How We Create Value Foundations for Creating Value At a Glance

At a Glance

Material and **Industrial Machinery Engineering Business Products Business** Segment Segment 82.5% 16.6% **Net Sales** ¥252.5 billion Defense Plastic Production Equipment and Processing Machinery 9.6% 40.7% Other Molding Machinery Machines 9.0% 23.3%

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, 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 our separator film manufacturing equipment for lithium-ion batteries, an essential element for the shift to electric vehicles. In this segment, which accounts for 82.5% 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.







Material and Engineering **Business Segment**

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.

In steel castings and forgings, we are either the world's only

manufacturer or have a high market share for products such as large shaft materials for power plants, pressure vessel components for nuclear power plants, and large components for pile-driving machines used in the construction of offshore wind farms. Perceiving the shift toward decarbonization as an opportunity, we are working to strengthen our earnings base through business structure reform.



We have narrowed down our other businesses to the three fields of photonics, composite materials, and metallic materials.

We are working to achieve profitability in each field through the supply of products: in photonics, materials for semiconductors and optical devices such as synthetic quartz, lithium niobate, and gallium nitride (GaN); in composite materials, lightweight and high-strength materials such as carbon fiber reinforced plastic (CFRP) products; and in metallic materials, materials for various electronic devices such as titanium copper.

Markets

Products

Business

Segments /

Production

Bases

Mobility

Defense

Renewable Energy

Infrastructure

(Muroran Plant)





manufacturing equipment









Plastic injection molding machines



Plastic injection molding machines (Special-purpose machines)

















(Large anvil for pile driver)



Components for offshore wind power Steel pressure vessels for hydrogen storac











Our History of Creating Value How We Create Value



Our History of Creating Value

1907 1970s 2024 1945 2000s Founding (pre-war) Rapid economic growth Preparation for a new era Post-war recovery

Social issues \ and needs

Phases in

our history

provision to

markets

customers and

 Development of defense industry Transition to commercial business

- Increasing energy demand
- Accelerating adoption of electronics in industry

- Decarbonization-related demand (electric vehicles, use of hydrogen energy)
- Increasing LCD demand with the growing use of smartphones
- Problem of marine plastic pollution

Launch as a national project

In 1907, The Japan Steel Works was established in Muroran. Hokkaido, as a joint venture between three companies: Hokkaido Colliery Steamship Company and two U.K. firms: Sir W.G. Armstrong, Whitworth & Co., Ltd., and Vickers, Sons & Maxim, Ltd. By manufacturing armaments as a national project, the Company contributed to the development of the defense industry. Purchasing Hiroshima Seisakusho Co., Ltd., in 1920, JSW established a Hiroshima factory (now known as the Hiroshima Plant) to expand the armaments business.

Growth based on a portfolio of technologies

After the Second World War, the focus of our business underwent a major shift to commercial products. Utilizing the technology cultivated through the manufacture of armaments, we began in earnest to produce large steel castings and forgings, such as rotor shafts for power generation and pressure vessels for oil refineries, and plastic processing machinery, such as injection molding machines and plastic extruders.

Becoming a comprehensive company in materials and mechatronics

We focused on creating new added value in response to market changes such as increasing energy demand and the accelerating adoption of electronics. Among the actions taken were the manufacture of ultra-large components (pressure vessels and rotor shafts) for nuclear power plants, a switch from hydraulic to electric injection molding machines, and the introduction of magnesium molding technology.

Toward establishing a new future vision for JSW

To contribute to a society that is demanding products that are friendly to the global environment, we manufacture and supply separator film manufacturing equipment for lithiumion batteries, molding machines for large plastic parts for automobiles that excel in weight reduction, all manner of resin processing machines adapted to serving a plasticresource-recycling society, and pressure vessels for hydrogen storage to support the hydrogen economy.

Meiki Co., Ltd.



First Japan-produced plasti



Plastic injection molding machines

Expansion of materials

Magnesium injection molding machines

Mechatronics technology Excimer laser annealing systems

Expansion of product range

Separator film manufacturing equipment for lithium-ion batteries



Expansion to secondary processing equipment

Film and sheet manufacturing equipment



Plastic extruders



Extruders for chemical and mechanical recycling

Lineage of technologies Artillery production technologies and their

Manufacturing technologies

Material manufacturing technologies

(e.g., for fertilizer)

Barrel processing technologies

Rotor shafts for power generation

High-pressure cylinders, reaction towers

Pressure vessels for oil refining

Manufacturing technologies

Pressure vessels for use in nuclear power generation

Pressure vessel manufacturing and high-pressure technologies Artificial crystals



Pressure vessel manufacturing and high-pressure technologies Gallium nitride (GaN) single-crystal substrates

Pressure vessel technologies

• • • • • • • • • • • • • • Steel pressure vessels Hydrogen handling technologies for hydrogen storage



Research on hydrogen in steel

Hydrogen storage alloys

Special steel technologies

Material manufacturing technologies

Thick plate rolling Clad steel plates and pipes



Net sales



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Material Revolution

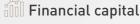
Material Revolution, making the world sustainable and prosperous.



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

Capital

As of March 31, 2024



- · Shareholders' equity: ¥164,155 million
- · R&I rating: A (stable)

Manufactured capital

- · Capital investment ¥12,183 million (FY2023)
- · Plants: 3 locations + Japan Steel Works M&E
- · Test centers:
- 3 plastic machine locations,
- 6 molding machine locations
- · Sales locations and Group companies covering major market regions in Asia, North America and Europe

Human capital

- JSW Group employees: 5,115
- · Non-consolidated JSW employees:
- Engineering career-track employees (non-consolidated): 843
- Training facilities for skills transfer: 2

Intellectual capital

- · Research and development expenses: ¥5,661 million (FY2023)
- · Patents held: 973 in Japan, 589 overseas

Social relationship capital

- · Long-term and stable relationships with customers
- · Good relationships with local communities around plants



- Energy consumption: 1,654 TJ
- Water intake: 16.09 million m³

Business Model

Material Design Technology Melting, Mixing, and Solidifying Technologies

Machine Element Technology
Precision Control Technology

Manufacturing lechnology

Materiality

Creating value and solving social issues through JSW Group's businesses

- Realization of a plastic-resource-recycling society
- · Contribution to a low-carbon society
- · Contribution to a super-smart society

Bolstering JSW Group's management foundation for sustainable growth

- · Human capital improvement and DEI&B*
- · Investment in the future with innovation management
- · Governance reinforcement of JSW Group
- * DEI&B: Diversity, Equity, Inclusion, and Belonging

Outputs

Resolution of Social Issues Industrial Machinery New Materials











Outcomes

Customers

- ·Contribute to the expansion of our customers' business opportunities
- •Resolve issues faced by our customers
- ·Contribute to reducing environmental impact

Employees

·A work environment with job satisfaction and excitement Growth as a highly skilled professional

Business partners

- ·Treat all business partners fairly and impartially, and always conduct transactions in good faith
- ·Build partnerships to create corporate value

Shareholders and investors

- · Medium-to-long-term enhancement of corporate value
- ·Stable shareholder returns

Local communities

·Contribution to the local economy through employment and procurement

Global environment

- ·Energy and resource conservation in production activities (reduction of CO₂ emissions)
- •Reduction of CO₂ emissions through our products and businesses



Sustainable society

(Particularly, realizing a plasticresource-recycling society and controlling plastic pollution)



Prosperous society

(Resolution of social issues such as the health of people, medical care, food, and energy)



Mitigating climate change

Creation of social value









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Sustainable

enhancement of

corporate value





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
- Expansion of renewable energy
- · Expansion of hydrogen and ammonia businesses • Phase-out of fossil fuels
- · Renewed popularity of nuclear power generation

Advancement toward digital transformation, Al, 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 domestic market, shrinking workforce

Global population growth

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

Message from the President Foundations for Creating Value Data



Message from the President



Toshio Matsuo

Representative Director & President
The Japan Steel Works, Ltd.



Results of the Previous Medium-Term Management Plan and Future Challenges

This year marks my third as president of JSW Group. I inherited JGP (JSW group Growth Plan) 2025, a five-year medium-term management plan that commenced in FY2021, when I took over from the previous president. Under JGP2025, we have implemented measures based on four basic policies. As the third year of the plan comes to an end, we will first examine its results and future challenges.

Our first policy in the plan was to move "towards the unprecedented general manufacturer of plastic processing machinery in the world," where we worked to boost our competitive edge and create more complex plastic processing equipment to gain the top global market share for existing products. Recent strong performance for orders and sales of plastic production equipment proves we have achieved this to some extent. However, we recognize the need to increase the number of products able to compete in the global market and see the potential for further growth along with a need to promote global expansion and improve our service business. Expanding production capacity and maintaining or improving our in-house production rate in response to strong performance of orders and sales are also important challenges.

We have also done well in general for our second policy, "making constant profit in Material and Engineering Business." We have set appropriate selling prices, shifted to products with a competitive edge to improve profitability, and are otherwise reviewing our product portfolio. I believe this allowed us to overcome periods of hardship in our business operations. Going forward, we will strive to prevent malfunctions and maintain stable operations through investments to upgrade core production equipment while continually reviewing our product portfolio to ensure stable profits.

For our third policy, "creating new core businesses," we developed and launched products for power semiconductor. We have also commenced operations of major proof-of-concept equipment for producing gallium nitride (GaN) crystal materials.

In our fourth policy, "promotion of ESG management," we have established the ESG Promotion Office and other systems for promotion and identified six material issues, which we regard as major developments.

We take the misconduct in product inspections announced in FY2022 very seriously and are continuing to work on four reforms to restore trust: quality assurance system reform, organizational culture reform, process reform, and governance reform. In particular, as part of our organizational culture reform, we are working to instill JSW Group's purpose and vision and invigorate projects aimed at organizational reform.

The fact that we have surpassed our sales target of 300 billion yen, which we had envisioned as a goal beyond JGP2025, based on orders at the end of FY2023 is profoundly significant, and we believe that JSW Group, which had long maintained sales of around 200 billion yen, has moved to the next stage as a company. In addition to such internal changes as the establishment of a corporate philosophy system and the identification of material issues, the past three years have seen dramatic changes in the business environment, including the emergence of global geopolitical risks. In light of these changes and with our sights set on taking sales to the next level, we have determined that we need a new management plan that clearly proclaims a transition to a new stage in order to fortify our management foundation and have decided to formulate and announce a new medium-term management plan, JGP2028, despite the fact that we are still in JGP2025.



Our Vision and the Place of the New Medium-Term Management Plan

Before creating the new medium-term management plan, we created financial and sustainability targets and made simultaneously achieving both of these our "vision" for the next decade. Our financial target is a sales goal of 500 billion yen, roughly double that of FY2023. While this will be highly challenging for JSW Group, my dream in creating this target was to show our stance and willingness to reincarnate ourselves as a growth-oriented company. Our sustainability target is to "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." Considering future business expansion, we thought that going beyond

resolving material issues to achieve our sustainability target through additional means other than simply building up existing businesses would be vital in achieving 500 billion yen in sales.

The five-year plan JGP2028 has been positioned as a stage for reforms and challenges for new growth to achieve our vision for FY2033. I believe that the area most in need of reform is the mind. We are strongly determined to have each employee of JSW Group embrace our purpose as their own and take on the challenge of changing their mindset from stability-oriented to growth-oriented. Over the next five years, we will work to sustainably increase corporate value while resolving material issues to achieve our vision for FY2033.

