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products available to general end-users, even if they do not recognize or are not aware of such materials. Items useful in your daily life and products to improve the world are underpinned by the power of the chemical industry. By pursuing new possibilities of materials through the power of chemistry, and contributing to the development of society, the JSR Group would like to ensure our own sustainable growth.



Editorial Policy

The JSR Group's corporate social responsibility (CSR) policy is to act with integrity as a good corporate citizen in a manner that at all times meets the expectations of stakeholders. Fulfilling our CSR is a critical management priority. We publish our CSR reports to inform all stakeholders of JSR Group policies and initiatives with a view to a sustainable society.

The CSR Report 2014 clearly describes how our Corporate Mission is related to CSR through our unique approach to creating a sustainable global environment and society, while presenting details on our products that open up new frontiers in power conservation with materials innovation. The report also includes a dialogue between external experts and our executives, discussing what we as a chemical manufacturer are expected to do for the environment and what challenges may arise in the future. Our activities are reported in tables after comparing targets and actual results for each action item. A third-party opinion (available both in the printed version and our website) and an independent review (only on the website) regarding our activities and report are provided.

The CSR Report 2014 Format

Online

The online version presents a comprehensive report on the JSR Group's CSR activities. In addition to the content provided in the printed version, the online version details specific initiatives regarding "Responsible Care" (the environment, health, and safety) and many other responsibilities for our stakeholders.



http://www.jsr.co.jp/jsr_e/csr/csrreport2014.shtml

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Referenced Guidelines

- •Sustainability Reporting Guidelines, 3rd Edition, Global Reporting Initiative (GRI)
- Environmental Reporting Guidelines 2012, Ministry of the Environment
- Environmental Accounting Guidelines for Chemical Companies, Japan Chemical Industry Association (JCIA)
- Environmental Accounting Guidelines 2005, Ministry of the Environment

Note: Details on how this report conforms to the GRI Guidelines are available in the online version.



CSR Report 2014 > Comparative Table of Guidelines

Target Period and Fiscal Year

April 1, 2013 – March 31, 2014 (Some parts of the CSR Report 2014 include activities and initiatives conducted since April 2014.)

Our fiscal year runs from April of the previous year to March of the year indicated.

Operations Covered

JSR Corporation and 40 Group Companies Operations for which data was collected on "Responsible Care" (the environment, health and safety) Yokkaichi Plant, Chiba Plant, Kashima Plant, Yokkaichi Research Center, Precision Processing Technology Center, Tsukuba Research Laboratories, 12 domestic Group companies*1, and 10 overseas Group Companies*2

*2 Shanghai Rainbow Color Plastics Co., Ltd., Elastomix (Foshan) Co., Ltd., Tianjin Kuo Cheng Rubber Industry Co., Ltd., Kumho Polychem Co., Ltd., Elastomix (Thailand) Co., Ltd., JSB Micro N.V., JSB Micro, Inc., JSR Micro Korea Co., Ltd., JSR Micro Taiwan Co., Ltd., JSR BST Elastomer Co., Ltd

Publication Information

Date of publication: August 2014 Next scheduled issue: July 2015 (Previous issue: August 2013)

The JSR Group's CSR Report 2014 is available both in printed and online versions.

Print

The printed version features CSR activities in the JSR Group that we would particularly like to communicate to our stakeholders. This version also provides the highlights of our previous fiscal year's activities.

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*1 Companies marked with a * in the list of JSR Group companies on page 26

Responsible Care[®]

("Responsible Care" is referred to as "RC" in this report.)

In the chemical industry, **Responsible** Care 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."

Source: Japan Chemical Industry Association pamphlet "Do You Know about Responsible Care?"

Executive Commitment

We will Pursue True Globalization and Challenge the World under the Corporate Mission of "Materials Innovation"



Producing Results for the World Shifting to a New Framework

The two keywords that best describe the period from 2011 to 2013, during which the JSR20i3 ("twenty thirteen") mid-term business plan was implemented by the JSR Group, are "uncertainty" and "diversification." In 2014, positive signs of economic turn-around began to appear, making us increasingly confident that a new global framework is emerging.

The three-year period of JSR20i3 was positioned as the stage for "activation toward growth" in the process of realizing our vision of what the Group should be by 2020. During this period, although sales increased to nearly a record high, net profit failed to meet the target. While the petrochemical product business achieved record high profits, the fine chemicals business was adversely affected by commoditization in the digital industry, resulting in a lower relative competitive advantage in the market and reduced revenue. On the other hand, this three-year period also saw us develop our clear growth strategy and make decisions on large-scale investments, thus paving the way for the Group to take a great stride forward in growth.

In JSR20i6 ("twenty-sixteen"), a new mid-term business plan that covers the fiscal year ending March 2015 to the fiscal year ending March 2017, our goal is to produce specific results, e.g., generate revenue by making the most of the foundations that have been laid up until now.

Linking All of Our Business Activities to the Creation of Social Value

In the petrochemical product business, while the global demand for fuel-

efficient tires is expected to increase, the reorganization of ethylene crackers currently underway in Japan may make it difficult to secure raw materials for synthetic rubbers. We are therefore advancing into regions where the market is open and raw materials are available to produce synthetic rubber for fuelefficient tires. One such region is Thailand, where a plant from JSR BST Elastomer Co., Ltd. started operations in the fiscal year ending March 2014, even embarking on second-stage construction work to meet the expected increase in demand. We also established a joint company in Hungary in March 2014 to build a new plant with a view to achieving sales there in 2017.

In the fine chemicals business, we aim to meet requirements becoming more complex and high level by keeping up with market changes and taking advantage of our global network while expanding our business into sensors and other areas to utilize our technological expertise in order to contribute to the realization of a comfortable, convenient ubiquitous society.

In the strategic business, our third pillar of business, we focus on two areas: lithium-ion capacitors and life sciences. Lithium-ion capacitors are an innovative, energy-saving device, and we are expecting their demand to increase particularly for use in hybrid construction machinery, buses, and other large vehicles to improve their driving efficiency. For example, airport buses in the United Kingdom began to be equipped with lithium-ion capacitors in 2013. In the area of life sciences, focus is being placed on bioprocess materials used in the development of next-generation new medicines. The development of antibody drugs today requires very high costs. Under these circumstances, we are working to develop technologies to realize "disruptive" innovations, such as making it possible to cut production costs in half, or efficiently obtain drug efficacy that could not have been obtained before. Lithium-ion capacitors and other environmental and energy-saving products are based on the E2 InitiativeTM concept, which comprises "Eco-innovation" an aggressive approach in which environmental conservation is seen as an opportunity to create new business rather than as a burden—and "Energy management"—a more defensive approach that focuses on the reduction of our environmental impact. Under this concept, we utilize our unique materials to develop and offer products that are both environmentally and economically sustainable, such as synthetic rubber for fuel-efficient tires, thermal management materials, and plant-derived resin, in order to help reduce environmental impact in various applications. At the same time, we also strive to reduce the environmental impact of our production processes, and have achieved our FY2014 goal of reducing total CO_2 emissions from our three plants in Japan by at least 6% compared to FY1991 levels. We are continuing with our efforts to reduce CO_2 emissions even further.

With regard to biodiversity conservation, we procure raw materials while paying due consideration to biodiversity based on an analysis of the supply chain; conduct comparative studies on the impact of synthetic rubber and natural rubber on biodiversity; and create green spaces at our business sites while assessing progress using the "Land Use Score Card", among other efforts taken. In addition, to further promote these activities, we will work even harder to integrate biodiversity into our business activities. We will also examine what the JSR Group can do for the conservation of water—a precious Earth resource.

As these efforts indicate, the JSR Group has been balancing the enhancement of its business competitiveness and the creation of its social value in every aspect of its business activities, which I believe constitutes the uniqueness and strength of the Group.

Valuing the Importance of True Globalization and Fulfilling Responsibility to Stakeholders

Of all our Management Policies, we attach great importance to "Responsibility to Our Stakeholders," particularly "Responsibility to Our Customers/Business Partners." This is because we believe that ensuring a steady supply of high-quality, affordable materials is indispensable for the creation of innovative products by our various customers, which, together with providing good relevant services, will eventually lead to the sustainable growth of companies and the realization of our Corporate Mission of enriching society through materials.

To fulfill our responsibilities to customers and business partners, management must build an environment that encourages every employee to stay motivated and dedicated to work. At the JSR Group, therefore, executives including myself, put efforts to have bi-directional



communications with employees by holding dialogue meetings and through other means. Also, in the last fiscal year, the company decided to increase its matching contributions to the employee shareholding association as a profit sharing incentive for employees who share goals and risks. I also sent five messages across the Group to tell employees about specific examples of "Materials Innovation" that was beginning to be materialized and how it would contribute to social changes so as to bring about even greater excitement and motivation in their work.

In FY2014, the ratio of overseas sales to total sales exceeded 50% for the first time, with about a half of the total generated by products produced and sold abroad. Our workforce comprises about 4,200 employees in Japan and about 1,400 employees abroad. From this, it can be said that the JSR Group's business is experiencing a shift from being Japan-oriented to becoming truly global. To address this trend, we require even more dynamic human resource management, such as personnel exchanges between overseas business sites and local training. The JSR 20i6 mid-term business plan, therefore, has added a global approach to our traditional personnel management, which places emphasis on what human resources are needed, what human resources we have, and how they should be trained on a global basis. We also need to deepen our understanding of diversity. People are diverse in nature, and we need to make the company open to diversity. The activities we have been conducting to ensure dissemination of the Essential Elements across the Group will be important in the area of diversity as well.

Safety is the first and foremost important issue for manufacturers. As many accidents occurred in chemical plants recently, the JSR Group is currently carefully checking safety activities and techniques that have been implemented by us as a matter of course in response to such problems.

We firmly believe that these and a number of other painstaking efforts will result in the fulfillment of our responsibilities to society and shareholders, and eventually lead to the creation of value.

