

JSR Group Sustainability Report 2022

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Sustainability

JSR is committed to using value creation through business to help achieve a sustainable environment and society.



JSR Sustainability at a Glance



Management Messages



CEO Message

Leveraging our innovative culture to deliver valuable technologies to business and society

[CEO Message \(JSR REPORT 2022\)](#)



Message from our Chief Sustainability Officer

We will promote sustainability in the Group as a whole by encouraging better communication between departments and Group companies.

[Click here for details](#) >

Latest Sustainability Information

- 11/17/2022 JSR revamped its sustainability website.
- 11/02/2022 JSR Joins Semiconductor Climate Consortium as Founding Member
- 12/17/2021 [Corporate Governance Report has been updated. \(PDF: 1MB\)](#)
- 09/10/2021 JSR to establish the JSR Group's Human Rights Policy

Sustainability Management at JSR Group

[Corporate Mission and Sustainability Philosophy](#) >

[JSR Group's Materiality \(Priority Issues\)](#) >

[JSR Group's Contribution to Attainment of the SDGs](#) >

[Sustainability Management and Advancement Structure](#) >

[Response to the TCFD Recommendations](#) >

ESG Activities



Environment

- > Overview of Environmental Initiatives and Environmental Impact
- > Climate Change Mitigation
- > Conservation of Water Resources
- > Waste Reduction
- > Biodiversity Conservation
- > Initiatives to Prevent Pollution
- > Environmental Accounting
- > Chemical Management



Society

- > Occupational Safety, Security and Accident Prevention
- > Logistics
- > Product Safety
- > Quality Management
- > Human Rights
- > JSR Health Promotion (Initiatives in Health and Productivity Management)
- > Human Resource Development
- > Work-Life Management
- > Diversity, Equity, and Inclusion
- > Supply Chain Management
- > Social Contributions



Governance

- > Corporate Governance
- > Compliance
- > Risk Management









Communication with Stakeholders



Responsible Care

- > Responsible Care Index
- > Responsible Care

Downloads

ESG Data 	Policy, Principle, Philosophy 	Integrated Report 	CSR Report (Group Companies) 
Corporate Brochure 	Report Archive 		

- > Editorial Policy
- > GRI Guideline Comparison Table 
- > Evaluation by Outside Organization
- > JSR Group Profile
- > Post comments and opinions concerning sustainability here.

JSR Sustainability at a Glance



Providing Value to Society through Our Business Activities

Contribution to quality of life and happiness



Providing Materials That Support a Comfortable Society

JSR Group's outstanding technological capabilities are always advancing. Our aim is to leverage them to contribute to smart societies built on IoT, AI, and 5G and to realize societies where every person in the world can live more prosperously.

> [Click here for details](#)



Contribution to a healthy and long-living society



Providing Advanced Medical Care to Patients Faster

JSR offers materials and services powered by the latest technologies. These bring greater efficiency and speed to biopharmaceutical development processes. We are also helping to enhance health and longevity in society by offering products and services to enable personalized medicine.

> [Click here for details](#)

Contribution to preservation of the global environment



Developing Products That Reduce the Environmental Impact of Our Customers

JSR Group is working to protect the global environment not only at the manufacturing stage but from many different angles. This includes creating new business opportunities that could help reduce the environmental impact of products themselves.

> [Click here for details](#)



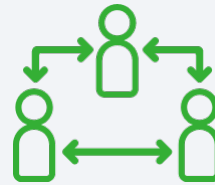
Strengthening Our Management Foundation to Continue Providing Value



Environmental conservation and impact reduction

We are working to achieve net zero emissions by 2050.

[> Click here for details](#)



Diversity, equity, and inclusion

We value diversity and improve employee engagement.

[> Click here for details](#)



Health and safety

We are developing a work environment where our employees can continue to work safely and healthily.

[> Click here for details](#)



Respect for human rights

We respect human rights in all our business activities.

[> Click here for details](#)



Supply chain

We aim to strengthen communication with our business partners and create value together with them.

[> Click here for details](#)

JSR Sustainability at a Glance



Contribution to quality of life and happiness

Providing Materials That Support a Comfortable Society

Developing Digitalization for the Smart Society

Contributing to the Miniaturization of Semiconductors with EUV Photoresists

All things are being connected via the Internet with the advent of the information society and the development of communications technologies to support that. Against that backdrop, PCs, smartphones and other devices have become indispensable for us to lead rich social lives. In addition, with the progress of this information society, data centers are becoming increasingly important as they speedily process the vast quantities of data constantly being generated to facilitate smooth communications.

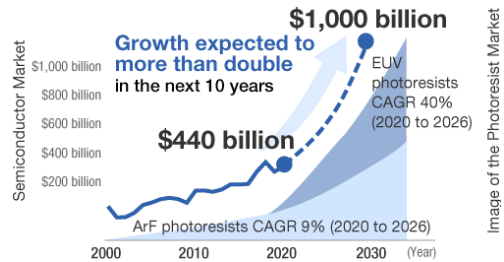
Semiconductors are essential in these devices and data centers. Accordingly, the miniaturization of semiconductor circuit wiring contributes to improvement in functionality and power saving. Technology which uses light with an extremely short wavelength called extreme ultraviolet (EUV) is currently being used as the technique for that miniaturization. The resin which supports that technology is our EUV photoresists.

Advantages of Miniaturization

- ✓ Increased processing capacity
- ✓ Increased data capacity
- ✓ Reduced size and weight
- ✓ Energy saving



Forecast for the EUV Market



Forecast of the semiconductor market: WSTS for 2000 to 2020 and IBS from 2021 onward
Photoresist CAGR: Estimate by JSR

Image of the Photoresist Market



Realizing Comfortable Driving with a Reduction of Squeaks in Vehicles

Suppressing Abnormal Noises in Automobiles with HUSHLLOY™ Anti-squeak Material

The momentum for strengthening measures to fight climate change is rising around the world. For example, Japan and the EU have set a common goal to achieve carbon neutrality by 2050. Efforts toward carbon neutrality are also progressing in the automobile industry. The pace of the shift to electric vehicles is accelerating on a global basis. For instance, the EU has announced a ban on the sale of new gasoline cars to take effect in 2035.

On the other hand, the spread of electric vehicles has led to a problem occurring. The quietness of these vehicles means that even slight abnormal noises in them cause annoyance. JSR Group's HUSHLLOY™ anti-squeak material reduces the squeaks generated from the joints of plastic parts; not only that, it also lightens the workload in terms of applying grease and affixing non-woven fabric which have been taken as measures by hand up to now. Obtaining a permanent effect contributes to ensuring a safe and comfortable driving environment.



Points where squeaks are effectively suppressed by using HUSHLLOY™

Contribution to quality of life and happiness

Contribution to a healthy and long-living
society >

Contribution to preservation of the global
environment >

JSR Sustainability at a Glance



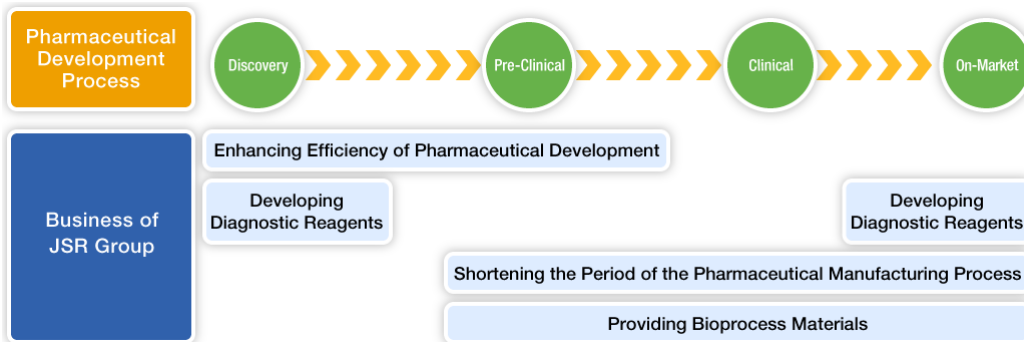
Contribution to a healthy and long-living society

Providing Advanced Medical Care to Patients Faster

Contributing to Shortening the Period and Improving the Success Rate of Pharmaceutical Development for Clients



Contribution of JSR Group to the Pharmaceutical Development Process



Enhancing Efficiency of Pharmaceutical Development

We develop and provide various pre-clinical efficacy evaluation models including the industry's largest PDX* collection and screening services to select effective drug candidates from many such candidates. These efforts are contributing to improving the efficiency of pharmaceutical development for pharmaceutical companies. We also provide pre-clinical services using organoids known for having an extremely high similarity with organs. Tumor organoids reflect the tumor characteristics specific to patients. Therefore, it is possible to even more accurately predict the response to drug candidates. It is expected this will improve clinical success rates.



* Patient-derived xenografts (PDX): This is a model in which tumor tissue derived from a patient is transplanted into an immunodeficient mouse. It is effective in selecting drug candidates because it allows an evaluation in an environment similar to that of humans.

Developing Diagnostic Reagents

We provide in vitro diagnostics, research reagents and diagnostic reagent materials. This provides wide-ranging support – from research to diagnosis. We also undertake the contracted development of companion diagnostics which identify patients for whom therapeutic effects can be expected and patients at high risk of developing serious side effects before the administration of pharmaceuticals. This is supporting the development of personalized medicine.

Moreover, Medical & Biological Laboratories (MBL) started providing real-time PCR reagents to detect COVID-19 in March 2020. We have continued to develop and sell many easy-to-operate test kits which give results in a short period of time since then. That has been greatly contributing to supporting measures to fight against COVID-19.



Shortening the Period of the Pharmaceutical Manufacturing Process

We have advanced technologies relating to analysis, cell line development and manufacturing process development in the development and manufacturing of biopharmaceuticals. With that technology, we also support the process development and manufacturing of molecules with complex structures. Furthermore, we provide an integrated service called "Gene to GMP in 9 months." It covers the processes from cell line development to manufacturing process development, analysis and manufacturing. This contributes to shortening the period to establish manufacturing processes in biopharmaceutical development.



Providing Bioprocess Materials

We provide process materials used in biopharmaceutical manufacturing such as particles for purification of antibody pharmaceuticals. Our Amsphere™ A3, a protein A carrier for antibody pharmaceutical purification with its industry-leading performance, is being used in the manufacturing of more than 95 investigational new drugs around the world. It started to be used in the commercial production of antibody pharmaceuticals approved by the U.S. Food and Drug Administration (FDA) in March 2022.



[Contribution to quality of life and happiness >](#)

Contribution to a healthy and long-living society

[Contribution to preservation of the global environment >](#)

JSR Sustainability at a Glance



Contribution to preservation of the global environment

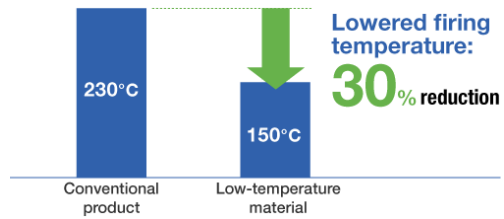
Developing Products That Reduce the Environmental Impact of Our Customers

Contributing to Energy and Resource Saving with Display Materials

Lowering the Firing Temperature with Low-temperature Materials Reducing Energy Consumption in the Manufacturing Process

Conventionally, the technological development of liquid crystal display materials was focused on the aim of reducing power consumption of the display panel itself such as by improving luminance (brightness) and the display response speed. However, we have been working on the development of a low-temperature material aiming to reduce the environmental impact in the manufacturing process of display panels.

The low-temperature material we have developed allows the conventional firing temperature of 230°C to be lowered to 150°C. The material is designed to have the same performance as before. Accordingly, using this material leads to an approximately 10% reduction in energy consumption in display panel manufacturing. We will strive to further spread this low-temperature material in the future to contribute to building an even richer society and reducing power consumption.

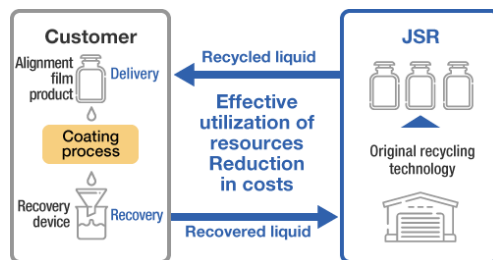


Launch of an Alignment Film Recycling Business

Alignment film is one of the important materials used to control liquid crystal behavior in liquid crystal displays. We have supported the progress of liquid crystal displays as a leading company in the development and sale of alignment films over many years.

Leftover chemical material and used waste liquid is generated in the process of forming alignment films for displays. There is a risk that material and liquid will leak during transportation or storage. In addition, great care must also be taken in handling when disposing of them. Accordingly, we have launched an alignment film recycling business to support our customers in efficiently using materials and to reduce their environmental impact. We will work to reduce the environmental impact and improve customer satisfaction by widely providing materials we have recycled based on the extensive knowledge in alignment films we have accumulated over time.

Recycling Process



Toward Automobile Plastic Material Resource Circulation

Aiming to Eliminate Painting and Promoting the Recycling of Automobile Parts with VIVILLOY

VIVILLOY® highly colorable materials are materials which express high color development even without painting. We developed these materials based on our unique polymer development technologies we have

Application Examples



Radiator grills



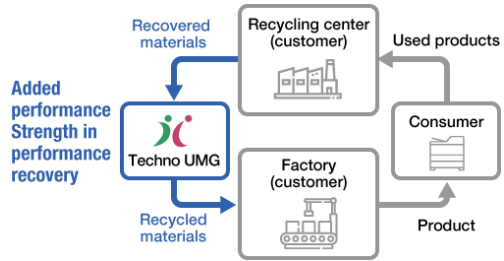
Side mirror covers



cultivated through our track record in the global sale and supply over many years of weather-resistant materials (DIALAC® series) and alloy products (composite materials with other resins).

VIVILLOY® also contributes to energy saving and an improvement in work efficiency in addition to cutting costs with the omission of the painting process. Moreover, the JSR Group has actual experience in the closed recycling of plastic parts with the cooperation of our customers in office automation equipment applications. We will utilize this knowledge to also consider the recycling of unpainted parts of automobiles.

Recycling Process



Contribution to quality of life and happiness >

Contribution to a healthy and long-living society >

Contribution to preservation of the global environment

CEO Message

**Leveraging our innovative culture to
deliver valuable technologies to
business and society**

Eric Johnson
Representative Director, CEO



Corporate Value in the Face of Disruptive Pressures

One of our missions in 2021 was to create opportunities within the new global structure that has emerged due to accelerating disruptive pressures in the wake of COVID-19. Disruption does not have to be framed as only negative. It forces us to take an in-depth look at ourselves, reassess the way we did things on a broader scale, and make considered decisions about the way forward.

I am confident that we can leverage our technological capability, our hunger to improve, and our geographical diversity to continue full-fledged implementation of our strategies. We have a lot of work to do, but I'm excited about where we are headed.

In the year under review, we increased JSR's value as a leading technology company, leveraged relationships, and remained focused on sustainable management initiatives, while solidifying our financial foundation.

Leading Technology Company

At its core, JSR is a technology company. We cite 'Materials Innovation' as our corporate mission and of course we are experts on materials science. We consider materials as the vehicle through

which we deliver technology. Moreover, we are committed to staying on the leading edge of technological innovation to ensure that we provide the highest value for our customers. We also understand that technology in and of itself is not valuable. To truly drive a value proposition, one must deliver that technology with the highest quality and with very close customer engagement. That is JSR's sweet spot.

Technologies and sciences have the answers to the most demanding technical challenges that our customers and society face. JSR is a critical player in expanding on the possibilities of semiconductors, as well as supporting the development of more personalized therapies for life-threatening illnesses such as cancer.

At JSR, we partner with some of the world's top research teams. Together with these partners, we leverage artificial intelligence and quantum computing to explore, not only opportunities for invention, but also to accelerate current businesses. We nurture a corporate culture where employees are empowered to follow inspiration in the pursuit of new possibilities.

We have a variety of relationships and programs. There are leading-edge academic programs with Keio University, the University of

Tokyo, IBM, and other universities and consortia globally. Among the key themes being explored are materials informatics and materials development. We are also expanding research and development programs for biological sciences. A constant thread through all of this, is data. We have also invested heavily in material informatics, bioinformatics, and quantum technology. We are committed to being on the leading edge, and to understanding what is happening, both technically and economically.



Management Policy 2024

We have transitioned from a three-year to a five-year strategic plan. While the plan technically covers a five-year period through the fiscal year ending March 2025, the impact of the pandemic has effectively given us four years in which to execute it. One important element of this policy is that we cannot have stagnant financial targets for each of our business units three years from now. Each year, we will review the metrics we have established—which include return on equity, profitability and the newly added sustainability—and adjust as required.

For JSR Group to deliver value sustainably, we need to have a finger on the pulse of social change and see challenges in the environment as potential opportunities. This demands that our organization be resilient. We have identified Five Foundations as a set of actions that are key for a successful transformation into a leaner organization and more flexible mindset as required for the sustainable growth outlined in the management policy.

The Five Foundations—Innovative Culture, Digitalization, Globalization, Operational Excellence, and Sustainability—are an invaluable guide as we

work to fortify the resilience of our management base and drive corporate value upward. We are extending the breadth of our resources internationally. We have antennae in many different regions and are receiving both formal and informal feedback on a regular basis. When we look at how we have handled digital transformation, I'm relatively pleased with our efforts. Digital transformation is truly a journey without a destination. We need to continue to work to master the realm of data analysis capabilities and secure buy-in from our people at all levels.

We understand that to be a truly sustainable organization we have to accelerate investments in our infrastructure. In particular, we are focusing on employee engagement, climate impact, and geopolitical impact.

Performance Overview

In the fiscal year ended March 31, 2022, we succeeded in significantly improving performance in sales and all profit categories amid strong semiconductor, flat panel display, and biopharmaceutical markets. Overall, the group recorded year-on-year increases in revenue, core operating profit, and operating profit. We posted gains in revenue in all business segments, and



double-digit increases in core operating profit in our Digital Solutions and Plastics. The Life Sciences segment saw core operating profit decline against the previous year, but this was attributable to factors such as investments in facilities by KBI.

Our return on equity already exceeds 10%. Moreover, we achieved near-double-digit revenue growth and a double-digit increase in core operating profit. We also improved our core operating profit margin to 12.7%, a significant step toward our Management Policy 2024 goal of 20%. As stipulated in the policy, the majority of our resources will be concentrated on Digital Solutions—primarily in Semiconductor Materials and Life Sciences.

Our Digital Solutions and Life Sciences

We are very bullish in both our Digital Solutions and Life Sciences. These two businesses will be the principal drivers of growth, and both are technology hungry. They put a high premium on technical content as well as quality and de-risking. These are areas that are very much in our core capabilities. We also see long-term consistencies in the fundamentals that are driving these businesses. Artificial intelligence, 5G, autonomous vehicles, and IoT are all long-term trends that demand ever more

computing power and capability. We believe they will continue to accelerate and provide a healthy value proposition for JSR.

Looking at our Digital Solutions initiatives, the 2021 acquisition of Inpria Corporation—experts in metal oxide photoresist design, development, and manufacturing for EUV lithography—along with the construction of a new lithography material plant at our Yokkaichi complex in Japan, will enhance our Semiconductor Materials. Demand for memory and logic semiconductors continues to be robust, and we have added metal oxide resists to our product arsenal.

Within our Digital Solutions, I would like to point out that Display Materials has successfully restructured over the past couple of years and is well positioned to continue its technical roadmap. We have optimized both our product portfolio and our geographical allocation of resources. We are now aiming to expand sales of products in China, including alignment and insulating films for wide-screen TV LCD panels.

The Life Sciences is an especially innovation-hungry, quality-sensitive industry, that places a premium on technical content. Overall, we believe that, because of macro-economic trends and our technical content, we are well positioned for

long-term growth.

Today, our focus is on biologics contract research, development and manufacturing services, led by JSR Group companies Crown Bioscience, KBI Biopharma, and Selexis. Crown Bioscience is working to expand its service lineup, while KBI Biopharma and Selexis are out to secure new CDMO contracts and broaden their pipelines. Crown Bioscience has gained valuable 3D cell imaging technology through its acquisition of OcellO B.V., bolstering its in vitro service portfolio. We are optimistic about the future of this business.



We see no downward trend for the fundamentals and expect medium- to long-term opportunities for growth in both of these businesses. We achieved considerable growth in fiscal 2021 for both and are projecting the same this year.

Plastics

In Plastics, we have great support from our partners. Most importantly, the business is performing strongly. It is well positioned and boasts

leading-edge products that are crucial elements of its strategic growth. Furthermore, recovery is expected to continue in automobile manufacturing, the key market for this business.

Elastomers

Having completed the transfer of shares to ENEOS Corporation, we have essentially finished our administrative and financial divestiture of Elastomers. The transition was smooth despite a number of complex issues. We remain convinced that this transfer was best, not only for JSR stakeholders, but for the future of the Elastomers.

ESG Initiatives in Support of Sustainability

We are proactive in devising and implementing Environmental, Social and Governance (ESG) strategies and measures and have two main focuses at JSR. Our first is to have dynamic reviews and changes to our materiality to meet constantly evolving business and societal needs. Our second is on bolstering group management on a global scale by enhancing employee engagement through initiatives such as Diversity, Equity & Inclusion.

Furthermore, and as outlined in the JSR Sustainability Challenge, we need to identify the positive and negative impacts our operations have

on society at large. We must also provide our people with clear metrics and strategies to guide them as they work to mitigate our impact on the global environment.

Over the past year we have made good progress in defining metrics and programs to drive continuous improvement in our ESG focus areas. We are well aware that we need to imbed sustainability in both our business strategies and our corporate management. Accordingly, we have established systems and specific key performance indicators (KPIs) based on our materiality studies.

In developing KPIs—which encompass environment, employee engagement, health and safety, and supply chain issues—the Board of Directors recommended that we consider environmental impact when contemplating investments. The Sustainability Promotion Department has been given the authority to oversee the business units to ensure that their decisions are not only in line with profit and loss, but also consider carbon tax policies and Task Force on Climate-Related Financial Disclosures recommendations.

While we will continue to leverage our own material science-related technological capabilities, we are determined to deepen our relationships with our global customer base. All these efforts are



inextricably linked to sustainability, which requires a holistic view toward ensuring JSR's future, while also addressing vital environmental issues such as climate change and greenhouse gas emissions (GHG).

Sustainability for us means not simply tackling environmental issues, but also enhancing employee engagement. JSR is committed to concrete action in this area.

In fact, in 2021, we conducted our first global employee survey, which provided us with invaluable insight. Each region was provided qualitative and quantitative data that they were then able to use as the basis for action plans specific to the needs of their region. We believe that optimizing employee engagement and satisfaction is fundamental to cultivating a truly excellent culture.

Bridging gender, cultural, and identity-related divides, by truly understanding what is happening and what drives it, is vital in creating a globally united JSR that affords all employees the chance to realize their true potential. This is also key in making JSR an attractive option for potential recruits. At its essence, this is every bit as much a business strategy as it is an ESG-related undertaking.

To Our Stakeholders

JSR is a technology company with deep materials science competency. Our materials and services are how we convey the fruits of our technological efforts to society. We can form and cultivate relationships with our customers that allow us to capitalize on capabilities, such as simulation, to best leverage these technologies in material development. We must remain agile and curious, while developing the resilience and unity as a company that will help to protect us as we take the calculated risks necessary to move JSR forward.

We will continue to foster an open, innovative culture where employees are encouraged to investigate new possibilities without fear of failure, as we believe it is in our failures that some of our most valuable lessons lie. We are poised not only to overcome the plethora of disruptive pressures we face, but also to deliver technological solutions of the highest possible quality to address the most pressing needs of business and society. Our efforts toward achieving this will show our valued stakeholders that their faith in JSR as a technology leader and excellent corporate citizen has been well placed.



Eric Johnson
Representative Director, CEO

Message from Our Chief Sustainability Officer

We will promote sustainability in the Group as a whole by encouraging better communication between departments and Group companies.

Ichiko Tachibana
Director,
Senior Officer



Message upon Assuming Office of CSO

At JSR Group, sustainability is defined as "contributing to society by creating value through our business activities." We work to advance sustainability while honoring diversity and following a direction shared throughout the Group. This basic policy remains the same as I assume the post of Chief Sustainability Officer (CSO). As I take over the initiatives of my predecessor, I simply hope to bring a new perspective.

I have long worked in the area of legal affairs, including compliance matters. Among my tasks, I have reviewed contracts and played a role in corporate reorganization. In these tasks, the first thing I needed to do was really listen when a company department asked for my help, so that I could know what they were trying to accomplish. Then, before responding, I had to anticipate all types of scenarios. For example, what is our business partner's point of view and what do they think? What problems are likely to occur in future? What can we do if things do not go well? Day to day, I was reminded how important it is to use imagination.

Likewise in the area of sustainability, it is important to have a process of first using your imagination in respect to stakeholders with varying standpoints and ways of thinking, then making use of diverse people and varied opinions. This process helps to increase corporate value. Imagination is also essential for discerning future risks and opportunities. My plan is to make full use of my experience and, in my role as CSO, pursue initiatives that benefit all stakeholders.

Rapidly Rolling out Initiatives from Board of Directors to the Group

Under JSR's system, the CSO is not only an executive officer but also a director, which enables the Board of Directors to practice thorough sustainability management. Since the CSO is both an officer and director, I can participate in the Board of Directors' discussions and then develop them at the company department level. One of the characteristics of this system, therefore, is that JSR can pursue effective initiatives promptly.

Starting in FY2022, the CSO is also in charge of promoting diversity, which was previously administered by the officer in charge of human resource development. Respecting diversity is an indispensable part of promoting sustainability. Therefore, I plan to use the maneuverability of my double role as director and executive officer to steadily promote diversity and sustainability.

Seeking a Strong Organization by Making an Environment Where Diverse Human Resources Can Actively Participate

The Group's Management Policy for FY2024 calls on us to build a resilient organization. Resilience means the strength to respond to all possible changes in the environment. As I see it, diversity is directly connected to resilience. Since we aim to be a truly strong organization, it is not enough to simply bring diverse personnel together. Rather, we need to make sure that there is an inclusive environment and culture, where everyone's opinion is put to use, in every corner of the Group.

The key to that is called "equity." Equity means that each person, as appropriate to their circumstances, gets fair opportunities and the resources necessary to fully demonstrate their capabilities. JSR Group's vision is to "respect the values of diversity, equity and inclusion (DE&I)." As such, our emphasis is on not only recognizing diversity but also giving people fair opportunities.

Going forward, I will take firm steps to ensure equity. My hope is that this will help boost resilience and employee engagement and spur innovation.



Setting KPIs for Materiality (Material Issues), Steadily Pursuing Sustainability

In FY2021, JSR Group set KPIs (key performance indicators) for our materiality to ensure we are concretely advancing our sustainability initiatives. In the KPI review process, based on our corporate mission and management policies, we comprehensively considered factors like the social and natural environment, product markets, technological trends, and stakeholder interest. By reflecting the views not just of our sustainability staff but also staff from other concerned departments, we were able to choose appropriate indicators.

The objective of our business activities is to realize CSV (Creating Shared Value) and contribute to the attainment of the SDGs. Thus, in each business domain, we aim to increase total sales and market share of products that promote sustainability as identified across JSR Group.

Our KPIs correspond to five material issues related to our management foundation. One issue, for example, is "Protecting the environment and reducing environmental impact." To that end, we set a target of reducing GHG emissions by 30% by FY2030 as compared to FY2020, and reaching net zero by FY2050. For the material issues "Employees, DE&I, and work styles," we are working to continually increase employee engagement. JSR Group conducted our first global engagement survey in 2021. We are continuing to administer surveys in FY2022 and beyond as one way to increase engagement. The process includes analyzing the survey results and drafting action plans and improvement measures. One aim is to increase the percentage of women in managerial positions. This and some of the other KPIs only apply to Japan, so we are considering setting KPIs tailored to other parts of the world in future.

Another material issues is "Health and Safety." Safe and stable operation is of utmost importance to a chemical manufacturer, so our goal is to have zero workplace and equipment accidents. As for "Respecting human rights," we will foster human rights awareness among employees and business partners in keeping with the JSR Group's Human Rights Policy, established in September 2021.

Our policy is to check progress on these KPIs and follow up semi-annually and summarize the results in one-year units. These progress checks and the like are not only an opportunity to promote communication among departments and Group companies, but also a path to setting new KPIs based on the views heard during these interactions.

Strengthening Communication among Departments and Group Companies to Increase Corporate Value

As I see it, promoting sustainability is one strategy for maximizing our corporate value. Also, I recognize how important it is for our sustainability staff to communicate closely and collaborate with JSR's business units, R&D, manufacturing, and back-office sections and as well as Group companies.

This is how I intend to fulfill my role as CSO going forward: aim to ensure that all JSR Group officers and employees are naturally aware of sustainability as the value standard for their work; create a framework for lively communication and information-sharing among departments and Group companies; and offer plenty of information to the outside world.

Director and Senior Officer, Chief Sustainability Officer (CSO)
General Manager of Sustainability Promotion Dept .

Corporate Mission and Sustainability Philosophy

1. Corporate Mission and Sustainability Philosophy ▾

2. Value Creation Model ▾

We established our "Essential Elements" as a set of common values that allows each JSR Group employee to act with responsibility and confidence. This ensures that we create a corporate culture in which sustainable growth is achieved regardless of changes in personnel or organizational form. The Essential Elements consists of the Corporate Mission, the Management Policies, and the Course of Action.

> The JSR Group's Essential Elements 

1. Corporate Mission and Sustainability Philosophy

We believe that to be a sustainable company, we must continue providing value to all stakeholders while responding to environmental changes. We define sustainability as "contributing to society by creating value through corporate activity." This way of thinking vis-à-vis sustainability is connected to JSR Group's Corporate Mission and in line with our management policies over the years.

Under our Corporate Mission of "Materials Innovation - We create value through materials to enrich society, people and the environment," we aim to contribute to the development of a sustainable global environment and society by creating value through corporate activity. And we will advance initiatives that benefit all stakeholders—customers and business partners, employees, society, the environment, and shareholders.

The scope of JSR Group's business activities is in the process of shifting from a Japan-centric focus to a truly global focus. In order to carry out global business activities, we need to have a deeper understanding of worldwide issues and the problems faced by regions throughout the world.

On the other hand, these issues and problems can be turned into opportunities for new businesses. By actively seeking to identify these business opportunities, we are working to expand the scope of our business.

Participation in the United Nations Global Compact

JSR Group signed the United Nations Global Compact in April 2009. As a company engaged in business operations globally, we will more proactively fulfill our corporate social responsibilities, recognizing that global businesses must make a greater commitment to the ideals expressed in The Ten Principles of the United Nations Global Compact; namely, human rights, labor, the environment and anti-corruption. As a signatory, we conduct Communication on Progress (COPs) by preparing status reports on our actions for the ten principles.



> www.unglobalcompact.org 

Eric Johnson
Representative Director and CEO
JSR Corporation

— The Ten Principles of the United Nations Global Compact

1. Businesses should support and respect the protection of internationally proclaimed human rights; and
2. make sure that they are not complicit in human rights abuses.
3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
4. the elimination of all forms of forced and compulsory labour;
5. the effective abolition of child labour; and
6. the elimination of discrimination in respect of employment and occupation.
7. Businesses should support a precautionary approach to environmental challenges;
8. undertake initiatives to promote greater environmental responsibility; and
9. encourage the development and diffusion of environmentally friendly technologies.
10. Businesses should work against corruption in all its forms, including extortion and bribery.

The Sustainable Development Goals (SDGs)

"Transforming our World: the 2030 Agenda for Sustainable Development" was adopted at the UN Sustainable Development Summit in September 2015. The SDGs are comprised of 17 goals and 169 targets that all United Nations member states will strive to achieve by 2030 for people, the earth and prosperity. In addition to conventional development goals, such as eradicating extreme poverty and hunger, the SDGs also cover challenges faced by developed countries, among them the promotion of gender equality, creation of a strong employment environment, reexamination of production and consumption, conservation of marine and forest resources, and development of safe communities. JSR Group will do its part to achieve the SDGs by creating value through its corporate activity.

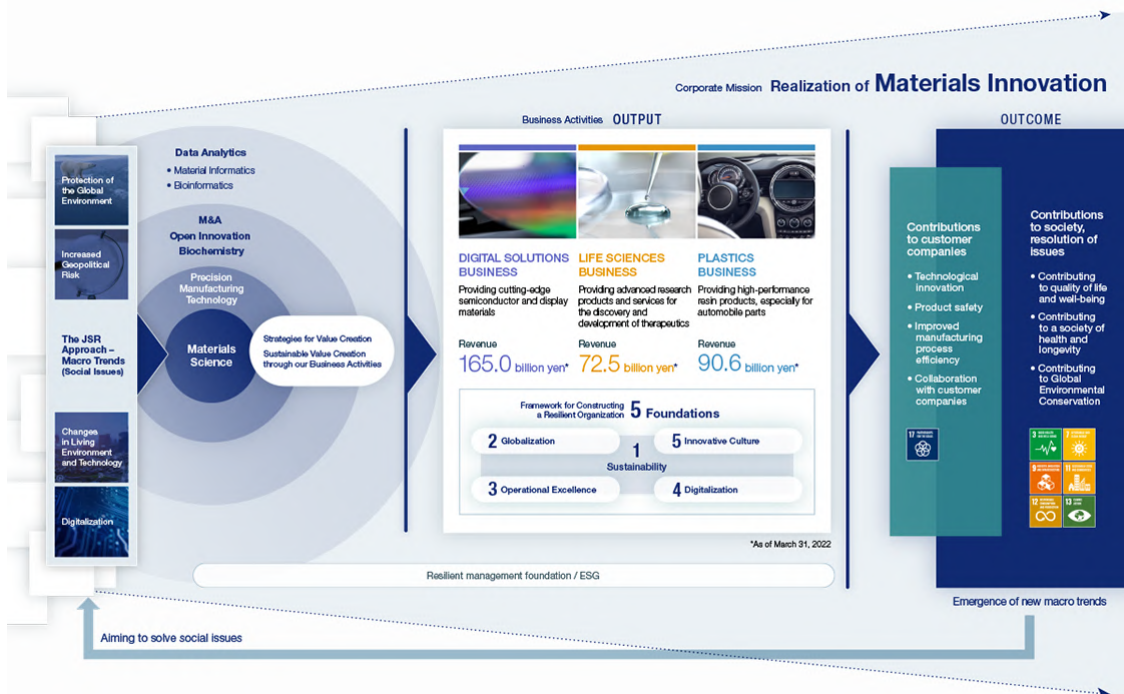
- > United Nations Information Centre "What are the Sustainable Development Goals (SDGs)?"
- > JSR Group's Contribution to Attainment of the SDGs

SUSTAINABLE DEVELOPMENT GOALS



2. Value Creation Model

We seize upon social issues and use JSR's technological strengths to strive to contribute to society and increase our corporate value.



JSR Group's Contribution to Attainment of the SDGs

1. Philosophy

2. JSR Group Activities

1. Philosophy

JSR Group believes that there is a need to deeply understand global issues, such as those cited in the Sustainable Development Goals (SDGs)^{*}, and other social problems apparent in various regions in order to carry out corporate activities. Activities to resolve these issues are new business opportunities, and are also linked to expanded business fields and enhanced corporate value. JSR Group will do its part to achieve the SDGs by creating value through its corporate activities.

At the same time, we view the SDGs as challenges within the Group's management foundation and therefore promote activities that give attention to them in our internal operations.

^{*} Sustainable Development Goals (SDGs):

"Transforming our World: the 2030 Agenda for Sustainable Development" was adopted at the UN Sustainable Development Summit in September 2015. The SDGs are comprised of 17 goals and 169 targets that all United Nations member states strive to achieve by 2030 for the betterment of people's lives, the environment, and prosperity. In addition to conventional development goals, such as eradicating extreme poverty and hunger, the SDGs also cover challenges faced by developed countries, among them gender (sex as determined by social and cultural factors) equality, creation of a strong employment environment, reexamination of production and consumption, climate change mitigation, conservation of resources, and development of safe communities.

- > Positive and Negative Impacts of JSR's Business Activities
- > Dialogue with Stakeholders 2019: JSR Group's Materiality and the SDGs

2. JSR Group Activities

(1) Relationship between Materiality and the SDGs

JSR Group significantly revamped its policy on sustainability activities in 2020. Following this updated policy, we are working to implement a new form of sustainability management that integrates our actions in terms of consideration for the environment, solutions to social issues and governance with business operations.

We have identified important issues for management from the perspective of sustainability as sustainability promotion activities (co-creation with companies and society), representing an extension of our previous CSR activities. These activities, which are already underway, will also contribute to the realization of the SDGs.

- > JSR Group's Materiality (Important Issues)

(2) Encouraging Employees to Get Involved with the SDGs

JSR Group hosts briefings and other meetings so as to deepen employee understanding of sustainability and utilize this knowledge in their daily work. Within these, we have also established opportunities for employees to learn about the SDGs.

For example, in FY2021, departments investigated and discussed the following three points for the sustainability report reading sessions held annually. We utilize the results in our sustainability activities and sustainability report.

- Awareness of the SDGs
- Opinions on materiality
- Business opportunities arising from social issues

We held the following briefing session and seminar for those interested.

- Briefing on the fundamentals of the SDGs by an internal instructor
- Seminar on SDGs utilization led by an outside instructor

Response to the TCFD Recommendations

1. Philosophy ▾

2. Governance ▾

3. Strategy ▾

4. Risk Management ▾

5. Indicators and Targets ▾

6. Participation in Related Group ▾

1. Philosophy

JSR Group sees responding to the problem of climate change currently facing society as one of the most important issues for the company, and we are therefore actively working to reduce greenhouse gas emissions both internally and externally. As JSR Group is also a supplier and manufacturer of chemical materials, we understand that our production and distribution processes have a variety of effects on climate change. At the same time, we can help mitigate climate change indirectly through our materials and products. For these reasons, we consider climate change as one issue most deeply connected to us.

It is in this context that we expressed our support for the TCFD^{*1} Recommendations in October 2020. We believe that these recommendations will contribute to the development of a sustainable society that is transitioning to a decarbonized economy. As a chemical company that takes climate change seriously, we seek to more deeply understand the opportunities and risks in the Group's business activities. We take action accordingly and strive to proactively and publicly disclose our initiatives. We will continue our quest to reach "net zero" GHG^{*2} emissions by 2050, as we committed to in 2021. Moreover, through our products, we will contribute to a reduction of GHG emissions by society as a whole.

^{*1} TCFD (Task Force on Climate-related Financial Disclosures): Founded by the Financial Stability Board in 2015. In June of 2017, the TCFD recommended that financial institutions, companies, governments, and the like disclose their climate change impacts in their financial reports. More than 3,100 organizations around the world have endorsed the recommendations (as of March 2022; from data published by the TCFD).

^{*2} GHG: Greenhouse gases

The TCFD Recommendations call for disclosure of information pertaining to climate change-related governance, strategy, risk management and metrics and targets. JSR Group is taking the following action in line with these recommendations.

Governance	Strategy	Risk Management	Metrics and Targets
Development of a managerial governance structure relating to climate change risks and opportunities	Analysis of impacts that climate change-related risks and opportunities will have on business, strategic and financial planning	Development of framework for assessing and managing climate change-related risks and opportunities	Establishment and progressive disclosure of metrics and targets for managing risks and opportunities

2. Governance

JSR utilizes a supervisory structure, overseen by the Board of Directors, to examine and carry out appropriate responses to issues that could potentially pose business risks. These responses include climate change measures and other sustainability initiatives. Since FY2020, the Chief Sustainability Officer (CSO) has also served as a company director, contributing to more robust supervision by the Board of Directors.

The Sustainability Planning Committee headed up by the CSO examines and promotes initiatives. The Sustainability Promotion Committee receives reports on and discusses the content and results of these initiatives four times a year. The most important matters are reported also to the Board of Directors. The Sustainability Promotion Committee is chaired by the President, with company officers in charge of units also participating. It discusses all JSR Group businesses and functions from a sustainability perspective.

Our responses to climate change are incorporated into our mid-term business plan and management targets and approved by the Board of Directors. In turn, the mid-term business plan is incorporated into annual plans. Each unit executes measures in keeping with these plans and targets. Progress gets reported to and discussed by the Sustainability Promotion Committee. The Board of Directors supervises and monitors the results and offers feedback to support improvements.

— Board of Directors discussions that included climate change (FY2021)

- Status report on sustainability (ESG) initiatives (including climate change response) (June)
- Status report on initiatives for TCFD Recommendations (June)
- Report on establishment of sustainability indicators (KPI) and targets (including climate change response) (December)
- Report on establishment of sustainability KPI medium- to long-term plan (March)

Director Remuneration Linked to Climate Change Response

The yearly bonuses of the CEO and President are determined based on Group performance (90%) and a non-financial evaluation (10%). This means that bonuses are linked to progress on Group-wide sustainability management indicators such as reducing GHG emissions and promoting DE&I. The amount of remuneration based on non-financial evaluation is first discussed by the Remuneration Advisory Committee and then decided by the Board of Directors, who can set it to any amount from 0% to 200%.

3. Strategy

In FY2019, JSR Group began a scenario analysis in line with the TCFD Recommendations. The purpose here was to assess climate change-related business risks and opportunities and establish strategies, indicators, and targets. An assessment of the significance of climate change and an analysis of climate change scenarios (qualitative) were completed in FY2020. However, we are revising the earlier results of our qualitative analysis because we transferred (carved out) our Elastomers Business to another company in FY2021. Of all our core business domains (the Digital Solutions Business, Life Sciences Business, Elastomers Business, and Plastics Business), this was the one with the greatest impact on climate change.

The carve-out of the Elastomers Business, which accounted for the greatest share of JSR Group's GHG emissions, does help to mitigate the Group's risks, but we are determined to continue taking sufficient measures without letting up. Moreover, we are continuing our quantitative assessment in FY2022.

At the same time, we recognize that there is no time for delay in responding to climate change around the world. Thus, we have already formulated measures to reduce GHG emissions and have set preliminary indicators and targets, which we are beginning to act on.

Climate-Related Risk Significance Assessment

- Socio-economic scenario assumptions
- Formulation of business impact scenarios and determination of degree of impact

Climate Change Scenario Analysis (Qualitative Determination)

- Investigation of risk and opportunity impact stemming from changes in JSR's business environment (scenarios) as a result of climate change

Climate Change Scenario Analysis (Quantitative Determination)

- Quantification of impact that JSR scenarios will have on future business strategy and financial affairs, and strategic incorporation of results

Identification of Potential Implementation Measures

- Determination of climate change strategy implementation measures and selection of management metrics

Climate-Related Risk Significance Assessment

For those social environments associated with JSR Group business, we assessed climate change impacts over the short term (five years), medium term (10 years), and long term (30 years).

* External information utilized includes IPCC_RCP2.6, RCP8.5, and IEA_B2DS

Climate Change Scenario Analysis (Qualitative Determination)

A climate change impact-related scenario analysis for JSR business was performed based on the gravity of the climate-related risks. One big change since the previous year's scenarios is that the analysis did not include the Elastomers Business, which we transferred to another company.

— Assessment Targets

Digital Solutions Business, Life Sciences Business, and Plastics Business were chosen as JSR Group's core business domains.

— Assessment Method

- (1) Based on the socio-economic scenario assumptions, relevant business impact scenarios were formulated and the degree of business-specific impact determined.
- (2) Based on the potential for, and impact on business (human loss, financial impact, etc.), of the above, particularly significant risks and opportunities were identified. In the course of this, factors such as trends in international discussion, development regions and other company's practices were considered.

— Assessment Results

- (1) Impact Scenarios and Degree of Business-Specific Impact

Small ← Size of Impact → Large

High-Impact Risks / Opportunities	Risk	Opportunity	Impact on Business			Impact period
			Digital Solutions	Life Sciences	Plastics	

World of +1.5°C

Increased opportunities for life-cycle CO ₂ reduction (bring attention to climate change challenges)		✓				Short term
Strengthening of GHG emissions regulations	✓					
Establishment and increase of carbon costs	✓					
Emergence of customers demanding decarbonated products (e.g., RE100)	✓					Medium term
Evolution of low-carbon energy sources	✓	✓				
Increased demand for environmentally-beneficial products	✓	✓				
Fundamental lifestyle transformation		✓				
Mainstream adoption of sustainable finance	✓					
Change in how human resources are secured	✓					
Popularization of advanced decarbonization technology	✓	✓				
Change in automotive industry / Increased mainstream adoption of EV	✓	✓				Long term
Increased need for recycling / reuse of tire materials Expansion in demand for recycled and recyclable resins	✓	✓				
More frequent flooding and more severe storm and flooding damage in Japan	✓					

World of +4°C

Increased opportunities for life-cycle CO ₂ reduction (bring attention to climate change challenges)		✓				Short term
More frequent flooding and more severe storm and flooding damage	✓					Medium term
Rise in sea levels	✓					
Rise in temperature	✓					Long term
Supply chain disruption due to more severe storm and flooding damage	✓					
Fundamental lifestyle transformation		✓				

(2) Scenario drivers and impacts on JSR Group (to assessment of financial impact)

Risks

Scenario drivers	Category	Factors (qualitative analysis results)	Impacts on JSR Group
Increased energy costs because of carbon pricing	Transition	<ul style="list-style-type: none"> Stronger GHG emissions regulations Carbon price setting and steep price rises Emergence of customers who demand decarbonized products (RE100, etc.) 	<p>Drive to net zero GHG emissions</p> <ul style="list-style-type: none"> Capital investment in measures to reduce emissions (energy conservation) Capital investment in measures to reduce emissions (fuel switching) Greater energy cost burden (switch to energy-conserving electric power)
Rising prices for raw material because of carbon pass-through		<ul style="list-style-type: none"> Advance of low-carbon energy sources 	<ul style="list-style-type: none"> Greater raw materials cost burden
Ensuring corporate value		<ul style="list-style-type: none"> Mainstreaming of sustainable finance Changes in how human resources are recruited 	<ul style="list-style-type: none"> Responding to ESG investment Winning trust by disclosing information
Damage caused by disaster	Physical (acute)	<ul style="list-style-type: none"> More frequent flooding and more severe storm and flooding damage in Japan 	<ul style="list-style-type: none"> Production disruptions caused by disaster Supply chain disruptions caused by disaster
Maintenance of work and social environment	Physical (chronic)	<ul style="list-style-type: none"> Air temperature rise 	<ul style="list-style-type: none"> Greater air conditioning costs because of rising air temperature Greater water withdrawal costs because of rising water risks

Opportunities

Scenario drivers	Factors (qualitative analysis results)	Impacts on JSR Group
Business growth resulting from responding to environmental changes	<ul style="list-style-type: none"> ■ Increasing momentum to reduce life cycle CO₂ (closer scrutiny of climate change problem) ■ Increasing demand for products that benefit the environment ■ Changes in how lifestyles are structured ■ Spread of advanced decarbonization technologies ■ Impact of changes in automobile industry / EVs becoming mainstream ■ Increased demand for recycled & recyclable plastics 	<p>Digital Solutions Business</p> <ul style="list-style-type: none"> ■ Increasing momentum to conserve energy in IT equipment, advancement of IoT built to respond to climate change <p>Life Sciences Business</p> <ul style="list-style-type: none"> ■ Accelerating drug development, advancement of personalized medicine <p>Plastics Business</p> <ul style="list-style-type: none"> ■ Diversification (lighter, quieter) resulting from transition to EVs ■ Evolution of circular economy

We will continue to perform climate change scenario analysis (quantitative determination) and identify potential measures we can take, while learning the financial impacts of the risks and opportunities associated with climate change. We will regularly review these and report the results to the Board of Directors for discussion there as part of an ongoing PDCA cycle.

4. Risk Management

JSR Group believes that preventing major crises and minimizing their effects on business activities should they occur are important management challenges. Given this, we have formulated Risk Management Policies and empower the Risk Management Committee to lead our risk management efforts.

Our independent risk management system has operated since FY2009. Under the leadership of the Risk Management Committee, all units in Japan and abroad, including Group companies, regularly identify risks. A risk map that we use charts the level of each risk's business impact and the frequency of its occurrence. Among risks that we identify, we label those with potentially big impacts on business continuity as "JSR Group Risk Factors." Senior management monitors and regularly reviews such risks, thereby building and maintaining a system to prevent and prepare for crises. We take a similar approach to climate change-related risks.

Quantitative results of the scenario analysis scheduled for this fiscal year will be consolidated into manifested risk, which will help us to conduct more precise risk management.

> Please refer to the page "Risk Management" for more details.

As for opportunities, we project that society's response to climate change will greatly transform the business environment in which JSR Group operates. We see such changes as new business opportunities. We can grow our business by timely offering technologies that are refined and innovated for the future.

5. Indicators and Targets

JSR Group has declared our aim of becoming carbon neutral in terms of our own GHG emissions by FY2050. To establish milestones along the way, we formulated intermediate environmental targets for 2030 and yearly GHG emissions reduction plans. Please refer to our Sustainability Report's section on climate change mitigation to see our GHG emissions reduction track record.

— FY2050 Targets

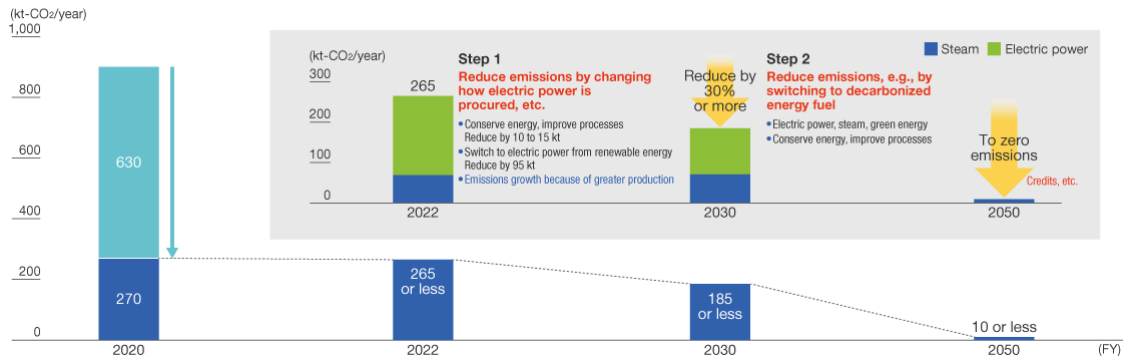
We in JSR Group continue working actively toward our aim of "net zero" GHG emissions by 2050.

— FY2030 Intermediate Targets

Globally, we are taking measures to conserve energy and switch to renewable energy. Our aim is to reach CO₂ emissions that are 30% lower in FY2030 than they were in FY2020. We are also challenging ourselves to implement innovative energy technologies and promoting the development of eco-friendly products and services to help shape a low-carbon, recycling society.

GHG Emissions Reduction Image

We anticipate a 70% reduction in Group GHG emissions in FY2022 owing to the sale of our Elastomers Business. We aim for FY2030 GHG emissions (current businesses only) 30% lower than FY2020 results, and net zero GHG emissions by FY2050.



6. Participation in Related Group

JSR Group participates in the TCFD Consortium, as we endorse its aim of contributing to "a virtuous cycle of environment and growth." Through a process of dialogue among enterprises, financial institutions, and others that support the TCFD, the consortium promotes effective and efficient disclosures based on the TCFD Recommendations and works to ensure that information so disclosed is appropriately evaluated and financing is encouraged.

JSR Group's Materiality (Priority Issues)



1. JSR Group's Materiality ▾

2. Establishment of KPI for Materiality ▾

1. JSR Group's Materiality

Under our Corporate Mission of "Materials Innovation - We create value through materials to enrich society, people and the environment," we aim to help bring about a sustainable environment and society by creating value through corporate activity. In 2015, we identified priority issues (in other words, our "materiality") after organizing sustainability issues based on "Importance for the JSR Group (Internal Factors)" and "Importance for Stakeholders (External Factors)." Our Group's materiality is reviewed as needed, and we are advancing sustainability management using "integrated thinking" in conjunction with our preparation of a set of new medium-term management policies.

* Integrated thinking: A way of thinking that sees corporate activity in its entirety by integrating financial and non-financial information

We postponed the announcement of the new medium-term management policies initially planned for FY2020 because of the global COVID-19 pandemic and impacts of structural reforms taking place in the petrochemical market.

Nonetheless, we spent two years reassessing our materiality through the "JSR Sustainability Challenge" based on points raised in a dialogue with experts we held in 2019.

These new priority issues were formulated from the two components of Business Activity and Management Foundation. These issues were also reflected in the medium-term management policies announced in March 2021 and represent the very core of our resilient management foundation.

* JSR Sustainability Challenge: An initiative where hearings were conducted to grasp the positive and negative social impacts of the Group's five business segments to determine the material impacts, both positive and negative, of JSR Group's business activities.

> JSR Report 2021 "Management Policies"

> Download JSR Group Sustainability Report 2020

> JSR Report 2020 – JSR Sustainability Challenge / Summary of Business Activities

> Download JSR Group Sustainability Report 2021

> Sustainability Report 2021 – JSR Sustainability Challenge / Management Foundation Implementation Process and Summary

JSR Group's Materiality (Priority Issues)

Business Activity Advancement of the three priority issues			Digital Solution	Materials supporting the digitalization of smart society Curtailed of electricity consumption	
Contribution to quality of life and happiness				Life Science	Early development of pharmaceuticals Increase success probability of development and development efficiency
Contribution to a healthy and long-living society					
Contribution to preservation of the global environment				Plastic	More comfortable driving experience by eliminating interior squeaking Providing products designed to support plastic recycling
Management Foundation Promotion throughout the Group Five priority issues					
Environmental conservation and impact reduction Achieve net zero GHG emissions by 2050 by working collectively as a Group					
Employees DE&I Ways of working Respect diversity and increase employee engagement					
Health and safety Prioritize safety and ensure good mental and physical wellbeing					
Respect for human rights Deepen understanding of human rights and take the correct actions					
Supply chain Sustain stable procurement from sound procurement partners					

We believe that our materiality will evolve amid continuing changes in what society demands of us as well as in our various stakeholders' views and needs. Going forward, we will therefore continue to identify and review materiality through the following operations.

1. Each year, we will confirm validity by conducting checks through engagement with experts, employees, responsible care activities, and the like.
2. Whenever we formulate new medium-term management policies, we will ensure (and periodically review) the transparency and acceptability of the processes that we apply when specifying materiality by exchanging views with experts.

In addition, we asked Mr. Keisuke Takegahara of the Development Bank of Japan, Inc. who enlightened us with his views during the 2019 dialogue with experts and through the "JSR Sustainability Challenge," to comment on our new issues of materiality. Details can be found using the links below.

We will strive to advance sustainability management across the entire Group further by taking such outside insights into account.

> Looking back at the process of developing the "new materiality" from the 2019 dialogue

2. Establishment of KPI for Materiality

In FY2021, we established Key Performance Indicators (KPI) for our new issues of materiality. During this process, the Sustainability Promotion Department, with the support of the Corporate Planning Department, discussed and shared sustainable management issues facing JSR Group together with business departments, corporate departments, and Group companies to determine specific KPI and numerical targets. For details, please refer to the table below "Materiality Initiatives and KPI."

The materiality affecting our business activity—specifically, the Group's Digital Solutions Business, Life Sciences Business, and Plastics Business—was determined to be providing products and services that contribute to society by having various effects on improving quality of life and happiness, achieving a society of longevity, and environmental conservation.

Based on this, we identified sustainability products in each business segment from among JSR Group's product lineup and then established KPI such as net sales, sales volume, and share of sales for each, with final targets set for FY2024.

The materiality affecting our business foundation underpinning business activities was determined to be environmental conservation and impact reduction, employee DE&I work styles, safety and health, respect for human rights, and supply chain. In turn, we established medium- to long-term issues and KPI for each. The background and characteristics are described below.

