Management's Discussion and Analysis

Analysis of Operating Results

Overview of Operating Results for FY2021

In the FY2021, a recovery trend from the previous downturn was seen, fueled by both the control of COVID-19 and a rebound in economic activity. On the other hand, recent signs point to the pace of the global economy's recovery slowing down, including a fresh wave of COVID-19 infections, skyrocketing resource prices sparked by the Russian invasion of Ukraine that broke out in February 2022, worsening raw material and component shortages, and suppressed demand due to inflation mainly in the United States. As for the exchange rate, the yen depreciated against the dollar year-on-year. As for trends among the Group's main customer industries, the semiconductor market remained strong for both memory and logic semiconductors due to continued growth in demand for 5th generation mobile communication systems (5G), PCs and data centers. The flat-panel display market was strong throughout the year, thanks to the promotion of telework and other factors, but panel market conditions softened in the second half of the year, prompting manufacturers to adjust panel production. The biopharmaceutical market continued to see strong growth. The speed of recovery in global automobile production was hampered by production cuts by automobile manufacturers stemming from semiconductor shortages and difficulties in procuring parts for overseas production.

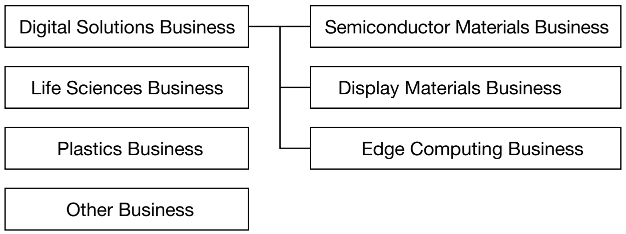
To push its business forward amid these circumstances, JSR Group has been strengthening its business structure and management framework to realize a corporate structure imbued with sustainability and resilience, in line with the management policy for FY2024, and actively investing in R&D and businesses. As part of this, the Group has focused resources on medium and long-term growth in the Digital Solutions Business and Life Sciences Business, which are positioned as core businesses. In the Digital Solutions Business, which is centered on the Semiconductor Materials Business, the Group made Inpria Corporation (Inpria) a wholly owned subsidiary. Inpria is a world leader in the design, development, and manufacturing of metal photoresists for extreme ultraviolet (EUV) lithography. The Group also embarked on the construction of a new plant for cutting-edge lithography materials, including EUV resists, at the main Yokkaichi Plant complex. Local subsidiaries were established in Singapore and Taiwan to further bolster marketing and customer support capabilities. The local subsidiaries will aim to further expand business in key markets for semiconductor production. In the Life Sciences Business, the Group took definitive steps toward future business growth. These included the continued construction and startup of new plants in Europe and America by the Group company KBI Biopharma, Inc. (KBI) for its biologics contract development and manufacturing organization (CDMO) business; the acquisition of OcellO B.V., which possesses advanced 3D cell imaging technology, by Crown Bioscience International (Crown Bio); and the opening of the JSR Bioscience and informatics R&D center (JSR BiRD), a new research facility to spearhead new business generation. Regarding the Elastomers Business, at the Board of Directors meeting held on May 11, 2021, the Company decided to establish a new subsidiary named Japan Synthetic Rubber Spin-off Preparation Co., Ltd. that succeeds to the Company's Elastomers Business through an absorption-type split, after which JSR will transfer all shares of Japan Synthetic Rubber Spin-off Preparation Co., Ltd. to ENEOS Corporation. Accordingly, JSR has classified the Elastomers Business as discontinued operations from the FY2021. Moreover, certain reclassifications have been made to the Consolidated Statement of Profit or Loss and related Notes on Consolidated Financial Statements for the FY ended March 2021 to conform to the presentation format for the FY ended March 2022. The share transfer to ENEOS Corporation was concluded on April 1, 2022.

As a result, the Group reported revenue of 340,997 million yen (up 9.3% year-on-year), core operating profit of 43,306 million yen (up 14.3% year-on-year), operating profit of 43,760 million yen (up 27.8% year-on-year), and profit attributable to owners of parent of 37,303 million yen, compared with loss attributable to owners of parent was 55,155 million yen in the previous fiscal year.

