

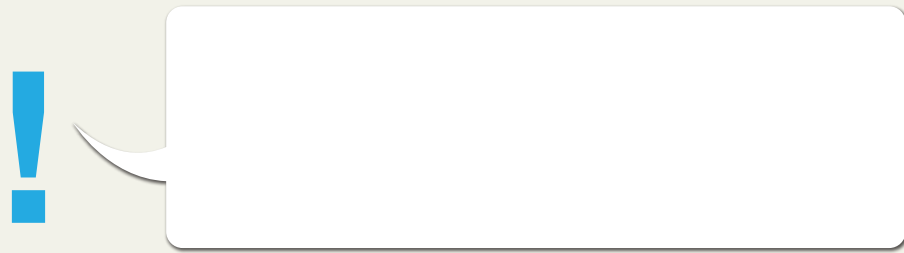
About the Front Covers

A childlike curiosity is fundamental to realizing Kaneka's long-term vision of building a more impressive and productive future.

The multicolored motif on the cover underscores Kaneka's commitment to a better future for our children. Each of the colors in the motif represents one of Kaneka's strategic domains.



How? CSR corporate social responsibility



<http://www.kaneka.co.jp/kaneka-e/>

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CSR Communication Book 2015

corporate social responsibility



Materializing the Spirit of Change and Growth to Contribute to Society through R&D and Global Development, while Safety and Security Remaining Top Management's Priorities



Operating Climate Changes and Opportunities

The operating climate changed dramatically during the year ended March 31, 2015. Key developments included plunging crude oil prices, a dramatic depreciation of yen, and geopolitical turmoil. Key factors in Japan

were the negative impact of a consumption tax increase and surging energy prices. In an increasingly unpredictable world, it is vital for management to identify prospective changes in the business environment.

Energy, resources, and food problems are worsening amid a growing global population. We must help materialize social

sustainability by resolving energy issues and providing technologies and materials that reduce environmental impact. Demand for health, medical, and nursing care is rising significantly as societies age, particularly in developed nations.

It is also worth noting that rapid advances in science and technology are

transforming societies and lifestyles. The start of moves to deploy iPS cells in clinical treatments is ushering in potential for regenerative medicine and cell therapy. Such progress is showing yet again that Japanese science and technology can play a key role in transforming industries.

Kaneka views such changes as opportunities to contribute to society by mobilizing its vast groupwide technological and human resources.

Driving R&D and Global Development

Since establishing the Declaration of Kaneka United in 2009, we have drawn on this long-term vision to embark on various reforms in keeping with the spirit of change and growth.

R&D reforms have exemplified that approach. Since its creation in 1949, Kaneka has employed R&D to drive its growth. Several R&D projects today are near commercialization. They include work in optical-electrochemicals and protein A chromatography resins. As well as perfecting quality, it is important to prepare for business launches by identifying market trends and value chains and to create frameworks for selling new offerings.

Kaneka collaborates with universities and public organizations and establishes research organizations in the United States and Europe to cultivate R&D globally. We will continue to establish research centers in countries and regions with advanced research and human resources so we can bear new

fruit.

Global development also exemplifies Kaneka's approach. We were early among Japanese chemicals manufacturers to produce and sell overseas. In April 2012, we established regional umbrella hubs in Asia and America to begin global operations. Although we generate around 40% of net sales overseas, we aim to raise this percentage to 70% by 2020.

To this end we must cultivate local activities by building networks with communities and solid ties with local users. Last year, we began constructing a manufacturing facility for acrylic fibers in Malaysia. We launched a food products facility in Indonesia to begin creating products that match local tastes. In the current fiscal year, we have decided to build an additional production facility for modifiers and construct a plant for silyl-terminated polymers, both in Malaysia.

We have leveraged R&D to create technologies and products that can contribute to social progress, and better living for people around the world.

Safety as the Number One Priority

Safety is the foundation of a manufacturer's competitiveness. Although management has made safety the top priority for the Kaneka Group, there were 22 occupational accidents in fiscal 2014. Naturally, we need to make improvements. As part of that effort, we are maintaining a program that we started three years ago in which top management patrols facilities to eliminate dangerous locations

and operations. We are also continuing with CSR Safety and Quality Inspections.

To fundamentally ensure safety and achieve an accident free record, it will be essential for us to make processes safer by drawing on the expertise of those overseeing production sites on a daily basis and on our process technologies. We will continue pushing forward with CSR activities on the basis that producing safe and secure products is a central objective for our corporate vision and all employees.

In March 2015, the Kaneka Group became a signatory of the United Nations Global Compact (UNGC), a global initiative to materialize sustainable growth for the international community. We will help resolve the planet's environmental issues and enhance people's quality of life by undertaking corporate initiatives in keeping with the 10 UNGC principles in the four areas of human rights, labor, the environment, and anti-corruption. We established the CSR Division in April 2015 to bolster our CSR efforts. We will further enhance the Kaneka brand by engaging more closely with stakeholders and building trust in Kaneka's people and technologies.

Mamoru Kadokura
President
Kaneka Corporation

How? CSR

Corporate Social Responsibility

How do we generate corporate value for our stakeholders?

Stepping up from “What?” and “Why?” to “How?”

For the Kaneka Group to become a truly CSR-driven entity, all employees must ask themselves what they can do for society, and act accordingly based on the knowledge that both the Company and its employees are members of society.

In 2013, we renamed the digest version of the CSR Report the Communication Book to step up dialogue with our stakeholders.

In the “What’s CSR?” section of CSR Report 2013, we provided an outline of CSR. In the equivalent section in the 2014 version, we explained the significance of engaging in CSR activities.

To step up communication with stakeholders, we yet again report on the Kaneka Group’s CSR activities through its core businesses. We look forward to your feedback. Through its CSR activities, the Kaneka Group will continue generating new value for society by communicating closely with employees.



The Environment

We make sure that we fulfill our environmental responsibilities in all aspects of our operations, including raw materials procurement, manufacturing, and transportation.

We focus on protecting the environment in our business activities. For example, we have developed products for tomorrow’s lighting devices to help lower environmental impact (see page 15 for details).



Customers

We provide high-quality products and services while ensuring product safety.

We prioritize customer satisfaction. For example, we are currently focusing on food defense in view of the heightened consumer focus on safety (see page 24 for details).



Vendors

We build mutually beneficial relationships with vendors by ensuring fair transactions.

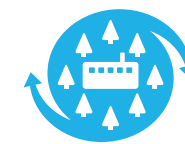
We are committed to appropriate procurement and distribution safety (The PDF version details initiatives for all stakeholders, including vendors).



Shareholders and Investors

We promptly disclose accurate information and deliver suitable returns to shareholders and investors.

We disclose accurate information to shareholders and investors in a timely manner. For example, we conduct orientations and visits for shareholders and other investors to deepen their understanding of the Kaneka Group (see page 25 for details).



Society

From community engagement, we consider safety and other factors related to plant operations.

Alongside reinforcing process safety and preventing disasters, we are striving to improve communication with society. For example, we have held stakeholder dialogues with local communities around plants, and in fiscal 2014, we held a discussion with the Otsu municipal office (see page 28 for details).



Employees

We treat and remunerate our employees appropriately, providing them with opportunities for self-fulfillment and maintaining safe working environments.

While focusing on employee diversity, we endeavor to enhance occupational safety and health. For example, we provided training for future leaders as part of our efforts to foster the personal growth of employees and the ability of perspective managers to execute regional business strategies (see page 26 for details).

Kaneka Group CSR Communication Book 2015

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*Previous reports, including the 2013 and 2014 CSR reports, are available on the Kaneka website. Please take some time to read them.

The Kaneka Group's Corporate Philosophy and CSR Positioning

Under its management philosophy structure, the Declaration of Kaneka United, the Kaneka Group positions its Basic CSR Policy as an employee action guideline and a foundation for implementing its management philosophy.

Based on this policy, the key stakeholders in the Group's CSR activities are employees, society, customers, the environment, shareholders and investors, and vendors. We endeavor to improve enterprise value to enhance stakeholder satisfaction through our business activities.

Management Philosophy Structure "Declaration of Kaneka United"

Expresses our raison d'être and our social mission

With people and technology growing together into creative fusion, we will break fresh ground for the future and tie in to explore New Values. We are also committed to challenge the environmental issues of our planet and contribute to upgrade the quality of life.

Describes our key values

Toward an Even More Impressive and Productive Future

Hold in your hands the future you have always dreamed of. We are a highly perceptive and collaborative value-creating group or, as we like to say, a "Dreamology Company." (see note)

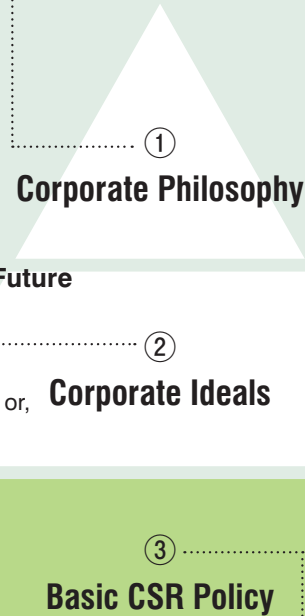
Note: "Dreamology" is an expression coined from 'dream' and 'logy' (science). Our "Dreamology Company" is a "highly perceptive and collaborative value-creating group."

Provides an action agenda for each employee for materialization of our Corporate Philosophy

Basic CSR Policy

The Kaneka Group will fulfill our corporate social responsibility through the materialization of our corporate philosophy with the earnest and forward-looking efforts of each employee.

1. We will strive to fully understand the cultural backgrounds, manners and customs of the countries and regions where we do business as a means of actively contributing to local societies and communities.
2. We will abide by all relevant laws and regulations and, in undertaking our business activities, conduct ourselves in a fair manner based on free competition.
3. We will place high priority on communicating with all our stockholders and stakeholders, and will disclose all pertinent information.
4. We will respect the personalities and individuality of all our employees to support and encourage the development and utilization of their abilities.
5. We will uphold safety as the top-priority concern of management as we dedicate our best efforts to securing a sound and safe workplace environment, offering safe products, and working to protect the global environment.



Kaneka Group's CSR Activities

Group CSR activities aim to increase stakeholder satisfaction through business activities, thereby boosting enterprise value.

Kaneka Group's Stakeholders

Customers

Our customers are the people who purchase Kaneka Group products. We provide them with quality products and services, ensure product safety, and disclose information.

Shareholders and Investors

They recognize the value of our corporate brand and own our shares. We offer appropriate returns and disclose timely information so we can increase overall trust in the Group.

Employees

Our employees include the people who work for the Kaneka Group, as well as their families. We offer employees appropriate treatment, remuneration, self-fulfillment, and safe working environments.

Society

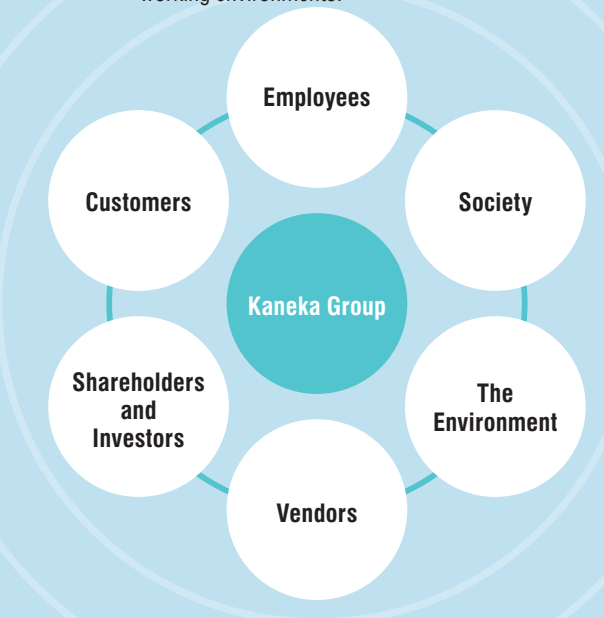
Including citizens and consumers. We can increase enterprise value by fulfilling our social responsibilities. We consider such factors as plant operational safety from the perspectives of social contributions, welfare, and community engagement.

The Environment

By this we mean the global environment. We fulfill our social responsibilities by considering the environment in our business activities, including raw materials procurement, manufacturing, and transportation.

Vendors

Raw materials suppliers and contractors. We build mutually beneficial relationships with vendors, ensuring that transactions are fair and that we offer equal opportunities to do business.



