

## MANAGEMENT'S DISCUSSION AND ANALYSIS

## Analysis of Operating Results

## Overview of FY2014, ended March 31, 2014

Summarizing trends in the main industries where JSR Group customers do business, in automobile tires, production increased for the year in China and the rest of Asia and achieved slight growth in North America and Europe while remaining at the same level in Japan. Automobile production in North America and China was up year on year, and Europe started to show signs of a recovery, but Japan was flat despite a second-half recovery. In the semiconductor industry, production rebounded in the second half, but full-year results remained at the same level owing to the effects of a first-half slowdown. In flat panel displays (FPDs), production expanded year on year as a result of strong sales of small- and medium-size panels for mobile devices such as smartphones.

Under these circumstances, the JSR Group drove expanded sales of its technically superior products, while it also sought to maintain profits by revamping product pricing in the face of volatile raw material prices and by pushing forward with cost reductions through the E-100plus cost restructuring initiative. The weakening yen was the primary factor lifting net sales, but further growth in operating income was held in check by other factors, namely the deteriorating position of our products in the Petrochemical Products Business and forward-looking investments in the Fine Chemical and Other Products Business.

Financial results for FY2014 consist of net sales of ¥394.3 billion (up 6.1% year on year), operating income of ¥36.1 billion (up 2.4%), and net income of ¥25.2 billion (down 16.9%).

## Review of Operations

*Elastomers Business Segment*

The Company's sales volume in synthetic rubber products was flat, as domestic production remained constant in the automobile tire

industry, one of our chief sources of demand; yet net sales value recorded a year-on-year gain. In other regions, particularly Asia, increased supply capacity at synthetic rubber firms upset the demand-supply balance and worsened market conditions. To retain its profit levels, JSR implemented a new pricing structure and cost reduction measures in the face of price volatility for raw materials. Despite these efforts, operating income was down year on year.

As a result, the Elastomers Business segment had net sales of ¥203.5 billion (up 3.9% year on year) and operating income of ¥17.4 billion (down 3.3%).

*Plastics Business Segment*

Sales volumes in synthetics rubber were down from the previous fiscal year. Although products for automobiles rebounded in the second half, those for use in industrial materials including amusement and general applications fell. Net sales and operating income, on the other hand, both managed to increase for the year as a result of cost reduction measures and a restructuring of product pricing in response to changes in raw material costs. Yen depreciation also helped boost these results.

Owing to these factors, the Plastics Business segment had net sales of ¥57.8 billion (up 11.6% year on year) and operating income of ¥3.9 billion (up 32.3%).

*Fine Chemicals and Other Products Business Segment*

In semiconductor materials, net sales rose year on year, driven in the second half by the start of high-volume production among major customers in leading-edge 20nm generation processing, where JSR boasts a high market share. The lower yen exchange rates also contributed to this result. In FPD materials, yen effects were also prevalent, and the operating ratios of principal customers trended firmly upward, resulting in a year-on-year increase in net sales. Among

## Segment Sales/Operating Income (¥ millions)

Years ended March 31	2010	2011	2012	2013	2014
Elastomers Business	¥136,086	¥160,854	¥180,835	¥195,797	<b>¥203,478</b>
Operating income	372	14,739	19,358	17,923	<b>17,330</b>
Plastics Business	47,812	52,297	51,236	51,759	<b>57,764</b>
Operating income	(1)	2,563	2,138	2,962	<b>3,919</b>
Fine Chemicals and Other Products Business	126,286	127,515	117,876	123,931	<b>133,067</b>
Operating income	19,859	21,793	14,468	14,321	<b>14,813</b>
Net Sales	310,184	340,666	349,947	371,487	<b>394,309</b>
Operating income	¥ 20,230	¥ 39,095	¥ 35,964	¥ 35,206	<b>¥ 36,062</b>

the strategic business and other products, net sales rose steadily in biomedical materials, but sales volumes of optical film in the precision materials and process field lost momentum.

In electricity storage devices, the segment started full-scale sales of lithium ion capacitors (LIC) and committed to construction of a high-volume production facility.

For the Fine Chemical and Other Products Business segment overall, FY2014 net sales and operating income both surpassed the corresponding results from FY2013, despite the downward pressure on operating income exerted by the JSR Group's commitment to forward-looking investment for the development of next-generation, leading-edge technology.

Key results in the segment for the year were net sales of ¥133.1 billion (up 7.4% year on year) and operating income of ¥14.8 billion (up 3.4%).

#### **Business Outlook for FY2015**

For FY2015, among the main customer industries, the JSR Group expects the automobile tire and semiconductor markets to benefit from demand growth in line with the improving global economy, which will return them to a recovery track in the first half. Our outlook for the FPD market is for continued firm growth in small- and medium-size

panels for smartphones and tablets. However, mounting geopolitical risks and global economic uncertainty make our forecasts for these markets subject to unclear and unpredictable conditions.