Our Aim is to Realize Our Corporate Mission and Become a Corporate Group with a Strong Global Presence

The JSR Group's Corporate Mission is to contribute to society through "Materials Innovation." To achieve this mission, we have declared our participation in the United Nations Global Compact, and through this and other commitments, we aim to act even more responsibly in the international community. We must continue our efforts to increase the quality, efficiency, and fairness of our business operations to meet and exceed international standards. At the same time, we also need to continue to value strengths that Japanese companies possess as well. High technological prowess and quality nurtured by Japan over many years have been and will continue to be powerfully appealing and trusted in markets around the world.

We will continue to stay ahead of the ever-changing times and pursue innovation to become a corporate group with strong global presence. Our pursuit of new challenges is never-ending.

Mitsunobu Koshiba Representative Director and President JSR Corporation

JSR Group's Approach toward Creating a Sustainable **Global Environment and Society**

The Corporate Mission represents why the JSR Group exists and is in business, while CSR guides the Group on how it should act. The JSR Group's Essential Elements and CSR form the foundation on which we create value through materials to enrich society, people and the environment, which remain consistent even with changes in personnel and organizational form. These are the foundation for our sustainable growth.

Corporate Mission and CSR Global environment New business opportunities JSR JSR Group Sustainability of global environment Divisions and society **Employees** Creation of value and enriching society, people Energy and the environment Corporate value through materials Appreciation, trust Disaster prevention, safety Social and global issues that need to be solved Climate change What value can each (employee) division and (the JSR Group) offer to create a sustainable global environment and society?

The JSR Group cannot exist without a sustainable global environment and society

The JSR Group's business is shifting from being Japan-oriented to becoming truly global. To conduct business globally, we need to have a deep understanding of issues on both global and local levels and act based on that understanding. On the other hand, these issues may also offer new business opportunities. We will expand our business by actively pursuing such business opportunities.

Participation in the **United Nations Global Compact**

In April 2009, the JSR Group became a participant in the United Nations Global Compact. Amid increasing pressure to engage in corporate social responsibility, businesses operating at a global level need to make a greater commitment to human rights, labor, the environment, and anti-corruption, as expressed in the 10 principles of the Global Compact. We consider our participation in the Global Compact to be a proclamation of our dedication to acting responsibly in the international community, and will strive to work even harder to fulfill our corporate social responsibility.

The 10 Principles of the United Nations Global Compact

- 1 Businesses should support and respect the protection of internationally proclaimed human rights.
- 2Businesses should 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. Businesses should uphold the elimination of all forms of forced and compulsory labour
- Network Janan 6 Businesses should uphold the effective abolition of child labour. 6 Businesses should uphold the elimination of discrimination in respect of WE SUPPORT

GLOBAL COA

- employment and occupation. Businesses should support a precautionary approach to environmental challenges
- Businesses should undertake initiatives to promote greater environmental responsibility Businesses should encourage the development and diffusion of environmentally friendly technologies. (DBusinesses should work against corruption in all its forms, including extortion and bribery.



Corporate Mission

Materials Innovation

We create value through materials to enrich society, people and the environment.

The corporate mission of the JSR Group clearly identifies the company's raison d'etre. By supplying materials that are indispensable to human societies, JSR aims to be trusted.

Management Policies	JSR's Fundamental Pilla
Continuous Creation of Businesses	As society evolves, so does the demand for special respond to changing marketing needs and, in doing
Enhancement of Corporate Culture	As society evolves, so will our organization. JSR will management style with the vitality to keep evolving.
Increase in Corporate Value	JSR will position itself to increase our overall corp satisfaction and the fulfillment of employees.

Management Policies Responsibility to Our Stakeholders

Responsibility to Our Customers / Business Partners When interacting with our business partners nd customers, the JSR Group will:	Oconstantly evolve to meet the demand for new r OAlways strive to increase customer satisfaction OAct in good faith and maintain fair and equitable Ocontinue to be socially and environmentally con
Responsibility to Our Employees All employees should expect:	 To be evaluated and rewarded based on fair sta Continuous opportunities to grow by challenging Acceptance of the diversity of fellow colleagues
Responsibility to Society III members of the JSR Group will conor our responsibility to both the local and global communities through:	 Responsible and respectful business practices (Support for environmental conservation by provi Reduction of our environmental impact throughe Active contribution to conserving biodiversity thr
Responsibility to Shareholders The JSR Group will maintain its esponsibility to its shareholders by:	 Aiming to increase corporate value by creating bu Constantly enhancing its management efficiencies Inspiring trust by being highly transparent and con

Course of Action "The 4Cs"

Challenge	All employees of the JSR Group should share a com feel confident to autonomously take on new challe opportunities to learn, grow and improve.
Communication	All employees should feel comfortable and confident levels within the JSR Group. Employees should strive for the best means of sharing value and achieving commo
Collaboration	Employees will work together in the spirit of cooper- Employees will also be encouraged to actively collaboration
Cultivation	All employees will cultivate an environment that su opportunities for them to develop together as individ

rs of Management

ized materials and advanced products. JSR continuously evolves to anticipate and so, achieves dynamic growth.

build on its existing positive corporate culture to create an organization and

orate value by creating businesses through materials with focuses on customer

naterials

e business relations

scious throughout the supply chain

ndards themselves

and to be provided a place where all employees can work together as a team

Responsible Care) that considers the environment and safety

iding eco-friendly products

out the entire product lifecycle

oughout its business activities and the entire product lifecycle

siness opportunities through materials

nducting sound corporate management practices

non, global focus and desire to succeed. Employees should iges, learning from successes while viewing setbacks as

naintaining open lines of bi-directional communication at all r organizational transparency through direct conversations as

goals, especially in the face of growth and diversification.

CHALLENGE

COLLABORATION CULTIVATION

ation, valuing common, corporate goals over internal or departmental barriers. rate with external resources and not be bound by conventional ideas.

upports bi-directional communication between managers and subordinates, and provides als and as members of productive, supportive teams.

CSR Management Framework

The mission and raison d'être of the JSR Group is to create value through materials to enrich society, people and the environment. The JSR Group's CSR policy is to act with integrity as a good corporate citizen in a manner that at all times meets the expectations of stakeholders. Fulfilling our CSR is a critical management policy.

The CSR Committee is responsible for managing the JSR Group's CSR initiative. The CSR Committee coordinates and provides guidance for the activities of the four committees placed under it. The CSR Committee meets four times a year regularly and as often as deemed necessary to enhance the Group's CSR activities.



Corporate Ethics Committee

OAdvances corporate ethics for the JSR Group OConfirms and follows up on matters of legal compliance OAdvances respect and safeguards for human rights OEstablishes and reviews the JSR Group's policies on safety, the environment, quality and product

safety, and ensures the

implementation thereof



continually improve response policies for risks involving the JSR Group

OExamines and advances social contribution activities in which the JSR Group ought to engage

Major Activities Promoted in FY2014 See pages 21 to 24, "Targets and Results," for the overall activity report.

CSR Committee

Activities to ensure penetration of Essential Elements across the Group

A dialogue is organized quarterly as an opportunity to discuss the Corporate Mission directly with the company's executives.

The scope of participants for these meetings, employees in their 30s and 40s, expanded in FY2014 to include General Managers and Group company officers. Each year at these meetings, participants share their experiences related to the Corporate Mission and techniques employed to make the Corporate Mission more familiar among employees, and actively and enthusiastically exchange opinions. Education with regard to different employee levels is also provided as an opportunity for each employee to think about how his/her job helps to create value and contributes to society along with how he/she should act.

Since these activities were launched three years ago, the level

of awareness and understanding of JSR Group's Essential Elements among employees has been increasing.



CSR Workshop

CSR workshops have been organized since FY2012 to study the essence of CSR-i.e. the importance of proactively working on social issues to create a sustainable society. In January 2014, the third CSR workshop was held, attended by manager-level employees from the JSR Yokkaichi Plant, Yokkaichi Research Center, and Group companies in neighboring areas.

At the workshop, the participants held group discussions on what they should do to realize the Group's 2030 vision. These on-going activities help each employee gain an understanding of CSR and what actions to take, leading to bolstering the total CSR performance of the Group.





Feature Building a Future with JSR Group's **Materials Innovation**

In the JSR20i6 mid-term business plan, the environment and energy business and the life sciences business are positioned as strategic businesses for which the market is expected to expand and the JSR Group's proprietary technologies can be utilized. This Special Feature discusses what we can do now and what direction these businesses should take going towards the future to contribute to solving global issues and the growth of the Group based on our high-quality and functional materials and superior technologies.

The JSR Group's Materials Used in Various Life Scenarios to Meet Everyday Challenges

P.11 Opening up New Frontiers in Power Conservation with Materials Innovation

P.13 Dialogue with Society Become a Company that Does Business in the Best Way Imaginable

P.17 Safety Assurance that Supports Materials Innovation

The JSR Group's Materials Used in Various Life Scenarios to Meet Everyday Challenges

The JSR Group's materials are used in a wide range of products.

We offer a broad spectrum of environment, energy, biomedical, and other materials that help to address social issues and create a brighter, environment-friendly society.



Solution Polymerization Styrene Butadiene Rubber (S-SBR)

Mostly grades for fuel-efficient tires. The unique molecular structure that makes it easier for rubber molecules to form connections with reinforcement molecules reduces energy loss caused by internal tire friction.

2 Polybutadiene Rubber (BR)

Rubber with excellent abrasion resistance, lowtemperature performance, and rebound resilience, used mainly in truck/bus tires and golf balls. Polybutadiene rubber based on a neodymium catalyst (Nd-BR) in particular helps to increase fuel efficiency and extend the lifecycle of tires.

3 Thermoplastic Elastomers (TPEs)

While TPEs demonstrate rubber elastic properties at room temperature, they become liquid when heated and can be easily molded and processed. Their reprocessability makes them easy to recycle.

4 Emulsions

Liquid form materials developed based on JSR's synthetic rubber manufacturing technologies. They are used in applications such as paper coating to give high gloss and smoothness to paper used for magazines, calendars, and others.

5 Water-based Binders for Batteries

Binders used in the production of electrodes for lithium-ion batteries and other products. They are useful not only for producing high-performance electrodes but also for reducing environmental impact since they are free of organic solvents.

