>Director <span>Independent Officer</span></div>	<div>Nobuko Mizumoto</div> <div>Director <span>Independent Officer</span></div>	<div>Shingo Mito</div> <div>Audit &amp; Supervisory Board Member (Full-Time)</div>	<div>Motoyuki Shiba</div> <div>Audit &amp; Supervisory Board Member (Full-Time)</div>	<div>Saori Yamaguchi</div> <div>Audit &amp; Supervisory Board Member <span>Independent Officer</span></div>	<div>Shinya Unno</div> <div>Audit &amp; Supervisory Board Member <span>Independent Officer</span></div>
<div>Apr. 1978 Joined Kao Soap Co., Ltd. (currently Kao Corporation)</div> <div>Jun. 2006 Executive Officer, Kao Corporation</div> <div>Jun. 2010 Director and Executive Officer, Kao Corporation</div> <div>Jun. 2012 Director and Managing Executive Officer, Kao Corporation (retired in March 2014)</div> <div>Apr. 2015 Auditor, National Institute of Technology and Evaluation (retired in June 2019)</div> <div>Jun. 2020 Director, the Company (current position)</div> <div>Jun. 2020 Outside Auditor, LiveDo Corporation (current position)</div>	<div>Apr. 1979 Joined the Ministry of Education (currently Ministry of Education, Culture, Sports, Science and Technology, Japan)</div> <div>Aug. 1988 Councillor, Legislative Bureau of the House of Representatives</div> <div>Apr. 2006 Board Member, National Institute of Technology</div> <div>Jul. 2008 Director of Private Education Institution Department, Higher Education Bureau, Ministry of Education, Culture, Sports, Science and Technology</div> <div>Sep. 2011 General Manager, Department of Facilities Planning, Minister's Secretariat, Ministry of Education, Culture, Sports, Science and Technology</div> <div>Jan. 2012 Deputy Commissioner, Agency for Cultural Affairs</div> <div>Jul. 2014 Director-General, Lifelong Learning Policy Bureau, Ministry of Education, Culture, Sports, Science and Technology</div> <div>Jan. 2016 Director General, National Institute for Educational Policy Research</div> <div>Jun. 2016 Counsellor, Cabinet Secretariat (retired in September 2017)</div> <div>Apr. 2018 President, Japan Arts Council (retired in March 2023)</div> <div>Jun. 2023 Director, the Company (current position)</div>	<div>Apr. 1979 Joined Tokyo Electron Ltd.</div> <div>Apr. 1999 Executive Officer, Tokyo Electron Ltd. (retired in March 2005)</div> <div>Apr. 2005 President &amp; Representative Director, Tokyo Electron Korea Ltd. (retired in May 2010)</div> <div>Jun. 2010 President &amp; Representative Director, TOKYO ELECTRON DEVICE LIMITED (retired in June 2015)</div> <div>Jan. 2015 Corporate Director, TOKYO ELECTRON DEVICE LIMITED (retired in June 2015)</div> <div>Jul. 2015 Representative Chairman, Tokyo Electron Korea Ltd. (retired in June 2018)</div> <div>Jul. 2018 Chairman, Tokyo Electron Korea Ltd. (retired in June 2019)</div> <div>Jul. 2019 Senior Advisor, Tokyo Electron Korea Ltd. (retired in March 2020)</div> <div>Jun. 2023 Director, the Company (current position)</div>	<div>Apr. 1982 Joined Ikhikawajima-Haima Heavy Industries Co., Ltd. (currently IHI Corporation)</div> <div>Oct. 2008 General Manager, Recruiting Group, Personnel Division, IHI Corporation</div> <div>Apr. 2012 General Manager of Corporate Social Responsibility Division, IHI Corporation</div> <div>Apr. 2014 Executive Officer, General Manager of Group Business Process Platform Control Division, IHI Corporation</div> <div>Apr. 2016 Executive Officer, General Manager of Procurement Strategy Planning, IHI Corporation</div> <div>Apr. 2017 Managing Executive Officer, General Manager of Procurement Strategy Planning, IHI Corporation</div> <div>Apr. 2018 Managing Executive Officer, General Manager of Intelligent Information Management Headquarters, IHI Corporation</div> <div>Apr. 2020 Director, IHI Corporation (retired in June 2023)</div> <div>Jul. 2020 Advisor, Executive Fellow, IHI Corporation</div> <div>Apr. 2021 Advisor, IHI Corporation (retired in June 2023)</div> <div>Jun. 2021 External Director who is an Audit and Supervisory Committee Member, Tokiyama Corporation (current position); Outside Director, Talkisha Ltd. (retired in June 2023)</div> <div>Jun. 2023 Outside Director, Kkamura Corporation (current position)</div> <div>Jun. 2024 Director, the Company (current position)</div>	<div>Apr. 1984 Joined the Company</div> <div>Jul. 2006 General Manager, Personnel Department</div> <div>Jul. 2011 Deputy General Plant Manager, Hiroshima Plant</div> <div>Apr. 2014 Deputy Director of Machinery Business Division</div> <div>Apr. 2016 Deputy Director of Research and Development Headquarters</div> <div>Apr. 2017 Executive Officer Oct. 2017 Deputy Director of New Business Promotion Headquarters</div> <div>Apr. 2021 Director &amp; Executive Officer</div> <div>Apr. 2022 Director &amp; Managing Executive Officer</div> <div>Apr. 2023 Director, the Company</div> <div>Jun. 2023 Audit &amp; Supervisory Board Member (Full-Time) (current position)</div>	<div>Apr. 1986 Joined the Company</div> <div>Jun. 2015 Deputy General Plant Manager, Hiroshima Plant</div> <div>Apr. 2018 General Manager, Finance &amp; Accounting Department</div> <div>Apr. 2020 Director, Japan Steel Works M&amp;E, Inc. General Manager, Business Promotion Officer</div> <div>Apr. 2022 Executive Officer, the Company; In charge of Export Control Administration, General Manager, Personnel Department</div> <div>Apr. 2023 In charge of Health &amp; Safety Management</div> <div>Jun. 2023 Director &amp; Executive Officer</div> <div>Apr. 2024 Director &amp; Managing Executive Officer; CSO; In charge of CSR &amp; Risk Management</div> <div>Jul. 2024 In charge of Personnel Department</div> <div>Apr. 2025 Director</div> <div>Jun. 2025 Audit &amp; Supervisory Board Member (Full-Time) (current position)</div>	<div>Apr. 1982 Joined MITSUBISHI GAS CHEMICAL COMPANY, INC. (retired in July 1985)</div> <div>Oct. 1986 Joined Tohmatsu Awoki &amp; Sawna (currently Deloitte Touche Tohmatsu LLC)</div> <div>Aug. 1990 Registered as a Certified Public Accountant</div> <div>Jun. 2005 Appointed Partner at Deloitte Touche Tohmatsu LLC (retired December 2019)</div> <div>Jan. 2009 Member of the Defense Equipment Procurement Council, Ministry of Defense (retired in December 2018)</div> <div>Dec. 2019 Established Yamaguchi Saori Certified Public Accountant Firm Representative (current position)</div> <div>Jun. 2023 Audit &amp; Supervisory Board Member, the Company (current position)</div>	<div>Apr. 1980 Joined The Long-Term Credit Bank of Japan, Ltd.</div> <div>Oct. 1999 Joined Chugai Pharmaceutical Co., Ltd.</div> <div>Mar. 2005 General Manager of Corporate Planning Department, Chugai Pharmaceutical Co., Ltd.</div> <div>Mar. 2006 Executive Officer, Chugai Pharmaceutical Co., Ltd.</div> <div>Mar. 2010 Managing Executive Officer, Chugai Pharmaceutical Co., Ltd.</div> <div>Apr. 2016 Senior Executive Officer, Chugai Pharmaceutical Co., Ltd.</div> <div>Apr. 2020 Vice President &amp; Executive Officer, Chugai Pharmaceutical Co., Ltd.</div> <div>Apr. 2022 Advisor, Chugai Pharmaceutical Co., Ltd. (retired in March 2023)</div> <div>Jun. 2023 Chairman and Park President, Sankeien Hoshokai Public Interest Incorporated Foundation (current position)</div> <div>Jun. 2024 Audit &amp; Supervisory Board Member, the Company (current position)</div>
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Shoji Nunoshita Managing Executive Officer	Takeshi Shinmoto Managing Executive Officer	Masayuki Aoyama Executive Officer	Miki Sawai Executive Officer	Kengo Takeya Executive Officer	Sadao Tanigawa Executive Officer	Toshiyuki Ninomiya Executive Officer	Tadashi Chimura Executive Officer
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# Roundtable Discussion with Outside Directors