The Kaneka Group Signs the United Nations Global Compact

In March 2015, the Kaneka Group became a signatory of the United Nations Global Compact. The then UN Secretary-General Kofi Annan announced these voluntary corporate principles in his address to the World Economic Forum in Davos, Switzerland in 1999. A signatory company's top management commits to the ten principles in the four areas of human rights, labour, the environment, and anti-corruption, and must continue ongoing efforts in these areas. Through this initiative, companies and organizations lead efforts to drive sustainable global growth in operating as good corporate citizens. The Kaneka Group, which pursues global CSR, will continue contributing to globally sustainable growth while conveying its corporate stance to stakeholders and the international community.



United Nations Global Compact's Ten Principles

Human Rights

Principle 1. Businesses should support and respect the protection of internationally proclaimed human rights; and
Principle 2. make sure that they are not complicit in human rights abuses.

Labour

Principle 3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
Principle 4. the elimination of all forms of forced and compulsory labour;
Principle 5. the effective abolition of child labour; and
Principle 6. the elimination of discrimination in respect of employment and occupation.

Environment

Principle 7. Businesses should support a precautionary approach to environmental challenges;
Principle 8. undertake initiatives to promote greater environmental responsibility; and
Principle 9. encourage the development and diffusion of environmentally friendly technologies.

Anti-Corruption

Principle 10. Businesses should work against corruption in all its forms, including extortion and bribery.

Contributing to Society through Business Activities in Key Strategic Fields

The Kaneka Group listed four strategic domains in the Declaration of Kaneka United, a long-term vision formulated in 2009. While these domains form the centers of growth for shaping Kaneka's corporate philosophy, they are also areas in which the Kaneka Group can contribute to society. The world is becoming increasingly borderless, with a surging population and the emergence of aging societies. As industries integrate, technological innovations are making everything smarter. The Kaneka Group continues to evolve to tackle social issues through its products and technologies. By 2020, the final year of our long-term vision, we aim to leverage growth and reform to generate value in our five target business areas of the Environment and Energy, Health Care, Quality of Life, Information and Communications, and Food Production Support.

Health Care

We create materials and products that contribute to health, medical treatment, and nursing care
 In Special Feature I, which starts on page 10, we introduce the Kaneka Group's health care activities.



Kaneka Nucleic Acid Chromatography chip accelerate genetic testing



Reduced form coenzyme Q10 (Ubiquinol) that contributes to a healthy lifestyle

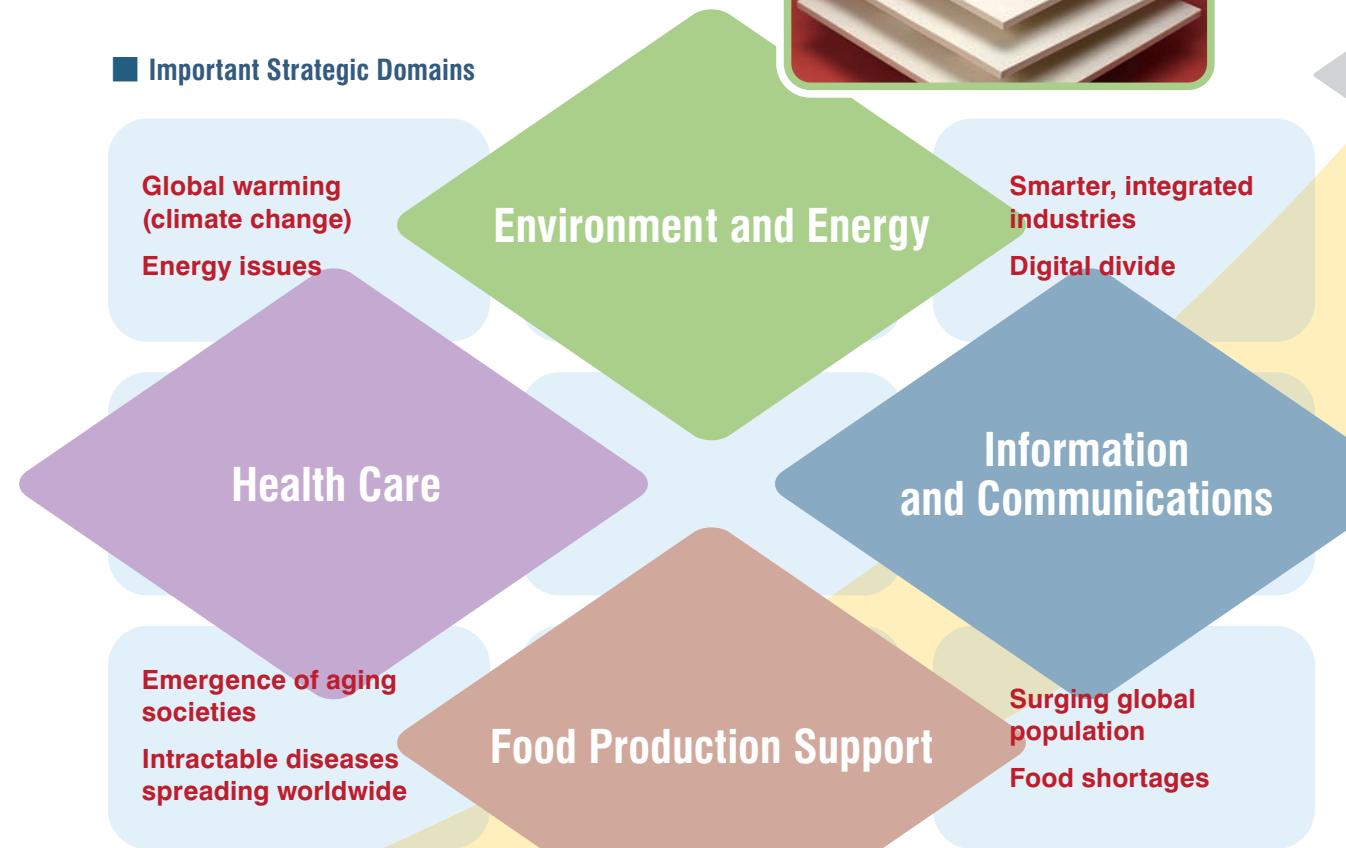


Kaneka Hip Protector reduces impact force from falls

Existing Business Units

- PVC & chemicals
- High-performance plastics
- Plastic foam products
- Food products
- Kanekalon
- Electronic materials
- Medical devices
- Quality of life
- Solar energy

Important Strategic Domains



Environment and Energy

We produce innovative materials that reduce environmental impact by mitigating society's carbon footprint while creating products and markets that can help resolve environmental problems around the world

In Special Feature II, which starts on page 15, we introduce the Kaneka Group's environmental and energy activities.



Form meets function: Roof-integrated photovoltaic modules

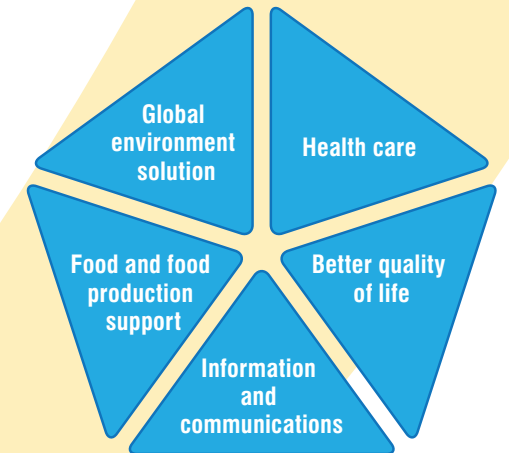


Toughness-enhancing master batch for epoxy resin contributes to more robust, lighter automobiles and airplane



Extruded polystyrene foam board for housing insulation

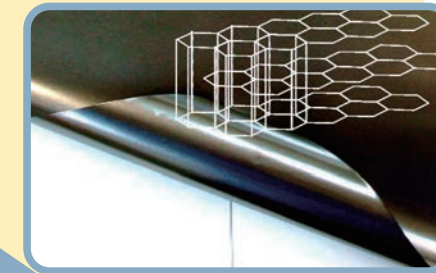
Business Clusters in 2020



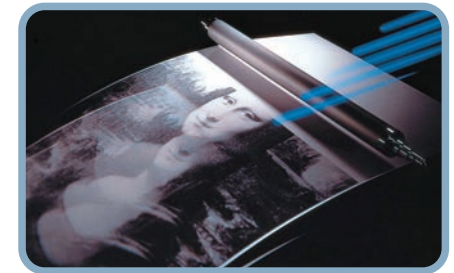
Information and Communications

We provide high-performance materials that underpin the information society

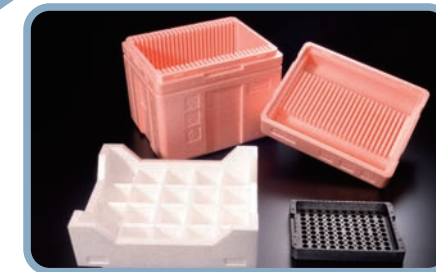
In the special column on page 19, we introduce the Kaneka Group's information and communications activities.



High thermal-conductive Kaneka graphite sheet used to diffuse and release heat from mobile and other devices



Bonded magnets for laser printers and copiers



Polypropylene and polyethylene foams made with the bead method as shock-absorbing packaging materials for precision equipment and other applications

Food Production Support

We aim to resolve food issues by providing materials that support breeding and farming

In the special column on page 19, we introduce the Kaneka Group's food production support activities.



100%-plant derived biopolymer naturally degrades into carbon dioxide gas and water



Anti-freeze protein to maintain the quality of frozen foods



Polystyrene foam made with bead method for fish or vegetable containers



Medical Device Development Laboratories is driving the spread of regenerative medicine and cell therapy

Toward a Future in which Human Cells Save Lives

Leveraging Our Science to Contribute to Regenerative Medicine and Cell Therapy

Professor Shinya Yamanaka of Kyoto University thrust regenerative medicine and cell therapy into the spotlight in Japan when he won the Nobel Prize in Physiology or Medicine in 2012.

A framework for swiftly applying regenerative medicine and cell therapy emerged on November 25, 2014, when the New Act for Ensuring Regenerative Medicine Safety and other legislation went into effect. Japan is thus well positioned to become a global leader in practicing regenerative medicine and cell therapy.

The Kaneka Group has been researching and developing such devices as a mesenchymal stem cell (MSC) separation device and a programmable closed circuit cell culture system since 2004. We are promoting the adoption of devices and apparatuses around the globe while drawing on collaborative endeavors with academia to develop cell preparations and products that support the discovery of drugs harnessing iPS cells.

Social Needs and Kaneka's Plan Kaneka Group Meeting New Challenges to Help Japan Lead the Way in Regenerative Medicine and Cell Therapy

Regenerative medicine and cell therapy has its roots in blood transfusions. The use of this tool to create cultures of patient cells for their own use arose from therapies such as activated lymphocytes for cancer treatment and more recently, iPS cell clinical trials for aged-related macular degeneration. While effective in some applications, their scope is quite limited. Thus, there is demand for broader applications in regenerative medicine and cell therapy.

Recent years have seen considerable progress in R&D for the broad use of cells from other individuals and not just the patients themselves. Of these, MSCs are considered the safest.

It was against this backdrop that the New Act for Ensuring Regenerative Medicine Safety went into effect in Japan in November 2014 to promote regenerative medicine and cell therapy. This opened the door for private enterprises to engage in cell preparation, which had been the exclusive domain of medical institutions. The revised Pharmaceutical Affairs Act made it possible to lower the development costs of regenerative medical products and accelerate their commercialization.