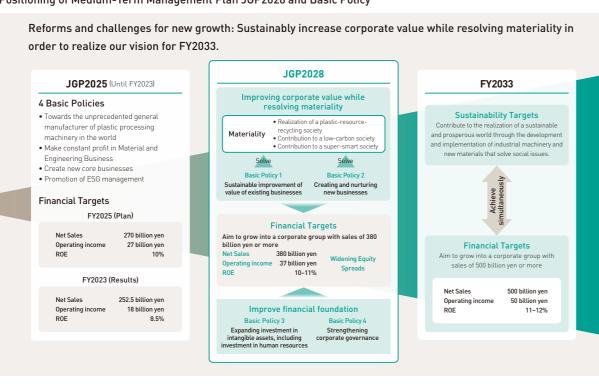
Message from the President

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We will promote JGP2028 through four basic policies. We view the promotion of "sustainable improvement of the value of existing businesses" and "creating and nurturing new businesses" as ultimately leading to the resolution of three key social and material issues (realization of a plastic-resource-recycling society, contribution to a low-carbon society, contribution to a super-smart society). We believe that addressing material issues aimed at solving social issues through business

will create both social and economic value (profits), enabling sustainable growth. Fortifying the management foundation necessary for achieving our FY2033 vision requires us to work backward from our goal and start making upfront investments and reinforcing now, and our initiatives based on the other two basic policies, "expanding investment in intangible assets, including investment in human resources" and "strengthening corporate governance," will serve as actions to that end.

Positioning of Medium-Term Management Plan JGP2028 and Basic Policy



Sustainable Improvement of Value of Existing Businesses

We will implement key strategies tailored to each business segment to sustainably improve the value of existing businesses. For the Industrial Machinery Business in



particular, we will make major investments in factories and production facilities at the Hiroshima Plant during the JGP2028 period to expand production capacity and maintain and improve our in-house production rate.

We will also fortify local production as part of our global expansion efforts. Key areas include our European bases in Germany and Poland as well as India. We plan to establish a technical center in India, leveraging and expanding the functions of local companies to capture demand in the growing Indian market.

Creating and Nurturing New Businesses

We will create and nurture new businesses through two approaches: strengthening existing businesses by developing elemental technologies and creating innovative technologies through basic technology research. To strengthen existing businesses through elemental technology development,

we will accelerate efforts such as elemental technology development at Muroran (Material Technology Laboratory), Yokohama (Device Technology Laboratory), and Hiroshima (Advanced Technology Laboratory). We will also formulate and implement strategies to create value for each business by leveraging intangible assets as well as focus on continuous training for R&D workers and fortifying our technological capability.

To create innovative technologies through basic technology research, we plan to establish a new R&D center in charge of developing innovative technologies. We will also work on creating innovation by leveraging diverse human resources as well as by examining market trends, the direction of R&D, and our own strengths through IP analysis to efficiently develop new products and markets.

JGP2028 4 Basic Policies

resolving materiality

including investment in human resources



Basic Policy 1

Sustainable improvement of value of existing businesses

4 Basic Policies

Basic Policy 3

Creating and nurturing new businesses

Basic Policies

Basic Policy 4

Expanding investment in intangible assets,

Improve financial foundation

0

Healthy Risk-Taking to Achieve Sustainable Growth

JGP2028's financial targets include 380 billion yen in sales, 37 billion yen in operating income, and 10–11% ROE in the final year to increase the equity spread. While growing sales and margins is important, our focus going forward will be on improving capital efficiency and increasing the equity spread—the difference between the cost of capital and the return investors expect—over the medium to long term. This is why we set ROE as our financial target indicator instead of operating income margin. The 10–11% ROE target exceeds our estimated 8.0% cost of equity based on CAPM.

Boosting profitability is vital if we are to improve ROE. However, improving profitability even further requires active capital investment. In the Industrial Machinery Business, for example, despite increased orders and sales, our in-house processing capacity, which ought to be our strength, was unable to keep up with business expansion, resulting in increased outsourcing costs and limited profitability growth. The investment in the Hiroshima Plant I mentioned earlier is a measure to overcome this. "Creating and nurturing new businesses,"

one of our basic policies, will also strengthen our business portfolio and contribute to sustained ROE improvement. We believe that "expanding investment in intangible assets, including investment in human resources" will also lead to sustained ROE improvement. In expanding intangible asset investment, I believe it is vital to view this as an "investment" for medium-to-long-term growth rather than a "cost" that reduces profits for the term. I think this mindset may have been lacking in the Group until recently. Going forward, we must maintain a stance of healthy risk-taking while keeping our vision in mind. We plan to make proactive strategic investments in equipment and intangible assets especially in the first half of JGP2028 to achieve long-term, sustainable growth.

Strengthening corporate governance

Respecting our purpose is a prerequisite for strengthening our business portfolio. We must maintain a strong awareness of our fundamental purpose, "Material Revolution, making the world sustainable and prosperous," while pursuing profitability and growth in all businesses, reviewing our business portfolio, and competing in areas where we excel with products that only JSW Group can create.

Message from the President

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Promoting Investment in Human Resources and Investment in the Future

Once again I'd like to explain "expanding investment in intangible assets, including investment in human resources," a basic policy of JGP2028. We will promote

"investment in human resources" and "investment in the future" in line with this policy.

Investment in Human Resources

As mentioned earlier, it is vital that Group management view intangible asset investment as an "investment" rather than a "cost." The same goes for "investment in human resources." That is why we will proactively invest in human capital, including raising salary levels and revising our training systems.

Viewing this as an investment means our main goal is to have this generate value in the future and help boost corporate value. Conducting business activities while respecting our purpose requires that we formulate and implement a human resource strategy that addresses the issue of human capital improvement and DEI&B, which we have identified as a material issue. To achieve this, we will implement measures focused on both the "organization" and the "individual."

Achieving results as an organization requires that each employee is able to demonstrate their abilities. Defining the skills employees are to acquire through their careers and promoting individual growth through a variety of HR measures is vital to executing work as an organization. Fostering an organizational culture where employees are able to grow their skills and workers from diverse backgrounds can achieve autonomous growth and play

active roles will create synergy between organizational results and individual growth.

What is vital for linking individual growth to organizational results is having diversity. Going forward, we will secure diversity at a variety of levels and encourage growth among diverse individuals to refine our organizational core competencies and maximize organizational results. In concrete terms, we are proactively recruiting and promoting female employees to management positions and also increasing hiring among foreign nationals and career recruits.

The Group is also striving to improve organizational strength by recruiting and developing human resources aligned with our business strategy, where managers play a particularly vital role. For this reason, we will place even greater focus on management training going forward. Here too, "reform" is a key concept. In the training we've conducted as the norm up until this point, we'd like to explain clearly to each and every employee why learning certain skills is important to their growth and what growth we expect from acquiring these skills, then help them set and work toward their own "vision" based on their own idiosyncrasies.

Investment in the Future

One aspect is active investment in research and development. In April 2023, we established the Innovation Management Headquarters to consolidate and strengthen companywide ability to breed innovation. We also restructured the R&D organizations of The Japan Steel Works and Japan Steel Works M&E, establishing the Advanced Technology Laboratory, Material Technology Laboratory, and Device Technology Laboratory as our R&D centers. Along with this, we also abolished the Technical Development Department of the Hiroshima Plant, the Muroran Laboratory at Japan Steel Works M&E's Muroran Plant, and the Technical Development Department of the Yokohama Plant, transferring and integrating their functions into the Advanced Technology Laboratory, Material Technology Laboratory, and Device Technology Laboratory.

I touched on this when discussing "creating and nurturing new businesses," and we envision creating a new research institute for advanced research aimed at providing a future for the young people today distinct from these laboratories. We hope to attract outstanding R&D workers by bringing this concept to life and creating a place where outside researchers would want to conduct research.

Another aspect is investment in DX. We aim to further boost productivity and provide new value to society by promoting a DX strategy based on active investment. In concrete terms, we will reform production processes in our business through manufacturing infrastructure innovation, transform existing businesses through digitalization of operations, and work to provide new value through DX-driven solutions. In management, we will accelerate organizational and operational reform by promoting data-driven operations and increasing IT literacy.



Transforming Governance and Corporate Culture from the Perspective of Long-Term Growth



We also view "strengthening corporate governance" as a key management issue and have made it one of the basic policies in JGP2028. Ensuring diversity to drive future growth and transformation applies to the Board of Directors as well. We truly appreciate the valuable feedback from outside directors with high expertise in their respective fields. Some outside directors are senior business leaders, and their advice has provided many insights. I have felt this myself, and with the ratio of outside directors reaching 50% and multiple women joining as outside directors, I understand that there has been steady improvement in the effectiveness of the Board of Directors.

The executive remuneration system is also undergoing review. In April 2024, a portion of our executive remuneration policy was revised to strengthen incentives for medium-to-long-term improvement of corporate value and further promote shared interests with shareholders. More specifically we added an assessment of ROE achievement

rate as an incentive to improve performance for a single fiscal year. We also added an assessment of efforts toward medium-to-long-term measures as an incentive to improve medium-to-long-term corporate value and increased the proportion of long-term incentives (stock-based remuneration) for representative directors. We expect this to take management's awareness of medium-to-long-term corporate value improvement to the next level.

In terms of strengthening governance, we will also work to promote risk management and reduce cross-shareholdings. In addition to selling shares of diminished value, we believe reducing holdings to a level broadly understood by investors is appropriate and will continue aiming for "10% or less of consolidated net assets" as our target.

We will also continue our efforts to reform our organizational culture in response to the misconduct in product inspections mentioned earlier. Two years have passed since the announcement, but we recognize that maintaining strong risk awareness regarding corporate ethics is of the utmost importance. I believe the essential cause of corporate misconduct is a lack of cooperation between departments and business divisions as well as insufficient communication between individuals. We will maintain risk awareness by treating this not as an issue within a single department but as a common challenge across the Group. I personally attend monthly meetings at work sites to engage in dialogue with employees and managers and am adamant about directly conveying our purpose and future management strategy in my own words. Information is of course communicated internally in a variety of ways, but I feel that direct communication with each employee in my own voice is particularly effective in conveying the message strongly, so I plan to continue this straightforward approach.



To Our Stakeholders

Our efforts to achieve the targets set forth in JGP2028 are inseparable from our efforts to address material issues. By combining our efforts to create value through business and solve social issues—realization of a plastic-resource-recycling society, contribution to a low-carbon society, and contribution to a super-smart society—with initiatives to strengthen our management foundation for sustainable growth—human capital improvement and DEI&B, investment in the future with innovation management, and governance reinforcement of JSW Group—we will move closer to

achieving the financial and sustainability targets set as our vision. Our efforts to achieve JGP2028 and address material issues are a unified effort between management and employees.

We ask for your continued understanding and support for future initiatives by JSW Group. I hope you'll stay tuned to JSW Group's future efforts toward helping build a sustainable and prosperous world through developing and implementing industrial machinery and new materials that solve social issues.

Medium Term Management Plan

How We Create Value
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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 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, enabling us to formulate JGP2028 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.