Business Segment Overview

The JSR Group's business is classified into three reportable segments: Digital Solutions, Life Sciences, and Plastics. The reportable segments are positioned as shown below.

Positioning of Reportable Segments



Digital Solutions Business Segment

The Digital Solutions Business segment experienced both increased revenue and profit compared to the previous fiscal year.

In the Semiconductor Materials Business, demand was firm for materials for both memory and logic semiconductors. To solidify JSR's position as a leader in the advanced lithography field, the Company made Inpria a subsidiary and added metal resists, a future technology, to its product portfolio of EUV photoresists. Sales of cutting-edge photoresists were particularly strong, due in part to advanced device launches by major customers. In addition, smooth product launches were achieved for packaging materials destined for major customers. An impairment loss was recorded for cleaning solutions caused by startup delays at the U.S. plant. Nevertheless, revenue and core operating profit increased year-on-year.

The Display Materials Business promoted expanded sales particularly of competitive products in the China market where continued growth is expected. Expanded sales to China were seen for alignment films and insulating films for wide-screen TV LCD panels, a focus point of the business. Although sales of alignment films and insulating films were solid, the sector posted lower year-on-year revenue and core operating profit because of increased expenses arising from the Group's business restructuring associated with the closure or scaling back of local production in Taiwan and South Korea, amid the shift of LCD production from South Korea and Taiwan to China.

The Edge Computing Business suffered revenue and profit declines because of a sales decrease in near infrared (NIR) filters.

As a result, the Digital Solutions Business segment posted a core operating profit of 39,002 million yen (up 12.8% year-on-year) on revenue of 165,030 million yen (up 9.0% year-on-year).

Life Sciences Business Segment

In the Life Sciences Business, with the U.S. headquarters guiding strategies for the entire business segment, the Group worked to expand revenue primarily in the biologics contract research business and the biologics contract development and manufacturing business, in addition to JSR materials. The contract research organization (CRO) business, provided by Group company Crown Bio, and KBI are steadily increasing their pipelines.

As a result, the Life Sciences Business segment posted a core operating profit of 3,168 million yen (down 9.7% year-on-year) on revenue of 72,452 million yen (up 31.3% year-on-year).

Plastics Business Segment

In the Plastics Business, sales volume rose from the previous fiscal year, mainly on the back of demand recovery in the automobile industry, and revenue also climbed. Core operating profit was up on the recovery in sales volume.

As a result, the Plastics Business segment posted a core operating profit of 5,323 million yen (up 20.2% year on-year) on revenue of 90,606 million yen (up 14.5% year-on-year).

Business Outlook

Uncertainties are anticipated to continue in FY ending March 2023, including changes in the international situation driven by the re-emergence of COVID-19 infections, geopolitical fluctuations including heightened tensions around the Ukraine situation, suppressed demand in countries around the world due to broad price increases, and the impact on exchange rates of interest rate policies in various countries. On the other hand, global economic growth is expected to be on a recovery track due to the widespread roll-out of COVID-19 vaccines, the expanding deployment of booster shots and use of therapeutic drugs against COVID-19, and the favorable employment conditions and asset markets in the United States that are expected to support the economy.

In the current situation, the semiconductor market, JSR's primary customer market, is expected to be sustained by digital infrastructure demand and see robust growth as an essential industry for society. Furthermore, the solid demand forecasts over the medium-to-long term for the life sciences field remain unchanged. In the global automobile market, the Plastics Business's main customer market, the recovery trend in automobile production is predicted to continue.

Amid these business conditions, JSR will continue proactive R&D and business investments in the growing Semiconductor Materials Business and Life Sciences Business toward further strengthening of its business structure and management framework in order to build an organizational structure having both resilience and sustainability.

Analysis of Financial Position

Overview of Financial Position for FY2021

1. Asset

Total assets as of March 31, 2022 amounted to 809,371 million yen, up 136,598 million yen from a year earlier.

Current assets amounted 437,002 million yen, up 107,723 million yen, due to an increase in inventories, including the Elastomers Business.

Non-current assets amounted 372,369 million yen, up 28,875 million yen, due to an increase in goodwill resulting from making Inpria Corporation a wholly owned subsidiary.