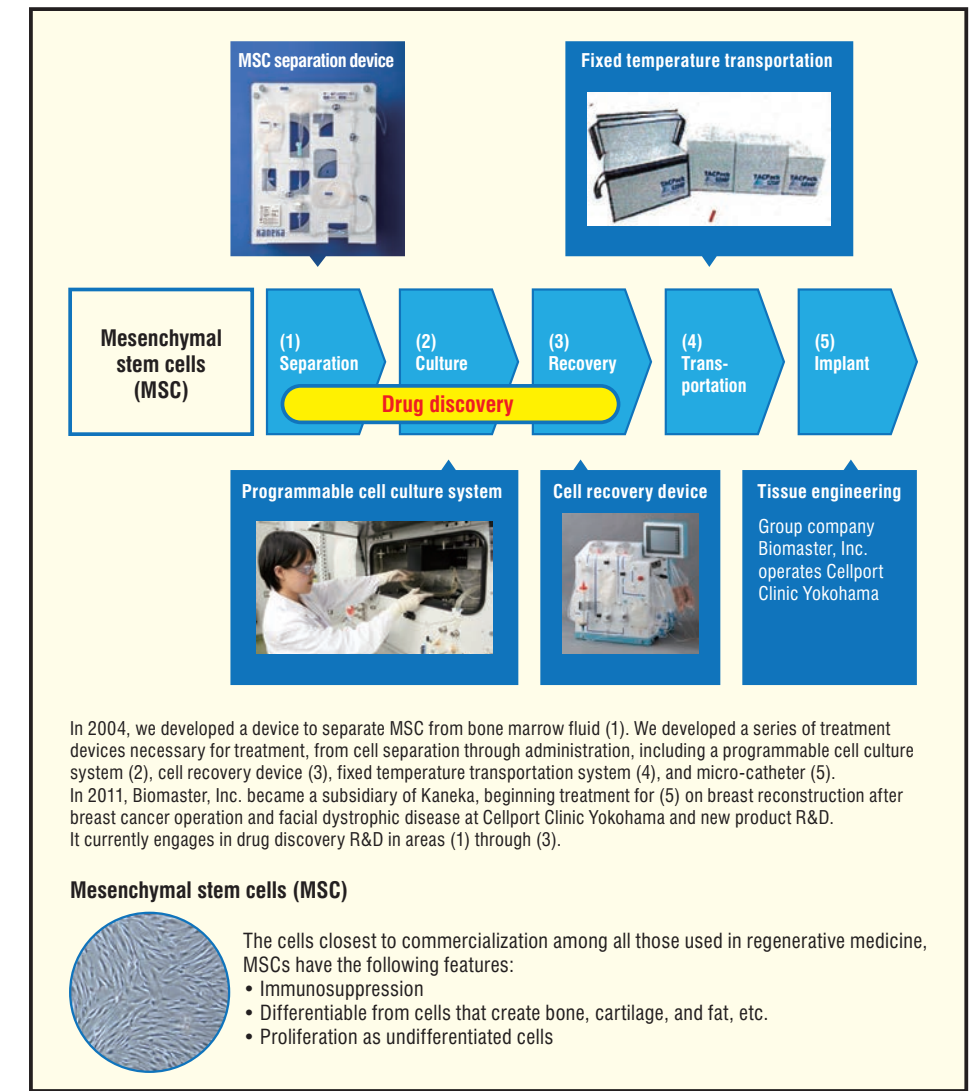
Yasuyoshi Ueda, an executive officer and head of the Medical Device Development Laboratories, says that, "I believe

that the Japanese government formulated various legislation, including the New Act for Ensuring Regenerative Medicine Safety, to promote tissue engineering as a strategic field for Japan in the world market. These changes in the rules will drive Japan's efforts to build the regenerative medicine and cell therapy industry. The Kaneka Group aims to contribute to progress in these fields by leveraging its networks with universities, public institutions and other organizations to realize cell preparation manufacturing and sales."

Kaneka Group's Approach Developing the MSC Separation Device and Cell Culture System to Drive Regenerative Medicine and Cell Therapy

The Kaneka Group's involvement in the medical field began in 1986 with R&D into Liposorber, which selectively absorbs and removes causative agents from plasma, a component of blood. We transformed our approach to absorption technology through this work, shifting away from the elimination of unnecessary agents to harvesting the agents needed. In 2004, we developed a device (see note 1) to separate MSC from bone mar-

The Kaneka Group's Business Developments in Regenerative Medicine and Cell Therapy



Yasuyoshi Ueda, Ph.D.
Executive Officer,
Head of Medical
Device Development
Laboratories

row fluid. We thereafter accelerated R&D in regenerative medicine and cell therapy by releasing important treatment devices such as a programmable closed circuit cell culture system and a cell recovery device.

Akira Kobayashi, a senior researcher at the Medical Device Development Laboratories, says that, "With the focus on MSC increasing, we began exploring technologies to select and separate MSC from bone marrow fluid. Centrifugation was the conventional method for this process, but separation took more than 90 minutes because of the complexities involved. Another issue was that separation efficiency differed greatly among operators. Customers have told us that the process involving the separation device that Kaneka developed takes less than 20 minutes and delivers the same results no matter who is operating the device."

Mr. Kobayashi notes that, "In addition, Kaneka's programmable closed circuit cell culture system ensures that operations



Akira Kobayashi
Senior Researcher,
(Research),
Medical Device Development
Laboratories

Note 1: As separation methods differ by bone marrow, adipose, and amniotic membrane MSC, the Kaneka Group has developed devices and other essential items for each of these three types of MSC.



are safe, reliable, and convenient as it automatically cultures in a closed environment and operators can observe and check cells cultured in real time with the attached microscope."

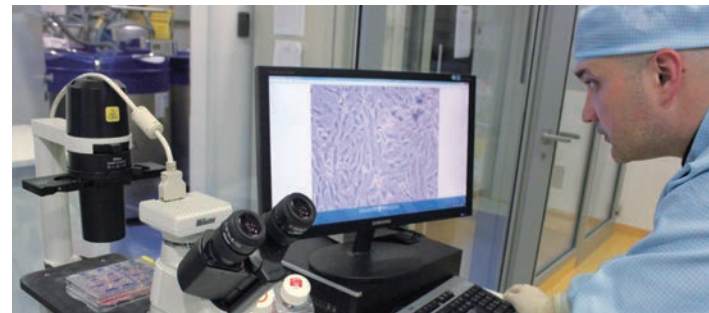
Kaneka Pharma Europe N.V. Popularizing Devices and Apparatuses

Kaneka obtained the European CE mark (see note 2) of approval for regenerative medicine and cell therapy devices and is working toward their commercialization. Turkey already allows insurance coverage for regenerative medicine and cell therapy. The United Kingdom, Germany, and France are clinically testing the efficacy of such therapies for intractable diseases. Commercial therapies should become available in Europe in a few years.

Hiroshi Sakurai, deputy general manager of Kaneka Pharma Europe N.V., says that, "We secured a CE mark in a more progressive European market to commercialize regenerative medicine and cell therapy and treatment using MSCs, which remains fairly unusual elsewhere. This was because we deemed it crucial to amass a clinical practice track record as soon as possible."

The German unit of Kaneka Pharma Europe N.V. has been involved in medical devices for two decades. Medical institutions have started deploying Kaneka's separation devices. Compared with conventional centrifugation setups, our devices are safer, faster, and simpler to operate, and offer high recovery rates.

Cornelia Fricke, product manager (CPD) at Kaneka Pharma Europe N.V., says that, "Our devices have solid repu-



Laboratory activities at Biobanka. Researchers can confirm microscopically enlarged stem cells on monitors

The German Red Cross Hospital in Frankfurt values Kaneka devices highly



tations, as they separate cells without stressing them, making it possible to recover large numbers of cells in good condition."

Used in More Clinical Practices while Driving Development of Better Products

Kaneka Pharma Europe currently handles two products. The first is CellEffic BM, which separates and recovers MSCs from



Hiroshi Sakurai, Ph.D.
Deputy General Manager,
German Branch,
Kaneka Pharma Europe N.V.



Cornelia Fricke, Ph.D.
Product Manager (CPD),
German Branch,
Kaneka Pharma Europe N.V.

bone marrow fluid. The second is CellEffic CB, which is used for umbilical cord blood.

Biobanka in Slovenia uses a Kaneka product for clinical cartilage regenerative medicine and cell therapy and umbilical cord blood storage (see note 3). Biobanka has pioneered such umbilical cord blood banking and other aspects of regenerative medicine and cell therapy together with Educell since its establishment in 1997.

The University Medical Centre Ljubljana in Slovenia has used Kaneka products since 2014 in cartilage regenerative medicine and cell therapy for patients with knee injuries from accidents and other causes. Associate Professor Matej Drobnic of the institution says, "We have set up 17 clinical cases to date. The treatments have been far easier than with conventional methods. No patients suffered any side effects and all have done well since treatment. Further improvements in usability would be a blessing to many more patients because we believe that we can use the device for treating other ailments such as rheumatism and osteoarthritis of the knee."

The people at Kaneka Pharma Europe reflected requests from clinical practices in improving products in collaboration with Japanese researchers.

Dr. Fricke notes that, "We are pursuing improvements based on the needs of clinical practices, and we hope to drive commercialization by strengthening our relationships with our customers."

She adds that, "We are in the process of building name recognition. While it is a huge challenge to enter the market for



Dr. Matej Drobnic, M.D., Ph.D.
Orthopedic Surgeon, and Associate
Professor at University Medical Centre
Ljubljana



The University of Ljubljana hosted a gathering of members of the Cell and Tissue Engineering Society of Slovenia on April 17, 2015. Personnel from Biobanka, a user of Kaneka devices, were on the organizing and scientific committee and announced many research results

regenerative medicine and cell therapy, it does offer considerable growth opportunities. We will therefore build a presence through such activities so people come to rely most on Kaneka's offerings."

Promoting Initiatives in Amniotic Membrane-Derived MSC and iPS Cell Fields for Cell Preparation and Drug Development

Amniotic Membrane-Derived MSC Preparation Project

While pursuing commercialization overseas, the Kaneka Group has undertaken various R&D initiatives in Japan through collaborative efforts with academia. One such initiative is an amniotic membrane-derived MSC preparation project that it is conducting with the National Cerebral and Cardiovascular Center and other partners for the Japan Science and Technology Agency.

Masaru Nakatani, a senior researcher at Medical Device Development Laboratories, says that, "We anticipate that applications of amniotic membrane-derived MSC (AMSC) in treating immune-mediated and inflammatory diseases since AMSC is highly immunosuppressive. AMSC offers the huge benefit of safe harvesting without stress on donors during childbirth."

He added that, "The National Cerebral and Cardiovascular Center and Kaneka established a protocol (see note 4) to separate MSCs from amniotic membranes and culture them. We will deploy stable amniotic membrane-derived MSC production technologies at our unit within the Kobe International Business Center. We have arranged clinical trials that use cultured cell preparation for acute graft-versus-host disease (GVHD) (see note 5), which is a side effect of leukemia and other treatments, at the Hyogo College of Medicine and Hokkaido University, and for Crohn's disease (see note 6) at Hokkaido University. We intend to confirm its safety and efficacy through these clinical trials and obtain manufacturing and sales approvals for cell preparation to treat these diseases."



Masaru Nakatani
Senior Researcher,
(Research),
Medical Device Development Laboratories

User Comment

Finding the Device Biobanka Sought for So Long



Dr. Marko Strbad (right), Ph.D., CEO of Biobanka,
and Assistant Professor **Miomir Knezevic (left),**
Ph.D., Scientific Director of Biobanka

Since our establishment in 1997, our group have provided cells that medical institutions around Slovenia have used for therapy. The cultured cells have been used in more than 300 patients. We had long awaited a cell separation and recovery device that did not employ centrifugation, because a new technique enabling us to recover cells of higher quality is more useful to patients. The Kaneka's CellEffic series we first encountered two years ago was a dream come true for us.

Many patients require regenerative medicine and cell therapy. We plan to utilize Kaneka's device to expand our business in this field in the European Union and then worldwide.

To make regenerative medicine and cell therapy available to numerous people, we must ensure safe and reliable treatment at reasonable prices. We expect Kaneka to continue making improvements and offering suggestions that are useful for medical practice in the years ahead.

Note 2: The CE mark is proof of conformity with European Union directives, and is awarded by private a third-party certification body authorized by the European Union member states.

Note 3: Umbilical cord blood is rich with hematopoietic stem cells and nucleated cells, making it a key cell supply source. Umbilical cord bloods are stored in state or private blood banks and used in treating such illnesses as leukemia and for research purposes. The number of umbilical cord blood banks has increased in recent years.

Note 4: Plan for clinical trials and treatment.

Note 5: Graft-versus-host disease. A grave side effect from hematopoietic stem cell transplants, notably for bone marrow. A refractory immune-mediated illness. In Japan, the probability of acute GVHD exceeds 50% in more than 3,000 transplants annually.

Note 6: Inflammatory bowel disease of unknown origin that is common among young people, mainly causing inflammation or ulcers in the small and large intestines. The number of patients in Japan is increasing every year, with more than 30,000 cases identified.