Material Revolution

Material Revolution, making the world sustainable and prosperous



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

JGP2017 JGP2020 JGP2025 FY2015-FY2017 FY2018-FY2020 FY2021-FY2023

Towards the unprecedented general manufacturer Great strides to becoming a global & Build a foundation to achieve steady growth Position niche top company for the JSW Group over the next decade of plastic processing machinery in the world Increase profitability of existing businesses Towards the unprecedented general Optimization of management resources. Foster new products and businesses manufacturer of plastic processing and strengthening of alliances Strengthen service business and make them competitive as soon as machinery in the world Make constant profit in Material and Acceleration in exploration and Basic Policy Reinforce Group management and development of new businesses Fngineering Business Create new core businesses promote alliances Promotion of ESG management Hiroshima Plant: new factory construction Hiroshima Plant: strengthened production Major Results

Boosted productivity and improved costs of Merger with Meiki Co., Ltd. capacity for film and sheet manufacturing industrial machinery products Made GM Engineering Co., Ltd. a Meiki Plant and M&E: strengthened Acquired of SM Platek Co., Ltd. in South subsidiary (strengthened film and sheet Korea (extruders) manufacturing equipment) production capacity for industrial Machinery Business acquisition from Hitachi Plant Merger with Nichiyu Machinery Co., Ltd. machinery products (strengthened film and sheet Europe: established production base Mechanics Co., Ltd. (simultaneous biaxial stretching device) manufacturing equipment) Established JSW Aktina System Joint development of injection molding machines with Toyo Machinery & Metal Co., Hiroshima and Europe: commenced Obtained orders for proposal-based development of defense equipment operations of service centers Ltd. (platform standardization) Restructured Muroran Plant Established Japan Steel Works M&E ("M&E") Prospects for improved profitability through Material and (boosted productivity and more) proper sales prices Engineering Business Increased orders for power generation parts amid global energy policy revisions Reorganized Research and Development Established Muroran Copper Alloy Co., • Established Innovation Management Ltd. with JX Advanced Metals Corporation Headquarters into New Business Headquarters Commenced operations of large-scale Commercialized hydrogen-related Promotion Headquarters Promoted companywide business business (transfer to M&E) proof-of-concept equipment for gallium development projects Focused on photonics, composites, and nitride (GaN) substrates metals as new husinesses to accelerate Established JSW Group corporate philosophy early-stage profit generation Identified material issues Established DX Promotion Office · Delays in developing new businesses Further promotion of plastic processing Increasing production capacity to meet sharp Major issues Insufficient efforts to strengthen alliances increases in orders and sales, and maintaining machinery complexes still to be Create new core businesses beyond plastic and improving in house production rate Promoting global expansion processing machinery addressed · Investing on the aging core production facilities

FY2024-FY2028

-FY2028 FY2033 Vision

Reforms and challenges for new growth Improving corporate value while resolving materiality

JGP2028

Realization of a plastic-resource-recycling society
 Contribution to a low-carbon society

• Contribution to a super-smart society

Basic Policy 1
Sustainable improvement of

Basic Policy 2

Creating and nurturing new

businesses

Financial Targets

Aim to grow into a corporate group with sales of 380 billion yen or more

Net Sales 380 billion yen 380 billion yen

Operating income ROE 37 billion yen 10-11%

value of existing businesses

Materiality

Widening Equity Spreads

Improve financial foundation Basic Policy 3 Basic Policy 4

Expanding investment in intangible assets, including investment in human resources

Strengthening corporate governance

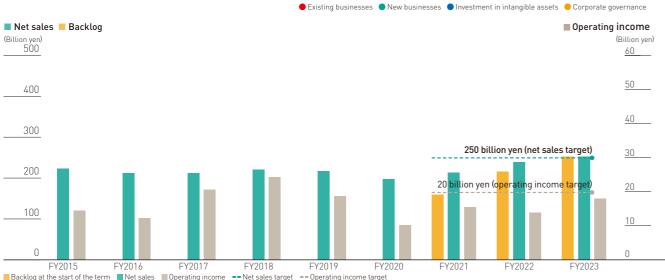
Sustainability Targets
Contribute to the realization of a sustainable and prosperous world through the development and implementation of industrial machinery and new materials that solve social issues.

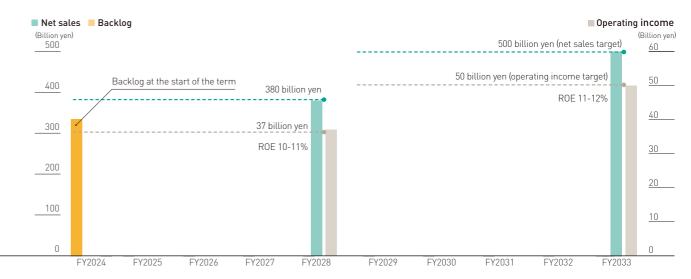
Achieve simultaneously

Financial Targets
Aim to grow into a corporate group with sales of 500 billion yen or more

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

FY2033 Vision



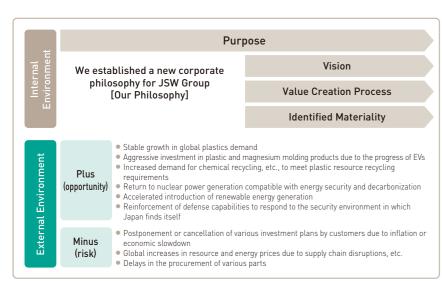


How We Create Value Medium Term Management Plan

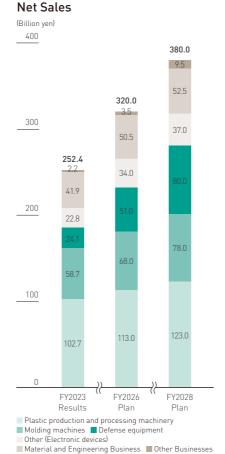


Medium-Term Management Plan JGP2028

In response to such internal changes as establishing a corporate philosophy for the Group and identifying material issues as well as the need to formulate strategies that capitalize on changes in the external environment and address order backlogs that have grown faster than planned, we revised JGP2025 before its final year to formulate JGP2028. Under JGP2028, we aim to increase corporate value while resolving materiality and improving our management foundation to grow into a corporate group with sales of 380 billion yen or more.



	FY2023: Results	FY2026: Plan	FY2028: Plan	Change from FY2023
Net sales	252.5 billion yen	320 billion yen	380 billion yen	+50%
Operating income	18 billion yen	26 billion yen	37 billion yen	+106%
Operating income ratio	7.1%	8.1%	9.7%	+2.6PP
ROE	8.5%	9.0%	10-11%	+1.5-2.5 _{PP}
Capital investment	8.1* billion yen/year	20 billion ye	en/year	+147%
R&D investment	5.2* billion yen/year	8.2 billion y	en/year	+58%
Dividend payout ratio	30%	35%		+5 _{PP}
DOE	2.0%	2.5%		+0.5 _{PP}
* Average of three years from	- FV2021 to FV2022			



4 Basic Policies

Improving corporate value while resolving materiality

Basic Policy 1: Sustainable improvement of value of existing businesses

- Execute Key Strategies by Business Segment
- Increase Production Capacity for Plastic Machinery Products - Make large capital investments (plants and facilities) to expand production capacity while maintaining the in-house production
- rate, which is one of our strengths Increase Production Capacity by Manufacturing in Optimal Locations and Mutual Complementation
- Maximize production capabilities by optimizing the business and products of each production base in implementing key
- Promote Global Expansion by Strengthening Local Production

Basic Policy 2: Creating and nurturing new businesses

- Strengthen existing businesses by developing elemental technologies and create innovative technologies through basic technology research.

Strengthen management foundation

Basic Policy 3: Expanding investment in intangible assets, including investment in human resources

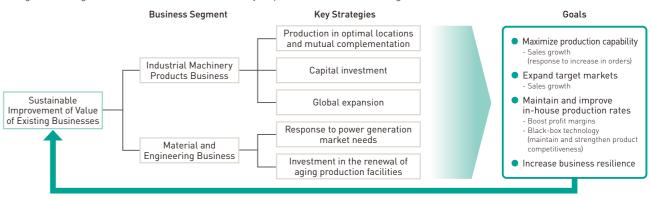
- ▶ p. 21 and p. 24-25 (DX Strategy and Human Capital Strategy)
- [Human Capital Strategy] Achieve sustainable growth and increase corporate value by fostering diverse individuals and maximizing organizational results
- [DX Strategy] Increase productivity and provide new value to

Basic Policy 4: Strengthening corporate governance

- ▶ p. 50-63 (Corporate Governance)
- Partially revised the officers' remuneration system to strengthen the incentive function for medium-to-long-term improvement of corporate value and to further promote the sharing of interests
- Sustainably increase corporate value by improving the feasibility of the sustainability and financial targets while reducing corporate management risks.

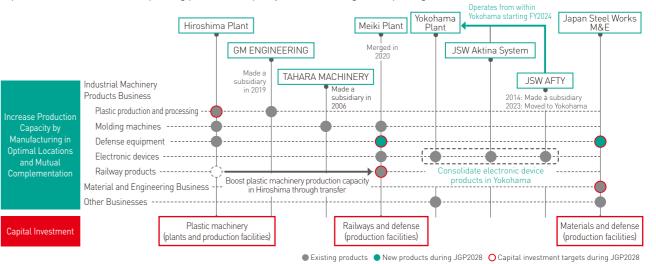
JGP2028 [Basic Policy 1] Sustainable improvement of value of existing businesses

We will develop a key strategy that fits each business segment, then maximize production capability, expand target markets, maintain and improve in-house production rates, increase business resilience, and more to achieve sales growth and higher profit margins. Through these efforts, we will sustainably improve the value of existing businesses.



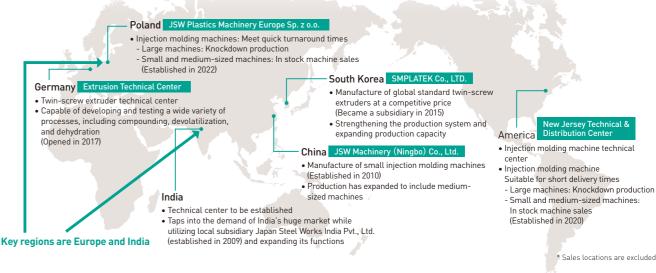
Key Strategies: Production in Optimal Locations, Mutual Complementation, and Capital Investment

We will strengthen manufacturing in optimal locations and mutual complementation by optimizing the businesses and products handled at each production location to expand production capacity, efficiently use management resources, and boost resilience. We will also make capital investments aimed at expanding production capacity and maintaining and improving our in-house production rates.



Key Strategies: Global Expansion

We aim for sustainable growth by expanding global market share, targeting Europe and India as key regions in addition to our current bases in China, the US, and South Korea. We plan to establish a technical center in India to boost our presence and strengthen our sales and service networks



Financial and Capital Strategy

How We Create Value
Foundations for Creating Value
Data



Financial and Capital Strategy: Message from the CFO

Widening Equity Spreads through Active Investment in Tangible and Intangible Assets while Maintaining Financial Soundness

Hiroki Kikuchi

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

General Manager of Business Development Office



Vision for FY2033 and JGP2028 New Medium-Term Management Plan

Based on its Purpose of "Material Revolution, making the world sustainable and prosperous," JSW Group aims to simultaneously achieve 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 targets of "net sales of 500 billion yen, operating income of 50 billion yen, and ROE of 11–12%" by fiscal 2033. As concrete measures to achieve this vision, the Group has formulated JGP2028, its new medium-term management plan.

Basic Financial Policy in JGP2028

In JGP2028, the Group aims to solve material issues while achieving financial targets of "net sales of 380 billion yen, operating income of 37 billion yen, and ROE of 10–11%" by improving the sustainable value of existing businesses, creating and nurturing new businesses, and strengthening its management foundation. While the Group will actively invest in both tangible and intangible assets to achieve these targets, the basic financial policy in JGP2028 is to "widen equity spreads while maintaining financial soundness."

To sustainably improve the value of existing businesses, major capital investments to expand production capacity and

maintain and improve the in-house production rates in the Industrial Machinery Products Business, along with increased investment to boost business sustainability in the Material and Engineering Business, are essential.

The Group will also create and nurture new businesses by bolstering R&D investment while improving its management foundation through expansion of investment in intangible assets, including investment in human resources.

Widening the Equity Spread

Improving ROE and cost of equity

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, which is why 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 cost of equity, which serves as the comparison for ROE, as 8.0% based on CAPM.

The Group recognizes that its ROE of 8.5% in fiscal 2023 exceeded its cost of equity by 0.5%; however, through sustainable improvement in the 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.

Specifically, by creating ROIC trees for each business and clarifying process KPIs, the Group will manage its business portfolio down to the level of the SBU to achieve business growth and improved profitability.