6 SIFCLEAR[™] for Paints

A fluorin-acrylic water-based material for paints, developed with JSR's proprietary emulsion technologies. The product makes paints weather and contaminationresistant, and when used in thermal insulation paints, helps them to retain insulation performance for a long period of time, thus contributing to energy conservation.

7 CALGRIP[™] Latent Heat Material

A material capable of maintaining space at a specific temperature ranging between -20° C and $+80^{\circ}$ C for a long period of time. The material is used in, among other applications, long-time transportation containers for pharmaceuticals and food, building materials, and thermal storage tanks for air conditioners.

8 ABS Plastic

ABS plastic is strong and hard to break, and has excellent luster, color, and moldability. The material is used for automobile parts, industrial goods, home appliances, toys, and many other products used in everyday life.

9 BIOLLOY[™] Bioplastic

A bioplastic produced by combining a thermoplastic resin with eco-friendly, plant-derived polylactic acid. Due to its great shock resistance, the material can be used to produce thin-walled and lightweight articles.





10 JSR Particles

JSR's unique light scattering particles are used in LED light guide panels. The particles diffuse strong LED light, making it uniform and friendly to the eyes, thus enhancing the efficiency of LED products.

Lithography Materials (Photoresists, Multilayer Materials, etc.)

Materials used for circuit formation on silicon substrates in the process of producing semiconductor chips. The materials enable the fabrication of very narrow circuits, supporting the production of highperformance and energy-saving devices.

12 Display Materials (LCD Materials)

Materials that help enhance the image quality and functionality of various liquid crystal displays (LCDs), regardless of size. Color pigment dispersed resists used to form color filter layers, alignment films that determine the performance of LCD panels, and other materials are used widely.

13 ARTON[™] Heat Resistant Transparent Resin

JSR's proprietary heat resistant transparent resin, which can be made into wide variety of optical films. The film provides, even when used in a very thin form, necessary functions as a retardation film to improve the clarity of LCD panels, making it an important material for mobile devices.

14 Optical Fiber Coating Materials

Materials used for high-speed, high-capacity optical fiber cables that sustain Internet communications. As protective coating materials, they provide added strength to cables and help secure required communication properties.

15 ULTIMO[™] Lithium-ion Capacitors

A capacitor capable of charging and discharging large amounts of energy almost instantly. The capacitor functions as a key device for energy conservation, enabling us to utilize the fluctuating electricity generated by wind power, photovoltaic power, and other renewable energies as well as regenerative energy.



16 Diagnostic Agent Materials

Magnetic beads and other materials developed with JSR's proprietary technologies are used for blood tests, flu tests, and other medical applications as materials of in-vitro diagnostic reagents. We are beginning to meet the needs of personalized diagnostics as well.

17 Bioprocess Materials

Materials used by pharmaceutical manufacturers to obtain a target ingredient with high purity efficiently in the process of refining antibody drugs such as anticancer drugs and rheumatism remedies.

18 Medical Polymers

JSR's rubber and resin materials are used for infusion tubes, medical stoppers, medical gloves, and other products. These are products developed based on JSR's proprietary polymer designs and production/ quality control technologies specifically for life sciences applications.

Opening up New Frontiers in Power Conservation with Materials Innovation

The JSR Group creates a wide range of energy-saving products by leveraging its proprietary material technologies. Of these products, this section introduces lithium-ion capacitors and explains what "Materials Innovation" they will bring about.

Lithium-ion capacitors—the key technology for more efficient energy use

Lithium-ion capacitors, which the JSR Group positions as one of its strategic businesses in the JSR20i6 mid-term business plan, are an electricity storage device capable of instant charging and discharging together with a long life span and little propensity for selfdischarge. They are currently at the center of global attention as a key technology for the more efficient use of energy and their market is expected to expand significantly. JM Energy Corporation is the industry's leading company, which commenced high volume production of lithium-ion capacitors for the first time in the world at the end of 2008. The company's present aim is to develop and offer lithium-ion capacitors with higher performance by utilizing the JSR Group's material and precision processing technologies to expand their applications in various fields.







Prismatic cell

What is a lithium-ion capacitor?

a chemical reaction and has a high capacity.

Not suitable for discharging large amounts of

Conventional capacitor (electric double-layer capacitor)

 Δ Capable of storing electricity but has a low capacity.

Capable of discharging large amounts of

Stores electricity through

Lithium-ion battery

A electricity instantly.

Stores electricity.

electricity each time.



wide range of applications. A module is a package of multiple cells.

Laminate cells are thin, lightweight,

compact, and excellent in their

Robust can-type modules. JM Energy

adopted the world's first prismatic-

can structure, rather than the more

common cylindrical structure. These

excel in heat radiation efficiency and

ease of implementation.

Laminate cell module

Lithium-ion capacitor ULTIMO[™] series available from JM Energy



Prismatic cell module

Lithium-ion capacitor

Incorporates the advantages of both a lithium-ion battery and a conventional capacitor, and is in principle very safe.

Capable of storing three to four times as much electricity as a conventional capacitor (high capacity).

Capable of discharging large amounts of electricity each time (high output).

In addition to the above advantages, JM Energy's ULTIMO[™] Series also features low internal resistance for low energy loss, thus realizing high efficiency and wide applicability.

Our innovative energy conservation products

CALGRIP[™]—Expanding the application to heat storage for building shells^{*1}

CALGRIP[™], a latent thermal storage material that stores energy released or absorbed during solid to liquid or other phase changes, is expanding its application to heat storage for building shells. The product was used in nextgeneration energy-saving model houses developed by the University of Tokyo and Chiba University exhibited at the "ENEX2014/Smart Energy Japan 2014" exhibition held at Tokyo Big Sight. In the University of Tokyo's model house, CALGRIP[™] was installed in the ceilings and floors, storing solar radiation heat during the daytime and discharging it during the night to maintain a comfortable room temperature, even in the winter. CALGRIP[™] contributes to reducing energy consumption by minimizing the use of air conditioners/heaters.



The University of Tokyo's next-generation energy-saving model house (CALGRIP[™] was used in the ceiling and floor.)



CALGRIP[™] being installed on the ceiling



Energy regeneration



 $\mathsf{ULTIMO}^{^{\mathrm{TM}}}$ capacitors are installed in power shovels and other construction machinery to collect and store energy generated during swing braking, and discharge it to the swing motor for

swing acceleration. In Europe, the lithium-ion capacitors were tested in hybrid buses in the fiscal year ending March 2014, and are now installed in them.



ULTIMO[™] capacitors are used in panels of wireless portable X-ray systems available from Konica Minolta, Inc. This use marked the first time that the capacitors had been employed by the medical equipment industry. The X-ray systems are lightweight and easy to carry while achieving the high level of safety required of medical equipment. Charging is quick and the systems have high durability, suffering from little deterioration even after repeated charging and discharging.



JM Energy Corporation

As a leading company that produces lithium-ion capacitors, we are expanding their possibilities

Lithium-ion capacitors are a new device handled by only a few companies in the world. We began high volume production of lithium-ion capacitors ahead of everyone else, and this has led us to gain great trust from customers and to take the initiative in their international standardization. Our challenge is to make it possible for lithium-ion capacitors to be used in various situations for efficient use of energy, but technological difficulty rises as the level of voltage and mobility required increases. We have already succeeded

SIFCLEAR[™]—A material for high-performance paints

Paints based on SIFCLEAR[™], a fluorine water-based emulsion with high weather and contamination resistance, last for a long time after their application, thereby lowering the frequency of repainting activities. Being water-based, SIFCLEAR[™] is also effective in reducing the level of volatile organic compounds (VOCs)^{*2}. The high resistance to contamination is advantageous not only in terms of aesthetic effects but also in terms of ensuring long-term functionality of thermal insulation paints. When applied to tanks, for example, the frequency of water spraying needed to cool the tanks in summer can be reduced, and dirty marks often left on the surface of the tanks after water spraying can be prevented. In Japan, applications of SIFCLEAR[™]-based paints have been increasing, including to outer walls of residences, outer walls and roofs of factories, and oil/gas stockpiling facilities, and it is expected that the value of SIFCLEAR[™] will be recognized soon in overseas markets as well.



*2: Volatile organic compounds (VOCs) are a major cause of air pollution.

11 JSR Group CSR Report 2014

*1: Building shells: Ceiling, floors, walls, and other major structures



production facilities, and other critical locations. In the event of a voltage dip or an instantaneous power failure, electricity stored in the capacitors is used to compensate for lost voltage over a few seconds or minutes until emergency power generators or other backup systems are activated. The capacitors are free from lead and other heavy metals and therefore have advantages such as low environmental impact and long service life.



ULTIMO[™] capacitors equipped in solarpowered delineators that assist drivers to recognize medians and junctions on expressways store electricity generated by photovoltaic cells, making electric supply from external sources unnecessary. Due to their long service life, the delineators can be installed even in places where maintenance is difficult, and electricity can be charged efficiently through photovoltaic cells regardless of weather conditions due to their low internal resistance.

in commercializing this technology for buses, construction machinery, and other applications, and are currently working to further enhance its capabilities and expand the product's use to cover a wider range of applications, including in automobiles.

We will continue to take on new challenges by combining the JSR Group's innovative materials and JM Energy's proprietary technologies so that we can contribute to society through "Materials Innovation."

Plant. The black parts of the wall have been coated by a SIFCLEAR[™]-based paint.



Butadiene tanks in the Kashima Plant The right tank is coated by a SIFCLEAR[™]based paint

Doing Business Involves Consuming the Earth's Resources; We Aspire to Become a Company that Does Business in the Best Way Imaginable

While the JSR Group is expected to consider the global environment, as a leading chemical manufacturer, the Group also has the ability to solve social and environmental issues through its innovative materials. We invited three external experts to inspect the Yokkaichi Plant, our main plant, and attend a dialogue meeting to discuss future issues of the Group.