R&D into Devices to Support Drug Development Research Using iPS Cells

The Kaneka Group engages in R&D for screening devices, facilitating preparation of iPS cell-derived cells, for new drug development, including for Alzheimer's disease and other ailments, working with the Center for iPS Cell Research and Application at Kyoto University.

Tomohisa Kato, a senior researcher at Medical Device Development Laboratories, says that, "Kyoto University developed a revolutionary technique to create iPS cell-derived neurons. Researchers need cells for screening a huge number of compounds in drug discovery. Manually preparing these cells is a huge burden on researchers."



Tomohisa Kato, Ph.D.
Senior Researcher,
(Research Theme Planning),
Medical Device Development Laboratories

He adds that, "Kaneka's R&D into a programmable closed circuit cell culture system led to the joint development of a device to automate the process. Discovering abnormalities that cause disease by using the device to differentiate iPS cells into neuron cells derived from patients can lead to the development of efficacious medications. Kaneka plans to commercialize devices to support drug discovery screening during fiscal 2016."

Dr. Kato says that, "Dementia and other neurological diseases will become greater issues as society ages. Society demands drug discovery screening using iPS cells to accelerate drug development."

Prospects Building a Value Chain with Cell Preparations and Devices and Apparatuses to Accelerate the Popularity of Regenerative Medicine and Cell Therapy

The Kaneka Group is focusing on creating a value chain for regenerative medicine and cell therapy over the next decade or two.

Dr. Ueda says that, "We anticipate that the cell prepara-

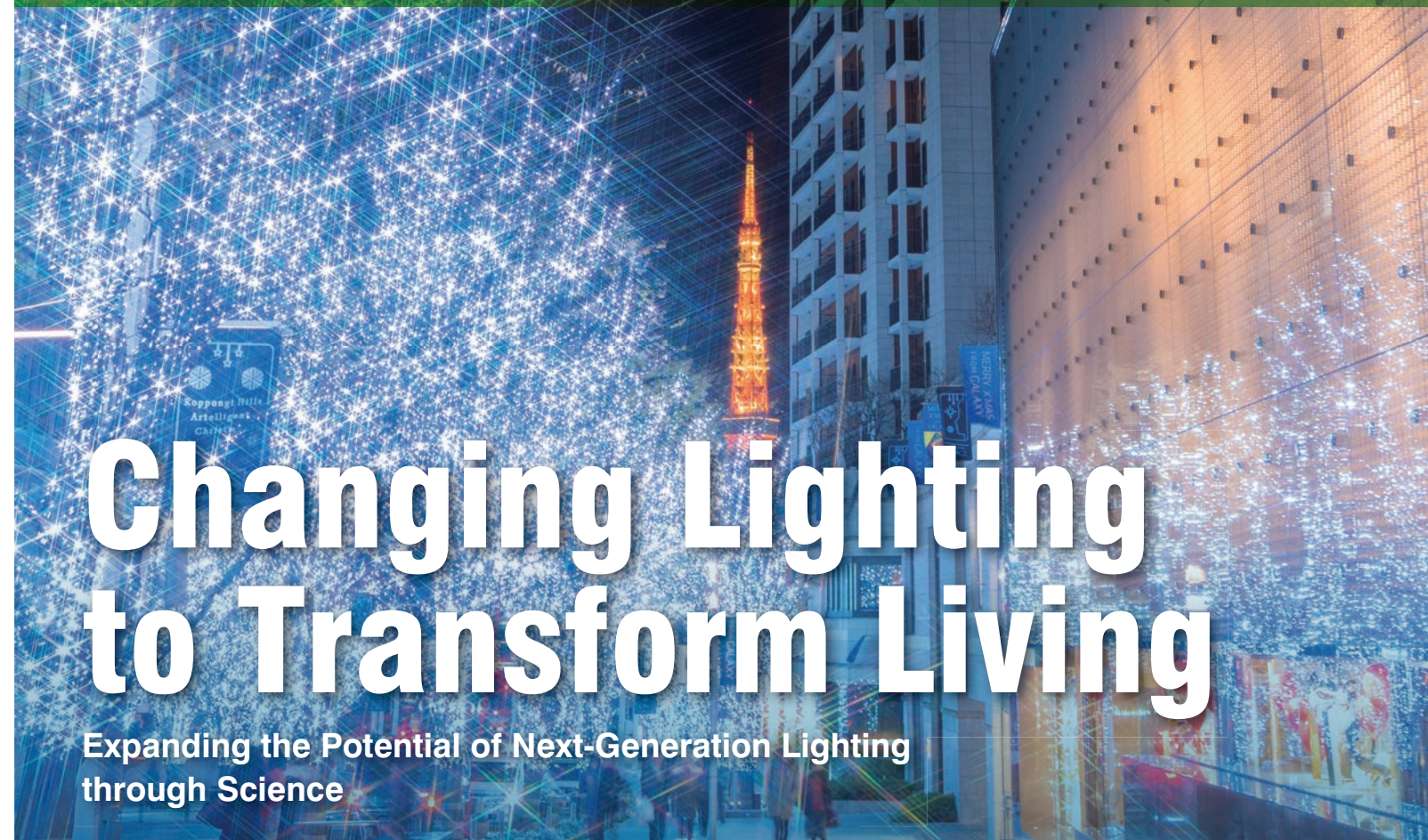
tion business will outgrow that of devices and apparatuses by 2030. The Kaneka Group aims to materialize the entire operational process, from separating amniotic membranes offered by medical institutions to culturing and recovery and then providing cell preparations."

Mr. Kobayashi says that, "First, we will conduct clinical trials of amniotic membrane-derived MSC preparations on acute GVHD and Crohn's disease cases. While the caseloads are small, the mortality rates are high. Thus our goal is to market effective cell preparations as swiftly as possible and deliver them promptly to patients. We look to expand applications to contribute to treatments for many other sufferers of intractable diseases. Regenerative medicine and cell therapy are not cheap. This was particularly true last year for the treatment of age-related macular degeneration using iPS cells. By promoting the standardization of our own closed-circuit devices to simplify such preparations, we can help cut the costs of regenerative medicine and cell therapy and make it more widespread."

Mr. Nakatani says that, "The Kaneka Group has extensive life sciences and quality management expertise in other areas as well as medical equipment and devices, having cultivated these capabilities in the coenzyme Q10 and pharmaceutical intermediate businesses. We are drawing on our human resources as part of our commitment to success in the new cell preparation field."

Dr. Sakurai says that, "The rapidly evolving regenerative medicine and cell therapy fields will soon be well established in society. Our goal is to offer medicine that is accessible even in regular municipal hospitals. We will leverage our early advantages in driving device development to maintain our swift advances in medicine."

Dr. Ueda says that, "We anticipate that the cell prepara-



Changing Lighting to Transform Living

Expanding the Potential of Next-Generation Lighting through Science

message ▶ Stakeholder Message

Kaneka's Manufacturing Capabilities are Essential in Commercializing the World's First Amniotic Membrane-Derived MSC Preparation



Dr. Kenichi Yamahara, M.D., Ph.D.
National Cerebral and Cardiovascular Center,
Chief, Laboratory of Cell and Tissue Engineering,
Department of Regenerative Medicine and Tissue Engineering

The Department of Regenerative Medicine and Tissue Engineering at the National Cerebral and Cardiovascular Center has focused on the potential of amniotic membrane-derived MSC in studying stem cells such as iPS, ES cells, and MSC, and decided to apply this approach in cell therapy. Amniotic membrane-derived MSC was the world's first such preparation, so safety is an absolute necessity. To drive the application of amniotic membrane-derived MSC preparations in more treatments, we are creating Japan's safest protocols through extensive safety deliberations with the Pharmaceuticals and Medical Devices Agency.

Kaneka cooperates in cell separation and culturing. The separation and culture of MSC in closed circuits is essential for developing safe products. We are also collaborating with Kaneka Pharma Europe N.V. with a view to developing products in the European Union. We look forward to timely decision making to accelerate commercialization.

▶ Response to Message

Aiming to become the Top Runner in Commercializing World-Standard Devices, Apparatuses and Cells for Our Future and for Patients



Promoting commercialization by establishing a cell preparation facility inside the Kobe International Business Center

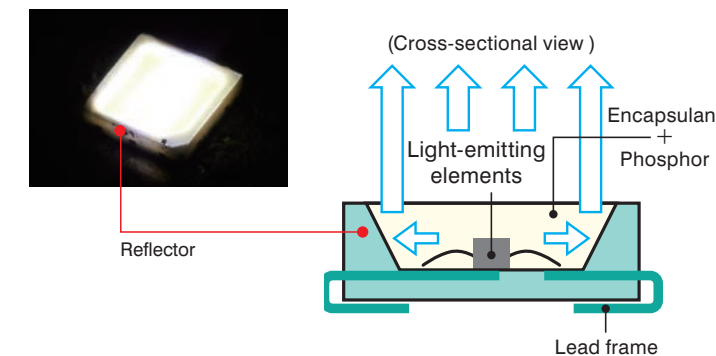
To become a top runner in the commercialization of cell related apparatuses and devices, the Kaneka Group is developing and providing devices encompassing everything from cell separation to culture, recovery, transportation, and administration. We aim to become the leader in commercializing cell preparations. Although this is a new field for both the Kaneka Group and Japan, we will cultivate this area with various professors, particularly Professor Kenichi Yamahara, to more swiftly commercialize preparations. This would contribute to better futures for medicine, Japan, and most importantly, the patients awaiting a breakthrough.

From torches, lanterns, candles, gas lamps, and incandescent lights to fluorescent lights, lighting has evolved together with mankind to enhance convenience.

Changing times have yet again prompted the emergence of new lighting. The Kaneka Group helps enhance lifestyles while reducing environmental impact by offering energy-saving LED and organic electroluminescent (EL) lighting that redefines light fittings.

■ Mechanism of the LED lighting reflector

A reflector efficiently reflects emissions. Kaneka's ILLUMIKA W thermo-resistant and non-discoloring material enables LED lighting to save energy



Helping to Save More Energy with LED Lighting

Social Needs and Kaneka's Plan Helping to Enhance Luminance and the Energy-Saving Performance of LED Lighting through Highly Thermo-Resistant Reflector Materials

Japanese people have increased their use of energy-saving LED lighting in response to electricity shortages since the Great East Japan Earthquake. Worldwide, the focus of demand for LED lighting has seen a shift from Europe and the United States toward China and other Asian markets.

Light-emitting diodes are semiconductor devices that convert electricity to light. LEDs consume just one-tenth of the electricity of incandescent light bulbs. LEDs are also long lifetime, as they do not use filaments, unlike their incandescent counterparts.

Each LED light bulb incorporates around 100 LEDs. Doubling the luminance would halve the number of LEDs needed to maintain the same brightness and halve the power consumption. Tadashi Kokubo, of the Opto-electronic chemicals business promotion Group in the New Business Development Division, says that, "Although the light emitting elements of LEDs consume less power than incandescent light bulbs or fluorescent lights, LEDs are exposed to internal temperatures



Tadashi Kokubo
Opto-electronic chemicals business promotion Group,
New Business Development Division

exceeding 100°C, as 70% of the power is released as heat. The development of peripheral materials that withstand high temperatures is thus crucial to support energy-saving, long life-time LED lighting. The reflection capacity of such materials is particularly important to direct the output of light. The brightness of LED lighting depends greatly on the performance of the reflectors. It is important to have a material that delivers greater reflectivity and heat resistance from more powerful light emitting elements to create LED lighting that conserves more energy and lasts longer. That is why we focused on such a material."

Kaneka Group's Approach Developing a Reflector with Thermo-Resistant Silicon-Based Resin, Overcoming the Challenges of Improved Reflectivity and Curing for Moldings

The types of reflective materials used have changed as LEDs have become more powerful. Nylon reflectors were commonly used in earlier LEDs, but lighting applications became limited as nylon lacked heat resistance with more advanced LEDs. The reflectors quickly discolored, causing the brightness of LEDs to deteriorate. This led to the use of ceramic reflectors in some cases. However, while ceramics have excellent heat resistance, they have low reflectivity and are hard to process, making them expensive. It was imperative to avoid increasing costs because of the need to expand the usage of LED lighting. Epoxy resin was adopted as a reflector material, offering superior process performance and heat resistance. Still, epoxy resin reflectors continued to fall behind as LEDs swiftly became more powerful.