To reduce the cost of equity, the Group will provide sufficient data disclosure through dialogue and disclosure of initiatives to improve corporate value as well as share assessments and feedback obtained through this with management and the Board of Directors to boost engagement. Through these engagement activities, the Group aims to reduce information asymmetry and lower its cost of equity.

Business portfolio strategy

Improving the ROIC for each of our businesses is essential to boosting ROE, an indicator of the Group's overall capital profitability.

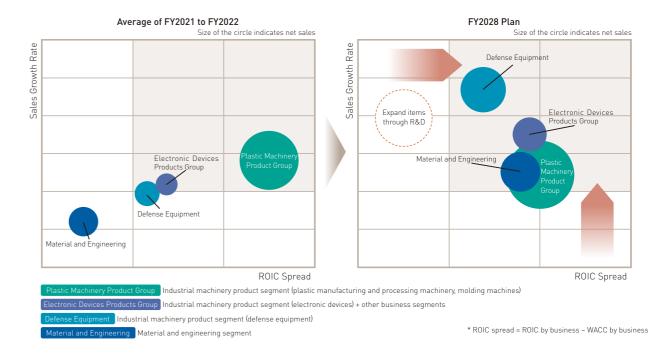
The Group conducts annual Board of Directors discussions and approvals of our basic business portfolio policy and has defined where each business should be positioned in a four-quadrant matrix based on capital profitability (ROIC spread) and sales growth rate by the final fiscal year of JGP2028.

To improve the ROIC for each business, it is essential that all employees involved actively participate and feel that they are contributing. To this end, the Group creates ROIC trees tailored to the characteristics of each business, clarifies process KPIs, and works to instill and operate these within the Company.

For ROIC improvement, it is also vital that individual capital investments contribute to better capital profitability.

For large-scale production expansion investments that require deliberation by the Executive Board or Board of Directors, the Group mandates verification using the NPV method and determines whether to invest based on whether it will truly increase shareholder value. The discount rate used in the NPV method is the WACC set for each business.

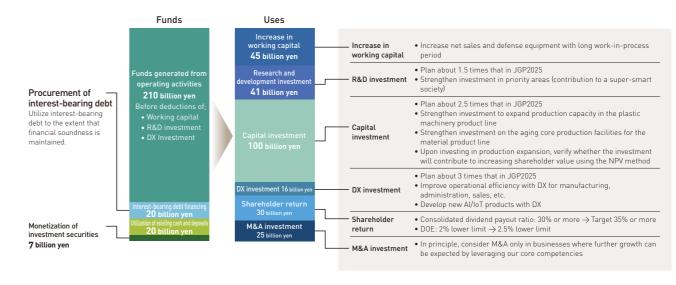
In having business portfolio management and investment selection criteria function as two wheels of a cart, the Group aims to improve companywide ROE by boosting ROIC for each business.



Cash allocation

During JGP2028, the Group plans to make proactive investments that exceed operating cash flow and make up the shortfall using low-yield assets such as existing cash and deposits and

investment securities as well as interest-bearing debt. While increasing interest-bearing debt can improve financial leverage, its use is premised on maintaining financial soundness.



Financial and Capital Strategy / DX Strategy

How We Create Value Foundations for Creatin

Data

Maintaining Financial Soundness

While the Group will actively pursue capital investment, R&D investment, and investment in intangible assets under

JGP2028 to sustainably increase corporate value, we will ensure flawless financial soundness.

Equity ratio

The equity ratio is considered an important indicator of financial soundness.

The Group's equity ratio was 48.3% in fiscal 2023, but total assets will increase during JGP2028 due to both proactive capital investment and increased working capital accompanying higher net sales.

While the increase in total assets will push the equity ratio downward, the Group plans to maintain a minimum of around

45% during JGP2028 to ensure financial soundness while maintaining our current issuer rating (R&I) of A or higher to secure fundraising capacity.

The Group plans to increase interest-bearing debt by 20 billion yen during JGP2028 but expects to hold net cash of 14 billion yen at the end of March 2029 and believes this will have no impact on financial soundness.

Optimal level cash and deposits

The Group considers the optimal level of cash and deposits to be the sum of two months' worth of monthly sales plus 10 billion yen for unexpected funding needs and plans to maintain this optimal level throughout JGP2028.

While JGP2028 plans for a 20 billion yen decrease in cash and deposits, the Group plans to secure an optimal level in line with net sales of 400 billion yen by the end of March 2029 as it launches its next medium-term management plan.

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 (minimum 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 from 30% to 35% and its DOE from 2.0% to 2.5%. While the annual dividend per share was 59 yen in fiscal 2023, the Group plans to pay an annual dividend of 74 yen per share in fiscal 2024.

To Our Shareholders & Investors

JSW Group aims to achieve its Vision and embody our Purpose by ensuring the smooth function and cycling of the Value Creation Process and simultaneously creating social and economic value

To ensure the smooth function and cycling of the Value Creation Process, it is essential to both bolster capital—represented by fixed capital and human capital—and boost product and service competitiveness by refining our business model while resolving material issues.

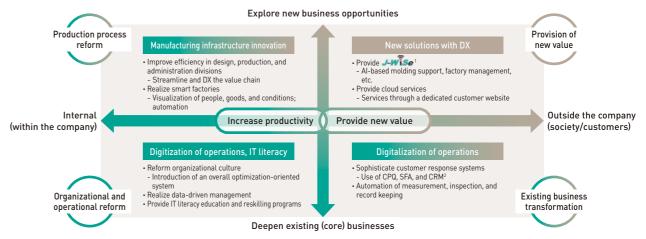
JSW Group will implement proactive investments aimed at sustainably boosting competitiveness while following a basic financial policy of "widening equity spreads while maintaining financial soundness."

The Group also recognizes the great importance of incorporating shareholder and investor opinions on social and economic value creation into Group management. We will continue to actively work to provide information and engage in dialogue with shareholders and investors and ask for your continued support.



In June 2024, the Board of Directors approved the JGP2028 medium-term management plan. One of the basic policies in JGP2028, "expanding investment in intangible assets, including investment in human resources," is closely tied to "strengthening the management foundation," and one of our strategies to achieve this is our DX strategy.

To achieve sustainability targets, it is vital that we benefit all stakeholders by resolving material issues, which will serve as a compass for resolving social issues, and this requires breaking the status quo to provide new value. It is also vital to improve productivity to meet orders, which are at a historical high. The Group recognizes that achieving financial targets will be difficult without both of these elements. To achieve this, we have classified our DX initiatives into four quadrants along two axes—new and existing businesses, and internal (within the company) and outside the company (society/customers)—and are implementing DX measures aimed at providing new value, transforming existing businesses, reforming production processes, and reforming organization and operations. The Group promotes DX by regularly measuring indicators such as the value-added ratio in IT investment and DX promotion indicators as metrics to gauge progress in the DX strategy aimed at achieving financial targets and, having obtained DX certification in August 2024, continues to work on improving its DX level.



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

Production process reform

The key initiative here is innovation in our manufacturing infrastructure. By consolidating and upgrading systems based on IT governance, the Group will promote greater standardization of systems at manufacturing sites and maximize factory and machine efficiency, boosted through capital investment. From the perspective of DX, this will also strengthen the measure set forth in the Basic Policy 1 of JGP2028, "increase production capacity by manufacturing in optimal locations and mutual complementation."

We are also working to build smart factories. Visualizing people, goods, and conditions, identifying issues, and then making improvements based on these will boost productivity at each plant, leading to further growth in overall production capacity. This visualization also helps us understand our product CFP (carbon footprint), which has been in the spotlight recently. Preparations are underway based on the presumption that ascertaining and reducing CFP will be closely linked to the value of our products.

Organizational and operational reform

Achieving data-driven management is vital for delving deeper into existing businesses. That is why we process data generated by production and sales systems and deploy it to our information systems so it can be used for management decision-making. As a foundation for this, the Group is replacing systems built for individual optimization at business divisions and plants with systems for overall optimization. To instill the importance of overall optimization and foster a mindset of taking on challenges rather than being satisfied with existing business processes and product types, the Group is creating opportunities for problem-solving through Organizational Culture Reform Projects and revisions to our Code of Conduct.

Meanwhile, in addition to reforming systems and culture, improving IT literacy is essential to maximizing the potential of DX tools. That is why we have implemented such initiatives as providing education for human resources with high potential as well as skill development training through rotation to the DX Promotion Office in addition to basic training.

Provision of new value

The key initiative here is to provide the IoT solution ***Jise* for production control, operation support, service and maintenance, and production automation in the Group's equipment and services. For injection molding machines, examples include Al Molding Navigator, which uses artificial intelligence to prevent and improve molding defects; Remote Connect, which reduces molding defects, downtime, and travel costs by enabling remote monitoring and adjustment of molding conditions; and Repex J-TAC, an Al-based control system for thickness that automatically adjusts the thickness of films output from T-dies in film and sheet manufacturing equipment in place of skilled workers. The Group has also begun developing a predictive maintenance system for twin-screw extruders (TEX). These solutions are expected to provide new value by meeting wide-ranging needs, including the need for measures to address labor shortages, cost reduction, and production streamlining.

Existing business transformation

The first measure here is to create more advanced customer response systems. Increasing sharing of data between business divisions through system consolidation and upgrades as well as utilizing CPQ, SFA, and CRM in sales systems will allow us to respond quickly and accurately to customer needs. This is expected to improve customer satisfaction and increase repeat rates. Strengthening the system to provide solutions through sharing and cooperation on requests across multiple business divisions will allow us to significantly improve efficiency and competitiveness across the entire Group and establish market advantage through digitalization.

The second measure is the digitalization and automation of measurement, inspection, and record creation. In addition to improving measurement accuracy, this will allow us to provide highly reliable inspection results to customers. Productivity will improve through increased throughput and maximized operating time, with labor savings and reduced worker load leading to improved well-being. This will allow for the transformation of existing businesses from multiple angles.

^{* &}quot;J-WiSe," "J-WiSe Al Molding Navigator," "J-WiSe Remote Connect," "Repex J-TAC" and "TEX" are Japanese registered trademarks.

Innovation Management Strategy How We Create Value Foundations for Creating Value Data



business strategy

Innovation Management Strategy

With "reforms and challenges for new growth" as its theme, JGP2028 aims to sustainably increase corporate value while resolving material issues to achieve our fiscal 2033 vision, strengthen the management foundation, and grow to a corporate group with sales of 380 billion yen or more. Creating new businesses and products is essential for this, which is why JGP2028 includes "creating and nurturing new businesses" as a basic policy. The innovation management strategy is crucial for achieving this.

The Innovation Management Headquarters was established in April 2023 to encourage companywide innovation and comprises the Innovation Planning Department (Tokyo Head Office), Advanced Technology Laboratory (Hiroshima), Material Technology Laboratory (Muroran), and Device Technology Laboratory (Yokohama). This organization will drive companywide innovation, which includes strengthening existing businesses through the development of elemental technology using our core competencies, pioneering new markets and innovative technology as a source of sustainable future growth for the Company, acquiring diverse

markets and innovative technology as a source of sustainable future growth for the Company, acquiring diverse human resources (with diverse values) and cultivating R&D workers, all while focusing on "creating and nurturing new businesses," in order to achieve the JGP2028 targets.

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

1

JGP2028 [Basic Policy 2] Creating and Nurturing New Businesses

Strengthen existing businesses by developing elemental technologies and create innovative technologies through basic technology research

Creating Deepening core Development of elemental technologies in and nurturing laboratories established at the three plants new Strengthen existing products and resolve Strengthen existing businesses by businesses materiality by deepening core technologies through elemental technology development Formulation and implementation of a business snecific intellectual property strategy Formulate and implement a strategy that creates value in each business from an intangible asset utilization perspective through a companywide IPE structure. Sustained development of R&D personnel and strengthening of technological capabilities Strengthen partnerships with universities and research institutes in Japan and overseas to promote sustainable human resource development and technological advancement by earning a doctorate degree, etc. Intellectual Property Executive (IPE) System: A system in which an intellectual property manage Creating innovative is assigned to each business division to fo technologies an intellectual property strategy based on the

Planning to establish a new R&D center to develop innovative technologies Establish a new laboratory within the medium term plan period that is not attached to a plant, and that conducts research and developmen of innovative technologies that do not adhere to existing products or core technologies.