Site visit date: Wednesday, May 28, 2014; Inspected plant: JSR Yokkaichi Plant Meeting date: Tuesday, June 10, 2014; Place: JSR Roppongi Club

What we realized after the plant inspection and the

Dr. Adachi: We visited the Yokkaichi Plant the other day. I'd first like to

Mr. Motoki: It was my first visit to the plant and I was amazed by how well

residents and maintains harmony with the community. I was also impressed

it was managed and how carefully the facility considers the neighboring

by the fact that the plant has achieved zero emissions, that its employees

are trained and understand the importance of maintaining zero emissions,

and that cogeneration facilities enable onsite power production using coal

and LNG to cover the entire plant while CO_2 emissions are minimized (1).

Dr. Suzue: Before the visit I was inclined to think that plants existed on

their own, but they are in fact connected with other companies through

pipelines that deliver raw materials. I was simply amazed by the entire

system of one of the largest chemical complexes in Japan. It was also

biodiversity (2), as well as an artificial hill that was created and managed

to blend in with the surrounding environment. One disappointing finding

was the presence of high walls surrounding the hill. The hill would be a

pleasant to see green spaces near the front gate in consideration of

significance of communicating it in an easy-to-

understand way

discuss what we learned from the site visit.



Experts inspecting the Yokkaichi Plan

comfortable sight for employees, so I hope the company will do something to allow the hill to be viewed from inside the premises (3).

Dr. Adachi: I read about Yokkaichi pollution in a textbook when I was a child, and this formed my preconception of the plants there. But when I visited Yokkaichi for the first time the other day, I saw many residences and abundant green spaces, and even where factories operate, there were no odors or smoke. I realized that I had been misled by my biased image of chemical plants. Speaking about the artificial hill, I was impressed by the way that the hill is designed and managed under the company's clear policy. The hill is managed in such a way that it is home to various species that live in the woods, both native and non-native; and edible grass for insects, particularly for butterflies, is also grown.

Kawasaki: Let me explain why we built the walls around the hill and our efforts to eliminate odors. There was an accident at the Yokkaichi Plant in 1994 in which a butadiene tank burst due to our lack of proper management. No employees or residents were injured; however, the explosion had hurled broken pieces of the tank as far as outside of the premises. The walls around the hill were built upon request from residents after the accident. The accident also led us to develop our own environment and safety management system before such systems were standardized by ISO and other organizations. Also, complaints about odors, vibrations, and light used to be common in the neighborhood until about 20 years ago, but



Cogeneration facilities in the Yokkaichi Plant



Green spaces near the front gate. This is a small showcase of the local vegetation referenced using data gathered from local forests in nature and around temples and shrines reported in Yokkaichi City History, as well as from local vegetation maps of the Ministry of the Environment.



The artificial hill currently developed is home to mainly butterflies

thanks to our improvement efforts and the new facilities, no complaints are forthcoming at present.

Dr. Suzue: Another thing that I noticed was vapor from the smokestacks. The RC Report from the Yokkaichi Plant states that the temperature of the vapor has been lowered to 200°C or below before being emitted, but I heard in the plant that the temperature of the vapor is actually 50 to 60°C. You must be making tremendous efforts to decrease the temperature to that level and perhaps you should communicate these efforts to the public more actively

Kawasaki: We basically try to collect heat from the vapor to the greatest extent possible in order to use it for our production operations. We also collect heat from wastewater as well to decrease its temperature before discharge. We have been taking these efforts for granted and were not aware of how important they are. Thank you for pointing this out.

Dr. Adachi: Cogeneration and waste heat utilization are activities that you have been carrying out for the benefit of the environment, so it is important to not take them for granted and communicate them more on an ongoing hasis

Hirano: These activities are not meant to be promotional, but I sometimes feel that maybe we should communicate more comprehensively what we are doing so that JSR's environmental efforts will be rated more fairly. Shimizu: The JSR Group has been committed to the environment under the concept of the E2 Initiative (4) for three years, but we are still pursuing the right balance between benefits and the huge time and cost investments required for this commitment. But I agree that we should more proactively publicize what we are doing, as it is also true that we are contributing to energy conservation in society.

E2 Initiative[™]—the key to innovation

Mr. Motoki: I feel that in Japan, public consciousness of and interest in energy and carbon management issues have been declining slightly since their peak immediately following the Great East Japan Earthquake. However, there are a great number of people in countries around the world who are actually experiencing abnormal weather, and companies will sooner or later be required to deal with climate change. Companies therefore need to decide how they will shift their energies while closely monitoring movements around the world.

4 E2 Initiative[™]—value creation concept E2 Initiative = Eco-innovation + Energy management -Enhances environmental performance -Launch of new E2 products rowth cycle Mr. Eco-Molecule F2 Initiative campaign character Low-carbon solutions in manufacturing Search out needs, create new business opportunities



Naoki Adachi, PhD.

Facilitato From the standpoint of a biodiversity exper

CEO of Response Ability. Inc. Studied ecology at the Faculty of Science and the Graduate School of Science, the University of Tokyo, and obtained a doctoral degree in science. After working for the National Institute for Environmental Studies (NIES) and the Forest Research Institute Malavsia (FRIM), he started his career as an independent consultant. Public posts he has held include: Executive Director of the Japan Business Initiative for Biodiversity (JBIB); a member of the Committee on Biodiversity Private Sector Activities Guidelines, the Ministry of the Environment; and a member of the Committee for Promoting Conservation and Other Efforts Regarding Biodiversity in Economic Society, the Ministry of the Environment.

Keiko Suzue, PhD.

From the standpoint of an international NGO on biodiversity

Representative Director of BirdLife International Tokyo, Ms. Suzue became deeply concerned about environmental problems when she was involved in CSR activities in her company, particularly natural protection support activities in Japan. She joined Birdl ife International in 2005, an international environmental NGO based in the United Kingdom, and has since been implementing various environmental projects from a global perspective. Her recent focus is to promote work on the conservation of biodiversity to private companies in collaboration with the U.K. headquarters. She is a doctor of environmental



Mr. Hiro Motoki

From the standpoint of an expert in the area of environmental activities and sustainability of companies



symbiotic studies

President of E-Square Inc. After graduating from the College of Economics, Rikkyo University,

Mr. Motoki engaged in consulting services on information technology (IT), strategy, and the environment at a Japan-based member firm of Deloitte Touche Tohmatsu. In April 2001, he became the manager of consulting services at E-Square, providing support to leading companies in a wide range of industries mainly in the areas of CSR strategy, communication, education, and business development. In October 2011, he

Kawasaki: The E2 Initiative provides a defensive approach aimed at reducing CO_2 emissions and the use of energy in plants and production processes, as well as an aggressive approach that involves the development of environmentally considerate products. With regard to energy, as I said last year, renewable energy is still unstable and we need to think about the way we can store electricity.

Dr. Suzue: From that point of view, your lithium-ion capacitors are very promising. For example, offshore wind power is currently attracting attention, but the problem is how we can deliver electricity generated at a facility far from land where the power is needed. This problem, however, can be solved immediately if we have a high-performance capacitor. The E2 Initiative allows for creation of these kinds of innovative products that sport drastically new concepts, rather than simply adding an environmental consideration label to products, and I think this is the greatest advantage of the initiative.

Shimizu: When launching the E2 Initiative, we ensured that a life cycle assessment would be implemented in the initial stage of R&D. This made R&D staff more conscious of the degree of contribution their products can make to society, including the stage of product use.

Dr. Adachi: Some projects may carry great costs at the R&D stage. But such costs may pay off instantly if supply-demand balance turns favorable or if a product is adopted and used on a large scale in a country. So ideas should be generated constantly regardless of costs, and I think this is the way to create a totally new world.

Hirano: Innovation can spawn from any new materials or processes, so we try not to consider costs only in the course of our R&D activities.



Takao Shimizu Officer Corporate Planning

Koichi Kawasaki Managing Director Safety and Environmental Affairs (as of this writing)

Shimizu: When it comes to proposing a new idea with an eye to the future, Europe is excellent. Their environmental regulations are meant not only to regulate but also to promote innovation under the notion that regulation is the mother of invention. Since half of the JSR Group's sales are now generated abroad, it is very important for us to closely monitor overseas regulations and markets. It is becoming increasingly important for us to keep a sharp eye on information from trade associations and others sources regarding future trends of regulations as well as on information collected from our frontline sales force.

Mr. Motoki: By communicating your efforts to help create a sustainable society through the internet or reports, you can show how advanced your Group is in this area. While technological innovation is important, I'd like you to put greater effort into this kind of communication as well.

Developing the foundation that enables the Group to create environmental value in all of its business processes

Dr. Adachi: I'd like to hear about how much progress has been made on the issues raised during last year's dialogue.

Kubo: With regard to an alternative method to procure butadiene from biomass, which doesn't rely on the traditional by-product, this issue is in the study stage.

Hirano: We are investing in and ardently conducting this study. We may need to search for a breakthrough, but when it is found, we may be able to change the world.

Kubo: We recently created a chart illustrating how we can enrich society through materials (see page 5). We are also considering clarifying what is being done and what is not being done yet in terms of environmental consideration for each business process, and systematically prioritizing what we need to do.

Mr. Motoki: You are addressing the issues directly. It's wonderful. You are looking at the entire value chain while addressing these issues, which I think is an important stance. In my view, contributing to energy conservation and low fuel consumption with S-SBR for fuel-efficient tires is particularly important when taking into account that car sales are likely to increase rapidly mainly in developing and emerging markets.

Dr. Suzue: You are trying to visualize and share what you need to do within the Group. I think this is very good. Companies cannot work on all issues simultaneously due to budget limitations, so they inevitably must choose which issues they will focus on. The JSR Group has been addressing GHG emissions and water consumption throughout its value chain. Not many companies in Japan are doing this. Your estimations of GHG emissions and

Hayato Hirano Director and Officer CSR

Tatsuya Kubo General Manager CSR Department (as of this writing)

water used by each tier of your suppliers should be fully utilized to reduce them to a minimum.

Dr. Adachi: As more and more organizations begin to control Scope 3 (indirect GHG emissions throughout the supply chain) as well, the JSR Group's stance to pursue total optimization throughout its supply chain, from the highest upstream point to the lowest downstream point will become a great strength for the Group. The most important question is how to quantify the effects of your efforts. The Group needs to find an easy-to-understand way of communicating the effects within and outside of the Group.