Masahito Ide, a Senior Researcher at the Frontier Materials Development Laboratories of the Information and Communication Materials Research Group, says that, "We responded to requests from customers seeking better reflective materials for more powerful LEDs. This led to the development of ILLUMIKA W, which used a silicon-based resin that we were working on as an LED encapsulant."

Mr. Ide adds that, "While taking advantage of the better thermo-resistance, we needed to enhance reflectivity by using a white pigment that we mixed to make the resin suitable enough for use as an LED reflector. We also had to develop technology to enhance ease in handling by solidifying the resin in the shape of a tablet. Several thousand recipes later, we succeeded with our effort."

Mr. Kokubo says that, "We ship ILLUMIKA W in tablet form, and customers use it to mold reflectors. Many customers were enthusiastic from the outset about the potential of ILLUMIKA W. Still, the shapes of reflectors vary among customers, as do the performances of molding machines. So, it was not immediately possible for customers to manufacture thermo-resistant reflectors as soon as they started using ILLUMIKA W. To complete the commercialization process, we had to check customers' manufacturing lines. We sent engineers to the lines for several weeks to suggest process conditions that matched customers' molding machines."



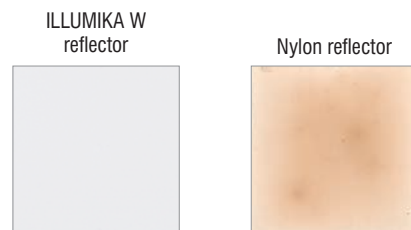
Masahito Ide
Senior Researcher,
Frontier Materials Development Laboratories,
Information & Communication Materials Research Group

Prospects Producing Energy-Saving LEDs while Helping Customers to Reduce Energy Consumption in Production Processes

Mr. Ide notes that, "Silicon-based resins have among the best thermo-resistance of all plastics. As long as we ensure easy processability, I believe that our material has a good chance of becoming the de facto standard for reflectors. LEDs are becoming more and more powerful, so we need to pursue performance advances, including the ability to reflect light more effectively and enhance thermo-resistance. We believe that LED lighting will also become more compact so it will be important for us to develop materials that are stronger and easier to mold."

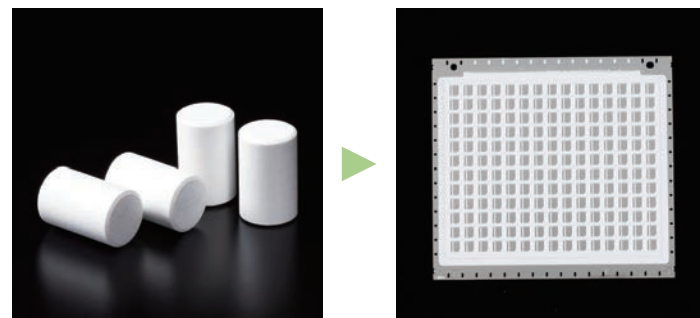
Mr. Kokubo says that, "The evolution of materials will benefit customers in society in various ways. For example, if we can develop a material that shortens curing time via heat, we will help customers to reduce the energy consumption of their production processes. Lower manufacturing costs will also drive the popularity of LEDs. By supplying such materials, we can help reduce society's carbon footprint."

Heat Resistance Comparison between Kaneka ILLUMIKA W and Nylon



Results of 1,000-hour thermo-resistance test at 150°C. Unlike a reflector made of Kaneka's ILLUMIKA W, the nylon reflector became discolored

ILLUMIKA W Thermo-Resistant, Light-Resistant Resin



ILLUMIKA W thermo-resistant, light-resistant resin in easy-to-handle tablet form (left), molded to create reflectors suitable for high output LEDs (right)



Heiseikan at the Tokyo National Museum hosted "Masterpieces of Kosan-ji Temple: the complete scrolls of *Choju Giga*, Frolicking Animals" special exhibition in 2015

A natural treasure, the *Choju Giga*, Frolicking Animals scrolls were exhibited using Kaneka's organic EL panels. The organic EL panels won accolades for revealing the original lantern and candle light look when the works were created

Pursuing the Potential of Surface-Emitting Organic EL Lighting

Social Needs and Kaneka's Plan Decline of Incandescent and Fluorescent Lamps Paving the Way to Next-Generation Lighting

From April 28 to June 7, 2015, the Tokyo National Museum held a special exhibition, "Masterpieces of Kosan-ji Temple: the complete scrolls of *Choju Giga*, Frolicking Animals." The museum employed Kaneka's organic electroluminescent lighting for the exhibition.

Organic EL lighting emits light in response to an electric current on a lighting panel that sandwiches an organic material between the electrodes. Unlike LEDs, which emit a spot of light, organic EL functions as a surface light source. Its advantages include surface-emitting lights generating fewer shadows, providing soft light that is free of ultraviolet or infrared rays, and installation flexibility because the devices are thin and light.

Hirokazu Ohbuchi of the OLED Business Development Project says that, "The Kaneka Group began developing organic EL lighting in 2008. At the time, the number of incandescent light bulb manufacturers had plunged, and they were moves to stop producing fluorescent lights in Europe because they contained mercury. Manufacturers thus started to develop LEDs and organic ELs."

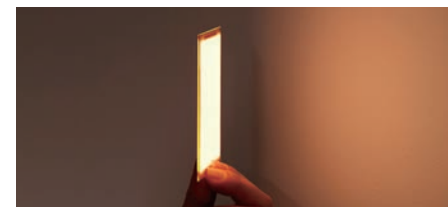
Kaneka Group's Approach Attaining Slimness and Long Life-time Organic Electroluminescence Based on the Thin-film Formation Technology of Photovoltaic Modules

The Kaneka Group's organic EL lighting is just 1 mm thick and operates for 50,000 hours.

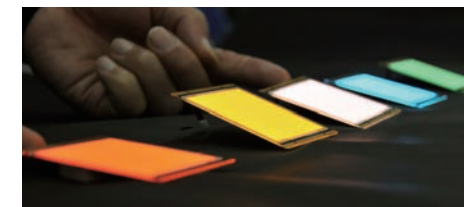
Mr. Ohbuchi says that, "The photovoltaic module's thin-film formation technology enabled us to attain a thickness of just 1 mm. Based on our expertise in manufacturing processes for thin-film photovoltaic modules, we jointly developed organic EL lighting with an organic EL manufacturing equipment maker, starting from the equipment design stage."

Takayuki Suzuki of the Device Development Team OLED Aomori Co., Ltd. says, "One factor in prolonging organic EL lighting durability is to prevent deterioration from technical problems and heat. Conventional organic ELs sandwiched between glass posed the problem of deterioration from heating inside the glass because the air served as insulation. Regular LEDs last around 40,000 hours. Kaneka attained more than 50,000 hours by eliminating the air space and changing the structure to efficiently release heat from the organic EL back. Furthermore, Kaneka's organic EL lighting is less likely to

Kaneka's Organic EL Lighting



Kaneka organic EL lighting is just 1 mm thick and is more long life-time than counterpart organic EL devices



Kaneka released its organic EL lighting lineup, which was the first in the world to comprise white (warm color), red, orange, blue, and green



experience issues than regular organic EL counterparts, which sometimes suddenly stop working when the glass loosens as a result of impact or glass coming into contact with vapor-deposited electrodes owing to the space between glass.”



Takayuki Suzuki, Ph.D.
Head of the Device Development Team,
OLED Aomori Co., Ltd.

achieve brighter and cheaper organic EL lighting will be necessary. Our goal is to achieve a luminance level of 6,000 to 8,000 cd/m² (see note 1), up from the current 3,000 cd/m², and a 60 lm/W luminous efficiency (see note 2), which is the energy-saving standard for housing, from the current 40 lm/W. Although the current conversion efficiency from electricity to light is about 20%, we would like to attain more than 30% to make organic EL lighting marketable as an energy-saving lighting.”

Mr. Ohbuchi adds that, “Initiatives to fully launch the device are also needed. As organic EL lights require less installation space, we can install them in unusual locations like shadowy areas under condominium beams or in the lower dark areas of closets. Even when installed on dining tables, lighting devices as thin as these probably would not bother diners even at eye-level. While improving luminance and power efficiency, we want to convey the benefits of organic EL lights by creating and promoting new applications that are impossible with conventional lighting. We believe that lighting that melts into the background could transform peoples’ lifestyles.”



Hirokazu Ohbuchi
OLED Business Development Project

Prospects

Popularizing Lighting that People Scarcely Notice, Lowering Costs, and Improving Luminance

LEDs initially lacked luminance, but technological breakthroughs popularized them by making them cheaper and more powerful.

Dr. Suzuki says that, “Although one organic EL panel lacks luminance as a base light when installed in ceilings and other locations, it has sufficient luminance as task lighting on desks and other locations. EL panels are particularly useful for work desks because they don’t cast shadows and therefore reduce stress. We believe that we have achieved some success in prolonging lifetime.”

Mr. Ohbuchi says that, “In future, further breakthroughs to

message ▶ Stakeholder Message

Wishing to Reproduce the Original Looks of Screen and Scroll Paintings with Organic EL Lights. Looking Forward to More Unique Proposals from Kaneka



Masato Matsushima
Senior Manager, Special Exhibition Planning,
Curatorial Planning Dept.,
Tokyo National Museum

The Tokyo National Museum was the first facility to use Kaneka’s organic EL lights to show folding-screen paintings in “Admired from Afar: Masterworks of Japanese Painting from the Cleveland Museum of Art”, an exhibition held in January 2014. Although the lighting at museums is mainly fluorescent, we wanted to showcase the original images of the exhibits, such as the God of Thunder under organic EL lights, as the works were painted by lantern and candlelight.

As the key museum for the nation, we must always try to optimize our exhibits, which is why we are grateful for corporations like Kaneka for helping us with our experiments. Kaneka also rose to the challenge of quickly improving the color rendering index (see note 3) of organic EL lights for “Masterpieces of Kosan-ji Temple: the complete scrolls of *Chouju Giga*, Frolicking Animals”.

We look forward to more unique proposals from Kaneka—they could not come from a regular manufacturer of lighting fixtures—to stimulate more ideas for museums and lighting designers.

▶ Response to Message

Reinforcing Organic EL Lighting Proposals Targeting Architectural and Spatial Designers



Kaneka’s booth at Lighting Fair 2015

Organic EL lighting is finally at the commercialization stage. We consider it important to propose applications to architectural and spatial designers and other direct customers to drive the popularity of such lighting. At the Lighting Fair in March 2015 held at Tokyo Big Sight, we created boutique and restaurant interiors in our booth to highlight ways to display shirts, footwear, and other items, and to create tasteful bar counters, receiving a range of feedback. We will continue to value engagement with customers to create more effective proposals to popularize organic EL lighting.

Note 1: Luminance is a measure of the luminous intensity per unit area. The unit for luminance is candela per square meter.

Note 2: Luminous efficiency is a measure of how well a lighting device produces visible light per unit of electricity. The unit is lumen per watt.

Note 3: A color rendering index is a quantitative measure of a light source to reveal the colors of objects. As the average color rendering index (Ra) gets closer to 100, the more naturally the light source reveals colors.



**“Information and Communications”
“Food Production Support”**

In addition to Health Care and the Environment and Energy, the Kaneka Group resolves social issues through its products and technologies in its other strategic domains of Information and Communications and Food Production Support. Below are some examples.



**Important Strategic Domains
“Information and Communications”**

We provide high-performance materials that underpin the information society

Pixeo BP

(Two-layer copper-clad laminate (CCL) sheet material)

Kaneka polyimide film is popular for its ultra-heat resistance and dimensional stability. It is used in such mobile devices as smartphones and tablets. Printed circuit boards are substrates for mounting electronic devices. As mobile devices become more advanced, there is demand for smaller, lighter, and thinner flexible printed circuit boards.

It is against this backdrop that Kaneka drew on its accumulated technologies to develop Pixeo BP, a highly functional film.

Pixeo BP comprises three main technologies. The first is layer design simulation technology. The second is a fusion bonded layer macromolecular design technology. The third is an ultrahigh temperature laminating technology. These technologies addressed market demand for high soldering temperatures and thinner, higher-density copper wiring on circuit boards.



