

# Medium-term Business Plan "Change for Growth" (FY2021-2023)

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### Basic Strategies





1. Expand provided value from economic value to social value to solve customers' and social issues
2. Strengthen the management base

### Transformation Strategy

1. Shift to a highly cyclical business model
2. Make the organization more dynamic and efficient

### Four Growth Engines

In our growth strategy, we will promote management efficiency through selection and concentration; for example, concentrating management resources on our four growth engines, which include the expansion of business domains. At the same time, we will aim for stable and sustainable growth through a balance between aggressive and defensive policies.

	 Automotive parts*1	 Thermal insulation materials for buildings and houses*2	 FPD cushioning materials	 New business domains
<b>FY2023 Target</b>	+23%	+12%	+20%	Net sales ¥3.0 billion
	Need for vehicle weight reduction Next-generation products that satisfy energy-saving and recycling demands	Growing demand for energy-efficient housing Expanding demand for high-performance insulation materials	Growing demand for LCD/organic EL panels and personal computers Increasing overseas business development	Promotion of M&A activities Promotion of commercialization for existing businesses that show potential
<b>FY2022 Result</b>	+6.1%	△6.5%	+16%	Net sales ¥0.6 billion

\*1 Sales volume for EPP business \*2 Sales volume for construction and civil engineering business  
 Figures in the columns of automotive parts, thermal insulation materials for buildings and houses, and FPD cushioning materials are changes in volumes compared with that of fiscal 2019.

Quantitative targets	Net sales (Millions of yen)	Operating profit (Millions of yen)	Operating profit ratio (%)
	120,000	7,700	6.4%
<b>FY2022 Result</b>	131,714	2,956	2.2%

### Qualitative targets

- Improve customer satisfaction by consciously increasing efforts to "Deliver with WOW!"
- Connect SDGs initiatives not only to profit improvement but also to social contribution and job satisfaction
- Establish a strategic and efficient corporate organization
- Use risk assessments and other measures to prevent lost worktime injuries

### Investment plan

#### Plan for FY2021 to FY2023

- Capital investment plan: ¥23.5 billion (3 years)
- Depreciation: Approx. ¥20.0 billion (3 years)

#### Major investment plans





- Warehouse construction at Kanuma MF Plant as a logistic cost saving plan
- Production capacity expansion for ARPRO/P-BLOCK (Korea, Taiwan, India)
- Production process improvement in North America

### Forecast for final fiscal year at the end of July, 2023

#### Quantitative target FY2023 forecast (millions of yen)

Net sales	Operating profit	Operating profit ratio
135,000	5,600	4.1%

### Progress of four growth engines

	 Automotive parts	 Thermal insulation materials for buildings and houses	 FPD cushioning materials	 New business domains
<b>FY2023 forecast</b>	+11%	+1%	+20%	Net sales ¥0.6 billion

### Forecast for extrusion/bead business

#### Extrusion Business

Net sales are expected to increase due to an increase in sales volume. Profits are expected to remain at the same level as the previous fiscal year, due in part to an increase in fixed costs.

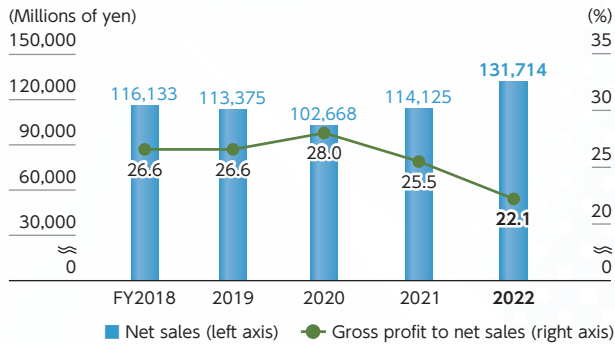
#### Bead Business

Sales and profit are expected to increase due to a recovery in sales volume and revisions of product prices.

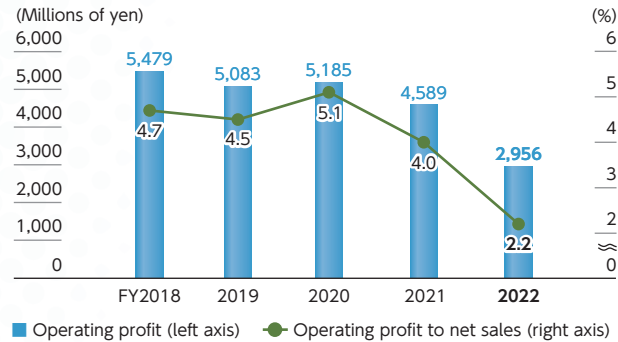
# Financial and Non-financial Highlights