Kawasaki: To publicize and symbolize our environmental efforts, we have been thinking about attaching a label to our products like the one used for fuel-efficient tires. But because we are not sure whether such a label will really lead to differentiation of our products, we still cannot decide on it.
Shimizu: When developing the E2 Initiative, we considered making a self-declaration conforming to high standards of environmental management such as by using a third-party certification. But because of the difficulty of assuring reliability and objectivity of the declaration, we gave up this plan.
Dr. Suzue: If there is a label that can be recognized by everyone, it would be ideal. But I think your Group's own label will still work effectively. At this stage, even if the stated standards are the Group's own standards and the figures published are based on such standards, I think you still can effectively differentiate yourself from others in the area of the environment.

Mr. Motoki: When you create your own standards, I recommend you let several NGOs and academic experts take part in the process and listen to their opinions to avoid being inclined toward complacency. By doing so, you can also expect possible positive side effects, such as the possibility that members of participating NGOs may become your fans or supporters and introduce your activities to others.

Dr. Adachi: Since the JSR Group engages in business-to-business sales, you probably often discuss the details of technical specifications with your customers. Similarly, in terms of environmental performance, you can simply present figures and logic to your customers, and they should understand what those indexes mean. The same can be said with communication with investors with an interest in ESG (environmental, social and governance) issues. As long as you can present the necessary indexes, such as those that indicate how your environmental performance is superior to your competitors, you can show your competitive advantage to a sufficient degree.

Kubo: In last year's dialogue, Dr. Itaru Yasui said, "While doing business inevitably involves consuming the Earth's resources, I want the JSR Group to become a company that can assure us that it is doing business in the best way imaginable." Although it is difficult in reality for us alone to lead society at large, we need to become a company that does business in the best way imaginable and communicate this commitment to society.

Integrating CSR and business management and assisting in coming up with solutions for social issues through materials

Dr. Adachi: Finally, I'd like each of us to express our impressions of today's dialogue and our expectations toward the JSR Group.

Mr. Motoki: The JSR Group's vision to offer solutions for various global and social issues through materials carries a great competitive advantage. I think this is one of the most attractive strengths of the Group. There are many roles that companies can play for society, and the top management of the Group is very eager to contribute to society, making the work

environment a highly environmental and social conscious one. In the future, I'd like to see the Group more clearly demonstrate its intentions to integrate CSR and sustainability activities with business management. When the Group's CSR and sustainability efforts are introduced on the website, this should be done in such a way that the integration with business management can be recognized, rather than simply reporting efforts that were taken on CSR webpages.

Dr. Suzue: When we as NGOs talk about biodiversity, we do so from the perspective of "protecting organisms." But when it comes to companies, they contribute to biodiversity based on the sustainability of their business activities. In this sense, the JSR Group should see the environment, social contribution, and CSR holistically, rather than as separate entities, under the common vision of sustainability of the Group to differentiate its environmental management from that of other companies. Another point I want to make concerns the message of "Materials Innovation" and E2 Initiative measures. Because they are already very easy to understand, it is probably better for the Group to only refine and emphasize the characteristics of the existing message and measures taken rather than excessively presenting abstract goals and plans, to ensure that they will remain straightforward for the public. I look forward to the Group's environment-conscious management further progressing and growing to become a model for other companies.

Dr. Adachi: Employees at the JSR Group are very diligent, so my advice is to forget about being serious for a moment and freely discuss and form a vision of what kind of bright future can be created when your technologies are disseminated around the world. Another thing I want to point out is the importance of water. Although we couldn't discuss this issue today, I'm sure that water will become an important environmental issue. While water is a precious resource, only some companies in Japan such as beverage makers are seriously taking on the issue. I think chemical companies will also need to start addressing the issue sooner or later. I hope that this issue will be discussed in next year's dialogue.

Safety Assurance that Supports Materials Innovation

Chemical plants handle high-pressure gas and many hazardous materials. Should an accident occur, it may cause injury to employees and damage to not only equipment and products within the plant but also to the neighborhood. It may affect the supply of products as well. Since its foundation, the JSR Group has been making vigorous efforts to ensure safety under the principle that safety takes priority over production.

Eliminating accidents and disasters

The JSR group has been striving to maintain and improve the level of our facility management, production technology, human resource development, and environmental conservation to ensure safe operations as shown in the chart below. The foundation of these efforts is our "safety culture." Safety culture is a safety-first climate that prevails throughout an organization from top management to each on-site worker. At the JSR Group, in order to build a more solid safety culture, it is assured that every employee shares the principle that safety takes priority over production and conducts safety activities on a daily basis to enhance the level of safety. In FY2014, however, accidents which caused injury to JSR employees and manufacturing partner employees and resulted in absence from work occurred. We will review existing safety activities and identify and solve outstanding issues, and reconstruct a safety culture in which all concerned personnel including top management share the same safety principles, and in which safety is incorporated into all of our business practices.

Labor accidents (accidents resulting in lost work time)

Safety target set under JSR2016: Reinforce the foundation for safety assurance at production sites to achieve zero facility accidents and zero worker accidents, resulting in no lost work time across the Group.

Act professionally with awareness and responsibility to assure safety

Kazuvoshi Nakazawa Senior Officer

I continually emphasize that the level of safety assurance can be calculated by multiplying "skills" by "mindset." Skills can be improved by each employee in carrying out their daily safety activities as well as by upgrading our risk prediction ability and technical knowledge. Even with adequate skills, accidents and injuries may still occur if employees are not well aware of the potential consequences of mistakes or lapses in the level of awareness or responsibility necessary of professionals working in a chemical plant. What I mean by "mindset" is a strong determination to observe the rules we have established and to put acquired skills into practice. It is indispensable that all employees have this mindset and these skills

In FY2015, each section of the plant discussed important safety issues that need to be addressed and areas where more efforts need to be made. We then incorporated activities identified as being the most critical into their operational plans. It was assured that every employee in each section understood why their activities were important and showed strong determination to implement them. The progress of each plan will be regularly reviewed through plant manager safety audits.

Safety initiatives by global Group companies

The JSR Group operates production sites in various locations around the world. Since products handled and machinery and equipment used differ among the sites. each site needs to adopt a safety approach that best matches their own circumstances. Goals are set and measures are devised on a site-by-site basis to ensure that each of the respective site's workers maintain high safety standards in their work practices.

JSR Engineering Co., Ltd.

Recently in the chemical industry, frequent occurrence of industrial accidents during periodic maintenance and other non-routine operations has been seen. At JSR Engineering, a Group company that undertakes engineering work, training is provided periodically to workers engaged in construction and maintenance work at each plant to raise their sensitivity to possible dangers. In FY2014, an expert was invited from a temporary equipment rental company to provide training on scaffolding work to employees of the company and its business partners.

JSR Micro Korea Co., Ltd. (Korea)

A drill for various disaster scenarios with the participation of all company employees is conducted twice a year in cooperation with the local fire station. Even on a divisional basis, training is provided to staff members on how to respond in the event of a disaster. The company also regularly checks disaster prevention facilities to make sure they will work safely during an emergency, and provides training to employees on the proper use of respirators and fire extinguishers once a year.

JSR Micro Kyushu Co., Ltd.

The company focuses on "individuals," as the last and most important safety net, and makes it a rule to review close call incidents onsite in the presence of everyone concerned to enhance employees' awareness of and sensitivity to safety with a view to eliminating all potential risks and creating a sound safety culture. The company has also been caring for employees' physical and mental health by offering medical examinations by an industrial physician. These efforts have been recognized by external organizations, and in June 2013 the company received an award from the Commissioner of the Fire and Disaster Management Agency as an excellent site that handles hazardous materials, in addition to certification of the company's effective occupational safety and health management system by the University of Occupational and Environmental Health in August 2013.

JSR Life Sciences Corporation

The biomedical business requires various unique safety activities. One such example is biohazard control. Experiments such as those producing proteins from cultured E. coli cells are evaluated for safety in advance using a different approach from that for chemical experiments and in accordance with biohazard experiment safety control standards. A biohazard mark (see the above photo) is also displayed on the door of the laboratory to restrict access depending on the level of hazard of the biomaterials used.

Comments from external experts who visited the Yokkaichi Plant on May 28, 2014

Naoki Adachi. PhD.

Chemical complexes need to be located close to the sea. At the Yokkaichi Plant, the main administration building was rebuilt in consideration of the risk of a tsunami, for example, by opening the disaster control headquarters on the fourth floor and a standby power generator on the roof. Since safety is particularly important for chemical plants, I would like the plant to continue to pursue the enhancement of workers' skills and mindset.

Keiko Suzue, PhD.

Plant Manager Nakazawa told us that no matter how many manuals are prepared, these alone cannot reduce the number of accidents to zero. According to him, making steady efforts through the boosting of "skills" via having a "mindset" and, ultimately, each employee's awareness and responsibility are key to minimizing accidents. These words were very impressive. I think this can be said not only for safety and the environment but for every aspect of corporate management. I hope this idea is passed on to global human resources as well during their training.

Mr. Hiro Motoki

Plant Manager Nakazawa is very safety conscious, ensuring that basic measures are fully implemented throughout the plant, such as installation of emergency exits and safety aisles, the securing of access to fire hydrants and fire alarms, the wearing of protective equipment, and implementation of the 5S (Seiri (sorting), Seiton (organizing), Seiso (cleaning), Seiketsu (sanitizing) and Shitsuke (sustaining)) method. One point of improvement I would like to note is that there were no safety cautions given to us. There was no explanation as to whose instructions we should follow and where we should evacuate in the case of an emergency. Giving warnings or explanations is probably something that is done in daily operations, but it should preferably also be done also on special occasions such as at dialogue meetings.

JSR Micro, Inc. (United States)

The EHS Committee takes the initiative in carrying out safety activities of the company, gathering safety concerns and proposals from different departments and conducting safety activity presentations to share the gathered information across the company. The committee members also meet every month to discuss safety inspection results and measures to address concerns and prevent hazards, as well as to verify the progress, current status, and effectiveness of the prevention measures taken. In FY2015, the company will use external consultants to utilize their opinions for its continuous improvement efforts.