A roundtable discussion was held with five outside directors to examine the evolution of governance and management, the two synergistic drivers of our next stage of growth. Participants gave candid views on, among other topics, changes over the past year, progress in addressing management issues, and matters that needed to be shored up going forward.

## Changes in Management and Governance over the Past Year

**Moderator:** I would like to begin by looking back over the past year and asking for your comments on the changes you have observed in management and governance.

**Nakanishi:** Until recently, I would say we continued with a defensive approach to management aimed at gaining a firmer footing, but over the past year I feel we have been gradually shifting toward more aggressive management. Our investments and other initiatives have become more dynamic, and I believe this past year marked the point at which we took our first steps toward the Vision for FY2033, with its stated target of growing into a corporate group with net sales of 500 billion yen.

**Mitsui:** The sheer magnitude of the recent changes in the business environment is particularly striking to me. It was a year in which I felt an urgent need for management to respond with greater flexibility to major

changes, such as declining demand for separator film manufacturing equipment even as demand for defense equipment and materials for power plants surged.

**Kawamura:** As Japan’s declining birthrate becomes an ever more serious issue, I believe that staying on top of developments in the labor market is gaining importance, and at an accelerating pace. I believe that for our Group to improve corporate value over the medium to long term, it will be critically important for us both to promote DX in our operations to save labor and improve efficiency, and to consider and implement measures to secure personnel for the future.

**Kuriki:** I make a point of attending the president’s briefing sessions held at each plant, and I’ve sensed an air of openness among everyone at the plants. This was a year in which, having seen everyone report to the president and officers without fear of speaking up, I truly felt the reforms to our organizational culture were steadily moving in the right direction.