## Financial Highlights

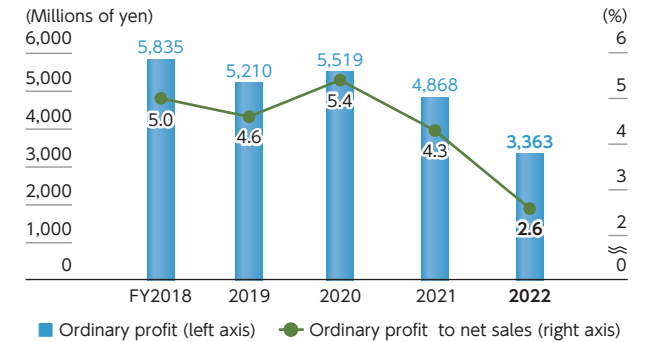
### Net sales/Gross profit to net sales



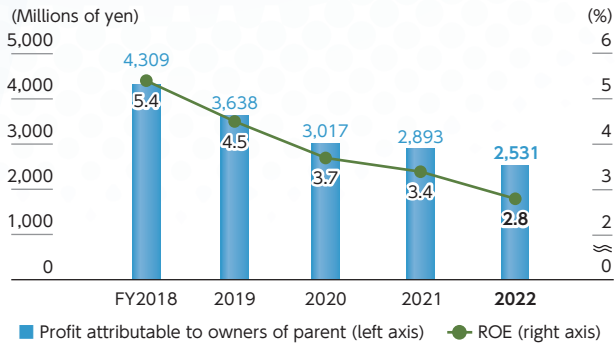
### Operating profit/Operating profit to net sales



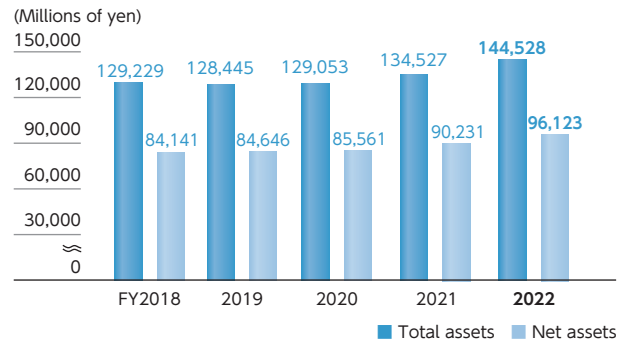
### Ordinary profit/Ordinary profit to net sales



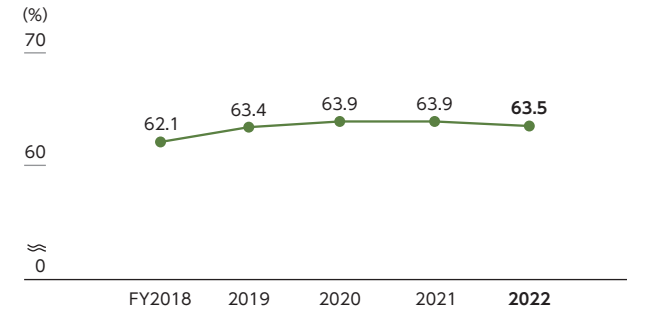
### Profit attributable to owners of parent/ROE