Activity Highlights of Global Group Companies

While sharing the Essential Elements, CSR, and mid-term business plan across the Group globally, each of the JSR Group companies also engage in their own activities to address issues and needs that differ from one country/region to another. This section reports the major activities conducted by overseas Group companies in FY2014.

JSR Micro, Inc. (United States)

Since its founding, the company has conducted business in consideration of the environment and society at large. The company's basic policy is to act responsibly as a member of the JSR Group and actively commit itself to CSR activities, not as an obligation, but rather as an efficient and effective way of advancing business and as an opportunity to create new businesses.

Employees' volunteer activities for environmental recovery

The company encourages employees to participate in local volunteer activities. In FY2014, activities for environmental recovery and biodiversity conservation were conducted along the San Francisco Bay, including the planting of native plants in marshy wetlands and cleanup of the coast at the bay. The company also supported fundraising for the operation of a local public broadcasting station, which is an important source of useful information for the community.

Environment-friendly architectural design

Leadership in Energy and Environmental Design (LEED) is an environmental performance rating program for buildings established in the United States with the aim of promoting green buildings. The company's new building,

which was completed in April 2013. was constructed to meet the LEED criteria. The energy-saving design, improved recycling rate of building materials, parking spaces used exclusively for eco-friendly cars, and other environmentally-considerate features of the building led to it being awarded the LEED Silver certification.

Employees participating in volunteer activities

Phyllis Moracco HR Director

We launched the CSR project in 2012 and published our own CSR report in April 2013. When the project began, we didn't have sufficient knowledge and didn't know what to do. But we studied hard as a team and conducted vigorous educational activities for the employees, and thanks to these efforts. sustainability is beginning to become a part of our corporate culture. Under the strong commitment of the top management, employees embrace the importance of protecting the global environment for future generations and participate in volunteer activities for the environment and the local community.

JSR BST Elastomer Co., Ltd. (Thailand)

Establishment of the corporate mission and culture

As a way to help to bring joy and pride to employees' work and realize the superb performance of the organization, in FY2014, the second year of its founding, JSR BST Elastomer developed its corporate mission of "Organization of Excellence," its corporate culture "STEP," and its slogan

"STEP for Growing Great." Efforts are currently being made to ensure that this mission and culture will penetrate throughout the organization and that communication among employees will be promoted through means such as various internal events, newsletters, and repeated training.

Tianjin Kuo Cheng Rubber Industry Co., Ltd. (China)

Awarding of the Excellent Supplier Award and other awards from customers

The company received the Excellent Supplier Award and the Advanced Quality Award from Tianjin Star Light Rubber Co., Ltd., one of its most important customers, in March 2013, as well as the Distinguished Service Award from Tianjin Toyoda Gosei Co., Ltd. in April 2013. The Excellent Supplier Award and the Advanced

Quality Award are particularly honorable awards because they were awarded to only three suppliers from among many.

JSR Micro Taiwan Co., Ltd. (Taiwan)

In Taiwan, since more than 99% of energy sources rely on imports, energy conservation and low-carbon economy are particularly important issues. JSR Micro Taiwan is striving to become a powerful manufacturer that combines the strengths of Taiwanese companies, namely swiftness and flexibility, with those of Japanese companies, namely leading-edge material technologies and organizational capability.

Certification of IS014064-1

The company attained ISO 14064-1:2006 certification in 2013 for its system for the monitoring and quantification of greenhouse gas emissions. The company will check emissions regularly and based on the results, will plan and promote activities to reduce them.

Safety and health management

In October 2013, the company received recognition and an award from the Council of Labor Affairs (current Ministry of Labor), the Executive Yuan, as a FY2012 excellent company in the area of safety and health.

This was the result of the company's ongoing efforts toward safety and health such as introducing and promoting a safety and health system certified under the Taiwan Occupational Safety and Health Management System (TOSHMS) ahead of other companies, conducting a safety assessment prior to starting construction and engineering work, providing beginners' training, and promoting both physical and mental health in each workplace. The company was one of only 19 selected from throughout Taiwan to receive the award.

Promotion of collaboration with academia

The company actively cooperates with local universities with their company visit programs and other activities to maintain continuous mutual communication as part of the company's efforts to support the development of next-generation human resources. In FY2014, more than 60 Taiwanese and Japanese students were invited to learn about the company's business and tour the plant.

J & W Beijing Biotech Co., Ltd. (China)

Promoting communication to become open to diverse values

Since the company employs a team of Chinese and Japanese people with different backgrounds, it is important for them to learn and become open to diverse values. The company is therefore making various efforts to vitalize communication among employees, including sending Chinese employees

to JSR and JSR Life Sciences in Japan to receive training, holding technical exchange events within the company, and rotating jobs to give each employee an opportunity to find and develop their potential through experiencing a variety of jobs other than their primary job.

A technical exchange event organized on June 28, 2013

Students touring the plant

A plaque presented in recognition of the company's excellent safety and health practices

We have been sharing knowledge on CSR and introducing the JSR Group's sustainability activities through newsletters as well as at employee meetings and on other occasions since 2010, and thanks to these efforts, our employees' CSR awareness is gradually improving. We will continue our activities that focus mainly on reducing environmental impact and promoting safety.

Rika Chen

Administration

Headquarters

JSR Micro N.V. (Belgium)

"ik Kyoto" campaign

The company implemented the "ik Kyoto" campaign for the eighth year in a row, most recently during a five-month period from May 1 to September 30, 2013. This campaign aims to reduce CO₂ emissions generated during people's daily

commute to work by encouraging the use of environmentally friendly methods of transportation (bicycle, public transportation, carpooling, etc.) in addition to working from home. In FY2014, 40% of employees took part in the campaign, effecting a reduction of CO₂ emissions totaling 4,988 kilograms.

The JSR Group has identified long-term actions in various categories and set targets for each year. Major actions targets and results are described below.

Targets and Results

Act	tion	FY2014 Target	FY2014 Performance		Assessment
CSR Mana	aement	Promote activities of the four committees	Promoted the activities of the four committees (Corporate Ethics Committee, Responsible Care Committee, Risk Management Committee, and Social Contribution Committee) as planned	Publishing the CSR Report	0
Promot raise the	e the relevant activities and e awareness of the activities across the Group	Raise awareness of the activities across the Group	 Promoted information sharing via internal newsletters and by intranet Held CSR workshops for employee leaders of JSR and Group companies at the Yokkaichi Plant, our "mother" plant Published the CSR Report in many languages (English, two Chinese versions, Korean, Thai) Implemented the RC & CSR Caravan (JSR Micro Korea) 	The CSR Report was published in many languages (English, two versions of Chinese, Korean, Thai) to strengthen the unity of the JSR Group in its CSR efforts.	O
	Understand social trends	Utilize the UN Global Compact (GC) network, etc.	 Used the GC network and reflected its activities in our corporate policies Supported activities of Global Compact Japan Network (GC-JN) as a member of the Working Group Steering Committee, Working Group Coordinator of In-house Awareness of UNGC Working Group, and as a member of the Human Rights Due Diligence Working Group 		0
		Join the Consortium for Sustainable Paper Use	Joined the Consortium for Sustainable Paper Use as a founding member, aimed at promoting environmentally and socially considerate paper use in society	Hotline for suppliers (April 2014)	0
		conduct a survey on awareness of corporate ethics	Implemented a survey on employee awareness of corporate ethics and followed it up at business sites both in Japan and overseas	The JSR Supplier Hotline was opened as a	0
		Ensure that employees are familiar with the Principles of Corporate Ethics	 Partially revised the Principles of Corporate Ethics to reflect social trends (stating our support for the Universal Declaration of Human Rights; tightening the Code of Conduct for Gifts and Entertainment (including political contributions); adding the provision concerning conflict of interest; etc.) 	contact point for suppliers who wish to consult and report on any legal or corporate ethical violations, whether actual or alleged, that they may find in the course of their transactions	0
	Reinforce corporate ethics and legal compliance		Upened a hotline for suppliers in April 2014	to discover violations at an early stage. It is	0
		Raise awareness of corporate ethics	 Iniplemented corporate eurics e-learning Held a Compliance Handbook study meeting at each workplace 	assured that reporting parties (suppliers) will not suffer any disadvantage or be retaliated against for their reporting of violations and that	0
		Ensure legal compliance	 Periodically confirmed the status of legal compliance and conducted improvement activities for the requirements across the JSR Group, including our overseas companies Held lectures on legal issues periodically for employees across the Group to gain knowledge of relevant laws and regulations 	anonymity of the reporting parties will be respected if they choose to remain anonymous.	0
	Reinforce risk management	Periodically operate the company- wide risk management system	 Promoted the company-wide risk management system to gradually become the standard practice within the Group. Implemented company-wide risk management activities across the Group, including overseas sites, and identified 12 major company-wide risks Conducted intermediate inspections Prepared for the launch of a risk bulletin board on the intranet to help sharpen employees' sensitivity to risks 	BCM training (October 2013) We conducted BCM training for the first time to reinforce our BCM system. All members of BCP headquarters	0
ISO 26000 Organizational governance	•	Strengthen crisis management	 Implemented training on BCM⁻¹ procedures in a simulated disaster (JSR) Implemented BCP⁻¹ training involving multiple Group companies Strengthened crisis management (initial response) (increased the efficiency of confirmation of the safety of employees and their families; multiplexing of communication circuits; etc.) 	participated in the training, carrying out all procedures from the moment the BCP was activated in a simulated disaster until the emergency situation was brought under control.	0
Cuetomore/	Continue to improve product quality	Enhance quality control across the supply chain	Enhanced material management and production technologies, among other efforts, to prevent quality accidents		0
Rusiness	Provide product environmental and safety information	Provide customers with environmental, safety, and other information	 Used SDS electronic management system to provide customers with appropriate SDS*³ for prototypes and products Organized an agency conference at the Petrochemical Products Division 	Agency conference (February 2014) The Specialty Flastomer Department	0
Partners		Ensure compliance with GHS*4	Made progress in labelling products shipped in Japan in accordance with the Industrial Safety and Health Law, and performed GHS of SDS as planned	of the Petrochemical Products Division organized a conference with 19 agency companies to discuss ways of building stronger	0
	Improve management of chemical substances	Ensure compliance with EU's REACH ⁺⁵ and CLP ⁺⁶	Communicated information necessary for the compliance with REACH and confirmed the registration status of materials for the compliance with REACH; affixed CLP labels to products exported to Europe	relationships and forming solid teamwork with agencies and customers, explain increasingly division and computer material and	0
ISO 26000		Implement green procurement*7	Continued to utilize the JAMP-GP*8	procurement trends, increase product knowledge, and share problems.	0
Fair operating practices Consumer issues	CSR procurement**	Improve CSR procurement	 Implemented CSR procurement, covering 99% of raw material suppliers with which we have consistently maintained transactions for the past four years Expanded the survey content to include a question on corruption prevention in the social responsibility section 	From among Japanese and international market agencies that had achieved prominent promotional performance in 2013, one agency each was commended during the conference.	0
Employees Promote employee work-life management	Implement measures to increase understanding	 Implemented education programs according to position Announced how much overtime work was generated (every month) 	Employee awareness survey debriefing (first half of FY2015)	0	
	work-life management	Implement measures to increase employees' awareness of the program	Increased employees' awareness of the program through the employee awareness survey	survey are conducted periodically	0
ISO 26000	Ensure diversity in the workplace	Cultivate the diversity as our corporate culture, take concrete measures, and achieve quantitative targets	 Percentage of women among our employees hired in April 2014 (JSR) – engineering positions for college graduates: 20% (18% last fiscal year); and clerical positions for college graduates: 20% (50% last fiscal year) Percentage of managerial positions filled by women as of April 2014: 4.0% (3.9% last fiscal year) Continued communication activities at each business site 	change the corporate culture for the better. FY2014 saw the fourth survey carried out. A survey debriefing meeting was also held at all business sites and Group companies to explain	0
Human rights		Ensure diversity of recruitment	 Hatio of employees with disabilities (JSR): 2.19% (1.96% last fiscal year) Number of non-Japanese employees (JSR): 20 (19 last fiscal year) Held a workshop to learn cross-cultural communication 	the survey results pertaining to their relevant division.	0