2. Liabilities

Total liabilities amounted to 394,631 million yen, up 92,595 million yen, due to an increase in borrowings resulting from the issue of bonds.

3. Equity

In terms of equity, total equity attributable to owners of parent amounted to 376,011 million yen, up 42,016 million yen from a year earlier, due to the recording of profit attributable to owners of parent. Total equity, including noncontrolling interests, amounted to 414,739 million yen, up 44,003 million yen.

Overview of Cash Flows for FY ended March 2022

Cash and cash equivalents ("funds") as of March 31, 2022 stood at 45,567 million yen, down 39,809 million yen from a year earlier.

Net cash provided by operating activities amounted to 18,271 million yen, down 52,132 million yen from the previous year. The main items included profit before tax of 45,521 million yen, depreciation expenses and amortization charges of 22,482 million yen, and net increase in inventories of 46,454 million yen.

Net cash used in investing activities totaled 63,117 million yen, up 10,431 million yen from the previous year. The main items were 47,614 million yen in payments for purchase of property, plant and equipment, 47,348 million yen in payments for purchase of shares of subsidiaries resulting in change in scope of consolidation, 17,203 million yen in proceeds from sale of investments, and 15,224 million yen in proceeds from sale of investments in associates.

Net cash provided by financing activities totaled 22,994 million yen, up 18,698 million yen from the previous year. The main items were 39,338 million yen in net increase in short-term borrowings and 15,338 million yen in repayments of long-term borrowings.

The Group formulates a funding plan based on the annual business plan and controls liquidity risk in consideration of an appropriate balance of direct and indirect funding, as well as short-term and long-term funding.

Financing and Capital Liquidity

The Group's need for capital includes working capital such as raw material costs; overhead costs; selling, general and administrative expenses; capital investment, business investment including M&As; and repayment of interest-bearing debt related to manufacturing and sales. The Group meets such needs for capital mainly from operating cash flows and by borrowing from financial institutions. The Group formulates a financial plan based on the annual business plan, and manages liquidity risks by ensuring an appropriate balance between direct and indirect financing and between short-term and long-term financing to prepare for these risks, while considering business expansion and enhancement of the financial position. The Group registered for the issuance of up to 100 billion yen in corporate bonds and established a commercial paper issuance facility of up to 15 billion yen. In the current fiscal year under review, we issue a total of 10 billion yen in short-term corporate bonds to further diversify our methods for raising capital. We are also introducing a cash management system for the purpose of efficient use of capital, and are seeking to centralize capital procurement and management within the Group.

Basic Approach to the Selection of Accounting Standards

JSR Group has voluntarily adopted International Financial Reporting Standards (IFRS) starting from FY ended March

2018 to improve convenience and the international comparability of financial information in the capital market.

Significant accounting policies, accounting estimates, and assumptions used in making such estimates adopted in the JSR Group's consolidated financial statements are described in "5. Accounting Conditions, 1. Consolidated Financial Statements, (1) Consolidated Financial Statements Notes to Consolidated Financial Statements, 4. Significant Accounting Policies, 6. Judgments Involving Significant Accounting Estimates and Estimates" in the Annual Securities Report.

Basic Policy on Profit Allocation and Dividends for FY ended March 31, 2022 and FY ending March 31, 2023

With respect to profit appropriation, the Company regards business growth over the long term as its top priority. To generate sustainable long-term growth, JSR strives to increase its competitiveness by developing new businesses through the reinforcement of research and development activities. The Company determines returns to shareholders by taking into account business performance and medium-term and long-term demand for funds, while giving consideration to a balance between returning profits to shareholders and retaining earnings necessary for future business advancement. The Company plans to pay a year-end dividend of 35.00 yen per share in the interest of continuing stable dividends. Including the interim dividend already paid, the total annual dividend for FY ended March 2022 will be 70.00 yen per share. With regard to the dividend for the next fiscal year (FY ending March 2023), JSR plans to pay 70.00 yen per share annually, the same amount as for FY ended March 2022, in consideration of the balance between returns to shareholders and retaining earnings for the Company's future growth, with the objective of sustainably improving the Company's business performance from a long-term perspective.