— Environmental Conservation and Impact Reduction

Climate change and resource depletion are issues threatening the very future of humankind. To resolve these worldwide social issues, JSR Group will begin by aiming to reach net zero GHG emissions by 2050 and eliminate waste bound for landfills entirely.

— Employee DE&I and Work Styles

Data shows that companies with diversity in terms of workforce gender and corporate culture have a higher probability of achieving excellent business performance and as a result this is believed to lead to greater corporate value, too. JSR Group aims to establish diversity in terms of gender and culture. As the first initiative toward this transformation, we will focus on promoting the active participation of women in the workplace and increasing the ratio of female managers at JSR.

— Safety and Health

For safety, we will use the number of accidents occurring after safety activities and results of the safety culture survey for measuring the progress of this process as KPI and adopt uniform standards for evaluating safety performance globally. For health, we targeted White 500 certification for JSR. During and after the pandemic, we have positioned the balance between employee health and productivity as an important management issue that we are now working diligently to address.

— Respect for Human Rights

Companies are responsible for setting an example when it comes to respect for human rights. To fulfill this responsibility, each and every JSR Group employee must deepen their understanding of human rights. Through e-learning and other means, we will focus on initiatives that educate our people about human rights continuously and systematically.

— Supply Chain

To share societal needs and JSR Group's philosophy with suppliers and to prevent risks before they materialize, we distribute booklets containing JSR Group's CSR/sustainable procurement and human rights policies to foster supplier understanding and we ask that they submit a written endorsement. With regard to conflict minerals and cobalt, which pose concerns in terms of child labor and other human rights abuses, we will use commonly used questionnaires worldwide to monitor JSR Group's use of these commodities and suppliers' responses to preventing human rights abuses.

We will review the status of materiality issues to be implemented in FY2022 and beyond every six months using KPI and take additional action as needed. In addition, evaluation results for each fiscal year will be shared with the Sustainability Promotion Committee and Executive Committee for making improvements to activities to be implemented in subsequent fiscal years.

Materiality Initiatives and KPI

JSR Corporation's Materiality



	Purpose	KPI	Goal (In FY2024)	Location
Digital Solution	<ul style="list-style-type: none"> Provision of materials to support digital development in a smart society Reducing power consumption in a smart society 	Sales of sustainability products Sustainability Products Sales Ratio	3 times as many* 2 times as many*	Global
Life Science	<ul style="list-style-type: none"> Early development of medical products Improvement of development success probability and development efficiency 	Sales of sustainability products	100 billion yen	Global
Plastic	<ul style="list-style-type: none"> Comfortable driving by improving vehicle creak noise Providing products designed to support plastic recycling 	Sales volume of sustainability products Sustainability of Products Sales Ratio	54 thousand ton 20%	Global

* Compared to FY2020



Materiality	Purpose	KPI	Goal	Location
Environmental conservation and impact reduction	Reducing GHG emissions	Reduction of GHG emission (vs FY2020)	FY2030: -30% FY2050: -100%	Global
	Waste reduction	Final landfill amount	<0.1%	Global
Employees, DE&I, and work styles	Increase engagement	Increase employee engagement	Increase	Global
	Promote DE&I	Ratio of women in managerial positions	10% in FY2030	JSR Corp
Health and safety	Create a safe work environment	The number of workplace accidents The number of facility accidents	Zero	Global
	Improve the health of employees	Obtain certification as an "Excellent Health Management Corporation (White 500)" by METI	Obtain "White 500"	JSR Corp
Respect for human rights	Give all employees opportunities to learn about human rights	Participation rate in e-learning on respect for human rights	>80%	Global
Supply chain	Strengthen supply chain management	Collection rate of acknowledgement of receipt received after sharing the JSR Group's CSR/Sustainable Procurement Policy and Human Rights Policy with our suppliers	100%	Global
		Collection rate of RMI templates (survey on the use of Conflict Minerals and Cobalt) from our suppliers	100%	Global

Sustainability Management and Advancement Structure

Under the corporate mission "Materials Innovation - We create value through materials to enrich society, people and the environment," JSR Group aims to build and maintain good relationship with all of our stakeholders and become an indispensable corporate citizen. And we will promote initiatives that benefit all stakeholders—customers and business partners, employees, society, the environment, and shareholders.

Sustainability Promotion Committee

JSR Group established its Sustainability Promotion Committee in 2020. The committee discusses and coordinates on matters related to sustainability, including policies, in line with internal and external circumstances relating to ESG and the SDGs.

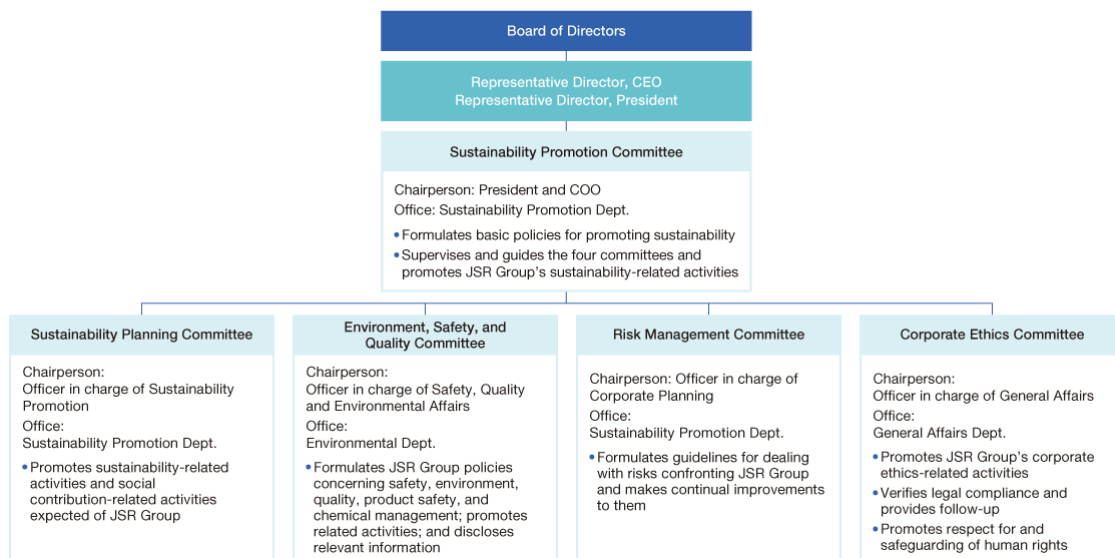
Below the Sustainability Promotion Committee are four committees called the Sustainability Planning Committee, Environment, Safety and Quality Committee, Risk Management Committee, and Corporate Ethics Committee. The Sustainability Promotion Committee supervises and guides the four committees, and also strengthens and promotes their management through regularly scheduled meetings (held four times annually) as well as extraordinary meetings. In principle, the Committee also reports on activities once every quarter to the board of directors and undergoes supervision/observation by the board of directors.

The Sustainability Promotion Committee is chaired by the President. Participants are the secretariats of the four above-mentioned committees as well as company officers (those responsible for corporate planning, manufacturing technologies, procurement and logistics, quality assurance, safety and environmental affairs, research and development, human resources development, accounting and financial affairs, corporate communications, general affairs, legal affairs and compliance, system strategies, cyber security management, sustainability promotion, diversity promotion, the Digital Solutions Business, the Life Sciences Business, and the Plastics Business). This enables the committee's discussions to touch on all businesses and functions of the Group.

We endeavor to build confidence among our stakeholders by disclosing information on the committee's activities and results in the Sustainability Report.

— Examples of Issues Discussed by Sustainability Promotion Committee in FY2021

- Materiality of JSR Group
- Sustainability trends affecting JSR Group (TCFD, circular economy , etc.)
- Establishment of JSR Group Human Rights Policy



(1) Sustainability Planning Committee

JSR Group maintains a Sustainability Planning Committee that is chaired by the officer in charge of sustainability promotion. The reason we have this committee is that we recognize the need to respond to changes in the environment, deepen our sustainability initiatives, and continually provide value to all stakeholders.

The Sustainability Planning Committee summarizes the state and results of Creating Shared Value (CSV) activities through co-creation with business departments. It also considers corporate initiatives for sustainability, such as responding to the Task Force on Climate-related Financial Disclosure (TCFD) and addressing climate warming and sets direction for sustainability strategies in light of the management policy, materiality, and identified risks. The committee also addresses social contribution activities by studying new undertakings and monitoring the status of existing activities based on JSR Group's Philosophy for Social Contribution.

> [Click here for details concerning our social contribution-related initiatives.](#)

(2) Environment, Safety and Quality Committee

We believe "making sustainable development possible" is an important form of corporate responsibility. We therefore address the environment, safety, and quality based on the principle of "responsible care." At JSR, these initiatives are fundamental to our business activities. Therefore, we maintain an Environment, Safety and Quality Committee chaired by the officer in charge of safety, environmental affairs, and quality assurance, who spearheads effective, Group-wide initiatives.

The committee approves plans that concern responsible care activities within the contexts of the environment, safety, and quality. It also evaluates and verifies the results of these activities. The committee additionally strives to maintain and improve responsible care as it pertains to the elimination of accidents, reduction of environmental impacts, chemical management, and product safety.

> [Click here for details concerning our responsible care-related initiatives.](#)

(3) Risk Management Committee

We believe that preventing major crises and minimizing their effects on business activities should they occur are important management challenges. Given this, we have formulated Risk Management Policies and established a Risk Management Committee that is chaired by the officer in charge of corporate management. The Risk Management Committee promotes continuous improvement of guidelines and plans for responding to both manifested and potential crises.

> [Click here for details concerning our risk management-related initiatives.](#)

(4) The Corporate Ethics Committee

JSR Group practices and promotes corporate ethics by setting down the JSR Group Principles of Corporate Ethics—a code of conduct for fulfilling our Responsibility to Our Stakeholders, a key management policy to support the realization of our management philosophy. We further pursue corporate ethics through the Corporate Ethics Committee chaired by the officer in charge of general affairs.

This committee makes certain that JSR's Course of Action is recognized throughout the Group as a statement demanding compliance in daily corporate activity. It also confirms compliance each year and works to continually improve it.

We also provide compliance reporting channels. For employees, we have an internal hotline connected to the Corporate Ethics Committee, an external hotline connected to an attorney, and an external hotline that can handle communication in English, Chinese, Korean, and Thai. We have also set up an external hotline for our business partners.

> [Click here for details concerning our corporate ethics and compliance-related initiatives.](#)

Overview of Environmental Initiatives and Environmental Impact

[1. Our Environmental Initiative](#) ▾[2. Overall Picture of our Environmental Impact: Input to Output](#) ▾

1. Our Environmental Initiative

(1) Philosophy

JSR Group recognizes that it is our duty to contribute to the realization of a sustainable global environment and society as a company which handles chemical substances.

Therefore, we consider reducing the environmental impact arising from our business activities and appropriately managing chemical substances to be priority issues. Accordingly, we are striving to reduce greenhouse gas emissions from energy consumption and to appropriately manage waste. In particular, it is expected that climate change will have a big impact on our business due to the risks from an increase in natural disasters and environmental regulations in the future. Therefore, we consider reducing greenhouse gas emissions to be a mid- to long-term management issue and are working on it over the whole of JSR Group.

(2) Promotion Structure

JSR Group formulates environmental targets under our basic policy of responsible care to promote environmental activities integrated with our management. The Environmental Supervisory Department drafts the environmental targets. The Environment, Safety and Quality Committee chaired by the Officer in charge of Safety and Environment Affairs and Quality Assurance then deliberates and approves those targets. After that, the committee reports the targets to the Sustainability Promotion Committee.

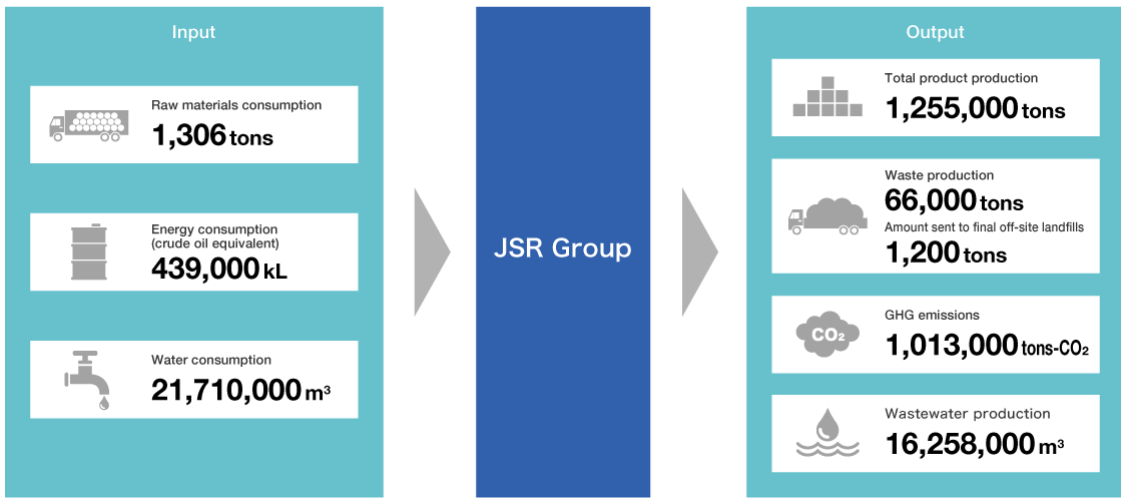
(3) Various Initiatives

- Climate Change Mitigation
- Conservation of Water Resources
- Waste Reduction
- Initiatives to Prevent Pollution
- Biodiversity Conservation
- Chemical Management

2. Overall Picture of our Environmental Impact: Input to Output

JSR Group strives to comprehensively and efficiently reduce its environmental impact by quantitatively ascertaining and closely analyzing its consumption of energy and resources in its business activities (input) as well as its product production, emissions into the environment, waste production, and other data (output).

The chart provides an overview of JSR Group's environmental impact (material balance) in FY2021. It presents totals for three items as input (raw materials consumption, energy consumption and water consumption) and five items as output (total product production, waste production, amount sent to final off-site landfills, greenhouse gas (GHG) emissions, and wastewater production).



> [JSR Group ESG Data \(PDF: 344KB\)](#)

Climate Change Mitigation



1. Philosophy

2. JSR Group's GHG Emissions and Energy Consumption

3. Initiatives to Reduce GHG Emissions

1. Philosophy

Environmental problems attributable to global warming (e.g., forest fires, droughts, water shortages, rising sea levels, threats of extinction, and impacts on ecosystems) are occurring on a global scale. Such problems are also seen in Japan. They are represented by floods caused by torrential rains, health problems such as heatstroke that result from more and more days of extreme heat, and impacts on ecosystems, such as coral bleaching.

JSR Group recognizes this as an important issue. Therefore, with the aim of helping realize a decarbonized society, we strive to lower our greenhouse gas (GHG) emissions by, for example, reducing the amount of energy needed in the various processes of producing and supplying our products.

Together with this, we also calculate and ascertain the GHG emissions in our supply chain (Scope 3) based on the Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain issued by Ministry of the Environment, Government of Japan. Chemical products are ultimately used in various products. Therefore, we believe it is necessary to work to reduce GHG emissions throughout the lifecycle of our products. We will continue to calculate and ascertain our GHG emissions on a global basis to contribute to reducing GHG emissions throughout society in the future.

In addition to this, we participate in the Japan Chemical Industry Association, the TCFD Consortium and other organizations to collect information. We recognize that climate change will bring about both risks and opportunities for JSR Group. Accordingly, we formulate and implement strategies based on scenario analysis.

- Scope 1: Direct GHG emissions by companies themselves (fuel combustion and company-owned vehicles, etc.)
- Scope 2: Indirect GHG emissions from the use of electricity, heat or steam supplied by other companies
- Scope 3: Other indirect GHG emissions besides Scope 2.
(Company: This includes the procurement of raw materials, employee business trips and subcontracting of waste disposal, etc.)

> JSR Group ESG Data (PDF: 344KB)

2. JSR Group's GHG Emissions and Energy Consumption

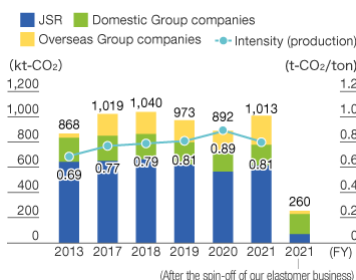
We continued to conduct energy saving activities as we did in the previous fiscal year. However, with an increase in production volume and an addition of overseas bases, both our GHG emissions (1,013 kt-CO₂) and energy consumption (439,000 kL) in FY2021 increased compared to FY2020 (GHG emissions: up 14% / energy consumption: up 19%).

We spun off our elastomer business in April 2022. If we make an estimate based on the post-spin-off boundary, GHG emissions become 260 kt-CO₂ and energy consumption becomes 109,000 kL.

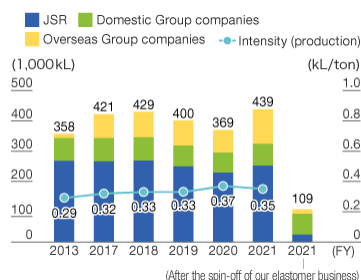
We will continue to strive to reduce GHG emissions on a global basis.

> Establishment of Materiality Evaluation Indicators (KPIs)

GHG emissions



Energy consumption



3. Initiatives to Reduce GHG Emissions

(1) JSR Bases

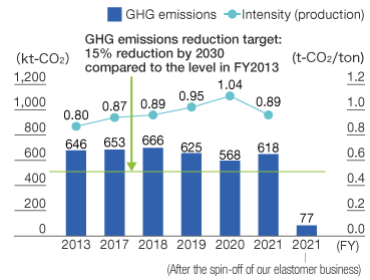
Since FY2005, JSR has been striving to upgrade our energy-saving technologies through various approaches. Those have included introducing co-generation facilities and sludge dryer systems in addition to fuel conversion. We thus achieved a significant GHG emissions reduction of 21.6% by FY2013 compared to the FY2005 level.

Furthermore, in FY2019, we set a long-term goal of "reducing emissions by 15% in FY2030 compared to the FY2013 level." We are endeavoring to further reduce GHG emissions by introducing highly efficient equipment and using renewable energy in addition to our energy conservation activities.

In FY2021, we only reduced our GHG emissions by 4.4% compared to FY2013 to 618 kt-CO₂. That was partly due to the impact of an increase in production volume. JSR spun off our elastomer business in April 2022. If we make an estimate based on the post-spin-off boundary, GHG emissions become 77 kt-CO₂.

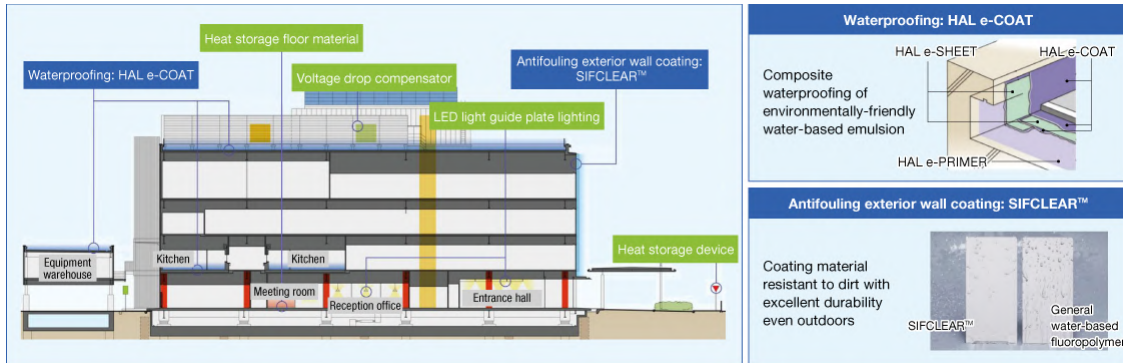
In addition to agreeing with the TCFD, we are continuing to identify risks and opportunities with respect to climate change through scenario analyses and formulating medium- and long-term measures.

GHG emissions



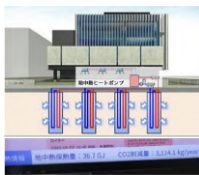
— Yokkaichi Plant

JSR Group develops various products which contribute to a reduction in the environmental impact. We use those products in various places throughout the main building at Yokkaichi Plant to mitigate climate change.



(Note: The products with no name are not currently handled by JSR Group)

— Cooling and Heating System



The reduction in CO₂ effect is displayed in the facility

JSR BiRD^{*}, which started operation in 2021, has adopted a cooling and heating system which uses geothermal heat (geothermal heat utilization system).

The temperature in the ground is lower than the outside temperature in the summer and higher than in the winter. We have built an effective cooling and heating system using this temperature difference. This system reduces CO₂ emissions resulting from the generation of cold and hot water further than with conventional air conditioning systems. That has led to a reduction in the environmental impact.

* This stands for JSR Bioscience and informatics R&D center. It is a JSR research facility we newly established in 2021 for the creation of new business.

— Natural gas-fired turbine cogeneration system



Natural gas-fired turbine cogeneration system (Yokkaichi Plant)

Using natural gas as fuel

Reduces CO₂ emissions as compared to coal- or heavy oil-fired steam boilers and condensing steam turbine systems.

— Sludge dryer system



Sludge dryer system (Yokkaichi Plant)

Reduces the amount of combustion support fuel (heavy oil) used in onsite incineration by drying high-water-content sludge that is produced by comprehensive wastewater treatment facilities and using it as fuel.

(2) Logistics: Improving Transport Efficiency

In terms of transportation, we are proactively promoting a move to bigger forms of transport with a modal shift from trucks to railways and ships. That is leading to a reduction in our transport energy intensity. In FY2021, as a result of promoting the use of railways and ships to transport products and raw materials, we maintained a high-level modal shift similar to the previous fiscal year at 85%. That meant we maintained our transport energy intensity. We transferred our elastomer business, which accounted for approximately 90% of our transportation volume, in April 2022. Accordingly, we expect our modal shift rate to fall significantly. Nevertheless, we will continue to work to improve transportation efficiency in consideration of the environment together with our business partners and logistics companies.

FY	2013	2017	2018	2019	2020	2021
CO ₂ emissions (tons)	22,960	24,437	24,208	20,211	15,517	17,686
Category 4 Transportation and delivery of raw materials and other materials	10,489	13,177	13,112	10,706	7,559	8,537
Category 5 Transportation of waste from plants	164	195	202	193	168	201
Category 9 Transportation and delivery of products	12,307	11,065	10,894	9,312	7,790	8,948
Transport volume (million ton-kilometers [*])	492	534	514	434	324	377
Modal shift rate (%)	83	86	85	85	83	85
Energy consumption (kL: crude oil equivalent)	9,026	9,899	9,324	7,855	6,052	6,944
Energy intensity (kL/1,000 t-km)	0.0183	0.0185	0.0181	0.0181	0.0187	0.0184

* Ton-kilometer: Freight Tonnage (ton) x Transport Distance (km)

> Logistics: 4. White Logistics Initiatives

Conservation of Water Resources



1. Philosophy ▾

2. Usage of Water Resources by JSR Group ▾

3. Other Information on Water Resources ▾

1. Philosophy

Water is an essential resource for living beings. Globally, freshwater, in particular, is an extremely valuable resources. In Japan, as in other countries, water resources are being affected by natural disasters caused by abnormal weather events, some of which are a result of climate change. This makes the appropriate management of water resources a necessity.

JSR Group uses such water resources for drinking water, of course, but also as a raw material and coolant in its manufacturing processes. We strive to recycle water in our processes. At the same time, we purify and check the quality of the water when discharging it outside of our processes. In this way, we work to conserve water resources through appropriate management and treatment.

> Environmental load (COD discharges, total nitrogen emissions, total phosphorus emissions) → JSR Group ESG Data (PDF: 344KB)

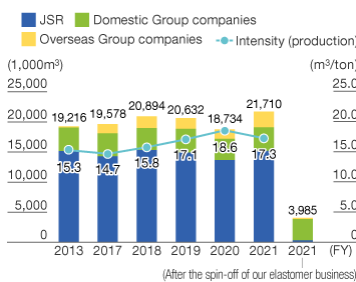
2. Usage of Water Resources by JSR Group

In FY2021, JSR Group consumed 21,710,000 m³ of water (up 16% year on year) and discharged 16,258,000 m³ of wastewater in total (up 11% year on year).

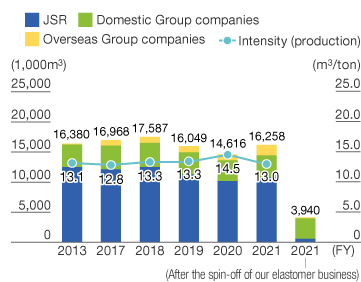
We spun off our elastomer business in April 2022. If we make an estimate based on the post-spin-off boundary, our water consumption and amount of wastewater becomes approximately 4,000,000 m³.

We will continue to strive to appropriately manage increasingly important water resources in the future.

Water consumption



Amount of Wastewater



3. Other Information on Water Resources

(1) Usage of Water Resources

In FY2021, JSR used 15,133,000 m³ of industrial water, groundwater* and tap water as water resources. We recycled and used 28.6% of that in the processes in our plants.

We will continue initiatives in the future with the target of maintaining this recycling usage rate.

* Groundwater is not used at the Yokkaichi and Chiba Plants.

Breakdown of water consumption (by intake source)

(x 1,000 m³/year)

FY	2013	2017	2018	2019	2020	2021
Industrial water	14,734	13,667	14,790	14,309	13,193	14,672

FY	2013	2017	2018	2019	2020	2021
Tap water	167	200	172	171	169	186
Groundwater	234	393	313	408	259	275
Total Water Consumption	15,134	14,259	15,275	14,888	13,620	15,133

Amount of Recycled Water Used

(x 1,000 m³/year)

FY	2013	2017	2018	2019	2020	2021
Usage of recycling water	4,496	4,250	4,481	4,210	3,624	4,322
Recycling rate (%)	29.7	29.8	29.3	28.3	26.6	28.6

(2) Water Risk Assessments

JSR Group uses the Aqeduct Water Risk Atlas of the World Resources Institute (WRI) as a tool to assess water risks in each of our production bases in and outside Japan. Together with ascertaining the current state of the overall water risks in our main production bases, we have confirmed that the overall water risks in all our bases is 3 or less. We are taking measures to reduce the respective risks at our bases with relatively high water risks.

* The Aqeduct Water Risk Atlas contains a risk assessment (five stages). A higher value indicates a higher water risk. The assessment is calculated from the situation of the indicators selected for each category in each of the physical quantity, quality and regulations/reputation items.

Efforts at JSR Micro N.V. (Belgium)

A large amount of water is used in the production process of the Life Sciences Division. The wastewater is then treated off-site. We started building an on-site wastewater treatment facility from October 2021 to reduce the amount of wastewater we generate. We completed construction of the facility in September 2022 and started test operation from October of that year. We expect this facility will make most off-site wastewater treatment unnecessary and will allow us to reuse 70% of the wastewater. We will also be able to greatly reduce the CO₂ emissions we generate by transporting wastewater to off-site treatment facilities.

> Reference: P. 21 of JSR Micro N.V. CSR Report 2021 (PDF: 2.89 MB) 

(3) Water Environment Conservation

> Environmental Pollution Measures > Initiatives to Prevent Pollution: 1-(2) Protection of Water Environments

Waste Reduction



1. Philosophy ▾	2. Amount of Industrial Waste Treated and Generated by JSR Group ▾	3. Initiatives to Reduce Industrial Waste ▾
4. Hazardous Waste Handling ▾	5. Future Initiatives ▾	

1. Philosophy

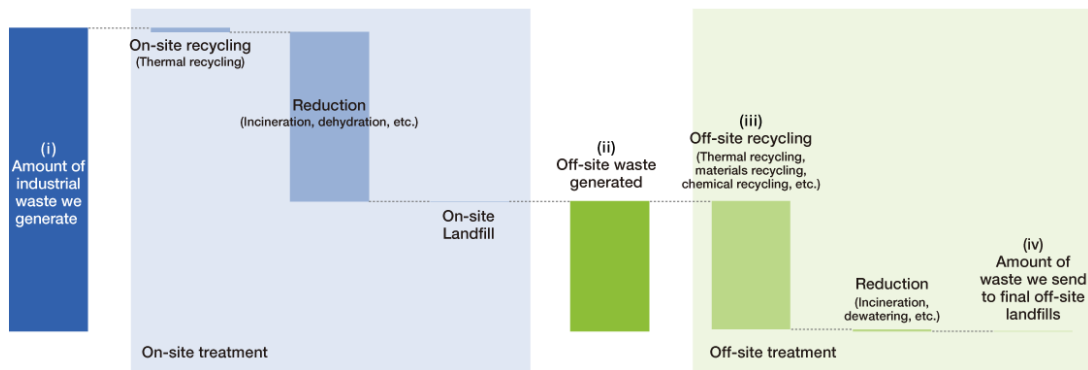
We will continue to promote recycling and to reduce the amount of waste we send to final landfills to contribute to the formation of a recycling-orientated society as it is JSR Group's responsibility to do so as a part of the manufacturing industry. We will do that to respond to movements in society aiming to solve climate change, marine plastic problems and other global issues and aiming for the formation of a recycling-oriented society which includes the EU's policy to transition to a circular economy.

2. Amount of Industrial Waste Treated and Generated by JSR Group

(1) Waste Treatment Scheme

The (i) industrial waste generated by the corporate activities of JSR Group is treated on-site (separated and recycled or weight reduced, etc.). After that, it is treated off-site* as (ii) waste we send off-site.

* (iii) Recycling, weight reduction and (iv) final landfill disposal



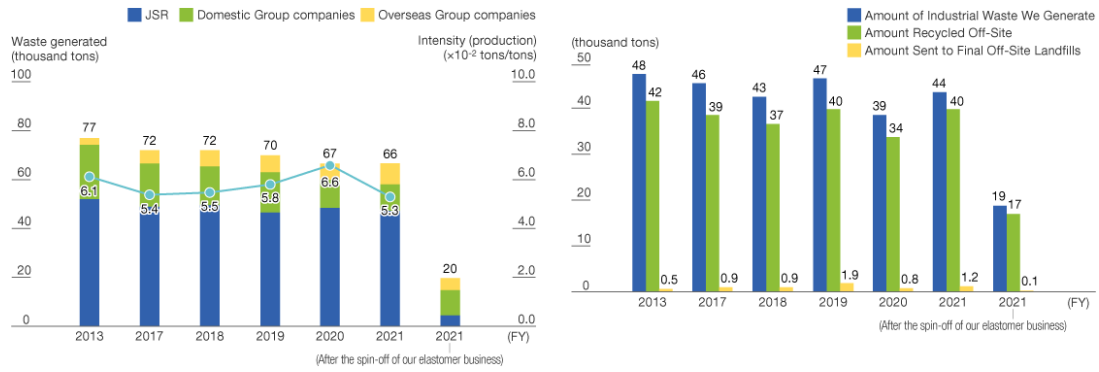
(2) Amount of Industrial Waste We Generate

In FY2021, JSR Group generated 66,000 tons of (i) amount of industrial waste we generate (same level as the previous year) and our recycling rate was 92%. We spun off our elastomer business in April 2022. If we make an estimate based on the post-spin-off boundary, the amount of industrial waste we generated becomes approximately 20,000 tons and our recycling rate becomes 93%.

The amount of industrial waste we generate fluctuates together with our product production volume. Nevertheless, we will continue to strive to reduce the amount of industrial waste we generate. Together with that, we will promote recycling and conduct activities from a long-term perspective.

(i) Amount of Industrial Waste We Generate

(ii) Amount of Waste We Generate Off-site, (iii) Amount of Waste We Recycle Off-site and (iv) Amount of Waste We Send to Final Off-site Landfills



3. Initiatives to Reduce Industrial Waste

(1) JSR

JSR has made the following initiatives with the aim of forming a recycling-oriented society.

Going forward, we will proceed with the initiatives we indicate in "5. Future Initiatives" in response to the spin off our elastomer business in April 2022.

(i) Reduce the Amount of Industrial Waste We Generate

In FY2018, we formulated a long-term target to reduce the amount of industrial waste we generate in FY2030 by 15% compared to the level in FY2013. We are working to reduce the amount of waste we generate and to promote recycling.

In FY2021, we reduced the amount of industrial waste we generated by 8.7% compared to FY2013.

(ii) Reduce the Amount of Waste We Send Off-site (Promote the On-site Recycling of Waste)

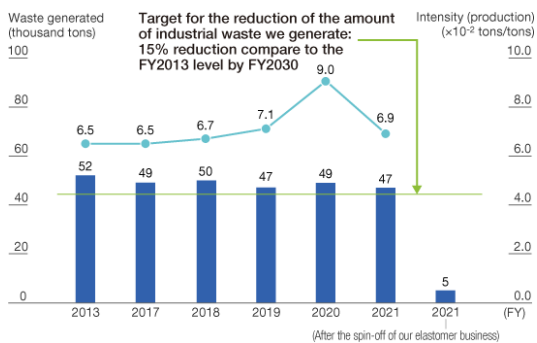
We are sorting and collecting complex wastes after putting a new recycling center into operation at our Yokkaichi Plant in 2018. This is in addition to our promotion of recycling in such ways as converting waste into raw materials for cement.

(iii) Reduce the Amount of Waste We Send to Final Off-site Landfills

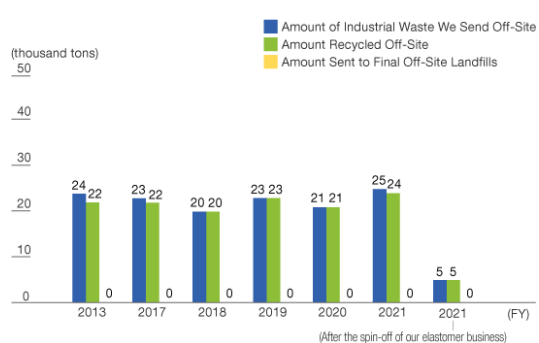
We have been working since 2000 to achieve our target of reducing the amount of waste we send to final off-site landfills to 0.1% or less of the amount of waste we generate. We have continued to strive toward this target since FY2003.

Record of the Initiatives by JSR

Amount of Industrial Waste We Generate and FY2030 Reduction Targets



Industrial Waste We Send Off-site -Amount Recycled Off-Site- Amount Sent to Final Off-Site Landfills



(2) Examples of Initiatives by Group Companies

Group companies are also reducing waste such as by promoting recycling. We have achieved zero emissions at most of our business sites. Those business sites which have not achieved zero emissions are working to achieve that goal. For instance, they are promoting the recycling and reuse of waste previously sent to landfills.

Initiative to Acquire Zero Waste Certification [JSR Micro Inc. (America)]

JSR Micro Inc. is aiming to acquire Total Resource Use and Efficiency (TRUE) zero waste certification in FY2023. The company is making improvements in response to identifications from an audit.

Reuse of Used Equipment [JSR Micro N.V. (Belgium)]

JSR Micro N.V. regularly upgrades its analytical equipment to the latest version to ensure the best possible quality. Since the analytical equipment that is no longer used after the upgrade can often still be used for other applications, in 2021 we decided not to discard it but to donate it to the university for use in the laboratory for students' practical training.

(3) Waste Plastic Recycling Promotion

For the problem of "marine plastic litter," which has become a global environmental issue in recent years, we established "The FY2030 Goals: 1) 100% recycling (including heat recovery), and 2) 60% recycling (not including heat recovery)" as long-term targets in FY2019. We took this step to further accelerate our recycling of waste plastics in response to the Japanese government's Plastic Resource Recycling Strategy.

We will also strive to make a social contribution by, for example, raising awareness of the plastics problem through in-house seminars and explanatory briefings, promoting "3R"-based activities in daily life, and participating in coastal cleanups.

Moreover, we became a participant of the Japan Initiative for Marine Environment (JaIME) as a founding member in FY2018.

The FY2021 waste plastics recycling rate (including heat recovery) was 96% for JSR and 91% for domestic Group companies. We will continue moving forward with approaches.

At the same time, our recycling rate (not including heat recovery) is low as compared to our target values as of the current point in time, and we will advance activities to further raise our recycling rates in order to achieve our targets.

Waste Plastics Recycling by JSR and Domestic Group Companies

	Waste plastics			
	Amount generated (thousand tons)	Amount recycled (thousand tons)	Recycling rate (including heat recovery) (%)	Recycling rate (excluding heat recovery) (%)
JSR	2.0	1.9	96	34
Domestic Group companies	2.5	2.2	91	34

(4) Promotion of "3R" (Reduce, Reuse, Recycle) for Packaging Materials in Logistics

JSR has always been serious about environmental measures in its logistics. Therefore, we promote "3R" (Reduce, Reuse, Recycle) to effectively utilize waste-free packaging materials and packaging containers.

We are working to reduce the weight of outer cardboard boxes (from a two-layer to a one-layer structure) for our efforts to reduce packaging materials.

We are striving to use links for product containers and to reuse intermediate product containers and storage cushioning materials for our efforts to reuse packaging materials.

Moreover, we are promoting the recycling of raw material container valuables and the adoption of raw materials which enable the recovery of resources when selecting packaging materials for our efforts to recycle packaging materials.

JSR will actively engage in the above 3R activities for packing materials to promote recycling and effective use of resources.

* Use of links: Links are returned or collected from customers for reuse.

4. Hazardous Waste Handling

PCB Handling

At JSR, electric facilities using high-concentration PCB (converters, capacitors, etc.) completed detoxification treatment. JSR also manages products using high-concentration PCB (stabilizers, contaminants, etc.) and low-concentration PCB waste in an appropriate manner in accordance with the Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes in Japan. We will also systematically carry out detoxification treatment in accordance with treatment deadlines.

5. Future Initiatives

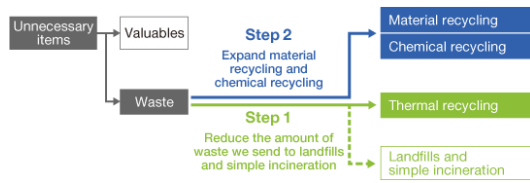
We examined JSR Group's sustainability KPIs in anticipation of the spin-off of our elastomer business in FY2021.

We recognize that the aim of achieving zero waste sent to final off-site landfills is a priority issue. Accordingly, we have set a KPI target to reduce the amount of waste we send to final off-site landfills to 0.1% or less of the amount of waste we generate. With this, we have decided to press ahead with recycling more

than ever before.

Moreover, we are also aiming for higher level recycling than landfills and simple incineration for waste plastic which is attracting attention because of the marine plastic problem (figure below). We will consider setting new KPI targets. At the same time, we will promote initiatives to increase our recycling rate.

Promotion of Material Recycling to Reduce Waste



Biodiversity Conservation



1. JSR Group Biodiversity Policies ▾

2. How JSR's Business Activities Depend on and Impact Biodiversity ▾

3. Progress of Initiatives ▾

1. JSR Group Biodiversity Policies

JSR Group formed biodiversity policies in FY2012 based on conservation issues determined using the JBIB Business & Biodiversity Interrelationship Map. We are currently promoting various initiatives in accordance with these policies.

To contribute to the establishment of a sustainable society, JSR Group strives to identify how our business activities depend on and impact biodiversity, and to promote efforts in consideration of biodiversity.

1. We prioritize biodiversity conservation in procuring naturally-derived raw and processed materials.
2. We work to make the green spaces of our business establishments biodiversity-friendly.
3. We strive to develop biodiversity-friendly products.
4. We emphasize staff engagement and cooperation with local communities.

2. How JSR's Business Activities Depend on and Impact Biodiversity

Utilizing and updating the JBIB^{*1} Business and Biodiversity Interrelationship Map, we have clarified which parts of our business activities depend on biodiversity and how our business activities impact biodiversity. In April 2022, we determined there were no new impacts.

In addition, we investigated new business sites using IBAT^{**2} and determined that as of April 2022 none of these locations are found in Key Biodiversity Areas (KBA).

*1 JBIB: Japan Business Initiative for Biodiversity.

**2 IBAT: [Integrated Biodiversity Assessment Tool](#).

A risk measurement tool provided by the IBAT Alliance, a biodiversity project involving the United Nations Environment Programme (UNEP) and others.

> [JBIB Business and Biodiversity Interrelationship Map](#)

> [Interrelationship map of JSR Group's business activities and biodiversity \(PDF: 466KB\)](#)

3. Progress of Initiatives

Policy 1 - We prioritize biodiversity conservation in procuring naturally derived raw and processed materials (raw materials used).

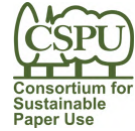
1) Identification of the impacts of naturally-derived raw materials and supplies on biodiversity.

While there were some naturally-derived materials in certain auxiliary materials, we conducted an investigation on traceability and other matters and found no impact at this time^{*3}. We will continue to conduct similar investigations when using new raw materials and supplies that may have an impact.

*3 Surfactants, etc., made from palm oil certified by the RSPO (Roundtable on Sustainable Palm Oil).

2) Sustainable Paper Usage and Promotion of Activities to Promote Increased Usage in Society.

While not a main raw material of products, JSR Group uses paper for copies, publications, envelopes, and packaging material. As such, JSR Group is working toward a society of sustainable paper use and has participated in the Consortium for Sustainable Paper Use, which was established to increase the use of sustainable paper in society, since its establishment in 2013.



As for paper usage within the Group, we established the JSR Group Paper Procurement Guidelines in FY2013 under which we promote initiatives that prioritize the procurement of company envelopes, copy paper, and other materials made primarily from used paper, or paper with FSC or other forest sustainability certifications. We will continue with our efforts toward the use of sustainable forest resources.

Policy 2 - We work to make the green spaces of our business establishments biodiversity-friendly (land use).

At JSR's two plants in Japan and the Tsukuba Research Laboratories, we are working to increase the biodiversity of green spaces at these locations in consideration of the surrounding environment. By FY2014, we completed improvements based on the JBIB Guidelines for Sustainable Business Sites following the results of the greenspace survey and green space improvement plan prepared with the cooperation of experts. Following this, each business site has continued to carry out initiatives independently, including monitoring surveys using the JBIB's prescribed monitoring sheet, nature observations, and removal of invasive species.

Reports on the initiatives of each business site are presented below.

In FY2021, our initiatives were inhibited due to the impacts of the COVID-19 pandemic, but we remain committed to continuing these in the future.

Yokkaichi Plant

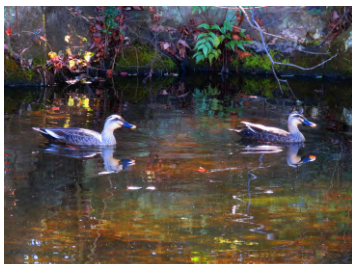
Overview of Activities	FY2021 Activities	Future Activity Plans
<ul style="list-style-type: none"> The Yokkaichi Plant is actively using its green spaces as places for communication and environmental education It holds biodiversity-themed events for employees and their families It maintains and manages biodiversity spaces at the plant site and company housing 	<ul style="list-style-type: none"> Maintenance and management of green spaces at the plant site and company housing Monitoring surveys and nature observations were cancelled due to the COVID-19 pandemic 	<ul style="list-style-type: none"> Maintenance and management of green spaces at the plant site and company housing that have been improved as biodiversity-friendly green spaces (ongoing) Holding of a nature tour for employees' families led by the curator of a local museum (Once or twice a year) (ongoing)

Chiba Plant (currently, JSR Arton Manufacturing Co., Ltd.)

Overview of Activities	FY2021 Activities	Future Activity Plans
<ul style="list-style-type: none"> The Chiba Plant has developed the "Ikoi no Hiroba" (Relaxation Garden) that is part of its green spaces into a biodiversity-friendly and uses it as a place for talking about biodiversity 	<ul style="list-style-type: none"> Weeding, cleaning, and other maintenance and management of green spaces on the plant site Nature observations were canceled due to COVID-19 	<ul style="list-style-type: none"> Development of green spaces in priority areas and promotion of their use (ongoing)

Tsukuba Research Laboratories

Overview of Activities	FY2021 Activities	Future Activity Plans
<ul style="list-style-type: none"> The facility establishes a biodiversity promotion area and practices wildlife-friendly green-space management 	<ul style="list-style-type: none"> In principle, prohibition of the chemical substances (herbicides) within the area (ongoing activity) Creation of soil with fallen leaves and branches (consideration for material circulation) (ongoing activity) Regular monitoring and removal of invasive species Monitoring surveys and nature observations were canceled due to COVID-19 	<ul style="list-style-type: none"> Initiatives up until now will be continued



The presence of spot-billed ducks has been confirmed for nine consecutive years (Tsukuba Research Laboratories)

Policy 3 - We strive to develop biodiversity-friendly products (product use and disposal).

- We strive to develop environmentally-friendly products according to our in-house standards.

Policy 4 - We promote initiatives that emphasize staff engagement and cooperation with local communities.

- We hold various events at our business sites as part of our business activities, but these events were canceled in FY2021 due to the COVID-19 pandemic.

Initiatives to Prevent Pollution



- 1. Protection of Atmospheric, Water, and Soil Environments
- 2. Measures Targeting PRTR Substances
- 3. Asbestos Measures
- 4. Improving the Local Environment
- 5. Investments in Environmental and Safety Equipment

1. Protection of Atmospheric, Water, and Soil Environments

JSR endeavors to protect the environment by complying with laws such as the Air Pollution Control Act in Japan, Water Pollution Prevention Act in Japan, and Soil Contamination Countermeasures Act in Japan and thereby avoid polluting the air, water or soil (including groundwater).

(1) Protection of the Atmospheric Environment

1) Initiatives to reduce emissions of sulfur oxides (SOx) and nitrogen oxides (NOx)

JSR keeps our SOx and NOx emissions below regulatory values by implementing various measures, including those described below.

- Installation of flue gas desulfurization equipment (Yokkaichi Plant: in-house power generation)
- Fuel conversion (from heavy oil to public utility gas) (FY2013, South Kashima Power Plant, Inc.)
- Introduction of denitrification equipment and low-NOx burners

Through full management of the abovementioned measures, we will continue to maintain our current levels.

> SOx and NOx emissions → JSR Group ESG Data (PDF: 344KB)

2) Initiatives for the Reduction of VOCs^{*1} Emissions into the Atmosphere

JSR has set a voluntary target even higher than that of the government and industry groups to reduce VOC emissions by 75% compared to the FY2000 level. Under that aim, we are making large-scale capital investments and taking other actions to reduce emissions.

- Installation of regenerative thermal oxidizer (synthetic rubber finishing system flue gas treatment) (FY2006-2009; 5 devices at 3 plants)
- Operational improvements (e.g., enhancing airtightness of release points, using a closed system for chemical sampling)
- Preventing leaks (valves, axle seals, etc.)

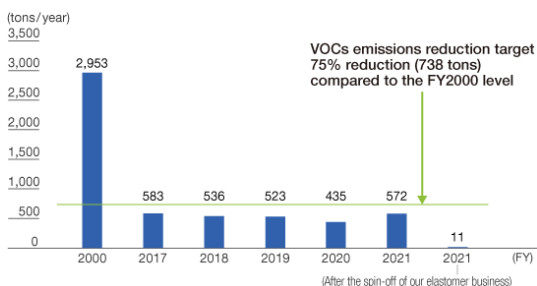
As a result, our VOCs emissions in FY2021 were 572 tons (81% reduction as compared to FY2000), and thus we continue to meet our voluntary target.

We spun off our Elastomers Business in April 2022. If we make an estimate based on the post-spin-off boundary, our VOC emissions become 11 tons.

We will maintain our current level of emissions through various emission reduction measures and management activities.

*1 VOCs: Volatile Organic Compounds.

VOCs emissions



3) Preventing freon leaks

JSR works to control freon leaks when using Class-1 Specified Equipment, including industrial air conditioners, refrigerators, and freezers, based on the Act on Rational Use and Proper Management of Fluorocarbons in Japan.

To properly promote efforts, we have prepared management standards that expand the scope of management to include all devices that use freon (including those that are not designated products) and are continuing to manage leaks based on them.

Our freon leaks in FY2021 amounted to 462 t-CO₂ after CO₂ conversion (reporting to the government is mandatory for leaks of 1,000 t-CO₂ or more).

In addition, we are introducing a system, including at Group companies, to collectively and electronically manage documents in response to a revision to the Act on Rational Use and Proper Management of Fluorocarbons (requiring, among other things, the storage of more documents) on April 1, 2020.

We will continue to appropriately manage leaks and link our efforts to control leaks.

(2) Protection of Water Environments

JSR complies with total emission controls in terms of water quality for COD, nitrogen and phosphorous in wastewater. We have strived to maintain and improve water quality through rigorous wastewater management at all of our plants.

Nitrogen regulations were tightened in Mie Prefecture where our Yokkaichi Plant is located in the 8th Total Pollutant Load Control. Nonetheless, we have continued to satisfy the standards in the regulations by continuing initiatives to improve water quality.

We will continue to strictly monitor water quality. At the same time, we will work to reduce the burden caused by the wastewater discharged from our plants into enclosed coastal seas.

> Environmental Load (COD emissions, total nitrogen emissions, total phosphorus emissions) → JSR Group ESG Data (PDF: 344KB) 

(3) Protection of Soil Environments

JSR regularly conducts fixed-point studies of soil and groundwater (observation wells) at each of its plants. As in previous years, no problems in the soil environment at our plants were found in FY2021.

Additionally, whenever we plan construction that involves changing the soil's form and nature over an area exceeding 900 m², we voluntarily conduct a soil survey beforehand.

In FY2021, fluorine concentration exceeding the standard values established by ordinance were detected in a voluntary survey conducted in our Yokkaichi Plant. In response to that, we notified the authorities of our discovery of the contamination. We then took appropriate measures in accordance with the laws and ordinances.

2. Measures Targeting PRTR^{*2} Substances

Based on the Act on the Assessment of Releases of Specified Chemical Substances in the Environment and the Promotion of Management Improvement (Chemicals Management Act) in Japan, JSR aggregates the amount of designated chemical substances emitted into the environment (atmosphere, water and soil), transferred by manufacturing, or used in the previous year, and notifies the government of Japan of the results.


Together with this, we have systematically implemented a range of measures primarily for substances that are highly hazardous or are emitted in significant amounts and that have a great impact on the environment. Such measures include enhancing the airtightness of substance release sources, rendering substances harmless by incineration, and improving manufacturing processes.

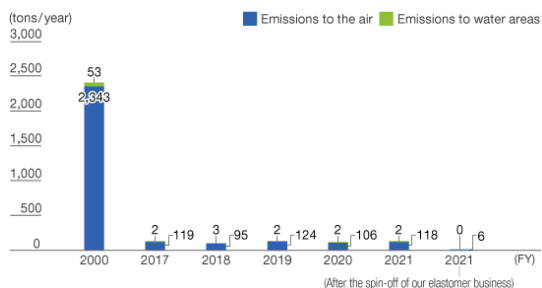
As a result of these efforts, our atmospheric emissions of designated chemical substances in FY2021 were 118 tons. That means we achieved a 95% reduction compared to FY2000.

JSR spun off our Elastomers Business in April 2022. If we make an estimate based on the post-spin-off boundary, our atmospheric emissions become 6 tons.

We will continue to maintain atmospheric emissions at the current level through full implement of the above-mentioned measures in the future. At the same time, we will proceed with advance preparations to respond to future legal revisions (reexamination of the substances subject to notification).

*2 PRTR: Pollutant Release and Transfer Registers. This is one of the systems stipulated by the Chemicals Management Act.

> Emissions of main chemical substances → JSR Group ESG Data (PDF: 344KB) 



3. Asbestos Measures

JSR conducted a survey of locations sprayed with materials containing asbestos in all of its facilities, including Group companies. For those places that were identified as a result, we undertook removal and enclosure work in accordance with the Ordinance on Prevention of Health Impairment due to Asbestos. This work was completed in FY2006.

In addition, whenever we demolish structures, we take appropriate measures based on the Air Pollution Control Act in Japan and Ordinance on Prevention of Health Impairment due to Asbestos to ensure that no workers or others nearby suffer health problems due to exposure to asbestos. We will also take steps to respond to scheduled revisions of the Air Pollution Control Act in Japan.

4. Improving the Local Environment

JSR values the opinions of people living near its manufacturing and research bases, and considers high transparency of plant operations to be the key to improving the local environment. With this in mind, we strive to improve the local environment based on the opinions we receive through monitoring and tours of environmental equipment at regular intervals.

In FY2006 and FY2007, we installed equipment to incinerate dry synthetic rubber dry exhaust (RTO^{*3}) at the Yokkaichi, Kashima, and Chiba plants to prevent foul odors. In FY2008, a ground flare was installed at the Yokkaichi Plant to prevent noise and flashes. Additionally, we are working to further diminish odors with continuous improvement activities by sealing off sources of foul odors and spraying a special deodorant that we developed with a deodorant manufacturer.

We will continue striving to maintain our basic policy of improving the local environment.

*3 RTO (Regenerative Thermal Oxidizer): A device that combusts and breaks down VOCs into water and CO₂ to make emissions clear



Dried-synthetic rubber waste incinerator (Kashima Plant)



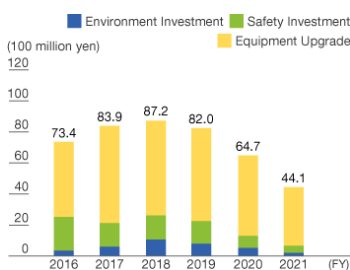
Ground flare (Yokkaichi Plant)

Number of Environmental Complaints (JSR and Domestic Group Companies)

FY		2017	2018	2019	2020	2021
No. of environmental complaints	Odor	0	0	0	0	0
	Noise	0	0	0	0	0
	Vibration	0	0	0	0	0
	Other	0	0	0	0	0

5. Investments in Environmental and Safety Equipment

JSR is making investments to maintain and improve the environment, safety and health on an ongoing basis in accordance with our medium-term capital investment plan. In FY2021, our investments totaled 4.4 billion yen combining investments in safety equipment (e.g., for prevention of workplace accidents and replacement of aging equipment) and in environmental facilities. We will continue these efforts in the future.



Environmental Accounting



1. Policy, Scope, and Underlying Assumptions

2. Environmental Protection Costs

3. Economical Effects of Environmental Protection Measures -Substantial Effect-

4. Consolidated Accounting

1. Policy, Scope, and Underlying Assumptions

(1) Policy

JSR introduced environmental accounting in FY1999 with the following two objectives.

1. To strive to quantify the amount of resources invested into the environment and implement sound measures for the environment.
2. To publish environmental accounting and increase corporate transparency.

(2) Scope

JSR Corporation - JSR Head Office, Yokkaichi Plant, Chiba Plant, Kashima Plant, Tsukuba Research Laboratories, and JSR BiRD (as of March 31, 2022).

(3) Target Period

April 1, 2021 - March 31, 2022

(4) Underlying Assumptions regarding Aggregation and Calculation

1. Calculations are performed in accordance with the Environmental Accounting Guidelines, 2005 edition (Ministry of the Environment of Japan) and environmental guidelines used in the chemical industry (issued by the Japan Chemical Industry Association and the Japan Responsible Care Council).
2. While the calculation of costs was based mainly on actual results, the calculation of some expenses was based on underlying assumptions.
3. Economic effects were substantial and did not include conversions of risk aversion effects or deemed effects into monetary amounts.