**Mizumoto:** I was appointed as an outside director in June 2024. I spent the first half of my time at my previous manufacturing employer as a researcher. I then worked in several head office departments and was also involved in DX toward the end of my tenure. It has only been a year since my appointment, so I have not had much time to observe changes, but my impression is that our Group possesses truly outstanding technologies. Our Purpose, Material Revolution, resonates with me powerfully, and I hope to work together with all of you to consider the strategies through which our Group will grow by embodying “making the world sustainable and prosperous.”

## Progress to Date and Future Plans for Key Areas Requiring Action Identified in Last Fiscal Year’s Evaluation of the Effectiveness of the Board of Directors

### Enhancing Value Creation and Innovation Management

**Moderator:** Some of the key areas requiring action identified in last fiscal year’s evaluation of the Board of Directors included “enhancing value creation capabilities and innovation management,” “current analysis and evaluation of capital profitability and plans to achieve management with an awareness of stock prices,” and “enhancing information disclosure and dialogue with stakeholders, including shareholders and employees.” First, how do you view the progress that has been made on “enhancing value creation capabilities and innovation management,” and what are your thoughts on issues such as areas where further strengthening may be needed?

**Mitsui:** I have heard that in the past horizontal partnership between our plants was inadequate, but with the establishment of the Innovation Management Headquarters in 2023, I feel that such partnership has been gaining momentum. We also plan to build a new research and development center, and going forward I anticipate that integrated, overarching insight into each R&D “seed” will be strengthened, leading to even greater utilization and implementation across our various businesses.

**Kawamura:** I also feel that we are managing our intellectual property better. For example, we have also been able to share information on and discuss not only domestic but also overseas patent acquisition and utilization more

extensively than before. I think things will improve even further as the organization as a whole sharpens its sense for how intellectual property is intertwined with business.

**Mizumoto:** I believe that “co-creation” will be the key concept involved in the strengthening of our value creation capabilities. We could, of course, collaborate more actively with other industries, such as chemical manufacturers, but also more actively within the Company.



**Nakanishi:** In today’s climate, it has become difficult to operate in a self-contained manner. I think we should broaden our areas of engagement beyond their current scope and collaborate in various ways with businesses different from those of our Group, such as businesses upstream and downstream from us in the supply chain.

**Kawamura:** I believe that existing businesses should be discussed separately from new businesses at meetings of the Board of Directors. As you all have noted, our existing businesses are at a stage where two axes need to be strengthened: cross-organizational leveling-up of technological innovation, and execution of initiatives to improve profitability and to open up and expand markets. Meanwhile, we need a new axis for the creation of new businesses that is not overly constrained by short-term economic rationality but instead approaches initiatives from a medium-to-long-term perspective, taking into account factors such as social impact and the sustainability of the business.

**Nakanishi:** With regard to our new business development efforts, the Board is discussing the organizational design and system of the new R&D center, as well as the functions it should have. What I believe will be important going forward is strengthening the mechanisms that will carry the “seeds” generated in R&D through to their implementation in society.



**Mitsui:** It will also be necessary to conduct management while looking ahead to when the seeds we sow will be ready to harvest. We must also discuss in greater depth what sort of time horizon is appropriate for which research theme.

**Kuriki:** I have the impression that our Group exhibits exceptional perseverance in its R&D efforts. I feel that the plans for tackling our R&D themes aimed at developing new businesses and products on a ten-year timeline are rather conservative. I feel that it might be better for certain themes to be handled with a greater sense of urgency.

**Nakanishi:** I think it would also be beneficial to better visualize the overall picture so that we can see at a glance the current level of our innovation themes, the time horizons for bringing each to profitability, and their current progress.

**Current Analysis and Evaluation of Capital Profitability and Plans to Achieve Management with an Awareness of Stock Prices**

**Moderator:** Next, let’s discuss “current analysis and evaluation of capital profitability and plans to achieve management with an awareness of stock prices.” How is that coming along?

**Nakanishi:** We have made progress on the analysis of the current status of each business from the standpoint of capital profitability. An overarching view of the business portfolio, detailing for example where each business is positioned, has also been shared at the Board of Directors. Moreover, with these being concretely illustrated through such means as ROIC trees for each business and with KPIs and action policies also being incorporated, we are able to see, in addition to the measures themselves, other information such as how they are progressing.

**Kawamura:** We have begun describing how things are looking from an ROIC management perspective not only at the Board of Directors but also during briefings at each plant, and I feel that over the past year we have made significant progress in terms of how well this way of viewing things has been instilled within each department.

**Mitsui:** As we manage our business portfolio, we need more in-depth discussion on how to deploy management resources effectively to support the development of each business.

**Kuriki:** For that reason as well, my understanding is that the role of outside directors is to further stimulate discussion of what each business should be aiming to do and what will be required for that, and then offer recommendations on the way forward.



**Kawamura:** I believe it is important that the need for stronger awareness than at present of how each business is connected to our Purpose and Vision be taken as a basic premise for such discussions. I want us to always keep in mind both the financial goal of increasing the profitability of our own business units and the concurrent achievement of sustainability objectives through the embodiment of our Purpose.