Creating innovation by leveraging

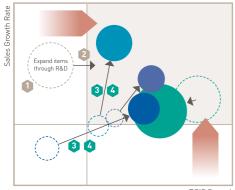
Encourage the creation of innovative technologies and new businesses through the accumulation of diverse human resources (values) from inside and outside the company and the promotion of entrepreneurship.

Efficient new product and market development through IP analysis² Examine the company's strengths, market trends, and R&D direction through IP analysis to efficiently develop new products and new markets.

 IP analysis: IP landscape analysis of management and business information incorporating IP information

Incorporation of R&D products as-is into the business portfolio, making them candidates for new businesses and products
 Widening the ROIC spread (improving profitability) by permeating new businesses and products in markets
 Increasing sales growth rate by transforming products in line with market trends through performance improvements, new feature additions, etc.
 Improvement of profitability by strengthening differentiating technologies in existing businesses, products, and services

Business Portfolio FY2028 Plan (Dotted circles show average from FY2021 to FY2022)



Plastic Machinery Product Group
Industrial machinery product segment
(plastic manufacturing and processing machinery,
molding machines)

Defense Equipment
Industrial machinery product segment

dustrial machinery product segment (defense equipment)

ndustrial machinery product segment (electronic devices) + other business segments

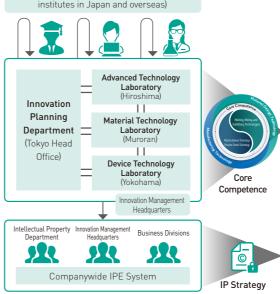
Material and Engineering

Material and engineering segment

Strengthen existing businesses by developing elemental technologies

- Development of elemental technologies in laboratories established at the three plants
- Formulation and implementation of a business specific intellectual property strategy
- Sustained development of R&D personnel and strengthening of technological capabilities

R&D Worker Development (Partnerships with universities and research institutes in Japan and overseas)



To help strengthen existing businesses and products, the Advanced Technology Laboratory, Material Technology Laboratory, and Device Technology Laboratory have been established respectively within the Hiroshima Plant, whose main business is products in the industrial machinery product segment; Japan Steel Works M&E, whose main business is material products; and the Yokohama Plant, whose main business is electronic device products, each of which is well-versed in their respective products. These laboratories develop elemental technologies to improve basic performance and add new functions to existing products using Al/IoT technology as well as heat-resistant and corrosion-resistant metal materials to precisely meet market needs.

These also support the creation and implementation of intellectual property strategies for each business division. Under the IPE system, IP strategies are formulated in partnership with the Intellectual Property Department based on companywide perspectives.

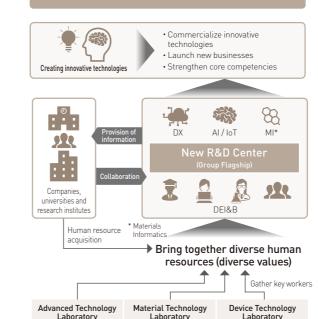
To implement such measures, developing R&D workers and strengthening technological capabilities are essential. The Group provides proactive support for doctorate degrees, technical studies at universities and research institutes in Japan and overseas, and joint research/joint research courses with Japanese universities.





Create innovative technologies through basic technology research

- Planning to establish a new R&D center to develo innovative technologies
- Creating innovation by leveraging diverse human resources
- Efficient new product and market development through IP analysis



Innovation Planning Department

Creating new products and businesses is essential to achieve our vision for fiscal 2033. That is why we plan to establish a new R&D center to explore markets and create technology beyond our existing products and core technologies from a concentrated, medium-to-long-term perspective as well as to serve as a flagship center to communicate the results of cutting-edge research to the outside world.

We believe communicating research results will also help attract talent from outside. This, combined with bringing together human resources from within the Company, will help secure diverse human resources (values) and create a research environment that practices DEI&R

For technology, we will incorporate advanced technologies from areas including DX, Al/IoT, and MI (Materials Informatics). These will be used to create innovative technologies, which will then be commercialized, leading to the launch of new businesses as well as stronger and broader core competencies.

Contributing to a super-smart society is cited as a material issue expected to become a future megatrend. That is why we have commenced research aimed at achieving robotics using generative AI and control technology as well as interactive automatic operation systems for industrial machinery. These are expected to serve as solutions to such social issues as the declining working population and insufficient succession of technical skills.

How We Create Value Human Capital Strategy



Based on the belief that human capital—that is, everyone, including management and employees—is a key factor in practicing sustainability management to embody our Purpose and achieve our Vision in the future, the Group has identified "human capital improvement and DEI&B" as a material issue. We recognize that the individual and organization are equals and have formulated a human capital strategy to resolve this material issue. Ensuring and increasing diversity underlies our human capital strategy, and we plan to achieve autonomous growth of diverse individuals and maximize organizational results by linking recruitment, assignment, training, evaluation, and treatment in human resources to achieve sustainable growth and increase corporate value.

To achieve this, the Group will work to create an environment where diverse individuals can acquire and fully demonstrate the skills needed to embody our Purpose according to their needs while also transforming the organization through higher engagement and fostering a culture of taking on challenges. By enabling all officers and employees with different personalities to maximize and demonstrate their potential, increasing psychological safety, and encouraging healthy clashes of opinion, the Group will foster an environment where creativity can thrive and use this as a driving force for improving productivity and breeding innovation.

The corporate image we seek through this human capital strategy is a company where "individual self-realization" and "sustainable growth of the organization" mutually circulate, and the individual and organization continue to thrive together. The Group will implement a variety of measures to achieve this corporate image and resolve material issues so

that our daily efforts help solve social problems, so that the Group maintains

the social value it has in the world, and so that we can feel this for ourselves.

Motoyuki Shibata

Director & Managing Executive Officer CISO. in charge of Export Control Administration in charge of CSR & Risk Management, in charge of Health & Safety Management in charge of the Personnel Department



JGP2028 [Basic Policy 3] Expanding Investment in Intangible Assets, Including Investment in Human Resources (Human Capital Strategy)

Achieve sustainable growth and increase corporate value by fostering diverse individuals and maximizing organizational results

Securing human resources that match the business strategy Continue to hire diverse human resources to meet business strategies, including new graduates, experienced workers, women, people with disabilities, and foreign nationals.

Developing individual skills and strengthening

organizational (management) capabilities
Create a mechanism to link growth in individual skills to organizational growth

Passing on and DX of sales, design, and manufacturing technologies, skills, and know how

Pass on proprietary technologies and skills; systemize tacit knowledge with DX.

Reform towards an organizational culture that encourages challenge

Create a culture where challenges are rewarded by leveraging opportunities for continuous problem-solving through an organizational culture reform project.

Spreading the purpose and promoting DEI&B (basic environment development)

- · Promote dialogue that aligns with the purpose and realizes its connection to the business.
- · Prioritize the creation of an environment where all employees work fairly and are valued and recognized as individuals by fostering a culture and building systems that respect DEI&B.

Maximize the value of human capital Human resource strategy to achieve the business portfolio strategy Creating a work environment that increases engagement



Human Capital Strategy Indicators and Targets

Human Capital Strategy Indicators and Targets					
	FY 2023 Results	FY2028 Targets			
Organizational culture reform project	In progress	Reduce workload, improve engagement, and select young high performers early			
Percentage of female managers/percentage of women among assistant managers	2.0% / 9.9%	5.0% / 15.0%			
Percentage of male employees who took childcare leave	88%	80% or more continuously			

Human resource strategy to achieve the business portfolio strategy

Securing human resources that match the business strategy

To execute our business strategy, we consider our most important human resources to be our mid-level workforce, which bridges junior and senior employees while driving the workplace. That is why continuously hiring young employees to grow into this mid-level group is vital for sustainable growth. Attracting experienced workers from diverse backgrounds who can increase

diversity in the Group is also critical. To achieve this, we actively conduct year-round recruitment through a wide variety of channels to attract a diverse range of talent, including recent graduates, experienced workers, women, people with disabilities, and foreign nationals.

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. We define individual abilities as portable skills foundational skills required regardless of role or position and technical skills—specialized abilities acquired through work experience—and aim to boost these skills through

HR initiatives.

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

Portable skills (basic skills required for any job title/position)		
Openness to diversity	Openness to diverse values and ideas, capable of leveraging them to boost team performance	
Ability to identify issues	Capable of identifying and raising issues proactively to keep the organization's awareness of issues current	
Capacity to take on challenges	Able to take on challenges without being constrained by precedent, and capable of involving others in the process	
Autonomous learning ability	Capable of adapting flexibly and promptly to changes in the environment, of learning autonomously, and of growing throughout their career	

Technical skills (specialized skills acquired through work)		
Technological capacity	High-level specialist knowledge that reinforces the Company's core competences (melting, mixing, and solidifying technologies)	
Management skills	Ability to maximize organizational performance and support management strategies and corporate foundations	
Global business skills	Skills that enable the individual to extend and grow the Company's business on a global scale	

Creating a work environment that increases engagement

Reform towards an organizational culture that encourages challenge

In a rapidly changing business environment full of volatility, uncertainty, complexity and ambiguity, called VUCA, achieving sustainable growth for the Group requires ongoing innovation. To breed such innovation, we must transform our organizational culture into one where employees feel encouraged to take risks and pursue challenges without fear of failure, backed by a high level of psychological safety.

That is why, starting in fiscal 2023, we launched the Organizational Culture Reform Project Team that comprises employees who answered our call with a passion for driving change, which plays a

leading role in advancing cultural reform efforts within the Group. In these efforts, the team works closely with management, promoting effective, rapid cultural reform through a combination of both bottom-up and top-down approaches.

To promote cultural reform within our human capital strategy as well, we are working toward a transformation in mindset among officers and employees through revisions to the evaluation system. We also have managers set "challenge goals" in their annual performance targets to support strategic action.

Spreading the purpose and promoting DEI&B

The Group established a corporate philosophy for JSW Group based around its Purpose in fiscal 2022. Efforts are currently underway to help the Purpose resonate with all officers and employees, starting with organizational managers. 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. To further embody our Purpose requires that we expand the breadth of this diversity. To achieve this, it is vital to bolster efforts to create a work environment where workers can fully express their individuality as well as create training programs tailored to idiosyncrasies. This is why the Group has added "E" and "B" to the existing definition of diversity, previously termed "D&I," to create the new term "DEI&B.

Materiality Management

In November 2022, the Company's Board of Directors identified six key issues (Materiality) to prioritize in order to embody our Purpose. Before formulating the new medium-term management plan JGP2028, we established sustainability targets as a scenario for achieving sales of 500 billion yen in fiscal 2033, a decade from now. We believe resolving material issues is vital to achieving this.

Of JGP2028's four basic policies, we view "sustainable improvement of value of existing businesses" and "creating and nurturing new businesses" as leading to the resolution of three material issues, "realization of a plastic-resource-recycling society," "contribution to a low-carbon society," and "contribution to a super-smart society." We believe that attempting to solving social issues through business will create both social and economic value, allowing for sustainable growth.

As shown under "State of major initiatives" in the table to the right, we have already provided multiple products that can

resolve those three material issues. For "contribution to a super-smart society," we will strengthen efforts, as doing so is expected to help solve such social issues as environmental problems and an aging population with a declining birthrate (including labor shortages). Specifically, we will accelerate the development of robotics using AI and make the Group's industrial machinery products more intelligent.