2. Environmental Protection Costs

(Unit: million yen)

Classification	Content of main activities	Investment		Expense	
		FY2020	FY2021	FY2020	FY2021
(1) Business area costs		483	157	4,109	4,351
Breakdown	(1)-1 Pollution prevention costs	308	57	1,799	1,864
	(1)-2 Global environmental protection costs	21	46	803	742
	(1)-3 Resource circulation costs	155	54	1,506	1,745

Classification	Content of main activities	Investment		Expense	
		FY2020	FY2021	FY2020	FY2021
	Expenses: Industrial waste recycling, disposal, etc.				
(2) Upstream/downstream costs		0	0	0	0
(3) Management activity costs	Expenses: Environmental load monitoring, maintenance and operation of green space, etc.	4	1	499	496
(4) Research and development costs	Expenses: Development of environmentally friendly products, tests for legal applications, etc.	0	0	1,481	1,551
(5) Social activity costs	Expenses: Donations to environmental protection organizations, support for ICETT, etc.	0	0	45	40
(6) Environmental pollution response costs		0	0	0	1
	Total	487	158	6,134	6,439

3. Economical Effects of Environmental Protection Measures -Substantial Effect-

(Unit: million yen)

Effect (for one year)		Benefit	
		FY2020	FY2021
Cost reduction	By saving energy	103	53
	By saving resources	39	0
	By treating waste on-site	1,289	770
Total		1,431	823

4. Consolidated Accounting

(Unit: million yen)

	Investments		Expense		Benefit	
	FY2020	FY2021	FY2020	FY2021	FY2020	FY2021
JSR	487	158	6,134	6,439	1,431	823
Domestic Group companies total	125	176	2,113	1,865	180	185
Total*	612	334	8,247	8,304	1,611	1,008

* Total of JSR Corporation and 10 Group companies as of March 31, 2022

Chemical Management

1. Philosophy and Advancement Structure ▾

4. Response to Overseas Regulations Concerning Exported Chemicals, etc. ▾

2. Voluntary Approaches to Systematically Reduce Toxic Chemicals ▾

5. Chemical Management within Supply Chain Management ▾

3. Compliance with Laws / Regulations and Standards ▾

6. Industrial and International Measures ▾

1. Philosophy and Advancement Structure

Under its sustainability promotion structure, JSR Group's Environment, Safety and Quality Committee formulates items that should be promoted in relation to chemical management and concrete actions plans based on those and then promotes those efforts.

(1) Chemical Management Basic Policies

In light of recent global trends in chemical management, JSR has established the following three policies in its environment and safety management organization by which chemical management is implemented.

1. Instead of hazard-based management^{*1}, we will endeavor to implement risk-based management^{*2}.
2. We will strive to manage our entire supply chain by utilizing a globally standardized method.
3. We will strive to comply with regulations and promote self-motivated initiatives to ensure the safety of our products.

^{*1} Hazard-based management: Management based solely on the hazardous properties of substances

^{*2} Risk-based management: Management based on exposure to the hazardous properties of substances

(2) Chemical Management Advancement Structure

In Japan, JSR's Corporate Div. deals with matters relating to legal compliance and exported goods. Overseas, we have established a structure to promote chemical management with local subsidiaries playing a central role. Under this structure, we quickly identify and respond in a planned manner to changes in the environment and trends in the relevant laws/regulations in Japan and overseas.

In 2019, we established a dedicated chemical products management division within the Elastomers Business Segment, in which there is particularly significant global customer expansion, to support the rapid tightening of regulations abroad and new legislations in various countries. In the Corporate Div. as well, we launched an overseas legal management organization to broadly collect legal information from overseas, such as from industry organizations, and promptly share information with all of JSR, including Group companies and local subsidiaries.

Going forward, we will continue to flexibly review our structures based on the expansion of our Group's business and trends in Japan and overseas.

Please refer to the two pages below for the details of our structures.

- > Responsible Care
- > RC Advancement Structure

2. Voluntary Approaches to Systematically Reduce Toxic Chemicals

JSR systematically implements approaches to reduce and eliminate toxic chemicals starting in the product design stage. The chemicals subject to management are those listed in laws and regulations of various countries and customers' management standards as well as general chemicals not included in those lists. For all of these chemicals, specialists implement reviews during each step – from raw materials procurement to design, development, trial manufacture, customer evaluation, and commercialization. In this way, we are striving to minimize the risks that JSR products have on people's health and the environment.

(1) Response to Regulations of Various Countries and Customers' Standards

Substances of which the manufacture and use are prohibited or restricted in the laws of major countries are investigated in detail starting with the raw materials selection stage, and their use, byproducts and mixing in products is strictly managed. The lists of substances covered are as shown below. Among

these, 1) to 6) are those for which use in JSR materials/products is prohibited. Those in 7) to 15) are those for which risks are evaluated by intended use when reviews are conducted in the development stage, and for which the possibility of use and necessity of review of alternative substances are confirmed.

In recent years, regulatory laws on chemicals have been legislated/amended in various countries across the world. As such, JSR confirms the regulated substances in applicable countries and checks their usage restrictions in a framework for reviewing commercialization in response to the expansion of countries to which our products are exported.

List of major chemical substance regulations subject to survey

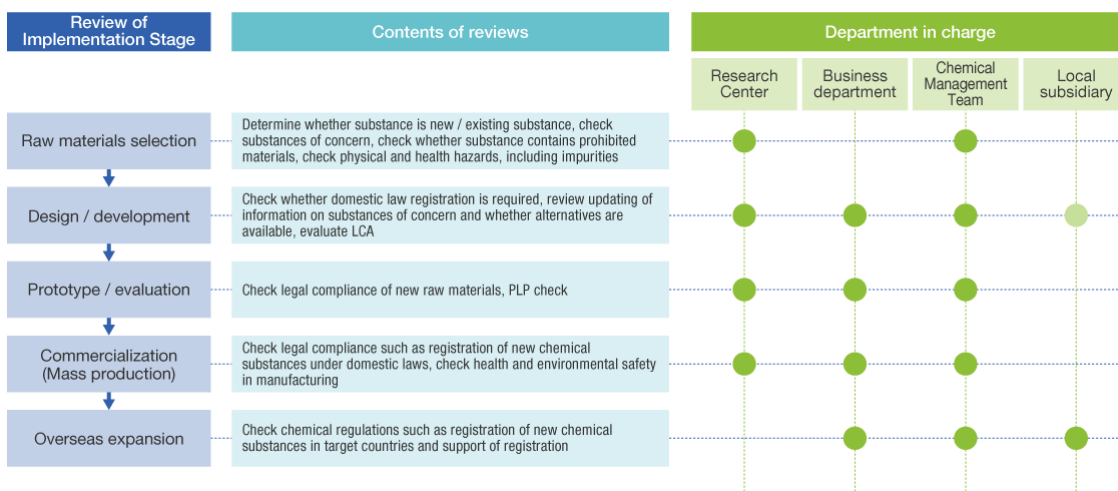
- 1) (Japan) Act on the Regulation of Manufacture and Evaluation of Chemical Substances Class I Specified Chemical Substances
- 2) (Japan) Article 55 of Industrial Safety and Health Act and Article 16 of Enforcement Order of the Industrial Safety and Health Act (Harmful Substances, etc., Prohibited for Manufacturing, etc.)
- 3) (Japan) Article 2 of Act on Special Measures against Dioxins
- 4) (Japan) "Specified Poisonous Substances" as specified in the Poisonous and Deleterious Substances Control Act and Cabinet Order for the Designation of the Poisonous and Deleterious Substances
- 5) (UN) Annexes A, B, and C of Stockholm Convention on POPs
- 6) (US) Toxic Substances Control Act (TSCA) Prohibited or Restricted Substances in Section 6
- 7) (Japan) Act on the Regulation of Manufacture and Evaluation of Chemical Substances Class II Specified Chemical Substances and Monitoring Chemical Substances
- 8) (EU) ELV Directive
- 9) (EU) RoHS Directive Annex II
- 10) (EU) POPs Regulation Annex I
- 11) (EU) REACH Regulation Candidate List of SVHC for Authorization and Annex XIV (Authorization List)
- 12) (EU) REACH Regulation Annex XVII (Restricted Substances)
- 13) (EU) Medical Devices Regulation (MDR) Annex I 10.4 Chemical Substances
- 14) Global Automotive Declarable Substance List (GADSL)
- 15) IEC 62474 DB Declarable substance groups and declarable substances

(2) Approaches to Reducing and Eliminating Toxic Substances and Substances of Concern Across All Chemicals

Even for chemical substances not regulated by law, JSR implements verifications of toxicity during reviews in the raw materials selection stage, design and prototype stage, regardless of whether it is an existing chemical substance or new chemical substance. In cases where it is judged as being necessary, JSR also takes measures such as limiting use. In recent years in particular, JSR has been implementing investigations and analyses of substance information, safety information and country registration information for impurities found in existing chemical substances in the raw materials selection stage. This is part of an effort to strengthen checks to make sure that raw materials containing toxic substances and substances of concern are not used erroneously.

For substances where there are concerns regarding continuity of future use due to the chemical structure of the substance or trends in risk evaluations of each country, our Chemical Products Management Dept. regularly gathers information and makes the business departments and R&D Dept. aware that such substances are toxic substances and substances of concern for which substitution and elimination should be examined starting in the design stage. We examine their elimination in reviews leading up to commercialization. (See diagram below)

Scheme for Confirming/Removing Toxic Substances and Substances of Concern Applied to All Chemical Substances Starting in the Design Stage



Note: This diagram features only contents of support related to chemical products. In each review, however, quality, specifications, manufacturing techniques, etc. are also checked simultaneously.

"Chemical Management Team" under "Department in charge" represents the Chemical management Team in the Environment Dept. and the Chemical Management Team in Technology Management Dept., Elastomer Products.

3. Compliance with Laws / Regulations and Standards

(1) Response to Chemical Product-related Domestic Laws and Regulations

In 2017, the Law concerning Pollutant Release and Transfer Register in Japan^{*3} was amended, and the revised portion of this Act which is concerned with the confirmation system used for low volume new chemical substances came into effect in 2019. JSR has been responding without problem since the revision to the act. This includes dealing with requirements such as for usage certificates for each substance as newly needed due to this revision. Moreover, we have been preparing for the expansion in substances subject to risk management arising from the enforcement of the Revised Chemical Substances Control Act^{*4} in 2023 and the enforcement of the Revised Industrial Safety and Health Act in 2024. To that end, we have been proceeding with system modification for the revisions to SDS^{*5} and advance confirmation to ascertain the amount of release and transfer. Of this, we have already started to list substances subject to being added to the Revised Chemical Substances Control Act in consideration of downstream companies. We will continue to respond in a planned manner.

*3 Act on the Regulation of Manufacture and Evaluation of Chemical Substances in Japan

*4 Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof in Japan

*5 Safety Data Sheet: Documentation listing the names, respective hazards and toxicities, etc., of substances contained in chemical products in order to ensure their safe handling

(2) GHS Compliance and Provision of SDS for All Products

1) Provision of SDS for All Products

JSR has voluntarily adopted a policy of providing customers with environmental and safety information by preparing SDS not only for products subject to legal obligations and products containing hazardous substances, but for all products which contain polymers. All SDS prepared by JSR are in compliance with JIS Z 7253, the Industrial Safety and Health Act in Japan, the Law concerning Pollutant Release and Transfer Register in Japan, and the Poisonous and Deleterious Substances Control Act in Japan.

Furthermore, in order to provide customers with SDS that contain the most accurate information possible, we were early adopters of an SDS electronic data management system, which we have operated since its creation in 2002. This system includes user management, chemical substance database management, creation support, and publication (revision) history, and it allows us to accurately and quickly provide environmental and safety information related to JSR products.

2) GHS Compliance

GHS^{*6} is an international standard for (a) classification of chemical products according to hazard and toxicity; (b) labeling on product packaging and containers; and (c) documentation and provision of details in the SDS.

In Japan, the Industrial Safety and Health Act and the Law concerning Pollutant Release and Transfer Register stipulate mandatory application of GHS on the labels and SDS of products containing GHS-designated chemical substances, with GHS classification stipulated with JIS Z 7252 and SDS and other communicated information stipulated with JIS Z 7253. At JSR, we perform GHS-based hazard and toxicity classification and create appropriate labels, as well as provide SDS, for all of our domestic products that contain applicable substances. We will also promote the gradual switch to the GHS in line with the laws being enacted in each country for when we export products we have manufactured in Japan.

*6 Globally Harmonized System of Classification and Labeling of Chemicals

(3) Education on Chemical Substance Regulations

JSR provides in-house training on chemical substance regulations in Japan and abroad every year. In FY2021, we decided to cancel training in consideration of changes in the business structure of our business sites such as the need to respond to the spread of COVID-19. We have resumed training in FY2022. Moreover, we launched an in-house portal site for chemicals in FY2021. With that, we have established an environment where it is possible to refer to the latest information on laws/regulations and training materials up to the previous fiscal year when needed from the Intranet environment.

4. Response to Overseas Regulations Concerning Exported Chemicals, etc.

Countries around the world strengthened their chemical products laws and regulations in advance of 2020 as this was the target year for the WSSD 2020 Goal^{*7}. This global trend to strengthen regulations will continue beyond 2021.

Following the EU's enactment of the REACH Regulation in 2007, JSR has confirmed regulatory trends such as substance registration each time they have been strengthened in countries. We respond to these without omission based on the business areas and structure of local subsidiaries. We describe our response to laws and ordinances in the major manufacturing and importing countries of JSR below. In addition to these, we appropriately comply with chemical products laws and ordinances in many other countries including ASEAN nations.

*7 WSSD 2020 Goal (long-term goal for chemical substances management that was adopted by the 2002 World Summit on Sustainable Development): International goal aiming to minimize significant adverse effects on human health and the environment by 2020

(1) EU (REACH Regulation compliance)

The REACH⁸ Regulation is an EU law relating to the registration, evaluation, authorization and restriction of chemical products. It was enacted in June 2007. Under REACH, all chemical products whose total production or import volume within the EU is one ton or more must register safety testing results and other data for the chemical substances contained in them, regardless of whether they are new or existing substances, every year.

In order to ensure there is no disruption to our manufacture and import of products in Europe or import, we regularly check whether or not the substances JSR utilizes require registration. In addition, we have also prepared for risks with respect to usage restrictions which may arise from future substance evaluations. Accordingly, we are sharing information with development departments and taking other steps to anticipate risk once evaluations commence.

We completed the necessary measures by the deadline for the UK which officially withdrew from the EU at the end of 2020. This includes the designation of REACH agents in the UK and responses to the exercise of registered vested rights.

⁸ Registration, Evaluation, Authorization and Restriction of Chemicals

(2) United States

In the United States, new chemical substance reporting is overseen by the Environmental Protection Agency under the Toxic Substances Control Act (TSCA) and other related federal laws and regulations. JSR follows all the required legal procedures with regard to the manufacture and importation within the United States of substances not included on the list of existing chemical substances. Moreover, we work in conjunction with our local subsidiaries to flexibly respond to the new legal requirements in relation to the amended TSCA enforced in 2016. In addition, we ascertain regulatory trends accompanying the start of risk assessment and respond to them.

(3) China

Since the enactment of the Measures for Environmental Management of New Chemical Substances to govern the reporting of new chemical substances in China, JSR follows the required legal procedures if exporting to China a substance not included in the "Inventory of Existing Chemical Substances in China." The amended Measures for Environmental Management of New Chemical Substances went into effect from January 2021. We are working to ensure we will not make any omissions in registering new chemical substances based on this amended law in the future.

(4) Korea

In Korea, reporting of new chemical substances is governed by the Act on Registration and Evaluation of Chemical Substances (REACH)⁹ and the Occupational Safety and Health Act (OSHA)¹⁰. JSR follows the procedures based on these laws in advance when manufacturing and importing within Korea substances not included on the list of existing chemical substances.

In addition, the Korean REACH Act underwent major revisions in 2019, and, as a result, it is now required that existing chemical substances produced or imported within Korea in quantities of one ton or more must be registered every year. JSR has already completed this pre-reporting in the preliminary stage through coordination between our business departments and local subsidiaries. This registration started in stages from the first deadline at the end of 2021. We will systematically register substances according to the amount of them we manufacture and import.

⁹ Act on Registration and Evaluation of Chemical Substances

¹⁰ Occupational Safety and Health Act

(5) Taiwan

In Taiwan, a registration system for new chemical substances was introduced based on the Toxic Chemical Substances Control Act¹¹ enacted in 2014. JSR follows the required legal procedures established in line with this system. In addition to this, as part of efforts to update its existing chemical substances list, Taiwan has instituted "Existing Chemical Substance Nomination," with the first designated target substances registration taking place in 2019. The registration deadline has been extended to the end of 2024 due to the impact of the COVID-19 pandemic. Despite that, JSR has been complying with the registration system in a structure according to each business with our Taiwan subsidiary playing a central role in this.

¹¹ (old) "Toxic Chemical Substances Control Act." Amended in January 2019 to expand the scope of controlled chemical substances; the name was also changed to "Toxic and Concerned Chemical Substances Control Act" in order to reflect this expansion.

5. Chemical Management within Supply Chain Management

JSR incorporates processes for chemical management in CSR procurement, green procurement, green purchasing and other areas of the implementation flow as part of our supply chain management. In particular, from the standpoint of toxic chemicals management, we have introduced chemSHERPA as part of our green procurement, as it is the industry standard format for communicating toxic substances information, and this has helped ensure that we are able to smoothly and reliably relay information to suppliers and in-house handling departments, as well as to customers. Please refer to the following links for more information.

- > [CSR / Sustainable Procurement](#)
- > [Green Procurement, Green Purchasing](#)

6. Industrial and International Measures

JSR is a member of the Japan Chemical Industry Association (JCIA). In addition to participating in the association's working groups, we contribute by providing a part of research funding to the activities of the Long-range Research Initiative (LRI)^{*12} which is being promoted by the association as voluntary effort of the chemical industry.

*12 LRI (Long-range Research Initiative):

This is a long-term, international initiative supporting research into chemical substances that have an impact on the environment, and human health. It was begun as a voluntary global research grant initiative of the International Council of Chemical Associations (ICCA), and it is currently being advanced through the cooperative efforts of the chemical industries associations of Japan, the United States, and the EU. In Japan, the Japan Chemical Industry Association (JCIA) is pursuing research into the following five topics.

- (1) Development and evaluation of the new risk assessment method/development of methods for simple exposure evaluation and alternatives to using laboratory animals
- (2) Study on the safety of new chemical substances including nano materials
- (3) Study on the effects of chemical substances on children, the elderly, and gene disorders
- (4) Evaluation of the impact on ecosystems and the environment
- (5) Other issues that require an emergency response

Occupational Safety, Security and Accident Prevention

Message from the President ▾	1. Safety Philosophy, Management System and Advancement Structure ▾	2. Targets and Planning ▾	3. Activity Record ▾
4. Legal Compliance Management ▾	5. Training ▾	6. Internal and External Communication ▾	

Message from the President



As a chemicals company, what is undeniably most important is safe and stable operations at our plants. Without this, we would not continue to be in existence.

Safety is the basis for business continuity, and is an investment for our company to grow. Safety is adopted as an important topic in management, and providing safety to local communities and developing our company into one where JSR Group employees and everyone working at our contractors are happy to work and maintain the status at are my responsibilities.

JSR completed the transfer of its elastomers business in April 2022. Today, we are working to achieve our business targets for FY2024 and establish a resilient management foundation. Safety is a particularly crucial element of these efforts. We must build a system that can withstand new environments and that is compatible with future business reforms.

To ensure that JSR continues to become a sustainable company trusted by society, top management is working with JSR Group employees toward developing a safety infrastructure and fostering safety culture so that we can further improve security and build human resources who are well-versed in safety.

Stay safe.

President and COO
Nobuo Kawahashi

1. Safety Philosophy, Management System and Advancement Structure

(1) Policy

JSR strives to prevent occupational accidents and facility-related accidents and promotes occupational safety, security and accident prevention measures to ensure safe and secure workplaces as well as the mental and physical health of its employees.

Philosophy for Safety

At JSR Corporation, safety is our highest priority and the foundation of all of our activities. Accordingly, we will create safe worksites and strive to maintain physical and mental health, with the goal of ensuring workers happily take it for granted that they will return home safely at the end of each workday.



Safety Policy

(1) Extremely Safe Behavior

The Philosophy for Occupational Health and Safety has penetrated through the organization, the Course of Action are established as applying to everyone, and safety competency is improving through independent safety activities.

(2) Enhanced Human Resources and Organizational Strength

High personal skills, organizational ability, and a healthy organizational culture are being maintained with the establishment and execution of the education and training programs needed for organizational management.



(3) Optimal Risk Management and Security Measures

Security measures corresponding to risk importance are being efficiently and effectively implemented using new technologies.

Courses of Action of Safety

1. No matter the situation, we will act with safety foremost in mind.
2. We will comply with established rules and never fail to act in accordance with safety basics.
3. We will maintain safety by identifying and eliminating both actual and potential hazards.
4. We will strive to create comfortable work environments and promote physical and mental health.
5. Through communication and ingenuity, we will aim to achieve 100% employee participation in all safety activities.



We post our philosophy and other pertinent information on our company intranet where it is easily accessible by employees to raise awareness on a daily basis. In addition, we utilize e-learning to conduct regular training for employees that increases the visibility of these policies and instills awareness. We support the safety activities of Group companies following this philosophy.

(2) Safety Management System

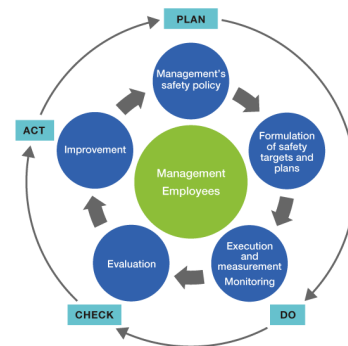
JSR has developed and operates a "Safety Management System" based on the situation of each business site. This system establishes regulations and procedures concerning security, accident prevention and occupational safety, all of which are based upon JSR's security management regulations.

To verify the effectiveness of this management system, we conduct Headquarters Environment and Safety Audits headed up by the CEO along with internal safety audits, safety patrols and management reviews regularly conducted every year by each business sites in an effort to achieve continuous improvement.

Furthermore, we have compiled manuals that contain appropriate and effective response measures that help to prevent damages from spreading in the event of an accident.

For the prevention of recurrences, all accidents are investigated to determine the cause so that proper countermeasures can be put into place and their effectiveness determined. In turn, we share this information within the Group to stop accidents before they occur.

Conceptual Image of JSR's Safety Management System

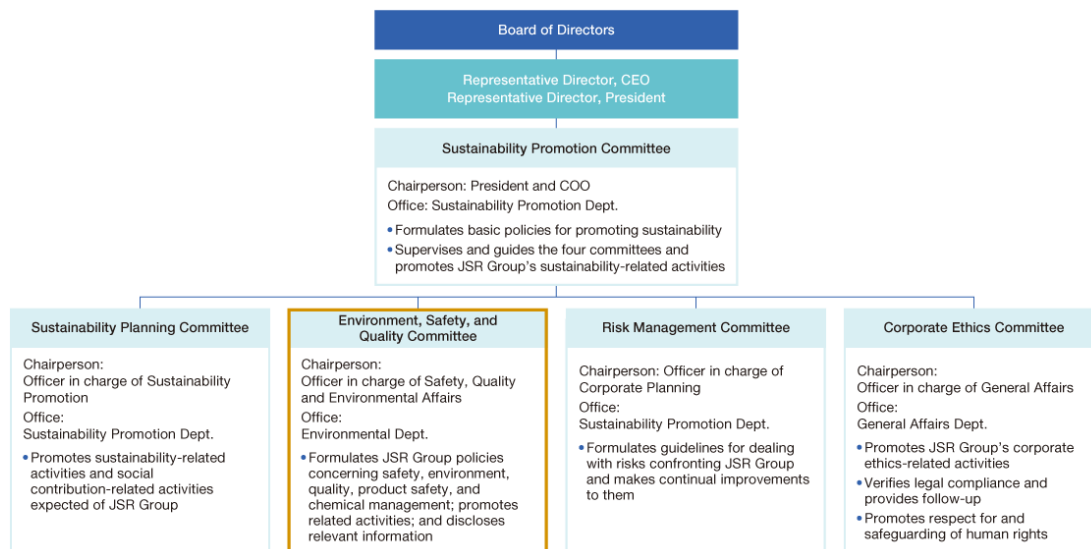


(3) Advancement Structure

JSR recognizes that safety is a cornerstone of business continuity and with this in mind we are implementing occupational safety, security and accident prevention efforts collectively as an organization.

JSR has put into place a powerful advancement structure headed up by the Environmental Safety and Quality Committee chaired by the officer in charge of environmental and safety affairs. Activity policies and action plans related to occupational safety, security and accident prevention are deliberated on and determined by this committee, based on the results of internal environmental and safety audits and management reviews.

JSR's Occupational Safety, Security and Accident Prevention Activities and Advancement Structure



2. Targets and Planning

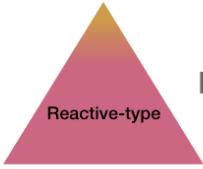
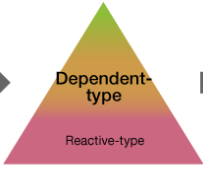
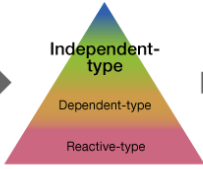
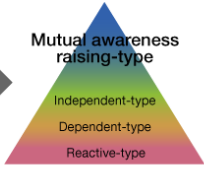
(1) Medium-Term Plan for Occupational Safety, Security and Accident Prevention

JSR aims to ensure safety in the workplace by conducting initiatives from the dual perspectives of fostering a safety culture (people and culture) and developing a safety infrastructure (facilities, organizations, and mechanisms) to improve security capabilities.

We formulated the JSR Occupational Safety, Security and Accident Prevention Roadmap as a medium-term plan in an effort to clarify the condition that each organization should strive for in terms of safety culture and safety infrastructure. The roadmap also covers the safety activities of each business site. The plan to become an Independent-type Organization by 2022 is somewhat delayed because the results of an employee survey indicate that we are still a Dependent-type Organization at present.

Going forward, JSR's operating environment is expected to undergo substantial changes following the carving out of the elastomer business. Under our new corporate structure, we will steadily implement risk assessments and countermeasures in an effort to attain our targets.

JSR Roadmap for Occupational Health, Security and Accident Prevention

FY	2014-2016	2017-2019	2020-2022	2023-2025
Organizational Structure				
Organization Name	Reactive-type Organization	Dependent-type Organization	Independent-type Organization	Mutual Awareness Raising-type Organization
Organizational State	Personnel perform safety activities according to instinct and without adherence to safety norms	Personnel perform safety activities exactly as stated in the rules/directions given by their supervisor	Personnel understand the guidelines and rules, and safety norms allow for independent decision-making and action when appropriate	Personnel understand the guidelines and rules, and safety norms allow for independent decision-making and action when appropriate, as well as providing each other mutual support and guidance
Top line: Safety Culture Bottom line: Safety infrastructure	Guidelines and rules are developed, and safety measures are implemented in reaction to past accidents	Guidelines and rules are known by personnel, and revised accident prevention safety measures have stated being put into action	Guidelines and rules are known by personnel, and accident prevention safety measures are well understood and entrenched	Guidelines and rules are known by personnel, and safety activities are carried out throughout the organization

(2) Fiscal Year Targets and Plan

Under the JSR Occupational Safety, Security and Accident Prevention Roadmap, we have established targets and focal points of action plans for each fiscal year in light of the results of internal safety audits and management reviews conducted in the previous year. As a result, we are using a selection-and-concentration approach to implementing more efficient occupational safety, security and accident prevention efforts.

For FY2021, JSR has established the following targets and focal points.

FY2021 Targets and Focal Points of Occupational Safety, Security and Accident Prevention

	Occupational safety	Security and accident prevention
Targets	Zero occupational accidents ^{*1}	Zero facility-related accidents ^{*2}
Focal points	<ul style="list-style-type: none"> Activities to raise awareness of safety Reduction of occupational accidents at Group companies and contractors 	<ul style="list-style-type: none"> Advance and raise bar of risk management Increase security level Conduct RBPS^{*3}-based safety audits Maintain certifications under applicable laws

*1 Occupational accidents involving lost time

*2 Facility-related accidents corresponding to abnormal phenomena per the Act on the Prevention of Disaster in Petroleum Industrial Complexes and Other Petroleum Facilities

*3 RBPS stands for risk-based performance standards. A system for practical safety management of chemical plants issued by the Center for Chemical Process Safety (CCPS) of the United States in 2007.

3. Activity Record

Occupational Safety

FY2021 Occupational Safety Target: Zero Occupational Accidents (Lost Time)

As a member of Japan Petrochemical Industry Association and Japan Chemical Industry Association, JSR reports the number of occupational accidents to each organization.

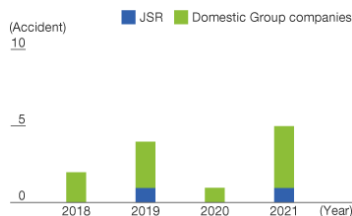
In FY2021, there was one occupational injury involving lost work time at JSR and four at Group companies, for a total of five Groupwide, which fell short of our target. Looking back on the previous three years, the number of lost time accidents at JSR and its Group companies in Japan have been on the rise. Although

not shown here, figures including no lost time accidents are also on the rise.

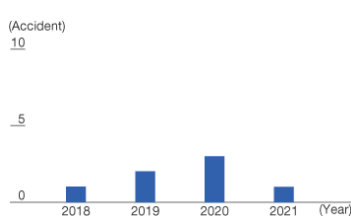
As a measure to eliminate occupational accidents, in response to the fatal accident involving an employee of a contractor that occurred in FY2020, we investigated the status of construction safety management at JSR and JSR Group companies and initiated improvements. Although we have not yet confirmed the effects, we will continue to strengthen our construction management system and promote the assurance of safety in construction works. For details of the activities, please refer to "(2) Reduction of Occupational Accidents at Group Companies and contractors."

Going forward, to ensure that all employees of JSR, JSR Group and its contractors understand and comply with safety standards, we will convey accurate safety information, review confirmation forms, and strengthen construction management. We will also deepen collaboration across JSR Group in an effort to reduce occupational accidents.

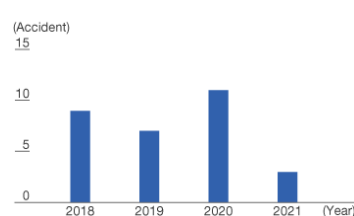
Number of Occupational Accidents (Lost Time) at JSR Group in Japan



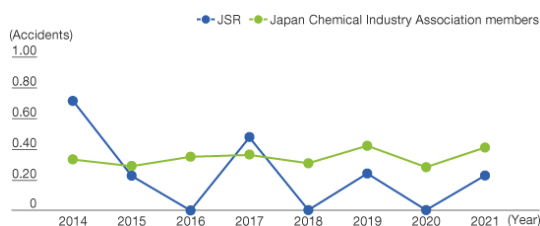
Number of Occupational Accidents (Lost Time) at JSR Group Contractors in Japan



Number of Occupational Accidents at JSR Group Overseas



Frequency Rate of JSR in Japan



(1) Activities to Raise Safety Awareness

JSR strives to improve safety awareness and eliminate unsafe actions by fostering a safety culture with its training on occupational safety, including experience-based learning, security and accident prevention, risk assessment, and e-learning.

For activity records in FY2021, please refer to "5. Training."

(2) Reducing Occupational Accidents at Group Companies and Contractors

— Group Companies

JSR assesses the construction management system at its Group companies to prevent construction work related accidents. Through the assessment, we are providing feedback for improvement of risk identification and sharing of information. The assessment was performed at ELASTOMIX CO., LTD., JAPAN COLORING CO., LTD., and Emulsion Technology, Co., Ltd. in FY2021.

The change in business environment resulting from the split of our elastomer business is expected to also have an impact on our Group companies. Going forward, we will promote safety activities across the entire Group to further ensure safety.

— Contractors

JSR has established the Comprehensive Disaster Prevention Committee (CDPC) with its contractors that perform various work and construction at each business site in order to improve communication. We strive to ensure the safety of all employees working at JSR by collaborating with other companies to promote occupational safety activities.

Safety Activities Conducted by CDPC (highlights)

Name	Details
Safety training for member companies	Training on occupational accidents through case studies, experience-based training and risk prediction is provided to safety instructors of member companies to improve their knowledge, skills and sensitivities towards safety.
Special patrol for regular maintenance	Members of the Comprehensive Disaster Prevention Committee conduct patrols during regular maintenance periods to identify and eliminate unsafe elements that may emerge or materialize from a third-party perspective.

Security and Accident Prevention

FY2021 Security and Accident Prevention Target: Zero Facility Accidents (abnormal phenomena per the Act on the Prevention of Disaster in Petroleum Industrial Complexes and Other Petroleum Facilities)

JSR reports to administrative authorities on the number of facility accidents in accordance with the Act on the Prevention of Disaster in Petroleum Industrial Complexes and Other Petroleum Facilities.

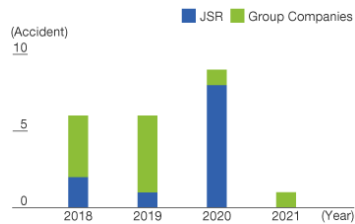
In FY2021, there was only one facility accident (abnormal phenomena stipulated in the Act on the Prevention of Disaster in Petroleum Industrial Complexes and Other Petroleum Facilities) reported at a Group company, and none at JSR. Comparing the records from the past three years, this number of accidents has decreased. We believe our ongoing measures against age-related facility corrosion has yielded positive results.

As these measures have proven to be effective to some extent in enhancing facilities management, we are considering continuing them while also bringing other Group companies onboard going forward.

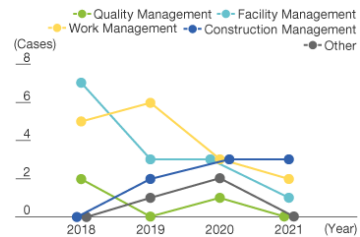
Upon analyzing minor issues that did not become accidents, we discovered that they were mainly attributed to work management such as poor construction, while there is an increasing rate of occurrence across the entire Group in recent years.

To address this, we plan to ensure thorough construction work management by expanding our support to contractors that conduct the work onsite to prevent future accidents.

Overall Facility Accidents at JSR (abnormal phenomena stipulated in the Act on the Prevention of Disaster in Petroleum Industrial Complexes and Other Petroleum Facilities)



Number of issues by cause (minor issues included)



(1) Risk Management Implementation and Advancement

At JSR, we strive to conduct more effective risk assessment, which is considered the most important part of risk management.

In FY2021, we verified that risk assessment was systematically conducted at all business sites. In addition, we provided implementation training on HAZOP¹, which aims to optimize risk assessment for process safety, with the additional approaches of LOPA² and ALARP³, and launched its operations.

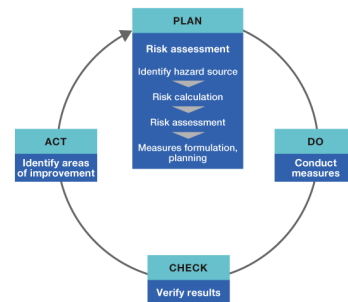
Following the transfer of the elastomer business, the breakdown of business risks is also expected to shift. As such, we will continue to choose and utilize the assessment protocols appropriate for the risks in conducting risk management.

¹ HAZOP: An acronym for "Hazard and Operability Study." It is a method of safety assessment used to identify the sources of hazards in processes and operations.

² LOPA: An acronym for "Layers of Protection Analysis". It is a semi-quantitative method of evaluating the frequency of occurrence (probability of occurrence).

³ ALARP: An acronym for "As Low As Reasonably Practicable". It is a principle that states risks should be minimized as much as possible so long as the cost is justified with consideration for the efforts and costs necessary to reduce risks.

Image of Risk Management



(2) Improve Security Level

— Introduction of New Technology for Security and Accident Prevention Activities

In response to the Ministry of Economy, Trade and Industry (METI)'s promotion of safe use of drones in the plant security sector, JSR is considering the use of drones in its security and accident prevention activities with reference to the guidelines published by METI on the safe operation of drones outside of petrochemical plants.

In 2021, we conducted verification tests on the feasibility of using drones for aerial photography and conducting inspections on manufacturing facilities and tanks. We began reviewing an autopilot system to improve the efficiency of patrolling inside the Yokkaichi Plant.



Test flight of a drone

The review of drone operations has been taken over by ENEOS Materials Corporation since April 2022 following the transfer of the elastomer business.

(3) RBPS-based Safety Audits

An auditing team led by the President regularly conducts annual Headquarters Environment and Safety Audits in plants and laboratories. From FY2015 onward, we have switched to an auditing style which incorporates sharing and discussion of the audited departments' issues. On top of this, we have established opportunities for dialogue between top management and employees where both sides can share their thoughts with one another to rejuvenate environmental and safety activities.

In FY2021, audits were conducted on all JSR business sites (Yokkaichi, Chiba, and Kashima plants, and Tsukuba Research Laboratories) as with previous years. In light of the COVID-19 pandemic, audits were once again conducted online while on-site inspections were cancelled. The conditions at each business site were confirmed during the audit following the RBPS (risk-based process safety) approach on priority points. The number of feedback and requests categorized by each priority point are as follows.

Number of feedback and requests categorized by each priority point

Business site	Priority point			
	Risk awareness	Construction management	Risk management	PDCA
Yokkaichi	1	3	5	0
Chiba	0	1	4	0
Kashima	0	3	6	1
Tsukuba	0	0	2	0
Total	1	7	17	1

Most of the feedback, requests for improvement and comments received during the audits pertained to "risk management" at all business sites. We believe this is due to our revision of the risk assessment procedures. As mentioned above in (1) Risk management implementation and advancement, we expect the breakdown of risks relevant to our business will further shift due to the transfer of the elastomer business. We will pay close attention to communicating with each business site and Group company, as well as continue to emphasize "risk management" in future safety audits in considering our response to changes.



Dialogue with President Kawahashi (Headquarters/Tsukuba office)



Audit in progress (left: Chiba Plant; right: Kashima Plant)

(4) Maintaining Certification Under Each Law

JSR Chiba Plant renewed its high-pressure gas certification in FY2021.

Following the transfer of the elastomer business, certification on the following will be succeeded and changed: <High Pressure Gas Safety Act> Accredited (Completion, Safety) Inspection Executor, <Fire Service Act> hazardous materials facility construction modification-related business site certification, and <Industrial Safety and Health Act> Class-1 pressure vessel operational inspection target sites for certification of boiler shut down inspection cycle. JSR Yokkaichi Plant has taken over the certification for <Fire Service Act> hazardous materials facility construction modification-related business site certification.

(Certification renewal in April 2022)

Other Activities

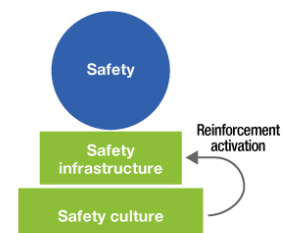
(1) Safety Culture Self-assessment

At JSR, we believe that effective safety is contingent upon an effective safety culture (system that fosters a culture which prioritizes safety) and safety infrastructure (system to ensure safety). In other words, we recognize that it is not only necessary to have safety infrastructure, but it is also essential to ensure a safety culture is being promoted.

As a metric for regular monitoring of the maturation of safety culture, we have created and implemented the use of self-assessment questionnaires. These questionnaires are distributed during each period of the medium-term management plan. As we have identified differences in scores concerning safety from the previous questionnaire (discrepancies between business sites, between managers and staff, and individual awareness), we are striving to penetrate safety related values through training.

On the other hand, along with the transfer of the elastomer business, major shifts are happening in areas such as our workforce composition. To properly address this issue, we plan to conduct interviews at each business site and Group company to identify the changes following the transfer and develop corresponding measures as appropriate.

Illustration of our safety policy



- Safety: It is being supported by instability, safety infrastructure, and safety culture, which cannot be ensured if any element is missing.
- Safety culture: It supports safety infrastructure, which also provides augmentation and activation.

(2) Development of Safety Infrastructure

JSR has established regulations and procedures concerning security, accident prevention and occupational safety based upon our Security Management Regulations, which are organized in a manual to ensure thorough compliance with requirements stipulated in legal regulations. We have confirmed that these manuals continue to be adequate even after the transfer of the elastomer business.

In the meantime, we are reviewing the Risk Management Manual, which is used to protect stakeholders and minimize risks in the event of an emergency situation such as severe accident, disaster or scandal related to our business activity, as it is determined that a revision is necessary.

We prioritize the sharing of contents with business sites that are targets of the revision and verify its effectiveness through training. Training was conducted at a number of business sites in March 2022, through which we have confirmed there was no major deficiency following the revision of the manual. We will continue to conduct effectiveness studies to ensure the manual is functioning effectively.

(3) Preparations for Severe Natural Disasters

In preparation for large earthquakes, JSR has implemented aseismic construction with a focus on high-pressure gas facilities in its plants, based on the results of seismic performance assessments. At present, an earthquake early-warning system has been installed at all JSR business sites.

JSR is also reviewing its disaster prevention measures according to the needs of each business site due to the increased instances of severe and localized natural disasters that also cause catastrophic damages other than earthquake (flooding, high winds, typhoons, and tsunami).

In addition, we have established a system that enables us to promptly obtain updates on the situation of JSR Group in areas affected by severe natural disasters by determining the definition and communication routes for each.

We confirmed that there were no human injuries or damage to facilities at business sites located near the epicenters of the earthquake that hit the Kanto region on October 7, 2021 (maximum seismic intensity of 5 upper) as well as the earthquake off the coast of Fukushima Prefecture on March 16, 2022 (maximum seismic intensity of 6 upper).

(4) Investment in Safety

JSR continuously invests in safety, including countermeasures against occupational accidents and aging facilities. For details about our investments in safety equipment, please refer to "5. Investments in Environmental and Safety Equipment" under Initiatives to Prevent Pollution in the Environmental section.

4. Legal Compliance Management

(1) Legal Compliance Structure

JSR has established supervising departments and business execution departments for each law and regulation, and has identified laws, regulations, and ordinances applicable to occupational safety, security and accident prevention, as well as standards established at plants. To comply with legal revisions, we utilize the Law Revision Monitoring Service to prevent compliance related mistakes or omissions, and actively obtain information on national government circulars and revisions from organizations we belong to and local governments. The information we obtain is disseminated to employees in accordance with information sharing procedures.

(2) Legal Compliance Status

In FY2021, we have confirmed that there were no violations of laws on occupational safety, security and accident prevention at JSR.

5. Training

(1) Occupational Safety, Security and Accident Prevention Training

JSR conducts on-the-job training (OJT) at each workplace and offers experience-based, practical skills training in miniature plant setting at its company-owned and operated training centers. This training helps to instill knowledge, skills and sensitivity to security management. Training on work processes includes an experience-based component provided in a virtual space using virtual reality (VR). Through experiencing fear that is difficult to replicate in real life for safety reasons, employees are able to increase their safety awareness and make efforts to eliminate unsafe actions.

In addition to mandatory training under occupational health and safety laws, we provide training on occupational safety, security and accident prevention in rank-based training for each job type in stages. We hold regular meetings to discuss this training and continuously review the curriculum and approaches based not only on the views of top management, but also feedback from the frontline of operations and results of surveys given to participants and instructors after training.

In FY2021, we held training on common skills required for manufacturing plants 22 times with a total of 512 participants, including 454 from JSR and 58 from Group companies, covering a total of 7,494 training hours. In addition, we held training in a miniature plant setting at our training centers five times with a total of 49 participants, spanning a total of 135 training hours.



VR simulation training in action



Example of VR screen image

(2) Risk Assessment Training

We conduct risk assessment training to increase the accuracy of our risk assessments. Through risk scenario training, we have put into a place a system for developing HAZOP leaders and continuously implementing improvement activities.

In FY2021, we held training on how to prepare process hazard scenarios two times, with 19 participants (17 from JSR and two from Group companies), spanning a total of 285 training hours.

(3) Fostering Safety Culture Using e-Learning

In FY2021, we held e-learning for all JSR employee focused on our safety philosophy and basic policy on safety in order to foster a culture of safety. At 98.4%, the participation rate fell short of 100% because some employees were unable to participate due to system constraints. Nevertheless, the survey revealed that all employees who participated understood the curriculum.

Looking ahead, we plan to roll out this training globally at our Group companies outside of Japan to penetrate our safety philosophy and policy further.

6. Internal and External Communication

(1) Internal Communication (Entire JSR Group)

Safety Ceremony and Safety and Health Activity Forum

JSR believes that safety is linked to the daily lives of all stakeholders and is also the bedrock of the company's management. With this in mind, we have made it a goal to achieve zero facility-related accidents and zero lost time accidents. However, a serious workplace accident which claimed the life of an on-duty employee occurred at the Yokkaichi Plant on July 23, 2014. In addition, there was a fatal accident involving an employee of a contractor working at the same location on May 14, 2020. With a pledge to aim for zero accidents and keep the lessons learned from these serious workplace accidents alive, and with a promise to continue developing a strong safety culture into the future to protect precious lives, we erected a safety monument in front of the Yokkaichi Plant's main building and also hold a safety ceremony as well as a forum for presenting case examples of safety activities by business sites each year around the same time as these accidents.

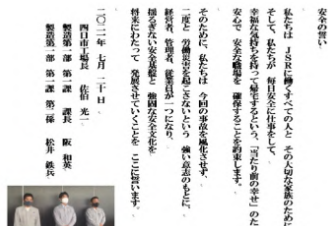
In FY2021, we held the Safety Ceremony and the Safety and Health Activity Forum on July 20 live on the company's intranet due to the COVID-19 pandemic. During the Safety Ceremony, a live video message from Executive Officer Takahashi was shared from the head office and a safety oath was made by two members of management including the head of the Yokkaichi Plant directly from the Yokkaichi Plant. At the Safety and Health Activity Forum, each business site made a presentation on good practices chosen based on a rigorous screening process from among the safety activities nominated by JSR and Group companies inside and outside of Japan. President Kawahashi also provided his comments from the head office.

This live format made the event accessible to employees of JSR and JSR Group who otherwise could not have attended, leading to many participants as compared to a typical year. As a result, we were able to directly convey our commitment to safety to a large number of employees.

The live stream was recorded and made available for later viewing on our company intranet by employee who could not participate on the day of the event.

In the future, the Safety Ceremony will be held by ENEOS Materials Corporation following the transfer of the elastomer business in 2022. JSR is considering establishing a new Safety Day in order to continue this same commitment.

Safety Ceremony and Safety and Health Activity Forum website



Message from Executive Officer

Takahashi



Comments by President

Kawahashi



* Pictured from left: Yokkaichi Plant General Manager Saeki, Manufacturing Dept. 1, Section 1 Manager Han, and Matsui of Section 2

Safety and Health Activity Forum Presentation Themes

Presenting Group	Theme
JSR Yokkaichi Plant Production Dept.	Safety activities using Unit Base and TEAMS
JSR Yokkaichi Plant Research Center	Establishment of smart inspection system using IoT sensors
JSR Yokkaichi Plant Environmental and Security Dept.	Workstyle innovation activities for security and accident prevention operations
Kraton JSR Elastomers K.K. Manufacturing Section	Issues and countermeasures for fostering a stronger safety culture

(2) External Communication (Communities and Society)

JSR is a member of the Japan Chemical Industry Association, Japan Petrochemical Industry Association, the Japan Society for Safety Engineering, and Japan Industrial Safety Competency Center. Through the following safety activities and our Responsible Care program, we communicate with communities, society and peers, sharing information both in Japan and abroad.

- Hosting of or participation in accident prevention training drills of firefighting authorities and joint training with other nearby companies
- Participation in joint accident prevention organizations with nearby companies
- Participation in disaster prevention councils in the community
- Participation in local dialogue on Responsible Care
- Response to CSR surveys from other companies/organizations

Our business sites in Japan and overseas also actively communicate with their local communities to increase awareness of safety, improve safety technologies and reciprocally prevent accidents.

Logistics



1. Policy ▾

2. Safety Initiatives ▾

3. Accidents and other Incidents in JSR Corporation (FY2021) ▾

4. "White Logistics"-Related Initiatives ▾

1. Policy

Each year, JSR executes activities to manage risks and ensure safety after formulating a health and safety promotion plan at each plant based on the Philosophy and Course of Action for Occupational Health and Safety.

We formulate these plans based on actual results and issues from the previous fiscal year from the standpoint of the PDCA cycle and then implement activities with the aim of eliminating logistics and workplace accidents.

> Philosophy and Course of Action for Occupational Health and Safety, which includes items pertaining to logistics safety.

2. Safety Initiatives

(1) Identification and Improvement of Risks

We strive to improve the safety of our logistics sites by identifying potential sources of logistics/workplace accidents for both people and infrastructure—such as hazardous operations and locations within worksites—and making improvements. One way we do this is through regular patrols by managers.

(2) Cultivating and Spreading Safety Awareness

We provide hazard prediction training (KYT) to raise awareness of potential risks without carelessness or overconfidence, even in routine and familiar tasks, and improve sensitivity to hazard prediction. We also broadly solicit safety slogans from logistics partners to cultivate and instill safety awareness in each worker.

(3) Enhancing Education and Training

We provide preventive education based on a horizontal approach to logistics accidents and workplace accidents that incorporates examples from other companies. We also conduct various drills jointly with our logistics partners that simulate crises, such as large-scale disasters and logistics accidents, to improve our ability to respond to crises and raise safety awareness. Whenever points requiring improvement arise after training, we enhance the quality of our education and training by revising crisis management manuals, incorporating improvements into subsequent training, and the like.

(4) Maintaining Transport Safety and Environmental Standards

JSR outsources the distribution of its products to outside logistics contractors. To maintain environmental and safety standards during transport, we have drivers carry a "Yellow Card" imprinted with special measures and telephone numbers in case of emergency. This is in addition to having logistics contractors train their drivers on specific safety issues.



Example of a Yellow Card

(5) Reinforcing Health and Safety Collaboration with Logistics Contractors

We share logistical challenges concerning quality, safety, and the environment and manage the progress of improvement activities by holding quarterly meetings with logistics contractors through our logistics subsidiaries. We also verify, assess, and guide health and safety activities by conducting annual audits of our logistics contractors.

3. Accidents and other Incidents in JSR Corporation (FY2021)

- Logistics-related workplace accidents: 0
- Traffic accidents resulting in injury to others: 0
- Traffic accidents resulting in injury to JSR employee: 0

4. “White Logistics”-Related Initiatives

JSR endorses the “White Logistics” Movement being advocated by the Ministry of Land, Infrastructure, Transport and Tourism (MLIT); the Ministry of Economy, Trade and Industry (METI); and the Ministry of Agriculture, Forestry and Fisheries (MAFF) of Japan. We submitted a voluntary action declaration for the movement and are currently engaged in the following activities.

The movement seeks to improve productivity and logistics efficiency in truck transportation and create work environments in which female and elderly drivers can work comfortably. In doing so, its goals are to address ever-worsening truck driver shortages, to bring stability to the logistics services needed in daily life and industrial activity, and to contribute to economic growth.

One focus of our efforts under the movement is the diversification of transportation methods to bring about a modal shift toward ships and railroads. We have achieved a high modal shift rate exceeding 80%—reaching 85% in FY2021—and are thus helping reduce CO₂ emissions through more efficient logistics. The modal shift rate is expected to decline substantially following the transfer of the elastomer business, which had accounted for 90% of transportation volume, in April 2022, but we aim to work with business partners and logistics providers to reduce the burden on drivers and raise logistics efficiencies. We are also taking earnest steps to maintain fair and equitable business relationships with logistics operators while building a supply chain that does a better job of taking the environment and society into account.

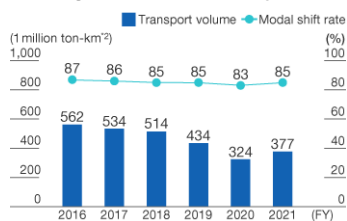
[> Click here to learn more about the White Logistics Movement](#)

* Written in Japanese

Initiatives undertaken by JSR Corporation

Item	Description
Proposing and cooperating in logistics improvements	Whenever our business partners or logistics operators present proposals to reduce the burden on drivers and workers or streamline logistics, for example, we discuss those proposals with sincerity and proactively offer our own ideas.
Use of pallets, etc.	We aim to reduce drivers' workload and shorten cargo-handling time by using pallets for transportation.
Separation of non-driving tasks	Whenever we are approached by a transportation company about non-transportation tasks performed by drivers, we engage in earnest discussions with the company to resolve the issue. We also proactively reach out to transportation companies and strive to grasp what is happening at the ground level.
Modal shift to ships and railroads	We aim to reduce environmental impacts by conducting a modal shift from truck to ship and railroad transportation.
Use of written transport contracts	We promote the use of transport contracts prepared in documentary form.
Safety measures during cargo handling	When handling cargo, we put safety first by implementing such measures as clearly indicating safe work procedures and installing scaffolding. We also strive to eliminate workplace accidents and achieve a safe work environment by identifying the sources of danger and hazardous operations and constantly conducting educational activities using Kiken Yochi Training (KYT).
Reducing long-distance transportation	We shorten the transport distance per trip and alleviate the workload on drivers in long-distance truck transportation by using ships and railroads and setting up stock points.

Achieving a modal shift in JSR Corporation ^{*1}



*1: Transport volumes and modal shift rates for products and raw materials transported and delivered from JSR Corporation's own warehouses and contracted outside warehouses to specified destinations in Japan

*2: Ton-km: [Cargo weight (tons)] x [transport distance (kilometers)]

See ESG Data for CO₂ emissions associated with logistics.

[> ESG Data \(PDF : 344KB\)](#)

Product Safety



1. Philosophy and Advancement Structure ▾

2. Product Liability Prevention (PLP) ▾

3. Chemical Safety of Products ▾

1. Philosophy and Advancement Structure

JSR Group's management policies state as part of our responsibility to society that we will reduce our environmental impact through the entire product lifecycle and continually give consideration to safety and the environment.

JSR Group advances measures pertaining to product safety under its Responsible Care Policy. The Group's Environment, Safety and Quality Committee takes the lead in formulating items for promoting product safety as well as concrete action plans.

> "Responsible Care" 2. RC Advancement Structure

2. Product Liability Prevention (PLP)

JSR strives to offer quality products and services that both meet customer requirements and ensure user safety based on this product safety policy: "Verify safety at all stages, from raw materials to finished products, protecting the health and property of all individuals involved."

(1) PLP Guiding Principles

Maintaining respect for humanity, JSR does business with based on the following PLP Guiding Principles

- Social mission:
The company's social mission is to pursue safety in the products it supplies and to ensure the safety and health of those who use them.
- Customer trust:
Activities that unfailingly execute PLP and continually supply safe products lead to customer trust.
- Prevention:
The essential point of PLP is to take all possible preventative measures to ensure that product accidents do not occur.
- Company-wide activity:
PLP activities are executed through collaboration among concerned departments and with the combined strength of JSR.

Established: April 1, 1994

(2) PLP Activities

JSR has enacted Product Liability Prevention (PLP) Standards to support its product safety efforts. We are taking steps to prevent PL incidents by establishing regulations for each part of the supply chain; namely, design and development, manufacture, sales, and distribution.

We have expanded our business categories to include the life sciences business, in addition to the digital solutions business (which includes semiconductor materials and display materials). Thus, at the design stage, we conduct PL risk reviews as a materials manufacturer that meets the demands of a diverse range of customers in different industries and with different needs. PLP activities represent the very basis for understanding customer requirements and standards as well as increasing the reliability of our products.

Examples of PLP Activities

— Utilization of PLP Check Sheet

In addition to design reviews, we utilize the PLP Check Sheet to prevent PL accidents. Using the PLP Check Sheet, we have built a system that checks the safety of products that will be newly brought to market from multiple aspects from the design stage and commercializes them after obtaining approval from department heads.

— PLP Training

We regularly provide training on PLP at each business site, including the Product Liability Act, our PLP system, and the prevention of PL incidents, to improve

employees' knowledge and awareness of PLP.

3. Chemical Safety of Products

JSR Group's management policies state as part of our responsibility to society that we will reduce our environmental impact through the entire product lifecycle and continually give consideration to safety and the environment.

> [Chemical Management](#)

Quality Management


[1. Philosophy](#)
[2. Advancement Structure](#)
[3. Quality Assurance](#)
[4. Looking Ahead](#)

JSR Group is committed to building a quality management system and continuously improving quality with the aim of providing customers with products of reliable quality and services that they can use with peace of mind.