In the Elastomers Business, the rate of demand growth for synthetic rubber is expected to fluctuate depending upon the rebound in the tire industry. Meanwhile, because S-SBR is showing good prospects for steady growth as the eco-tire market heats up, we are engaged in an effort to expand global sales by making use of a tire joint venture and plant in Thailand that has entered full-scale operation.

In the Fine Chemical and Other Products Business, we are embarking on sales expansion plans in both semiconductor materials and FPD materials. In semiconductors, our efforts will focus on lithography materials, mainly photoresist, which are tied to the momentum for advanced 20nm generation high-volume production by the industry's major players. In FPD materials, we will concentrate on small- to medium-size panel products, whose production outlook is quite favorable.

In consideration of the above, our consolidated earnings forecast for FY2015 consists of net sales of ¥410.0 billion (a 4.0% year-on-year increase), operating income of ¥38.0 billion (a 5.4% increase), and net income of ¥28.0 billion (an 11.2% increase). The assumptions behind this forecast are an exchange rate of ¥100.0 per U.S. dollar and a naphtha price of ¥70,000 per kiloliter.

## Analysis of Financial Position

Total assets at the fiscal year-end on March 31, 2014, amounted to ¥501.3 billion, up ¥18.4 billion from a year earlier.

Current assets totaled ¥326.5 billion, up ¥6.1 billion, due to increases in inventories, cash and deposits, and securities.

Noncurrent assets totaled ¥174.8 billion, up ¥12.3 billion. Major factors were an increase in investment securities as a result of capital contributions in Japan and overseas and changes in the market value of certain securities in addition to an increase in plant, property and equipment as a result of plant construction in Thailand.

Total liabilities amounted to ¥164.1 billion, down ¥3.1 billion from a year earlier. Major factors include an increase in long-term loans payable and a decrease in notes and accounts payable—trade.

Net assets amounted to ¥313.0 billion, including a ¥12.5 billion increase in shareholders' equity. Accumulated other comprehensive income was ¥18.3 billion, up ¥10.2 billion year on year. After subscription rights to shares and minority interests are also accounted for, total net assets come to ¥337.3, up ¥21.5.

## Analysis of Cash Flows

Cash and cash equivalents ("funds") on March 31, 2014, stood at ¥91.1 billion, up ¥37.3 billion from a year earlier.

Net cash provided by operating activities was a net inflow of ¥35.5 billion, down ¥12.2 billion from a year earlier.

Major factors include income before income taxes and minority interests of ¥37.0 billion, depreciation and amortization of ¥18.1 billion, a decrease in notes and accounts payable of ¥14.5 billion, and income taxes paid of ¥11.9 billion.

Net cash from investing activities was a net inflow of ¥8.2 billion,

up ¥66.9 billion from the previous year. Major factors include an inflow of ¥28.5 billion from a decrease in short-term investment securities and an outflow of ¥21.1 billion from purchase of noncurrent assets.

Net cash used in financing activities was a net outflow of ¥8.1 billion, down ¥2.0 billion from the previous year. Major factors include ¥8.5 billion for payment of cash dividends, ¥4.2 billion for purchase of treasury stock, and ¥4.5 billion for proceeds from long-term loans payable.

## Profit Appropriation

The Company regards its most critical challenge to be the long-term enhancement of business earnings. To this end, we strive to strengthen our research and development from a long-term standpoint and intend to enhance our business competitiveness through new business expansion.

In conformance with this approach, the JSR Group has set a basic policy to appropriate profits, including repurchase of Company shares, in line with consolidated performance while continuing to pay a stable cash dividend. The determination of cash dividends is based on comprehensive consideration of the balance between appropriating profits and retaining the necessary funds for future business advancement.

We allocate retained earnings to R&D connected to future growth and to strategic investments, and we work hard to enhance corporate value so that we can return profits to our shareholders.

In accordance with this policy, we have decided to pay a year-end dividend of ¥19 per share as previously announced. This amount is the same as the interim dividend, and the total annual dividend for fiscal year 2014, including the interim dividend already paid, will be ¥38.00 per share.

For the next fiscal year (FY2015 ending on March 31, 2015), we plan in consideration of the business outlook to increase the cash dividend to ¥40 per year, consisting of an interim dividend of ¥20.00 and a year-end dividend of ¥20.00.