### Total assets/Net assets



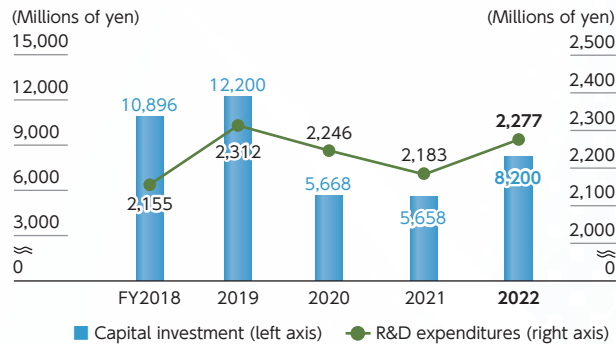
### Shareholders' equity ratio



# Financial and Non-financial Highlights

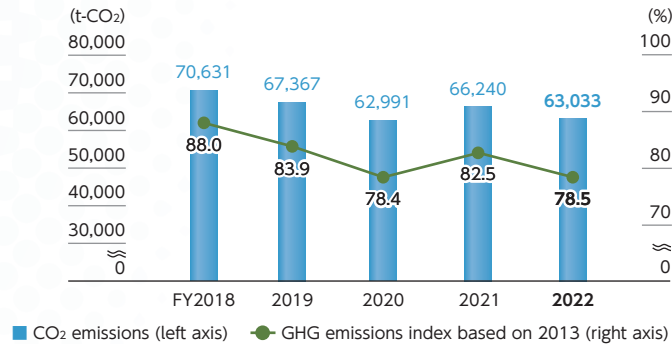
## Financial Highlights

### Capital investment/R&D expenditures

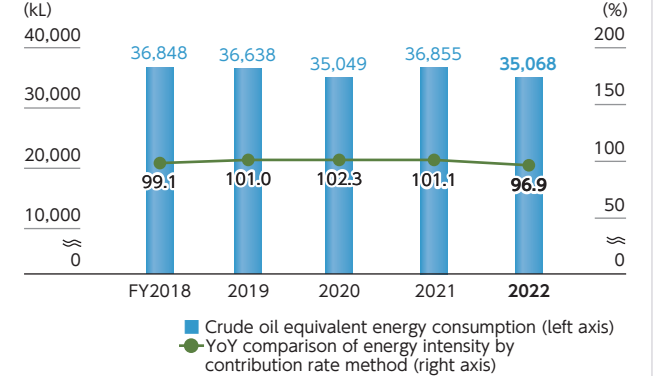


## Non-financial Highlights (Non-Consolidated Figures)

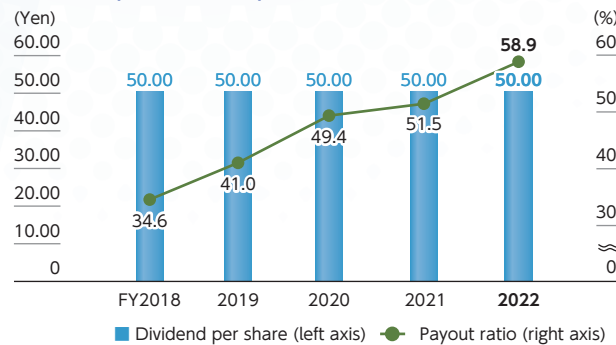
### CO<sub>2</sub> emissions/GHG emissions index based on 2013



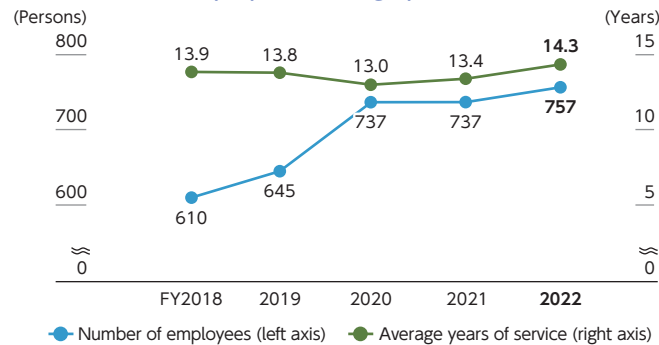
### Crude oil equivalent energy consumption/ YoY comparison of energy intensity by contribution rate method



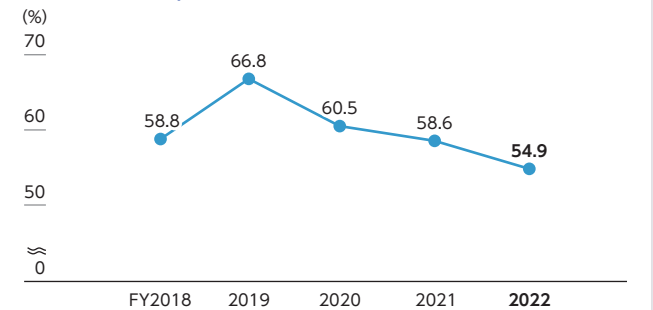
### Dividend per share/Payout ratio



### Number of employees/Average years of service



### Paid leave acquisition rate

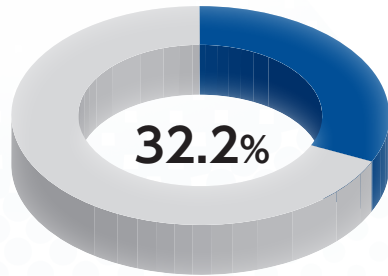


# Extrusion Business



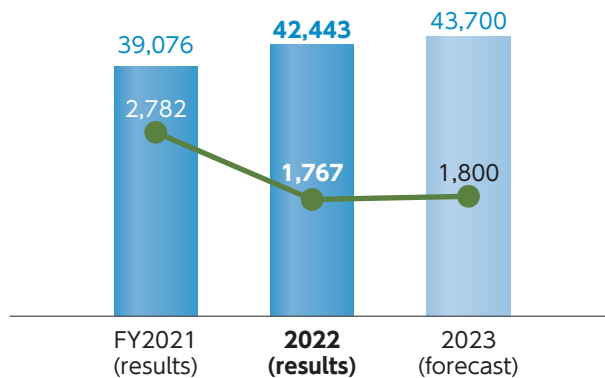
**Koichi Wakabayashi**  
Director,  
Executive Vice President  
In charge of  
Extrusion Business Division

## Net sales ratio



## Net sales and Operating profit

■ Net sales ● Operating profit (Millions of yen)



## Business Environment

### Opportunities

- Increase earnings by revising sales prices
- Focus on development of sustainability strategy products
- Growing needs for resource-saving and high-performance product development

### Risks

- Increase in raw materials costs, distribution costs, and power costs
- Revision of sales price
- Decline in consumer sentiment due to rising prices

## Strengths

- Know-how and technological capabilities to maximize the lightweight, heat-insulating, and shock-absorbing properties of foamed plastics
- Development capabilities for high value-added products differentiated as a leading company in foamed plastics
- Close relationship of trust with customers and ability to respond to advanced needs



## Review and Future Outlook

The extrusion business in fiscal 2022 was also affected by factors such as soaring prices for raw materials, distribution, and power, as well as the shortage of semiconductors. Operating profit decreased due to delayed sales price revisions for raw material prices increase, in addition to soaring utility costs. Moving forward, we expect continued increases in prices for raw materials, distribution, and utilities. Revision of sales prices will continue to be the most important issue in fiscal 2023.