*1 BCM (Business Continuity Management), BCP (Business Continuity Plan): A BCP defines activities that need be conducted before the occurrence of an emergency situation that may threaten the survival of a company (large-scale natural disaster, explosion/fire, terrorist attack, etc.), judgment criteria and action guidelines that enable business continuity in the event of such emergencies, and other matters necessary for ensuring the continuity of important businesses and early restoration. BCM is a management system that has been developed to operate a BCP and continuously improve it through a PDCA (plan-do-check-act) cycle. *2 PLP (Product Liability Prevention): activities designed to prevent the manufacture of defective products

*3 SDS (Safety Data Sheet): a form that is attached to chemical substances when they are shipped to other businesses to provide safety information

*4 GHS (Globally Harmonized System of Classification and Labeling of Chemicals): a system aimed at creating a global standard for chemical classifications, labeling, and SDS submission

volumes of 1 ton or more annually *6 CLP (Classification, Labelian and Packaging of substances and mixtures): a European Union regulation regulation

*6 CLP (Classification, Labeling and Packaging of substances and mixtures): a European Union regulation regulation regarding classification, labeling and packaging of hazards of chemical substances and mixtures based on GHS *7 Green Procurement: measures aimed at procuring materials from suppliers who implement comprehensive management of substances that have the potential to harm human health

*8 JAMP-GP (Joint Article Management Promotion-Consortium Global Portal): global portal site for the Joint Article Management Promotion-Consortium, with the functions to support its member companies to manage, disclose, and transmit information regarding chemical substances contained in products

*9 CSR Procurement: measures aimed at procuring materials from suppliers who are environmentally compliant and strive to be socially responsible in their corporate behavior, when hiring employees, etc.

Assessment \bigcirc : Better than planed \bigcirc : As planned \bigtriangleup :	improvement needed
Target for FY2015 Onward	Implementing Division
 Continuation of current efforts Continue to disseminate messages from CSR Department Continue to implement measures to raise the awareness within the company by holding workshops and other events Continuation of current efforts 	CSR Department
 Continuation of current efforts Continuation of current efforts Promote employees' understanding of the Principles of Corporate Ethics Continuation of current efforts 	Corporate Ethics Committee
 Continuation of current efforts Launch a risk bulletin board Continue to implement and improve crisis management training (initial response training and BCM training) Issue BCM rules Reinforce functionality of the disaster control headquarters 	Risk Management Committee
 Develop a global quality control system and improve the level of PLP² throughout Group companies Continuation of current efforts Continue to implement labeling and submit SDSs based on GHS and in accordance with laws and regulations Observe GHS for exported products as well, as required by the laws and regulations of each country Continuation of current efforts Continuation of current efforts Conduct activities that focus on cooperation within the supply chain 	Responsible Care Committee
 Support the catching-up of suppliers who failed to meet the standard Expand to include Group companies 	Procurement Departments I and II
Continuation of current efforts	Human Resource Development Department

Assessment \bigcirc : Better than planed \bigcirc : As planned \triangle : Improvement needed

*5 REACH (Registration, Evaluation, Authorization and Restriction of Chemicals): a European Union regulation regulation regulation of safety testing data for all chemicals that are manufactured or imported in

Ac	tion	FY2014 Target	FY2014 Performance		Assessmer
Society	lop products with consideration to the environment and safety	Use LCA ^{*10} in environmental impact reduction activities	Implemented LCA of new products and major products (about 67 product groups in total) from their R&D stage to calculate their expected CO ₂ emissions during production		0
RC	Eliminate accidents	Implement preliminary environmental and safety assessments	 Continued to implement preliminary environmental and safety assessments in accordance with safety and environmental manuals when installing new facilities or modifying existing ones and performing non-regular work Two fire-based accidents, which were required to be reported to the government under the Act on the Prevention of Disaster in Petroleum Industrial Complexes and Other Petroleum Facilities, occurred. Problems identified and other information were shared across the Group and countermeasures were taken. Continued efforts to eliminate hazardous areas and operations to prevent occupational health and safety accidents 	Disaster prevention functions of the Yokkaichi Plant's main administration building The main administration building that was completed in December 2013 is equipped with effective anti- earthquake devices. The combination of two different types of seismic	
			 Three accidents that resulted in worker absence occurred at JSR. Problems were identified and countermeasures were taken to prevent a recurrence. Implemented a safety assessment for JSR BST Elastomer (Thailand) prior to its full-fledged 	isolators—a laminated-rubber type and an oil-damper type—makes the building capable of withstanding a	
		Introduce systematic measures to prepare for and respond to	 operation to ensure that the plant was at the same safety level as our plants in Japan Implemented anti-seismic reinforcement in anticipation of a near field earthquake, and organized and promoted countermeasures in anticipation of a huge tsunami following an 	600 Gal seismic force. The grid-form ground improvement method was also adopted to prevent ground liquefaction. The building also serves as a disaster- preparedness warehouse and is designated by Yokkaichi City as a tsunami	0
		Maintain ISO 14001 and	Passed audits to maintain IS014001 and IS09001 at three JSR plants	evacuation building. In the event that the Head Office in Tokyo is severely damaged by a disaster, this building will function as the emergency head office.	0
	Develop highly-trusted business establishments	Maintain certification under security- related laws and regulations Audit environmental and safety	 Maintained certification under the High Pressure Gas Safety Act at three JSR plants Obtained permission for four-year consecutive operation of class-1 pressure vessels under the Industrial Safety and Health Act at the Chiba Plant Implemented environmental and safety audits at 16 sites of 11 Group companies in Japan 	Environmental and safety audits for overseas Group companies	0
		performance of Group companies Participate in Japan Safety Competency Center activities	and two site of two overseas Group company Joined activities of the Safety Enhancement Center, an independent evaluation organization established in April 2013 for the purpose of promoting the Safety Competency Evaluation System within industrial circles	sites, whether based in Japan or abroad, meet the expected standards in terms of the environment and safety by conducting	0
		Conduct energy conservation measures and anti-global warming measures	 Worked on further sophistication of energy-saving technologies and established a system that is expected to reduce total CO₂ emissions from three plants by 6% over FY1991. CO₂ emissions in FY2014 decreased by approx. 77,000 tons (10.7%) compared to FY1991. The per-unit index was 61 in FY2014 when FY1991 = 100 Began work on the measurement of GHG emissions across the supply chain (Scope 3), in addition to GHG emissions from our business activities (Scope 1 and Scope 2) 	periodic audits. In FY2014, an audit was conducted for JSR Micro Korea Co., Ltd., a Group company in Korea that develops, produces, and sells materials for liquid crystal panels and semiconductors.	0
	Reduce environmental	Reduce atmospheric release of VOC*12	Reduced VOC emissions by 74% compared to FY2001 through the stable operation of RTOs* ¹³ installed at three JSR plants	Formulation of JSR Group Paper Procurement Guidelines	
	impact	Reduce the environmental impact of wastewater and industrial waste	 Industrial waste: "zero waste" goals have been achieved every year from FY2004 to FY2014 (zero ton of landfill waste per year), due to various measures taken at all our plants, such as those to limit the generation of industrial waste, sort waste thoroughly, and search for recyclers. Satisfied the 7th Total Pollutant Load Control through strict wastewater (COD, total 	The guidelines that need to be observed when purchasing paper were formulated based on the JSR Group's Biodiversity Policies created in FY2013. In accordance with these guidelines,	0
ISO 26000 The environment		Introduce measure to improve local environments	nitrogen, total phosphorous) management at each plant and on-going measures to achieve stable wastewater treatment and improved water quality Continued to reduce offensive odors by installing RTOs at three JSR plants Continued countermeasure to reduce noise and light by installing a ground flare ⁻¹⁴ at Yokkaichi Plant; once again, there were no environmental complaints in FY2014	we will promote the preferential procurement of paper produced mainly from used paper or paper certification bodies.	0
Community involvement and development	Secure the environment and safety in international businesses	Make cooperation for the International Center for Environmental Technology Transfer around the world	Cooperated in the International Center for Environmental Technology Transfer (ICETT) and supported training of environment and safety engineers around the world	Greening of Tsukuba Research Laboratories	0
Society Biodiversity conse ISO 26000 The environment	ervation	Promote activities according to established policies and plans Continue to support JBIB ^{*16} activities	 Formulated the JSR Group's Paper Procurement Guidelines Conducted an investigation on paper procurement (JSR) Developed green space improvement plans for four business sites in Japan while considering biodiversity Supported biodiversity protection planning before two overseas Group companies started on plant construction 	Green space improvement plans were formulated for each of JSR's three plants as well as Tsukuba Research Laboratories based on the results of green space and biological research conducted at these sites in the pursuit of land use that does not affect biodivertity. At Tsukuba Research	0
Society Community	Implement acciel	Implement social contribution programs	 Continued to provide Fun Lab Classes for elementary school students, visiting lectures of science for junior high school students, and private company training programs for teachers in collaboration with educational institutions, as well as participating in the TABLE FOR TWO program Accepted interns from Rikkyo University and other educational institutions 	Laboratories, a part of its premises has been designated as a biodiversity conservation area where various efforts have been implemented, including limiting the use of herbicides to the minimum necessary level and leaving fallen leaves on the ground to produce compost.	0
ISO 26000 Community involvement	contribution activities	Promote volunteer activities such as those for supporting disaster- affected areas	Conducted support activities for disaster-affected areas, such as participating in local volunteer activities by taking volunteer service leave as well as purchasing local products	"Delivery Science Class" (December 2013)	0
and development		Implement activities that will contribute to local communities	Implemented various activities at each plant area with the emphasis on communication with the local community, such as interactive events with local residents and cleanup activities	JSR staff visited Kamisu Municipal Hasaki-Daiyon Junior High School in Kamisu City, Ibaraki Prefecture where	0
Sharehold	ers	Share information through various media	Provided information regarding the Group in an easy-to-understand manner through the Investor Relations section of our website, Annual Reports, the "JSR Throughout Society" brochure, and other means	the Kashima Plant is located, to provide a science class for 102 second-year students to allow them experience the properties of macromoleculor. EV2014	0
	Better communication with shareholders and investors	Promote interactive communication with shareholders and investors Make general shareholders' montings more attracting	 Held briefings on business results after each quarter, seminars for institutional investors and analysts, and other events Made convocation notices mailed to shareholders more informative and mailed them as early as possible, held the general shareholders' meeting at an early date, introduced our products on the day of the general 	this lesson. Science classes for junior high school students are provided at the Vokkaichi Plant as well	0
		meenings more attractive	shareholders' meeting, and improved the way in which we explain our businesses during the meeting	Tormedition if Fidelic do Hon.	