**Nakanishi:** I interpret our share price to be the result of an assessment that is based on our Group’s current business environment and factors in expectations for future growth.

**Kuriki:** While there is no need to overreact to day-to-day swings in the share price, I believe we must consistently keep working to create social value and enhance corporate value.

**Mitsui:** I also believe we should devote ourselves to creating social value and enhancing corporate value. The results of those efforts show up in the share price.

**Enhancing Information Disclosure and Dialogue with Stakeholders, Including Shareholders and Employees**

**Moderator:** For our final topic, I would like to hear your comments on “enhancing information disclosure and dialogue with stakeholders, including shareholders and employees.”

**Nakanishi:** I feel that in recent years we have been strengthening our dialogue with investors, including those overseas.

**Kawamura:** Feedback obtained from investors through our dialogue with them as stakeholders is shared on a quarterly basis and is reflected in discussions by the Board of Directors.



**Kuriki:** I think expanding our base of individual investors is also important. To that end, I would like us to be creative in our branding — for example, by clearly communicating how the things made from the products our Group provides are closely connected to, and of benefit in, everyone’s daily lives.

**Mizumoto:** Last year and this year, the General Meeting of Shareholders was alive with questions about our defense equipment business. This has been a business of ours for some time, but it would be good if everyone could recognize and understand that defense plays an important role in protecting the safety and security of everyday life. I feel that the state of affairs is similar for nuclear power.

**Nakanishi:** I believe that over the past one to two years, people have come to understand the social value of defense equipment and nuclear power generation. We also need to effectively communicate the trajectory of our businesses as a Group.

**Mitsui:** Employees are also stakeholders, and I feel that dialogue with them, carried out by management with the president playing a central role and involving visits to each plant to communicate directly and closely through town meetings and other forms of engagement, has now begun to show significant effect. As Director Kuriki mentioned at the outset, communication in the organization now feels more open and free-flowing than ever before.

**Nakanishi:** That is something I feel very keenly. I think that over the past one to two years, the distance between management and employees has narrowed.

**Kuriki:** I think that management has become more transparent as communication has become more open and free-flowing, and that this has also had a positive effect on our risk management. In that sense as well, this is a theme we should continue working on.



**Mizumoto:** I think we need to do more to promote women’s careers. Led by Director Kawamura, three female outside officers are taking the lead in engaging in dialogue with female employees and working on awareness-raising and related initiatives.

**Kawamura:** This is something that is relevant to more things than just promoting women’s careers, but a team of younger employees took the lead and, incorporating input from various people, established the Five Action Guidelines. In response to this, the Company also established Company Commitments paired with the Five Guiding Principles for Action expressing its intent to recognize employees who take on challenges and act accordingly. I hope that as these initiatives take hold, they will lead to further progress in conduct reform.



# Risk Management

## Basic Approach

The Company and other companies in the Group work to avoid and mitigate different types of risk, and manages these to keep their impact to a permissible amount. In this way, the Group recognizes that working on continuous development and sufficiently fulfilling its social responsibilities are important management issues. In selecting materiality, the Group considers two perspectives: creating value and solving social

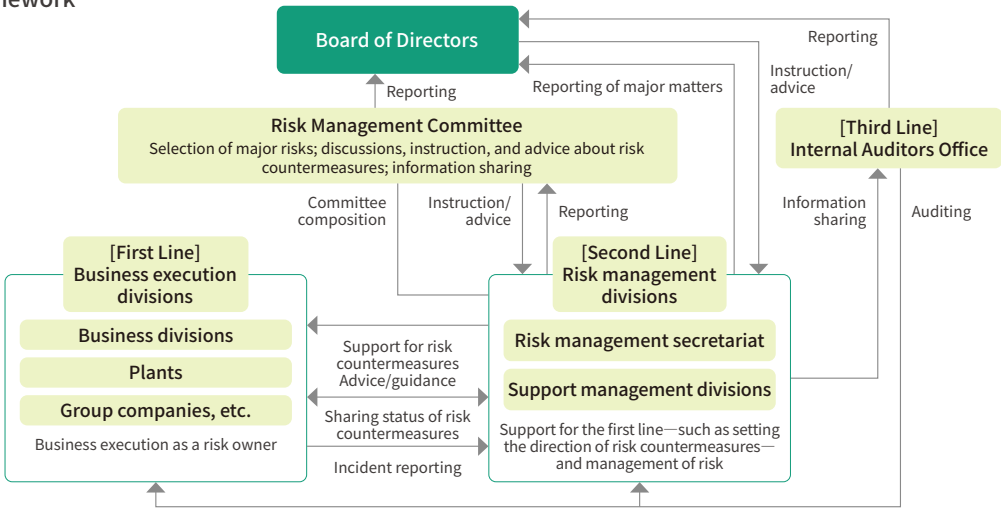
issues through JSW Group's businesses, and bolstering JSW Group's management foundation for sustainable growth. Based on these, we will encourage awareness that there are both risks for the sake of sustainable growth that should be taken actively and risks that should never be taken, even if for the sake of making profits. We will also carry out appropriate and efficient risk management.