JSP will also focus on developing strategic products that promote sustainability management. We will accelerate the development of resource-saving, high-performance products by utilizing the properties of foamed plastics such as light weight, heat insulation, and cushioning. We will contribute to solving social issues by supplying new products with less environmental impact than ever before.

## Living Materials Business

In the Living Materials Business, which mainly comprises STYRENEPAPER (foamed polystyrene sheets used in food packaging), demand for general-purpose trays for fresh food declined slightly as pandemic stay-at-home demand cooled. At the same time, demand for side dish containers used for home meal replacement increased. In fiscal 2023, we anticipate a recovery in demand for food containers due to recovery leisure excursions, events, tourism, etc., in conjunction with normalization of daily life after the pandemic, as well as an increase in demand for containers that support new eating styles such as take-out and delivery.

In the Living Materials Business, we plan to actively develop food containers with reduced environmental impact such as biomass materials and recyclability. We will develop new applications by realizing even higher added value for PSP, which has excellent resource-saving and heat-insulating properties. In addition to heat resistance, we will promote the market development of grades with excellent oil resistance and recyclability.



STYRENEPAPER (food containers)

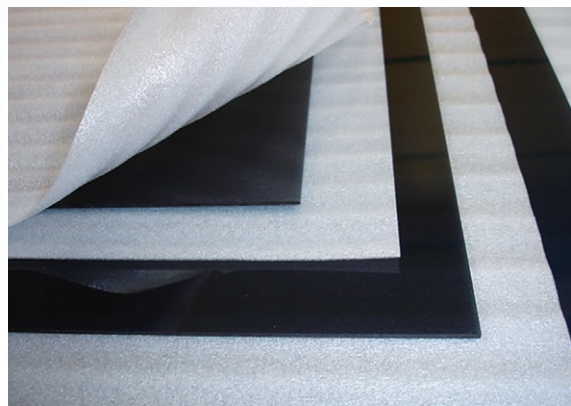
# Overview by Segment

## Extrusion Business

### Industrial Materials Business

In fiscal 2022, the performance of FPD cushioning materials, which is one of JSP's growth engines, decreased for both high-value-added products and general-purpose products. This decrease was caused by the impact of stock adjustments of LCD panels. In fiscal 2023, we expect a gradual recovery toward the second half of the fiscal year. Growth in China, a large market, will be important in expanding demand for FPD cushioning materials. From 2022, we will dispatch personnel to local group Companies in order to strengthen our sales activities. As a basic strategy for the extrusion business, we will promote the switch from other materials by actively communicating the value of JSP products.

The need for FPD cushioning materials is expected to further increase due to the higher quality and larger sizes of displays such as organic EL and 8K. Further expansion is expected in the future, not only for smartphones and computers, but also for automobiles and medical devices. MIRAMAT ACE has a high advantage in performance, and we predict that the replacement of existing cushioning materials with MIRAMAT ACE will accelerate further in the future.



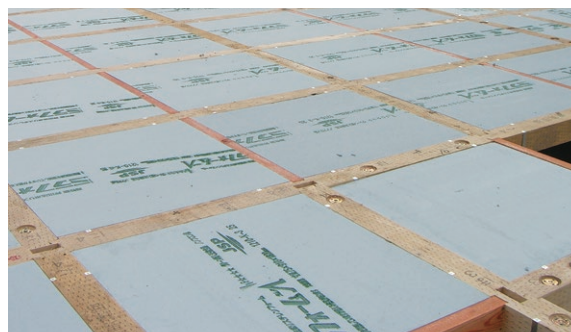
MIRAMAT ACE (FPD cushioning materials)

### Construction and Civil Engineering Materials Business

Fiscal 2022 performance in this area of business decreased by 7%, falling below the fiscal 2023 target of a 12% increase over fiscal 2019 sales volume. This was due to the supply of housing equipment (hot water heaters and other appliances) having been affected by a shortage of semiconductors and other parts which, in turn, caused there to be delays in housing starts. In addition, sales of MIRAFOAM λ (lambda), a strategic high-performance insulation material for housing, were limited due to difficulties in obtaining some auxiliary materials. At the same time, sales volume of pre-cut thermal insulation materials continued to grow. We will expand our business further by leveraging the strengths of this product, which include a shorter, simpler installation process and reduced industrial waste-related costs.