1. Philosophy

JSR Group's Management Policies state "Always strive to increase customer satisfaction" as its policy on quality. We believe that an important role of JSR is to supply innovative materials and excellent products that meet customer needs and contribute to a better society. Going forward, we will strengthen our global quality assurance structure from the standpoints of expanding business globally and into broader fields, diversifying the supply chain as a result, and addressing more sophisticated customer needs.

2. Advancement Structure

JSR Group's activity policy and activity plan on quality are deliberated on and formulated by the Environment, Safety and Quality Committee, chaired by the officer responsible of Safety, Quality and Environmental Affairs. The committee also oversees related activities and their results. For details about the Environment, Safety and Quality Committee, please see below.

> For details about responsible care at JSR, see "2. RC Advancement Structure."

3. Quality Assurance

(1) ISO 9001 Certification

JSR Group supplies customers with chemicals and other diverse products and services. To continuously deliver reliable quality in all of our products and services, we give full attention to quality management each day. We also strive to further improve quality under a management framework that is based on manufacturing and quality management standards (ISO 9001^{*1}).

We have acquired ISO 9001 certification at all of our main plants and business sites (including relevant divisions and indirectly involved departments). Each certified business site undergoes management reviews by the plant manager or senior management. During these reviews, efforts are made to address any quality complaints from customers as well as identify the root cause of minor quality issues and implement countermeasures. In this manner, the PDCA cycle is used to prevent quality complaints and issues. Additionally, countermeasures are rolled out to other departments as well.

— Main Themes Addressed in Management Reviews

- Reporting of quality complaints and issues
- Preventive measures for quality complaints and issues
- Quality improvement activities

^{*1} ISO 9001: An international standard for quality management systems that was issued by the International Organization for Standardization (ISO)

— ISO 9001 Certification (As of June 2022)

> ESG Data (PDF : 344KB) 

(2) Quality Guidelines

JSR shares its basic approach to quality management in terms of design and development, purchasing, production and sales with the entire Group and strives to ensure consistency in the application of this approach by all employees. Toward this end, we established and enforce the Quality Guidelines, which serve as a guideline for quality control at the JSR Group.

— Main Areas of Quality Guidelines

- Design review for commercialization
- Design review for planning^{*2}
- Manufacturing and process management
- Response to quality defects

*2 Design review: A system for related parties to verify whether a mass produced product satisfies the customer's requirements or not.

(3) Quality Level

JSR Group examines how to satisfy customers' quality requirements using quality control methods matched to product characteristics in each of departments of R&D, manufacture, and quality assurance. This process helps to verify the level of quality at the time of mass production.

— Examples of Quality Control Methods

- Quality control at the time of product manufacturing using QFD (Quality Function Deployment^{*3})
- Identification of risks in advance at the time of starting new product manufacturing or process changes using FMEA (Failure Mode and Effect Analysis^{*4})

*3 Quality Function Deployment (QFD):

A design approach aimed at making quality assurance possible by bringing the design quality of a supplied product to the manufacturing process.

*4 Failure Mode and Effect Analysis (FMEA):

A Method for assigning priority to countermeasures after estimating risks in case an abnormality were to occur in design, process development and/or manufacturing.

(4) Quality Improvement

JSR Group incorporates the "Six Sigma methods"^{*5} that reduces product defect rates based on statistical data analyses, to its traditional quality control methods. This approach has yielded substantial results in quality improvement. Moreover, use of the Six Sigma methods also transforms employees' approaches into data-driven thinking^{*6}.

*5 The Six Sigma methods:

A quality improvement method that was developed by Motorola of the United States in the 1980s. It seeks to suppress quality deficiencies and improve quality by controlling variability with focus on the processes by which variability occurs.

*6 Data-driven thinking: an approach to thinking and taking action based on data

(5) Quality Audits and Quality Activities Forum

As part of the manufacturing industry, JSR Group must supply products that satisfy customer requirements in terms of quality, cost and supply, among other factors. We conduct quality audits and hold the Quality Activities Forum to constantly improve customer satisfaction.

Quality audits check quality control activities within the quality management system and quality control mechanisms using the PDCA cycle^{*7}. The Quality Activities Forum involves an annual review of quality performance led by top management.

— Main Matters Reported at the Quality Activities Forum

- Report on results of customer satisfaction survey
- Presentations and commendations on quality improvement activities

*7 PDCA cycle: a method of improving business operations by repeating the four steps of Plan, Do, Check and Act.

(6) Quality Education

JSR Group is also working to enhance employee training. In FY2007, we opened a training center at our Yokkaichi Plant as part of this effort. We are expanding our training programs and providing training on quality control and PLP for specific employee classes (i.e., employees with the company between 1 and 3 years, employees with the company between 6 and 10 years, and employees who will be/have been promoted to the rank of manager). Through these training programs, we are working to increase the level of quality companywide and transform the way employees think about quality.

— Examples of Quality Training

- Quality control training
- PLP training
- Six Sigma training

4. Looking Ahead

With "emphasis on improving customer satisfaction" and achieving a "continuous increase in customer satisfaction," we will continue optimizing our quality management system and improving the quality of our products and services to stay in step with business transformations taking throughout JSR Group. By doing so, we will stay true to our aims of supplying innovative materials and excellent products that meet customer needs and contributing to a better society.

Human Rights



1. Philosophy ▾

2. Advancement Structure ▾

3. Establishment of JSR Group's Human Rights Policy ▾

4. Response to Human Rights Issues ▾

1. Philosophy

JSR Group recognizes the importance and supports the philosophy of the UN Universal Declaration of Human Rights, the UN Global Compact and the UN Guiding Principles on Business and Human Rights, and accordingly respects human rights. We also understand that we must fulfill our responsibility to respect human rights in all of our business activities.

2. Advancement Structure

We promote respect for human rights as an activity guideline of the Corporate Ethics Committee. The Corporate Ethics Committee is charged with formulating and executing plans to promote human rights and verifying their progress.

> Sustainability Management and Advancement Structure

3. Establishment of JSR Group's Human Rights Policy

As the provisions of the UN Guiding Principles on Business and Human Rights clearly state, companies have a social responsibility to take the lead in respecting human rights. Fulfilling this responsibility requires having guidelines that can provide the foundation for promoting respect for human rights and that are shared and understood throughout the entire group. JSR is a participant in Global Compact Network Japan's Human Rights Due Diligence Subcommittee. As such, we have acquired knowledge that has proved useful in studying the ideal human rights policy for JSR Group. In September 2021, we established the "JSR Group's Human Rights Policy" following a review by concerned divisions and Group companies in Japan and overseas. The review took into account the aims of the Government of Japan's "National Action Plan on Business and Human Rights". We have shared this new policy externally and to ensure that it becomes firmly embedded into the consciousness of each employee, we have used our internal intranet and special feature articles in the company newsletter. Going forward, JSR Group will study the introduction of a framework for "human rights due diligence" and effective initiatives in the supply chain.

JSR Group's Human Rights Policy (September 2021)

- > Japanese (PDF 188KB) 
- > English (PDF 145KB) 
- > Simplified Chinese (PDF 147KB) 
- > Traditional Chinese (PDF 177KB) 
- > Thai (PDF 97KB) 

4. Response to Human Rights Issues

(1) Participation in Global Initiatives

JSR Group is a signatory and supporter of the United Nations Global Compact. We also actively participate in subcommittee activities provided by Global Compact Network Japan.

As participants in GCNJ's Human Rights Due Diligence Subcommittee, we gather pertinent information through workshops and group work activities, and disseminate it throughout the company. In group work activities, we participated in a human rights policy group and presented a model case for newly

formulating human rights policy under the theme of "our vision of the ideal framework for human rights policy." In formulating the JSR Group's Human Rights Policy, we applied insights that we acquired through these activities. As we believe this policy must continue to be understood and diffused throughout the entire Group, we decided to join GCNJ's Human Rights Education Subcommittee in FY2021. We will utilize the knowledge we gain from these activities to consider the forms of education and training that are most appropriate.

(2) Respect for Human Rights in the Supply Chain

JSR Group also understands the necessity of promoting initiatives oriented toward respect for human rights not only within the Group, but across the entire supply chain as well. To put this into practice, we revised our questionnaire for suppliers in 2017 and incorporated relevant items on respect for human rights in the "JSR Group CSR/Sustainable Procurement Policy" established in 2018. Additionally, the "JSR Group's Human Rights Policy" clearly states that we will continue to encourage our business partners in the supply chain to support this policy and adopt a similar policy.

JSR Group's philosophy outlined in the above policies speaks for the requirements placed in companies by international society. JSR Group believes that it must share this philosophy with its business partners, and toward this end we have conveyed both policies to the Group's main suppliers and began collecting consent forms stating their endorsement of the policies in FY2021.

We will continue taking the steps necessary to strengthen collaboration with partners in the supply chain and enhance our respect for human rights.

> Supply Chain Management

(3) Initiatives for Promoting Respect for Human Rights

JSR Group has established a Corporate Ethic Hotline for employees to serve as a remedy for employees who have been affected by harassment considered to be a violation of their human rights. In this manner, we have a system in place for redress and corrective action. Also, we have a Supplier Hotline for business partners whom we do business with regularly in an effort to quickly detect suspected violations of corporate ethics and provide redress or implement corrective action for any persons affected.

> Compliance

Further educating Group employees of human rights is essential to fulfilling our responsibilities in terms of respect for human rights. Starting in FY2022, we will begin providing ongoing e-learning on human rights, aiming to systematically educate our employees on human rights.

In FY2022, we plan to conduct the first installment of e-learning that teaches basic knowledge of human rights. Currently, we are in the process of selecting the organization to provide curriculum and once finalized we will roll out this program globally.

JSR Health Promotion (Initiatives in Health and Productivity Management)

1. Philosophy ▾

2. Codes of Conduct ▾

3. Advancement Structure ▾

4. Physical Health Assistance ▾

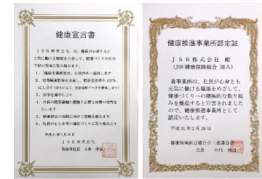
5. Mental Health Assistance ▾

6. Measures to Combat COVID-19 ▾

7. Results of Initiatives ▾

1. Philosophy

JSR Group feels that a healthy mind and body are extremely important for employees and their families to live happy lives. We also feel that they are imperative in the creation of a productive and vibrant workplace. Because of this, we have adopted various measures to help our employees work in good health, both mentally and physically. JSR and some locations make a Health Declaration, which describes the policy on active initiatives to create health. The Mie National Health Insurance Organization, which is part of the National Federation of Health Insurance Societies, has designated JSR and these locations as business establishments that promote health.

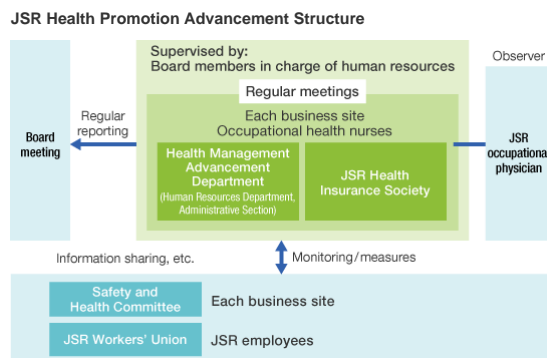


2. Codes of Conduct

We shall strive to maintain and improve safety and hygiene levels for all relevant parties, based on our belief that "safety is of utmost importance to everyone working in manufacturing and the bedrock of business activities." Additionally, we shall pay sufficient attention to the maintenance of the mental and physical health of ourselves and those we work with.

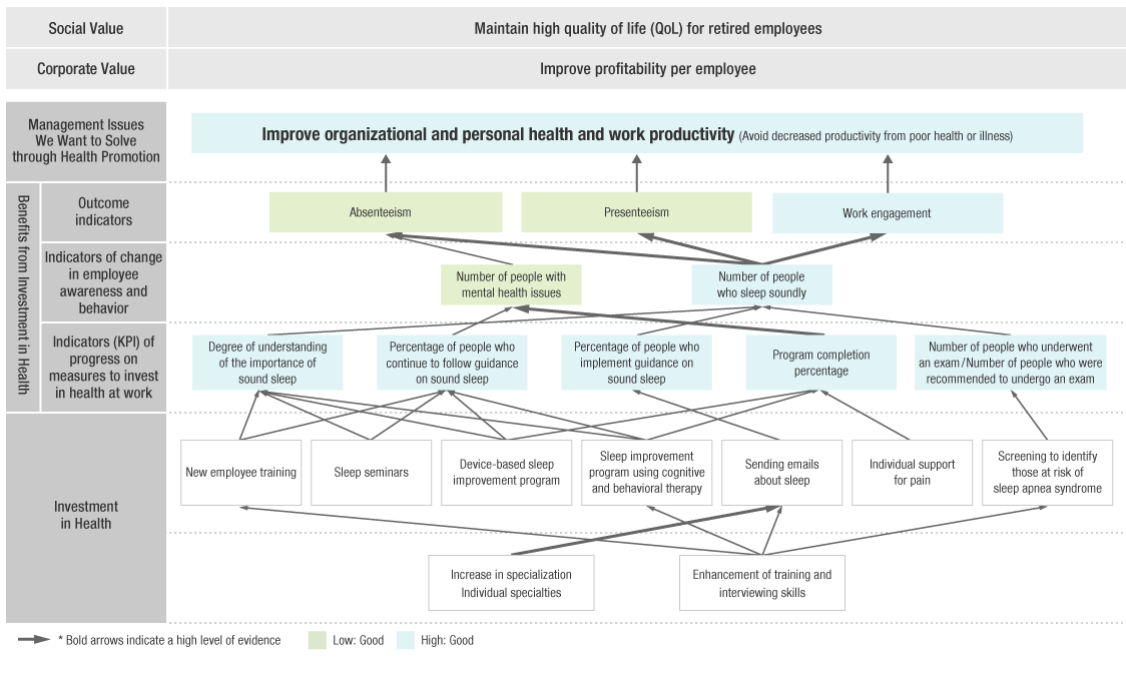
3. Advancement Structure

JSR will advance "JSR Health Promotion" as an activity to promote health and fitness among our employees, who are the foundation of organizational activity, and thereby increase engagement and improve work productivity. We explain the importance of health promotion in the company's Top Message. In addition, as part of the framework to advance JSR Health Promotion, the Health Promotion Advancement Council centering on occupational health nurses convenes regularly, and implements monitoring and various measures cross-sectionally across business departments and organizations. The contents of activities conducted by the Health Promotion Advancement Council are shared with the management level, and approaches are made to health promotion of employees.



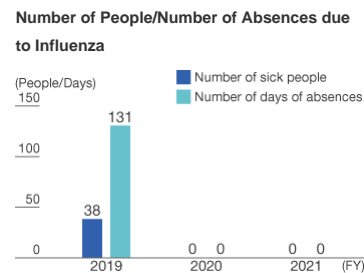
Examples of efforts to improve organizational and personal health and work productivity (counteract presenteeism (working while sick)) include the creation of a sleeping strategy map, offering sleeping seminars and improvement programs, and online personal coaching programs for stiff shoulders and low back pain.

JSR Health Promotion Strategy Map



4. Physical Health Assistance

In addition to general physical screening and special examinations as required by law, and lifestyle disease checkups, JSR supports employee's physical health by providing subsidies to employees who receive complete medical screenings, brain scans, and gynecologic cancer examinations. As an infection control measure, JSR also provides a partial subsidy for flu vaccinations. In FY2021, the number of employees who were sick due to influenza was zero, and the number of absences due to influenza was also zero.



In FY2021, the percentage of people with abnormalities in their physical examinations was 24.3%, which is lower than the national average. This signifies that our employees are maintaining good health.

In addition to a high-risk approach (individual measures being taken when illnesses occur), the idea of a population approach (overall risk reduction/prevention) was incorporated with regard to health management of employees. We make active approaches to ensuring the health of our employees, by preventing lifestyle-related diseases, ensuring that employees undergo physical examinations and providing follow-up, and preventing passive smoking.

Data on Health Support Measures

Category	FY2019	FY2020	FY2021
Percentage who underwent physical examinations	99.8%	98.7%	98.9%
Percentage with abnormalities in physical examinations	—	26.4%	24.3%
Percentage who maintained normal weight * BMI: 18.5 up to 25.0	67.1%	65.9%	66.3%
Percentage who sleep soundly * Percentage of people who get sufficient rest from sleep	65.6%	68.6%	69.2%
Percentage who smoke	22.4%	17.9%	16.2%
Percentage who underwent a stress check	92.1%	92.2%	91.4%
Percentage who scored as highly stressed on the stress check	8.3%	8.2%	8.9%
Organizational vitality index * 2019 = 100	100	126	101
Number of people using company training facilities	8,009	1,472	1,794

— Training Facility Establishment

In addition to providing its own sports facilities for employees, employees can also take advantage of memberships in sports clubs through welfare service contracts. Each JSR business site also hosts sporting events, such as softball games and bowling tournaments, to improve health through physical activity and facilitate communication among employees. These programs have also received positive feedback from employees who do not normally have the opportunity to participate in physical activities.

To combat the COVID-19 pandemic in FY2020 and FY2021, restrictions were placed on the hours of usage and the number of people. As a result, the number of people using company training facilities decreased.



Health management center (exterior) and training room, Yokkaichi Plant

5. Mental Health Assistance

JSR Group is strengthening the support structure because we think it is even more important to support the mental health aspects of moving to telecommuting and other new workstyles in order to prevent each employee from feeling lonely and isolated.

To be more specific, we are taking a four-point approach in implementing measures to improve employee mental health: "Check," "Organizational Analysis," "Consultation," and "Training."

Checks and organizational analysis include an employee mental health survey conducted by JSR since FY1998. Starting in FY2015, stress checks have been implemented annually in accordance with the amendment of the Industrial Health and Safety Act in Japan, and the results of such checks are analyzed in units of departments.

Consultation includes the establishment of a program to provide counseling for employees at a location of their choosing. Counseling is conducted through a third-party professional, Human Frontier Counseling. This program has been established at JSR and our domestic group companies as a part of our mental-health counseling support efforts. After stress checks are administered, an organizational analysis report is distributed to managerial staff, and support is provided in usage seminars to communicate how to view the report and what actions to take. We are working to enhance the response by occupational health professionals at all of JSR's offices and plants.

Training includes a variety of mental health care programs, such as self-care and line-care that properly reflects each level of JSR's organizational hierarchy.

As a result of these efforts, 8.9% of people who took the stress check were identified as experiencing high stress. This is lower than the nationwide average.

6. Measures to Combat COVID-19

To combat COVID-19, JSR is implementing appropriate prevention measures at the workplace as well as daily health management in alignment with the state of each business site, based on social conditions.

In addition to providing alcohol-based hand sanitizers and installing contactless thermometers in business sites, we are distributing masks to employees, and working to prevent infections. We are also distributing one set of antigen test kits (containing 20 tests) per employee in each office to enable early detection if an infection occurs.

We provided a series of two occupational vaccines at the Yokkaichi Plant and the Shiodome Headquarters in FY2021. A total of 3,372 people were vaccinated, including people from Group companies, contractors, and employees' family members.

JSR had been offering health exercises by a health fitness programmer from the JSR Health Insurance Society, for health and strength development of employees. With the spread of COVID-19, however, we began providing a health exercise program online from FY2020. With a total of 6,627 users in FY2021, this program helps to solve the issue of lack of exercise caused by working from home and quarantining.

— Total Participants (JSR employees only)

- FY2019: 3,112 (offline)
- FY2020: 2,959 (online only)
- FY2021: 6,627 (online only)

7. Results of Initiatives

These initiatives were recognized and five companies in JSR Group were selected as Excellent Health Management Corporations in 2022.

— The Certified Health and Productivity Management Organization Recognition Program in 2022 (Large Enterprise Category)

- JSR Corporation

— The Certified Health and Productivity Management Organization Recognition Program in 2022 (Small and Medium-sized Enterprise Category)

- Emulsion Technology Co., Ltd.
- JSR Micro Kyushu Co., Ltd.
- JSR Health Insurance Society
- JSR Logistics & Customer Center Co., Ltd.

One example of JSR Health Promotion activities is the sleep seminar we offered in March 2022 for participants to learn about the role that sleep plays in health, problems with sleep, and how to improve their sleep.

A survey conducted among the 152 participants three weeks after the seminar revealed the following results: The percentage of respondents who increased their sleep time to six hours or more rose by 5.9 points (from 82.9% to 88.8%); the percentage who reported the quality of sleep as “extremely poor” or “quite poor” decreased by 7.8 points (from 31.6% to 23.8%); the percentage who reported quality of sleep as “extremely good” or “quite good” increased by 14.3 points (from 13.2% to 27.5%).

In terms of JSR 12 Sleep Practices recommended to ensure sound sleep, a comparison of responses beforehand and three weeks after the seminar showed an increase in the number of people with good sleep habits on all twelve recommended practices.

Of particular note was the increase of 20 points or more in the categories of “Expose yourself to bright sunlight immediately if you awaken early,” “Get a moderate amount of exercise during the day and avoid strenuous exercise at night,” and “Make sure you get the amount of sleep time you planned on.”

— JSR 12 Sleep Practices

1. Get up at a certain time
2. Expose yourself to bright sunlight immediately if you awaken early
3. Eat breakfast
4. Get a moderate amount of exercise during the day and avoid strenuous exercise at night
5. Don't eat at night (before bed)
6. Don't have a drink before bed
7. Avoid caffeine within four hours before going to bed
8. Don't smoke before going to bed
9. Avoid blue light for one hour before going to bed (from a smartphone, PC, TV, etc.)
10. Make a habit of getting in bed after you get sleepy
11. Make sure you get the amount of sleep time you planned on
12. Create a bedroom or sleeping environment that makes it easy to sleep (bedding, lighting, etc.)

Human Resource Development



1. Organization and Personnel	2. Philosophy	3. Advancement Structure	4. Developing the Next Generation of Leaders
5. Mechanisms and Specific Measures Relating to HR Development	6. Training Programs	7. Progressing Corporate Culture	8. Self-evaluation System
9. Career Development Program (CDP)	10. Employee Awards Program	11. Employee Engagement	

1. Organization and Personnel

(1) Policy

We, the JSR Group, specify our responsibilities to employees within our management policies.

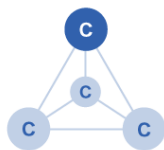
- Evaluation and rewards based on fair standards
- Continuous opportunities to grow by challenging themselves
- Acceptance of the diversity of fellow colleagues and to be provided a place where all employees can work together as a team

We are working on human resource development with the understanding that it is the greatest priority for achieving sustainable, long-term corporate growth.

JSR Group drives its organization and personnel based upon the following measures:

- Develop mechanisms and a corporate culture with a healthy balance of 'Freedom' and 'Discipline,' guided by the Course of Action's 4Cs to enable managers and junior staff to grow together, help all employees accurately perceive and solve issues in order to foster a JSR that not only maintains its organizational capacity, but ensures its future growth.
- Promote the globalization of JSR corporation employees while developing a globalized workforce within JSR Group as well as train and manage the Group's human resources on a global level.
- Generate synergies which take full advantage of the increasing range of diversity (in terms of nationality, culture, gender, values, etc.) throughout JSR Group's vast human resource pool.

4C Course of Action



**CHALLENGE
COMMUNICATION
COLLABORATION
CULTIVATION**

CHALLENGE : All employees of JSR Group should share a common, global focus and desire to succeed. Employees should feel confident to autonomously take on new challenges, learning from successes while viewing setbacks as opportunities to learn, grow and improve.

COMMUNICATION : All employees should feel comfortable and confident maintaining open lines of bi-directional communication at all levels within JSR Group. Employees should strive for organizational transparency through direct conversations as the best means to share value and achieve common goals, especially in the face of growth and diversification.

COLLABORATION : Employees will work together in the spirit of cooperation, valuing common, corporate goals over internal or departmental barriers. Employees will also be encouraged to actively collaborate with external resources and not be bound to conventional ideas.

CULTIVATION : All employees will cultivate an environment that supports bi-directional communication between managers and subordinates and provides opportunities to develop together as individuals and as members of productive, supportive teams.

(2) Codes of Conduct

- We shall ensure the fair treatment of employees, based on each person's tasks, roles, and level of commitment.
- We shall respect the diversity of our workforce and make efforts to create a workplace environment that enables every employee to make the best use of their abilities and to find a rewarding sense of satisfaction in their work.
- We shall respect the human rights and diverse characteristics of all individuals, and shall not discriminate against gender, age, nationality, race, ethnic group, origin, religion, beliefs, social status, physical disability, sexual orientation, or other relevant conditions when determining employment status and/or working conditions.
- We shall not force religion and/or belief on others.

- We shall provide a workplace free from any harassment arising from positions of power. In addition, we will not engage in any form of sexual harassment, such as behavior and verbal comments with sexual connotations that will make others feel uncomfortable.
- In the event that a staff member reports the violation or possible violation of the law and/or the Principles of Corporate Ethics to his / her superiors and / or internal / external hotline, we shall fully protect the said staff member's identity and protect him or her from unfavorable treatment.

(3) Rank System

Under the career-track system, we have established a skills-based qualification system that specifies qualification grades corresponding to employees' abilities. Skill standards established for each qualification also clarify the standards for the type of human resource, ability, and treatment. For employees of higher ranks, we also apply a job rank system that establishes ranks corresponding to given duties (i.e., responsibilities in the organization and performance responsibilities).

In April 2022, we revised the personnel system for managerial level positions by establishing role-based grading system to create an environment and culture where fair treatment of diverse employees and organizations enables employees to demonstrate their best performance and to ensure that JSR continues to be a company that is chosen by employees and external human resources.

(4) Assessment System

We conduct assessments of abilities and results fairly by employing two systems. One is an "ability assessment system" that designates the specific behavioral characteristics of abilities required for each qualification grade in individual job categories and then assesses demonstrated abilities based on those standards. The other is an "objective management system" that assesses the degree to which a person has achieved objectives that were determined at the beginning of the fiscal year.

The ability assessment system evaluates the abilities demonstrated in the six functional categories of task definition, task execution, organizational leadership and management, creativity, interpersonal skills, and growth mindset. Because the behavioral characteristics required differ according to the job category, these six functional categories are weighted according to the job category.

In these assessments, work performance objectives (work standards) are clearly established, the performance of the objectives is monitored, and employees meet regularly with superiors to properly assess the results. This system achieves improvement in the quality of work assigned, ensures reasonable treatment, and is designed to systematically develop work skills through the day-to-day performance of work.



(5) Philosophy concerning Wages and Working Hours

JSR Group strictly complies with the legally established minimum wage of each country and region, and provides wages that are based on fair assessments of employees. JSR Group naturally strives to be legally compliant in terms of working hours. We also endeavor to provide appropriate labor management with the aim of avoiding long working hours and to help employees enjoy a proper work-life balance.

2. Philosophy

Desirable Types of Human Resources

JSR specifies desirable types of human resources to target in developing human resources.

— [All employees]

- (1) Professionals who are globally competitive in each area they are responsible for
- (2) Challengers who respond flexibly to changes in the environment and pursue innovation and transformation without accepting the status quo
- (3) Individuals who possess high ethical values and respect challenge, communication, collaboration, and cultivation

— [Managerial level positions]

- (4) Leaders who delegate work and responsibility to subordinates and consistently maintain an awareness of organizational management and human resource development while leading by example and standing at the helm
- (5) Leaders who guide innovation while managing the efficient achievement of organizational objectives

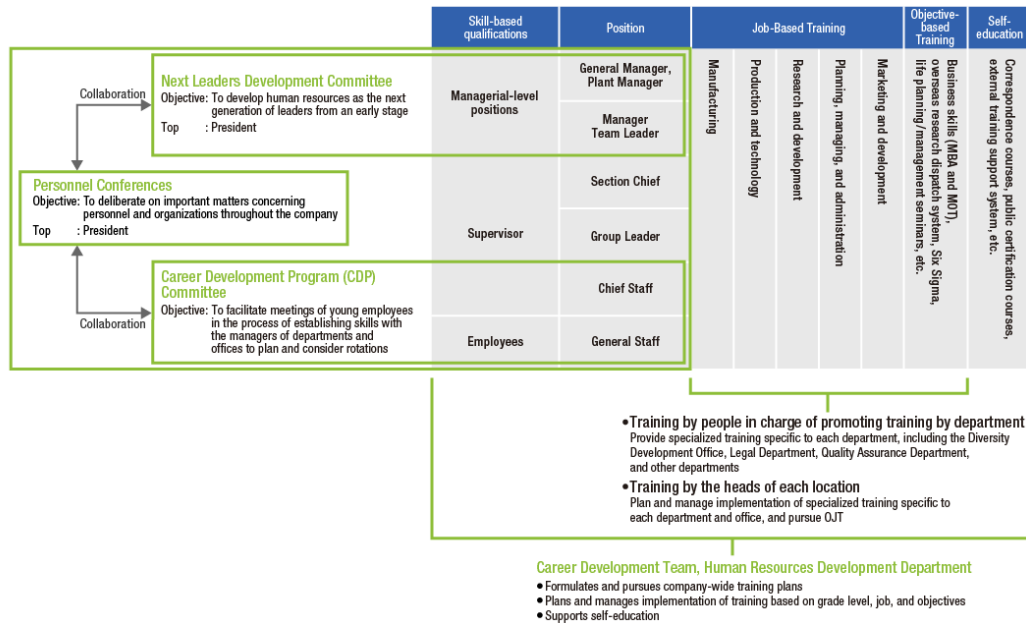
Human Resource Development Philosophy

JSR has established the following elements as its human resource development policy to develop human resources who are consistent with the company's medium and long-term business objectives, improve the abilities of individual employees, and enable employees to fully demonstrate their abilities.

- (1) Provide sufficient support for employees to focus on their own desire to grow and take the initiative in improving their own skills and building their careers.
- (2) Developing and cultivating the abilities of employees is the foundation of the company. The greatest priority is growth through work. Structured, systematic, ongoing training is provided to supplement this from a company-wide, long-term perspective.

3. Advancement Structure

The Human Resources Development Department and Career Development Team take the lead on employee training. They formulate and advance company-wide training plans while working closely with others through the various personnel systems, personnel conferences held by each level of management, and other means. The person in charge of training in each division and the head of each location plan and manage implementation of specialized training specific to each department and office.



4. Developing the Next Generation of Leaders

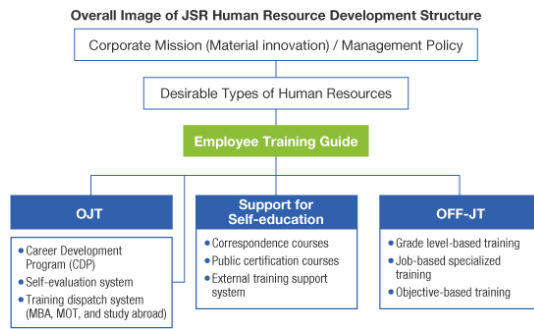
As globalization and digitalization progress, the demands made of leaders are changing. At JSR, we have been providing the "Training the next generation of leaders" course with external cooperation since 2007. This course is focused on development of the next generation of leaders. The training teaches participants established practices, the essentials of digital management, and other necessary business skills through discussions based on actual cases. Participants also expand their perspective by imagining that they are in the position of a superior, thinking about what is important from a management perspective, and outlining a vision for their own departments. Those who have taken this training include people who are already officers and the training is steadily generating diverse human resources who are equipped to look beyond the present and spur innovation themselves.

5. Mechanisms and Specific Measures Relating to HR Development

Human resource development and education (training) at JSR is based on the Employee Training Guide, which specifies the training policy, training structure, and matters related to implementation.

The Employee Training Guide positions 1) on-the-job training (OJT), 2) support for self-education, and 3) off-the-job training (OFF-JT) as the three pillars of human resources development.

Based on the view that Human Resource Development = Skill & Know-How x Motivation, we work to develop both skills & know-how and the motivation & drive of human resources, and to further improve organizational capabilities.



(1) OJT

The greatest priority is growth through work via on-the-job training. We have produced the Seven Articles of OJT (Trainer's Edition) and the Three Articles of OJT (Trainee's Editions) and are using these to develop human resources through work at each workplace.

(2) Support for Self-education

We have established the following systems to support self-education:

- Correspondence course system: Once an employee has completed a voluntary correspondence course selected from menu of 250 courses the company has selected, the company will pay roughly 50% of the course fee as a subsidy.
- Public certification course system: The company will pay testing fees, course fees, and the cost of course texts to employees who have acquired certifications necessary for their work.
- External training support system: The company will pay part or all of the course fees for external courses employees have taken that are necessary for their work.

(3) OFF-JT (Training)

We provide the following off-the-job training to augment on-the-job training.

— Grade level-based training

Training in the common knowledge and skills considered necessary for skill qualifications or for each job grade level, from a company-wide perspective.

— Job-based training

Training in the specialized knowledge and skills needed for each job for career building and to improve work efficiency.

- Specialized skill training: For engineers and technical staff, this includes plant training in common skills, safety training, quality control training, technology management training, and R&D environmental safety training. For administrative staff, it includes external courses on management strategies, accounting, finance, and other areas.
- Courses on handing down technological expertise: Expertise on the past business activities of JSR is shared among employees, including understanding of the past history, background on initiatives, techniques for problem identification and control, problem points, discussion of failures and tips for succeeding. We pass on the good DNA of JSR and have employees utilize it in the future business activities of each department.

— Objective-based Training

For issues that should be addressed on a company-wide level, we narrow down the objectives and focus on the needs.

- Language training: To develop language skills and the mindset for global response, we support short-term language study abroad (in English and Chinese), and hold conversation classes in English and Chinese.
- Overseas research dispatch: Employees voluntarily perform research at universities and research institutions overseas for up to two years to improve research skills and learn challenging and innovative new technologies useful for future business creation and technological innovation.
- Dispatch for MBA/MOT: Employees acquire MBAs and MOTs at graduate schools in Japan while working their normal jobs.
- Life planning/management seminars: Employees around the ages of 51 to 52 have the opportunity to think about their lives after retirement by learning about the three pillars of life planning: 1) career development plan, 2) lifelong economic plan, and 3) health management.

Skill-based qualifications	Position	Grade level-based Training	Job-based Training					Objective-based Training							
			Manufacturing	Production and technology	Research and development	Planning, managing, and administration	Marketing and development	Common across all areas	Six Sigma	Promoting internationalization	Business skills	Life planning	Assistance to applicants for career transfer		
Managerial-level positions	General Manager, Plant Manager	Training for the next-generation leaders (JSR Business School) (JSR courses for managers)													
	Manager, Team Leader	Training for new managerial level positions (Social education program) (Coaching skills) (Organizational human resource management training)	Pre-management training Safety, environmental preservation, quality control, facility management, personnel management, and cost management												
Supervisor	Section Chief	Mid-level supervisor training (Developing subordinates) (Managing assessments)													
	Group Leader		Motivation leadership training (Improving organizational motivation)												
	Chief Staff	New supervisor training (Improving followership skills) (Improving facilitation skills)	Health and safety education for foreperson, etc. (External courses / workshops)												
Employees	General Staff	Training for 3rd year after graduation (Facilitation skills) (Future career plan, mindset)	General technical skills training	Basic knowledge training Polymer chemistry, chemical engineering, chemical processes, and bioprocesses											
		High school graduate training in the 3rd, 6th, and 9th year of employment (Reporting / communicating / consulting, guidance of junior colleagues, career plan, leadership)	Safety and environmental training	Understanding of JSR's unique technologies											
		New employee follow-up training (Logical thinking, career)	Quality control training	Quality control (Levels: Introductory / Intermediate)											
		New employee training	Public certification training	Chemical management, environment, safety, intellectual property and contracts											

Other training

- Training content is the same for all domestic Group companies and the employees of domestic Group companies also participate in training conducted by JSR. JSR is working to develop human resources for the entire Group.
- Due to the COVID-19 pandemic, some training is provided online, depending on the training objectives.
- To promote the advancement of women, the Diversity Development Office provides training to managerial level employees who have female subordinates, sends them to external training (the NPO, J-Win), and provides other training opportunities. Click here for more information.
 - ▷ Diversity, equity, and inclusion: Initiatives promoting the advancement of women
- As part of our efforts to promote digital transformation (DX), we provide training in data science to employees who will be the next generation of leaders, training in programming to young engineers and technical staff, and an introductory course in data literacy to young administrative staff.

6. Training Programs

JSR conducts a variety of training programs to raise the skills of its employees.

The total annual training time and education cost per JSR employee was as follows.

*Figures for education/training cost were corrected in December 2022.

	2017	2018	2019	2020	2021
Total training time (hr)	55,994	49,671	64,334	43,624	34,591
Training time per person (hr)	16.8	14.7	18.7	12.4	10.1
Total cost of education/training (thousand yen)	87,139	108,189	148,711	115,513	120,628
Education/training cost per person (yen)	26,160	32,037	43,130	32,900	35,148

Note: This total was calculated by including technology and skill training, stratified training programs, and other training organized by human resources departments. It therefore does not include hours spent in education provided independently by departments or external education. Additionally, it does not include educational hours based on e-Learning.

The status on providing core training is shown below.

Training	Total number of participants (people)	Total hours of training (hr)	Cost of education/training (thousand yen)	Training objectives and content
Grade level-based Education	623	14,567	54,392	We are working to provide the basic knowledge and mindset needed for each grade level in JSR (managerial level, supervisor, new employee, etc.). Along with this, we are providing basic training aimed at those types of human resources that we need but are difficult to develop through the on-the-job training (OJT) in each workplace alone. More specifically, this means developing human resources who can logically state their own opinions even when among people

Training	Total number of participants (people)	Total hours of training (hr)	Cost of education/training (thousand yen)	Training objectives and content
				having diverse views, lead everyone to identify the issues and arrive at a consensus from mutual debate of conflicting opinions, and guide the organization to resolution of the issues while involving those concerned.
Technical Training Common to all Plants	535	9,290	0	We provide systematic education on safety, environment, facilities, manufacturing processes, and other knowledge necessary to handle manufacturing operations at JSR, mainly for employees involved in manufacturing and technology departments and other areas of manufacturing. This does not end with learning about the topics mentioned above. One of the objectives is "T-shaped" human resource development that delves deeply into specialized knowledge and expands to related knowledge.
Miniature Plant Training and Safety Education	66	390	0	We provide experience-based, hands-on training using a miniature plant in the Yokkaichi area, and work to improve knowledge, technical skills, and sensitivity to security management. We are also working on revising the educational system diagram, creating a skill map for safety education, and establishing a safety education curriculum.
Quality Control Education	319	3,026	0	Employees are learning practical quality control methods through lectures on the basic philosophy on quality control, exercises using internal data, and other means. We also provide education on basic statistical methods using statistics software, gauge analysis, control chart techniques, process capability analysis, etc. to improve data analysis skills and for implementing statistical quality control.

Note: Nearly all technical training common to all plants, miniature plant training and safety education, and quality control education is conducted by internal instructors or alumni. We provide instructor training to improve the instruction techniques of these internal instructors and alumni.

We have established training centers near our Head Office and in the Yokkaichi area to create an environment that can provide continual educational support to employees. We are using these training centers to focus on further refining our strengths in technology and developing human resources by passing on technical skills at manufacturing sites and expanding employee education programs.



Yokkaichi Training Center



Miniature Plant in Yokkaichi Training Center



Head Office Training Center
(JSR Roppongi Club)

The following types of original educational programs and symposiums are also held at domestic Group companies.

— **Techno-UMG Co., Ltd.: Short-term study abroad in the U.S.**

This program is designed to develop human resources equipped to support global business operations overseas. The three-month program involves learning the mechanisms of company operation and management at the U.S. subsidiary while studying at a language school in the U.S.

— **MEDICAL & BIOLOGICAL LABORATORIES CO., LTD.: Takato Molecular Cell Biology Symposium**

This symposium has been held since 1989 and facilitates interaction with researchers who are leading global biological research. The 32nd Symposium was held in FY2021. The free-ranging discussions include presenters and participants of all generations and lead to opportunities to gain new perspectives and motivation.

> [Takato Molecular Cell Biology Symposium \(Japanese only\)](#)

7. Progressing Corporate Culture

JSR is actively working on reshaping its corporate culture based on the principles of freedom and discipline. Our corporate culture-related activities are comprised of cultivation, on-the-job training (OJT) advancement, and communication improvement. "Cultivation" works to help managers and subordinates develop together as individuals by promoting inter-personal communication and encouraging managers to provide their subordinates with more opportunities for independence. "OJT promotion" aims to spread preparedness to implement OJT and its philosophy among employees through training. And "communication improvement" creates opportunities for regular informal workplace gatherings and Group get-togethers.

8. Self-evaluation System

We established a self-evaluation system in which individuals report frankly on how they view the status of the work they are currently responsible for and their future vision for themselves. This system deepens mutual understanding through meetings with superiors based on these self-evaluations. It targets systematic, efficient development of each individual's abilities and self-realization as well as effective human resource development by setting skill development objectives for the coming year based on wage assessment results, skill development results during the past year, and the individual's self-evaluation, through discussion between the individual and his or her superior.

9. Career Development Program (CDP)

We have established the Career Development Program (CDP) in conjunction with other training programs to support the growth of human resources who will be responsible for JSR Group in the next generation.

CDP is a job rotation program for recent university graduates on the management track. We believe that this kind of rotation forms the basis of human resources development. We have continued to improve and refine this method of training since CDP was first introduced in 1988.

Each employee in the program works in a number of different departments during their first 10 years of employment. This program produces highly capable employees who also improve their own work efficiency due to their understanding and awareness of the relationships between upstream and downstream processes as well as inter-departmental communication skills. In terms of career development, CDP gives participants the opportunity to think about their own careers and facilitates autonomous career building for the future.

To consider transfers under CDP, CDP Committee members individually interview employees who will enter CDP before discussing individual rotation plans at a general CDP meeting. The Human Resources Department runs the CDP Committee, and each General Manager is a committee member.

10. Employee Awards Program

We use various awards programs to enhance employees' motivation.

- Among the awards presented are the President's Award, Production and Technology Award, Research and Development Award, Environment Distinguished Service Award, special commendations, length-of-service commendations, and "zero accidents" commendations.

11. Employee Engagement

JSR Group aims for sustainable growth and creates value for all shareholders. We respect diversity, equity, and inclusion, and focus on drawing out the maximum potential of all employees to create a resilient organization that can respond to all sorts of changes in the environment.

We continue to implement various initiatives to help each employee maintain a high level of health and engagement. In FY2021, we conducted the first global employee engagement survey to further enhance the support provided.

The first survey of Group companies, except for a few companies, yielded a response rate of 82%. Many employees were interested and responded despite facing a major turning point as a Group and being the first attempt at a survey. After the survey, we analyzed the factors influencing employee engagement based on the results and are beginning to identify the problems in each Group company and department and take action for improvement.

We will continue to conduct the survey on a regular basis and work to improve employee engagement by implementing continual improvements from both the top down and bottom up while carefully examining the appropriateness of such actions and reflecting them in measures.

Work-Life Management



1. Philosophy ▾

2. Advancement Structure ▾

3. Systems for Supporting Flexible Work Styles ▾

4. Work Style Innovation ▾

5. JSR Workers' Union ▾

1. Philosophy

At JSR, we think that fostering diversity, equity, and inclusion (DE&I) and the two pillars built on that are essential in improving the competitiveness of the organization and employees to achieve sustainable growth and a resilient organization. Those two pillars are 1) establishing a work environment, various systems, and IT infrastructure to make flexible work styles possible, and 2) work-style innovation (WSI) that maximizes results by accepting many flexible work styles at each workplace, mutually supporting them, and transforming them into organizational strengths.

To explain in more detail, employees use the various systems and infrastructure appropriately, as needed, proactively practice work-life management, and implement a workstyle that allows them to work in health and with vigor. Each workplace is aiming to realize the vision for their own division by employing business management, people management, and using team building to create psychological safety as they make active use of the latest digital technologies and other means to dramatically improve productivity.

Such environments increase employee engagement and create workplaces that make it easy to work and provide job satisfaction. This generates innovation and competitiveness and will lead to sustained growth.



2. Advancement Structure

The Human Resources Development Department establishes work environments and formulates, designs, and implements policies on various systems. The Diversity Development Office takes the lead on formulating the policy on work style innovation and planning and implementing measures. Based on the medium-term human resources strategy, the two organizations work closely together to report the details of initiatives to management as needed and use the intranet to make employees aware of these initiatives.

3. Systems for Supporting Flexible Work Styles

(1) Systems for Supporting Flexible Work Styles

JSR has a variety of systems designed to create an environment that helps employees balance work and caretaking duties. JSR also distributes a guidebook detailing the various support programs available for balancing work and caretaking (including those within the company and without) to educate employees

about the options available to them.

We are implementing various initiatives to support employees' diverse working styles. In addition to easing the requirements to qualify for the work-from-home system, this includes changing the system to eliminate uniform time limitations (up to 5 days per month) and allow for flexibility depending on the work or department; introducing a by-the-hour annual paid leave system that allows employees to take their annual paid leave in one-hour increments; extending the time period during which employees can work shortened hours for child care and nursing care; and adding more annual paid holidays for young employees (14 days in the first year of employment).

Number of and Percentage of Employees Using the Childcare Leave System

		FY2017	FY2018	FY2019	FY2020	FY2021
Number of users	Female	24	22	14	15	21
	Male	42	38	61	59	101
Percentage of taking leave	Female	100%	100%	100%	100%	100%
	Male	31.0%	24.5%	42.7%	50.9%	72.7%

Percentage Who Return to Work After Childcare Leave and Retention Rate

		FY2017	FY2018	FY2019	FY2020	FY2021
Percentage of returning to work	Female	100%	100%	100%	100%	100%
	Male	100%	100%	100%	100%	100%
Retention rate after one year	Female	—	96%	100%	95%	100%
	Male	—	100%	98%	100%	96%
Retention rate after three years	Female	—	—	—	96%	100%
	Male	—	—	—	98%	95%

* Retention rate after one year: Of the number of employees who have returned from childcare leave in fiscal year (n-1), the percentage who still work at the company at the end of fiscal year n

Retention rate after three years: Of the number of employees who have returned from childcare leave in fiscal year (n-3), the percentage who still work at the company at the end of fiscal year n

JSR's Systems for Supporting Flexible Work Styles

Life Stage	Available Support	Description
Prenatal (During fertility treatment, pregnancy etc.)	Shorter working hours	During pregnancy, employees may reduce their working hours up to two hours per day. Employees engaged in fertility treatments can reduce their working hours by up to four hours per day, or up to 44 hours per month.
	Work from home	In cases where increased productivity is anticipated, employees can work from home based on a schedule where the work-from-home frequency or period is set individually, subject to approval by the department head.
Before and after childbirth	Maternity leave (prenatal & postpartum)	Employees can take maternity leave starting six weeks before, and extending eight weeks after childbirth.
	Special paid paternity leave	Male employees can take four days of special paid paternity leave anytime from one week prior to two weeks after the birth of their child.
	Extended childcare leave	Employees are able to take an extended leave of absence until their child turns 18 months of age.
	Extended childcare leave counseling	Upon request by employees taking extended childcare leave, counseling sessions between the employee and their supervisor are held. In these sessions they discuss and aim to resolve any worries or issues that could hinder a smooth transition back to working life.
Balancing work and childcare	Shorter working hours	Employees with non-working spouses can shorten their working hours until the child is three years of age. Additionally, employees with working spouses can reduce their working times until the child is in their sixth year of elementary school.
	Work from home	In cases where increased productivity is anticipated, employees can work from home based on a schedule where the work-from-home frequency or period is set individually, subject to approval by the department head.
	Family care leave	Employees can take up to ten days of leave in half-day units per year to provide nursing care for family member's that live in the same household. Uses include, accompanying family members to the hospital, medical examinations, vaccinations etc.
Balancing work and nursing care	Shorter working hours	Employees providing nursing care for family members can reduce their working hours by up to four hours per day, or up to 44 hours per month.

Life Stage	Available Support	Description
	Work from home	In cases where increased productivity is anticipated, employees can work from home based on a schedule where the work-from-home frequency or period is set individually, subject to approval by the department head.
	Family care leave	Employees can take up to ten days of leave in half-day units per year to provide nursing care for family members that live in the same household. Uses include, accompanying family members to the hospital, medical examinations, vaccinations etc.
	Nursing care leave	Employees providing nursing care for family members can take up to 20 days of leave in half-day units annually. Can also be taken in one-hour increments.
	Extended nursing care leave [*]	Employees providing care for family members can take up to 24 months of extended nursing care leave. Extended leave can be broken down into as many as three periods for up to two years.

* At the request of employees who use these various systems, we have established the mechanisms for lending company PCs or making it possible for them to access email and internal systems through a dedicated app on their personal devices while on leave. In addition to providing a way for employees to obtain information on the company and workplace during leave, these mechanisms are used as BCP measures during natural disasters, pandemics, etc.

JSR has also established a discretionary work system for employees in R&D, as well as a "no-core" flextime work system for employees who do not work shifts. Employees who need time off for community service activities can take up to a total of five days paid leave per year as volunteer leave.

JSR and JSR Micro Kyushu were Accredited with the "Kurumin" Next-Generation Mark

In August 2007 and April 2012, JSR received the Next Generation Mark accreditation (nicknamed "Kurumin") issued by the Minister of Health, Labor and Welfare. Kurumin designates enterprises that provide superb parenting support. JSR Micro Kyushu Co., Ltd. also received the mark in May 2017.



JSR was awarded the "Tomonin" Mark for promoting the establishment of a work environment that enables employees to balance work and caretaking duties

JSR uses this mark (nicknamed Tomonin), which was created by the Ministry of Health, Labour and Welfare for promoting the establishment of workplace that enable employees to balance work and caretaking duties, to showcase initiatives in JSR and create an environment that enables employees to continue to contribute actively while balancing work and caretaking duties.



(2) JSR Original Support Benefits

In addition to compensation benefits available during paid leave periods via Health and employment insurance, JSR employees are provided with the following original benefits. These benefits aim to aid employees in maintaining a healthy work-life balance.

> ESG Data (PDF: 344KB)

■ Childbirth Lump-Sum Allowance

Women enrolled in JSR's health insurance program are eligible to receive 100,000 yen per child as Childbirth Lump-Sum allowance in addition to the government mandated childbirth allowance.

■ Extended Childcare Leave Allowance

Employees on extended childcare leave are eligible to receive their base salary with an additional 50% bonus for the first five days. This allowance is funded via JSR Mutual Aid Association.

■ Post Childcare Leave Reinstatement Allowance

For employees who have returned back to work for a continues six months following maternity leave or extended childcare leave (of at least one month) are eligible to receive an allowance of 200,000 yen per child. This allowance is funded by JSR Mutual Aid Association for the purpose of recognizing employees past service, and continued dedication.

■ Daycare Allowance

In households where both parents work, employees are reimbursed half the cost of babysitter services that are required on working days. Costs are reimbursed via JSR Mutual Aid Association with an annual limit of 400,000 yen per eligible employee.

4. Work Style Innovation

JSR recognizes the need for continual innovation of work styles to turn organizational strengths into organizational results. Work style innovation does not just

refer to continuing to search for better work styles by checking and reflecting on your own work styles. It includes innovation to achieve better work styles for the organization as a whole while learning about and understanding the diverse work styles adopted by those around you and mutually supporting one another from time to time. We think that, as individuals and the organization continue to innovate work styles, this will lead to a resilient organization that is able to respond flexibly to changes in the external environment.

The "New Work Style Project" launched in FY2020 in response to the spread of COVID-19 determined that the ideal work style conditions would "provide a flexible work format with various tools to facilitate work activity to achieve targets and expected results." To accomplish this, we recommended three actions: (1) revise the image of the ideal office (particularly in terms of headquarters functions), (2) strengthen IT support that will contribute to greater convenience and work productivity, and (3) develop human resources systems and measures that will improve productivity and competitiveness and maximize engagement.

In FY2021, we implemented concrete initiatives based on these three points. For Point (1), we are responding to actual working conditions after working from home became a common practice as an infection prevention measure by installing booths and small meeting rooms for Web conferences to accommodate telecommuting in the head office as well, among other measures. For Point (2), we used a system to visualize work styles and compare work styles immediately after the COVID-19 pandemic began (April-June 2020) and during the same period one year later (April-June 2021). We provided this feedback to employees to encourage them to continue to revise work styles. For Point (3), we completely revised the personnel evaluation system for managerial level positions to clarify position requirements and the treatment for each position.

In addition to the above efforts, we continued to pursue efforts to promote WSI by thinking about creating a workplace environment that provides a psychological sense of safety by holding seminars and posting articles on the intranet to put the focus on good communication and management within and among teams.

FY2021 Topics

WSI Management Seminar

COVID-19 was a catalyst for rapid change in work styles. For JSR headquarters, it became increasingly obvious that the difficulty in team building and management caused by the extended period spent working from home was a problem. Restrictions were also placed on business trips between plants and research laboratories, and on visits to customers. We therefore held a WSI Management Seminar for managers in FY2020 to think about how to update team management so that we could continue to produce results as an organization during the COVID-19 pandemic. During the seminar, participants shared what they could do personally to foster a sense of psychological safety in the team and their concerns about management. Participants engaged in constructive, energetic discussion of what action could be taken to resolve these problems.

In FY2021, we expanded eligibility for the seminar to assistant managers and held a seminar on thinking about what action each manager and assistant manager could take to utilize the diverse human resources in their own division to reinforce organizational strengths, not just under extended pandemic conditions, but when confronted with any sort of change in the external environment. The reason for including assistant managers was to strengthen connections between assistant managers and managers. We received an extremely large number of requests to participate in the seminar from managers who participated in FY2020 and from assistant managers. This showed us how far the new mindset has spread of recognizing the essential need to foster a culture of DE&I in order to maximize organizational strengths.

Analysis to Visualize Work Styles

The impact from the COVID-19 pandemic has substantially changed work styles and it has now become a common practice to work and communicate while mastering online tools. The adoption of work styles that use online tools will likely accelerate even further in the future. To visually grasp past and present work styles, we used data on the use of Outlook and Teams by roughly 500 employees in JSR headquarters to analyze work styles. When we compared the data from immediately after the pandemic began (April-June 2020) with the data from one year later (April-June 2021), we saw a large decline in communication via email and an increase in the use of chat as an alternative efficient communication tool. However, there was room for improvement in the time spent in meetings and the time spent working, and this revealed the need to revise work styles on an ongoing basis. We are continuing to create mechanisms to sort out what type of work needs to be performed, visualize skills, and enable the active use of systems such as RPA, and to update work styles.

5. JSR Workers' Union

(1) Thinking on Workers' Union Activities

We strive to maintain a relationship with JSR Workers' Union that allows us to routinely engage in constructive dialogue through regular labor-management councils, meetings concerning the revision of labor agreements, and other opportunities. We are also working to build better workplace environments with attention to union concerns—namely, wage policy, labor environment policy, welfare policy, leisure time, public relations and volunteerism policy, and organizational policy.

(2) Codes of Conduct

We will abide by national and international labor codes and respect workers' right of association and right for collective negotiation in the realm of basic labor rights.

(3) Communication between JSR and JSR Workers' Union

JSR and JSR Workers' Union have entered a labor agreement based on workers' union regulations. As specified in the labor agreement, we notify JSR Worker's Union before implementing significant changes in operations.

The president, directors in charge of individual business segments, and workers' union representatives have regular discussions to exchange opinions and conduct Q&A sessions regarding the working environment, business conditions, major company policies, and workers' union activities. JSR Workers' Union discloses the content of these discussions with union members. Moreover, we endeavor to deepen mutual understanding and trust as well as to maintain and strengthen sound labor relations through frequent labor-management councils at the employee and plant levels, local labor-management councils, and Safety and Health Committee meetings. In FY2021, we endeavored to maintain smooth business operation through repeated discussions concerning a business transfer agreement, revision of various rules, and other matters.

(4) Dialogue between the Workers' Union and its Members

Union members at each workplace represent workplace workers' opinions. They also act as a conduit between union leadership and the union members. Workplace discussions and questionnaires are conducted to ensure the ideas and opinions of union members are incorporated into union activities.