## Framework

The Group has established JSW Group Risk Management Regulations, which clearly stipulate that all officers and employees of the Company and Group companies are responsible for implementing risk management in accordance with their respective roles. In addition, the Company has appointed an officer in charge of risk management (CRO), who oversees risk management of the Company and Group companies. The Risk Management Committee, chaired by the CRO, is convened semiannually to deliberate on the identification of key risks and the formulation of risk responses. The Operations Management Division acts as the risk management secretariat, and the Company has constructed a risk management framework based on the three lines model. In doing so, it has strengthened the risk management divisions forming the second line, while reporting the status of risk management to the Board of Directors and the Executive Board every six months. The Internal Auditors Office acts as the Group's internal auditing body, and which serves as the third line, monitors the status of risk management and reports annually to the Board of Directors and the Executive Board. Major risks and corresponding initiatives are disclosed each year in documents such as the financial report.

Furthermore, the Risk Management Group within the Corporate Planning Office promotes and oversees companywide risk management activities. Also, to deal with risks by divisional function such as quality management, health and safety, environmental management, export control, and information security, each division has formed committees or put in place regulations from a companywide, cross-sectional perspective to reduce risk through training, guidance, and supervision. With regard to companywide risk management, the Risk Management Committee, as stated above, deliberates on these matters, and the details of its discussions are reported to the Board of Directors twice a year as the Risk Management Report. Furthermore, where necessary, the committee utilizes the lines of reporting shown in the risk management framework diagram to guide or instruct relevant divisions. In addition, escalation regulations have been established along with a system for the immediate reporting of incidents and materialization of significant risks that includes Group subsidiaries. In the event of a major accident, disaster or any other risk that could cause serious damage to JSW Group, the Crisis Management Headquarters, led by the CRO, is promptly established to offer a response.

Risk Management Framework



# Compliance

## Basic Approach

JSW Group has established its JSW Group Basic Sustainability Policy and engages in business activities in compliance with ethics, laws and regulations, and international rules in both letter and spirit. In addition, the Board of Directors has decided on the Basic Policy on Internal Control and is developing internal control systems, and with the recognition of the importance of the proper operation of these systems, we regularly report on matters relating to internal control and its operational status to the Board of Directors. Regarding compliance with codes such as laws and regulations, and internal rules, on a regular or as-needed basis,

the Internal Auditors Office audits the overall operations of JSW, and reports the results annually to the Board of Directors and Audit & Supervisory Board, as well as the representative director & president and, the Executive Board or the Management Council, or other relevant parties. In fiscal 2024, there were no violations of relevant laws and regulations\* that resulted in fines or penalties. Relevant laws and regulations: Laws and regulations regarding the environment, Industrial Safety and Health Act, Financial Instruments and Exchange Act, laws and regulations regarding export control administration, laws and regulations regarding competition, laws and regulations regarding bribery, and Whistleblower Protection Act

## Promotion of Compliance Training

The Company is implementing the following measures to further enhance compliance awareness.

- E-learning for JSW employees and Group company officers and employees is conducted annually to enhance compliance awareness and ensure thorough risk management. (In fiscal 2024, the participation rate was 98%)
- Regular harassment prevention training is conducted by our corporate divisions for subsidiaries. (5 companies in fiscal 2024)
- Information and articles are posted and continually updated on the in-house portal site, intranet noticeboard, posters, and newsletters to help raise awareness of compliance.
- E-learning for employees of the Company and Group companies is conducted annually to ensure compliance with laws, regulations and internal rules on export control administration. (In fiscal 2024, the participation rate was 100%)
- Internal mock examinations, preparatory courses for examinations and e-learning are conducted annually to increase the number of current employees who pass the export control administration

- practical skills certification examination.
- Information security training is conducted annually for all employees. (In fiscal 2024, the participation rate was 100%)
- As part of Quality Compliance Month each May, the Company streams a video message from the president and conducts e-learning and quality compliance training via educational videos. (In fiscal 2025, the participation rate was 100%)
- For National Product Quality Month each November, the Company streams a video message from the officer in charge of quality management and conducts e-learning and quality compliance training via educational videos. (In fiscal 2024, the participation rate was 100%)
- E-learning is conducted on patents for employees involved in technology development at the Company and Group companies who have worked for a certain number of years.

## Whistleblowing System

JSW Group has formulated and operates whistleblowing rules for the purpose of strengthening and promoting compliance management, and has established a system for the proper handling of reports and consultations from employees and others regarding potential organizational or individual violations of laws and regulations that may have been committed by employees or others associated with JSW or Group companies. This system allows for anonymous reports and consultation and stipulates that those who use it will not receive disadvantageous treatment. It is available not only to employees of the Company and Group companies but also to employees of sales agents, service agents, and other commissioned or subcontracted business operators. In addition, we have established a leniency system that allows for reduction or exemption of internal disciplinary action through voluntary

self-reporting of misconduct, thereby strengthening our response to organizational misconduct and harmful practices. The Whistleblowing Committee, chaired by the CRO, investigates reported cases, and if a problem is identified, the committee will take appropriate action and implement corrective measures. The office of the committee and Audit & Supervisory Board members share information as appropriate, while the Audit & Supervisory Board members monitor the progress made in individual cases and the status of operation of this system. In principle, the Board of Directors confirms proper operations of the whistleblowing system twice a year, as based on reports from the committee. The number of reports made was 42 in fiscal 2023 and 32 in fiscal 2024. Most reports were consultation cases on workplace environments, including harassment incidents, which were investigated by the committee and appropriately addressed.