*10 LCA (Life Cycle Assessment): a method of quantitatively analyzing and assessing a product's environmental impact in all lifecycle stages, including raw materials, manufacturing, use, and disposal *11 LCI (Life Cycle Inventory): in LCA, the compilation of data on the flow of resources, energy, and environmental impacts of a product *12 VOC (Volatile Organic Compounds): organic compounds that are highly volatile, which are a source of atmospheric pollution

*13 RTO (Regenerative Thermal Oxidizer): a device that combusts VOCs and breaks them down into water and CO₂ to make emissions cleaner *14 Ground flare: a device that combusts waste gases in a cylindrical furnace placed on the ground. Ground flares have a lower impact on the surrounding environment (create less noise, etc.) compared to conventional flare stacks. *15 FSC (Forest Stewardship Council): a nonprofit organization established to promote responsible management of the world's forests *16 JBIB: Japan Business Initiative for Biodiversity

Target for FY2015 Onward	Implementing Division
 Continue investigation of the use of LCI*¹¹ data in activities to reduce environmental impact Identify potential risks concerning existing facilities, materials and work, and continue countermeasures for them 	
 Eliminate dangerous work practices and conditions, and encourage passing down of skills from experienced to inexperienced workers Implement safety assessment for overseas plants when they are completed or prior to their full-fledged operation to ensure that they have the same safety level as our plants in Japan Implement measures in accordance with the mid-term business plan Maintain and continue to operate ISO14001 and ISO9001 Obtain ISO14001 certification for the Tsukuba Research Laboratories Renew certifications under safety laws and regulations Continue current efforts Increase the frequency of audits at overseas sites Continue energy-saving activities to achieve the target for reducing CO₂ emissions Continue activities for the measurement of Scope 3 emissions Continue to achieve the FY2014 target: a 75% reduction from the FY2001 level Continue to achieve "zero waste" goals Promote stable wastewater treatment and further reduce drainage impact Continue zero environmental complaints performance Continue to make cooperation for ICETT 	Responsible Care Committee
 Conduct activities in accordance with a green space improvement plan formulated for each business site Create product standards while considering biodiversity Promote other policies and plans Continue involvement in JBIB's activities 	Corporate Social Responsibility Department Safety Environment Affairs Department Units responsible for raw material procurement Relevant units at each plant
Continuation of current efforts	Social Contribution Committee
Continuation of current efforts	General Affairs Department Accounting & Finance Department Corporate Communications Department

Evaluation by Outside Organizations

JSR Group Profile

Listed in Leading SRI Indexes

(As of June 30, 2014)

We have been listed in the FTSE4Good Index Series since 2003.

We have been selected as a member of the Morningstar Socially Responsible Investment Index, Japan's major SRI index, since 2009.

We have been reconfirmed for inclusion in the Ethibel Pioneer & Excellence Investment Registers since October 2013.

We were selected as one of 120 companies worldwide (including 17 Japanese companies) listed in the Euronext Vigeo World 120 Index in June 2014

Third-Party Opinion Itaru Yasui, PhD

the message is very clear and easy to understand.

When I receive the CSR Report, the first thing I do is read the Executive

Commitment. Because of its logical consistency and sophisticated writing style,

President Koshiba's main topic this year was lithium-ion capacitors, a product

that has been positioned as a strategic business since last year. It appears that

the business has finally entered the expansion stage. President Koshiba asserts

the importance of bringing greater excitement to its employees, which I think

is the correct policy, and the company seems to be making tremendous efforts

The priority issue expressed by President Koshiba is how to assure the safety

of plant operations, which has recently become a serious challenge for the

chemical industry. This is a very important issue. On a later page of the report,

there is an article explaining the details of how the company is working hard

on the issue. Mr. Nakazawa, the Yokkaichi Plant Manager, calls on workers to

"act professionally with high level of awareness and responsibility for safety

assurance." In my personal view, I suspect that the reason why many accidents

occurred recently in chemical plants is because many experienced workers who

knew all about the complexities of the plants and understood that they behaved

like a living creature have retired and been replaced by younger generation

workers who simply look up information in a manual on what to do after

something takes place. Judging from the measures taken by the company, I

suppose that this personal view I harbor may be correct at least to some extent.

Dialogue between experts and the company's executives appears on some of

the earlier pages. The heading of the article immediately attracted my attention:

"Doing Business Involves Consuming the Earth's Resources, But We Aspire

to Become a Company that Does Business in the Best Way Imaginable." This

toward that end. This is one of the many impressions I had from this topic.

Former Vice-Rector of United Nations University and Professor Emeritus of the University of Tokyo (Professor of the Institute of Industrial Science; former Director of the Research Center for Advanced Science and Technology (RCAST)). He has been working for the National Institute of Technology and Evaluation (NITE) in the areas of inorganic material chemistry, environmental science, and industry-university cooperative research since April 2009. Dr. Yasui is currently a member of the Central Environment Council the Ministry of the Environment and an expert panel member of the Council for Science and Technology Policy, the Cabinet Office.

is what I mentioned at last year's dialogue meeting. This may even sound offensive, but I thought would be "cool" if I could say this line. The company takes this message seriously, and from this I can gather how open-minded the company is.

I am truly glad that the dialogue appears in the report. The dialogue tells me what the attending executives have in mind and what they focus on when implementing CSR. It seems that lifecycle assessments, for which there were no sufficient explanations until now, are significantly advancing. After making preparations steadily and energetically, the company has finally brought their lifecycle assessments to a level that they can be proud of in the CSR Report.

I personally had an opportunity to give a lecture to those who had just attained managerial positions. I told the audience that the key to becoming managers respected by young workers is to be open to change themselves and retain flexibility to bring out what their staff have in mind. This is the way they should enhance the ability of the entire team and increase team staff satisfaction. From this year's dialogue and President Koshiba's remarks on the need to increase excitement among employees as mentioned above, I assume that JSR is aware of the importance of maintaining the open and flexible attitudes of managers toward young employees

By the way, for whom is this report intended? I found the answer in the Editorial Policy, which states that it is intended for all stakeholders. This is correct, but stakeholders as referred to here should also include employees. The most important yet unstated purpose of the CSR Report is to increase the number of young employees who are proud of their company by showing them top management's philosophy and the company's achievements. Despite its compact size, this year's CSR Report will once again likely fulfill this purpose.

JSR Profile (as of March 31, 2014)

Company name: Established: Head office:	JSR Corporation December 10, 1957 Shiodome Sumitomo Building, 1-9-2 Higashi-Shinbashi, Minato-ku, Tokyo, Japan
President: Capital: Number of employees Major businesses:	Mitsunobu Koshiba 23.3 billion yen 2,477 (non-consolidated); 5,548 (consolidated) Petrochemical products (elastomers, TPEs, emulsions,
	(semiconductor materials, display materials, optical materials), strategic businesses (life sciences, lithium- ion capacitors)

JSR Group Companies (as of June 30, 2014)

Cover illustration

The main administration building of the JSR Yokkaichi Plant, which was completed in December 2013, is designed to high environment performance standards and is equivalent to "A" rank under the Comprehensive Assessment System for Built Environment Efficiency (CASBEE). Green open spaces have also been created in front of the front gate. The illustration on the cover page of this report conveys an image of the plant coexisting with surrounding nature and growing together with the local residents.

JSR Corporation

CSR Department

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Printed on paper made with wood from forest thinning. "Morino Chonai-Kai" (Forest Neighborhood Association)— Supporting sound forest management.