Meanwhile, we will also bolster the management foundation needed to achieve our vision for fiscal 2033. Our efforts toward the basic policies of "expanding investment in intangible assets, including investment in human resources" and "strengthening corporate governance" will serve as actions to this end.

Regarding the material issue of human capital in particular, we have changed "D&I" to "DEI&B" based on our belief that "E" and "B" are essential in addition to traditional "D&I" for each employee to reach their full potential.

Identification Process

STEP 1

Identifying potential issues After exhaustively identifying

potential social issues from megatrends, international quidelines, etc., a short list was compiled based on an importance assessment.

STEP 2 Refining the candidate list

Group's businesses

Using the short list, internal discussions were held to narrow down important candidates for Materiality

STEP 3

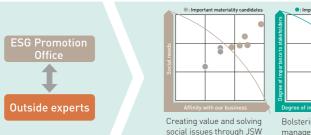
Grouping Similar important Materiality were grouped after being broadly categorized as either "creating value and solving social issues" or "bolstering management foundation.

STEP 4 Discussion by management

Over a period of six months. several discussions were held at the upper management level to check candidate issues importance to the Group's businesses and management foundation.

Finalization

Finalized the Materiality and received approval from the Board of Directors.









Assumed External Environment and Related Risks and Opportunities

External environment

- Global plastic pollution
- Worldwide climate change (CO₂ emissions)
- Japan's 2025 digital cliff
- Japan's declining birthrate and aging population
- Economic and population growth in emerging countries
- Evolution of governance

- Decline in demand for plastics
- Difficulty in making products more energy-efficient, rising
- Decrease in the Group's market competitiveness due to
- Difficulty in maintaining and strengthening human capital
- Degradation of trust and reputation among stakeholders due to delayed action

Opportunities

- Global spread of electric vehicles (EVs)
- Spread of power generation from renewable energy
- demand for energy-saving infrastructure overall
- Activation and diversification of markets

How We Create Value

Creating Value and Solving Social Issues through JSW Group's Businesses

Realization of a Plastic-Resource-Recycling Society

Contribution to

a Low-Carbon

Society

Contribution to

a Super-Smart

Society



As a general manufacturer of plastic 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 highpriority business expansion opportunity.

The realization of a low-carbon society is

worldwide. Products created by JSW Group's

industrial machinery and products featuring

its new materials have contributed to the

reduction of CO2 emissions. Demand for

future, which makes it a matter of high

the reduction of energy consumption of

our industrial machinery products and

the curbing of CO2 emissions from the

operations of our manufacturing sites.

In a super-smart society, such social issues

as environmental problems and declining

JSW Group's industrial machinery and

birthrates are expected to be resolved.

manufacturing of electronic devices that

make up digital infrastructure. Robotics

with AI and intelligent industrial machinery

That is why the Group's product lines

super-smart society. This is also considered

to be a highly important business expansion

will also play a central role in a super

could serve as an essential part of a

new materials are involved in the

smart society.

importance for the Group.

such products is expected to increase in the

In addition, our responsibilities include

one of the most important challenges

processing machinery, JSW Group believes it extremely important to supply society with all manner of plastics processing machinery that achieves the

Currently being provided Renewable Twin-screw extruder (TEX) for non-fossil-fuel derived plastics

Recycle

- TFX for biocomposites

- Physical foaming injection molding machines

- TEX for chemical and mechanical recycling

- Injection and blow molding machines for recycled plastics
- Film and sheet manufacturing equipment for recycled plastics

Under development

Twin-screw extrusion dechlorination system - Mono-material film manufacturing equipment



Zero CO_2 emissions

- Separator film manufacturing equipment for LiB in electric vehicles
- Pelletizers for solar panel protection film materials
- Materials for major nuclear power generation components
- Materials for offshore wind turbine construction

Reduce CO2 emissions

- 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)
- Reduce CO₂ emissions from business activities (Scope 1, 2)

Under development

Reduce CO₂ emissions - Large injection molding machines for large automotive parts (plastic/Mg)

- Excimer laser annealing (ELA) systems for displays - 3-stage vacuum laminators for package substrate manufacturing

- Laminators and presses for circuit boards
- Laser heat treatment equipment for power semiconductors
- Micro LA systems for sensors
- Deposition systems for 5G-compatible LCP flexible substrates
- Industrial Machinery

- 🎶 🗫 equipped injection molding machines, film and sheet manufacturing equipment

Electronic Devices

- Gallium nitride (GaN) crystal materials
- Lithium niobate (LN), synthetic quartz materials
- Substrates for optical communication and optical modulators Industrial Machinery

- Al robotics and industrial machinery

Bolstering JSW Group's Management Foundation for Sustainable Growth

Human Capital Improvement and

opportunity for the Group.



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.

Human resource strategy to achieve the business portfolio strategy Securing human resources that match the business strategy

– Year-round hiring of young employees and experienced workers with different backgrounds and attributes

Developing individual skills and strengthening organizational (management) capabilities - Management training focused on strengthening organizational ability to

promote "taking on challenges" Creating a work environment that increases engagement

Reform towards an organizational culture that encourages challenge Include challenge targets in managers' annual goals (revision of evaluation system)

Spreading the purpose and promoting DEI&B Strengthen DEI&B initiatives such as creating work environments where

workers can demonstrate individuality in work and development measures to accommodate individuality



Investment in the Future with Innovation Management



contributing to society, it is essential to maintain and strengthen its technological superiority by refining its core competence and expanding its business.

In order for JSW Group to continue

Innovation is an essential factor for sustainable growth. It is important to promote digital transformation which supports data-based, rapid decisionmaking, business model innovation, and the creation of new value.

For the sustained growth of JSW Group, it engage in dialogue with stakeholders.

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

Established Innovation Management Headquarters (April 2023)

Strengthen existing businesses through elemental technology development - 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)

Create innovative technologies through basic technology research

- Formulate plans to establish new R&D centers for developing innovative technologies - Strengthen IP landscape system for efficient new product and market development

- Continue promoting DX strategy following DX certification acquisition in August 2024



- Review officers' remuneration system
- Increase diversity of Board of Directors and Audit & Supervisory Board
- Establish Risk Management Group in Corporate Planning Office

rengthen quality assurance system



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• Demands for recycling and lesser use of plastic resources

Digital infrastructure development for 5G and 6G communications,



Reinforcement of

JSW Group

is important not only to further strengthen compliance and governance, but also to

And supplying society with industrial

(outside officers and female officers)

- Reduce cross-shareholdings

- Continue implementing measures for quality assurance system reform organizational culture reform, process reform, and governance reform



Plastics Machinery Business

Business Overview

The Plastics Machinery Business Division manufactures, sells, and provides maintenance services for plastic production machinery including pelletizers and twin-screw extruders (TEX) that produce plastic pellets, and as well as for plastic process machinery including film and sheet manufacturing equipment which are used for primary processing, that heats and shapes plastic into films. We take pride in our high global market share for pelletizers and separator film manufacturing equipment.

Plastics are used in a wide array of products, from IT products like smartphones to electronic components like capacitors and semiconductors, lithium-ion batteries, automotive parts, food packaging, medical equipment (e.g., catheters), 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 are targeting for realization of a plastic-resources-recycling society, contribution to a low-carbon society (e.g., enhance EV development, boost fuel efficiency through mobility weight reduction, social implementation of renewable energy power generation), and secure stable sales of 100 billion yen, all while enhancing social value and increasing

Analysis of Current State: SWOT Table for FY2024

- Our technical centers in Japan and abroad have developed a unique technology for melting, mixing, and molding control, showcasing a robust capability to meet customer demands
- · Support for PP, PE, and LDPE pelletizers (high coverage rate) High rate of in-house production (confidentiality: proprietary technology)
- Strengths · Ability to manufacture high-quality films cultivated through separators
 - Availability of skilled service technicians with a wealth of experience
 - · Growth in plastics demand, driven by rising living standards Revitalization of markets in India and the Middle East
 - Growing demand for plastics recycling, 5G/6G-compatible

Message from the Head of the Division

Plastic plays an essential role in our lives due to its ease of

Business, we leverage our world-leading technical center to

develop technologies for recycling, energy conservation, and

resource-recycling society and a low-carbon society. In fiscal

strength, achieving orders and sales exceeding 100 billion

10th assembly plant, the 2nd and 4th machinery plants,

capacity for medium- and large-sized extruders, enhance

our service business, and simultaneously strengthen ties

with affiliated companies, increase our share of the current

product lineup, and grow through alliances and M&A.

2023, despite fluctuations, we maintained our overall

Opportunities • After-sales service demand based on long track record of deliveries

- Longer delivery times due to small-lot production and customization · Global Standard (GS) machines were introduced later than at
 - other companies
 - The in-house production rate for film manufacturing equipment is not very high
- Weaknesses Service system in Europe and the United States has room for improvement (film)

- ullet The possibility of tighter global restrictions on plastics use
- · Slowing Chinese market and promotion of Chinese domestic production
- · Growing geopolitical risks (Iran, Russia)

TOP Message

Mono-materialization of packaging film

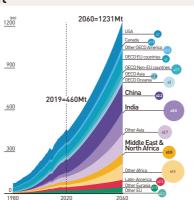
Operating Environment

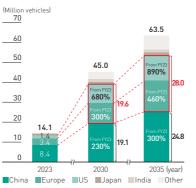
Plastic production machinery

It is estimated that global plastic consumption will rise from approximately 460 million tonnes in $\frac{900}{1}$ 2019 to around 1.2 billion tonnes by 2060. The regions expected to see the highest growth rates are India (5.5 times) and the Middle East and North Africa (3.5 times). While China's growth rate is projected to be 2.2 times, it will continue to hold the largest market share.

Plastics processing machinery

It is estimated that approximately one-fifth of the world's CO₂ emissions originate from transportation and related industries. While the growth rate of electric vehicles (EVs) is currently experiencing a period of $\frac{30}{2}$ Agency (IEA) predicts that the medium- to long-term growth trend will persist, albeit with increased polarization between North America, Europe, and China.





* The figures include PHEV as well as BEV. Created by our company based on Global EV Outlook

Trends in net sales for plastic production and processing machinery









Analysis of Current State: Sources of Strengths and Challenges

We are proud to possess the world's most advanced melting, mixing, and solidifying technologies for plastics. One of our key strengths is our in-house capability to design, manufacture, and process all the main components of our equipment. The confidentiality of our proprietary technology through in-house production underpins our ability to maintain and enhance our product competitiveness. Additionally, we collaborate with Japan Steel Works M&E to develop materials (metallic materials) with exceptional wear and corrosion resistance for our core components, the screw and cylinder. This unique capability sets our Group apart.

We offer innovative products and services by integrating our profound knowledge of equipment and processes with advanced software, including numerical analysis technology like resin flow analysis, and Al/IoT technology, alongside the abovementioned cutting-edge hardware.

With this foundation, we offer equipment and services tailored to meet customer needs, and several of our products boast top-class market shares.

We are proactively addressing our weaknesses, particularly in correcting long delivery times, by promoting digital transformation (DX) and capital investment to enhance production efficiency. While most of our capital investment is directed toward plastic production machinery, increasing the productivity of our pelletizers and twin-screw extruders will also enhance the production capacity of our film manufacturing equipment and boost the rate of in-house production. Additionally, we will implement measures based on TOWS analysis.

Strategy, Measures, and Prospects for Growth

1. Accelerate growth with focused investments

(1) Plastic production machinery (pelletizers, twin-screw extruders)

- Achieve both sales growth and improved profitability by increasing
- · Capture growth markets, such as India, by strengthening global expansion. (2) Film and sheet manufacturing equipment
- Capture separator film demand, which will grow in the medium to
- Expand the lineup of functional materials and packaging materials.