Key Data

Main Financial Data

11-Year Summary

(Millions of yen)

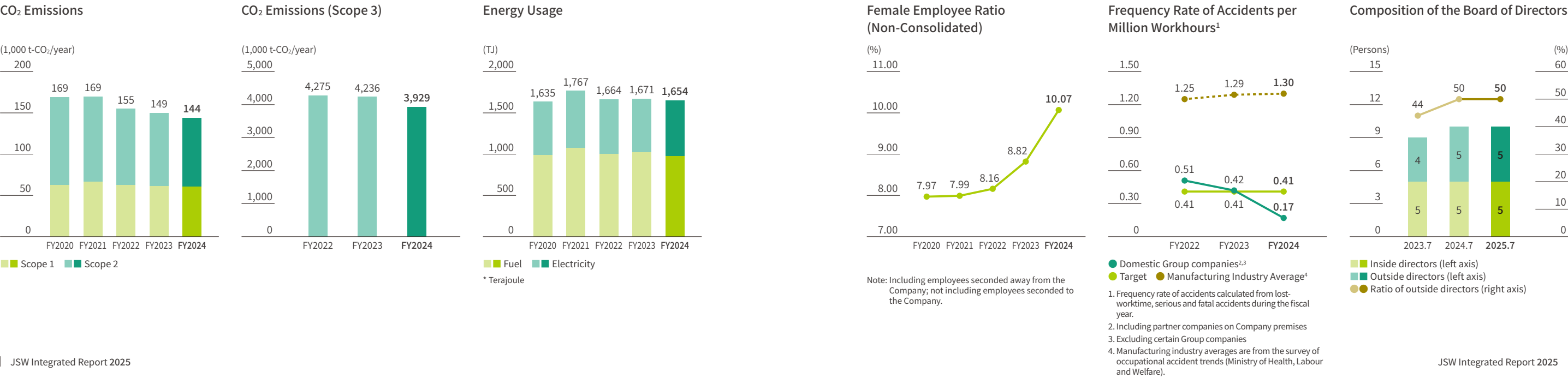
	FY2014	FY2015	FY2016	FY2017		FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
Net sales (consolidated)	194,674	223,301	212,469	211,700		220,153	217,527	198,041	213,790	238,721	252,501	248,556
Operating income	7,517	14,423	12,340	20,578		24,290	18,709	10,226	15,460	13,846	18,014	22,824
Profit before income taxes	(5,523)	(22,049)	(5,841)	14,892		29,317	14,154	12,960	19,736	18,518	19,201	23,307
Profit attributable to owners of parent	(5,327)	(16,600)	(4,968)	10,712		19,966	9,310	6,893	13,948	11,974	14,278	17,961
Total assets	319,667	293,138	275,315	297,365		305,471	297,173	316,249	339,729	348,358	366,775	398,122
Net assets	138,234	111,340	107,587	118,600		129,827	132,492	141,985	151,083	160,636	178,613	195,101
Net D/E ratio	(0.06)	(0.10)	(0.07)	(0.23)		(0.17)	(0.18)	(0.22)	(0.32)	(0.28)	(0.30)	(0.17)
Operating cash flow	11,580	19,721	12,023	26,712		1,092	18,959	14,712	22,325	(986)	21,707	(4,567)
Investing cash flow	(2,675)	(12,135)	(13,580)	(5,077)		(1,334)	(13,172)	(3,243)	(2,976)	947	(6,841)	(12,272)
Financing cash flow	(2,964)	4,788	(1,203)	(2,457)		(3,758)	(6,164)	2,767	(2,860)	(20,112)	(4,899)	(5,723)
Cash and cash equivalents at end of the period	49,152	61,458	58,671	77,879		73,820	74,477	88,759	105,799	86,400	96,902	75,150
R&D expenses	4,104	4,292	4,237	4,369		4,506	4,708	4,586	4,909	5,020	5,661	5,682
Capital investment	7,992	14,010	9,502	6,436		9,945	10,585	12,592	4,903	7,346	12,183	18,150
Depreciation	11,008	10,669	7,858	4,097		4,424	5,733	6,040	6,183	6,572	7,743	7,895
Earnings per share (Yen)	(14.39)	(45.32)	(67.61) <sup>1</sup>	145.77		271.69	126.66	93.76	189.63	162.75	194.02	244.03
Dividend per share (Yen)	4.0	5.0	15.0 <sup>2</sup>	37.5		55.0	45.0	35.0	57.0	58.0	59.0	86.0
Consolidated dividend payout ratio (%)	—	—	—	25.7		20.2	35.5	37.3	30.1	35.6	30.4	35.2
Operating income ratio (%)	3.9	6.5	5.8	9.7		11.0	8.6	5.2	7.2	5.8	7.1	9.2
ROE (%)	(3.9)	(13.5)	(4.6)	9.6		16.3	7.2	5.1	9.6	7.8	8.5	9.7
ROA (%)	(1.7)	(5.4)	(1.7)	3.7		6.6	3.1	2.2	4.3	3.5	4.0	4.7

1. The Company conducted a 1-for-5 reverse common stock split effective October 1, 2016. Earnings per share for fiscal 2016 is calculated on the assumption that the reverse stock split occurred at start of the fiscal year.