In the area of civil engineering materials, J-WALLBLOCK, an expanded polystyrene (EPS) block with wall surface material, is gaining market recognition for its contribution to reducing time and costs associated with construction. JSP expects sales of the product to continue to grow steadily in fiscal 2023.

The construction industry is expected to continue promoting the construction of net-zero energy and other energy-efficient housing. In addition to new energy-efficient homes, we will work to develop high-performance insulation materials and construction methods that are easy to apply. These should help us capture business associated with the renovation of many existing homes in Japan to energy-efficient specifications.



Pre-cut thermal insulation material MIRAFOAM (lambda)

Insulation materials pre-cut to customer specifications eliminate the need for cutting at the construction site, saving time and simplifying the installation process, leading to lower labor costs. Further, as no industrial waste is generated, disposal costs are also reduced.

### TOPIC

#### J-WALLBLOCK and Foam-Support Construction Method Registered with NETIS

In June 2022, J-WALLBLOCK, which has a solid track record as a simple wall construction method for road retaining walls, and the foam-support construction method, which uses EPS blocks and urethane foam together to reinforce bridges, were registered with the New Technology Information System (NETIS) operated by the Ministry of Land, Infrastructure, Transport and Tourism in Japan. JSP expects that NETIS will provide the information to public works contractors and builders and sales will increase.



Foam-support construction method registered with NETIS.

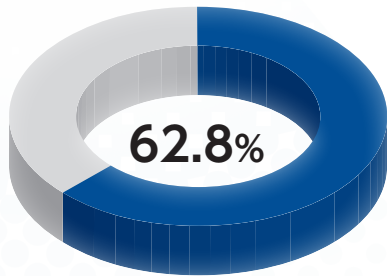
# Overview by Segment

## Bead Business

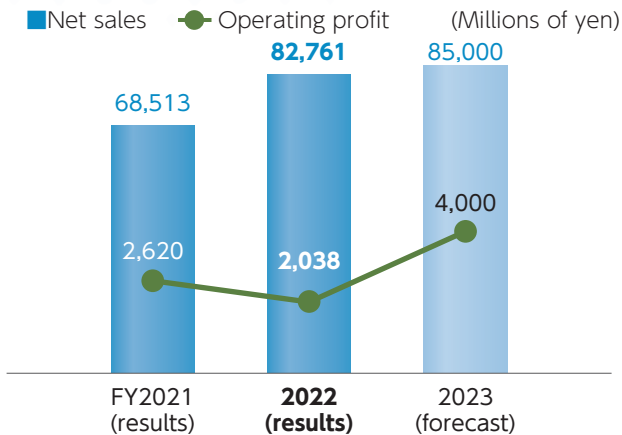


**Yasuo Oikawa**  
Director,  
Executive Vice President  
In charge of  
Bead Business Division

### Net sales ratio



### Net sales and Operating profit



### Business Environment

#### Opportunities

- Growing demand for resource-saving and high-performance products
- Increase earnings by revising sales prices
- Expand earnings by adding value to products and reducing costs

#### Risks

- Decrease in automobile production due to shortage of semiconductors
- Decrease in orders due to stagnation of economic activity
- Soaring raw material prices

### Strengths

- Achieving the reduction of GHG emissions, which is a customer issue
- Providing customers with added value other than products (for example, technical support)
- Business growth potential that leverages our global network

### Review and Future Outlook

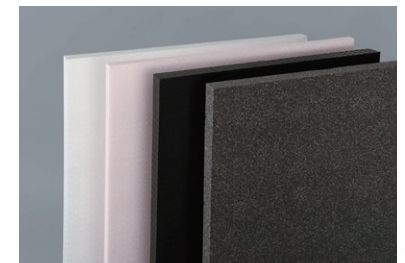
In fiscal 2022, the overall bead business recovered in terms of both sales volume and net sales compared with fiscal 2021 results. However, the results fell short of progress goals in our medium-term business plan. Automotive components—one of our four growth engines—saw sales volume in fiscal 2022 increase just 6% over the fiscal 2019 level, in contrast to the target of 23% growth in fiscal 2023. The reason was mainly due to shortages of semiconductors and other components, accompanied by an economic slowdown. Business in the areas of ARPRO/P-BLOCK expandable polypropylene and STYRODIA expandable polystyrene (EPS) were impacted by price increase in raw material and fuel costs beyond expectation. Moving forward, although the outlook remains somewhat uncertain in the face factors such as conditions in Ukraine, we expect the production volume of automobiles to increase, and expect further recovery from the pandemic in Asia and other regions.