(5) JSR Workers' Union Membership

As of the end of March 2022, the membership enrollment rate in JSR Workers' Union was 100%, made up of 2,746 employees excluding board members, management personnel, etc. The Union is a member of Japanese Federation of Chemical Workers' Unions, an umbrella organization.

The total number of union members is 3,775, including members of unions organized at consolidated subsidiaries. This represents 38.9% of the 9,696 employees at the consolidated level.

Number of Members Enrolled in the Worker's Union and Enrollment Rate

		FY2017	FY2018	FY2019	FY2020	FY2021
JSR Corporation	Number of members	2,588	2,629	2,709	2,799	2,746
	Enrollment rate	100%	100%	100%	100%	100%
JSR Group	Number of members	3,545	3,588	3,739	3,766	3,775
	Percentage of consolidated employees	49.2%	41.0%	41.3%	40.1%	38.9%

Diversity, Equity, and Inclusion



1. CEO Message ▾	2. Philosophy ▾	3. Advancement Structure ▾
4. Promoting Active Participation and Advancement of Diverse Human Resources ▾		

1. CEO Message

We are proactive in devising and implementing Environmental, Social and Governance (ESG) strategies and measures and have two main focuses at JSR. Our first is to have dynamic reviews and changes to our materiality to meet constantly evolving business and societal needs. Our second is on bolstering group management on a global scale by enhancing employee engagement through initiatives such as Diversity, Equity & Inclusion.

Bridging gender, cultural, and identity-related divides, by truly understanding what is happening and what drives it, is vital in creating a globally united JSR that affords all employees the chance to realize their true potential. This is also key in making JSR an attractive option for potential recruits. At its essence, this is every bit as much a business strategy as it is an ESG-related undertaking.

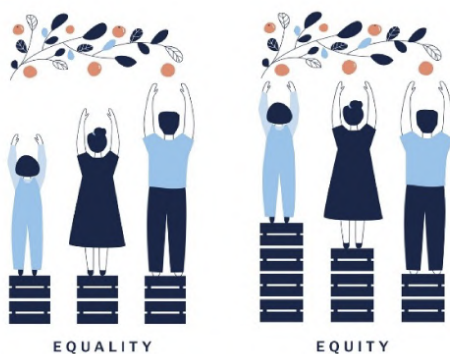
Eric Johnson
Representative Director, CEO
(From the CEO Message, JSR REPORT 2022)

2. Philosophy

To be a sustainable, resilient company, JSR Group is actively working to create an inclusive culture where diverse human resources mutually trust and accept one another's presence and views, can demonstrate their individual skills fully, and thereby develop this diversity and inclusion as organizational strengths.

We have added equity to the concept of diversity and inclusion used thus far and are using the expression, diversity, equity, and inclusion (DE&I). This means that individuals work under many different environments and circumstances, and the company coordinates and provides opportunities and resources equitably and fairly, according to the circumstances and needs of each person.

Equality and Equity

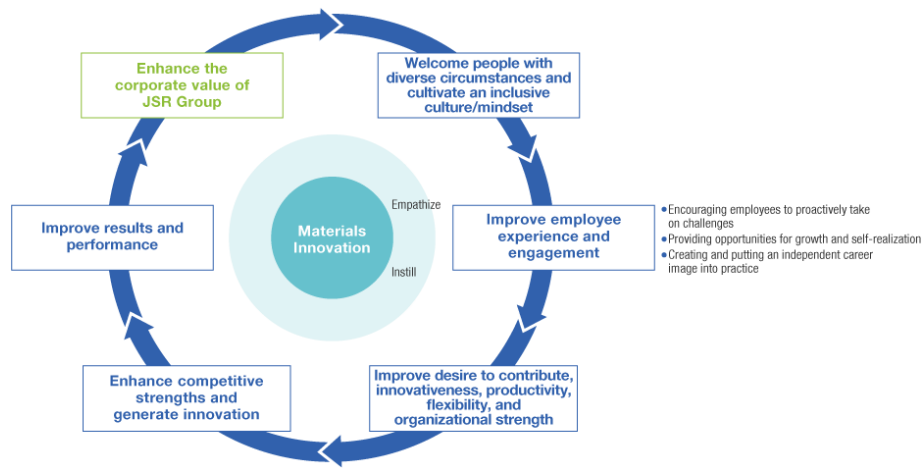


Equality: Providing everyone with the same resources, regardless of the obstacles they face
 Equity: Coordinating and providing resources according to the circumstances of each person

By creating opportunities for employees to proactively take on challenges, develop careers, grow, and play an active role based on DE&I, JSR Group can increase employee engagement, reinforce organizational strengths and competitiveness, and evolve into a resilient organization that can respond flexibly to many different changes in the business environment. We think that will lead to sustainable growth of JSR Group.

Especially in work styles, we are pushing ahead on work-life management by providing systems to support both work and life, work-from-home and other systems, and enhancing infrastructure, and by incorporating diverse workstyles. This will provide management that leads to the manifestation of each person's capabilities as well as results and stronger competitiveness as an organization.

> [Work-Life Management](#)

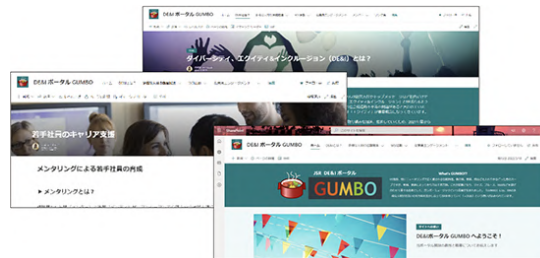


3. Advancement Structure

JSR established a Diversity Development Office in 2015 as an organization dedicated to the advancement of diversity, equity, and inclusion (DE&I). The office's primary focus has been on providing active support for the active participation and advancement of female employees and helping employees balance work with childcare, nursing care, and other family duties. However, its mission is to establish and implement initiatives that enable diversity in the workforce. JSR Group must address a range of categories that go beyond just gender differences. Examples include promoting participation by foreign nationals and individuals with disabilities, supporting employees who work while also dealing with nursing care or illness, bridging the generation gap, and accepting members of the lesbian, gay, bisexual, transgender, and queer / questioning (LGBTQ) community. Instead of just accepting diversity, we aim to embrace it and utilize individuality as an asset.

Since FY2020, we have positioned DE&I as a global JSR Group initiative. One aspect of this is the assignment of a DE&I officer to JSR North America Holdings. As we share this global orientation, we are incorporating the perspectives of each country and organization, and tackling DE&I issues that differ from one organization to another.

In FY2021, we established the GUMBO internal DE&I portal site to share our policy and views on DE&I, the details of initiatives, and the latest information relating to DE&I with employees and help them understand DE&I better.



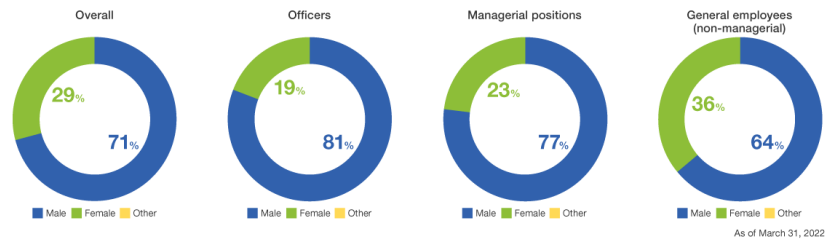
4. Promoting Active Participation and Advancement of Diverse Human Resources

(1) Promoting Active Participation and Advancement of Women in the Workforce

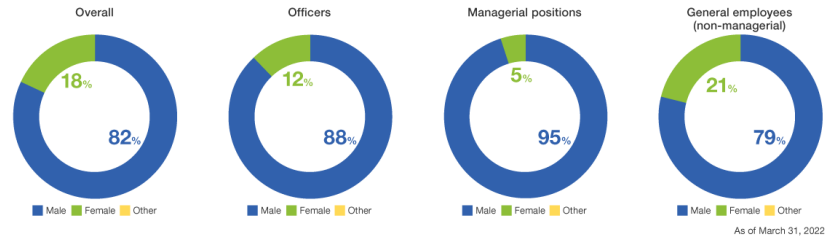
(i) Gender Ratio and Targets Set for 2030

The gender composition of JSR Group globally is about 30% female and 70% male. When the percentage of females is viewed in terms of job position, the percentage of females in officer and managerial positions together is around 20%. The percentages at the non-consolidated level are low, with females accounting for around 20% of JSR, 12% of officers, and 5% of managerial positions. There is a substantial difference in the gender composition of employees and in the upper ranks compared to JSR Group on a global basis.

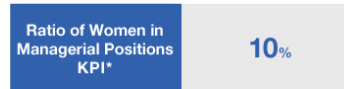
Gender Ratio in JSR Group as a Whole



Gender Ratio in JSR at the Non-Consolidated Level



While we have pursued various initiatives to support the careers of female employees at JSR thus far, we set a new target of having women in 10% of managerial positions by 2030 and will put effort into this as a management issue. This initiative is one of those aimed at supporting the advancement of diverse human resources and we are setting clear targets and KPI and reinforcing initiatives to achieve this as a social issue unique to Japan.



* JSR Corporation (non-consolidated), by FY2030

(ii) Action Plan and Results for the Act on Promotion of Women's Participation and Advancement in the Workplace

We developed the JSR Action Plan for the Advancement of Women in the Workplace (Third Phase, April 1, 2020 to March 31, 2023) and are implementing initiatives based on the Act on Promotion of Women's Participation and Advancement in the Workplace (Women's Act), which was enacted in April 2016.

JSR Action Plan for the Advancement of Women in the Workplace (Third Phase) (excerpt)

1. Third Phase Period	April 1, 2020 to March 31, 2023
2. Issues	(1) Low percentage of women in managerial positions (2) Few women hired for career-track technical positions
3. Quantitative Goals	(1) Achieve a percentage of women in managerial positions of 6% during the Third Phase. (2) During the Third Phase, attain a ratio of "applicants to hires" for career-track positions for women that is roughly equivalent to that for men, and achieve a male-to-female ratio for hires of 50% in administrative positions and 30% in technical positions.
4. Details of Measures	(1) Take action to raise the female recruitment rate. (2) Support career development. (3) Introduce a mentor system.

> Act on Promotion of Women's Participation and Advancement in the Workplace: JSR Action Plan for the Advancement of Women in the Workplace (PDF: 56KB)

One example of success is the "Eruboshi (Stage 2)" designation that JSR earned in 2019 after being certified by the Minister of Health, Labour and Welfare as a company that is making outstanding efforts to "promote women's participation" based on the Act on Promotion of Women's Participation and Advancement in the Workplace.



(iii) Trend in Performance

JSR is actively working to hire female employees. We have set targets for the percentage of female new graduates hired since 2010.

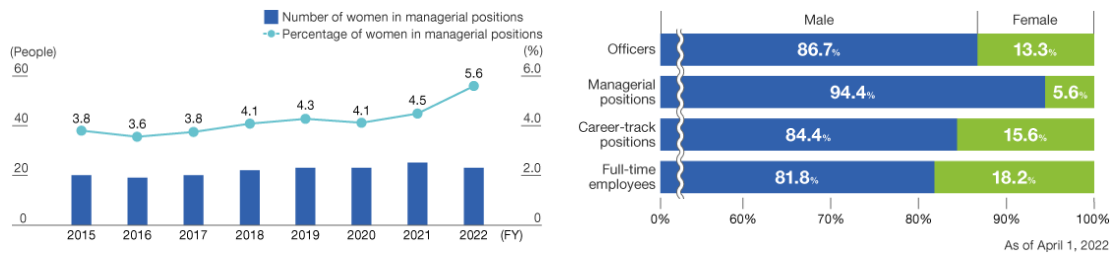
Targets and Achievements Regarding Active Support of Women in the Workforce

	Target	FY2017	FY2018	FY2019	FY2020	FY2021
Percentage of women hired annually per position	College graduates, engineering positions: 30% ^{*1}	20%	18%	22%	26%	30%
	College graduates, administrative positions: 50% ^{*2}	50%	45%	50%	55%	60%
Percentage of women in managerial positions	March 2023: 6%	3.8%	4.1%	4.3%	4.1%	4.5%

*1 As of April 1 of each fiscal year

*2 Set from the ratio of male and female students

The percentage of women in managerial positions at JSR is 5.6% (as of April 1, 2022) and this percentage is increasing every year. However, this differs substantially from the percentage of female employees and we continue to take various approaches to address this.



(iv) Initiatives to Promote Advancement of Women

At JSR, it is a common practice for women to continue working even after marrying and having children. However, that is not the only goal. We are working to develop working women who contribute actively and grow over the long term while striving for self-realization, and who can contribute to the growth of the Company.

Measures to Promote Advancement of Women

	Female officers	Managerial positions	Females in managerial positions	Female employees	People who have switched to career-track
Training for managerial positions					
■ Diversity management seminar (2010 to 2020)		○			
■ Unconscious bias test (2020)					
■ Unconscious bias training (2021)					
Career development seminar for female employees of the section chief level (2016 to 2019)				○	
Dispatch to external training (NPO J-Win) (2019 onward)	○	○	○	○	
Interviews of female employees / managers (2016 onward)			○*	○*	
Interviews of the superiors of female employees (2016 onward)		○			
Seminar for people who switch to career-track (2010 onward)					○

* Career counseling is provided as needed

— Training for managerial positions

We provide management support training for those in managerial positions to learn the skills to appropriately consider the needs of each female subordinate and empower subordinates. We also provide a seminar for managers to confront their own unconscious biases and encourage them to modify their behavior to avoid microaggression.

— Dispatch to external training (NPO J-Win)

The Japan Women's Innovative Network (J-Win), an NPO, is a corporate member-based organization established in April 2007 to support the promotion and common practice of diversity management in companies. Female employees of the assistant manager level, people in managerial positions, and officers have participated in the one-year external training provided by J-Win each year since 2019. We are striving to develop leaders and abilities by providing opportunities for mutual refinement of employees as a member of the business community, beyond the boundaries of work type or business model.

— Interviews of female employees

Since FY2016, we have conducted interviews with several dozen female employees a year to ask them about job satisfaction, issues they are experiencing in their work, and what their views of a future career are, among other topics. These interviews include elements of career counseling.

— Interviews of the superiors of female employees

Since FY2016, we have interviewed several dozen superiors of female employees each year to ask about the temperament and talents of each female subordinate and confirm plans for development. We also ask about issues in pursuing DE&I. The issues identified through these interviews of female employees and their superiors are analyzed and reported to management and we adopt approaches that will lead to measures to address the issues.

We also hold seminars on individual themes and provide support as requested when necessary, in addition to such initiatives.

(2) Providing Support and Promoting Advancement of Employees Who are Caring for Children

Since the beginning of the 2000s, JSR has established various systems to support employees in balancing childcare and work. This is not only aimed at achieving a balance between the two. We are also working to create a workplace that makes it easy for people to work, provides job satisfaction, and enables people to work with enthusiasm and contribute, even in workplaces where people adopt diverse workstyles.

(i) Action Plan and Results for the Act on Advancement of Measures to Support Raising Next-Generation Children

We developed the JSR's Next Generation Development Action Plan (Eighth Phase, April 1, 2020 to March 31, 2023) and are implementing initiatives based on the Act on Advancement of Measures to Support Raising Next-Generation Children, which was enacted in April 2005.

JSR's Next Generation Development Action Plan (Eighth Phase) (excerpt)

1. Eighth Phase Period	April 1, 2020 to March 31, 2023
2. Current Issues	(i) The company is proceeding with the development of work-life balance support schemes. However, whether or not those schemes are being effectively utilized must be verified. (ii) The company must provide support that helps employees who balance work with child-rearing be successful in their jobs.
3. Numerical Objectives	Achieve the following minimum levels for the childcare leave-taking rate and length of leave during the Eighth Phase: Male employees: Leave-taking rate: 30% or higher Number of leave days taken: Average of ten days or more
4. Details of Measures	(i) Study the effectiveness of work-life balance support schemes and promote their use. (ii) Foster awareness of, and a company culture that supports, men involved in child-rearing.

> Act on Advancement of Measures to Support Raising Next-Generation Children: JSR's Next Generation Development Action Plan (PDF: 38.8KB) 

(ii) Trend in Performance

> Work-Life Management: Systems for Supporting Flexible Work Styles

(3) Providing Support and Promoting Advancement of Employees Who Are Providing Nursing Care

Today, Japan is facing a "super-aging society." It is reported that about one in four people in Japan aged 75 or older requires nursing care, and the number of employees who are faced with providing such care is expected to increase. JSR is preparing a variety of support measures that allow employees who provide nursing care to balance that care with their work.

In addition to such support measures, we offer an e-learning course on nursing care to all employees. The purpose of this course is to increase their understanding of the systems and services available to them and prepare them before they confront the need to actually provide nursing care. We also educate those in managerial positions on how to respond and support subordinates when they are working and caring for family members. Through such measures, we are working to create a culture that understands and accepts employees experiencing a diverse range of circumstances, along with enabling employees to experience job satisfaction and continue to work while providing nursing care when they face the need to do so.

Number of People Using Support Systems for Balancing Work and Nursing Care

	FY2017	FY2018	FY2019	FY2020	FY2021
Shorter working hours system	3	1	1	2	1
Nursing care leave system	8	7	11	6	4
Extended nursing care leave system	0	1	3	0	0

> Work-Life Management: Systems for Supporting Flexible Work Styles

(4) Career Support for Young Employees

We began a mentoring program for young employees in FY2021. Young employees who joined the company around the time the COVID-19 pandemic began were forced to work from home for an extended period of time. This substantially changed the means, quality, and quantity of communication compared to before the pandemic and we felt a sense of urgency over whether this made them more susceptible to feeling a vague sense of anxiety. We also undertook the mentoring program because the experience of major changes in the environment also heightened the awareness of young employees about developing their own careers.

The objectives of mentoring are to 1) provide young employees (mentees) with the opportunity to create a relationship with a senior employee outside of their own division and create a means for them to consult someone about their work and career, or matters outside of work, and to 2) provide senior employees who serve as mentors experience in developing successors, the opportunity to reflect on themselves, and support growth through mentoring. This not only creates personal connections for and assuages the mentee's concerns about work; it enables both the mentor and mentee to experience the benefits of mentoring and we plan to continue the mentoring program next fiscal year.

(5) Expanding Hiring of Mid-Career Employees and Promoting Active Contribution

JSR thinks that being chosen by human resources who possess a diverse range of knowledge, skills, and ideas and having them contribute actively will spur innovation and lead JSR to continue to provide value to society. For that reason, we actively hire human resources from a diverse range of backgrounds as mid-career employees.

Number of Mid-Career Employees Hired

	FY2017	FY2018	FY2019	FY2020	FY2021
Male	23	31	25	22	30
Female	4	11	7	3	5
Total	27	42	32	25	35

(6) Promoting the Reactivation of Resigned Employees

JSR established and operates a Career Re-Entry System to enable employees who voluntarily left JSR and the workforce (due to marriage, childbirth, nursing care responsibilities, or the transfer of a spouse, for example) to register for rehire in accordance with company needs and the former employee's desires. The number of employees being stationed overseas is also increasing as globalization progress, and the spouse is also a JSR employee and accompanies him/her overseas, in some cases. Because it is easier to use a system that enables re-entry without retirement when the date of return has been set, we established a new system of leave for spouses transferring overseas in FY2020. This system enables spouses to take leave for up to two years.

Number of People Using the Career Re-Entry System / Spouse Overseas Transfer Leave System

		FY2017	FY2018	FY2019	FY2020	FY2021
Career Re-Entry System	Number of people registered	4	5	5	3	1
	Number of people employed	1	2	2	2	0
Spouse Overseas Transfer Leave System	Number of using system	-	-	-	0	1

* Implemented in FY2020

(7) Employment Opportunities Beyond Retirement

In accordance with the Act on Stabilization of Employment of Elderly Persons, JSR has systems in place that enables employees who have reached the mandatory retirement age to stay in the JSR workforce. Prior to retirement, employees complete a survey concerning their desire to continue employment. All of those who wish to continue working are re-employed. We also hold life planning seminars before mandatory retirement to provide information and educate retirees on future life planning and career planning.

Percentage of Employees of Mandatory Retirement Age Who Re-enter the Workforce

	FY2017	FY2018	FY2019	FY2020	FY2021
Number of people re-employed	53	38	22	24	18
Percentage of people re-employed	72%	81%	81%	86%	69%

(8) Promoting Active Contribution of Foreign Nationals

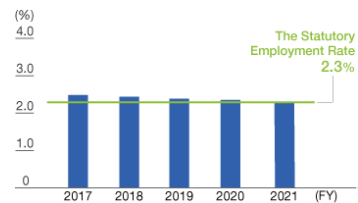
Sixty percent of JSR Group's revenue comes from overseas, and 50% of its employees are affiliated with overseas businesses. Based on this unique characteristic of JSR, we engage in corporate activity that is founded on the leadership of a CEO who is well acquainted with circumstances in Japan and abroad. Moreover, to secure personnel who can succeed on the global stage, we promote the development of workplace environments where employees of different nationalities, religions, and lifestyles can work together while demonstrating their own unique characteristics.

JSR Group has long been working to expand hiring and diversify its human resources as part of promoting the globalization of employees by hiring foreign university students and accepting employees from overseas subsidiaries at JSR. We are strengthening the network of human resources departments in Japan and overseas in JSR Group along with our hiring activities. JSR Group will also consider promoting local human resources to management of overseas subsidiaries and promote exchanges between human resources in Japan and overseas.

(9) Providing Support and Promoting Advancement of Employees with Disabilities

As of the end of FY2021, JSR's employment rate of individuals with disabilities was 2.24%, owing to the impact from the spin-off of the Elastomers Business. This caused the employment rate to temporarily fall below the statutory employment rate 2.3% (the employment rate was 2.59% as of April 1, 2022).

Employment Rate of Individuals with Disabilities



When we hire people with disabilities, we discuss their strengths and the details of their disability, and then determine the work location and type of that best suits each employee's situation.

Although few employees with disabilities work in areas where hazardous materials are handled, such as manufacturing and research laboratories, we are working on ways to ensure safety while expanding employment opportunities for people with disabilities. In September 2021, we also established a farm (in Saitama Prefecture) mainly operated by people with disabilities to give even more people with disabilities the chance to work as a member of JSR team and join us in building a society where everyone can work with enthusiasm and contribute actively. This farm began with preparing a vacant lot and staff worked together to install planters. After consulting members of headquarters and local staff, it was named JSR Nanairo ("Seven Colors") Farm and we are telling everyone in the company about it.

Seeds were planted in December 2021 and the first mesclun greens and radishes were harvested in February 2022. A repeated process of trial-and-error led to a harvest of komatsuna (mustard greens), garland chrysanthemum, and lettuce leaves large enough to provide in the cafeteria in March 2022. Employees who work at headquarters joined in the harvesting, washing, and shipment work. The harvested vegetables were shipped directly to JSR Yokkaichi Plant and offered as "parboiled Komatsuna and garland chrysanthemum" and "corn salad on a bed of lettuce" in the plant cafeteria.



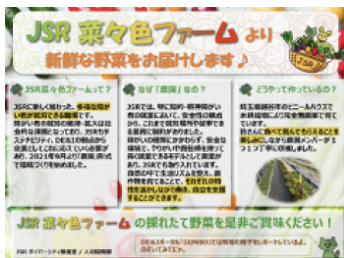
JSR Nanairo Farm



Employees from headquarters helping with shipment



First menu items provided in the plant cafeteria



Internal poster explaining the farm



Message of appreciation to the local staff

(10) Support and Promoting Understanding of LGBTQ Individuals

JSR aims to build a workplace in which all people can be accepted for who they are without pretense and work with enthusiasm in their own way. LGBTQ is no exception to this philosophy, and we do not tolerate any exclusive treatment or discriminatory words or behavior.

Along with providing the option of "other" in addition to "male" and "female" in the gender section of the entry form for new employees, we provide an e-learning course for employees and pursue initiatives to think about our vision of diversity. JSR has also endorsed the Business for Marriage Equality campaign to advocate for legalizing same-sex marriages. We want to do our part as one company to advocate for gender equality in society as a whole. While we are still only halfway there at present, we will focus on this more in the future.

JSR was recognized as a company ranked in the Advanced category of D&I AWARD 2021

JSR was ranked in the Advanced category of D&I AWARD 2021 (December 14, 2021, sponsored by JobRainbow), which recognizes companies in Japan that work on diversity and inclusion.

There are many perspectives and issues to think about in order to achieve diversity, equity, and inclusion. This award evaluates companies from the five perspectives of Gender, Childcare/Nursing Care, Disabilities, Coexistence of Diverse Cultures, and LGBT. We understood that JSR has room for improvement from the three perspectives of Coexistence of Diverse Cultures, Disabilities, and LGBT, particularly in consideration for work styles, community building, and providing education. We recognize that it is time to move beyond limited attributes such as gender that can be easily recognized on the surface, and accelerate initiatives focused on the deeper layers of diversity such as the diverse attributes, unique characteristics, values, and experience that each person possesses. In the future, JSR will make an even greater effort to pursue initiatives aimed at utilizing the unique characteristics of each individual, rather than just accepting the many



types of diversity in human resources.

* Advanced rank: A recognized rank in the D&I AWARD. This rank requires that a company be "A leader in D&I, even among domestic companies in Japan that is leading the promotion of D&I as a role model. The requirement is a company that undertakes a wide range of initiatives from multiple perspectives, fosters an internal culture where each employee respects D&I, and continues to work on further innovation."

Supply Chain Management



1. Philosophy ▾

2. Relations with Business Partners
(Supply Chain Management) ▾

3. Green procurement and purchasing ▾

1. Philosophy

We believe that an important role of JSR Group is to offer innovative materials and excellent products that meet customer needs and contribute to the making of a better society. Towards that purpose, through supply chain management, we will respond to social issues together with our business partners.

2. Relations with Business Partners (Supply Chain Management)

(1) CSR/sustainable procurement

JSR Group supply chain management has a unique feature for a chemicals company supplying materials to various industries and supporting society. Specifically, that is our ability to deliver products of discernible quality to our customers reliably and without interruption.

The JSR Group CSR/Sustainable Purchasing Policy states that when making purchases, JSR will give sufficient consideration to legal and regulatory compliance, resource protection, environmental conservation, safety, human rights, biodiversity, and other factors that lead to a sustainable society. With suppliers' and customers' understanding, and through communication, mutual understanding, and cooperation, we will continue engaging in effective initiatives.

As part of this, we have practiced CSR/sustainable procurement since FY2010. Based on our Purchasing Policy, we conduct surveys of suppliers' social and environmental initiatives with a questionnaire. If we find issues that need to be addressed, employees in charge of procurement visit suppliers in person to find the best solution. By FY2013, we were able to survey the suppliers that represent 99% of the value of our materials purchases. We will continue to conduct the same process as we establish new suppliers in the future.

Additionally, as the supply chain becomes more globalized, there is greater risk of forced labor, child labor, environmental destruction, corruption, and the like. In response, we revamped and expanded the survey questions in FY2017. We are now conducting the second round of the survey using this revised questionnaire.

Moreover, based on our belief that this kind of supply chain management benefits both JSR Group and our business partners, we newly formulated the JSR Group CSR/Sustainable Procurement Policy in December 2018. This policy sets out the items that JSR Group asks our business partners to comply with, as listed in the above revised questionnaire.

As this shows, sustainable business operations require continual supply chain management. To ensure that our suppliers know society's expectations and JSR Group's approach to them, we have been conducting initiatives since FY2021 to communicate the Group's procurement and human rights policies and asking the same suppliers to return written endorsements of these policies. We are also holding a series of briefings and beginning specific actions to ensure that the entire Group, including Group companies in Japan and abroad, are working to the same ends.

> [JSR Group CSR/Sustainable Procurement Policy](#) 

(2) Assessment of business partners

JSR Group confirms that our business partners conform to assessment standards that we demand. This happens when starting business with a new partner as well as during ongoing business with existing partners. When assessing potential new business partners, we evaluate their financial status and quality control and conduct onsite audits of safety, environmental, and quality concerns before starting trade. We also reassess business partners with whom we have a continuing business relationship following the same criteria as when starting new trade.

Some raw materials are difficult to procure in an emergency due to poor availability or scarcity. For them, we strive to secure stable availability for our customers by conducting regular supplier audits, making onsite checks of matters having a bearing on supply continuity, and offering suggestions and guidance for quality reliability.

(3) Initiatives concerning conflict minerals

Our stance based on the JSR Group Purchasing Policy is to never permit the use of conflict minerals (which tin, tantalum, tungsten, or gold could potentially be), either directly or indirectly. We work with our business partners to continuously verify that we use no conflict minerals.

In FY2015, we conducted an investigation concerning the use of conflict minerals and confirmed that none of the targeted suppliers used them. Since then, we have investigated the use of conflict minerals when acquiring new raw materials or using a new supplier and have maintained a system that guarantees we do not use conflict minerals.

On the other hand, in recent years, there has been growing concern about human rights violations associated with cobalt mining, which is seen as a hotbed of child labor. In light of this, in FY2021 we determined to exhaustively investigate whether any problems exist with respect to cobalt (in addition to the conventional conflict minerals) in our operations. This investigation will make use of global standard templates provided by the Responsible Minerals Initiative (RMI)—namely, the Conflict Minerals Reporting Template (CMRT) and Extended Minerals Reporting Template (EMRT). Because this investigation too will be done throughout the Group, we will first hold briefings for Group companies in Japan and abroad. We will then identify any raw materials that use or contain the minerals of interest, then distribute the templates to suppliers of such materials and make sure they reply.

(4) Education and training of employees in charge of procurement

JSR Group educates and trains employees in charge of procurement on the subject of CSR/sustainable procurement and conflict minerals initiatives to make sure we are practicing sound supply chain management. This includes introductory education to personnel newly assigned to purchasing departments to ensure that they fully understand the JSR Group Purchasing Policy.

To encourage employees in charge of procurement to obtain more advanced knowledge, we recommend that they acquire the Japan Management Association-accredited Certified Procurement Professional certification (CPP; a qualification certifying expertise in the purchasing and procurement field) to promote their acquiring of more advanced knowledge. We support them in this endeavor by paying the costs of workshops and examination fees.

(5) Participation in initiatives concerning CSR/sustainable procurement

JSR Group participates in Global Compact Network Japan's Supply Chain Working Group, where we utilize knowledge obtained through dialogue with stakeholders to strengthen our CSR/sustainable procurement activities. Recently, we have applied this knowledge when formulating the JSR Group CSR/Sustainable Procurement Policy and revising the questions on the questionnaire used to survey business partners.

3. Green procurement and purchasing

(1) Green procurement of raw materials

JSR Group established green procurement guidelines in 2000 and has practiced green procurement, which is to say, preferentially purchasing goods with minimal environmental impact. In response to the growing industry trend of managing chemicals in the supply chain, JSR Group joined the Joint Article Management Promotion-consortium (JAMP)* in 2008 and reviewed our guidelines so that chemicals under control and our formats would support JAMP MSDSplus.

Then in 2018, we revised our guidelines again to reflect the transition from MSDSplus to chemSHERPA, a new chemical information transfer format established under the leadership of the Ministry of Economy, Trade and Industry. We currently practice green procurement in keeping with these guidelines. We will continue to actively pursue green procurement with an emphasis on information transfer to ensure that there is effective chemical risk management in the supply chain.

* The Joint Article Management Promotion-consortium (JAMP) was established as an inter-industry organization in September 2006 to support activities that aim to create and expand specific systems for the proper management of information on chemicals in articles (components, molded goods, and so on) and to facilitate the disclosure and dissemination of information within supply chains. JSR conducts activities that contribute to the practice of these principles through its participation in JAMP.

(2) Green purchasing of office equipment and supplies

JSR defines green purchasing as the purchasing of environmentally friendly office equipment and supplies not directly related to its products or manufacturing. Green purchasing is distinguished from the green procurement of raw materials for products, packaging materials, and manufacturing facilities.

In Japan, the Law Concerning the Promotion of Procurement of Eco-Friendly Goods and Services by the State and Other Entities (commonly referred to as the Green Purchasing Law) was enacted in 2000. Japan's basic policy on the law was announced in 2001, when the law came into effect, and has been revised multiple times since then. Based on the most recent version of this policy, JSR strives to preferentially purchase equipment and supplies with energy-saving features and high recycled content. In FY2021, green purchasing represented 62,700,000 yen out of a total of 73,655,000 yen in purchases at all business sites. This is equivalent to a green purchasing rate of 85%.

Social Contributions

1. Philosophy ▾

2. Advancement Structure ▾

3. Approaches in FY2021 ▾

1. Philosophy

JSR Group established its "Philosophy to Social Contribution" in January 2009. We are currently implementing the initiatives outlined in this philosophy.

Philosophy on Social Contributions

- 1) Our Corporate Mission dictates that we contribute to society through our business activities. We also actively provide solutions to social requirements and issues as a responsible member of society.
- 2) We are continuously engaged in positive social contribution activities, capitalizing on the chemical and technical knowledge and skills that form the core of JSR business.
- 3) Every employee is a point of contact between the Company and society, and we actively support our employees in their voluntary participation in social contribution activities.

Established in January 2009

In 2010 we also established standards for making donations for disasters in order to stipulate evaluation standards when making donations for natural disasters. This provides greater clarity to standards and allows contributions to be made promptly and fairly.

2. Advancement Structure

The JSR Sustainability Planning Committee plans and executes activities that promote JSR Group's standing as a good corporate citizen.

> Sustainability Management and Advancement Structure

3. Approaches in FY2021

The following section describes some of our main social contributions for FY2021.

(1) Academics, Education, Culture

JSR Group provides support for young-generation development and education opportunities through continued efforts to provide education and internship opportunities to students both in Japan and abroad. We also provide career experience opportunities. Since FY2020, we have continued to scale back face-to-face activities to help check the spread of COVID-19.

Support for undergraduate students, graduate students, and international students

We provided assistance to students who are facing financial hardship due to the COVID-19 pandemic. By providing scholarships through universities, we aim to help students, who will create our future, concentrate on their studies.

Participation in the Human Resources Development Program in Chemistry

The Human Resources Development Program in Chemistry was created by the Japan Chemical Industry Association (JCIA) in October 2010. It is based on a

proposal made in a report prepared in April of the same year by the "Kagaku Bijon Kenkyukai" (chemistry vision study group) of the Ministry of Economy, Trade and Industry. The program informs universities of the chemical industry's human resources needs. The industry then supports the university courses that can meet these needs and their students. The program's purpose is to develop the young people who will serve as the foundation for stronger international competitiveness and industrial promotion in Japan's chemical industry. We use the program to support courses engaged in outstanding initiatives and their students.

Advancing active participation of female students in STEM fields

KBI Biopharma, Inc. in the U.S. streamed podcasts sponsored by STEMblazers and worked as a facilitator of experiments in middle schools. STEMblazers is an organization that communicates information and holds events that enable female students to imagine a career in STEM fields (Science, Technology, Engineering, and Mathematics).

Providing technical internships to local high school students

At the request of an engineer's association from Mie Prefecture, JSR provided technical internships to local high school students to develop young people with technical skills who will be responsible for local industry in the future.

Creation of educational opportunities: participation in Memory Book Bag donations

Since 2014, with cooperation from JSR Group and JSR Labor Union, has participated in the "Memory Book Bag (Randoseru) for Children in Afghanistan" drive held by JOICFP, an NGO engaged in international cooperation. Through the event, we donate used school bags to underprivileged children in Afghanistan to assist in their education. The event's aim is to help give children the knowledge and information they need to keep themselves and their families healthy by attending school and learning to read and write. In May 2021, we again donated book bags as well as pencils, notebooks, and other stationery. We will remain involved with this event as a form of social contribution in which individual employees can participate.



Donated book bags

> [JOICFP \(external site\)](#)

Support for the non-profit organization Supporting Organization for Artists of Tohoku (SOAT)

SOAT is a non-profit organization that carries out support activities for victims of the Great East Japan Earthquake in March 2011 by creating motivation in life through art workshops. JSR agrees with the objective of SOAT's activities and supports these activities.

> [NPO Supporting Organization for Artists of Tohoku \(external site\)](#)

Support for local soccer team

JSR Micro Kyushu Co., Ltd. donated to Sagan Tosu AID through the Saga Mirai Sozo Kikin ("Saga future creation fund") to support the local soccer team, Sagan Tosu.

(2) Community activities, environment

JSR Group undertakes various activities to build good relationships with local communities and people living nearby. The Group's offices and plants in Japan and abroad continually conduct clean-ups targeting nearby communities, coastlines and rivers, and other areas.

Holding a river clean-up event

Crown Bioscience San Diego Ltd. in the U.S. teamed up with Mapping Through Life and cleaned up the San Diego River in April 2021. They removed trash to beautify the river and maintain its natural state.

Participation in hands-on forestation development activities to protect water resources

The Techno-UMG Co., Ltd. Ube site participates in hands-on forest development that protects water resources, as part of the local water resource

conservation activities in Yamaguchi Prefecture.

It participates in these activities each year as a member company of the Kotogawa Industrial Water Users' Association. Their aim is to cultivate and maintain the water sources of the Kotogawa Dam watershed while also encouraging a better understanding of the roles that forests have and the necessity of forest development through hands-on thinning of trees and bamboo.

Each year, Techno-UMG also participates in efforts to protect and nurture grasslands on the Akiyoshidai Plateau, located in Mine City, Yamaguchi Prefecture. These activities are traditional events undertaken with the participation of concerned organizations and local residents as well as companies that do business in the prefecture and their employees' families.

Techno-UMG will continue to assist with these events and contribute to society in the future.

Donation to a greenery promotion organization

Emulsion Technology Co., Ltd. and Japan Coloring Co., Ltd. donate a portion of their beverage vending machine sales to the Mie Greening Promotion Association.

The donations are used to promote tree planting, periodic forest thinning, and other forms of greening.

(3) Social welfare and health

Cooperation with blood donation activities

Blood cannot be stored for a long time, nor can artificial blood be created.

JSR Group has long been an active participant in blood donation activities at both domestic and overseas offices and plants. In this way, the Group helps to ensure a stable supply of blood to medical institutions and save the lives of as many people as possible.

Donation to child care

JSR Micro N.V. (Belgium) participated in De Warmste Week, a charity event in the Flanders region. This is an event where people in the Flanders region raise funds for various charitable activities. The money raised as a result of the event was donated to a day care center for children who need special care.

Mutual aid fundraising

In FY2021, JSR Micro Korea in South Korea donated the money collected from the in-house bazaar auction to the Community Chest for Social Welfare.

Toy donations to children

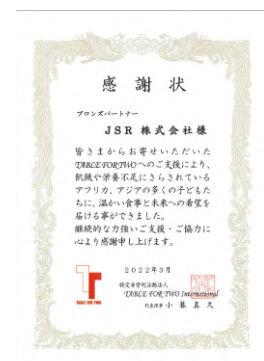
Crown Bioscience San Diego Ltd. and Crown Bioscience Inc. in the U.S. worked with the U.S. Marine Corps' annual Toys for Tots drive and donated toys for children in December 2021.

The Table for Two (TFT) Program

JSR Group's Tokyo and Yokkaichi Districts have participated in the TFT program run by the non-profit organization TABLE FOR TWO since February 2010. We have donated approximately 180,000 meals as of the end of March 2022.

TFT is an initiative for sharing meals with children in developing countries. When an employee purchases a healthy meal designated by TFT, 20 yen of its price is donated to buy a school meal for a child in a developing country. School meals do more than satisfy children's hunger; they also play an important role in solving issues stemming from poverty by improving school attendance rates and academic performance, improving children's physical fitness, strengthening disease prevention, and leading to the formation of communities between schools and parents.

Yokkaichi City also has ongoing (CUP FOR TWO) activities that utilize beverage vending machines.



Letters of appreciation presented to JSR by Table for Two

JSR donations to help resolve global health issues

We support activities to prevent illness and donate to the Japan branch of the Médecins Sans Frontières NGO (Doctors Without Borders) programs that provide ongoing treatment for HIV/AIDS and infectious diseases such as cholera and malaria.

(4) Assistance to disaster-stricken areas and humanitarian aid for crises

Great East Japan Earthquake Assistance

Due to the government's declaration of a state of emergency amid a surge in COVID-19 cases, we continued with our decision last year to use the company's intranet to present recent happenings and products of the Tohoku region in lieu of the annual "Tohoku reconstruction support market."

Eleven years have passed since the Great East Japan Earthquake. While the affected areas are steadily recovering, they continue to need support in rebuilding their communities, providing psychological support, and creating a sense of purpose in life.

* "Tohoku reconstruction support market": A sustainability project that sells products from three Tohoku prefectures that were particularly affected by the Great East Japan Earthquake (Iwate, Miyagi, and Fukushima) and fosters communication between employees and Tohoku residents.

Humanitarian aid for the crisis in Ukraine

Offices and plants of JSR and JSR Group donated to humanitarian aid for the crisis in Ukraine.

(5) Efforts to combat COVID-19

Employees at Crown in China and Taiwan volunteered to assist with nucleic acid amplification (NAAT) testing by local governments to screen for COVID-19. JSR actively supports efforts to combat COVID-19.

(6) Employee volunteer activity support

JSR actively supports employees who voluntarily participate in social contribution activities. Employees can take up to five days of paid leave per year as a part of our paid volunteer leave system. This allows them to participate in social contribution activities that occur during working hours.




> [ESG Data \(PDF: 344KB\)](#) 

Corporate Governance



It is JSR Group's goal to make steady progress in realizing its corporate mission (Materials Innovation: We create value through materials to enrich society, people and the environment). Corporate governance represents a key issue for this process.

The Group will also continuously strive to create new corporate value through efficient and transparent business management by sustaining sound and healthy business practices, with the hope of becoming an attractive corporation that can earn the trust of and satisfy the interests of all our stakeholders. Reports detailing our philosophy and operations in corporate governance are available below.

- > [Integrated Report \(JSR Report\)](#) 
- > [JSR's policy, philosophy, governance system, and management system pertaining to corporate governance](#) 
- > [JSR's Corporate Governance Report \(PDF 1,176KB\)](#) 
- > [Corporate Mission and Sustainability Philosophy](#)
- > [Sustainability Management and Advancement Structure](#)

Compliance



1. Philosophy ▾	2. JSR Group Principles of Corporate Ethics ▾	3. Advancement Structure ▾
4. Corporate Ethics Activities ▾	5. Legal Compliance Measures ▾	6. Protection of Personal Information ▾
7. Initiatives for Bioethics ▾	8. System on the Management and Audit of Public Research Funds and Initiatives to Address Misconduct in Research ▾	

1. Philosophy

JSR Group has been endeavoring, by building up and maintaining good relationships with all our stakeholders, to become a trustworthy and indispensable corporate citizen.

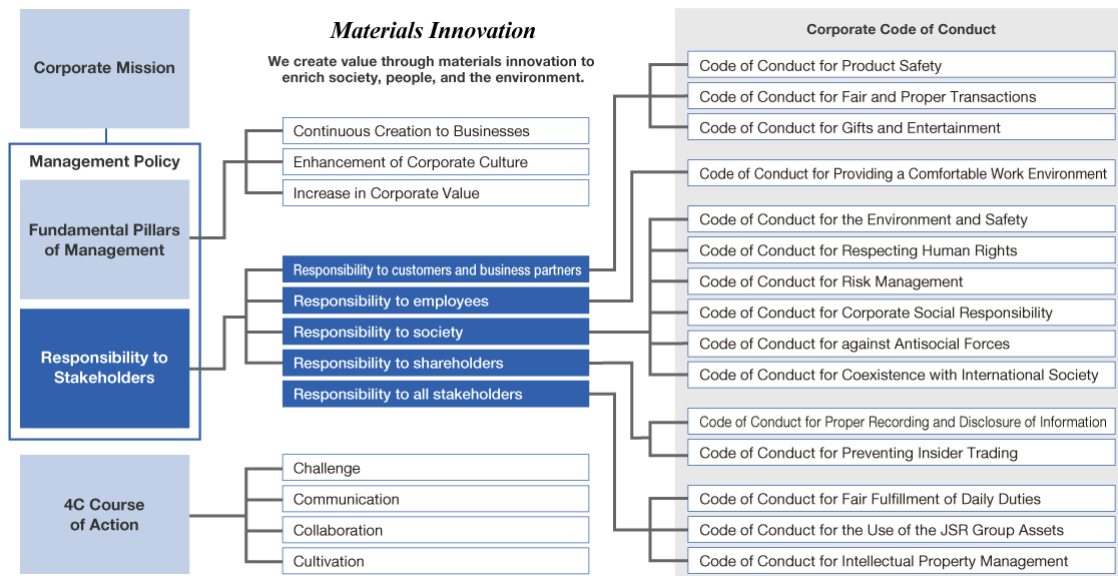
We have been vigorously executing our Code of Conduct in order to fulfill "Our Responsibility to our Stakeholders", an essential part of our Management Policies, as well as to ensure compliance with relevant laws and regulations during the course of our business.

2. JSR Group Principles of Corporate Ethics

JSR Group is advancing corporate ethics activities together with all of its Group companies, both in Japan and overseas. To achieve this, we have formulated JSR Group Principles of Corporate Ethics as a concrete and globally-shared guideline that reflects our "Essential Elements".

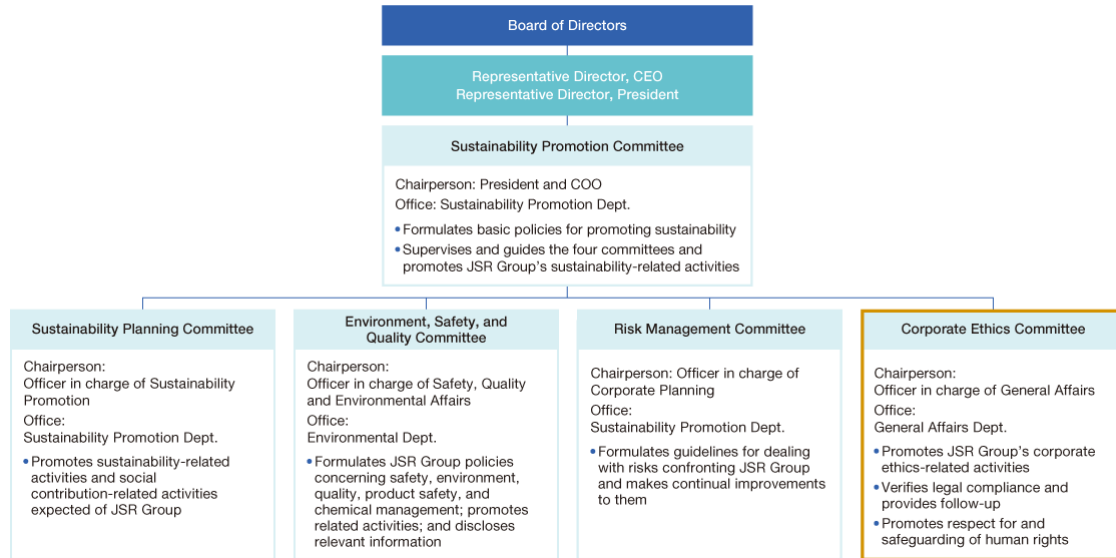
The principles represent a Code of Conduct that all directors and employees (full-time, contract, part-time, and temporary employees as well as employees on short-term contracts) of JSR companies should comply with to develop our corporate activities while fulfilling the management policies spelled out in "Our Responsibility to our Stakeholders". The Group shall never require directors and employees of Group companies to violate this Code of Conduct. Additionally, JSR Group shall not disadvantage any director or employee who refuses to execute an order to violate the Code of Conduct because of that refusal.

* JSR Group's "Essential Elements": The Essential Elements consist of the Corporate Mission, the Management Policies, and Course of Action: 4C action guidelines.



3. Advancement Structure

The Corporate Ethics Committee spearheads compliance activities (corporate ethics activities). The Committee is responsible for monitoring the Group's legal compliance, follow-up, and promotion of respecting and safeguarding human rights.



4. Corporate Ethics Activities

JSR Group has been pursuing the following three major corporate ethics activities:

(1) Publication and Education of JSR Group Principles of Corporate Ethics

JSR Group formulated JSR Group Principles of Corporate Ethics to serve as a globally-shared Code of Conduct, and we are now working to make these principles known to all. By preparing English, Simplified and Traditional Chinese, Korean and Thai versions in addition to the Japanese version, we are ensuring that directors and employees at all Group companies can access and fully comprehend JSR Group Principles of Corporate Ethics in their native language or in a language in which they are proficient.

Moreover, each year we provide an e-learning program on JSR Group Principles of Corporate Ethics for all employees of JSR Group companies in Japan. We incorporate the themes of confidential information management, prevention of abuse of power, and prevention of data falsification into the program. We also conduct corporate ethics training for each stratum, such as new recruits and newly promoted managers. With regard to harassment education, we conduct management training on bullying and harassment reports and the handling of actual cases for high-ranking and managerial positions.

— JSR Group Principles of Corporate Ethics (Revised on Jan. 1, 2021)

- > Japanese (PDF 3,163KB)
- > English (PDF 1,745KB)
- > Simplified Chinese (PDF 3,142KB)
- > Traditional Chinese (PDF 3,946KB)
- > Korean (PDF 3,038KB)
- > Thai (PDF 3,882KB)

(2) Corporate Ethics Awareness Survey

JSR Group works to grasp and improve corporate ethics-related issues by conducting annual surveys on corporate ethics awareness that target the directors and employees of JSR Group companies in Japan and overseas. The results are reported at the Corporate Ethics Committee and then to an Officers Committee. They are subsequently fed back to employees as a post containing a message from the assigned officer summarizing the results and explaining issues and other matters gleaned from the results. Overseas Group companies also strive to build awareness of corporate ethics and legal compliance among their employees, including their locally hired employees, using methods that are appropriate for the local culture.

(3) Hotline (Internal Reporting Channels)

1) Hotline for Employees

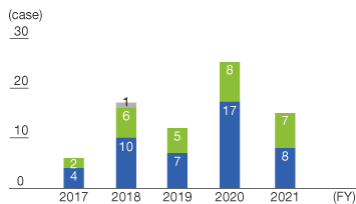
JSR Group has introduced a system of internal reporting channels called the Corporate Ethics Hotline. We inform our employees on the existence of these

holiness by displaying and showing how to access them on the company intranet and the top page disseminated in the online internal newsletter. We strive to build trust in the hotlines by ensuring confidentiality and prohibiting unfair treatment of hotline users. The other is an independent and specialized outside organization capable of handling communication in Japanese, English, Chinese, Korean, Thai, and Indonesian 24 hours a day, 365 days a year. This system is designed to facilitate use even by overseas employees. Reports made to the external hotline are also simultaneously reported to full-time auditors, which ensures independence from management.

For each report that comes in, the office of the Corporate Ethics Committee in the company concerned asks the relevant department to ascertain the facts. The office then discusses and decides on responses based on the department's findings, and later follows up on the results. If the reporter desires feedback, the contact point that initially received the report contacts him/her with the results as well as the responses taken.

We also hold yearly meetings between the corporate ethics officers of domestic Group companies and JSR's Corporate Ethics Committee for the purposes of getting all Group companies in Japan on the same page and tackling ethics-related issues. Furthermore, we post and display guides for accessing the hotlines on the company intranet and the top page of online internal newsletters to make the hotlines easier to use.

State of Use of JSR Group's Hotline (Number of Reports)



Internal Report Flow



Fifteen reports were received during FY2021. Of them, ten involved abuse of power. We addressed each report in an appropriate manner.

2) Suppliers' Hotline

JSR employs at its Procurement Department a "Suppliers' Hotline", an external reporting channel for business partners, namely suppliers and services providers, with whom domestic Group companies do regular business.

The hotline receives reports from business partners to quickly discover and resolve violations of the law as well as actual and possible violations of corporate ethics in business transactions. Hotline services are entrusted to the same outside organization employed for the employees' hotline. Efforts are being made toward improving reliability, by thoroughly enforcing strict secrecy of reports and prohibiting handling of reports that would be disadvantageous to those reporting.

There was one report made to the supplier hotline in FY2021.

5. Legal Compliance Measures

Every JSR Group member defines legal compliance regulations that form the basis of its legal compliance. Each company then uses the regulations to solidify its compliance through regular review and improvement as well as legal training to increase awareness of laws and regulations and instill commitment to compliance. JSR Group establishes specific systems and executes other priority approaches to ensure compliance with laws and regulations that are particularly relevant to the execution of business.

1) Approach to Preventing Bribery and Unfair Competition

JSR Group has formulated "Policy for Bribery Prevention", "Rules on Complying with Anti-Corruption Laws" and "Standards for Gift-Giving and Entertaining" that specify necessary items for all executives and employees to comply with the Unfair Competition Prevention Act in Japan, Foreign Corrupt Practices Act in the U.S., Bribery Act in the U.K. and other anti-corruption laws when performing their tasks.

In addition, JSR has also formulated "Rules on Antimonopoly Law" (Japan), "Rules on Complying with U.S. Antitrust Laws", "Rules on Complying with the EU's Antitrust Laws" and "Rules on Complying with Korean Fair Trade Laws" that specify items necessary for complying with each country's antimonopoly (antitrust) laws.

With regard to due diligence of third parties, such as an important proxy, in preventing bribery, JSR has specified "Due Diligence Guideline for Proxies, etc.". In line with this, JSR strives to reduce the risk of bribery by conducting surveys through self-checks and external databases.

> JSR "Policy for Bribery Prevention" (PDF 33KB)

Participation in global incentives

JSR participates in the Corruption Prevention subcommittee of the Global Compact Network Japan (GCNJ), a local network for the UN's "Global Compact". In this subcommittee, various activities are carried out, such as lectures with invited experts, exchange of information related to measures for

preventing corruption among participating companies, etc. Through these activities, JSR explores, examines and implements effective and ideal corruption prevention measures that are suitable for JSR Group.

Corruption prevention measures have a strong compliance system advancement aspect of complying with relevant laws of each country. At the same time, the foundation of such measures is closely linked to global social issues related to human rights, labor and the environment. In addition to continuing to implement effective corruption prevention measures, JSR searches for ideal forms of such measures.

In October 2020, JSR Group endorsed the recommendations of the Task Force on Climate-related Financial Disclosures. For details of our response to these recommendations, please see below.

> [Response to the TCFD Recommendations](#)

2) Approach to Taxes (Philosophy)

JSR Group understands that carrying out appropriate tax payments and tax management that follows relevant laws and regulations of each country fulfills an important role in the economic and social development of each country and is linked to supporting and earning the trust of all stakeholders.

JSR Group is engaged in taxes by supporting the following philosophy as provided by the Chief Financial Officer (CFO).

"JSR Group will comply with the taxation laws of each country in which it does business, including regarding transfer pricing and tax havens."

(1) Reviewing and Improving Legal Compliance

Based on legal compliance regulations, JSR Group designates laws and regulations that are important in the execution of business as Overall Significant Laws and Legal Regulations. Each year, the Group regularly verifies its compliance by self-checking whether the business operations of all Group companies conform with the Overall Significant Laws and Legal Regulations. The regular sharing of information on cases of non-compliance within JSR Group is useful in preventing legal violations and quickly detecting and improving non-compliant situations. It also helps improve awareness of compliance. In FY2021, no serious legal violations were found during the compliance confirmation process.

(2) Training and Increasing Awareness

Compliance Handbook

The Group is thoroughly publicizing important points that demand legal compliance among employees in Japan, South Korea, and China by issuing Japanese, Korean, and Chinese versions of JSR's Compliance Handbook. The Chinese version is issued to not only Group companies in China but also JSR departments and Group companies that sell products, supply samples, or otherwise engage in business dealings with Chinese enterprises. Through it, we are working to ensure thorough understanding and practice of legal compliance in China.

We revised and redistributed the Compliance Handbook's Japanese version in April 2022 based on revisions to related laws.