2. Expand the service business

- Increase production capacity and expand sales in focused regions (India, Middle East, China, Japan).
- 3. Promote the expansion of the plastic processing machinery complex

Enhancing the sales and after-sales service of film and sheet manufacturing equipment

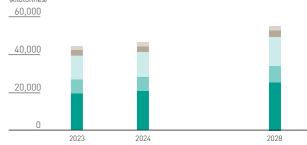
We anticipate robust sales of plastic production machinery, driven by growing demand for plastics. To meet this demand, we are bolstering our production capacity through capital investments and other strategic initiatives. To enhance our global presence, we have expanded the capabilities of our local subsidiary in India and are considering establishing a technical center there. These measures will help us capture demand in this vast market.

We anticipate that sales of separator film manufacturing equipment will remain steady during the JGP2028 period. During this time, we will focus on enhancing our overall capabilities in plastic processing machinery by expanding sales of film and sheet manufacturing equipment for applications beyond separators, such as functional and packaging materials. Additionally, we will bolster our after-sales service and aim to improve our overall capabilities in plastic processing machinery.

Sales trends and forecasts for plastic production machinery (pelletizers, twin-screw extruders)



Projections for film and sheet demand



■Asia Pacific ■Europe ■North America ■Middle East & Africa ■South America (Created by JSW based on various materials)

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Strategy by Business

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, which shape plastic materials (pellets) into three-dimensional forms. Additionally, we provide injection molding machines for 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 3,000 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. Magnesium injection molding machines utilize the thixomolding method, allowing the molding of high-precision, high-density parts. Both plastics and magnesium contribute to the weight reduction of automobiles, particularly EVs, as in-vehicle parts. We are also working to meet the needs for monolithic molding and larger components to improve productivity.

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 magnesium injection molding machines, and blow molding machines with over 80% share of the direct blow molding machine market in Japan.

Analysis of Current State: SWOT Table for FY2024

- In-house development and manufacturing of numerous key
- Capable of mass customization production
- · Ability to respond and offer recommendations with mediumsized and large machines, backed by extensive experience,
- especially in the automotive field Well-developed domestic and international sales and service network
- · Increase in new capital investment with the shift to electric

 Growing demand for replacing to energy-efficient electric machines due to rising energy costs and the need to reduce CO2 emissions

Opportunities • Increasing demand for plastics and rising interest in sustainable plastic products, particularly in India

- Adaptability to economic fluctuations in Japan and overseas where the company's products are
- · Ability to handle large orders
- Weaknesses Lack of experience in supporting overseas standards for some

 Disruption of international supply chains due to political and • The increasing performance of overseas manufacturers

 Decline in demand for refillable bottles due to the shift toward pouches (blow molding machines)

TOP Message



Message from the Head of the Division

with increased inquiries for large-scale equipment. Additionally, we

The products of our division significantly contribute toward a low-carbon society by enhancing equipment energy efficiency and increasing, and we are pursuing global expansion by developing products that offer remote maintenance and user-friendly features

Operating Environment

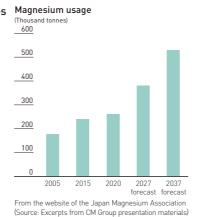
Percentage of injection molding machine electrification

In Europe, hydraulic machines remain prevalent, with the electrification rate for large machines being only a few percent. However, the recent $\frac{60}{100}$ increase in electricity prices and the growing imperative to reduce CO₂ emissions are expected to drive demand for replacing hydraulic machines with more energy-efficient electric injection molding machines.

Magnesium usage for automobiles Magnesium usage

The use of magnesium in automobiles is projected to rise, driven by the increasing need to reduce vehicle weight as electric vehicles become more prevalent. Additionally, there is a growing demand for larger components, such as in-vehicle displays to display more information.

Electrification rate 100 [Japan] Large size [Japan] Small to medium size Electrification rat [Europe] Large size FY2022 (Created by JSW based on various materials)



Trends in net sales of molding machines JGP2028 (Millions of ven) 80,000 78,000 68,000 65 800 65,300 60,000 40,000 20,000

Plastic injection molding machines

Domestic shipment value: 1st place Domestic market share by units: 3rd place



Direct blow molding machines Domestic market share: over 80%

Exclusive product line

(Japanese Registered Trademark



Analysis of Current State: Sources of Strengths and Challenges

Leveraging our extensive product lineup, we offer a wide range of models at our technical centers in Japan and overseas, equipped to address our customers' needs effectively. Our core competencies are fully integrated into our injection molding machines. Additionally, our strength in material design technology allows us to develop wear- and corrosion-resistant metallic materials. We also manufacture key components in-house, such as controllers, servo amplifiers, and special servo motors, and handle part processing and assembly at our own facilities. Our advanced manufacturing technology, unique to our non-fabless production, ensures we provide safe and reliable machinery and services. Notably, we are proud to be the world's leading manufacturer in terms of large all-electric injection molding

machine shipments. In the automotive sector, the trend toward integrated molding and larger components for improved productivity presents a significant opportunity for us, as we specialize in providing large-scale injection molding machines.

Plastic and magnesium injection molding machines are distributed through a well-developed, directly controlled sales network and through sales companies at 22 locations (10 in Japan, 12 overseas). After-sales service is provided through a global service network, ensuring responsiveness to customer needs. However, we see potential for growth in Europe, India, and other regions. To enhance our corporate value in these areas, we plan to expand the capabilities of our bases.

Strategy, Measures, and Prospects for Growth

1. Plastic injection molding machines

Position Europe and India as key regions for future sales expansion.

- Europe: Accelerate the adoption of electric machines to meet rising energy costs and the need to reduce CO₂ emissions.
- · India: Establish a technical center to increase our presence and strengthen sales and service networks.

2. Magnesium injection molding machines

• Expand large-scale machine series to meet the growing demand for automotive applications

3. Improve product competitiveness by incorporating AI/IoT functionality

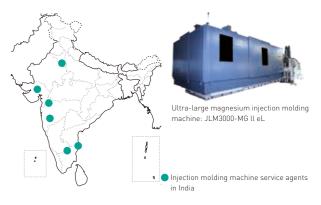
· Remote maintenance (North America and Asia) and productivity improvement with smart molding machines (J-wise equipped machines) (Japan)

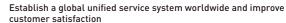
Expanding sales of electric plastic injection molding machines and capturing the emerging markets

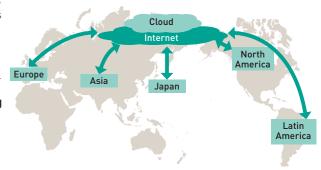
As the world's leading manufacturer in terms of shipments of all-electric large-scale machines, we are poised to meet Europe's electrification needs by leveraging the large-scale assembly and service capabilities of our Poland base. To expand our global sales, including in Europe, we are committed to enhancing customer satisfaction by establishing a global unified service system that integrates remote service from Japan with local service staff.

Expanding magnesium injection molding machine lineup catering

We will develop and launch new models aimed at large-scale automotive components. Additionally, we will introduce region-specific models in major markets such as Europe, the United States, Southeast Asia, and India, leveraging our mass customization production capabilities.







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Industrial Machinery Business

Business Overview

The Industrial Machinery Business Division manufactures, sells, and provides maintenance services for industrial machines that solving social issues in the fields of electronic devices and infrastructure.

In April 2024, we strategically relocated our affiliate, JSW AFTY, to the Yokohama Plant, where JSW Aktina System and Nikko Kouki are also based. This move enables us to leverage our Group's resources more efficiently, enhance operational productivity, and optimize results. Our key products—excimer laser annealing (ELA) systems, ECR deposition systems, vacuum laminators, and vacuum presses—are generating a wide range of social value, including the creation of digital social infrastructure in a supersmart society and improvement of energy-saving performance through advancements made in the device products.

Our infrastructure product line offers highly specialized and essential products designed to meet customer requirements, including couplers and draft gears for railroad cars and starting gates for horse racing tracks. These products are highly regarded by customers for their reliability and durability.

Analysis of Current State: SWOT Table for FY2024

- Product lineup leveraging proprietary technology (e.g., F-ELA systems)
- · Advanced technical capabilities in laser heat treatment
- Ability to develop and design products that meet customer needs · Well-equipped testing facilities and process engineers
- $\textbf{Strengths} \ \, \textbf{\cdot} \, \text{Exceptional reliability grounded in extensive experience of} \\$ delivering equipment

- · Demand for electronic devices driven by the expansion of DX, AI, and EV • Demand for new equipment driven by technological and product innovation (high-speed, high-capacity communications, next-generation power semiconductors)
- Increasing demand for high-efficiency equipment aimed at reducing production costs
- Relocating production to emerging countries to mitigate

- Extensive range of products in specialized fields, leading to
- Limited production capacity resulting from a rapid increase in
- · Late entrant in the semiconductor manufacturing equipment

Weaknesses

- trade tensions between the US and China • Risk of a decrease in market value due to price competition
 - with rival companies

· Geopolitical risks such as raw material supply issues due to

Risk of declining demand due to the shift toward existing

Threats

TOP Message



Message from the Head of the Division

Notably, in our primary area of laser application products, with large-size G8 glass substrates. The large-size substrate and medium-sized panels. This advancement simultaneously boosts production efficiency and significantly reduces waste.

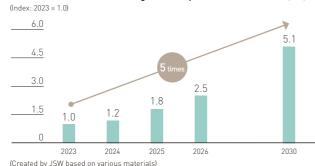
heat treatment technology (melting and solidification) and

Operating Environment

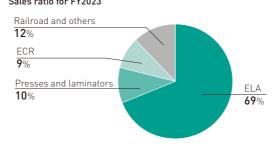
The expansion of DX, AI and EV is fueling the demand for electronic devices, leading to increased investment in equipment aimed at enhancing quality and productivity. Notably, the electrification and automation of automobiles are driving the need for high-speed, high-capacity communication, power semiconductors, and various sensors. Additionally, the electronic circuit board industry is witnessing a shift in production to emerging countries, with significant investment progressing in Southeast Asia.

On the other hand, there are concerns that geopolitical risks, such as US-China trade friction, along with potential market value declines due to price competition with competitors, may adversely impact the business.

Market scale forecast for next-generation power semiconductors (SiC)



Sales ratio for FY2023



ELA systems for display

Global market share: approx. 80% (2022-2024)

ECR deposition systems for semiconductor lasers

Global market share: 100% (High-end applications)

Railroad couplers and draft gears

Domestic market share: approx. 60%



Analysis of Current State: Sources of Strengths and Challenges

Since its introduction in 1995, we have successfully delivered over 200 units of the ELA systems. Building on this extensive experience, we have developed innovative technologies like the F-ELA, which employs a unique float mechanism to transport workpieces. The F-ELA system that meets customers' needs is highly regarded and has been adopted for mass production. Currently, we are expanding our business beyond the display field and actively pursuing opportunities in the power semiconductor market by leveraging our laser heat treatment technology.

In addition, since its introduction in 1989, the ECR deposition system, essential for manufacturing semiconductor lasers for optical communications, has been successfully delivered and implemented at leading device manufacturing companies in

Japan. Looking ahead, we aim to expand our sales to China, Europe, and the United States.

On the other hand, laminators and presses play a crucial role in manufacturing high-density circuit boards and package substrates for various semiconductor types. Our extensive delivery record has earned us the trust and confidence of our customers in this field. In 2023, we introduced a cutting-edge 3-stage vacuum laminator designed for manufacturing package substrates for servers used in high-speed, high-capacity data centers. We are currently demonstrating its performance on our customers' production lines. To further expand our business, we are targeting new markets in East Asia including China, as well as Southeast Asia and India.

Strategy, Measures, and Prospects for Growth

1. ELA systems for displays

• We will increase the production volume of F-ELA systems to solidify their position as an industry standard for high productivity and largesize panel manufacturing

2. Laminator and press machines for electronic circuit boards

• We aim to strengthen our presence in emerging markets and expand our global footprint by leveraging our features, including energy efficiency and clean compatibility.