Ultra-heat-resistant polyimide film used for heat-resistant insulation in mobile devices

As Pixeo BP boosts cost performance, it has become popular in the market, underpinning the evolutions of smartphones and tablets. In fiscal 2014, Pixeo BP received the Grand Prize in the 46th Annual Technology Award by the Japan Chemical Industry Association, the 47th Ichimura Prize in Industry from the New Technology Development Foundation, and the 61st Award of the Society of Polymer Science.

As mobile devices become thinner and more compact, we will continue to provide highly functional materials that assist an information-intensive society.



**Important Strategic Domains
“Food Production Support”**

Resolving food issues by providing materials that support agricultural production

Kaneka Peptide

(Oxidized glutathione for fertilizer and agriculture)

Kaneka is launching fertilizer business by developing Kaneka peptide containing oxidized glutathione (GSSG).

GSSG assimilates carbon dioxide and accumulates sugar. It can increase agricultural production yields and enhance sugar concentrations by spreading GSSG in the soil and on plant leaves.

Field studies with GSSG fertilizer in North America, Asia, and elsewhere around the world found that yields of potatoes and other crops increased consistently by 10% to 40%. Another benefit of GSSG is that it is safe, existing in the cells of plants and all other organisms. In Japan, we have already registered six GSSG fertilizers.

Since 2010, we have been developing Kaneka peptide with the



A breakthrough fertilizer poised to open new horizons for agriculture

Okayama Prefectural Technology Center for Agriculture, Forestry, and Fisheries, Research Institute for Biological Sciences (RIBS), leveraging years of expertise in such areas as fermentation technology.

We will cultivate this business to help resolve global food shortage issues.

The Kaneka Group's CSR Activities

Kaneka's CSR engagement extends to domestic and overseas Group companies. We undertake activities that match local needs in keeping with our goal of seeking to make wishes come true through science.

Kaneka (Foshan) High Performance Materials Co., Ltd.



Kaneka (Foshan) High Performance Materials Co., Ltd. manufactures and sells expandable plastic products mainly for automotive parts in southern China and for electronic equipment packaging and transportation materials.

China is urgently pushing ahead with a national drive to improve the environment. Reducing the weight of vehicles is central to cutting exhaust emissions, so manufacturers are deploying various alternative materials to that end. Kaneka's Eperan (see note 1) is extremely strong, and customers have lauded it for delivering both lightness and safety. We seek to leverage such strength to contribute to better environments in China and throughout the solidly developing Southeast Asian region.

PT. Kaneka Foods Indonesia



We jointly established PT. Kaneka Foods Indonesia with Mitsubishi Corporation in 2013 as the first overseas operation for our food business. This subsidiary began operations in 2014, focusing on processed oils.

We are leveraging the expertise that we have cultivated in Japan in a steady effort to contribute to Indonesia's food industry by supplying tasty and functional confectionary and bread ingredients that are safe and reliable. We look to expand throughout Southeast Asia, and aim to continue accommodating local needs, pleasing customers by contributing to taste.

RIVER Co., Ltd.



River Co., Ltd. is a medical equipment manufacturer based in Okaya, Nagano Prefecture. The company became part of the Kaneka Group in 2013.

River focuses on endoscope treatment units in developing new medical equipment to alleviate the burden on health care workers and patients. During River's nearly three decades of operations, numerous medical professionals have consulted the company for its advice. It is currently developing new products that draw on the techniques and expertise that Kaneka has cultivated in catheters. It looks to keep developing products that can contribute to health care progress.

Kaneka South America Representative Ltd.



We established Kaneka South America Representative Ltd. in Sao Paulo, Brazil, in 2013 as our first Latin American business unit. It promotes Kaneka's products, conducts market research, and provides technical services to customers.

While focusing on developing products as a market insider to accommodate Brazilian tastes, this subsidiary endeavors to create demand and penetrate the market to drive corporate progress and contribute to Brazil's people and society. In functional plastics, it cultivates new applications beyond existing architectural ones.

Kaneka Foods Corporation



Kaneka Foods Corporation was created in July 2013. It sells an array of ingredients and related supplies, including Kaneka Group ingredients, primarily for commercial confectionary and bread making.

This subsidiary swiftly accommodates customer needs as part of its objective of creating a structure in which it can deliver exactly what customers around Japan desire when they want it. The company currently provides support in the development of local products for local consumption. It is drawing on our branch network in an effort to strengthen planning and sales around Japan for distinctive agricultural and marine products.

Kaneka Kanto Styrol Co., Ltd.



Kaneka Kanto Styrol Co., Ltd. was established in 1963 to manufacture and sell polystyrene foam products. The company became part of the Kaneka Group in 2001, and manufactures containers for fish and vegetable products.

Polystyrene is a commonly used material that conserves resources and is environmentally friendly. More than 88% of containers made with this material are recycled. Kaneka Kanto Styrol promotes the reuse of resources by functioning as a recycling center for the Japan Expanded Polystyrene Association. Kaneka Kanto Styrol will continue making efforts to address social sustainability through its business activities.

Kaneka's Ongoing Support for WFP's School Feeding Program

Kaneka is a corporate partner of the United Nations World Food Programme (WFP) for three years from 2013 through 2015. We donate part of our African sales of Kanekalon, a synthetic fiber product, to the WFP's school feeding program.

•Number of students receiving school meals in 2014: 248,447 (117,290 boys and 131,157 girls)



Fundraising for the UN WFP at Kaneka's 65th Anniversary Events

We raised funds for the United Nations WFP at our 65th anniversary events in the Kansai and Kanto areas in November and December 2014. A special guest in a talk segment at the events was Kurara Chibana, a Kaneka character who is also an ambassador for the UN WFP in Japan. Kurara Chibana spoke about progress with aid status to developing countries.

Many employees and their families donated at both events, raising a total of 169,295 yen.



We raised funds for the United Nations WFP at our 65th anniversary events

CSR Orientations (expanding to domestic Group companies)

One new initiative was CSR orientations for domestic Group companies using the CSR Report 2014 and the CSR Handbook that we produced in March 2014. In fiscal 2014, we held orientations at eight sites of five companies. We covered such topics as top management's commitment, our long-term vision, the Declaration of Kaneka United, the results of safety and environmental activities, CSR activities, and our brand strategy. We plan to schedule such orientations in fiscal 2015 and beyond.



Head office, Kaneka Sun Spice Corporation



Koga plant, Tatsuta Chemical Co., Ltd.

■ Fiscal 2014 CSR Orientations at Domestic Group Companies

Date	Company Name	Participants
October 21, 2014	Kyushu Subsidiary, Kaneka Foods Corporation	25 employees, including the subsidiary president
October 22, 2014	West Japan Subsidiary, Kaneka Foods Corporation	21 employees, including the subsidiary president
November 19, 2014	Head Office, Kaneka Foods Corporation	23 employees
December 18, 2014	Tokai Subsidiary, Kaneka Foods Corporation	23 employees
October 28, 2014	Tochigi Kaneka Corporation	40 employees, including the president
October 23, 2014	Head Office, Kaneka Sun Spice Corporation	15 executives and managers, including the president
November 7, 2014	Kaneka Solartech Corporation	67 employees, including the president
November 17, 2014	Koga Plant, Tatsuta Chemical Co., Ltd.	88 employees, including the president

Note 1: Eperan is the brand name for Kaneka's expanded polypropylene and polyethylene foams made using the bead method

Expanding Environmentally Friendly Products and Plant Initiatives

As a part of its global warming measures, the Kaneka Group is expanding its environmentally compatible products, and has installed megasolar systems at its business sites. We will continue to reinforce environmental initiatives in the years ahead.

Kaneka Kashima Plant - Open Plant with Megasolar Facility

A megasolar facility in the west of the Kashima Plant started operations in October 2013. It is one of the largest solar power generation plants in Japan to employ thin-film photovoltaic cells. We installed 115,920 solar panels on a 239,000 square-meter property. This facility generates enough electricity to supply 3,000 households.

The industrial complex where the Kashima Plant is situated is a model site for visits to wind and biomass power facilities as well as Kaneka's megasolar facility. We welcome many visitors, including local government officials.

Koichi Motohiro of the General Affairs Team of Kashima Plant says, "Our plant coexists with the community and we wish to encourage visits from them."

The team at the Kashima Plant hopes to use such visits as opportunities for children to learn about environmental issues, and is preparing educational materials for them.

Keiko Osaki, also of the plant's General Affairs Team, says that, "We want to teach children how to generate electricity and convey the importance of the environment. We will also showcase our solar facility model in visits to schools."



Koichi Motohiro (left)
Keiko Osaki (right)
General Affairs Team, Kashima Plant

Visiting the megasolar facility



Megasolar facility in the west of Kashima Plant

Environmentally Compatible Products Quantitatively Assessing Products that Help Reduce Carbon Dioxide Emissions

We have defined a number of products that can help lower the environmental impact of usage through the disposal and recycling stages as environmentally compatible. We endeavor to drive social sustainability through our business activities.

We are conducting quantitative assessments of environmentally compatible products that help lower carbon dioxide emissions. We use Carbon Life Cycle Analysis for these assessments, calculating reduction volumes through quantitative and comparative assessments throughout product lifestyles, which are benchmarked against counterpart products based on guidelines issued by the Japan Chemical Industry Association.

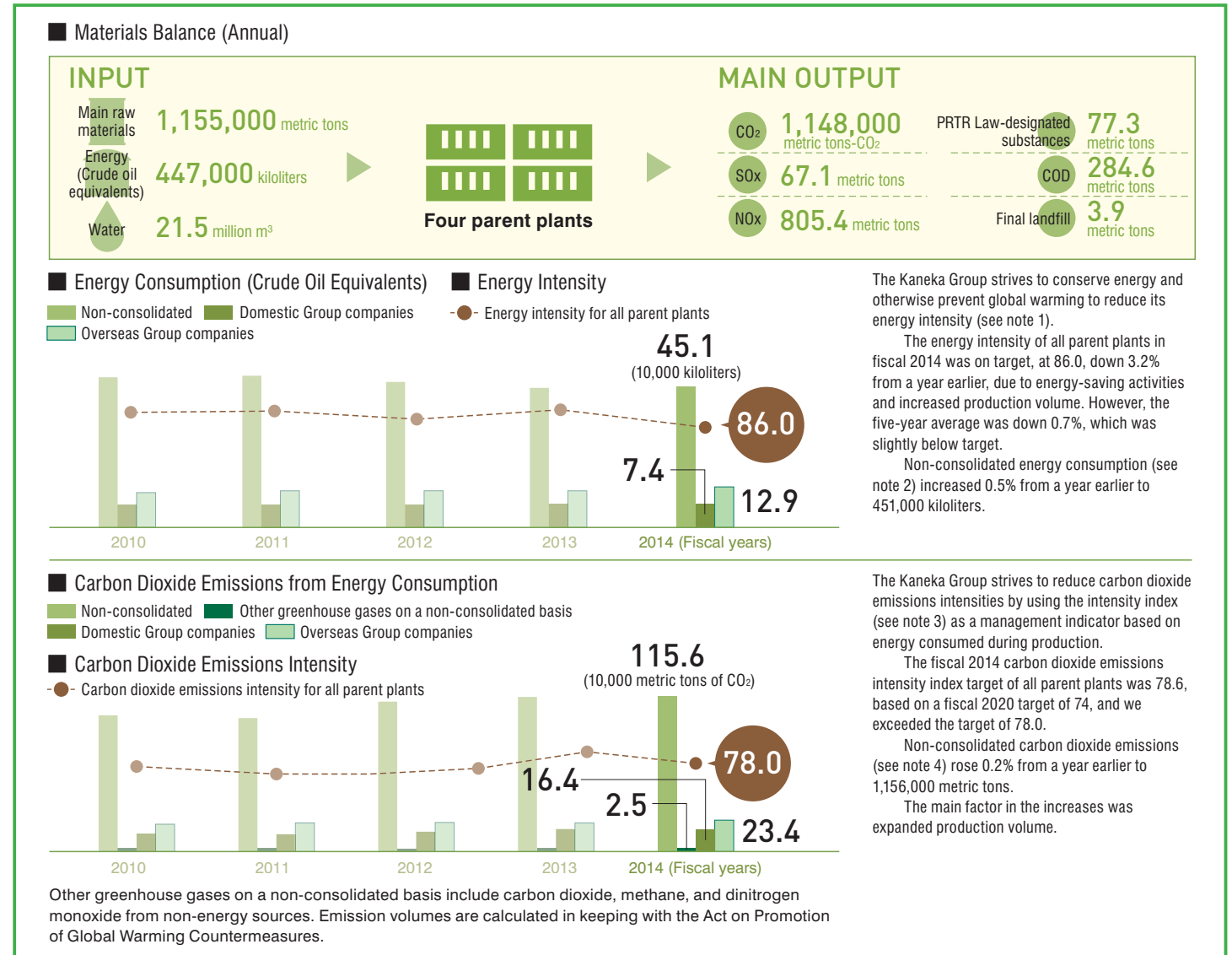
Carbon dioxide emission reduction volumes based on fiscal 2014 sales were approximately 4.8 million metric tons. We will continue to expand the range of products used in our assessments.