Compliance Handbook

Seminars and E-Learning

We hold periodic seminars and provide e-learning programs for directors and employees of all JSR Group companies as part of legal education to ensure full organizational knowledge of laws demanding compliance along with related company policies and rules. The main seminars held in FY2021 were as follows.

- September 2021: Seminar on Anti-monopoly Act of Japan
- March 2022: Export Control seminar

We also provide e-learning on corporate ethics.

Additionally, we provide legal education that has been customized to meet the requirements of individual departments and Group companies. This includes individualized education for employees being sent to new assignments (training on anti-trust laws, anticorruption laws, etc.).

6. Protection of Personal Information

JSR Group recognizes the importance of protecting personal information under the circumstances of highly advanced information and communication technologies. We have therefore formulated a Privacy Policy and Rules for Handling Personal Information that sets out our approach to the acquisition, use, and management of personal information based on the Act on the Protection of Personal Information in Japan. At the same time, we have established Rules for Handling Specific Personal Information in response to the introduction of Japan's Individual Number system.

Within these rules, in accordance with relevant laws and our privacy policy, we ensure appropriate handling of specific personal information by defining precautions and security standards necessary to ensure the proper use and protection of this information at each of the stages of acquisition, storage, use, provision, disclosure, correction, suspension of use, and deletion.

Furthermore, for Group companies that handle personal data covered by the EU's General Data Protection Regulation (GDPR), we are providing support for the development and operation of a GDPR compliance system to be applied to the acquisition, processing, and transfer of covered personal data.

7. Initiatives for Bioethics

(1) Initiatives for Medical and Biological Research Involving Human Subjects

JSR Group conducts life science and medical research on human subjects mainly as it relates to the Life Sciences Business. This research fully complies with the laws and regulations of each country where it takes place.

JSR and Medical & Biological Laboratories Co., Ltd. (MBL) are both subject to the Ethical Guidelines for Medical and Biological Research Involving Human Subjects, co-developed by the Ministry of Education, Culture, Sports, Science and Technology, the Ministry of Health, Labour and Welfare, and the Ministry of Economy, Trade and Industry. Both companies have established internal rules required under these guidelines along with an Ethics Review Committee comprised of internal and external members in order to screen research from ethical and social perspectives. Applicable research is carried out following the research plan deliberated on and approved by this committee. Furthermore, we provide training on bioethics to employees involved in this research to ensure they follow proper research practices.

The member register, regulations, and summary of meeting minutes of each companies' Ethics Review Committee is recorded in the Research Ethics Review Committee Reporting System (Japanese only) of the Ministry of Health, Labour and Welfare.

➤ [Research Ethics Review Committee Reporting System \(Japanese only\)](#)

(2) Ethical Considerations for Animal Testing

Animal testing compliant with laws and regulations is necessary during the development process for chemicals, pharmaceuticals, and medical materials to confirm their safety and efficacy on humans. JSR Group conducts appropriate animal testing compliant with the laws and regulations of each country as part of the process to support the development of pharmaceuticals. Each JSR Group company has established internal rules compliant with these laws and regulations and set up an Animal Testing Committee. These committees administer animal testing appropriately based on rigorous screening from the perspectives of science, animal ethics and animal welfare, including the 3Rs of Replacement, Reduction and Refinement. Additionally, we conduct self-inspections and evaluations of our animal testing to ensure compliance with all relevant laws, regulations and guidelines. Furthermore, JSR Group is working to develop technologies that enable alternatives to animal testing.

Moreover, Group company Crown Bioscience International has obtained certification for its sites in the United States and China from AAALAC International, a third-party assessment institution that promotes the humane treatment of animals in science.

(3) Handling of Genetically Modified Organisms

JSR Group uses genetically modified organisms, adult stem cells, and human-derived samples to engage in contract drug development and manufacturing operations and research on diagnostic agents. JSR Group handles these samples and related applied technologies following the laws and regulations of each country, while also giving consideration to ethical standards.

8. System on the Management and Audit of Public Research Funds and Initiatives to Address Misconduct in Research

JSR has established a management accountability structure based upon the Guidelines on the Management and Audit of Public Research Funds at Research Institutions established by the Ministry of Education, Culture, Sports, Science and Technology and the Ministry of Health, Labour and Welfare, as well as the Guidelines for Responding to Misuse of Public Research Funds and the Guidelines for Responding to Misconduct in Research established by the Ministry of Economy, Trade and Industry. JSR has also put into place a whistleblowing desk for reports regarding the management and audit of public research funds. Under the following structure, we properly manage and administer public research funds, prevent misconduct by researchers, and engage in fair research activities.

Management Accountability Structure

Chief Management Officer	Chief Technology Officer
General Management Officer	General Manager of Research & Development Department
Compliance Promotion Officer Research Ethics Education Officer	Head of the organization implementing research and development using public research funds

Whistleblowing Desk

JSR Corporation
Corporate Ethics Committee Office
22F, Shiodome Sumitomo Building
1-9-2 Higashi Shimbashi, Minato-ku, Tokyo 105-8640

In addition, Group company Medical & Biological Laboratories Co., Ltd. (MBL) has also established a system on the management and audit of public research funds, along with a consultation desk and a whistleblowing desk.

Risk Management



1. Philosophy ▾

2. Risk Management System ▾

3. Risk Management Measures ▾

4. Information Security Measures ▾

1. Philosophy

JSR Group believes that preventing major crises from occurring and minimizing their impacts on business activities is a key part of management. The Group has formulated Risk Management Policies and established a Risk Management Committee through which it actively pursues risk management activities.

> [Basic Views and Policies Related to JSR's Corporate Governance](#)

2. Risk Management System

JSR Group manages risk by largely classifying it into two types: risk related to business strategies and risk related to business operations.

Among these, we manage risks related to business strategies through deliberations and decisions made in important meetings, such as those of the Board of Directors, Executive Committee, and Business Issues Committee. Please click on the following link for the roles of each committee and other details.

* Risks associated with doing business include strategic risks concerning capital investment and M&As that are discussed at Board of Directors meetings and other important meetings.

> [JSR's Corporate Governance Report \(PDF 893KB\)](#)

For risks related to business operations, we engage in risk management centered on the Risk Management Committee in accordance with Risk Management Policies.

The risk management system forms part of the Group's internal control system. The status of the internal control system's execution is reported regularly to the Board of Directors. JSR's Corporate Audit Department continuously verifies and evaluates the preservation and operation of internal control for the entire JSR Group as required by the Companies Act and Financial Instruments and Exchange Act. It also ensures that risk in existing business does not exceed permissible levels. Furthermore, the department additionally strives to maintain and strengthen internal control levels for the entire Group and conducts internal audits to ensure the appropriate and efficient execution of operations.



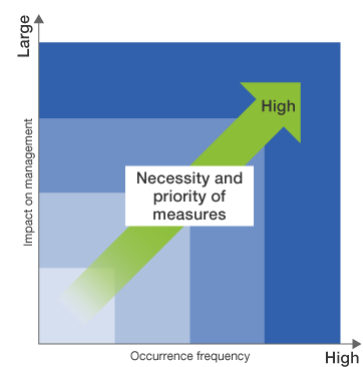
3. Risk Management Measures

(1) Identifying Risks and Selecting Important Risks

JSR Group has been operating its own risk management system since FY2009. Under the initiative of the Risk Management Committee, each division of JSR Group companies in and outside of Japan identifies risks on a regular basis.

Utilizing a risk map that represents level of business impact and frequency of occurrence, we identify risks that could have a significant impact on business continuity and organize them into JSR Group Risk Factors. We build and maintain a system for prevention of latent risks and crisis preparedness by having senior management monitor and regularly review important risks.

Conceptual diagram of risk map



Click on the following link for information on the risks that could impact on JSR Group's business performance, financial standing, cash flow, etc.

> [JSR Group Business and Other Risks \(PDF: 343KB\)](#)

(2) BCM (Business Continuity Management)

1) Formulation and Operation of BCM Procedures

JSR has formulated BCM procedures that summarize the BCM/BCP* systems in place for both peacetime and emergency situations. In addition to defining the BCM organization and the actual BCP, which includes stipulations on target recovery times, and BCP activation and cancellation standards, these procedures also set out the organizational structure that takes effect during activations of the BCP, and corresponding priority businesses and operations.

Moreover, we maintain a stable supply of funds on hand to allow us to manage our businesses flexibly if a major risk arises. We also acquire issuer ratings and commercial paper ratings from rating agencies each year. JSR's ratings are available on rating agencies' websites as well as the JSR website.

* BCM: Business Continuity Management/BCP: Business Continuity Plan

A BCP defines activities to be conducted in anticipation of emergencies that could threaten a company's survival (such as a large-scale natural disaster, explosion/fire, or terrorist attack), judgment criteria and action guidelines that enable business continuity in the event of such emergencies, and other matters necessary for ensuring the continuity and early restoration of important businesses. BCM is a management system that operates and continuously improves the BCP through the PDCA (plan-do-check-act) cycle.

> [Basic Stock Information](#)

2) Major Earthquake Preparations

JSR Group adopted a mid-term business plan in FY1995 concerning preparations for a major earthquake and has been conducting systematic activities to enhance those preparations. After FY2006, we began a seismic retrofitting project focused on high-pressure gas facilities in our plants, and installed an earthquake early-warning system at all JSR business sites. Based on lessons learned from the experience of the Great East Japan Earthquake, we are systematically reinforcing the aseismic capabilities of our buildings and implementing safety measures that include tsunami countermeasures. In FY2020, we completed aseismic retrofitting of our spherical tank braces.

> [Occupational safety, security and disaster prevention](#)

(3) Enhancement of Initial Response to Emergencies

1) Crisis Management Training

Once a year since 2004, JSR holds crisis management training with the participation of "headquarters for accident and crisis control" members.

In FY2021, in conjunction with comprehensive disaster prevention training at our factories, we conducted training on the establishment of a head office task force and on information sharing with local task forces remotely.

By conducting drills that anticipate a variety of potential disasters, we will continue to make the preparations needed to ensure safety, control damage, maintain business continuity.

2) Disaster Management Training at Each Plant and Laboratory

JSR Group conducts disaster management and evacuation training and drills on a regular basis. FY2021 was no exception. While implementing measures to combat COVID-19 infections, we held drills that simulate disasters at each of our business bases. We will continue working to minimize the impacts of emergencies and improve our ability to ensure business continuity.



Comprehensive disaster prevention training at JSR Chiba Plant (at the time)

3) Safety Confirmation System

In FY2009, JSR introduced a safety verification system that uses employees' mobile phones and smartphones. The system can promptly ascertain the safety of employees in the event of a large-scale earthquake or other disasters. In FY2011, we began expanding the system's coverage to include domestic Group companies and the families of JSR employees.

Training using this system is conducted regularly, and JSR is prepared for large-scale and wide-area disasters.

4) Infection Preparedness

We stockpile masks in preparation for an epidemic of influenza or another infectious disease.

Following the spread of the COVID-19 pandemic since FY2020, we continue to maintain our Code of Conduct, enforce the wearing of masks and other protective equipment, implement regulations on outside visitors, share information with our employees around the world, and carry out such measures at each base as working from home in order to sustain the Group's main manufacturing, research and development bases in Japan, Asia and Europe and the United States. Moreover, in Tokyo and the Yokkaichi City districts, we provided workplace COVID-19 vaccinations for employees, including Group companies, and their families.

In addition to the above, to prevent flu infections from spreading in our workplaces and to also make sure that the cases of influenza that do occur stay minor, we invited doctors and nurses to JSR's Head Office and the Yokkaichi, Chiba, and Kashima Plants to administer vaccinations to those who desired one.

5) Responses to Legal Risks and Compliance Risks

Click on the following link for information on our responses to legal risks and compliance risks.

> Compliance

Response to the Situation in Ukraine

In response to the situation in Ukraine which has sparked sanctions and stronger regulations in other countries, we are confirming impacts on customers and on the supply chain in the form of the Group's raw materials procurement and transportation in Japan, Asia, Europe and North America. We also introduced measures through explanations provided to employees stationed in Europe and their families. At the same time, we increased awareness of cyberattacks among employees.

We are working on crisis management and business continuity by containing to take appropriate actions while respecting the unique culture and autonomy of our bases around the world.

4. Information Security Measures

JSR Group endeavors to manage information in an appropriate and secure manner by establishing Information Security Policy and by thoroughly disseminating the policy to its employees.

Information Security Policy

- JSR Group, by complying with laws and regulations and by observing other social norms relating to the handling of information, will protect information that belong to JSR Group, its customers, business partners and other third parties.
- JSR Group will strive to develop and actively use its information assets for the efficient execution of its business. Officers and employees will only use these information assets for the purposes of their work and within the scope of their authority.
- JSR Group will improve organizations and systems, provide education on information security, thoroughly disseminate this policy and related regulations, and implement measures to ensure information security.

- JSR Group will implement appropriate human, organizational, and technological measures and work to prevent unauthorized access to information assets from outside the company, as well as leaks, falsification, loss, theft and destruction of information assets.
- If an information security-related problem occurs, JSR Group will promptly identify the cause and take measures to minimize damage and prevent recurrences.
- JSR Group will periodically assess and review its information security measures to respond appropriately to changes in external environments.

Established January 2006

Having established an Information Security Policy, JSR Group is working on the appropriate management of information by making this policy known to all employees. In August 2019, we established the Cybersecurity Management Office as the department in charge. We are working alongside outside experts on information security management including Group companies, employee training and education, and strengthening our response capabilities to cyberattacks or other incidents.

In FY2014, we published the Information Security Handbook so as to further increase employee sensitivity toward information leakage risks and to ensure their actions are in compliance with company rules at all times. We make employees aware of this handbook through our company intranet, e-learning, and workplace discussions. In FY2021, JSR conducted a cyberattack response drill.



Information Security Handbook

Communication with Stakeholders



1. Philosophy ▾

2. Examples of communication with stakeholders ▾

1. Philosophy

In our management policy, the JSR Group specifies "Responsibilities toward Stakeholders", which expresses our responsibilities as a member of society. We are promoting approaches that contribute to all stakeholders, including customers/business partners, employees, society/environment and shareholders.

As a result, as a concrete guideline that is common throughout our global sites, we have established the JSR Group Principles of Corporate Ethics. Each employee is making approaches toward resolving challenges while valuing bi-directional dialogues with stakeholders, based on shared, fundamental values such as a corporate philosophy, management policy, behavioral guideline, etc.

> [The JSR Group's Essential Elements](#)

2. Examples of communication with stakeholders

Stakeholder	JSR Group's Responsibility	Main methods / opportunities for dialogue
Customers / Business Partners	<ul style="list-style-type: none"> ■ Never cease to challenge changes and evolve, to support the diverse material needs of the ever-changing times. ■ Aim for sustainable improvement of customer satisfaction. ■ Approach all business partners with sincerity, and always continue maintaining fair and equitable business relations. ■ Continue considering the environment and society in supply chains. 	<p>Customers</p> <ul style="list-style-type: none"> ■ Received Excellent Partner Award from Sony Semiconductor Solutions Group ■ Received Excellent Performance Award from TSMC ■ Providing information through SDS (safety data sheet), website, etc. ■ Quality Assurance Support ■ Implementation of customer satisfaction surveys ■ Support of CSR surveys from customers <p>Business Partners</p> <ul style="list-style-type: none"> ■ Communication through purchasing activities such as Partner Awards ■ Support of CSR surveys from business partners ■ Distribution of JSR Group Human Rights Policy and CSR Procurement Policy ■ Supplier hotline
Employees	<ul style="list-style-type: none"> ■ Evaluate each employee based on fair standards. ■ Provide opportunities for employees to constantly challenge themselves. ■ Continue providing opportunities for employees to mutually recognize each others' personalities and diversity, and to flourish together. 	<ul style="list-style-type: none"> ■ Labor-Management council and workplace meetings ■ Commendation system ■ Employee awareness survey and employee engagement survey ■ Various training programs (stratified education, technical training, etc.) ■ Corporate climate reform activities (interactive education, OJT promotion activities, communication improvement activities, etc.) ■ Activities to promote sustainability and Responsible Care <p>> For details about our health and productivity management initiatives, click here.</p> <p>> For details about work-life management at the JSR Group, click here.</p>
Local / Society	<ul style="list-style-type: none"> ■ As a responsible member of local society, continue carrying out business activities that take the environment and safety into consideration (responsible care). 	<ul style="list-style-type: none"> ■ Participation in local responsible care dialogues (at plants) ■ Local cleanup activities (plants, research labs) ■ Participation in environmental conservation activities,

Stakeholder	JSR Group's Responsibility	Main methods / opportunities for dialogue
	<ul style="list-style-type: none"> ■ Continue providing environment-conscious products that support the needs for global environmental conservation, including reduction of local environmental burdens. ■ Make efforts to reduce environmental burdens that are generated from the product lifecycle as a whole, and continue making considerations to the environment and safety. ■ Continue actively contributing to the preservation of biodiversity through business activities. 	<p>such as beach clean-ups and forest preservation</p> <ul style="list-style-type: none"> ■ Participation in visiting lectures at schools and in projects to develop skilled workers ■ Participation in social welfare activities (blood donation, fundraising activities, etc.) ■ Contribution towards disaster areas, support for employee volunteer activities <p>> For details about our social contribution activities, click here.</p>
Shareholders / Investors	<ul style="list-style-type: none"> ■ Create business opportunities through materials and aim to expand corporate value. ■ Constantly improve management efficiency. ■ Become a company that is trusted by shareholders, through highly-transparent and robust corporate management. 	<ul style="list-style-type: none"> ■ General Meeting of Shareholders ■ Corporate strategy meeting, financial results briefing, individual meetings with investors and analysts ■ Publication of JSR Report (Integrated Report) ■ Provision of information through websites <p>> Corporate Governance Report (PDF : 1.1MB) </p>

Responsible Care Index



— Management System

- > Responsible Care

— Environmental Conservation

- > Overview of Environmental Initiatives and Environmental Impact
- > Climate Change Mitigation
- > Conservation of Water Resources
- > Waste Reduction
- > Biodiversity Conservation
- > Initiatives to Prevent Pollution
- > Environmental Accounting

— Occupational Safety, Security and Accident Prevention

— Logistics Safety

— Chemical and Product Safety

- > Chemical Management
- > Product Safety

— Communication with Society

- > Communication with Stakeholders

Responsible Care



1. Responsible Care Policy

2. RC Advancement Structure

3. Environment and Safety Management

4. Stakeholder Engagement

5. Disclosure of Legal and Regulatory Violations

1. Responsible Care Policy

(1) Policy

Seeing occupational safety, security and accident prevention, environmental conservation, and product safety as key foundations for its business activities, the JSR Group conducts all business undertakings under the following Responsible Care® (RC) policy.

1. We strive to ensure the safety of employees and local communities, and to contribute to environmental conservation and a sustainable global environment by ascertaining risks associated with our business activities and executing countermeasures.
2. We strive to comply with laws, ordinances, and voluntary regulations by gathering information on and ensuring the full development of laws and regulations required for business activity.
3. We strive to ensure the safety of our products by developing products with consideration for safety, health, and the environment and providing information about them.

> What is Responsible Care® (RC)?

(2) International Initiatives

JSR Signs Declaration Supporting RC Global Charter

The Responsible Care (RC) Global Charter is a voluntary activity policy adopted by the International Council of Chemical Associations (ICCA) and shared by the chemical industry to enhance and reinforce RC activities around the world.

JSR subscribes to this activity policy, and has signed a declaration supporting the RC Global Charter in October 2008. JSR has also signed the revised RC Global Charter in March 2015. By signing this declaration, JSR has committed itself to making even greater contributions to health, safety, and environmental preservation not just in Japan, but around the world.



Declaration of support for RC Global Charter

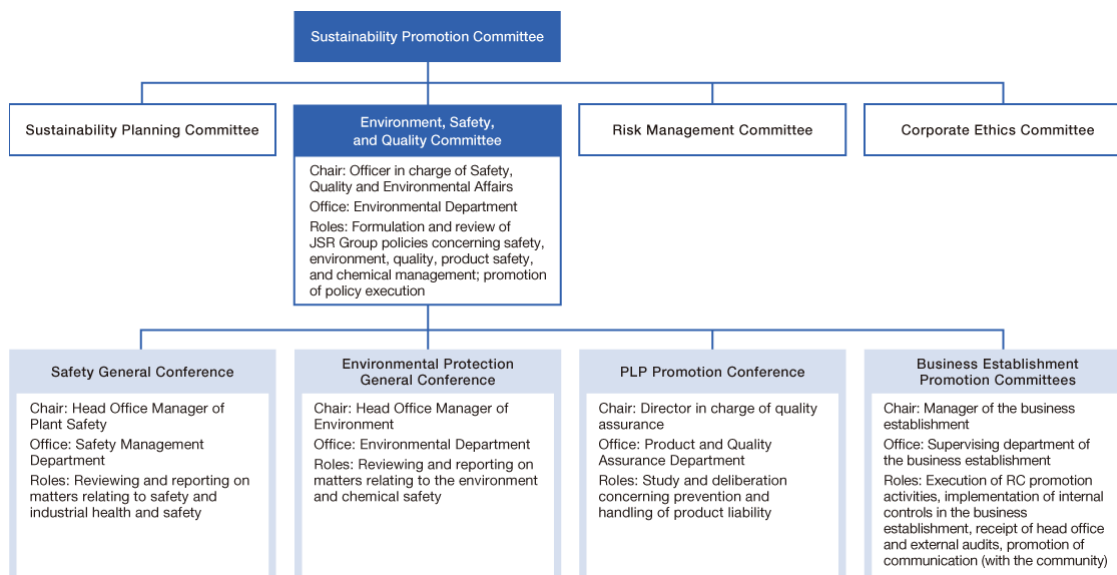
2. RC Advancement Structure

Led by the officer in charge of safety, quality and environmental affairs, the Environment, Safety and Quality Committee formulates activity policies and action plans concerning JSR Group's environment, safety, quality, product safety, chemical management, and other matters and manages the results of those activities.

For the execution of concrete operations, the Environment, Safety and Quality Committee sets up various meetings and committees and then proceeds according to plans.

Additionally, contents deliberated on and approved by this Committee are presented to the Sustainability Promotion Committee, of which the President serves as the chairperson.

Advancement Structure Diagram



Note: The Environmental Dept. and Safety Management Dept. were combined into the Environmental and Safety Dept. in April 2022.

> Details of the Sustainability Promotion Committee and Four Committees (Sustainability Management and Advancement Structure)

3. Environment and Safety Management

(1) Compliance

When environmental and safety laws are adopted, enacted, or amended, the Head Office distributes information to each business site to keep them fully informed. The JSR Group identifies laws and regulations requiring compliance based on compliance regulations and conducts annual self-checks to ensure that business departments conform with laws and regulations.

Additionally, we actively promote all plants to acquire plant and operator certification under Japan's Fire Service Act and Industrial Safety and Health Act in order to strengthen our safety management systems, prevent accidents, and improve our responses to emergencies. We will continue to maintain and upgrade certifications with the aim of improving safety and preventing accidents.

- > Occupational Safety, Security and Accident Prevention "4. Legal Compliance Management"
- > 5. Disclosure of Legal and Regulatory Violations

(2) Environmental Management System

By 1999, all three main domestic JSR plants had acquired ISO 14001 certification, an Environment Management System that supports environmental management. We have kept our certifications up to date each year since. We completed our compliance with the ISO 14001 revisions that were released in September 2015 at all three of our plants by January 2018.

JSR Group companies, mainly manufacturing companies, have also obtained ISO 14001 certification, and are promoting environmental conservation activities using a management system that complies with this standard.

ISO 14001 Certification (Manufacturing Bases)

(As of March 31, 2022)

JSR (3 locations)	Domestic Group companies (6 companies)	Overseas Group companies (10 companies)
Yokkaichi Plant Chiba Plant Kashima Plant	Emulsion Technology, Co., Ltd. Techno-UMG Co., Ltd. Japan Coloring Co., Ltd. UBE JYUSHIKAKOU, LTD. JSR Micro Kyushu Co., Ltd. Elastomix Co., Ltd.	JSR Micro N.V. EUV Resist Manufacturing & Qualification Center N.V. JSR Micro, Inc. JSR Micro Korea Co., Ltd. JSR Micro (Changshu) Co., Ltd. JSR BST Elastomer Co., Ltd. ELASTOMIX (FOSHAN) CO., LTD. PT.ELASTOMIX INDONESIA ELASTOMIX (THAILAND) CO.,LTD. JSR MOL Synthetic Rubber Ltd.


(3) Safety Management System

JSR has established and operates a safety management system tailored to the unique situation of each business site. This system sets forth procedures and

rules on accident prevention and occupational safety pursuant to the Safety Management Regulations.

To verify the effectiveness of this management system, we conduct Headquarters Environment and Safety Audits headed up by the President, while each business site takes the lead in carrying out internal safety audits and patrols along with management reviews regularly every year in an effort to achieve continuous improvement.

We have also compiled a manual that describes appropriate and effective actions should an accident occur and ways to prevent damages from escalating. As of March 2022, four business sites at JSR Group companies had obtained ISO 45001 certification.

- > Occupational Safety, Security and Accident Prevention “1. Safety Philosophy, Management System and Advancement Structure”
- > ESG Data 2022(PDF : 344KB) 

(4) Audits

Headquarters Environment and Safety Audits and Certified High-Pressure Gas Establishment Audits

JSR regularly conducts audits of the company’s plants and research laboratories, with the President acting as head of the auditing team, every year. In FY2015, we switched to a style whereby issues and challenges faced by audited departments are shared and discussed. We also set up opportunities for dialogue between top management and employees so that the two sides can share thoughts in an effort to stimulate environmental and safety activities.

Similar to FY2020, all business sites of JSR (Yokkaichi Plant, Chiba Plant, Kashima Plant, Tsukuba Research Laboratories) were targeted in these audits conducted in FY2021. Given the COVID-19 pandemic, we conducted audits virtually and postponed onsite inspections as was the case in the previous year. Audits used key points of emphasis to confirm the compliance status of each business site based on risk-based process safety (RBPS).

Furthermore, Headquarters Environment and Safety Audits on Group companies were postponed due to COVID-19 pandemic and in consideration of the transfer of the elastomers business.

In our Certified High Pressure Gas Establishment Audits, we found no cases of non-compliance at any of the targeted business establishments.

Details on the Safety Audits and Certified High-Pressure Gas Establishment Audits are available at the following link.

- > Occupational Safety, Security and Accident Prevention “3. Activity Record: Security and Accident Prevention (3) RBPS-based Safety Audits”

(5) Environment Merit Award

At JSR, to further encourage environmental protection activities, we created the Environment Merit Award for employees who have made important contributions to environmental protection through a range of activities that include environmental product and technology development, environmental impact reduction, and assisting local communities with environment-related issues. Twenty-eight employees received this award for seven areas of excellence in FY2021.

Business establishment	Description
Yokkaichi Plant	Reduction of sludge emissions by reducing drainage load
Yokkaichi Plant	Reduction of GHG emissions from coal-fired boilers following introduction of advanced control system
Yokkaichi Plant	Reduction of waste emissions from boilers by optimizing fuel coal type
Yokkaichi Plant	Reduction of waste emissions by converting non-standard goods into valuable materials
Chiba Plant	Reduction of high concentration PCB waste by establishing a sorting and disassembly process for PCB stabilizers
Yokkaichi Plant	Reduction of CO ₂ emissions by removing filter blockages
Kashima Plant	Improvement of work environment by changing the solvent used for rubber product testing

4. Stakeholder Engagement

By identifying new issues through dialogue with stakeholders and making continuous improvement applying the PDCA cycle, we aim to fulfill stakeholder needs and to help build a better society. Please access the links below for more details.

- > Communication with Stakeholders

5. Disclosure of Legal and Regulatory Violations

In FY2021, there were no legal violations by JSR with regard to laws on the environment, safety, quality, product safety and chemicals.

We continue to implement measures to prevent recurrences of past incidents and we strive toward prevention by regularly sharing case studies in legal and regulatory violations including those involving other companies.

What is RC?

RC is an acronym for Responsible Care®. In the chemical industry, each company handling chemical substances is responsible for ensuring that safety, health, and environmental issues are addressed throughout the chemical lifecycle, from development and production to distribution, use, and disposal, publishing the results of their activities and maintaining dialogue and communication with society - all voluntarily. This initiative is called "Responsible Care."



Started in Canada in 1985, Responsible Care is practiced in the chemical industries of 62 countries and regions of the world (as of 2017). It has attracted considerable international attention as a unique initiative unseen in other industries, and is even encouraged in an action plan (Agenda 21) for implementation by countries and related international organizations to achieve sustainable development in the 21st century that was adopted at the "Earth Summit" (United Nations Conference on Environment and Development) held in Rio de Janeiro, Brazil in June 1992.

> [Japan Chemical Industry Association HP What Is Responsible Care?](#) 

Editorial Policy

1. Editing Concept ▾

2. Positioning of Sustainability Site ▾

3. Referenced Guidelines ▾

4. Target Period and Fiscal Year ▾

5. Operations Covered ▾

6. Independent Review ▾

7. Major Organizations and Initiatives We Take Part In ▾

8. Publication Information ▾

9. Definitions of Terms, Notations ▾

1. Editing Concept

Where JSR Aims to Go

Under the corporate mission of "Materials Innovation - We create value through materials to enrich society, people and the environment," JSR Group aims to build and maintain good relations with all of our stakeholders and become a trusted and indispensable corporate citizen. To this end, the Group will contribute to the realization of a sustainable global environment and society by creating value through its corporate activity and based on this corporate mission.

Establishment and Disclosure of Sustainability KPIs

Beginning with this report, JSR Group is disclosing our sustainability KPIs ("KPIs"). We chose to do this to help our stakeholders understand the initiatives we are taking to solve sustainability issues and the progress we are making.

We started the process of establishing KPIs in June 2021. For each material issue of JSR Group, we set an objective, a KPI, a goal, and a scope. We based these on social trends and discussions with concerned parties within the Group. The Board of Directors approved the KPIs in December 2021, and in May 2022, we announced them publicly. We will continue our sustainability initiatives going forward as we strive to reach the goals we outlined.

About the Report

In continuation of the previous year, we edited the report while being impacted by the spread of COVID-19.

The transfer of the Elastomers Business, which we announced in May 2021, was completed as planned on April 1, 2022. That makes FY2022 the first year of a new JSR built primarily around the Digital Solutions Business and Life Sciences Business. Although the Elastomers Business will no longer be in the scope of our reporting from FY2022, the report of FY2021 initiatives, presented here, still includes the Elastomers Business within its scope. Readers should be aware that the way results are reported may be confusing at times because of this period of transition.

This time, we have added a new feature, entitled "JSR Sustainability at a Glance," that describes JSR Group's sustainability initiatives simply for stakeholders, students, and general readers. We have also included a message from the officer in charge of sustainability promotion as well as an account of material issues arranged in terms of ESG (environment, social, governance) to assist the reader in comprehending sustainability as a whole at JSR. We also present related numerical data in the ESG Data section. Please note that we will not publish a Highlight Version.

2. Positioning of Sustainability Site

The sustainability site offers comprehensive non-financial information about JSR. The site is provided with the approval of the Sustainability Promotion Committee.

Information Disclosure System and Target Readers

Information Disclosure System and Target Readers



3. Referenced Guidelines

- United Nations Guiding Principles on Business and Human Rights
- Environmental Accounting Guidelines 2005 / Environmental Reporting Guidelines 2012, Ministry of the Environment
- Environmental Accounting Guidelines for Chemical Companies, Japan Chemical Industry Association (JCIA)
- Global Reporting Initiative (GRI) Standards

4. Target Period and Fiscal Year

April 1, 2021 - March 31, 2022
(Some sections include activities conducted during other periods)

5. Operations Covered

The Entire Report

JSR Group: 68 companies

- JSR:
Head Office, Yokkaichi Plant, Chiba Plant, Kashima Plant, Yokkaichi Research Center, Tsukuba Research Laboratories, JSR-Keio University Medical and Chemical Innovation Center, JSR Bioscience and informatics R&D center (JSR BiRD), Nagoya Branch, Taiwan Branch
- Group Companies:
23 domestic Group companies, 44 overseas Group companies
(Current as of March 31, 2022)

RC Data (Environment, Safety, Health)

JSR Group: 22 companies

- JSR:
Head Office, Yokkaichi Plant, Chiba Plant, Kashima Plant, Yokkaichi Research Laboratories, Tsukuba Research Laboratories, JSR Bioscience and informatics R&D center (JSR BiRD), Nagoya Branch
- Group Companies:

9 domestic Group companies, 12 overseas Group companies^{*}
(Current as of March 31, 2022)

^{*} See "ESG Data" for information on Group businesses covered by RC data

> ESG Data (PDF: 344KB) 

6. Independent Review

JSR transferred its Elastomers Business, along with the utilities departments of places such as the Yokkaichi Plant, one of our major plants in Japan, to ENEOS Corporation in April 2022.

Because of these structural transitions, we did not conduct an independent review this year, but plan to resume next year and continue it thereafter.

7. Major Organizations and Initiatives We Take Part In

- United Nations Global Compact
- Japan Chemical Industry Association (JSR's Representative Director, President, COO serves as a Director of the association)
- TCFD Consortium
- Etc.

8. Publication Information

- Date of publication: November 2022
- Next scheduled issue: October 2023
(Previous issue: October 2021)

9. Definitions of Terms, Notations

- Definitions of business activities, management foundation, corporate activity

Corporate activity:
Activity that includes both business activities and management foundation

Business activities:
Activities that provide products and services

Management foundation:
Activities of units involved in manufacturing and company management

- Definitions of terms

JSR Group: JSR and its Group companies

JSR: JSR Corporation

- A note on numerical values

Absolute values and percentages are rounded off. Therefore, the total of individual numbers listed may not exactly equal the total shown.

Evaluation by Outside Organization

1. Inclusion in ESG and SRI Indexes
(current as of July 1, 2022)

2. Evaluation by Other than ESG Rating
Organizations

3. Independent Review

1. Inclusion in ESG and SRI Indexes (current as of July 1, 2022)

JSR Group is highly regarded for its non-financial initiatives, as evidenced by JSR Corporation's inclusion in global socially responsible investment (SRI) indexes. Additionally, JSR Corporation has been selected for inclusion in five ESG indexes that cover Japanese stocks and are used by the Government Pension Investment Fund (GPIF): the FTSE Blossom Japan Index, FTSE Blossom Japan Sector Relative Index, MSCI Japan ESG Select Leaders Index, MSCI Japan Empowering Women Index (WIN), and S&P/JPX Carbon Efficient Index.

— FTSE Blossom Japan Index

— FTSE Blossom Japan Sector Relative Index

FTSE Russell selected JSR Corporation as a constituent of the FTSE Blossom Japan Index and FTSE Blossom Japan Sector Relative Index as a Japanese company with excellent ESG initiatives.



FTSE Blossom Japan Index



FTSE Blossom Japan Sector Relative Index

— FTSE4Good

FTSE Russell has selected JSR Corporation for 17 consecutive years since 2004 as a constituent of the FTSE4Good Index Series.



FTSE4Good

— MSCI Japan ESG Select Leaders Index

— MSCI ESG Leaders Indexes

JSR Corporation was selected as a constituent of the MSCI Japan ESG Select Leaders Index and MSCI ESG Leaders Indexes as a company with outstanding ESG performance.*

2022 CONSTITUENT MSCI JAPAN
ESG SELECT LEADERS INDEX



— MSCI Japan Empowering Women Index (WIN)

MSCI selected JSR Corporation as a constituent of the MSCI Japan Empowering Women Index (WIN) as a company with excellent gender diversity.*

2022 CONSTITUENT MSCI JAPAN
EMPOWERING WOMEN INDEX (WIN)

— S&P/JPX Carbon Efficient Index

The S&P Dow Jones Index selected JSR Corporation as a constituent of the S&P/JPX Carbon Efficient Index.



— Sompo Sustainability Index

Sompo Asset Management once again selected JSR Corporation as a constituent of the Sompo Sustainability Index as a company with excellent ESG initiatives.



Sompo Sustainability Index

* The inclusion of JSR Corporation in MSCI indexes, as well as the use of the MSCI logo, trademark, service mark and index name, does not constitute support, endorsement, or promotion of MSCI or any MSCI-affiliated company by JSR Corporation. MSCI indexes are the sole property of MSCI. MSCI and all MSCI index names and logos are the trademark or service mark of MSCI and its affiliated companies.

2. Evaluation by Other than ESG Rating Organizations

— 2022 Certified Health and Productivity Management Outstanding Organization (Large Enterprise Category)

JSR Corporation was named a 2022 Certified Health and Productivity Management Outstanding Organization (Large Enterprise Category) of the Ministry of Economy, Trade and Industry.



— 2022 Certified Health and Productivity Management Outstanding Organization (SME Category)

Four JSR Group companies were named 2022 Certified Health and Productivity Management Outstanding Organizations (SME Category) of the Ministry of Economy, Trade and Industry.

- Emulsion Technology Co., Ltd.
- JSR Micro Kyushu Co., Ltd.
- JSR Health Insurance Society
- JSR Logistics & Customer Center Co., Ltd.



3. Independent Review

JSR Group transferred its elastomers business, along with the utilities departments of places such as the Yokkaichi Plant, one of our major plants in Japan, to ENEOS Corporation in April 2022.

Because of the structural transition, we did not conduct an independent review this year, but plan to resume next year and continue it thereafter.

Report Archive



1. JSR Group Sustainability Report

2. JSR North America Holdings, Inc. Sustainability Report

3. JSR Micro N.V. CSR Report

4. JSR Plant Responsible Care Reports

1. JSR Group Sustainability Report

The name of the report was changed to Sustainability Report in 2020.

JSR Group Sustainability Report 2022 (April 1, 2021 - March 31, 2022)



> Website

The sustainability site may be updated after October 2022.

JSR Group Sustainability Report 2021 (April 1, 2020 - March 31, 2021)

> Website

> PDF version (13.9MB)

The PDF version contains our sustainability site as of October 2021.

JSR Group Sustainability Report 2020 (April 1, 2019 - March 31, 2020)

> Website

CSR Report 2019 (April 1, 2018 - March 31, 2019)

> Detailed Version Website

> Highlight Version [Two-Page Spread Type] (PDF 4.6MB)

> Highlight Version [A4-Size Page Type] (PDF 4.6MB)

CSR Report 2018 (April 1, 2017 - March 31, 2018)

> Detailed Version Website

> Highlight Version (PDF 5.7MB)

CSR Report 2017 (April 1, 2016 - March 31, 2017)

> Online Version

> Highlight Version (PDF 4.8MB)

CSR Report 2016 (April 1, 2015 - March 31, 2016)

> Online Version


> Print Version (PDF 4.6MB)

CSR Report 2015 (April 1, 2014 - March 31, 2015)


> Online Version

- > [Highlight Version \(PDF 6.7MB\)](#) 

CSR Report 2014 (April 1, 2013 - March 31, 2014)

- > [Online Version](#)
- > [Print Version \(PDF 11.5MB\)](#) 

CSR Report 2013 (April 1, 2012 - March 31, 2013)

- > [Online Version](#)
- > [Print Version \(PDF 5.1MB\)](#) 

2. JSR North America Holdings, Inc. Sustainability Report

Since 2020, JSR North America Holdings, Inc. has published a Sustainability report.



- > [JSR North America Holdings, Inc. Sustainability Report 2022 \(Website\)](#)

- > [JSR North America Holdings, Inc. CSR Report 2020 \(PDF 2.6MB\)](#) 
- > [JSR Micro, Inc. CSR Report 2018 \(PDF 2.7MB\)](#) 
- > [JSR Micro, Inc. CSR Report 2016 \(PDF 5.1MB\)](#) 
- > [JSR Micro, Inc. CSR Report 2014 \(PDF 4.5MB\)](#) 

3. JSR Micro N.V. CSR Report



- > [JSR Micro N.V. CSR Report 2021 \(PDF 2.9MB\)](#) 

- > [JSR Micro N.V. CSR Report 2019 \(PDF 1.9MB\)](#) 
- > [JSR Micro N.V. CSR Report 2017 \(PDF 0.8MB\)](#) 
- > [JSR Micro N.V. CSR Report 2015 \(PDF 4.3MB\)](#) 

4. JSR Plant Responsible Care Reports

Responsible care report of each Plant (Japanese only)

- > [Yokkaichi Plant Responsible Care Report](#)
- > [Chiba Plant Responsible Care Report](#)
- > [Kashima Plant Responsible Care Report](#)

JSR Group Profile

1. JSR Profile ▾

2. JSR Group's Major Business ▾

3. JSR Group's Major Business Establishments, Plants ▾

4. JSR Group Companies ▾

5. Financial Information ▾

1. JSR Profile (as of March 31, 2022)

Company name	JSR Corporation
Established	December 10, 1957
Head office	Shiodome Sumitomo Building, 1-9-2 Higashi-Shimbashi, Minato-ku, Tokyo, Japan
Representative Director and CEO	Eric Johnson
Representative Director, President and COO	Nobuo Kawahashi
Capital	23,370 million yen
Number of employees (consolidated)	9,696 (2,489 of which work in the Elastomers Business)

2. JSR Group's Major Business (as of April 1, 2022)

The manufacture and sale of the following products

Type of business		Main products
Digital Solutions Business	Semiconductor Materials	Lithography materials (photoresists and multi-layered materials), packaging materials, cleaning solutions, CMP materials.
	Display Materials	Color liquid crystal display (LCD) materials, organic electroluminescence display materials.
	Edge Computing	Heat-resistant transparent resin, functional films, stereolithography, photo molding.
Life Sciences Business		Services to support drug discovery, diagnostic/research reagents and materials, bioprocess materials
Plastics Business		Synthetic resins such as ABS resin, AES resin, AS resin, and ASA resin
Other Businesses		Purchasing and selling of chemicals.

3. JSR Group's Major Business Establishments, Plants (as of April 1, 2022)

(1) JSR

Head office	1-9-2 Higashi-Shimbashi, Minato-ku, Tokyo, Japan	
Branches	Nagoya Branch	Nagoya City, Aichi Prefecture
Plants	Yokkaichi Plant	Yokkaichi City, Mie Prefecture
	Chiba Plant	Ichihara City, Chiba Prefecture

Research centers and laboratories	Yokkaichi Research Center	Display Solution Research Laboratories	Yokkaichi City, Mie Prefecture
		Fine Electronic Materials Research Laboratories	Yokkaichi City, Mie Prefecture
		Edge Computing Research Laboratories	Yokkaichi City, Mie Prefecture
	Tsukuba Research Laboratories		Tsukuba City, Ibaraki Prefecture
	JSR-Keio University Medical and Chemical Innovation Center		Shinjuku-ku, Tokyo
	JSR-UTokyo Collaboration Hub, CURIE		Bunkyo-ku, Tokyo
	JSR Bioscience and informatics R&D Center		Kawasaki City, Kanagawa Prefecture
Overseas branch	Taiwan Branch	Taiwan	

(2) Important Subsidiaries and Affiliates

Business division	Company Name	Headquarters
Digital Solutions Business	JSR Micro N.V.	Belgium
	JSR Micro, Inc.	United States
	JSR Micro Korea Co., Ltd.	Korea
	JSR Micro Taiwan Co., Ltd.	Taiwan
	JSR Micro (Changshu) Co., Ltd.	China
Life Sciences Business	JSR North America Holdings, Inc.	United States
	Medical & Biological Laboratories Co., Ltd.	Nagoya City, Aichi Prefecture
	KBI Biopharma, Inc.	United States
	Selexis SA	Switzerland
	Crown Bioscience International	United States
Plastics Business	Techno-UMG Co., Ltd.	Minato-ku, Tokyo
	Japan Coloring Co., Ltd.	Yokkaichi City, Mie Prefecture
Other businesses	JSR Trading Co., Ltd.	Minato-ku, Tokyo

(Note) JSR North America Holdings, Inc. oversees global operations for JSR's Digital Solutions Business and Life Sciences Business in North America, through its wholly owned subsidiaries. JSR Micro N.V. also manufactures and sells Life Sciences products.

4. JSR Group Companies (as of March 31, 2022)

Consolidated companies: 52
 Non-consolidated subsidiaries: 8
 Equity-method affiliates: 7
 Scope of RC reporting: 22

Details are provided in ESG Data.

> ESG Data: JSR Group Companies (PDF 344KB) 

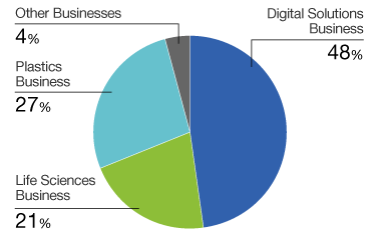
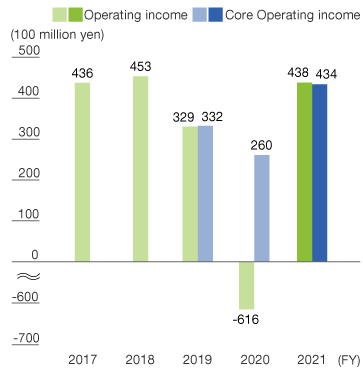
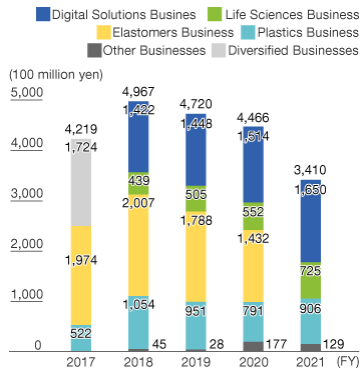
5. Financial Information

JSR Group transferred its Elastomers Business effective April 1, 2022. Financial results data published for FY2021 excludes the Elastomers Business.

Revenue (consolidated)

Operating Income/Core Operating Income
(consolidated)

FY2021 Revenue (Consolidated) Composition
Ratios



Note: Reporting segment classifications were changed in FY2018.

JSR Group ESG Data

Contents

Environment Data	P 1 3 3
Social Data	P 1 3 9
Governance Data	P 1 4 6
JSR Group Companies	P 1 5 4

Unless otherwise noted, FY (Fiscal Year) means the year starting April 1st. For example, FY2021 means April 1, 2021 - March 31, 2022

For both absolute values and percentages, numerical values that fall below the shown number of digits are rounded off. For this reason, the sums of individual numbers may differ from the sum values provided.

The numerical values in **red indicate places** where we have revised last year's values.

The post-business transfer base for FY2021 refers to numerical values (reference values) we have calculated by subtracting the parts relating to the elastomer business from the actual values for FY2021.

We transferred our Elastomer business to ENEOS Corporation in April 2022. In line with that, we also transferred the Utility Department of our Yokkaichi Plant which is our main plant in Japan. We postponed third-party verification in this fiscal year due to the transition to these new structures. However, we plan to resume and continue third-party verification from the next fiscal year onward.



JSR Corporation

Created Sep., 2022

Corrected Dec., 2022

(Education and training expenses on Page 142)

◆ Environment Data

Environmental Impact of Business Activities

Category	Items	Boundary ※			Unit	FY2017	FY2018	FY2019	FY2020	FY2021	FY2021 Ex elastomer business			
		A	B	C										
I n p u t D a t a	Raw materials consumption		○	○	○	1,000 kL	1,400	1,394	1,267	1,042	1,306	345		
			○	○	○		828	823	707	589	757	7		
			○	○	○		428	417	358	318	369	332		
			○	○	○		144	154	202	134	181	6		
	Energy consumption	(Crude oil equivalent)		○	○	○	1,000 kL	421	429	400	369	439	109	
				○	○	○		266	269	251	230	254	26	
				○	○	○		77	77	68	66	72	67	
		Intensity			○	○	○	kL/ton	0.35	0.36	0.38	0.42	0.37	-
									0.18	0.18	0.18	0.20	0.19	-
									0.56	0.58	0.48	0.56	0.59	-
	Water consumption	(Excluding seawater)		○	○	○	1,000 m ³	19,578	20,894	20,632	18,734	21,710	3,985	
				○	○	○		14,259	15,275	14,888	13,620	15,133	231	
				○	○	○		3,822	3,681	3,970	3,619	3,972	3,582	
				○	○	○		1,497	1,938	1,774	1,495	2,605	172	
		Intensity			○	○	○	m ³ /ton	19.0	20.5	22.5	25.1	21.9	-
									8.7	8.5	10.6	10.9	10.6	-
									10.9	13.5	10.5	11.5	13.7	-
		Industrial water			○	○	○	1,000 m ³	13,667	14,790	14,309	13,193	14,672	114
									200	172	171	169	186	117
									393	313	408	259	275	0
55,011	64,296								56,354	51,319	55,370	5,996		
Recycled water			○	○	○	1,000 m ³	4,250	4,481	4,210	3,624	4,322	-		
							29.8	29.3	28.3	26.6	28.6	-		
Effective use rate of recycled water			○	○	○	%	29.8	29.3	28.3	26.6	28.6	-		
							29.8	29.3	28.3	26.6	28.6	-		
O u t p u t D a t a	Total generated		○	○	○	1,000 tons	1,330	1,320	1,205	1,006	1,255	348		
			○	○	○		752	746	661	543	691	3		
			○	○	○		440	431	375	333	374	339		
			○	○	○		137	144	169	130	190	5		
	Industrial waste generation			○	○	○	1,000 tons	72	72	70	67	66	20	
				○	○	○		49	50	47	49	47	5	
				○	○	○		18	16	16	11	10	10	
				○	○	○		5	7	7	7	8	5	
		Comparison with FY2013			○	○	○	%	-5.5	-4.5	-10.2	-6.4	-8.8	-
	Intensity			○	○	○	Tons/tons	0.065	0.067	0.071	0.090	0.069	-	
								0.040	0.037	0.044	0.034	0.028	-	
								0.039	0.046	0.041	0.051	0.044	-	
	Recycled waste			○	○	○	1,000 tons	39	38	41	34	40	17	
				○	○	○		23	21	23	21	24	5	
				○	○	○		14	12	12	9	10	8	
				○	○	○		2	5	5	4	6	4	
	Intensity			○	○	○	Tons/tons	0.031	0.028	0.035	0.039	0.035	-	
								0.032	0.028	0.032	0.026	0.026	-	
								0.016	0.037	0.032	0.035	0.031	-	
	Amount of final offsite- landfills			○	○	○	1,000 tons	0.9	0.9	1.9	0.8	1.2	0.1	
○				○	○	0		0	0	0	0	0		
○				○	○	0.2		0.3	1.2	0.2	0.0	0.0		
○				○	○	0.7		0.6	0.7	0.6	1.2	0.1		
Intensity			○	○	○	Tons/tons	0	0	0	0	0	-		
							0.0004	0.0008	0.0033	0.0007	0.0000	-		
			○	○	○		0.0053	0.0039	0.0043	0.0046	0.0062	-		

*Boundaries A: JSR Corporation B: Group companies in Japan C: Group companies in other countries

Category	Items	Boundary ※			Unit	FY2017	FY2018	FY2019	FY2020	FY2021	FY2021 Ex elastomer business	
		A	B	C								
O u t p u t D a t a	Greenhouse gas emissions	Scope1 + Scope2	○	○	○	1,000 tons CO ₂	1,019	1,040	973	892	1,013	260
			○	○	○	653	666	625	568	618	77	
			○	○	○	198	199	176	168	165	156	
		○	○	○	168	175	171	156	229	27		
		Comparison with FY2013	○	○	○	%	1.1	3.1	-3.3	-12.1	-4.3	-
		Intensity	○	○	○	Tons/tons	0.87	0.89	0.95	1.05	0.89	-
	Waste water	Total amount of waste water	○	○	○	1,000 m ³	16,968	17,587	16,049	14,616	16,258	3,940
			○	○	○	12,108	12,479	11,250	10,141	10,728	335	
			○	○	○	3,975	4,077	3,741	3,490	3,713	3,470	
		○	○	○	885	1,031	1,059	984	1,817	134		
		Intensity	○	○	○	m ³ /ton	16.1	16.7	17.0	18.7	15.5	-
			○	○	○	9.0	9.5	10.0	10.5	9.9	-	
	○		○	○	6.4	7.2	6.3	7.6	9.6	-		
	Waste water	COD	○	○	○	Tons	530	580	495	401	486	51
			○	○	○	457	481	404	346	436	1	
			○	○	○	74	98	91	54	50	50	
		Intensity	○	○	○	x10 ⁻⁵ tons/tons	607	645	611	638	631	-
			○	○	○	167	228	243	163	134	-	
			○	○	○	173	144	160	112	148	10	
		Total nitrogen	○	○	○	Tons	156	129	145	102	138	0
			○	○	○	18	14	14	10	10	10	
			○	○	○	207	174	220	188	199	-	
		Intensity	○	○	○	x10 ⁻⁵ tons/tons	41	33	38	31	27	-
	○		○	○	1	1	1	1	1	0		
	○		○	○	0.7	0.6	0.6	0.7	0.6	0.0		
	Total phosphorus	○	○	○	Tons	0.3	0.5	0.4	0.3	0.2	0.2	
○		○	○	0.9	0.7	1.0	1.3	0.8	-			
○		○	○	x10 ⁻⁵ tons/tons	0.7	1.1	1.0	0.8	0.4	-		
○		○	○	0.7	1.1	1.0	0.8	0.4	-			
Atmospheric emissions	SO _x	○	○	○	Tons	13	13	11	11	11	6	
		○	○	○	5	4	4	4	4	0		
		○	○	○	8	8	7	6	6	6		
		○	○	○	0	0	0	0	0	0		
	Intensity	○	○	○	x10 ⁻⁵ tons/tons	0.6	0.6	0.6	0.8	0.6	-	
		○	○	○	1.9	1.9	1.7	1.9	1.6	-		
		○	○	○	0.0	0.0	0.0	0.0	0.2	-		
	NO _x	○	○	○	Tons	375	349	342	287	290	37	
		○	○	○	335	308	303	244	250	0		
		○	○	○	34	33	31	35	31	31		
		○	○	○	6	8	9	7	9	5		
		○	○	○	45	41	46	45	36	-		
	Intensity	○	○	○	x10 ⁻⁵ tons/tons	7.8	7.8	8.2	10.6	8.4	-	
		○	○	○	4.4	5.3	5.1	5.6	4.8	-		
○		○	○	633	575	568	483	607	46			
VOC	○	○	○	Tons	583	536	523	435	572	11		
	○	○	○	50	39	45	47	35	35			
	○	○	○	0.8	0.7	0.8	0.8	0.8	-			
Intensity	○	○	○	Tons/tons	11.3	9.0	12.1	14.2	9.4	-		
	○	○	○	981,530	960,932	842,045	697,162	870,093	207,961			
	○	○	○	739,259	725,727	632,835	523,163	665,910	3,919			
PRTR (In Japan only)	Amount handled	○	○	○	Tons	242,272	235,205	209,210	174,000	204,183	204,042	
		○	○	○	168	134	170	154	153	40		
		○	○	○	119	95	124	106	118	6		
	Atmospheric emissions	○	○	○	Tons	50	39	45	47	35	35	
		○	○	○	10	11	9	8	8	7		
		○	○	○	2	3	2	2	2	0		
	Water supply discharge	○	○	○	Tons	8	8	7	6	7	7	
		○	○	○	1,031	890	897	807	1,060	827		
		○	○	○	445	328	338	348	617	385		
	Transported waste	○	○	○	Tons	586	562	559	458	443	442	
○		○	○									

*Boundaries A: JSR Corporation B: Group companies in Japan C: Group companies other than Japan

Accounting for Greenhouse Gas Emissions Throughout the Supply Chain

Note: From FY 2018, other indirect emissions (Scope 3) category 1 has been changed to be calculated for all JSR Group.