3. Three-stage vacuum laminator for manufacturing package

• We will establish a technical center within the Meiki Plant, which is our development base for laminators, with the goal of addressing issues for our customers and making a full-scale market entry.

Entering the semiconductor market through development of laser application technology

At the end of fiscal 2023, we secured an order for the world's first large-scale 8th generation substrate laser annealing system (F-ELA system), which utilizes a unique float transfer mechanism. To further expand sales of laser application equipment, we will leverage our core competence in laser application technology to develop and market a laser annealing system for the thermal processing of SiC substrates, which are next-generation power semiconductors. This will enable us to achieve productivity more than double that of conventional equipment and meet the growing market demand. Additionally, we will ensure customer satisfaction by enhancing sales of parts and maintenance services for mass-production equipment, alongside the introduction of new products for displays and semiconductors.

New vacuum laminator



Sales trends and forecast for laser application equipment



Strategy by Business

Material and Engineering Business

Business Overview

In the Material and Engineering Business, Japan Steel Works M&E (hereinafter referred to as M&E) has developed large products for power plants, which we pioneered and have the 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) rotor shafts), components for offshore wind power construction (anvils, ram weights, etc.), and industrial components (back up roll for plate mill, etc.). Additionally, we have been involved in the development and manufacture of pressure vessels, thick plates, and clad steel plates for social infrastructure and a wide range of facilities.

In response to major shifts in our operating environment toward a low-carbon society, we are further expanding our products related to nuclear and offshore wind power generation, and are exploring clad product applications. Additionally, we are transforming our product portfolio to continue offering a wide range of materials (M: Materials): not only steel, but also non-ferrous metals and carbon fiber composite materials. In engineering services (E: Engineering), we are broadening our scope to include hydrogen tanks for large buildings and other facilities, leveraging our expertise in welding, non-destructive testing, hydrogen, and high-temperature/ high-pressure technologies.

Analysis of Current State: SWOT Table for FY2024

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

Kengo Takeya

For over 110 years, our company has delivered high-quality,

global initiatives to secure stable energy and achieve carbon

role in supporting the world's energy supply and advancing

Under the medium-term management plan JGP2028

that commenced in fiscal 2024, we are focusing on stabilizing

quality and improving the productivity of our core large-scale

forged steel products. Additionally, we are investing in

needs. We will systematically implement measures to

achieve our financial targets within five years, with the

upgrading our facilities to better meet our customers' diverse

Message from the Head of the Division

- · 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

Opportunities • Withdrawal/downsizing of competitors, industry reorganization trend



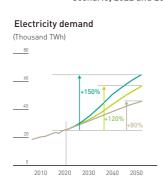
- · Limits to in-house machining capabilities due to constraints on large-scale machining facilities
- Difficult to standardize due to our build-to-order production system
- Not enough automation of tasks
- Capacity to accommodate new demand for small and medium-sized products and small lot production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

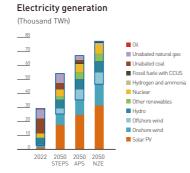
- Difficulty in securing personnel due to decrease in the local population and falling birthrate
- · A sudden slowdown in demand due to tighter regulations
- related to the environment and such
- · Shrinking market for oil- and gas-related products (rapid shift to renewable energy generation

Operating Environment

Global energy demand is projected to increase under all climate change scenarios anticipated by the International Energy Agency (IEA). The NZE scenario is expected to see the highest increase. With the current situation considered to be at 100%, the NZE scenario is projected to reach 250% (+150%), the APS scenario at +120%, and the STEPS scenario at +80%. Our Company supplies components for various types of power generation, including nuclear and wind power (blue box in the figure below), presenting opportunities across all scenarios. Additionally, there is a growing trend toward nuclear power generation, particularly in Europe, driven by the need to balance decarbonization and energy security, as well as its superior cost performance and stable power supply capabilities.

Figure 3.13 ▶ Global electricity demand, 2010-2050, and generation mix by scenario, 2022 and 2050



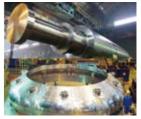


* Source: Created by JSW based on IEA "World Energy Outlook 2023"

Trends in net sales of Material and Engineering Business (Millions of ven) 60,000 52,500 50.500 41,911 38.500 40,000 33,900 30,000 15,000

Rotor shafts for nuclear power generation, generator shafts, nuclear reactor vessel components, steam generator components

Deliver ultra-large components manufactured from the world's largest 670-tonne steel ingot



Anvils for offshore wind turbines

Hold a 100% global market share for large models with an outer diameter of 6.5 meters or more



Analysis of Current State: Sources of Strengths and Challenges

Our greatest strength lies in the knowledge, experience, and track record we've built over more than 100 years in the fields of melting, mixing, and solidifying steel. We are proud to possess world-class manufacturing technology, including facilities at Muroran Plant capable of producing the world's largest 670-tonne steel ingots. These steel ingots are forged and heat-treated using a 14,000-tonne press machine and then shaped to their final form with super-large machining facilities, accommodating a maximum processing weight of 400 tonnes.

We leverage the strengths mentioned above to address the current base load requirements for primary and secondary components in nuclear power generation and high-efficiency gas power generation.

In renewable energy power generation, we also supply ram weights (used in pile drivers) and anvils (covers for monopiles) essential for securing offshore wind turbines to the seabed. These products benefit from our expertise, being large components with diameters of several meters, and they exhibit a high balance of strength and toughness.

By continuing these initiatives, we aim to create social value while sustainably enhancing our corporate value. We are confident that this approach will also attract talented individuals who take pride in contributing to these values.

Strategy, Measures, and Prospects for Growth

1. Capture demand for forged steel products related to power generation equipment

- Securely capture demand for ultra-large forged steel products for nuclear power generation, offshore wind power generation, and other applications that help reduce CO2 emissions.
- Respond to robust demand for forged steel products for high-efficiency thermal power generation.

2. Investment in the renewal of aging core production facilities

· Aim to maintain manufacturing capabilities, improve efficiency, and increase profitability by investing in the aging production facilities.

We anticipate that the demand for nuclear power generation will continue to increase due to the need for decarbonization and energy security. Additionally, we expect the demand for high-efficiency thermal power generation, which operates under high-temperature and highpressure conditions, to persist in the long term.

We will meet the growing demand by leveraging our extensive manufacturing experience and expertise in various reactor types across different countries and regions. Furthermore, we will address the demand for high-efficiency power generation using natural gas by utilizing our manufacturing capabilities for large-scale heat-resistant materials, and meet the demand for high-efficiency thermal power generation, such as the GTCC power generation system.

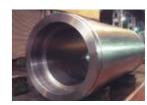
We recognize that a stable power supply is essential for "making the world sustainable and prosperous," and our Company plays a vital role in global energy supply and policies. We will continue to make every effort to ensure that we have the best production system in place at all times, so that we can provide products that meet our customers' requirements without delay.

Outlook for installed power generation capacity by energy STEPS (Stated Policies Scenario)

(1 GW = 1 million kW) 5,000 4,000 Coal-and oil-fired power generation is expected 3,000 2,000 Nuclear and gas-fired power generation is 1,000 2050 (Year

Nuclear energy Natural gas Petroleum Coal * Source: Created by JSW from IEA "World Energy Outlook 2023







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Business Overview

The Photonics Business, managed by our New Business Promotion Headquarters, and its core technology focuses on crystal growth and processing of synthetic quartz, lithium niobate (LN), and gallium nitride (GaN). Our roots trace back to synthetic quartz crystal, with nearly 40 years of experience in growing and selling crystals. Over the years, we have developed our crystal growing and processing technologies, offering products such as optical low-pass filters, quartz wafers, and wave plates, in addition to contract processing services. We are also expanding into new materials like LN and GaN, leveraging our technological expertise and experience. Notably, we have jointly developed the ammonothermal method with Tohoku University and Mitsubishi Chemical Corporation, a mass production technology for large and low-defect GaN crystals.

The cultivation and processing of synthetic quartz crystals are primarily managed by Fine Crystal, while Fine Crystal Iwaki oversees the cultivation and processing of LN crystals. In addition to being able to produce their own high-quality crystals, in recent years, they have advanced their technology for joining different materials and are intensifying their efforts in developing various bonded substrates required for optical communication applications.

Analysis of Current State: Strengths and Challenges

For crystal growth process, we leverage our core competencies in the technologies of "melting" and "solidifying." In addition to our established strengths in crystal growing and processing technologies, we have expertise in developing, designing, and manufacturing in-house pressure vessels (autoclaves) essential for growing crystals at high temperatures and pressures, using our proprietary high-heat-resistant, high-corrosion-resistant alloys. Additionally, we manufacture unique crystal materials

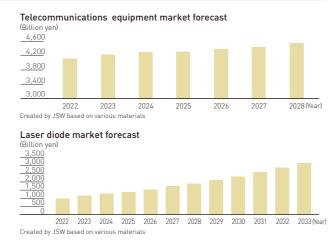
such as synthetic quartz and LN crystal and possess fundamental processing technologies like cutting and polishing, as well as technologies for bonding different materials.

Our greatest strength lies in our ability to offer a comprehensive service. This includes ensuring the quality of the crystals themselves, managing the manufacturing equipment and conditions that enable that quality, and performing substrate processing with focus on the performance of the final product.

Analysis of Current State: Operating Environment

There is an increasing demand for next-generation high-speed, high-capacity communications, characterized by "high speed and large capacity," "low latency," and "massive simultaneous connections." The infrastructure supporting these communication networks requires substantial quantities of substrates for optical communications and optical modulators, as well as high-radio-frequency (RF) devices that ensure both high-speed operation and energy efficiency. High-quality crystals and substrates are essential to achieve these capabilities.

On the other hand, GaN is recognized for its unparalleled potential with no competing material in applications such as laser diodes (LDs: for special high-brightness lighting such as high-brightness projectors). Compared to the traditional hydride vapor phase epitaxy (HVPE) method, our Company's ammonothermal method offers superior quality and productivity.



TOP Message

Takumi Hanamura
Specialist Managing
Senior Councilor
Director of New Business
Promotion Headquarters
General Manager,
Photonics Office,
New Business Promotion



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 "birefringence" of quartz and LN. Today, we are dedicated to developing new high-quality, high-precision crystal substrates that leverage the various electrical and optical properties of quartz and LN to meet our customers' needs. With our lineup of three crystal materials, including the newly added GaN, we aim to provide optimal solutions to emerging social challenges such as higher brightness, greater capacity, lower latency, and power saving in key areas like optical devices, optical communication devices, and power electronics. We will achieve this by utilizing our long-established technological expertise alongside new knowledge.





Message from the Director in Charge of Promoting ESG

We are promoting sustainability initiatives in line with our new corporate Group philosophy and material issues that we established and identified in November 2022 as well as the Basic Sustainability Policy that we formulated in July 2023. In June of 2024, JSW Group formulated a new medium-term management plan, JGP2028. Our aims for the fiscal 2033, ten years from now, include not only reaching our financial target of 500 billion yen in net sales, but also achieving our sustainability targets of contributing to the realization of a sustainable and prosperous world through the development and implementation of industrial machinery and new materials that solve social issues.

In JGP2028, which is backcasted from there and has the approach of "reforms and challenges for new growth," we aim to grow into a corporate group with sales of at least 380 billion yen by fiscal 2028 via improving corporate value while resolving materiality and improving our financial foundation.

To achieve this goal, it is essential that we further strengthen our sustainability management. As such, we plan to enhance various initiatives related to the environment, society, and governance.

Visit our website to view the Japan Steel Works Group Basic Sustainability Policy.

Sustainability Management: https://www.jsw.co.jp/en/sustainability/sustainability_management.html



Hideo Nakanishi
Director & Executive Officer
In charge of Promoting ESG,
In charge of Environmental
Management, General
Manager of General Affairs
Department

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 director 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