### Achieving the Medium-term Business Plan

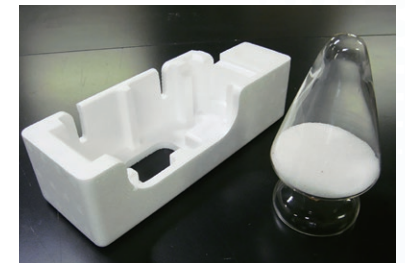
The key to achieving the medium-term business plan is a technology and product development strategy focused on the next generation. Our business for advanced materials in Japan is going to promote the development of new technologies and products which contribute to cost reduction based on the principles of sustainability and consideration for the environment. In the automotive field, our sales department, with its knowledge of customer needs, and the development department, with its knowledge of technology, have worked together to achieve successful results. In the past, one of our concerns was the time-consuming process of creating prototypes by hand and repeating tests during the design phase. However, we now have a system in place that supports quick design using simulation technologies. This system has well received by our clients. We aim to create similar partnerships with more of our clients, which should go far in helping us achieve our medium-term business plan.



ARPRO/P-BLOCK (automotive parts)



ARPRO/P-BLOCK (planks)



STYRODIA (molded components and beads)

# Overview by Segment

## Bead Business

### Seizing Growth Opportunities

We are focusing on technological innovation and developing new markets from the perspectives of sustainability and environmental protection. Regarding ARPRO/P-BLOCK business overseas, our main target area remains the automotive component sector, but we are expanding into non-automotive areas. These include food delivery containers, as well as noise, vibration, and harsh sound absorbing components that benefit from the absorbing and lightweight properties of foamed plastic. In Japan, materials development at the Yokkaichi Research Center, molding technology development and application development at the Kanuma Research Center work together to develop new high-value-added products. As a result, P-BLOCK LC, which reduces GHG emissions produced during the molding process, was developed and has been performing well on the market, adopted by automobile manufacturers. In addition, we have launched other polyethylene-based materials that incorporate biomass. In the domestic EPS business, which is facing a severe demand environment as the number of fish boxes, a mainstay product for the fisheries industry, has declined due to a marked decrease in yields. This has caused us to make every effort to expand sales of high-value-added products, including those that benefit from special functions, such as lost foam casting.

### Spreading “One JSP” policy

Our bead business targets expansion through global ideas and activities, which depends on ascertaining common global issues and specific local issues. Currently, our most important global issue is how to expand our ARPRO/P-BLOCK business to markets around the world. At the same time, we recognize such local issues as the need to support global customers who have different requirements. We have long sought to provide local market support by appointing local regional personnel there to management and sales positions. To date, we have done so successfully at our North American and European businesses. Now, to promote business globally, we are working to inculcate the concept of One JSP throughout the Group. This will allow Group companies worldwide to work as one in promoting business. Besides fostering this concept, we will make the investments necessary to enhance overall Group value. By leveraging One JSP—our global network—we will achieve business growth.

### Group Collaboration for Growth

In addition to our existing lineup of expanded polypropylene beads, we are adding P-BLOCK LC, MIRABLOCK BIO, ARPRO REvolution, and other products with distinctive environmental value. We are providing the market with products that are expected to have high marketability in accordance with the characteristics and needs of each region. Collaboration within the Group is critical to the development of these strategic products. It occurs among the Yokkaichi No. 2 and Kanuma No. 2 Plants (which produce beads), JSP Molding Co., Ltd. (which produces molded parts such as car bumpers) located on the same site, and the Development Department, as does targeted value-added manufacturing. At the same time, we are working to devise a next-generation recycling system. Although our foamed plastics are highly recyclable, there is a need to collect customers' used products, crush them to reduce their volume, and transport them to our plants. In Europe and North America, we have already set up recycling schemes for ARPRO, which is widely used, mainly in automobiles. We will reduce the environmental impact of our products on a global scale by sharing the efforts and technologies of each region around the world.

We will continue to expand our business, developing ever more products of social and economic value.



P-BLOCK LC

This is an advanced, sustainable product with new features. A proprietary, low-carbon technology has been applied to beads that can make energy use more efficient during molding and contribute to reduce GHG emissions, which is an issue customers are facing. As seen in the image, each bead has a hole in the center, which is a unique technology born from JSP's long-term technological development efforts.

# RC Activities

The JSP Group promotes RC activities as a means of realizing our corporate philosophy.

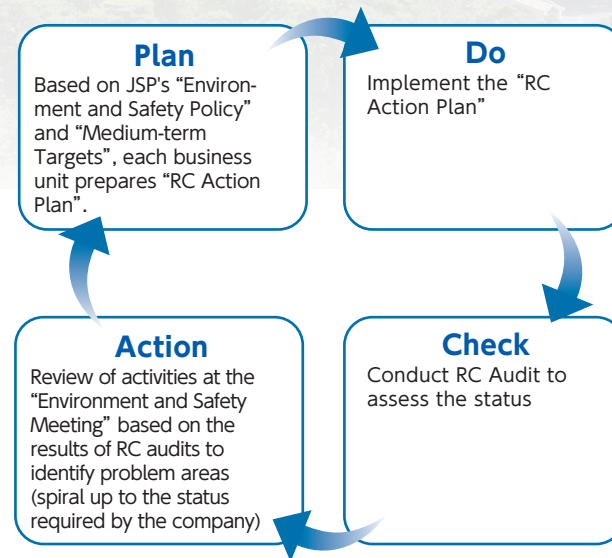
## RC Activity Policy

As an internationally competitive company that emphasizes safety and the environmental responsiveness, JSP will carry out business activities that are trusted and satisfied by all stakeholders.