2. The Company conducted a 1-for-5 reverse common stock split effective October 1, 2016. Dividend per share for fiscal 2016 in the table above is the total of the interim dividend of 2.5 yen and the year-end dividend of 12.5 yen.

Taking into consideration the effects of the reverse stock split, the interim dividend would have been 12.5 yen, resulting in a total annual dividend per share of 25 yen.

Key Non-Financial Data





# Corporate Data (As of March 31, 2025)

## Company Information

Company Name	The Japan Steel Works, Ltd.	Head Office	Gate City Ohsaki-West Tower, 11-1, Osaki 1-chome, Shinagawa-ku, Tokyo 141-0032, Japan
Founded	November 1, 1907		
Incorporate	December 11, 1950	Share Capital	¥19,837 million
		Number of Employees	5,283 (consolidated) 1,982 (non-consolidated)

## Main Group Companies (As of March 31, 2025)

Domestic		
<b>Consolidated subsidiaries</b>		
<b>Nikko-YPK Shoji Co., Ltd.</b> 10F, Gate City Ohsaki-West Tower, 11-1, Osaki 1-chome, Shinagawa-ku, Tokyo 141-0032, Japan Phone: +81-3-5745-2131	<b>Sun・Tectro, Ltd.</b> 6-1, Funakoshi-Minami 1-chome, Aki-ku, Hiroshima-shi, Hiroshima 736-0082, Japan Phone: +81-82-824-3881	<b>Nikkou Muroran Service Co., Ltd.</b> 4, Chatsucho, Muroran-shi, Hokkaido 051-8505, Japan Phone: +81-143-24-2553
<b>Nikko Kosan Co., Ltd.</b> 23F, Gate City Ohsaki-West Tower, 11-1, Osaki 1-chome, Shinagawa-ku, Tokyo 141-0032, Japan Phone: +81-3-5745-2130	<b>Just Co., Ltd.</b> 2-1, Horikoshi 3-chome, Minami-ku, Hiroshima-shi, Hiroshima 734-0052, Japan Phone: +81-82-820-0123	<b>MNED Co., Ltd.</b> 4, Chatsu-cho, Muroran-shi, Hokkaido 051-8505, Japan Phone: +81-143-22-0620
<b>Nikko Tokki Co., Ltd.</b> 1005 Gate City Ohsaki-West Tower, 11-1, Osaki 1-chome, Shinagawa-ku, Tokyo 141-0032, Japan Phone: +81-3-5745-2093	<b>Nikko Kouki Co., Ltd.</b> 2-1, Fukuura 2-chome, Kanazawa-ku, Yokohama-shi, Kanagawa 236-0004, Japan Phone: +81-45-701-7841	<b>Muroran Environmental Plant Service, Ltd.</b> 3F, JESCO, 14-7, Nakamachi, Muroran-shi, Hokkaido 050-0087, Japan Phone: +81-143-22-0005
<b>Nikko Sekkei Co., Ltd.</b> 6-1, Funakoshi-Minami 1-chome, Aki-ku, Hiroshima-shi, Hiroshima 736-0082, Japan Phone: +81-82-822-7653	<b>JSW Aktina System Co., Ltd.</b> 2-1, Fukuura 2-chome, Kanazawa-ku, Yokohama-shi, Kanagawa 236-0004, Japan Phone: +81-45-787-8462	<b>Fine Crystal Co., Ltd.</b> 9-1, Chatsucho, Muroran-shi, Hokkaido 051-8505, Japan Phone: +81-143-22-7401
<b>Nikko Techno Co., Ltd.</b> 6-1, Funakoshi-Minami 1-chome, Aki-ku, Hiroshima-shi, Hiroshima 736-0082, Japan Phone: +81-82-822-3232	<b>JSW AFTY Corporation</b> 2-1, Fukuura 2-chome, Kanazawa-ku, Yokohama-shi, Kanagawa 236-0004, Japan Phone: +81-45-787-7203	<b>Muroran Copper Alloy, Co., Ltd.</b> 9-1, Chatsucho, Muroran-shi, Hokkaido 051-0006, Japan Phone: +81-143-22-0690
<b>Nippla Inc.</b> 6-1, Funakoshi-Minami 1-chome, Aki-ku, Hiroshima-shi, Hiroshima 736-0082, Japan Phone: +81-82-847-5510	<b>Japan Steel Works M&amp;E, Inc.</b> 4, Chatsucho, Muroran-shi, Hokkaido 051-8505, Japan Phone: +81-143-22-0143	<b>Tahara Machinery Ltd.</b> 2-1, Kagurominami, Inzai-shi, Chiba 270-1369, Japan Phone: +81-476-21-1991
<b>MG Precision Co., Ltd.</b> 6-1, Funakoshi-Minami 1-chome, Aki-ku, Hiroshima-shi, Hiroshima 736-0082, Japan Phone: +81-82-822-1305	<b>Nikko Unyu Co., Ltd.</b> 4-1, Chatsucho, Muroran-shi, Hokkaido 051-8505, Japan Phone: +81-143-22-7923	<b>GM Engineering Co., Ltd.</b> Shin-Yokohama No.1 Building, 14-27, Shinyokohama 2-chome, Kohoku-ku, Yokohama-shi, Kanagawa 222-0033, Japan Phone: +81-45-472-6819
	<b>Nikko Truck Co., Ltd.</b> 4-1, Chatsucho, Muroran-shi, Hokkaido 051-8505, Japan Phone: +81-143-22-7923	<b>Non-consolidated subsidiary</b>
		<b>Fine Crystal Iwaki Co., Ltd.</b> 2-6, Chubukogyodanchi, Iwaki-shi, Fukushima 972-8338, Japan Phone: +81-246-68-6858