Category	Boundary	FY2017 Emission		FY2018 Emission		FY2019 Emission		FY2020 Emission		FY2021 Emission		FY2021 Emission Ex elastmor business	
		t-CO ₂	ratio (%)	t-CO ₂	ratio (%)	t-CO ₂	ratio (%)	t-CO ₂	ratio (%)	t-CO ₂	ratio (%)	t-CO ₂	ratio (%)
I. Direct emissions (Scope 1)	JSR Group	418,037	25.0	439,556	20.3	408,480	20.3	398,733	22.6	356,660	17.2	35,999	5.9
II. Energy-derived indirect emissions (Scope 2)		601,141	36.0	600,485	27.7	564,108	28.1	492,844	28.0	656,095	31.5	223,508	36.6
III. Other indirect emissions (Scope 3)		649,724	38.9	1,129,175	52.1	1,038,302	51.6	869,723	49.4	1,067,169	51.3	350,683	57.5

I. Direct emissions (Scope 1)	JSR Corporation	383,394	29.9	404,131	31.6	374,483	32.4	365,397	35.5	318,489	26.7	1,944	1.6
II. Energy-derived indirect emissions (Scope 2)		269,797	21.1	262,009	20.5	250,404	21.6	202,192	19.7	299,605	25.2	74,711	62.1
III. Other indirect emissions (Scope 3)		627,963	49.0	614,841	48.0	532,859	46.0	461,577	44.9	572,972	48.1	43,672	36.3
I. Direct emissions (Scope 1)	Group companies in Japan	28,088	13.2	27,067	4.7	24,818	5.0	25,307	5.6	25,552	5.2	24,230	5.4
II. Energy-derived indirect emissions (Scope 2)		169,611	79.5	172,262	30.0	151,569	30.4	142,854	31.5	139,623	28.3	131,846	29.2
III. Other indirect emissions (Scope 3)		15,665	7.3	374,074	65.2	322,890	64.7	284,926	62.9	327,509	66.5	295,027	65.4
I. Direct emissions (Scope 1)	Group companies other than Japan	6,555	3.8	8,358	2.7	9,179	2.6	8,028	2.9	12,619	3.2	9,825	25.4
II. Energy-derived indirect emissions (Scope 2)		161,734	92.7	166,215	52.8	162,135	45.8	147,798	53.0	216,867	54.7	16,951	43.7
III. Other indirect emissions (Scope 3)		6,096	3.5	140,260	44.6	182,553	51.6	123,221	44.2	166,688	42.1	11,984	30.9

Other indirect emissions (Breakdown of Scope 3)

(1) JSR Corporation

Category	Contents	FY2017 Emission		FY2018 Emission		FY2019 Emission		FY2020 Emission		FY2021 Emission		FY2021 Emission Ex elastmor business	
		t-CO ₂	ratio (%)	t-CO ₂	ratio (%)	t-CO ₂	ratio (%)	t-CO ₂	ratio (%)	t-CO ₂	ratio (%)	t-CO ₂	ratio (%)
Category 1	Purchased goods and services	547,887	87.2	540,653	87.9	447,580	84.0	371,339	80.5	493,598	86.2	6,047	13.9
Category 2	Capital goods	40,628	6.5	35,907	5.8	51,266	9.6	61,278	13.3	46,426	8.1	32,727	74.9
Category 3	Fuel and energy related activities not included in Scope 1 or 2	6,788	1.1	6,958	1.1	6,217	1.2	6,530	1.4	6,157	1.1	0	0.0
Category 4	Transportation and delivery (upstream)	13,177	2.1	13,112	2.1	10,706	2.0	7,559	1.6	8,537	1.5	188	0.4
Category 5	Waste from business operations	6,886	1.1	5,738	0.9	6,154	1.2	5,436	1.2	7,674	1.3	3,285	7.5
Category 6	Business travel	328	0.1	338	0.1	347	0.1	354	0.1	350	0.1	201	0.5
Category 7	Employee commuting	1,184	0.2	1,221	0.2	1,255	0.2	1,278	0.3	1,263	0.2	726	1.7
Category 8	Leased assets (upstream)	19	0.0	19	0.0	22	0.0	14	0.0	19	0.0	15	0.0
Category 9	Transportation and delivery (downstream)	11,065	1.8	10,894	1.8	9,312	1.7	7,790	1.7	8,948	1.6	483	1.1
Category 10	Processing of sold products	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Category 11	Use of sold products	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Category 12	Disposal of sold products	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Category 13	Leased assets (downstream)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Category 14	Franchises	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Category 15	Investments	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Total of Scope3 (Category 1- Category 15) 627,963 100 614,841 100 532,859 100 461,577 100 572,972 100 43,672 100
(N/A: not applicable, -: no data)

(2) Group companies in Japan

Category	Contents	FY2017 Emission		FY2018 Emission		FY2019 Emission		FY2020 Emission		FY2021 Emission		FY2021 Emission Ex elastmor business	
		t-CO ₂	ratio (%)	t-CO ₂	ratio (%)	t-CO ₂	ratio (%)	t-CO ₂	ratio (%)	t-CO ₂	ratio (%)	t-CO ₂	ratio (%)
Category 1	Purchased goods and services	--	--	360,084	96.3	308,621	95.6	274,770	96.4	318,173	97.2	286,209	97.0
Category 2	Capital goods	--	--	--	--	--	--	--	--	--	--	--	--
Category 3	Fuel and energy related activities not included in Scope 1 or 2	--	--	--	--	--	--	--	--	--	--	--	--
Category 4	Transportation and delivery (upstream)	--	--	--	--	--	--	--	--	--	--	--	--
Category 5	Waste from business operations	14,567	93.0	12,848	3.4	13,140	4.1	9,046	3.2	8,189	2.5	7,777	2.6
Category 6	Business travel	226	1.4	237	0.1	235	0.1	234	0.1	240	0.1	217	0.1
Category 7	Employee commuting	816	5.2	855	0.2	847	0.3	843	0.3	865	0.3	783	0.3
Category 8	Leased assets (upstream)	23	0.1	19	0.0	22	0.0	10	0.0	13	0.0	13	0.0
Category 9	Transportation and delivery (downstream)	--	--	--	--	--	--	--	--	--	--	--	--
Category 10	Processing of sold products	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Category 11	Use of sold products	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Category 12	Disposal of sold products	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Category 13	Leased assets (downstream)	33	0.2	31	0.0	25	0.0	24	0.0	29	0.0	29	0.0
Category 14	Franchises	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Category 15	Investments	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total of Scope3 (Category 1- Category 15)		15,665	100	374,074	100	322,890	100	284,926	100	327,509	100	295,027	100

(N/A: not applicable, --: no data)

(3) Group Companies other than Japan

Category	Contents	FY2017 Emission		FY2018 Emission		FY2019 Emission		FY2020 Emission		FY2021 Emission		FY2021 Emission Ex elastmor business	
		t-CO ₂	ratio (%)	t-CO ₂	ratio (%)	t-CO ₂	ratio (%)	t-CO ₂	ratio (%)	t-CO ₂	ratio (%)	t-CO ₂	ratio (%)
Category 1	Purchased goods and services	--	--	132,802	94.7	174,724	95.7	115,810	94.0	156,236	93.7	5,539	46.2
Category 2	Capital goods	--	--	--	--	--	--	--	--	--	--	--	--
Category 3	Fuel and energy related activities not included in Scope 1 or 2	--	--	--	--	--	--	--	--	--	--	--	--
Category 4	Transportation and delivery (upstream)	--	--	--	--	--	--	--	--	--	--	--	--
Category 5	Waste from business operations	4,427	72.6	5,382	3.8	5,633	3.1	5,412	4.4	7,783	4.7	4,526	37.8
Category 6	Business travel	180	3.0	190	0.1	203	0.1	213	0.2	327	0.2	208	1.7
Category 7	Employee commuting	650	10.7	685	0.5	733	0.4	768	0.6	1,179	0.7	750	6.3
Category 8	Leased assets (upstream)	839	13.8	839	0.6	896	0.5	656	0.5	801	0.5	599	5.0
Category 9	Transportation and delivery (downstream)	--	--	--	--	--	--	--	--	--	--	--	--
Category 10	Processing of sold products	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Category 11	Use of sold products	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Category 12	Disposal of sold products	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Category 13	Leased assets (downstream)	0	0.0	362	0.3	362	0.2	362	0.3	362	0.2	362	3.0
Category 14	Franchises	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Category 15	Investments	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total of Scope3 (Category 1- Category 15)		6,096	100	140,260	100	182,553	100	123,221	100	166,688	100	11,984	100

(N/A: not applicable, --: no data)

Categories of Greenhouse Gas Emissions Throughout

Category	Emissions subject to calculation
I. Direct emissions (Scope 1)	■ Direct emissions from the use of fuel and industrial processes by the reporting company
II. Energy-derived indirect emissions (Scope 2)	■ Emissions from the use of electricity and heat purchased by the reporting company
P III. Other indirect emissions (Scope 3)	<ul style="list-style-type: none"> • Added as a new calculation item in FY2016 • Expansion of calculation range for some new items in FY2018

Other indirect emissions (Breakdown of Scope 3)

Category 1	<p>Emissions from activities up to the manufacture of raw materials, parts, purchased goods, sales-related materials, etc.</p> <ul style="list-style-type: none"> • Calculated for JSR only from FY2016. • Expansion of calculation range for some new items in FY2018.
Category 2	<p>Emissions from the construction and manufacturing of the reporting company's capital goods</p> <ul style="list-style-type: none"> • Calculated for JSR only from FY2016.
Category 3	<p>Emissions from the procurement of fuel used in power generation, etc., for electricity and heat procured from other entities</p> <ul style="list-style-type: none"> • Calculated for JSR only.
Category 4	<p>(1) Emissions from the distribution of raw materials, parts, purchased goods, sales-related materials, etc., up to delivery to the reporting company</p> <p>(2) Emissions (emissions from the distribution paid for by the reporting company) amount of activity from distribution services other than (1) above (transport, handling, and storage) purchased in the fiscal year of the report: Amount of shipment distribution in Japan and other countries</p> <ul style="list-style-type: none"> • Calculated for JSR only.
Category 5	Emissions from the transportation and processing of waste generated by the reporting company
Category 6	Emissions from employee business travel
Category 7	Emissions from employee transportation when commuting to and from the place of business
Category 8	Emissions from the operation of assets leased to the reporting company (excluding emissions calculated under Scope 1 or 2)
Category 9	<p>Emissions from the transport, storage, cargo handling, and retail sales of products (limited to those items not paid for by the reporting company)</p> <ul style="list-style-type: none"> • Calculated for JSR only.
Category 10	<p>Emissions from the processing of intermediate products by the reporting company</p> <ul style="list-style-type: none"> • This category is excluded from calculation because the company is a chemical intermediates manufacturer.
Category 11	<p>Emissions from the use of products by users (consumers and companies)</p> <ul style="list-style-type: none"> • This category is excluded from calculation because the company is a
Category 12	<p>Emissions from the transportation and processing of products upon disposal by users (consumers and companies)</p> <ul style="list-style-type: none"> • This category is excluded from calculation because the company is a chemical intermediates manufacturer.
Category 13	Emissions from the operation of assets leased to other entities
Category 14	<p>Emissions from franchises</p> <ul style="list-style-type: none"> • No emissions; business structures are not franchises.
Category 15	<p>Emissions from investment to earn profit</p> <ul style="list-style-type: none"> • This category is excluded from calculation because it is not applicable to "investment to earn profit."

FY2021 Emissions of Chemical Substances (PRTR)

Totals for JSR Corporation (Yokkaichi Plant, Chiba Plant, Kashima Plant and Tsukuba Research Laboratories)

Ordinance designated number	Substance	Amounts handled* ² (t)	Emissions			Transfers* ³ (t)
			Atmospheric (t)	Water (t)	Soil (t)	
1	P 1 3 3	1.1	0.0	1.1	0.0	0.0
2	Acrylamide	61.2	0.0	0.0	0.0	0.0
4	P 1 4 6	547.0	0.0	0.0	0.0	0.0
7	n-Butyl acrylate	14.9	0.0	0.0	0.0	0.0
9	Acrylonitrile	14,262.7	0.4	0.0	0.0	0.9
13	Acetonitrile	127.6	0.1	0.5	0.0	36.1
20	2-Aminoethanol	1.1	0.0	0.0	0.0	0.1
28	Allyl alcohol	4.0	0.0	0.0	0.0	2.2
30	n-Alkylbenzenesulfonic acid and its salts (limited to those with 10 to 14 alkyl group carbons and their mixtures)	472.9	0.0	0.0	0.0	0.0
36	Isoprene	51,870.9	0.2	0.0	0.0	2.3
53	Ethylbenzene	1.5	0.0	0.0	0.0	0.0
71	Ferric chloride	22.1	0.0	0.0	0.0	0.0
80	Xylene	3.3	0.0	0.0	0.0	0.0
86	Cresol	11.4	0.0	0.0	0.0	0.0
186	Dichloromethane (also called methylene chloride)	3.3	1.0	0.0	0.0	2.0
190	Dicyclopentadiene	15,795.3	0.1	0.0	0.0	48.7
202	Divinylbenzene	39.5	0.0	0.0	0.0	0.0
203	Diphenylamine	60.1	0.0	0.0	0.0	0.0
207	2,6-di-tert-butyl-4-cresol (also called BHT)	538.9	0.7	0.0	0.0	0.1
220	Water-soluble salts of dimethyldithiocarbamic acid	59.4	0.0	0.0	0.0	0.0
230	N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine	155.3	0.0	0.0	0.0	0.0
240	Styrene	49,273.5	7.0	0.0	0.0	2.6
274	Tert-dodecanethiol	570.4	0.0	0.0	0.0	0.0
276	3, 6, 9-triazaundecane-1, 11-diamine (also called tetraethylenepentamine)	12.6	0.0	0.0	0.0	3.1
300	Toluene	1,970.4	71.8	0.2	0.0	395.5
321	Vanadium compounds	40.0	0.0	0.0	0.0	39.2
337	4-Vinyl-1-cyclohexene	59.9	0.0	0.0	0.0	0.4
351	1,3-Butadiene	527,164.7	4.9	0.0	0.0	0.2
392	n-Hexane	672.9	31.3	0.0	0.0	83.3
395	Water-soluble salts of peroxydisulfuric acid	529.9	0.0	0.0	0.0	0.0
411	Formaldehyde	2.4	0.0	0.0	0.0	0.0
415	Methacrylic acid	86.1	0.0	0.0	0.0	0.0
420	Methyl methacrylate	1,472.1	0.4	0.0	0.0	0.1
440	1-Methyl-1-phenylethyl hydroperoxide	1.9	0.0	0.0	0.0	0.0
	Total	665,910.1	117.9	1.8	0.0	616.9
243	Dioxins* ³	-	0.0480	0.0250	0.0000	0.0000

*1 The handling amount represents the value after base deduction (1 ton/year per place of business)

*2 The transfer amount is the amount committed to intermediate waste service companies plus the amount discharged into public sewers

*3 Dioxin category unit: mg-TEQ

◆ Social Data

Workplace Accidents (calendar year)

		Boundary	Unit	FY2017	FY2018	FY2019	FY2020	FY2021	Ex elastomer business
Number of Workplace Accidents Lost time injury () Indicates non-working accident	JSR Corporation	Same as shown at left	Accident	2 (3)	0 (0)	1 (0)	0 (0)	1 (2)	0 (2)
	Manufacturing partners of JSR			2 (0)	1 (0)	0 (4)	2 ^{*1} (1)	0 (1)	0 (0)
	Group companies in Japan			0 (3)	2 (3)	3 (4)	1 (2)	4 (3)	2 (2)
	Manufacturing partners of Group companies in Japan			2 (2)	0 (2)	2 (3)	1 (2)	1 (3)	1 (3)
Lost time injury	Frequency ^{*2}	JSR Corporation	–	0.48	0.00	0.24	0.00	0.23	–
	Severity ^{*3}	Statistics by JCIA ^{*4}	–	0.04	0.00	0.00	0.00	0.00	–
	Frequency ^{*2}	–	–	0.36	0.31	0.42	0.28	not yet open	–

*1 Includes one fatal accident

*2 Frequency = (Deaths or injuries in workplace accidents resulting in absence from work ÷ total working hours for all employees) × 1 million

*3 Severity = (Total days of lost work accidents / Total number of actual working hours) × 1000

*4 Source: JCIA (=Japan Chemical Industry Association) statistical data (occupational safety and health fact-finding results)

Equipment accidents (calendar year)

		Boundary	Unit	FY2017	FY2018	FY2019	FY2020	FY2021	Ex elastomer business
Number of facility accidents	Leakage ^{*5}	JSR Corporation	Accident	1	2	1	4	0	0
	Fire ^{*5}			1	0	0	1	0	0
	Leakage ^{*5}	Group companies in Japan	Accident	1	3	3	1	1	0
	Fire ^{*5}			0	1	2	0	0	0

*5 Based on the definition of an "abnormal phenomenon" in the Act on the Prevention of Disaster in Petroleum Industrial Complexes and Other Petroleum Facilities

ISO 45001 Certification (Manufacturing Bases) as of March 31, 2022

Company name	Certification number	Certification acquisition date (Updated)	Expiry date
Techno-UMG Co., Ltd. Ube Plant	JQA-OH0037	March 1, 2021	February 29, 2024
JSR Micro Kyushu Co., Ltd.	JQA-OH0319	March 27, 2020	March 26, 2023
JSR Micro N.V.	BE20/819943937	April 25, 2020	April 24, 2023
JSR Micro, Inc.	OHS13340	March 18, 2022	March 17, 2025

◆ Social Data

Logistics disaster/accident

	Boundary	Unit	FY2017	FY2018	FY2019	FY2020	FY2021	Ex elastomer business
Logistics-related workplace accidents	JSR Corporation	Accident	-	0	0	0	0	0
Traffic accidents resulting in injury to others			-	0	0	0	0	0
Traffic accidents resulting in injury to JSR employee			-	0	0	0	0	0

Achieving a modal shift

	Boundary	Unit	FY2017	FY2018	FY2019	FY2020	FY2021	Ex elastomer business
Transport volume ^{*6}	JSR Corporation	1 million tons-km	534	514	434	324	377	3
Modal shift rate ^{*7}		%	86	85	85	83	85	0

^{*6} Transport volumes for products and raw materials transported and delivered from JSR Corporation's own warehouses and contracted outside warehouses to specified destinations in Japan

^{*7} Ton-km: [Cargo weight (tons)] x [transport distance (kilometers)]

ISO 9001 Certification as of June,2022

Company / Site name		Certification number	Certification acquisition date
JSR Corporation	Yokkaichi plant	JQA-0396	February 9, 1994
JSR Micro Kyushu Co., Ltd.		JQA-3163	March 12, 1999
Emulsion Technology, Co., Ltd.		NQA-16050168A	November 30, 1998
Techno-UMG Co., Ltd.	Yokkaichi plant	JCQA-0700	May 15, 2000
	Ube plant, Ootake plant	JCQA-1508	July 19, 1994
JAPAN COLORING CO., LTD.		NQA-16100028A	March 19, 1996
UBE JYUSHIKAKOU, LTD		02843-2016-AQ-KOB-JAS-ANZ	October 17, 2002
JSR Life Sciences Corporation		JP13/062551	November 23, 2010
JSR Logistics & Customer Center Co., Ltd.		JQA-0396	February 9, 1994
JSR Micro, Inc. (USA)		10305	April 17, 1998
JSR Micro N.V. (Belgian)		BE91/03002	October 1, 2004
JSR Micro Korea Co., Ltd. (Korea)		FM 88265	October 11, 2004

ISO 13485* Certification as of June,2022

Company / Site name		Certification number	Certification acquisition date
MEDICAL & BIOLOGICAL LABORATORIES CO., LTD.	Ina Laboratory	JP06/040213	October 11, 2006

* ISO13485: Quality management system for medical devices

◆ Social Data

Human Resources Data									
	Boundary	Unit	FY2017	FY2018	FY2019	FY2020	FY2021	Ex elastomer business	
Consolidated number of employees	JSR Group	Person	7,203	8,748	9,050	9,383	9,696	—	
Non-regular employee ratio (non-regular / employee + non-regular)		%	9	13	8	7	12	—	
Employee ratios by region	JSR Group	%	Japan	64	60	59	57	53	—
			Asia (excluding Japan)	19	16	20	21	21	—
			United States	13	20	16	18	20	—
			Europe	4	4	5	4	6	—

As of the end of each fiscal year (March 31)

	Boundary	Unit	FY2017	FY2018	FY2019	FY2020	FY2021	Ex elastomer business	
% of female employees	JSR Group* ¹	%	—	—	18	17	29	—	
Number of employees	JSR Corporation* ³	Person	Male	2,848	2,883	2,933	2,974	2,902	1,776
			Female	483	494	515	537	531	397
			Total	3,331	3,377	3,448	3,511	3,433	2,173
Number of hires	New graduates* ²	Person	Male	66	74	89	101	42	27
			Female	15	15	18	29	12	11
			Total	81	89	107	130	54	38
	Mid-career	Person	Male	23	31	25	22	30	16
			Female	4	11	7	3	5	3
			Total	27	42	32	25	35	19
Average number of years of continuous service	JSR Corporation* ³	Year	Male	13.2	12.9	13.3	13.6	13.8	—
			Female	15.1	14.8	14.7	14.7	14.6	—
			Total	13.5	13.2	13.5	13.8	13.9	—
Turnover rate for personal reasons	JSR Corporation* ³	%	1.1	1.4	1.2	1.3	5.4* ⁴	—	
Turnover rate within three years of joining company			1.1	6.4	7.4	6.9	9.3	—	
Layoff			Person	0	0	0	0	0	—

As of the end of each fiscal year (March 31)

*1 We changed the scope of aggregation to companies subject to consolidation in FY2021. Please refer to the consolidated companies in the list of the Group's companies for the scope of aggregation. This is the percentage with respect to the total of 9,651 employees in the scope of aggregation.

*2 As of the beginning of each fiscal year (April 1)

*3 Including seconded employees

*4 We provided an early retirement incentive plan in FY2021.

Annual Total Working Hours/Annual Total Overtime Hours/Average annual salary								
	Boundary	Unit	FY2017	FY2018	FY2019	FY2020	FY2021	Ex elastomer business
Total working hours per employee	JSR Corporation* ³	Hour	1,966	1,969	1,950	1,903	1,921	—
Total overtime hours per employee			215	220	214	148	158	—
% of annual paid leave taken	JSR Corporation	%	—	—	85.2	81.0	87.4	—
Average annual salary* ⁴	JSR Corporation	1,000 JPY	7,432	7,551	7,546	7,360	7,446	—

*3 Including seconded employees

*5 Average annual salary includes bonuses and non-standard wages.

◆ Social Data

Education/Training and Overseas Assignments

		Boundary	Unit	FY2017	FY2018	FY2019	FY2020	FY2021	Ex elastomer business
Total training time* ⁶		JSR Corporation* ³	Hour	55,994	49,671	64,334	43,624	34,591	–
Training time per employee* ⁶			Hour/Person	16.8	14.7	18.7	12.4	10.1	–
Total amount of education and training expenses* ⁶			1,000 JPY	87,139	108,189	148,711	115,513	120,628	–
Education and training expense per employee* ⁶			JPY/Person	26,160	32,037	43,130	32,900	35,148	–
e-learning programs	Principles of Corporate Ethics	JSR Corporation & its group companies in Japan	Hour/Person	0.5	0.5	0.5	0.5	0.5	0.5
	Anti-monopoly law · anti-corruption · subcontract law management			0.5	0.5	0.5	0.5	0.5	0.5
	Information security			0.5	0.5	0.5	0.5	0.5	0.5
	Quality compliance			0.5	1.0	0.5	–	0.5	0.5
	Work style reform law			–	0.5	–	0.5	–	–
	Prevention of insider trading			–	–	–	–	0.5	0.5
	Drainage* ⁷			–	–	–	–	0.5	0.5
	Confidential information management	JSR Corporation	Hour/Person	0.5	0.5	0.5	0.5	0.5	0.5
	Safety			–	–	0.5	0.5	0.5	0.5
Number of employees utilizing overseas research dispatch system		JSR Corporation* ³	Person	9	8	11	6	5	–

*3 Including seconded employees

*6 We aggregate technical/skills training and education by level in the organization held by the Personnel Department. Therefore, the hours and expenses for education held by departments other than the Personnel Department, the education unique to each department and education provided by those outside the Company are not included in these training hours and expenses. The hours and expenses for e-learning education are also not included.

◆ Social Data

Diversity Development

		Boundary	Unit	FY2017	FY2018	FY2019	FY2020	FY2021	Ex elastomer business
% of women hired annually per position* ²	College graduates, engineering positions	JSR Corporation* ³	%	20	18	22	26	30	33
	College graduates, administrative position			50	45	50	55	60	60
% of women in managerial positions* ²	3.8			4.1	4.3	4.1	4.5	5.4	
% of female workers at section chief level			%	–	–	8.9	9.4	8.8	11.0
% of female executives			%	–	–	6.1	9.1	12.1	–
Career Re-Entry System	Number of people registered		Person	4	5	5	3	1	1
	Number of people employed			1	2	2	2	0	0
Number of employees using leave system for when an employee's spouse is transferred overseas* ⁸			Person	–	–	–	0	1	–
Promotion of activities by employees who have reached retirement age	Number of retirees re-employed		Person	53	38	22	24	18	–
	Rate of retirees who are re-employed		%	72	81	81	86	69	–
Hiring of foreign nationals		Person	3	1	3	7	1	1	
Employment rate of individuals with disabilities		%	2.47	2.43	2.38	2.34	2.24	2.58	

As of the end of each fiscal year (March 31)

*² As of the beginning of each fiscal year (April 1)

*³ Including seconded employees

*⁸ We started providing a leave system for when an employee's spouse is transferred overseas in FY2020.

◆ Social Data

Work-Life Management Data										
Work-balance support system* ⁹		Boundary	Unit	FY2017	FY2018	FY2019	FY2020	FY2021	Ex elastomer business	
Fertility treatment	Number of employees using shorter working hours	JSR Corporation* ³	Person	1	2	0	0	0	–	
	Number of employees using prenatal & postpartum maternity leave system* ¹⁰			21	24	19	18	19	–	
Number of employees using childcare leave system* ^{10,*11}	Female			24	22	14	15	21	17	
	Male			42	38	61	59	101	62	
	Total			66	60	75	74	122	79	
Childcare leave system take-up rate* ^{10,*11}	Female		%	100	100	100	100	100	–	
	Male		%	31.0	24.5	42.7	50.9	72.7	–	
Childbirth	Number of days of childcare leave taken on average		Male	Days	17.7	11.9	13.0	19.6	19.2	–
	Rate of employees who return to work after taking childcare leave		Female	%	100	100	100	100	100	–
			Male	%	100	100	100	100	100	–
	Retention rate one year after returning to work from childcare leave* ¹²	Female	%	–	96	100	95	100	–	
		Male	%	–	100	98	100	96	–	
	Retention rate three years after returning to work from childcare leave* ¹³	Female	%	–	–	–	96	100	–	
		Male	%	–	–	–	98	95	–	
	Number of employees using extended childcare leave counseling		Person	13	28	15	17	13	–	
	Balancing work and childcare	Number of employees using shorter working hours* ¹⁴		Person	91	101	113	119	122	–
	Balancing work and nursing care	Number of employees using shorter working hours	Person		3	1	1	2	1	–
Number of employees using nursing care leave* ¹⁰				8	7	11	6	4	–	
Number of employees using extended nursing care leave				0	1	3	0	0	–	
Other	Number of employees using discretionary work system* ²	Person		108	111	122	122	169	146	
	Number of employees using volunteer leave (The value in parentheses represents the total number of leave days taken)			0 (0)	7 (17)	2 (2)	0 (0)	0 (0)	–	

As of the end of each fiscal year (March 31)

*2 As of the beginning of each fiscal year (April 1)

*3 Including seconded employees

*9 The telecommuting system has been implemented since fiscal 2019 by eliminating the requirements for childcare and nursing care.

*10 At the request of employees who use various systems, we lend mobile devices that can access our corporate network from home.

*11 Total number of employees who took childcare leave in that fiscal year

*12 Percentage of the number of employees who remain with the Company at the end of the fiscal year (n) among the number of employees who return to work from childcare leave in the applicable fiscal year (n-1)

*13 Percentage of the number of employees who remain with the Company at the end of the fiscal year (n) among the number of employees who return to work from childcare leave in the applicable fiscal year (n-3)

*14 Number of employees including users of the system during pregnancy

◆ Social Data

Number of employees eligible for work-balance support allowances	Boundary	Unit	FY2017	FY2018	FY2019	FY2020	FY2021	Ex elastomer business
Extended childcare leave allowance	JSR Corporation* ³	Person	67	53	80	75	110	–
Post childcare leave reinstatement allowance			16	30	28	22	35	–
Daycare allowance			7	15	18	16	15	–
Care worker allowance			0	0	2	0	1	–

As of the end of each fiscal year (March 31)

*3 Including seconded employees

Union Data

		Boundary	Unit	FY2017	FY2018	FY2019	FY2020	FY2021	Ex elastomer business
Workers' union	Number of members	JSR Corporation* ³	Person	2,588	2,629	2,709	2,799	2,746	–
	% of union members* ¹⁵		%	77.7	77.9	78.5	79.7	80.0	–
	Number of members	JSR Group	Person	3,545	3,588	3,739	3,766	3,775	–
	% of union members* ¹⁵		%	49.2	41.0	41.3	40.1	38.9	–

*3 Including seconded employees

*15 Percentage of union members among full-time employees including managers

Health data

	Boundary	Unit	FY2017	FY2018	FY2019	FY2020	FY2021	Ex elastomer business
% of employees with abnormalities in physical examinations	JSR Corporation* ¹⁶	%	–	–	–	26.4	24.3	–
% of employees who scored as highly stressed on the stress check		%	7.5	7.3	8.3	8.2	8.9	–
Monthly average number of employees who work more than 45 hours of overtime a month (long working hours)	JSR Corporation* ³	Person	92.9	90.1	91.7	51.3	64.7	–

As of the end of each fiscal year (March 31)

*3 Including seconded employees

*16 Excluding seconded employees

◆ Governance Data

Corporate Governance

			Boundary	Unit	FY2017	FY2018	FY2019 *1	FY2020	FY2021		
Board of Directors	Inside Directors (executive directors)	Male	JSR Corporation	Person	4	4	5	5	4		
		Female			0	0	0	1	1		
		Total			4	4	5	6	5		
	Independent Outside Directors (non-executive directors)	Male			3	3	3	3	4		
		Female			0	0	0	0	0		
		Total			3	3	3	3	4		
	Total	Male			7	7	8	8	8		
		Female			0	0	0	1	1		
		Total			7	7	8	9	9		
	% Independent Outsider						43	43	38	33	33
	% Female Director						0	0	0	11	11
	% Non-Japanese Directors						0	0	11	11	22
	Term of Office						1	1	1	1	1
	Maximum age limit for directors						Years old	None	None	None	None
Number of BOD meetings held in a fiscal year				Times	17	17	17	17	18		

*1 Mr. Manabu Miyasaka, a former outside director (term of office from June 18, 2019 to September 5, 2019), is excluded from this table.

			Boundary	Unit	FY2017	FY2018	FY2019	FY2020	FY2021		
Audit & Supervisory Board (formerly known as Statutory Auditors Board)	Insider	Male	JSR Corporation	Person	1	1	1	1	1		
		Female			0	0	0	0	0		
		Total			1	1	1	1	1		
	Independent Outsider	Male			1	1	1	1	0		
		Female			1	1	1	1	2		
		Total			2	2	2	2	2		
	Total	Male			2	2	2	2	1		
		Female			1	1	1	1	2		
		Total			3	3	3	3	3		
	% Independent Outsider						67	67	67	67	67
	% Female Audit & Supervisory Board Member						33	33	33	33	67
Term of office				Year/ Term	4	4	4	4	4		
Number of Audit & Supervisory Board meetings held in a year				Times	19	18	18	18	18		

◆ Governance Data

		Boundary	Unit	FY2017	FY2018	FY2019 *1	FY2020	FY2021
Nomination Advisory Committee	Chairman	JSR Corporation	–	Independent Outside Directors				
	Committee Member		Independent Outside Directors	3	3	3	3	4
			Inside Director	2	2	1	2	2
			Total	5	5	4	5	6
	Number of meetings held in a year		Times	3	3	3	3	4
Remuneration Advisory Committee	Chairman	JSR Corporation	–	Independent Outside Directors				
	Committee Member		Independent Outside Directors	3	3	3	3	4
			Inside Director	1	1	1	2	2
			Total	4	4	4	5	6
	Number of meetings held in a year		Times	4	4	4	7	7

*1 Mr. Manabu Miyasaka, a former outside director (term of office from June 18, 2019 to September 5, 2019), is excluded from this table.

		Boundary	Unit	FY2017	FY2018	FY2019	FY2020	FY2021
Number of officers (Number of concurrent directors)	Male	JSR Corporation	Person	24 (3)	24 (3)	25 (2)	24 (4)	24 (4)
	Female			1 (0)	1 (0)	1 (0)	2 (1)	2 (1)
	Total			25 (3)	25 (3)	26 (2)	26 (5)	26 (5)
% Non-Japanese officers		JSR Corporation	%	4	8	8	8	12

◆ Governance Data

Remuneration for Directors and Audit & Supervisory Board Members										
			Boundary	Unit	FY2017	FY2018	FY2019	FY2020	FY2021	
Remuneration for Directors	Inside Directors	Basic Remuneration (Fixed remuneration)	JSR Corporation	Million JPY	183	186	264	246	242	
		Annual Bonuses (Short term performance linked remuneration)			69	50	64	182	182	
		Medium-term performance-based bonus			–	25	48	(abolition)	(abolition)	
		Performance Share Unit			–	–	–	–	120	
		Restricted Stock Shares (Remuneration in share stock)			28	37	100	124	232	
		Deep Discounted Stock Option (Remuneration in share stock)			9	–	–	–	–	
		Sub-total			289	298	476	552	776	
	Outside Directors	Basic Remuneration (Fixed remuneration)			40	42	47	43	43	
		Sub-total			40	42	47	43	43	
	Total				329	340	523	595	819	
	Remuneration for Audit & Supervisory Board members	Inside Audit & Supervisory Board Member			Basic Remuneration (Fixed remuneration)	28	29	28	28	28
					Sub-total	28	29	28	28	28
		Outside Audit & Supervisory Board Members			Basic Remuneration (Fixed remuneration)	17	20	22	22	22
Sub-total			17	20	22	22	22			
Total		45	49	50	50	50				

◆ Governance Data

List of Remuneration for individual Directors paid in FY2021 *2

Name	Position	Name of Company	Unit	Description of consolidated remuneration					Total
				Basic Remuneration	Restricted Stock shares	Medium-term performance-based bonus	Performance Share Unit	Restricted Stock Shares (Non-monetary reward)	
Eric Johnson	Director	JSR Corporation	Million JPY	60	63	–	77	173	575
	President	JSR North America Holdings, Inc.	Million JPY	61	63	–	77	–	
Nobuo Kawahashi	Director	JSR Corporation	Million JPY	80	30	–	24	29	163

*2 the above list is limited to Directors whose annual remuneration

Accounting Auditors

		Boundary	Unit	FY2017	FY2018	FY2019	FY2020	FY2021
Amount of remuneration for Accounting Auditors	Remuneration for services relating to auditing or certifying the financial documents	JSR Corporation and its consolidated subsidiaries	Million JPY	67	87	116	112	115
	Remuneration for non-auditing services			24	0	0	2	0
Amount of remuneration for Accounting Auditors	Remuneration for services relating to auditing or certifying the financial documents	JSR Corporation and its consolidated subsidiaries	Million JPY	–	39	72	96	118
	Remuneration for non-auditing services			–	42	28	42	23

◆ Governance Data

Activities of Directors and Audit & Supervisory Board Members in FY2021

Name, Gender, Nationality	Title*	Age*	Tenure*	Activities	Attendance to the meetings in fiscal year ending in March 2021
Eric Johnson, Male, U.S.A.	Representative Director and CEO	61	3 years	Since assuming the position of Representative Director and CEO in 2019, Eric Johnson has driven the expansion of our life science business as the officer in charge of supervising our North American business. In addition, he utilizes his global management experience to lead the management of the Group and has strived to realize a company which is trusted by all our stakeholders and which gives them satisfaction. He utilized his extensive work experience and insights in making important decisions and overseeing the execution of duties by the Board of Directors to contribute to a continuous improvement in the corporate value of the Group.	BOD 18 / 18 100%
					Nomination Advisory Committee 4 / 4 100%
					Remuneration Advisory Committee 7 / 7 100%
Nobuo Kawahashi, Male, Japan	Representative Director and President, COO	65	6 years	Since assuming the position of Representative Director and President, COO in 2019, Nobuo Kawahashi has assisted the CEO to grow our digital solutions business and life science business as core businesses based on our management policies and strategies. He utilized his extensive work experience and insights in making important decisions and overseeing the execution of duties by the Board of Directors to contribute to a continuous improvement in the corporate value of the Group.	BOD 18 / 18 100%
					Nomination Advisory Committee 4 / 4 100%
					Remuneration Advisory Committee 7 / 7 100%
Kouichi Kawahashi, Male, Japan	Director and Executive Managing Officer	65	6 years	Kouichi Kawahashi contributes to improving the corporate value of the Group by being in charge of production and technologies, quality assurance, environmental safety, human resources development, and diversity promotion. He utilized his extensive work experience and insights in making important decisions and overseeing the execution of duties by the Board of Directors to contribute to a continuous improvement in the corporate value of the Group.	BOD 18 / 18 100%
Hideki Miyazaki, Male, Japan	Director and Managing Officer	64	4 years	Hideki Miyazaki has contributed to improving the corporate value of the Group by being in charge of accounting, financial affairs, public relations, systems strategies, cyber security supervision and operational process innovation utilizing his extensive experience and wide-ranging insights relating to financial affairs in Japan and overseas over a long period of time. He utilized his extensive work experience and insights in making important decisions and overseeing the execution of duties by the Board of Directors to contribute to a continuous improvement in the corporate value of the Group.	BOD 18 / 18 100%
Mika Nakayama, Female, Japan	Director and Senior Managing Officer	61	2 years	Mika Nakayama contributes to improving the corporate value of the Group as the officer in charge of sustainability promotion. She utilized her extensive work experience and insights in making important decisions and overseeing the execution of duties by the Board of Directors to contribute to a continuous improvement in the corporate value of the Group.	BOD 18 / 18 100%

Name, Gender, Nationality	Title [※]	Age [※]	Tenure [※]	Activities	Attendance to the meetings in fiscal year ending in March 2021
Yuzuru Matsuda, Male, Japan	Independent Outside Director	73	7 years	Yuzuru Matsuda attended all 18 Board of Directors meetings held in FY2021. Utilizing his extensive experience in management of a multinational company engaged in the fields of ethical pharmaceuticals and biochemicals along with his outside perspectives independent of the Company, he shared his views as necessary during deliberations of agenda items and contributed to the continuous improvement of corporate value by ensuring the rationality of management's decision making and the transparency and soundness of management. Matsuda chairs the Remuneration Advisory Committee and made every effort to ensure the rationality and transparency of the officer remuneration system. Also, Matsuda assisted in the review of the succession plan for the Group's management structure as chairperson of the Nomination Advisory Committee from an objective and long-term perspective.	BOD 18 / 18 100%
					Nomination Advisory Committee 4 / 4 100%
					Remuneration Advisory Committee 7 / 7 100%
Shiro Sugata, Male, Japan	Independent Outside Director	72	6 years	Shiro Sugata attended all 18 Board of Directors meetings held in FY2021. Utilizing his extensive experience in activities in the financial world and in management of a multinational company engaged in the fields of optical products and industrial machinery coupled with his outside perspectives independent of the Company, he shared his views as necessary during deliberations of agenda items and contributed to the continuous improvement of corporate value by ensuring the rationality of management's decision making and the transparency and soundness of management. Sugata serves on the Remuneration Advisory Committee and made every effort to ensure the rationality and transparency of the officer remuneration system. Also, Sugata assisted in the review of the succession plan for the Group's management structure as member of the Nomination Advisory Committee from an objective and long-term perspective.	BOD 18 / 18 100%
					Nomination Advisory Committee 4 / 4 100%
					Remuneration Advisory Committee 7 / 7 100%
Tadayuki Seki, Male, Japan	Independent Outside Director	72	5 years	Tadayuki Seki attended all 18 Board of Directors meetings held in FY2021. Utilizing his extensive experience in finance and accounting as CFO and in management positions at a multinational trading company coupled with his outside perspectives independent of the Company, he shared his views as necessary during deliberations of agenda items and contributed to the continuous improvement of corporate value by ensuring the rationality of management's decision making and the transparency and soundness of management. Seki serves on the Remuneration Advisory Committee and made every effort to ensure the rationality and transparency of the officer remuneration system. Also, Seki assisted in the review of the succession plan for the Group's management structure as member of the Nomination Advisory Committee from an objective and long-term perspective.	BOD 18 / 18 100%
					Nomination Advisory Committee 4 / 4 100%
					Remuneration Advisory Committee 7 / 7 100%

Name, Gender, Nationality	Title*	Age*	Tenure*	Activities	Attendance to the meetings in fiscal year ending in March 2021
David Robert Hale, Male, U.S.A.	Independent Outside Director	37	1 year	David Robert Hale attended 13 of 13 Board of Directors meetings held after his appointment. He utilized his extensive experience in global business administration as well as business transformation and expansion as a partner at an investment firm engaged in long-term investments and as director of investee companies, coupled with his international and outside perspectives, in important decision making by the Board of Directors, supervision of execution of duties, and strengthening of corporate governance. As a result, he contributed to the continuous improvement of corporate value by ensuring the rationality of management's decision making and the transparency and soundness of management. Hale serves on the Remuneration Advisory Committee and made every effort to ensure the rationality and transparency of the officer remuneration system. Also, Hale assisted in the review of the succession plan for the Group's management structure as member of the Nomination Advisory Committee from an objective and long-term perspective.	BOD 13 / 13 100%
					Nomination Advisory Committee 3 / 3 100%
					Remuneration Advisory Committee 4 / 4 100%
Tomoaki Iwabuchi, Male, Japan	Full-time Audit & Supervisory Board Member	64	2 years	Tomoaki Iwabuchi utilizes his extensive experience, insights and expertise in the Company as a full-time Audit & Supervisory Board member. He also shares his experience, insights and expertise with other outside Audit & Supervisory Board members and utilizes it in overseeing the decision-making and execution of business by directors to contribute to ensuring the rationality of management decisions and the transparency and soundness of management by the Company.	BOD 18 / 18 100%
					Audit & Supervisory Board 18 / 18 100%
Hisako Kato, Female, Japan	Independent Outside Audit & Supervisory Board Member	73	8 years	Hisako Kato attended all 18 Board of Directors meetings and all 18 Audit & Supervisory Board meetings held in FY2021. She utilized her wide ranging specialist knowledge and extensive experience in finance and accounting as Certified Public Accountant and licensed tax accountant coupled with her outside perspectives independent of the Company in audits, and she shared her views as necessary during deliberations of agenda items at Board of Directors meetings and contributed to ensuring the rationality of management's decision making and the transparency and soundness of management.	BOD 18 / 18 100%
					Audit & Supervisory Board 18 / 18 100%
Junko Kai, Female, Japan	Independent Outside Audit & Supervisory Board Member	54	1 year	Junko Kai attended 13 of 13 Board of Directors meetings and 13 of 13 Audit & Supervisory Board meetings held after her appointment. She utilized her wide ranging specialist knowledge and extensive experience in law as an attorney-at-law coupled with her outside perspectives independent of the Company in audits, and she shared her views as necessary during deliberations of agenda items at Board of Directors meetings and contributed to ensuring the rationality of management's decision making and the transparency and soundness of management.	BOD 13 / 13 100%
					Audit & Supervisory Board 13 / 13 100%

*1 As of June 17, 2022 (at the close of the 77th AGM of the Company)

◆ Governance Data

Compliance									
	Boundary	Unit	FY2017	FY2018	FY2019	FY2020	FY2021	Ex elastomer business	
Amount of corporate income tax paid	JSR Corporation and consolidated subsidiary in Japan	Same as the left	Million JPY	12,565	9,547	9,435	3,266	7,452	–
	Consolidated Subsidiaries in other countries			2,204	1,434	3,338	2,127	4,254	–
Political Donations/contribution	JSR Corporation		0	0	0	0	0	–	

	Boundary	Unit	FY2017	FY2018	FY2019	FY2020	FY2021	Ex elastomer business	
Number of Sustainability Promotion Committee (Former CSR Committee) meetings held in a year	JSR Corporation	Times	7	4	5	4	3	–	
Violation of each country's anti-corruption laws and international standards	Number of violations	JSR Group	Times	0	0	0	0	0	–
	Penalty	JSR Group	JPY	0	0	0	0	0	–
Number of times the JSR Group hotline was used	JSR Corporation	Number	2	6	3	9	8	–	
	Group companies		4	10	7	17	7	–	
	Unknown		0	1	0	0	0	–	
Number of times the supplier hotline was used	JSR Corporation	Number	0	0	0	0	0	–	
	Group companies		0	0	0	0	1	–	

Research and Development (R&D)									
	Boundary	Unit	FY2017	FY2018	FY2019	FY2020	FY2021	Ex elastomer business	
R&D expenses	JSR Group	Billion JPY	203	249	254	246	241	–	
	JSR Corporation	Billion JPY	165	191	205	193	204	–	
Number of researchers	JSR Corporation	Person	680	727	747	766	666	–	
Number of patents held	Japan	JSR Corporation	Number	3,282	3,258	2,960	2,695	2,570	2,278
	Other than Japan			3,812	3,793	3,710	3,446	3,395	2,806
	Total			7,094	7,051	6,670	6,141	5,965	5,084

JSR Group Companies (As of 31st May, 2022)

52 consolidated companies, 8 non-consolidated companies, 7 affiliates accounted for by the equity method, and 22 scope of RC reporting

(Ref.) After transfer of elastomer business: 41 consolidated companies, 2 non-consolidated subsidiaries, 4 equity-method affiliates, 15 RC reporting companies

* RC = Responsible Care®

Country	Companies' name	Business segment					Consolidated companies	Non-consolidated companies	Equity-method affiliates	RC reporting
		Digital Solutions	Life Sciences	Plastics	Elastomer ^{※1}	Others				
Japan	JSR Corporation	●	●	●	●	●	/	/	/	※
	JSR Micro Kyushu Co., Ltd.	●					●			※
	D-MEC LTD.	●					●			
	Emulsion Technology, Co., Ltd.	●				●	●			※
	JSR ARTON Manufacturing Co., Ltd. ^{※2}	●					●			
	JSR Life Sciences Corporation		●				●			※
	MEDICAL & BIOLOGICAL LABORATORIES CO., LTD.		●				●			※
	G&G SCIENCE CO., LTD.		●				●			
	LEXI Co., Ltd.		●				●			
	Techno-UMG Co., Ltd.			●			●			※
	JAPAN COLORING CO., LTD.			●			●			※
	UBE JYUSHIKAKOU, LTD			●			●			※
	ELASTOMIX CO., LTD. ^{※1}				●		●			※
	Japan Butyl Co., Ltd. ^{※1}				●				◆	
	KRATON JSR ELASTOMERS K. K. ^{※1} (cr:KRATON ENEOS ELASTOMERS K. K.)				●				◆	
	JSR Trading Co., Ltd. ^{※1} (cr:ENEOS Materials Trading Co., Ltd.)				●	●	●			
	Goko Trading Co., Ltd. ^{※1}				●	●	●			
	Rapithela Corporation					●		●		
	Musashi Energy Solutions Co., Ltd.					●			◆	
	JSR Active Innovation Fund, LLC,	—				●	●			
	JEY-TRANS CO., LTD.					●			◆	
	JSR Logistics & Customer Center Co., Ltd.					●	●			※
	JSR Business Services Co., Ltd.					●	●			
	JN System Partners Co., Ltd.					●			◆	

※1 We transferred our elastomer business and the stock in our subsidiaries and affiliated companies involved in that business to ENEOS Corporation on April 1, 2022.

※2 We established JSR ARTON Manufacturing Co., Ltd. to transfer the functions and organizations relating to ARTON manufacturing in the former JSR Chiba Plant due to the spinoff of our elastomer business on April 1, 2022. We completed the transfer of the functions and organizations on March 31, 2022.

Korea, Taiwan, China

Country	Companies' name	Business segment					Consolidated companies	Non-consolidated companies	Equity-method affiliates	RC reporting
		Digital Solutions	Life Sciences	Plastics	Elastomer ^{※1}	Others				
Korea	JSR Electronic Materials Korea Co., Ltd.	●							◆	
	JSR Micro Korea Co., Ltd.	●					●			※
	JSR Elastomer Korea Co., Ltd. ^{※1} (cr:ENEOS Materials Korea Co., Ltd.)				●			●		
Taiwan	JSR Electronic Materials Taiwan Co., Ltd	●					●			
	JSR Micro Taiwan Co., Ltd. ^{※3}	●					●			
China	JSR (Shanghai) Co., Ltd.	●	●		●		●			
	JSR Micro (Changshu) Co., Ltd.	●					●			※
	MBL Beijing Biotech Co., Ltd.		●				●			
	MBL Hangzhou Biotech Co., Ltd.		●				●			
	MBL Shenzhen Biotech Co., Ltd		●				●			
	Techno-UMG Guangzhou Co., Ltd.			●			●			
	Techno-UMG Hong Kong Co., Ltd.			●			●			
	Techno-UMG Shanghai Co., Ltd.			●			●			
	Tianjin Kuo Cheng Rubber Industry Co., Ltd. ^{※1}				●				◆	
	ELASTOMIX(FOSHAN) CO., LTD. ^{※1}				●		●			※
	JSR Trading (Shanghai) Co., Ltd. ^{※1} (cr:ENEOS Materials Trading (Shanghai) Co., Ltd.)				●	●	●			

※ 1 We transferred our elastomer business and the stock in our subsidiaries and affiliated companies involved in that business to ENEOS Corporation on April 1, 2022.

※ 3 JSR Micro Taiwan Co., Ltd. closed its plant in September 2021 and became a sales activity and technical service company for local customers.

Southeast Asia, South Asia

Country	Companies' name	Business segment					Consolidated companies	Non-consolidated companies	Equity-method affiliates	RC reporting
		Digital Solutions	Life Sciences	Plastics	Elastomer ^{※1}	Others				
Indonesia	PT.ELASTOMIX INDONESIA ^{※1}				●		●			※
Vietnam	JSR Trading Vietnam Co., Ltd. ^{※1} (cr:ENEOS Materials Trading Vietnam Co., Ltd.)					●		●		
Thailand	Techno-UMG Asia Co., Ltd.			●			●			
	JSR BST Elastomer Co., Ltd. ^{※1} (cr:BST ENEOS Elastomer Co., Ltd.)				●		●			※
	ELASTOMIX (THAILAND) CO., LTD. ^{※1}				●		●			※
	JSR Trading Bangkok Co., Ltd. ^{※1} (cr:ENEOS Materials Trading Vietnam Co., Ltd.)				●	●	●			
Singapore	JSR Electronic Materials Singapore Pte. Ltd.	●						●		
India	JSR Elastomer India Private Limit ^{※1} (cr:ENEOS Materials India Private Limited)				●			●		

※ 1 We transferred our elastomer business and the stock in our subsidiaries and affiliated companies involved in that business to ENEOS Corporation on April 1, 2022.

Europe

Country	Companies' name	Business segment					Consolidated companies	Non-consolidated companies	Equity-method affiliated	RC reporting
		Digital Solutions	Life Sciences	Plastics	Elastomer ^{※1}	Others				
Hungary	JSR MOL Synthetic Rubber, Ltd.※1 (cr:ENEOS MOL Synthetic Rubber Ltd.)				●		●			※
Germany	Techno-UMG Europe GmbH			●			●			
	JSR Elastomer Europe GmbH※1 (cr:ENEOS Materials Europe GmbH)				●			●		
Switzerland	KBI Biopharma SA		●				●			
	Selexis SA		●				●			
Belgian	JSR Micro N.V.	●	●				●			※
	EUV Resist Manufacturing & Qualification Center N.V.	●					●			※
	KBI Biopharma BVBA		●				●			

※1 We transferred our elastomer business and the stock in our subsidiaries and affiliated companies involved in that business to ENEOS Corporation on April 1, 2022.

North and Central America

Country	Companies' name	Business segment					Consolidated companies	Non-consolidated companies	Equity-method affiliated	RC reporting
		Digital Solutions	Life Sciences	Plastics	Elastomer ^{※1}	Others				
USA	JSR North America Holdings, Inc.					●	●			
	JSR Micro, Inc.	●					●			※
	Inpria Corporation	●					●			
	JSR Life Sciences, LLC		●				●			
	MBL International Corporation		●				●			
	KBI Biopharma, Inc.		●				●			※
	KBI Biopharma Boulder, LLC		●				●			
	Crown Bioscience International		●				●			
	Techno-UMG America, Inc			●			●			
	JSR Elastomer America, Inc.※1 (現 ENEOS Materials America, Inc.)				●		●			
Mexico	ELASTOMIX MEXICO, S.A. de C.V.※1				●			●		※
	JSRT Mexico S.A. de C.V.※1 (cr:ENEOS Materials Trading Mexico S.A. de C.V.)					●		●		

※1 We transferred our elastomer business and the stock in our subsidiaries and affiliated companies involved in that business to ENEOS Corporation on April 1, 2022.

JSR Group

Policy, Principle, Philosophy

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JSR Corporation

Created Sep., 2022

Corporate Mission, Corporate Slogan, Management Policies, Course of Action

Corporate Mission

Materials Innovation

We create value through materials to enrich society, people and the environment.

The corporate mission of JSR Group clearly identifies the company's raison d'etre. By supplying materials that are indispensable to human societies, JSR aims to be trusted.

Corporate Slogan

With chemistry, we can.

JSR is determined to keep providing solutions that benefit not only customers but also the broader society. The company's slogan highlights the word "chemistry" to succinctly convey its corporate identity and business positioning, and also expresses the confidence JSR professionals feel in the face of every challenge.

Management Policies - JSR's Fundamental Pillars of Management

Continuous creation of businesses

As society evolves, so does the demand for specialized materials and advanced products. JSR continuously evolves to anticipate and responds to changing marketing needs and, in doing so, achieve dynamic growth.

Enhancement of corporate culture

As society evolves, so will our organization. JSR will build on its existing positive corporate culture to create an organization and management style with the vitality to keep evolving.

Increase in corporate value

JSR will position itself to increase our overall corporate value by creating businesses through materials with focuses on customer satisfaction and the fulfillment of employees.

Management Policies - Responsibility to Our Stakeholders

Responsibility to our customers / business partners

When interacting with our business partners and customers, the JSR Group will:

- Constantly evolve to meet the demand for new materials
- Always strive to increase customer satisfaction
- Act in good faith and maintain fair and equitable business relations

Continue to be socially and environmentally conscious

Responsibility to our employees

All employees should expect:

- To be evaluated and rewarded based on fair standards
- Continuous opportunities to grow by challenging
- Acceptance of the diversity of fellow colleagues and to be provided a place where all employees can work together as a team

Responsibility to society

All members of the JSR Group will honor our responsibility to both the local and global communities through:

- Responsible and respectful business practices (Responsible Care) that consider the environment and safety
- Support of environmental conservation by providing eco-friendly products
- Reduction of our environmental impact throughout the entire
- Active contribution to conserving biodiversity throughout its business activities and the entire product lifecycle

Responsibility to shareholders

Group will maintain its responsibility to its shareholders by:

- Aiming to increase corporate value by creating business opportunities through materials
- Constantly enhancing its management efficiencies
- Inspiring trust by being highly transparent and conducting sound corporate management practices

Course of Action : 4C

Challenge

All employees of JSR Group should share a common, global focus and desire to succeed. Employees should feel confident to autonomously take on new challenges, learning from successes while viewing setbacks as opportunities to learn, grow and improve.