## Spiral Up in RC Activities

JSP is striving to implement precise PDCA cycles for the six basic RC activities: occupational health and safety, process safety and disaster prevention, environmental preservation, product stewardship, logistics safety and communication with the public. As the first step, "Medium-term Targets" for RC activities are formulated and each business unit prepares (P: Plan = Plan) and implements (D: Do = Implement or Execute) the "RC Action Plan" to achieve the Medium-term Targets. The next step is to conduct "RC Audit" (C: Check = check and evaluation) to confirm the progress and achievement of these activities. The results of the RC audit are summarized, and the activities are reviewed at the "Environment and Safety Meeting" held by the company management. The results are reflected in the next activity (A: Action = action/improvement) and spiral up for continuous improvement.



## Details of RC mid-term targets, RC activity results and plans

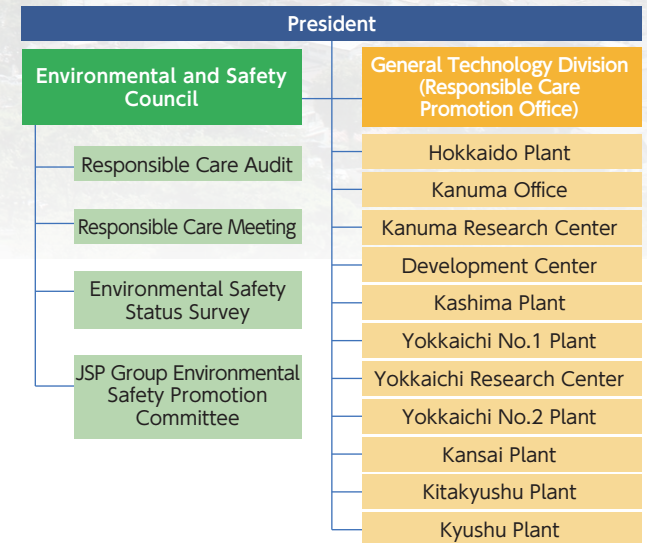
→ [https://www.co-jsp.co.jp/english/sustainability/rc/rc\\_act.html](https://www.co-jsp.co.jp/english/sustainability/rc/rc_act.html)

## RC Promotion Structure

JSP has the Environment and Safety Meeting, chaired by the president, as the highest decision-making body regarding RC activities. In addition to discussing and deciding on comprehensive policies related to RC activities, this committee establishes activity targets based on the results of RC audits, formulates medium- to long-term plans, and establishes, revises, or abolishes various internal regulations.

The JSP Group in Japan also holds "RC Meeting" to deepen the information exchange on RC activities.

In order to effectively promote RC activities, JSP is promoting the revitalization of RC activities throughout the Company by implementing the "Environment and Safety Promotion Committee" and "Environment and Safety Status Assessment" for JSP Group in Japan.



## RC Audit

In order to evaluate whether PDCA cycles are being adequately implemented at each workplace based on uniform criteria, the person in charge of environment and safety and members of the responsible department visit each workplace once a year to conduct RC audits.

In FY2022, on-site audits were conducted at 12 workplaces including research centers. Based on a "checklist" of activities at each workplace, we checked management documents and the status of compliance with laws and regulations, conducted on-site inspections and interviewed at each workplace regarding pending issues and priority challenges.



# Responsible Care RC Activities

## Safety Policy

- We keep in mind that safe and stable operations are the basis of corporate activities and prevent accidents and disasters.
- We comply with laws and regulations and other standards, and strive for health & safety, security & disaster prevention and product safety.
- We continuously improve health & safety management and security & disaster prevention systems and work together to engage in health & safety activities and security & disaster prevention activities.

## Security & Disaster Prevention

### Countermeasures against factory fires caused by static electricity

In the case of using flammable gas as a blowing agent in the production process of foamed plastic, we prevent ignition caused by static electricity by properly installing ground wires and lowering the withstand voltage with static eliminators and water mist. In order to avoid repetition of ignition incidents that have occurred in the past, we have established a system to check whether the countermeasures are being continued. We added check items for during safety patrols and periodically confirm that countermeasures are functioning. We are also working to prevent recurrence of ignition incidents by continuing to check both equipment and operations, such as attaching stickers to areas where ignition incidents have occurred in order to make it visible to alert operators.