Overseas		
<b>Consolidated subsidiaries</b>		<b>Non-consolidated subsidiaries</b>
<b>S M Platek Co., Ltd.</b> 687-2, Seonggok-dong, Ansan-si, Kyeonggido, Korea Phone: +82-31-488-3401	<b>The Japan Steel Works (Singapore) Pte. Ltd.</b> 17 Gul Lane, Singapore 629413 Phone: +65-6861-4511	<b>Japan Steel Works Europe GmbH</b> Bonner Str. 243 40589 Düsseldorf, Germany Phone: +49-0211-7886000
<b>Japan Steel Works America, Inc.</b> 201 Hansen Court, Suite 121, Wood Dale, IL 60191, U.S.A Phone: +1-630-716-3400	<b>JSW Electromechanical Trading (Shangha) Co., Ltd.</b> 304, Metro Plaza, 555 Loushanguan Road, Changning District, Shanghai, China Phone: +86-021-5206-7031	<b>Japan Steel Works India Private Limited</b> 611 Time Tower, MG Road, Sector 28, Gurgaon, Haryana 122002, India Phone: +91-124-469-4444

# Stock Information (As of March 31, 2025)

## Stock Status

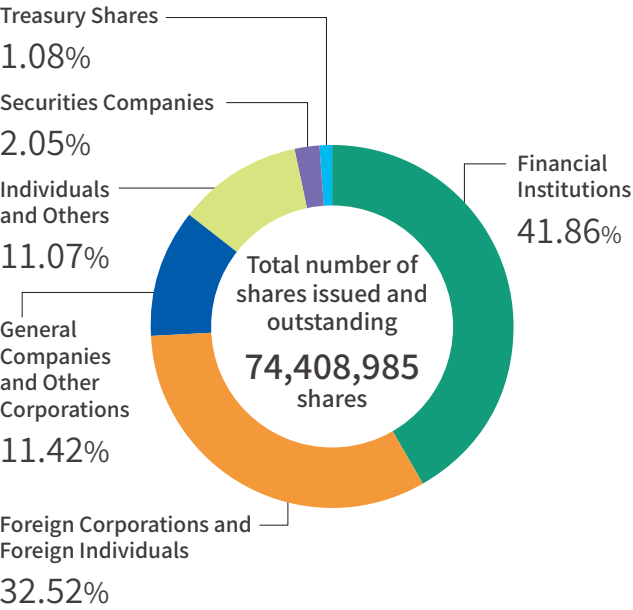
Authorized Shares	200,000,000 shares
Issued and Outstanding Shares	74,408,985 shares
Shareholders	22,368

## Major Shareholders

Shareholder Name	Shares Held	Shareholding Ratio
The Master Trust Bank of Japan, Ltd. (Trust Account)	13,340,900	18.13
Custody Bank of Japan, Ltd. (Trust Account)	7,405,300	10.06
NORTHERN TRUST CO. (AVFC) RE NON TREATY CLIENTS ACCOUNT	3,125,295	4.25
TAIJU LIFE INSURANCE COMPANY	2,827,600	3.84
Goldman Sachs International	1,177,052	1.60
JUNIPER	1,176,200	1.60
The Nomura Trust and Banking Co., Ltd. (Investment trust account)	1,164,000	1.58
Sumitomo Mitsui Banking Corp.	1,100,032	1.49
HSBC Hong Kong Treasury Services Account, Asian Equities Derivatives	1,025,702	1.39
Mitsubishi Heavy Industries, Ltd.	1,006,200	1.37

Note: Shareholding ratios are calculated after deducting 804,900 treasury shares from the total number of shares issued.

## Classification of Shareholders by Percentage of Shares Held



## Stock Price and Trading Volume

### Stock price

(Yen)

7,000

6,000

5,000

4,000

3,000

2,000

1,000

0

Apr. 2015 Apr. 2016 Apr. 2017 Apr. 2018 Apr. 2019 Apr. 2020 Apr. 2021 Apr. 2022 Apr. 2023 Apr. 2024 Apr. 2025

Note: The Company conducted a 1-for-5 reverse common stock split and changed the number of shares per stock unit from 1,000 shares to 100 shares, effective October 1, 2016.  
All stock prices and trading volumes in the graph above are shown taking into consideration the effects of the reverse stock split.

### Trading volume

(Thousand shares)

60,000

50,000

40,000

30,000

20,000

10,000

0