Communication

All employees should feel comfortable and confident maintaining open lines of bi-directional communication at all levels within the JSR Group. Employees should strive for organizational transparency through direct conversations as the best means to share value and achieve common goals, especially in the face of growth and diversification.

Collaboration

Employees will work together in the spirit of cooperation valuing common, corporate goals over internal or departmental barriers. Employees will also be encouraged to actively collaborate with external resources and not be bound to conventional ideas.

Cultivation

All employees will cultivate an environment that supports bi-directional communication between managers and subordinates and provides opportunities to develop together as individuals and as members of productive, supportive teams.



Environment

Responsible Care Policy

Seeing industrial safety and accident prevention, environmental conservation, and product safety as key foundations for its business activities, JSR Group conducts all business undertakings under the following Responsible Care® (RC) policy.

- 1) We will strive to ensure the safety of employees and local communities and to contribute to environmental conservation and a sustainable global environment by ascertaining risks associated with our business activities and executing countermeasures.
- 2) We will strive to comply with laws, ordinances, and voluntary regulations by gathering information on and ensuring the full development of laws and regulations required for business activity.
- 3) We will strive to ensure the safety of our products by developing products with consideration for safety, health, and the environment and providing information about them.

Philosophy concerning Climate Change

Environmental problems attributable to global warming (e.g., forest fires, droughts, water shortages, rising sea levels, threats of extinction, and impacts on ecosystems) are occurring on a global scale. Such problems are also seen in Japan. They are represented by floods caused by torrential rains, health problems such as heatstroke that result from more and more days of extreme heat, and such impacts on the ecosystems as coral bleaching.

JSR Group recognizes this problem as an important issue. Therefore, with the aim of helping realize a low-carbon society, we strive to lower our GHG emissions by, for example, reducing the amount of energy needed in the various processes of producing and supplying our products.

Together with this, we also calculate and ascertain the GHG emissions in our supply chain (Scope 3) based on the Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain issued by Ministry of the Environment, Government of Japan. Chemical products are ultimately used in various products. Therefore, we believe it is necessary to work to reduce GHG emissions throughout the lifecycle of our products. We will continue to calculate and ascertain our GHG emissions on a global basis to contribute to reducing GHG emissions throughout society in the future.

In addition to this, we participate in the Japan Chemical Industry Association, the TCFD Consortium and other organizations to collect information. We recognize that climate change will bring about both risks and opportunities for JSR Group. Accordingly, we formulate and implement strategies based on scenario analysis.

Philosophy concerning Water Resources

Water is an essential resource for all living beings. And fresh water, in particular, is a limited and precious resource throughout the world. In Japan, as in other countries, water resources are being affected by natural disasters caused by abnormal weather events, some of which are a result of climate change. This makes the appropriate management of those resources vital.

JSR Group uses such water resources for drinking water, of course, but also as a raw material and coolant in its manufacturing processes. We strive to recycle water in our processes. At the same time, we purify and check the quality of the water when discharging it outside of our processes. In this way, we work to conserve water resources through appropriate management and treatment.

Philosophy concerning Industrial Waste Reduction

We will continue to promote recycling and to reduce the amount of waste we send to final landfills to contribute to the formation of a recycling-orientated society as it is JSR Group's responsibility to do so as a part of the manufacturing industry. We will do that to respond to movements in society aiming to solve climate change, marine plastic problems and other global issues and aiming for the formation of a recycling-oriented society which includes the EU's policy to transition to a circular economy.

Philosophy concerning Biodiversity Conservation

JSR Group has formed biodiversity policies based on issues identified through conservation activities conducted in the past.

JSR Group Biodiversity Policies

To contribute to the establishment of a sustainable society, JSR Group strives to identify how our business activities depend on and impact biodiversity, and to promote efforts in consideration of biodiversity.

1. We prioritize biodiversity conservation in procuring naturally derived raw and processed materials.
2. We work to make the green spaces of our business establishments biodiversity-friendly.
3. We strive to develop biodiversity-friendly products.
4. We emphasize staff engagement and cooperation with local communities.

established in April 2012

Philosophy concerning Chemical Management

Under its CSR advancement scheme, JSR Group advances measures pertaining to chemical management based on promotion items and concrete action plans founded on those items that are established by the Responsible Care Advancement Committee.

Policy on Chemical Management

In light of recent global trends in chemical management, JSR has established the following three basic policies in its environment and safety management organization.

- 1) Instead of hazard-based management,^{*1} we will endeavor to implement risk-based management.^{*2}
- 2) We will strive to manage our entire supply chain by utilizing a globally standardized method.
- 3) We will strive to comply with regulations and promote self-motivated initiatives to ensure the safety of our products.

*1 Management based solely on the hazardous properties of substances

*2 Management based on exposure to the hazardous properties of substances

Social

Philosophy and Course of Action for Occupational Health and Safety, Policy for Security Management

Philosophy for Occupational Health and Safety

At JSR Corporation, safety is our highest priority and the foundation of all of our activities. Accordingly, we will create safe worksites and strive to maintain physical and mental health, with the goal of ensuring a safe return home at the end of each workday.



Courses of Action of Philosophy for Occupational Health and Safety

1. No matter the situation, we will act with safety foremost in mind.
2. We will comply with established rules and never fail to act in accordance with safety basics.
3. We will maintain safety by identifying and eliminating both actual and potential hazards.
4. We will strive to create comfortable work environments and promote physical and mental health.
Through communication and ingenuity, we will aim to
5. achieve 100% employee participation in all safety activities.



The safety monument

Policy for Security Management

(1) Extremely Safe Behavior

The Philosophy for Occupational Health and Safety has penetrated through the organization, the Courses of Action are established as applying to everyone, and safety competency is improving through independent safety activities.

(2) Enhanced Human Resources and Organizational Strength

High personal skills, organizational ability, and a healthy organizational culture are being maintained with the establishment and execution of the education and training programs needed for organizational management.

(3) Optimal Risk Management and Security Measures

Security measures corresponding to risk importance are being efficiently and effectively implemented using new technologies.



Social

JSR Group's Human Rights Policy

This policy explains in concrete terms JSR Group's thinking with respect to human rights and presents our pledge to make efforts in line with that thinking. It is based on JSR Group's "Code of Conduct for Respecting Human Rights," which is established in the "JSR Group Principles of Corporate Ethics." We position it as the prevailing policy of all documents and norms associated with actions concerning respect for human rights in JSR Group's business activities.

1. Philosophy

JSR Group recognizes the importance of such international norms as the Universal Declaration of Human Rights, the UN Global Compact, and the UN Guiding Principles on Business and Human Rights. We agree with the thinking they represent and will respect human rights accordingly. We also understand that we must fulfill our responsibility to respect human rights in all of our business activities.

2. Respect for human rights

JSR Group respects the dignity and human rights of all people. We pledge to comply with all international norms and local laws and regulations that concern respect for human rights in the countries and territories where we do business. When a local law or regulation is inconsistent with international norms, we will do our best to find ways of respecting international norms for human rights to the greatest extent possible. Moreover, we will not discriminate on the basis of gender, age, nationality, race, ethnic group, origin, religion, beliefs, social status, physical disability, or sexual orientation for any reason. Nor will we accept any type of harassment that degrades an individual's dignity.

3. Avoidance of complicity in violating human rights

We apply this policy to all JSR Group corporate officers and employees, and thereby demand that they respect human rights and not infringe upon rights or engage in unfair discrimination. We also strive to ensure that they do not become complicit in human rights violations, even indirectly. Moreover, we endeavor to prevent or lessen negative effects on human rights that are directly tied to JSR Group's businesses, products, and services, and continually urge our business partners and suppliers to support our policy and to adopt a similar policy.

4. Employment and labor

Prohibition of child labor and forced labor

JSR Group prohibits forced labor as well as labor by children who have not reached the employment age stipulated in the laws of the nations and regions in which we do business. We also demand that our business partners and suppliers do the same.

Respect for basic labor rights

JSR Group complies with the labor laws of the nations and regions where we operate. We also respect employees' right to organize and right to collective bargaining, in accordance with the applicable local laws and regulations.

Elimination of discrimination

JSR Group respects every individual's diversity, identity and human rights and strives to ensure equal opportunity without discrimination in every aspect of its dealings with employees, including recruitment, placement, promotion, and skills development.

5. Response when problems occur

If a business activity by JSR Group has a negative consequence on human rights, we will respond swiftly and appropriately to provide relief and rectification. Moreover, if a negative consequence on human rights is caused by a business partner or a supplier, we will utilize our influence on that partner or supplier to encourage them to make an appropriate response.

6. Prevention of human rights violations

JSR Group works to prevent human rights violations by acting in accordance with the "human rights due diligence" mechanism. We also provide appropriate education and training to all employees to ensure the dissemination of this policy throughout the Group.

Date of establishment : September 1, 2021
Eric Johnson
Representative Director, CEO JSR Corporation

Philosophy concerning Human Rights

Philosophy concerning Respect for Human Rights

JSR Group's Principles of Corporate Ethics establish its philosophy concerning human rights.

Code of Conduct for Respecting Human Rights

❶ We will respect and uphold basic human rights, such as United Nations "The Universal Declaration of Human Rights", United Nations "Guiding Principles on Business and Human Rights", declared internationally and protected under constitution and legal precedents of respective countries, and will not infringe basic human rights.

Code of Conduct for Fair and Proper Transactions

❷ With regard to purchase transactions, we shall conduct transactions that are fair, transparent, and based on economic rationality, as well as consider our responsibility to society, such as compliance with laws and ordinances, protection of resources, environmental conservation, safety and human rights.

Code of Conduct for Providing a Comfortable Work Environment

❸ In the event that a staff member reports the violation or possible violation of the law and/or the Principles of Corporate Ethics to his/her superiors and/or internal/external hotline, we shall fully protect the said staff member's identity and protect him or her from unfavorable treatment.

The JSR Group Principles of Corporate Ethics, revised in January, 2021.

Philosophy concerning Inhumane Acts (Harassment)

JSR Group's Principles of Corporate Ethics establish its philosophy concerning inhumane acts (harassment).

Code of Conduct for Providing a Comfortable Work Environment

❹ We shall provide a workplace free from sexual harassment and any harassment arising from positions of power. In addition, we will not engage in or make verbal comments with sexual connotations that will make counterparts feel uncomfortable.

The JSR Group Principles of Corporate Ethics, revised in January, 2021.

Philosophy concerning Prevention of Discrimination

JSR Group's Principles of Corporate Ethics establish its philosophy concerning prevention of discrimination.

Code of Conduct for Providing a Comfortable Work Environment

① We shall ensure the fair treatment of employees, based on each person's tasks, roles, and level of commitment.

③ We shall respect the human rights and diverse characteristics of all individuals, and shall not discriminate against gender, age, nationality, race, ethnic group, origin, religion, beliefs, social status, physical disability or other relevant conditions when determining employment status and/or working conditions.

④ We shall not force religion and/or belief on others.

The JSR Group Principles of Corporate Ethics, revised in January, 2021.

Philosophy concerning Child Labor and Forced Labor

JSR Group's Principles of Corporate Ethics establish its philosophy concerning child labor and forced labor.

Code of Conduct for Respecting Human Rights

③ We shall never allow child labor or forced compulsory labor, whether at the JSR Group or in the workplaces of business partners and collaborating companies.

The JSR Group Principles of Corporate Ethics, revised in January, 2021.

Philosophy concerning Collective Bargaining

JSR Group enters into labor agreements with labor unions based on its Principles of Corporate Ethics, which establish its philosophy concerning collective bargaining.

Code of Conduct for Respecting Human Rights

② We will abide by national and international labor codes and respect workers' right of association and right for collective negotiation in the realm of basic labor rights.

The JSR Group Principles of Corporate Ethics, revised in January, 2021.

Philosophy concerning Customers

JSR Group's Management Policies establish its philosophy concerning its customers.

Management Policies

Responsibility to Our Stakeholders

Responsibility to Our Customers / Business Partners

- Constantly evolve to meet the demand for new materials
- Always strive to increase customer satisfaction
- Act in good faith and maintain fair and equitable business relations
- Continue to be socially and environmentally conscious throughout the supply chain

Philosophy concerning Social Contribution

JSR Group has been involved in various social contribution programs with a focus on community activities. In January 2009 we established our "Basic Approach to Social Contribution" as a philosophy aimed at further strengthening our activities. We are currently implementing the initiatives outlined in this philosophy.

Basic Philosophy concerning Social Contribution

- (1) Our Corporate Mission dictates that we contribute to society through our business activities. Further, we are actively engaged in providing solutions to social requirements and issues as a responsible member of society.
- (2) We are continuously engaged in positive social contribution activities, capitalizing on the chemical and technical knowledge and skills that form the core of JSR business.
- (3) Every employee is a point of contact between the Company and society, and we actively support our employees in their voluntary participation in social contribution activities.

Basic Approach to Social Contribution, established in January 2009

Fundamental Philosophy concerning Employees

Fundamental Human Resource Policy

The JSR Group drives its organization and personnel based upon the following measures:

1. Develop mechanisms and a corporate culture with a healthy balance of 'Freedom' and 'Discipline,' guided by the Course of Action's 4Cs to enable managers and junior staff to grow together, help all employees accurately perceive and solve issues in order to foster a JSR that not only maintains its organizational capacity, but ensures its future growth.
2. Promote the globalization of JSR corporation employees while developing a globalized workforce within JSR Group as well as train and manage the Group's human resources on a global level.
3. Generate synergies which take full advantage of the increasing range of diversity (in terms of nationality, culture, gender, values, etc.) throughout JSR Group's vast human resource pool.

Human Resource Development Philosophy

We are working on human resource development with the understanding that it is the greatest priority for achieving sustainable, long-term corporate growth. In particular, we are promoting human resource development in order to strengthen our organizational capacity by implementing the Course of Action "The 4Cs" - "Challenge," "Communication," "Collaboration," and "Cultivation" - of our Course of Action at a higher level, and with focus on "skill/know-how" and "awareness/motivation."

Human Resources = Skill and Know-How x Motivation

As a key goal, we will also strengthen our employees' international communication abilities.

(1) Desirable Types of Human Resources

JSR specifies desirable types of human resources to target in developing human resources.

All Employees

1. Professionals who are globally competitive in each area they are responsible for
2. Challengers who respond flexibly to changes in the environment and pursue innovation and transformation without accepting the status quo
3. Individuals who possess high ethical values and respect challenge, communication, collaboration, and cultivation

Management

4. Leaders who delegate work and responsibility to subordinates and consistently maintain an awareness of organizational management and human resource development while leading by example and standing at the helm
5. Leaders who guide innovation while managing the efficient achievement of organizational objectives

(2) Human Resource Development Policy

JSR has established the following elements as its human resource development policy to develop human resources who consistent with the company's medium and long-term business objectives, improve the abilities of individual employees, and enable employees to fully demonstrate their abilities.

1. Provide sufficient support for employees to focus on their own desire to grow and take the initiative in improving their own skills and building their careers.
2. Developing and cultivating the abilities of employees is the foundation of the company. The greatest priority is growth through work. Structured, systematic, ongoing training is provided to supplement this from a company-wide, long-term perspective.

Work-Life Management Philosophy

At JSR, we think that fostering diversity, equity, and inclusion (DE&I) and the two pillars built on that are essential in improving the competitiveness of the organization and employees to achieve sustainable growth and a resilient organization. Those two pillars are 1) establishing a work environment, various systems, and IT infrastructure to make flexible work styles possible, and 2) work-style innovation (WSI) that maximizes results by accepting many flexible work styles at each workplace, mutually supporting them, and transforming them into organizational strengths.

To explain in more detail, employees use the various systems and infrastructure appropriately, as needed, proactively practice work-life management, and implement a workstyle that allows them to work in health and with vigor. Each workplace is aiming to realize the vision for their own division by employing business management, people management, and using team building to create psychological safety as they make active use of the latest digital technologies and other means to dramatically improve productivity.

Such environments increase employee engagement and create workplaces that make it easy to work and provide job satisfaction. This generates innovation and competitiveness and will lead to sustained growth.

The Human Resources Development Department establishes work environments and formulates, designs, and implements policies on various systems. The Diversity Development Office takes the lead on formulating the policy on work style innovation and planning and implementing measures. Based on the medium-term human resources strategy, the two organizations work closely together to report the details of initiatives to management as needed and use the intranet to make employees aware of these initiatives.



Philosophy concerning Employees' Mental and Physical Health

JSR Group feels that a healthy mind and body are extremely important for employees and their families to live happy lives. We also feel that they are imperative in the creation of a productive and vibrant workplace. Because of this, we have adopted various measures to help our employees work in good health, both mentally and physically.

JSR and some locations make a Health Declaration, which describes the policy on active initiatives to create health. The Mie National Health Insurance Organization, which is part of the National Federation of Health Insurance Societies, has designated JSR and these locations as business establishments that promote health.

Philosophy concerning JSR Workers' Union's activities

We strive to maintain a relationship with JSR Workers' Union that allows us to routinely engage in constructive dialogue through regular labor-management councils, meetings concerning the revision of labor agreements, and other opportunities. We are also working to build better workplace environments with attention to union concerns—namely, wage policy, labor environment policy, welfare policy, leisure time, public relations and volunteerism policy, and organizational policy.

JSR Group CSR / Sustainable Procurement Policy

JSR Group's Corporate Mission is "Materials Innovation - We create value through materials to enrich society, people and the environment."

Based on this, we make CSR activities a core part of our everyday operations. Our commitment to CSR includes establishing "The JSR Group Principles of Corporate Ethics" and consolidating our responsibilities to our customers/business partners, to our employees, to society, and to shareholders under management policies we call "Responsibility to Our Stakeholders."

At JSR Group, we believe that developing CSR supply chain management will lead to mutual prosperity for both the Group and our business partners. It was with this in mind that we established this JSR Group CSR/Sustainable Procurement Policy.

Below are listed 36 items in six areas that we ask our business partners to strictly observe. We call on our partners to accept them and put them into practice, keeping in mind the intent described above and fully understanding their content.

It should be understood that this policy may undergo review and revision as required in response to changes in society's demands on us.

I . Establishing and Maintaining a CSR Advancement Structure

Companies must of course comply with the laws and regulations of each country in which they do business. But they also have a responsibility to abide by social norms and meet society's expectations.

For the following Areas II to VI (fair corporate activity, human rights and labor, environmental conservation, health and safety, and information security), companies that do business with JSR Group must establish CSR mechanisms to ensure that their business activities do not negatively affect society and the environment and, if negative effects do occur, to deal with them immediately.

The following actions are required:

- 1 . Incorporate CSR mechanisms into the company's policies and code of conduct, make them known among employees, and establish a department with the responsibility of executing them.
- 2 . Have raw material suppliers and other business partners also understand and execute the CSR mechanisms.
- 3 . Voluntarily announce the status of their initiatives through environmental reports, CSR reports, websites, and other media to the public.

II. Fair Corporate Activity

In the processes of producing products and services, companies must engage in business activities that are based on fair, transparent, and free competition.

The following actions are required:

1. Prohibition of corruption and bribery
2. Prohibition of giving or receiving inappropriate favors or payoffs
3. Prohibition of abuse of superior position
4. Prohibition of anti-competitive conduct
5. Provision of accurate product and service information
6. Respect for others' intellectual property rights
7. Proper import/export management
8. Proper tax payment according to the laws and regulations of each country
9. Prevention and early detection of improper behavior by maintaining an internal reporting system

III. Human Rights and Labor

Companies must act in accordance with the laws of each country and international standards, respect basic human rights, and give attention to the following items to ensure that their business activities do not violate human rights, either directly or indirectly.

The following actions are required:

1. Prohibition of forced labor
2. Prohibition of child labor and protection of young workers
3. Prohibition of inhumane treatment
4. Prohibition of discrimination in terms of employment, promotion opportunities, treatment, etc.
5. Payment of fair wages exceeding the minimum wage amount
6. Reduction of excessive working hours by proper management of working hours and non-work days
7. Respect for employees' freedom of association and right to collective bargaining

IV. Environmental Conservation

Companies have a responsibility to comply with the laws and standards of each country concerning environmental conservation, to specify and manage factors that impact on the environment by building a management system, and to work toward preserving the environment in their processes of producing products and services.

The following actions are required:

1. Establishment and operation of an environmental management system
2. Management of chemical substances and prevention of pollution
3. Reduction of environmental burden
4. Reduction of energy consumption and greenhouse gas (GHG) emissions
5. Resource conservation, resource recycling, and proper waste disposal
6. Conservation of water resources and reduction of water consumption
7. Preservation of biodiversity and reduction of negative impact
8. Disclosure of the status of environmental conservation initiatives

V. Health and Safety

Companies must comply with the laws and standards of each country concerning occupational health and safety and establish management systems and mechanisms to prevent workplace accidents, promote the health and safety of employees, and create comfortable workplace environments.

The following actions are required:

1. Safety measures for machinery and equipment
2. Maintenance of workplace safety
3. Maintenance of workplace health
4. Employee health management
5. Pre-emergency preparedness measures

VI. Information Security

Companies must properly manage and protect the information they obtain through business activities, take protective measures against threats to their computer networks, and manage the confidential information of customers and third parties in a manner that prevents leaks.

The following actions are required:

1. Compliance with the laws and regulations of each country concerning information security
2. Protection against threats to computer networks
3. Prevention of personal information leaks
4. Prevention of leaks of confidential information pertaining to customers and third parties

Enacted on December 10, 2018

JSR Corporation

Governance

Corporate Governance

Please refer to JSR's Corporate Governance Report by clicking the URL shown below. The following are the gist of the report.

https://www.jsr.co.jp/jsr_e/company/assets/pdf/20220707_CG_En.pdf

Basic Views on Corporate Governance

It is the JSR Group's goal to make steady progress in realizing its corporate mission (Materials Innovation: We create value through materials to enrich society, people and the environment). This shall be done through efficient and transparent business management, by sustaining sound and healthy business practices. The Group will also continuously strive to create new corporate value with the hope of becoming an attractive corporation that can earn the trust of and satisfy the interests of all our stakeholders.

The Company therefore has been and will continue focusing on the enhancement of corporate governance as an important management challenge.

Corporate governance structure

As a company with audit & supervisory board members (formerly known as statutory auditors), JSR principally monitors and oversees the execution of duties by directors and the management through its Board of Directors and audit & supervisory board members. JSR has continuously strengthened the function of management supervision, improved efficiency in decision making and execution of business duties, and enhanced the transparency and soundness of business management through the introduction of an officer system and the appointment of outside directors and audit & supervisory board members, who are independent from the Company and have extensive business

Composition of Board of Directors

The current Board of Directors consists of nine (9) directors (four (4) of whom are independent outside directors with independence and abundant experience and extensive expertise in the management of corporations and businesses). Seiji Takahashi, who is a Director but not a CEO or COO, serves as the board's chairperson. In principle, the Board of Directors meets once monthly to establish the direction of management strategies, make important decisions, and supervise the execution of duties by Directors and Officers.

Composition of Audit & Supervisory Board (formerly known as Statutory Auditors Board)

The current Audit & Supervisory Board consists of three (3) audit & supervisory board members, two (2) of whom are independent outside audit & supervisory board members with extensive and sophisticated expertise (one is a lawyer and the other is a certified public accountant qualified. In the future, the Company will elect two independent outside audit & supervisory board members with vast experience and extensive and sophisticated expertise in such fields as law, accounting, and etc., to effectively audit the execution of duties by directors and the management.

Policies on Remuneration for Directors and framework for determining the remuneration

Remuneration Advisory Committee

JSR established the Remuneration Advisory Committee of which majority members are independent outside directors and the chair of which is an independent outside director in order to ensure the objectivity and transparency of its directors' remuneration scheme. The committee deliberates the basic policy of remuneration, the remuneration structure, the mechanism of a performance-based remuneration, the setting of targets, and assessment of performance, and submits its findings to the Board of Directors.

Policies on Remuneration for Directors

JSR establishes basic policies on remuneration with the objectives of training and recruiting highly globally-minded and diverse management personnel to ensure the corporate group's competitive advantage as a global company; setting short-term, medium-term, and long-term incentives for executives for the sharing of profits with shareholders; and ensuring the unfailing execution of management strategy and business strategy while maintaining transparency.

(1) The remuneration system shall be one that can attract, retain, and reward diverse and highly talented human resources, regardless of nationality, to build and improve competitive advantage and further advance global management.

(2) The system shall provide managers with a healthy entrepreneurial spirit oriented toward achieving operational objectives in management strategy for the Company's sustained development in order to motivate them to achieve those objectives.

(3) The remuneration system shall improve medium- and long-term corporate value based on the active sharing of profits by JSR directors with shareholders through stronger stock-holding during their time as directors.

JSR's executive remuneration consists of basic remuneration as fixed remuneration; annual bonuses linked to the level of performance achievement company-wide in a single fiscal year; post-allocation performance-linked stock remuneration (performance share units) aimed at achieving the Medium-Term Management Plan ending in FY2024 and steady business structure reforms; and transfer-restricted shares (non-monetary remuneration) aimed at promoting the continuous improvement in corporate value and the sharing of value with shareholders. Remuneration for outside directors and Audit & Supervisory Board members is only basic remuneration in light of their roles.

Policies and procedures for nominating candidates for Directors and Audit & Supervisory Board members

Nomination Advisory Committee

1) JSR established the Nomination Advisory Committee of which majority members are independent outside directors and the chair of which is an independent outside director to ensure the transparency of the policy and procedures of nominating candidates for directors, audit & supervisory board member and officers with directorship status (including senior officers). At the committee, any of the members is not eligible for voting in the agenda in which such member has special interest.

2) The committee deliberates the standard for the diversity in breadth of knowledge, experience, and capability necessary for the Board of Directors, criteria and procedures for the nomination, and candidates for future appointment as president, directors, officers with directorship status (including senior officers), and audit & supervisory board members, and submits its findings to the Board of Directors. In order to ensure transparency of the deliberation, the committee takes necessary measures as deliberation solely among outside independent directors for the agenda relating to appointment/reappointment or dismissal of CEO and/or President.

3) The committee systematically develops and selects candidates for the successor to CEO and/or President in an objective and transparent manner by providing the pool of candidates with necessary training and coaching to enhance skills and leadership and by actively participating in selection process through interviews etc.

Criteria for nominating candidates for Directors

1) When nominating candidates for director, JSR's basic policy is to ensure the Board of Directors has the required knowledge, experience and abilities, diversity, and size (number of members), and a balance of those elements to appropriately and flexibly make important management decisions and to oversee the execution of business. We appoint persons who are mentally and physically healthy, and who have an exceptional character and reputation, and advanced insights and ethical standards. We identify the specific elements in terms of the knowledge, experience and abilities required by the Board of Directors based on medium- and long-term management policies and strategies. We disclose those elements in a skills matrix. Please refer to "[Supplemental Principle 4-11-1] Concept of balance of knowledge/experience/capability, diversity and size of the Board of Directors as a whole" for the skills matrix.

2) The Nomination Advisory Committee deliberates and reports its findings to the Board of Directors in a timely fashion when it judges that a reason has arisen which necessitates the dismissal of a director including the CEO. The committee ensures transparency in its deliberations when deliberating the dismissal of the CEO or President such as by establishing opportunities for discussions only by outside directors.

Criteria for nominating candidates for audit & supervisory board member

- 1) From the perspective of ensuring the transparency and soundness of business management through auditing the process of directors' decision making and execution of duties in accordance with laws and regulations, such as the Companies Act, the articles of incorporation and internal rules, JSR nominates persons with vast experience and extensive and sophisticated expertise necessary for audit (including one person with sufficient knowledge of finance and accounting) among those who are mentally and physically sound and have an exceptional personality and popularity, and high principles and ethical view.
- 2) Regarding candidates for outside audit & supervisory board members, in particular, JSR nominates persons who have independence and extensive experience and knowledge of laws and accounting.

Views on capability and diversity of the Board of Directors as a whole

- 1) JSR believes it is important to ensure the Board of Directors has the required skills and size (number of members) and a balance of those elements at any given time by the Board of Directors as a whole making maximum use of the extensive knowledge, experience, abilities and other skills possessed by internal and outside directors in fields including corporate management and business management; research and development; manufacturing; manufacturing technologies; intellectual properties; personnel; finance and accounting; governance; and legal affairs, compliance and risk management. We see this as important so that the Board of Directors can appropriately and flexibly make important management decisions and oversee the execution of business to improve our corporate value in the medium- to long-term.
- 2) The Company believes that its Board of Directors has acquired necessary diversities so that the Board is functioning effectively at present.
JSR will continue to ensure the sufficient diversity in knowledge, experience, and capability that are essential for the Board of Directors and maintain its optimum size but not exceeding 12 people in accordance with the deliberation to be made by the Nomination Advisory Committee and with its business strategies in the future.

Securing equitable Shareholders' rights

JSR has continued to develop an environment where shareholders can appropriately exercise their voting rights at the ordinary general meeting of shareholders. JSR will continue to implement the following measures: holding an ordinary general meeting of shareholders earlier than other companies (in the middle of June each year); disclosure on the website before sending the notice of convocation; introducing an electronic voting platform via the Internet, etc.; participating in the electronic voting platform for institutional investors; enhancing contents of the convocation notice; and translating the convocation notice into English, etc.

Reduction of cross-shareholdings

JSR holds listed shares as cross-shareholdings* only after comprehensively reviewing the rationality of holding such shares in the light of business management strategies and economics of such shareholdings while it has been reducing cross-shareholdings when holding such shares has become irrational.

The Board of Directors periodically reviews the status and the policies for holding individual cross-shareholdings by taking such factors into consideration as the purpose of holding, potential risk and expected return, and cost of capital required for holding such individual shares.

When exercising voting rights of cross-shareholdings, JSR comprehensively determines to vote for or against their proposals after reviewing whether or not their corporate governance system and proposals will contribute to the improvement of their corporate value over the medium and long-term.

Ways to avoid conflict of interest transactions arising from the act of Directors

1) In accordance with the Companies Act and JSR's "Regulations of the Board of Directors", JSR has obtained the Board of Directors' prior approval for competitive and conflict-of-interest transactions and reported important facts regarding such transactions to the Board of Directors after completion.

2) In accordance with applicable laws and regulations, JSR has disclosed the outline of transactions with related parties in notes to consolidated financial statements of the Securities Report and notes to non-consolidated financial statements of the ordinary general meeting of shareholders.

3) JSR has been determining the terms and conditions for the transactions with major shareholders by negotiating prices considering market conditions in the same way as it deals with third parties.

Compliance

Code of Conduct and Corporate Ethics

JSR Group has established a Code of Conduct as the rules that all JSR Group companies, their directors and employees (full-time, contract, part-time, and temporary employees as well as employees on short-term contracts) should comply with, in order to execute the management policies "Our Responsibility to our Stakeholders" in engaging in business activities. JSR Group shall not require its directors or employees to act in violation of the Code of Conduct. Additionally, JSR Group shall not disadvantage any director or employee who refuses to execute an order to perform an act that is in violation of the Code of Conduct for the reason of said refusal.

Please click on the following link for the English version of "The Group Principles of Corporate Ethics"

https://www.jsr.co.jp/sustainability/pdf/compliance_en.pdf

Code of Conduct for anti-bribery and anti-corruption

The JSR Group established "Standards on Providing and Accepting Gifts and Entertainment" and "Regulations for Compliance with Anticorruption Laws" based on the principles of anti-bribery and anti-corruption established in "The JSR Group Principles of Corporate Ethics".

Code of Conduct for Gifts and Entertainment

- 1) Whether inside or outside the country, we shall not give gifts to and/or entertain politicians, government officials or other relevant parties in a manner that may generate profits through illegal means or violate bribery regulations.
- 2) When making contributions to political figures/parties or other organizations, we shall do so in a proper manner and observe all applicable laws and regulations, such as the Political Funds Control Law.
- 3) We shall not give or receive gifts and provide or receive entertainment to or from customers, suppliers and other stakeholders, which may be regarded as bribery or unfair acts. We shall not be involved in the exchange of gifts or entertainment that may go beyond the accepted social norms.
- 4) Within the JSR Group, we shall not give and/or receive gifts and/or provide entertainment.

The JSR Group Principles of Corporate Ethics, revised in January 2021.

Policies Protection of Whistleblowers

The JSR Group specifies its policies on protection of whistleblower in its "JSR Group's Principles of Corporate Ethics" as below;

Code of Conduct for Providing a Comfortable Work Environment

7) In the event that a staff member reports the violation or possible violation of the law and/or the Principles of Corporate Ethics to his/her superiors and/or internal/external hotline, we shall fully protect the said staff member's identity and protect him or her from unfavorable treatment.

The JSR Group Principles of Corporate Ethics, revised in January, 2021.

Policies against Antisocial Forces

The JSR Group expresses its principles against antisocial forces in "The JSR Group Principles of Corporate Ethics".

Code of Conduct against Antisocial Forces

Our basic policy, upheld by our top executive and company as a whole, is to reject any relation with antisocial forces including any business transactions, and firmly reject any demand with collaboration from police and external organizations specialized in security issues.

The JSR Group Principles of Corporate Ethics, revised in January, 2021.

Information Security Policy

JSR Group endeavors to manage information in an appropriate and secure manner by establishing Information Security Policy and by thoroughly disseminating the policy to its employees.

Information Security Policy

- 1) The JSR Group, by complying with laws and regulations and by observing other social norms relating to the handling of information, will protect information that belong to the JSR Group, its customers, business partners and other third parties.
- 2) The JSR Group will strive to develop and actively use its information assets for the efficient execution of its business. The Group's officers and employees will only use these information assets for the purposes of their work and within the scope of their authority.
- 3) The JSR Group will improve organizations and systems, provide education on information security, thoroughly disseminate this policy and related regulations, and implement measures to ensure information security.
- 4) The JSR Group will implement appropriate human, organizational, and technological measures and work to prevent unauthorized access to information assets from outside the company, as well as leaks, falsification, loss, theft and destruction of information assets.
- 5) If an information security-related problem occurs, the JSR Group will promptly identify the cause and take measures to minimize damage and prevent recurrences.
- 6) The JSR Group will periodically assess and review its information security measures to respond appropriately to changes in external environments.

Established in January 2006

Policy for Bribery Prevention

1. Prevention of bribery

JSR will not seek to gain profit or benefit, directly or indirectly, from any person who is subject to the regulations of anti-corruption laws, including commercial bribery regulations, by wrongfully influencing said person's professional conduct, nor provide benefit or promise to provide benefit ¹⁾ to said person, either in Japan or abroad.

2. Anti-bribery system

JSR will ensure that all officers, employees, etc., comply with this policy.

If an act by an officer, employee, etc., that violates, or may violate, this policy is discovered, JSR will have the discovering person report the act using the internal reporting system or another channel and will not engage in retribution against said reporting person.

3. Audits and system reviews

JSR will conduct periodic internal audits and also evaluate and review its anti-bribery system to maintain a continuous and effective bribery and corruption prevention system.

4. Education

JSR will conduct appropriate education to officers, employees, etc., to ensure their compliance with this policy.

5. Recording and retaining transaction details

JSR will accurately and appropriately prepare accounting records concerning all transactions and disposals of assets and retain those records.

6. Punishment

If an officer, employee, etc., violates this policy, JSR will strictly punish the violating officer, employee, etc., based on the employment regulations and other regulations.

Definition of terminology

- 1) Provide benefit or promise to provide benefit refers to the provision or promise to provide money or goods as well as any other tangible or intangible benefit (such as invitation to an eating or drinking establishment, provision of entertainment, coverage of travel expenses, donation, and participation in an outside organization) and includes the provision of said benefit done directly or indirectly through a third party, such as an agent.

Established: August 2020

GRI Guideline Comparison Table

The Group's Sustainability Report 2021 refers to the GRI Sustainability Reporting Standards, an international guideline. For items that are described in detail in reports other than the Sustainability Report, the name of the relevant report (e.g., Integrated Report) is given.

General Disclosures

Explanation of locations (titles) —: No data available N/A: No applicable items

GRI Standards General Disclosures 2016		Location (Title)	ISO26000 Core Subject	UN Global Compact Principle
1.Organizational profile				
102-1	Name of organization	JSR Corporation	—	—
102-2	Activities, brands, products, and services	Product Information About JSR	—	—
102-3	Location of headquarters	1-9-2 Higashi-Shimbashi, Minato-ku, Tokyo, Japan	—	—
102-4	Location of operations	About JSR JSR Group ESG Data(PDF)	—	—
102-5	Ownership and legal form	About JSR	—	—
102-6	Markets served	Product Information	—	—
102-7	Scale of the organization	About JSR JSR Group ESG Data(PDF) Investor Relations	—	—
102-8	Information on employees and other workers	JSR Group ESG Data(PDF)	6.4 6.4.3	—
102-9	Supply chain	Supply Chain Management Human Rights	—	—
102-10	Significant changes to the organization and its supply chain	Supply Chain Management	—	—
102-11	Precautionary Principle or approach	Corporate Mission and Sustainability Philosophy Sustainability Management and Advancement Structure Corporate Governance Compliance Risk Management Responsible Care	6.2	—
102-12	External initiatives	Corporate Mission and Sustainability Philosophy Response to the TCFD Recommendations Responsible Care Biodiversity Conservation Chemical Management Diversity, Equity, and Inclusion	6.2	—
102-13	Membership of associations	Corporate Mission and Sustainability Philosophy Response to the TCFD Recommendations Responsible Care Biodiversity Conservation Chemical Management Editorial Policy	6.2	—
2.Strategy				
102-14	Statement from senior decision-maker	Message from Our Chief Sustainability Officer Corporate Mission and Sustainability Philosophy	6.2	—
102-15	Key impacts, risks, and opportunities	Message from Our Chief Sustainability Officer JSR Group's Materiality (Priority Issues) Response to the TCFD Recommendations JSR Group's Contribution to Attainment of the SDGs	6.2	—
3. Ethics and integrity				
102-16	Values, principles, standards, and norms of behavior	Corporate Mission and Sustainability Philosophy Compliance JSR Group Policy, Principle, Philosophy(PDF)	—	—
102-17	Mechanisms for advice and concerns about ethics	Compliance	—	—

Explanation of locations (titles) —: No data available N/A: No applicable items

GRI Standards General Disclosures 2016		Location (Title)	ISO26000 Core Subject	UN Global Compact Principle
4. Governance				
102-18	Governance structure	Corporate Governance Sustainability Management and Advancement Structure Corporate Governance Report(PDF)	6.2	—
102-19	Delegating authority	Corporate Governance Sustainability Management and Advancement Structure Corporate Governance Report(PDF)	—	—
102-20	Executive-level responsibility for economic, environmental, and social topics	Corporate Governance Sustainability Management and Advancement Structure Corporate Governance Report(PDF)	—	—
102-21	Consulting stakeholders on economic, environmental, and social topics	JSR Group's Materiality (Priority Issues)	6.2	—
102-22	Composition of the highest governance body and its committees	Corporate Governance Sustainability Management and Advancement Structure Corporate Governance Report(PDF)	6.2	—
102-23	Chair of the highest governance body	Corporate Governance Corporate Governance Report(PDF)	6.2	—
102-24	Nominating and selecting the highest governance body	Corporate Governance Corporate Governance Report(PDF)	6.2	—
102-25	Conflicts of interest	Corporate Governance Report(PDF) Corporate Governance Report(PDF) JSR REPORT 2022	6.2	—
102-26	Role of highest governance body in setting purpose, values, and strategy	Corporate Governance Sustainability Management and Advancement Structure Corporate Governance Report(PDF)	—	—
102-27	Collective knowledge of highest governance body	Corporate Governance Corporate Governance Report(PDF)	—	—
102-28	Evaluating the highest governance body's performance	Corporate Governance Report(PDF) Corporate Governance Report(PDF)	6.2	—
102-29	Identifying and managing economic, environmental, and social impacts	JSR Group's Materiality (Priority Issues) JSR Group's Contribution to Attainment of the SDGs Corporate Governance Sustainability Management and Advancement Structure Compliance Risk Management JSR REPORT 2022	6.2	—
102-30	Effectiveness of risk management processes	Corporate Governance Risk Management Responsible Care Corporate Governance Report(PDF) JSR REPORT 2022	—	—
102-31	Review of economic, environmental, and social topics	Sustainability Management and Advancement Structure Corporate Governance Report(PDF)	6.2	—
102-32	Highest governance body's role in sustainability reporting	Sustainability Management and Advancement Structure	—	—
102-33	Communicating critical concerns	Sustainability Management and Advancement Structure Risk Management	6.2	—
102-34	Nature and total number of critical concerns	Risk Management	—	—
102-35	Remuneration policies	Corporate Governance Report(PDF) JSR Group ESG Data(PDF)	6.2	—
102-36	Process for determining remuneration	Corporate Governance Report(PDF) JSR Group ESG Data(PDF)	—	—
102-37	Stakeholders' involvement in remuneration	Communication with Stakeholders Corporate Governance Corporate Governance Report(PDF)	6.2	—
102-38	Annual total compensation ratio	JSR Group ESG Data(PDF)	—	—
102-39	Percentage increase in annual total compensation ratio	JSR Group ESG Data(PDF)	—	—

Explanation of locations (titles) —: No data available N/A: No applicable items

GRI Standards General Disclosures 2016		Location (Title)	ISO26000 Core Subject	UN Global Compact Principle
5.Stakeholder engagement				
102-40	List of stakeholder groups	Sustainability Management and Advancement Structure Communication with Stakeholders	6.2	—
102-41	Collective bargaining agreements	JSR Group ESG Data(PDF) Work-Life Management	6.3.10 6.4 6.4.3 6.4.4 6.4.5	1,3
102-42	Identifying and selecting stakeholders	JSR Group's Materiality (Priority Issues) Corporate Mission and Sustainability Philosophy	6.2	—
102-43	Approach to stakeholder engagement	Communication with Stakeholders JSR Group's Materiality (Priority Issues)	6.2 6.7 6.7.4 6.7.5 6.7.6 6.7.8 6.7.9	1~10
102-44	Key topics and concerns raised	JSR Group's Materiality (Priority Issues) Response to the TCFD Recommendations JSR Group's Contribution to Attainment of the SDGs	6.2	—
6.Reporting practice				
102-45	Entities included in the consolidated financial statements	JSR Group Profile	6.2	—
102-46	Defining report content and topic Boundaries	JSR Group ESG Data(PDF) Editorial Policy	—	—
102-47	List of material topics	JSR Group's Materiality (Priority Issues) JSR Group's Contribution to Attainment of the SDGs	—	—
102-48	Restatements of information	—	—	—
102-49	Changes in reporting	—	—	—
102-50	Reporting period	Editorial Policy	—	—
102-51	Date of most recent report	Oct-2021	—	—
102-52	Reporting cycle	1 year	—	—
102-53	Contact point for questions regarding the report	Contact Us	—	—
102-54	Claims of reporting in accordance with the GRI Standards	—	—	—
102-55	GRI content index	—	—	—
102-56	External assurance	Evaluation by Outside Organization	7.5.3	—

Economic standards

Explanation of locations (titles) —: No data available N/A: No applicable items

GRI Standards General Disclosures 2016		Location (Title)	ISO26000 Core Subject	UN Global Compact Principle
GRI103: Management Approach 2016				
103-1, 103-2, 103-3		JSR Group's Materiality (Priority Issues) Response to the TCFD Recommendations Sustainability Management and Advancement Structure	—	—
Economic Performance 2016				
201-1	Direct economic value generated and distributed	JSR REPORT 2022	6.8 6.8.3 6.8.7 6.8.9	—
201-2	Financial implications and other risks and opportunities due to climate change	Response to the TCFD Recommendations	6.5.5	—
201-3	Defined benefit plan obligations and other retirement plans	JSR REPORT 2022	—	—
201-4	Financial assistance received from government	JSR REPORT 2022	—	—
Market Presence 2016				
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	—	6.4.4 6.8	—
202-2	Proportion of senior management hired from the local community	Diversity, Equity, and Inclusion	6.8 6.8.5 6.8.7	—
Indirect Economic Impacts 2016				
203-1	Infrastructure investments and services supported	Social Contributions	6.3.9 6.8 6.8.3 6.8.4 6.8.5 6.8.6 6.8.7 6.8.9	8,9
203-2	Significant indirect economic impacts	—	6.3.9 6.6.6 6.6.7 6.7.8 6.8 6.8.5 6.8.6 6.8.7 6.8.9	—
Procurement Practices 2016				
204-1	Proportion of spending on local suppliers		6.6.6 6.8 6.8.5 6.8.7	—
Anti-Corruption 2016				
205-1	Operations assessed for risks related to corruption	N/A	6.6 6.6.3	10
205-2	Communication and training about anti-corruption policies and procedures	Compliance	6.6 6.6.3	10
205-3	Confirmed incidents of corruption and actions taken	JSR Group ESG Data(PDF)	6.6 6.6.3	10
Anti-Competitive Behavior 2016				
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	N/A	6.6 6.6.5 6.6.7	—
Tax 2019				
207-1	Approach to tax	Compliance	6.6	—
207-2	Tax governance, control, and risk management	Risk Management	6.6	—
207-3	Stakeholder engagement and management of concerns related to tax			
207-4	Country-by-country reporting			

Environmental standards

Explanation of locations (titles) —: No data available N/A: No applicable items

GRI Standards General Disclosures 2016		Location (Title)	ISO26000 Core Subject	UN Global Compact Principle
GRI103: Management Approach 2016				
103-1		JSR Group's Materiality (Priority Issues)	—	—
103-2		Response to the TCFD Recommendations		
103-3		Sustainability Management and Advancement Structure		
Materials 2016				
301-1	Materials used by weight or volume	Overview of Environmental Initiatives and Environmental Impact	6.5.4	7,8
301-2	Recycled input materials used	Waste Reduction	6.5.4	7,8
301-3	Reclaimed products and their packaging materials	Waste Reduction	6.5.4 6.7.5	7,8
Energy 2016				
302-1	Energy consumption within the organization	Overview of Environmental Initiatives and Environmental Impact JSR Group ESG Data(PDF)	6.5.4	7,8
302-2	Energy consumption outside of the organization	Climate Change Mitigation JSR Group ESG Data(PDF)	6.5.4	7,8
302-3	Energy intensity	Climate Change Mitigation JSR Group ESG Data(PDF)	6.5.4	7,8
302-4	Reduction of energy consumption	Climate Change Mitigation JSR Group ESG Data(PDF)	6.5.4 6.5.5	7,8
302-5	Reductions in energy requirements of products and services	Climate Change Mitigation JSR Group ESG Data(PDF)	6.5.4 6.5.5	7,8
Water and Effluents 2018				
303-1	Interaction with water as a shared resource	Conservation of Water Resources JSR Group ESG Data(PDF)	6.5.4 6.5.6	7,8
303-2	Management of water discharge-related impacts	Conservation of Water Resources JSR Group ESG Data(PDF)	6.5.3 6.5.4 6.5.6	7,8
303-3	Water withdrawal	Conservation of Water Resources JSR Group ESG Data(PDF)	6.5.4 6.5.6	7,8
303-4	Water discharge	Conservation of Water Resources JSR Group ESG Data(PDF)	6.5.3 6.5.4 6.5.6	7,8
303-5	Water consumption	Conservation of Water Resources JSR Group ESG Data(PDF)	6.5.4 6.5.6	7,8
Biodiversity 2016				
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Biodiversity Conservation	6.5.6	7,8
304-2	Significant impacts of activities, products, and services on biodiversity	Biodiversity Conservation	6.5.6	7,8
304-3	Habitats protected or restored	Biodiversity Conservation	6.5.6	7,8
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	N/A	6.5.6	7,8
Emissions 2016				
305-1	Direct (Scope 1) GHG emissions	Climate Change Mitigation JSR Group ESG Data(PDF)	6.5.5	7,8
305-2	Energy indirect (Scope 2) GHG emissions	Climate Change Mitigation JSR Group ESG Data(PDF)	6.5.5	7,8
305-3	Other indirect (Scope 3) GHG emissions	Climate Change Mitigation JSR Group ESG Data(PDF)	6.5.5	7,8
305-4	GHG emissions intensity	Climate Change Mitigation JSR Group ESG Data(PDF)	6.5.5	7,8
305-5	Reduction of GHG emissions	Climate Change Mitigation JSR Group ESG Data(PDF)	6.5.5	7,8
305-6	Emissions of ozone-depleting substances (ODS)	Initiatives to Prevent Pollution	6.5.3 6.5.5	7,8
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Initiatives to Prevent Pollution JSR Group ESG Data(PDF)	6.5.3	7,8
Waste 2020				
306-1	Waste generation and significant waste-related impacts	Waste Reduction JSR Group ESG Data(PDF)	6.5.3	7,8
306-2	Management of significant waste-related impacts	Waste Reduction JSR Group ESG Data(PDF)	6.5.3	7,8
306-3	Waste generated	Waste Reduction JSR Group ESG Data(PDF)	6.5.3	7,8
306-4	Waste diverted from disposal	Waste Reduction JSR Group ESG Data(PDF)	6.5.3	7,8
306-5	Waste directed to disposal	Waste Reduction JSR Group ESG Data(PDF)	6.5.3	7,8

Explanation of locations (titles) —: No data available N/A: No applicable items

GRI Standards General Disclosures 2016		Location (Title)	ISO26000 Core Subject	UN Global Compact Principle
Environmental Compliance 2016				
307-1	Non-compliance with environmental laws and regulations	Responsible Care	4.6	7,8
Supplier Environmental Assessment 2016				
308-1	New suppliers that were screened using environmental criteria	—	6.3.5 6.6.6 7.3.1	7,8
308-2	Negative environmental impacts in the supply chain and actions taken	—	6.3.5 6.6.6 7.3.1	7,8

Social standards

Explanation of locations (titles) —: No data available N/A: No applicable items

GRI Standards General Disclosures 2016		Location (Title)	ISO26000 Core Subject	UN Global Compact Principle
GRI103:Management Approach 2016				
103-1		JSR Group's Materiality (Priority Issues)	—	—
103-2		Response to the TCFD Recommendations		
103-3		Sustainability Management and Advancement Structure		
Employment 2016				
401-1	New employee hires and employee turnover	JSR Group ESG Data(PDF) Diversity, Equity, and Inclusion	6.4 6.4.3	—
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	—	6.4 6.4.3 6.4.4	—
401-3	Parental leave	JSR Group ESG Data(PDF) Work-Life Management	6.4 6.4.3	6
Labor/Management Relations 2016				
402-1	Minimum notice periods regarding operational changes	Work-Life Management	6.4 6.4.3 6.4.4 6.4.5	—
Occupational Health and Safety 2018				
403-1	Occupational health and safety management system	Occupational Safety, Security and Accident Prevention	6.4.6	—
403-2	Hazard identification, risk assessment, and incident investigation	Occupational Safety, Security and Accident Prevention	6.4.6	—
403-3	Occupational health services	Occupational Safety, Security and Accident Prevention	6.4.4	—
403-4	Worker participation, consultation, and communication on occupational health and safety	Occupational Safety, Security and Accident Prevention	6.4.7	1
403-5	Worker training on occupational health and safety	Occupational Safety, Security and Accident Prevention Human Resource Development	6.4.7	—
403-6	Promotion of worker health	JSR Health Promotion (Initiatives in Health and Productivity Management)	6.4.4	—
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Chemical Management Product Safety Compliance	6.4.6	—
403-8	Workers covered by an occupational health and safety management system	The following is a list of offices with major facilities and the number of employees, but not the number of employees covered by the system. JSR REPORT 2022 The following is a list of the departments audited for environmental and safety audits at the head office and Group companies, headed by the president, although it does not include the number of employees covered by the systems subject to internal audits. Occupational Safety, Security and Accident Prevention	6.4.3 6.4.6	—
403-9	Work-related injuries	JSR Group ESG Data(PDF) Occupational Safety, Security and Accident Prevention	6.4.3 6.4.4 6.4.6	1
403-10	Work-related ill health	—	6.4.3 6.4.4	1
Training and Education 2016				
404-1	Average hours of training per year per employee	JSR Group ESG Data(PDF) Human Resource Development	6.4 6.4.7	—
404-2	Programs for upgrading employee skills and transition assistance programs	Diversity, Equity, and Inclusion Human Resource Development	6.4 6.4.7 6.8.5	6
404-3	Percentage of employees receiving regular performance and career development reviews	Human Resource Development	6.4 6.4.7	—
Diversity and Equal Opportunity 2016				
405-1	Diversity of governance bodies and employees	JSR Group ESG Data(PDF) Diversity, Equity, and Inclusion	6.3.7 6.3.10 6.4 6.4.3	1,6
405-2	Ratio of basic salary and remuneration of women to men	—	6.3.7 6.3.10 6.4 6.4.3 6.4.4	—

Explanation of locations (titles) —: No data available N/A: No applicable items

GRI Standards General Disclosures 2016		Location (Title)	ISO26000 Core Subject	UN Global Compact Principle
Non-Discrimination 2016				
406-1	Incidents of discrimination and corrective actions taken	Compliance	6.3 6.3.6 6.3.7 6.3.10 6.4.3	—
Freedom of Association and Collective Bargaining 2016				
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Supply Chain Management Human Rights	6.3 6.3.3 6.3.4 6.3.5 6.3.8 6.3.10 6.4.3 6.4.5	—
Child Labor 2016				
408-1	Operations and suppliers at significant risk for incidents of child labor	Supply Chain Management Human Rights	6.3 6.3.3 6.3.4 6.3.5 6.3.7 6.3.10	—
Forced or Compulsory Labor 2016				
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Supply Chain Management Human Rights	6.3 6.3.3 6.3.4 6.3.5 6.3.7 6.3.10	—
Security Practices 2016				
410-1	Security personnel trained in human rights policies or procedures	Compliance Human Rights	6.3 6.3.5 6.4.3 6.6.6	—
Rights of Indigenous Peoples 2016				
411-1	Incidents of violations involving rights of indigenous peoples	N/A	6.3 6.3.6 6.3.7 6.3.8 6.6.7	—
Human Rights Assessments 2016				
412-1	Operations that have been subject to human rights reviews or impact assessments	—	6.3 6.3.3 6.3.4 6.3.5	—
412-2	Employee training on human rights policies or procedures	Compliance Human Rights	6.3 6.3.5	1
412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	—	6.3 6.3.3 6.3.5 6.6.6	—
Local Communities 2016				
413-1	Operations with local community engagement, impact assessments, and development programs	Social Contributions	6.3.9 6.6.7 6.8 6.8.5 6.8.7	8
413-2	Operations with significant actual and potential negative impacts on local communities	—	6.3.9 6.5.3 6.5.6 6.8.9	7.8
Supplier Social Assessments 2016				
414-1	New suppliers that were screened using social criteria	Supply Chain Management	—	—
414-2	Negative social impacts in the supply chain and actions taken	Supply Chain Management	—	—
Public Policy 2016				
415-1	Political contributions	JSR Group ESG Data(PDF)	—	—

Explanation of locations (titles) —: No data available N/A: No applicable items

GRI Standards General Disclosures 2016		Location (Title)	ISO26000 Core Subject	UN Global Compact Principle
Customer Health and Safety 2016				
416-1	Assessment of the health and safety impacts of product and service categories	Chemical Management Product Safety	6.3.9 6.6.6 6.7 6.7.4 6.7.5	9
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	Responsible Care	6.3.9 6.6.6 6.7 6.7.4 6.7.5	—
Marketing and Labeling 2016				
417-1	Requirements for product and service information and labeling	Chemical Management	6.7 6.7.3 6.7.4 6.7.5 6.7.6 6.7.9	—
417-2	Incidents of non-compliance concerning product and service information and labeling	Chemical Management	6.7 6.7.3 6.7.4 6.7.5 6.7.6 6.7.9	—
417-3	Incidents of non-compliance concerning marketing communications	N/A	6.7 6.7.3 6.7.6 6.7.9	—
Customer Privacy 2016				
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	N/A	6.7 6.7.7	—
Socioeconomic Compliance 2016				
419-1	Non-compliance with laws and regulations in the social and economic area	JSR Group ESG Data(PDF)	6.6 6.6.3 6.6.7 6.6.7	—