## Risk Information

The JSR Group is exposed to the following risks that may impact on operating results, financial position, cash flows and other aspects of performance. Forward-looking statements in this discussion are based on JSR's judgments as of March 31, 2014. Risks at JSR include, but are not limited to, the following items:

### **(1) Changes in Demand due to Economic Trends**

In the major industries where the JSR Group's products are sold, such as automobiles and electronics, demand is influenced by the economic climate in a country or region. An economic slowdown could reduce demand in an industry and adversely affect the JSR Group's operating results.

### **(2) Fluctuation in Prices for Crude Oil, Naphtha and Other Major Raw Materials**

Higher prices for crude oil and naphtha, or changes in the markets for JSR's major raw materials, could raise prices of raw materials and adversely affect the JSR Group's operating results, especially in the petrochemical products sector of elastomers, emulsions and plastics.

### **(3) Fluctuation in Exchange Rates**

As the JSR Group undertakes product exports in foreign currencies and imports goods such as raw materials, the Company takes measures to reduce risks such as entering into forward exchange contracts; however, fluctuation in exchange rates could give rise to adverse outcomes. In addition, operating results of consolidated subsidiaries and equity-method affiliates located overseas are converted into Japanese yen amounts for the purposes of preparing the consolidated financial statements. However, due to the yen's appreciation, the JSR Group's business results could be adversely affected.

### **(4) Procurement of Raw Materials**

The JSR Group works to ensure a stable supply of raw materials by procuring materials from a number of sources. However, an interruption to the supply of raw materials due to an accident, bankruptcy or quality problem at a supplier could adversely affect production activities and the JSR Group's operating results.

### **(5) Development of New Products**

Rapid technological progress is constantly taking place in the electronics industry, which is the primary source of demand for semiconductor manufacturing materials, FPD materials and optical materials, the major products of the JSR Group's fine chemicals and other products business. JSR is constantly working on developing state-of-the-art materials in line with this progress. However, unforeseen changes in the industry or market could prevent the timely development of new products and adversely affect the JSR Group's operating results.

### **(6) R&D Involving Next-Stage Growth Businesses**

The JSR Group makes substantial investments in R&D to create next-stage growth businesses. However, there is no guarantee that these R&D activities will always yield worthwhile results. Depending on R&D results, there could be an adverse effect on the JSR Group's operating results.

### **(7) Protection of Intellectual Property**

Protection of intellectual property is extremely important for the JSR Group's business activities. JSR has established a system for protecting its intellectual property and takes various actions as required. However, a dispute about intellectual property with another company or an infringement on JSR's intellectual property by another company could adversely affect the JSR Group's operating results.

**(8) Product Quality Assurance and Product Liability**

The JSR Group has a product quality assurance system and product liability insurance. However, damage or injury caused by a product manufactured by the JSR Group could adversely affect the JSR Group's operating results.

**(9) Natural Disasters and Accidents**

To minimize the negative effect on its business activities of any disruption to manufacturing activities, all JSR Group manufacturing facilities have established countermeasures based on the identification of all potential sources of a crisis and conducts periodic inspections of facilities. The Group also works constantly on safety measures with regard to earthquakes and other natural disasters. However, a major natural disaster or accident that damages a production facility or disrupts manufacturing could adversely affect the JSR Group's operating results.

JSR's main production facility, the Yokkaichi Plant, houses private power generation equipment, and the Kashima Plant is able to access electric power from shared power generation facilities when necessary. In the event that electric power shortages become severe due to natural disasters and the like, however, the JSR Group's operating results could be affected.

**(10) Environmental Issues**

Positioning environmental protection as an important element of its operations, the JSR Group complies with all laws and regulations concerning the environment. The Group also takes actions aimed at reducing its environmental impact, lowering and eliminating waste materials, and cutting energy and resource consumption. The Group has taken many actions to prevent the external release of all types of chemicals.

However, in the event that a spill occurs or that environmental regulations become stricter, the Group's business activities could be restricted, the Group may have to pay compensation and other expenses, or the Group may have to make substantial capital expen-

ditures. Any of these events could adversely affect the JSR Group's operating results.

**(11) Overseas Operations**

The JSR Group is aggressively expanding operations on a global scale, conducting manufacturing, sales and other activities in countries and regions in the North America, Europe, Asia and other parts of the world. 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 an inadequate social infrastructure; and the impact of wars, terrorism and other social instability. Any of these events could adversely affect the JSR Group's operating results.

**(12) Laws and Regulations**

In the countries where it operates, the JSR Group is subject to various laws and regulations involving business and investment permits, export and import activities, trade, labor relations, intellectual property, taxes, foreign exchange and other items. The Group has established a clear compliance policy in order to ensure strict observance of laws and regulations as well as ethical standards. 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 the JSR Group's operating results.

**(13) Litigation**

In conjunction with its business activities in Japan and overseas, the 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 the JSR Group's operating results.