JSR Group Business and Other Risks

JSR Group is exposed to the following risks that may impact on operating results, financial position, cash flows, and other aspects of its business performance.

Forward-looking statements are based on the Group's judgments as of March 31, 2022, and the Group's business and other risks are not limited to the following matters.

Changes in Demand due to Economic Trends

Major industries in which JSR Group's products are sold, such as automobiles and electronics, may be influenced by the economic climate in countries or regions. An economic slowdown could reduce demand in these industries and adversely affect JSR Group's operating results.

Fluctuations in Exchange Rates

JSR Group is susceptible to the effects of exchange rate fluctuations. Operating results of consolidated subsidiaries and equity-method affiliates located in other countries are converted into Japanese yen amounts for the purposes of preparing consolidated financial statements. Accordingly, yen appreciation could adversely affect JSR Group's operating results.

Fluctuations in Prices for Crude Oil, Naphtha, and Other Major Raw Materials

Fluctuations in prices for crude oil and naphtha, or changes in market conditions for other major raw materials, could change procurement prices of raw materials or market conditions for products and adversely affect JSR Group's operating results, especially in the Elastomers Business and Plastics Business.

Overseas Operations

Overseas operations are exposed to a number of risks that include, but are not limited to, an unfavorable political environment or economic trends; labor disputes and other problems due to differences in labor laws and other working conditions; difficulty in recruiting and retaining employees; an adverse impact on business activities due to inadequate social infrastructure; and the impact of wars, terrorism, and other social instability. Any of these events could adversely affect JSR Group's operating results.

Product Quality Assurance and Product Liability

Damage or injury caused by a product manufactured by JSR Group could adversely affect JSR Group's operating results.

Development of New Products

Large, unforeseen changes in the industry or market could prevent the timely development of new products and adversely affect JSR Group's operating results.

R&D Involving NextStage Growth Businesses
JSR Group actively invests in R&D to create next-stage growth businesses. However, there is no guarantee that all R&D activities will yield worthwhile results. Depending on R&D results, there could be an adverse effect on JSR Group's operating results.

Protection of Intellectual Property
Disputes over intellectual property with other companies could arise or infringements on JSR's intellectual property by other companies could occur.

Climate Change
As a transition risk associated with climate change, if policies toward a decarbonized society are strengthened or laws and regulations related to carbon emissions are revised or newly enacted at an unexpectedly rapid pace in various countries and regions in the future, the Group may face increased expenditures for such efforts and restrictions on its business activities.

Environmental Issues
In the event that a spill of any type of chemical occurs or that environmental regulations become more stringent, the Group's business activities could be constrained, the Group may have to pay compensation and other costs, or the Group may have to make new substantial capital expenditures. Any of these events could adversely affect JSR Group's operating results.

Laws and Regulations
In the countries where it operates, JSR Group is subject to various laws and regulations involving business and investment permits, import and export activities, trade, labor relations, intellectual property, taxes, foreign exchange, and other matters. In the event that a law or regulation is violated, or a law or regulation becomes stricter or is significantly altered, there could be limitations to the Group's business activities or additional compliance costs. Any of these events could adversely affect JSR Group's operating results.

Litigation
JSR Group may be sued or be involved in other litigation concerning a dispute with a supplier, customer, or other external party. The outcome of significant litigation could adversely affect JSR Group's operating results.

Procurement of Raw Materials
An interruption in the supply of raw materials due to an accident at a raw materials manufacturer or a supply stoppage due to quality issues or bankruptcy could hinder production activities and adversely affect JSR Group's operating results.

Information Systems and Information Management
Unauthorized access due to cyber attacks, malicious or grossly negligent actions by employees or others, power outages, disasters, or other events, may result in the falsification or destruction of data, leakage of personal information, failure of information systems, which could in turn impede business activities.

Natural Disasters and Accidents
Constraints on economic activity caused by a major natural disaster or an accident at a manufacturing facility that damages a manufacturing facility or disrupts production could adversely affect JSR Group's operating results.

Spread of COVID-19 Infections
Restriction of economic activities due to the spread of the COVID-19 infections, temporary closure of offices and factories, or reduced operation could adversely affect the JSR Group's business results.