Products assessed quantitatively for their contribution to reducing carbon dioxide emissions

- Plastic foam insulation materials
- Plastic sash parts (polyvinyl chloride and polyvinyl chloride impact-modifying functional resins)
- Solar power system
- Pipes and fittings (polyvinyl chloride, heat-resistant polyvinyl chloride, and polyvinyl chloride impact-modifying functional resins)
- Automobile parts (functional resin products) and others

Materials Balance of Production Activities

The Kaneka Group's fiscal 2014 energy and resource inputs substance emissions, and product commercialization are listed below. We also overview a fire that occurred at the Osaka Plant.



The Kaneka Group strives to conserve energy and otherwise prevent global warming to reduce its energy intensity (see note 1). The energy intensity of all parent plants in fiscal 2014 was on target, at 86.0, down 3.2% from a year earlier, due to energy-saving activities and increased production volume. However, the five-year average was down 0.7%, which was slightly below target. Non-consolidated energy consumption (see note 2) increased 0.5% from a year earlier to 451,000 kiloliters.

The Kaneka Group strives to reduce carbon dioxide emissions intensities by using the intensity index (see note 3) as a management indicator based on energy consumed during production. The fiscal 2014 carbon dioxide emissions intensity index target of all parent plants was 78.6, based on a fiscal 2020 target of 74, and we exceeded the target of 78.0. Non-consolidated carbon dioxide emissions (see note 4) rose 0.2% from a year earlier to 1,156,000 metric tons. The main factor in the increases was expanded production volume.

Fire at the Osaka Plant Research Facility

At approximately 7:30 p.m. on August 26, 2014, foam spouted out from an extruder at the research facility and caught fire. Kaneka employees immediately extinguished the fire using carbon dioxide fire extinguishers. There was no human or material damage. We believe that this incident occurred

because during the shutdown of an extruder, foam gradually thinned out, with flammable gas remaining and static electricity igniting the gas.

We collaborated with external experts to jointly investigate the causes and assess countermeasures. To prevent fires occurring inside the

extruder, we stepped up efforts to diffuse flammable gases and prevent static charges. To avoid a recurrence, we implemented risk assessments to avoid fires and explosions, experimenting with flammable gas.

Note 1: Energy intensity is a numerical value calculated by dividing the energy consumption at all parent plants for manufacturing by the active mass, and indexing this figure against the baseline year of fiscal 1990 as 100. Active mass is a benchmark of production volume at all parent plants. We have changed the calculation of energy consumption volume to a method based on the Act on the Rational Use of Energy.
 Note 2: We have unified the energy consumption volume to the boundary of the Act on the Rational Use of Energy and an action plan formulated by the Japan Chemical Industry Association. We also included facilities other than all parent plants and have switched to total figures for parent Kaneka consumption. This differs from boundary for the four parent plants in the material balance.
 Note 3: The carbon dioxide emissions intensity index is a measure against a fiscal 1990 baseline of 100 divided by the activity amount (which Kaneka calculated as the fiscal 1990 coefficient on a fixed usage basis) by carbon dioxide emissions from energy consumption in production activities. This makes it easier to visualize the impact of the Company's activities. We have set our fiscal 2020 target using this index.
 Note 4: Carbon dioxide emissions are calculated in keeping with the Act on Promotion of Global Warming Countermeasures. In this report, we have used real coefficients for the carbon dioxide emissions intensity of purchased electricity and changed to a total figure for individual energy consumption at parent companies.

Introducing the Food Defense Program to Improve Customer Satisfaction

Customer interest in food safety and security has grown in response to food tampering incidents. In January 2014, the Kaneka Foods group accordingly introduced its Food Defense Program.

Strengthening Food Quality Management Systems with the Food Defense Program

Companies in the Kaneka Foods group produce and sell such offerings as margarine, bakery yeasts, cocoa butter substitutes, and spices, accounting for about 25% of consolidated net sales. The Foods Division bases its quality policy on the notion that foodstuff quality assurance is not just an issue for plants and quality management departments, but also one for all team members, including those in sales, storage, and transportation. We accordingly undertake a Plan-Do-Check-Act cycle for quality management systems (shown in the illustration).

Quality management system initiatives by Kaneka Foods group companies started with deploying the AIB International Consolidated Standards for Inspection to ensure healthy and safe foodstuffs, encompassing the Hazard Analysis and Critical Control Point (HACCP; see note 1) program initiated in 2002.

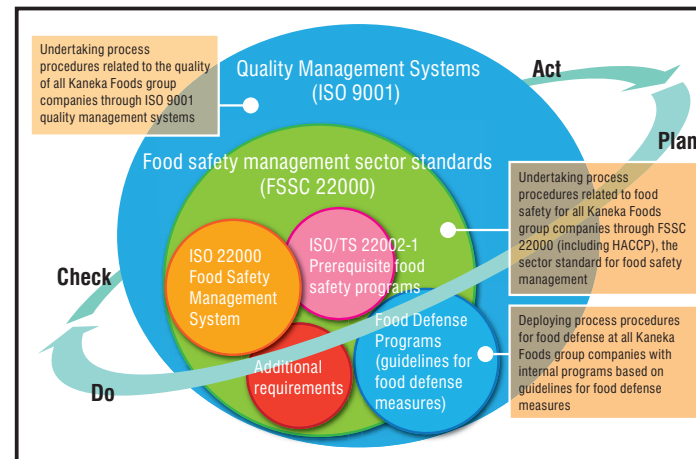
Since then efforts have expanded to include AIB under the ISO 9001 quality management system and Food Safety System Certification (FSSC) 22000, the sector standard for food safety management. In 2014, we embarked on efforts to deploy food defense programs.

This concept emerged in the food industry after the 9/11 terrorist attacks in the United States raised concerns about the potential for food chain attacks that could greatly harm people's health. Another factor was that in Japan, more companies have deployed defense plans in response to food tampering incidents. Kaneka Foods group companies formulated their own food defense programs under guidance from Professor

Emiko Araki (currently a visiting professor) at Tokai University and in keeping with programs prepared by the U.S. Food and Drug Administration. In April 2015, we started deployment and operational preparations that include vulnerability assessments and the installation of quality assurance cameras (see note 2).

We endeavor to enhance customer satisfaction with the reliability of our products by running our programs and implementing a series of quality management systems.

Quality Management Systems of Kaneka Foods Group Companies



Kozo Yamashita
Head of Quality Assurance Group,
Foods Division (left)
Shinichi Matsumoto
Manager, Quality Assurance Group,
Foods Division (right)

Stakeholder Feedback

Anticipating Positive Results through Introduction of Food Defense Programs



Professor **Emiko Araki** (visiting professor)
Department of Fisheries,
School of Marine Science and Technology,
Tokai University,
and Academic Advisor for the Japan Food Hygiene Association

Japan lags behind the world in food defense initiatives. Thus, I think that Kaneka has quickly risen to the challenge in light of the situa-

tion. The company has swiftly responded to my advice and suggestions by improving its programs and other initiatives.

I believe that food defense ought to incorporate the concept of risk management. Properly controlling such risks would be beneficial. For example, installing quality assurance cameras would enhance employee awareness and reduce the potential for customer complaints, thereby enhancing trust in the Kaneka brand.

Note 1: The Hazard Analysis and Critical Control Point (HACCP) is a hygiene control method to secure the safety of products. Step-by-step procedures under this method encompass a prospective analysis of risk factors, such as microbial contamination that could happen at any stage of the food manufacturing and processing processes, drawing on the results of analysis to determine management priorities to ensure product safety through certain countermeasures at identified stages throughout the manufacturing process, followed by constant monitoring.

Note 2: Kaneka installs quality assurance cameras at production sites to monitor and protect employees and the organization itself by ensuring that it maintains quality.

Building Trusting Relationships with Shareholders and Investors and Sharing Kaneka's Brand Direction

From fiscal 2015, Kaneka will step up its investor relations efforts as part of its CSR program. We will endeavor to optimize disclosure of both financial and non-financial information.

Turning a Changing Investment Environment into an Opportunity to Foster Understanding of the Kaneka Group

We responded to changing perspectives among institutional investors and analysts with whom we have engaged in investor relationship activities in recent years by transferring the IR Department from the Accounting Department to the new established CSR Division on April 1, 2015.

We concluded that it would be difficult to position Kaneka as an investment target based solely on prevailing results, as we engage in various fields. These include chemicals, functional plastics, expandable plastics and products, foodstuffs products, life science products, electronic products, and synthetic fibers. While gaining understanding of our focus on the strategic domains of health care, the environment & energy, food production support, and information & communications, we would sometimes also face questions about how long we would retain unprofitable operations. Some understood that we would not immediately discard operations solely on the basis of losses and that we have underlying resources.

Kaneka has deepened communications with institutional investors and analysts through financial result announcements, press conferences, individual meetings, and other vehicles. In recent years, we have encountered more questions about the potential and risks of new businesses and our business strategy, in addition to questions relating to prevailing financial figures, such as year-on-year growth and major products and markets. This indicates that more people are considering investments from medium- and long-term perspectives.

We have accordingly responded to such a change in perspectives by having general managers conduct business orientations and holding plant tours to increase understanding of the Kaneka Group. We will continue to share our brand direction with institutional investors and analysts.



We exhibited and profiled our products at an investor relations briefing in May 2015



Our investor relations website provides timely and appropriate corporate information



Semiannual business reports to Japanese shareholders and the English language annual report



Employee Feedback

Building Relationships of Trust with Investors



Takeji Kobuki
Head,
Investor Relations Department,
CSR Division

Kaneka's investor relations program targets institutional investors, analysts, and other stakeholders. While insti-

tutional investors consider the value of holding or increasing their holdings of shares over the long-term, analysts seek information so they can appropriately evaluate the stock. Regardless of such different stances, these stakeholders all seek corporate honesty. As representatives of Kaneka's investor relations program, we must disclose information honestly from the perspectives of investors and engage in transactions based upon trust to be able to ask investors to purchase and retain our shares.

Developing Future Leaders Overseas as Part of Group Reforms

We are pushing ahead with efforts to cultivate global human resources to drive the Declaration of Kaneka United, which we deployed in 2009.

Training prospective leaders among Kaneka Overseas Group company employees

In fiscal 2013, we instituted the Multinational Leader Development Program for overseas Group company employees who could eventually drive our regional business strategies.

Management candidates from Europe, the United States, Southeast Asia, China, and other areas participate in the program. The four-day Phase 1 of this initiative is held in Texas and covers business case studies on global enterprises. Participants then consider and discuss the significance of these examples for the Kaneka Group. While candidates are specialists in fields such as marketing, manufacturing, and logistics in their home countries, the program enables them to broaden their perspectives to encompass different industries and techniques in other nations. On the final day of Phase 1, candidates formulate globalization activity themes that they deploy on

returning to their countries. In Phase 2 of the program, which is six months later and held in Belgium, candidates make a presentation of progress and results for the activity themes in leveraging networks of Group companies and fellow candidates.

Feedback from participants has been positive. The experience of one was that the program underscored the links within the Group and the breadth of operations. Another came away keen to transform Kaneka from outside Japan, while another noted that the interaction with other candidates stimulated new ideas.

There were 12 participants in the fiscal 2013 program and 11 a year later. The projected number of candidates for the fiscal 2015 program, including those from Japan, is 14.

Another training offering is the Leadership Challenge Workshop, which Kaneka runs for managers to share leadership thinking throughout the Group.