## Logistics Safety

### Logistics Accidents

The majority of trucking accidents occurs at customer sites at times such as delivery. 12 trucking accidents occurred in fiscal 2022 in Japan. Backing accidents and collisions with the eaves (upper part of the building) were particularly frequent. In order to reduce such accidents, we promote safety awareness among drivers and ensure that they thoroughly check the six directions (front, back, left, right, up, and down) around their trucks. We also continue activities aimed at increasing safety awareness in logistics by periodically soliciting safety slogans within our company and using them as banners to be installed in our factories to continue our distribution safety enlightenment activities. Our target number of trucking accidents for fiscal 2023 is 6 or less. We will continue to implement various safety measures to achieve this goal.

### Initiatives for White Logistics

In response to the serious shortage of truck drivers in Japan, White Logistics is recommended to ensure stable logistics necessary for people's daily lives and industrial activities, as well as to be useful for economic growth. As part of our efforts to promote White Logistics, we have declared our Declaration of Voluntary Action for White Logistics and are actively addressing logistics issues, including measures such as "improvement of truck transportation productivity and logistics efficiency" and "realization of a healthier working environment where women drivers, drivers in their 60s, and others can work more comfortably."



## Product Stewardship

### Challenge to Reduce PRTR Substance Emissions

JSP Corporation investigates and reports annually to administrative agencies the amounts of substances subject to notification as specified in the PRTR Law\* that are released into the environment and the amounts transferred from our business sites to outside entities.

\*PRTR Law: Law on understanding the amount of specified chemical substances released into the environment and promoting improvement of management

### Substances with high emission volumes reported under the PRTR Law (FY2022 results)

→ [https://www.co-jsp.co.jp/english/sustainability/e/e\\_safety.html](https://www.co-jsp.co.jp/english/sustainability/e/e_safety.html)

### Risk Assessment of Chemical Substances

JSP Corporation has set "1) Steady implementation of chemical substance risk assessment" and "2) Zero leakage and dispersal problems related to raw materials and products" as the RC mid-term targets for fiscal 2021 to fiscal 2023 and is continuing to check chemical substances at each business site (obtaining and managing new SDS (Safety Data Sheets), education, etc.) and management system checks at each business site. The Kyushu Plant has adopted the JISHA (Japan Industrial Safety and Health Association\*) method of chemical risk assessment, which allows us to determine risks in greater detail and with greater ease at the worksite level.

\*JISHA method: It is a qualitative and simple method, which is similar to the control banding method (improved and developed as a WEB system by the Ministry of Health, Labour and Welfare), but one that can identify the chemical and physical properties of a substance, amount handled, working hours, and working environment, and use a matrix to determine the risk level.

## Product Safety Management

### Compliance with the RoHS2 Directive

In order to comply with the RoHS2 Directive in Europe, JSP Corporation regularly conducts non-inclusion surveys of hazardous substances at analytical laboratories with JISQ17025\* certification to provide safety information.

\*JISQ17025: General requirements for capabilities of testing and calibration laboratories

### Providing GHS\* compliant SDSs (Safety Data Sheets)

JSP Corporation provides safety information by preparing SDS for each product based on the GHS (Global Harmonized System of Classification and Labeling of Chemicals), even for products that are not required by law to have an SDS.

\*GHS: Globally Harmonized System of Classification and Labelling of Chemicals



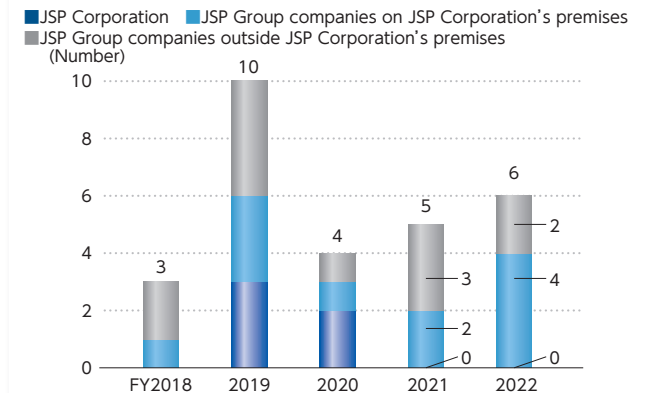
## Occupational Health and Safety

### Initiatives for "Zero Lost Time Injuries"

JSP Corporation and the Group companies in Japan are promoting initiatives aimed at "zero lost time injuries". In July 2021, we started the "Safety Baton Meeting" for business sites in Japan. This is an online meeting where, when an operational disaster or fire/ignition incident occurs, we call for not only that business site but also other business sites with similar facilities or operations to come together to discuss countermeasures.

By discussing the accident that occurred with other workplaces, the meeting will help to develop truly effective countermeasures and prevent similar accidents from occurring in the future.

### Number of lost time work-related accidents



### Change in lost workday frequency rate