Global Employee Development System (Fiscal 2014)

	Program	Content	Number of Employees
Development Training	Global Employee Development Program	Mastering practical foreign-language communication skills	1,942
Overseas learning	Overseas Trainee System	One-year work experience at a Kaneka overseas affiliate	10
	Short-Term Overseas Trainee System	Pursuing personal objectives at a Kaneka overseas affiliate (around three months)	5
	Program for Acquiring Language Skills Abroad	Overseas experience through activities such as short-term study at a language school and homestay program	10
Language Courses	English and Chinese	Language studies essential for business management	92
Personnel Exchanges	Global Employee Exchange Program	Accepting trainees from overseas Group companies at Kaneka (Japan)	1
Overseas Training	Multinational Leader Development Program	Case study on leading global corporations and applying action learning	11
	The Leadership Challenge Workshop	Acquiring and applying leadership skills	103



Multinational Leader Development Program session



On the final day, candidates present progress in their activity themes and are critiqued

Employee Feedback

Vital to harness training as a stepping stone toward developing leaders for overseas Group companies



Yoshiaki Takemasa, a global human resources manager in the Global Planning Department (on the left in the photo), says that, "Kaneka must urgently groom Japanese nationals for international leadership roles. It is similarly important to foster the growth of foreign Group company managers with a broad knowledge of its operations."

Mr. Takemasa adds that, "Our challenge is to provide oppor-

tunities for tomorrow's executives to be active worldwide as part of Kaneka after embracing the great value of collaboration through the Group."

Keisuke Araki, who works in global human resources for the Global Planning Department (on the right in the photo), says that, "We've begun sending a manager from Belgium to Japan and are also sharing best practices from Europe and the United States with Japanese and other operations. Our program is gradually beginning to bear fruit."

Cultivating a Corporate Culture of Individual Responsibility for Safety

Nurturing a corporate culture in which accidents are one's own responsibility and not someone else's issue is vital to attaining zero occupational accidents.

Kaneka cultivates awareness among all Group companies by broadening opportunities for safe danger simulations.

Providing mobile hands-on learning to each Group company

The Takasago Plant was Kaneka's first operation to provide hands-on learning (see note 1). Such initiatives thereafter expanded to the Osaka, Shiga, and Kashima plants and Group company Tochigi Kaneka. Although Group company members are permitted to participate in these classes at each of the business sites, many of them found it difficult to do so because of location or time issues.

Therefore, the Production Technology Division produced mobile hands-on learning equipment and began taking it around business sites for classes from December 2013. The three-hour course comprises one hour on what happens when people are caught in machinery, one hour of hands-on learning, and an hour on taking precautions to prevent falls. Group company presidents, plant managers, and full-time and con-

tract employees take part in mobile hands-on learning. As of the end of March 2015, we had conducted 28 courses for 867 employees at 13 Group companies.

We plan to provide hands-on learning throughout Japan during fiscal 2015. We look to extend such initiatives to overseas group companies.



Through hands-on learning, class participants learned about situations in which accidents are likely to occur



Participants stand on one leg for several seconds to check their balance and confirm their own physical capabilities so they can prevent themselves from falling

Feedback from hands-on learning course participants at Kanto Styrene Co., Ltd.



Yoshihiro Morijiri (left) says that, "I had gotten used to operating machinery without turning it off for many years. The course demonstrated the horrible consequences of acting habitually." Hitomi Otake (right) says that, "I'd been going through the motions with near-misses, and the course drove home the importance of continuing to keep all of us aware of what can happen."

Employee Feedback

You can always catch up if you miss a production target but a life lost can never be recovered



Kouji Oonaka
Environmental Protection & Safety Group,
Responsible Care Department,
Production Technology Division

If you miss a production volume target, you can catch up if everyone pitches in. But if someone is injured or dies as a result of being caught in machinery or through some other mishap, you cannot undo the damage or loss of life. In hands-on learning, we emphasize that we want people to notice the dangers in advance

rather than realize them once an accident has occurred.

Safety is about preventing injury and illness and avoiding workplace accidents.

What's important in these mobile hands-on learning classes, which we began in 2013, is that you should repeat the learning. I think it's important for supervisors and colleagues to keep disseminating safety messages to ensure that all of our people maintain the right safety mindset. My fundamental message to new employees joining the group every year is that carelessness is the enemy of safety.

Note 1: Feel free to read Kaneka's CSR Report 2014, which presents hands-on learning on the Highlight page of the Caring for Our Employees section.

Stakeholder Dialogues

Business Sites Engaging with Municipal Governments

Kaneka conducts stakeholder dialogues to share differing opinions on common issues and to deepen mutual understanding in the process.

Since 2011, the company's business sites have continued to engage in dialogue, focusing on local government officials.

Our fifth stakeholder dialogues were with officials from Otsu, Shiga Prefecture, which is home to the Shiga Plant.

Fifth Stakeholder Dialogue

In February 2015, we conducted our fifth dialogues with external stakeholders to learn more about their evaluation and opinions, and to seek direct feedback about our CSR activities and confirm the direction of our efforts.

Stakeholder dialogues are about sharing differing opinions on common issues, deepening mutual understanding in the process.

We conducted a broad discussion with local government officials about the CSR Communication Book 2014, which we issued in July 2014.

Dates and Locations

February 6, 2015 at Kaneka Shiga Plant

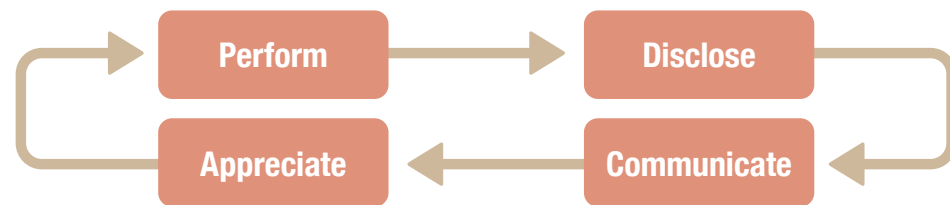
The Kaneka Group will continue conducting stakeholder dialogues about CSR issues.



Participants exchanging different opinions

■ Kaneka's stance on building trust through stakeholder dialogues

Model for building trust (through a type of PDCA cycle)



We aim to reinforce trust through this PDCA cycle.

Participating Otsu Municipal Government officials



Satoshi Inoue
Industry and Tourism Director



Ryuhei Ueno
Environment Director



Hiroyuki Nakano
Policy Coordination Director



Hitoshi Hibi
Citizen Director



Masahiko Tanaka
Education Deputy Director

Topic 1

The Kaneka's corporate approach, including CSR activities based on core business activities and TV commercials to raise awareness

Opinions of Otsu Municipal Government Officials	Kaneka's Responses
<ul style="list-style-type: none"> ○ Reading the CSR report acquainted me with how extensive Kaneka's businesses are. I think that CSR activities are an effective tool for business-to-business companies. Incidentally some local governments use CSR as an acronym for "City Social Responsibility." I think that Kaneka's tag line of "Leveraging science to make wishes come true" is very easy to understand. 	<ul style="list-style-type: none"> ● We will continue CSR activities that contribute to society through business so we can realize our vision of leveraging science to make wishes come true.
<ul style="list-style-type: none"> ○ The report made me aware of Kaneka's global contributions, such as to the United Nations program, as well as its domestic community contributions. All communities have distinctive characteristics and unique underlying problems and histories. We hope that corporations can fully understand this, and welcome the technological and manpower support of Kaneka. 	<ul style="list-style-type: none"> ● The local governments with which we have engaged in dialogue elsewhere are also very distinctive. One such example is Kamisu City in Ibaraki Prefecture, which hosts our Kashima Plant as part of a large industrial complex. We would like to exchange views extensively with Otsu City, too, to develop community contribution initiatives.

Topic 2

Disclosure and environmental initiatives to enhance community trust

Opinions of Otsu Municipal Government Officials	Kaneka's Responses
<ul style="list-style-type: none"> ○ The Environment Department deals with corporations in areas such as air pollution, water management, and vibration. For the three priority corporate responsibility areas that have been described-the focus on core businesses, contingency planning, and ethical compliance-Kaneka is doing a great job. As illustrated by the company signing a firefighting operations agreement with Otsu City in December last year, and through environmental education and other activities, Kaneka is a top runner in practicing community-focused CSR. 	<ul style="list-style-type: none"> ● We explained the anticipated roles and responsibilities of corporations that the general public deems important. There is also a lot of overlap in topics beyond the three priority CSR areas. We aim to continue undertaking CSR initiatives to build community trust and more broadly enhance corporate trust.
<ul style="list-style-type: none"> ○ We are grateful for Kaneka's participation in an annual mass cleanup of Lake Biwa. Related to this event, about 700 citizens participated in cutting reeds at Lake Biwa to prepare the lake for its tourist season in 2014. We would like some funds to purchase reed-cutting sickles and other tools for this effort. 	<ul style="list-style-type: none"> ● While financial support is important, the Shiga Plant also likes to consider human resources and other support.

Our response to stakeholder opinions and requests

Our fifth stakeholder dialogue revealed the extent to which stakeholders consider the CSR activities of the Kaneka

Group acceptable or inadequate, and highlighted the areas requiring improvement.

We believe that pursuing CSR through core businesses and enhancing stakeholder satisfaction will help us

to enhance enterprise value and fulfill our corporate responsibilities. We will discuss the valuable points and opinions we received with related departments to bolster sustainable CSR activities.

Outline of Past Stakeholder Dialogues

The stakeholder dialogue marked the completion of all dialogues with representatives of the local governments where Kaneka's four parent plants are located.

We would like to engage in dialogue with various other bodies, including non-government and non-profit organizations. To mark the completion of the process of dialogue with local governments, we have summarized these initiatives below.



Third dialogue: Professor Toshihiro Kanai and researchers from Kobe University

Purpose

Solicit external stakeholder opinions, requests and other interests regarding the Kaneka Group's CSR activities by engaging in direct dialogue and verifying social demands with regard to the direction of Kaneka's initiatives.

Date of Dialogues and Participants

Six director-class officials from Takasago City, Hyogo Prefecture on November 11, 2011
 Seven deputy-director-class officials from Settsu City, Osaka Prefecture on November 29, 2011
 Seven researchers from Kobe University on November 27, 2012
 Seven director-class officials from Kamisu City, Ibaraki Prefecture on February 19, 2014

Topics

The Kaneka Group's corporate approach
 Enhancing community trust
 CSR report feature articles
 Overall composition and contents of report

Fostering Youth

Kaneka does much to foster youth in the communities in which it operates and throughout society. In fiscal 2014, we took part in the second Children's Chemistry Show in western Japan. Core-Net, a non-profit organization of retired executives, whose members include Kaneka retirees, provided educational assistance at elementary and junior high schools.

Participating in a Children's Chemistry Show in Osaka

The Dream Chemistry 21 Committee sponsored the Children's Chemistry Show in Osaka at the Kyocera Dome Osaka on October 18 and 19, 2014. The event celebrated the new Chemistry Day, held on October 23 to commemorate the Avogadro constant (see note 1), and the Chemistry Week, during which includes this day falls. This was the second time for the show to be held in the Kansai region in 2014, with the first show held in Kobe in January.

Approximately 5,700 people visited the venue during the two-day event. About 330 children visited the Kaneka booth to learn how to make erasers.

The children were given 25 minutes each to experiment with creating their own erasers in three different colors. They and their parents greatly enjoyed the experiment, drawing on some assistance from staff.

We are keen for children to understand the power of science by experiencing the joy of chemistry.

We look forward to contributing further to communities by participating in another Children's Chemistry Show in western Japan in fiscal 2015.



Children experiencing the marvels of Kaneka's materials



Children crafted their very own erasers

Kaneka Manufacturing Class

Pro bono activities leveraging professional expertise are becoming more popular in Japan. NPO Core-Net is part of the pro bono movement, passing down manufacturing knowhow to support elementary and junior high school education.

Following on from 2013, we again conducted Kaneka Manufacturing Class activities. We held two classes in which elementary school students assembled scroller kits. One was in October 2014 for about 70 students in the sixth grade at Takasago Elementary School, near the Takasago Plant. The other was in December of the same year for around 80 students in the sixth grade at Torikai Nishi Elementary School near the Osaka Plant.

Kaneka participants on both days were mainly new plant employees. They instructed and assisted the students, imparting an interest in manufacturing and a sense of achievement from taking part. The students greatly enjoyed the experience.

In fiscal 2015, we look forward to holding these classes at other schools near our facilities as part of our commitment to contributing to society by fostering youth.



Unveiling scroller assembly kits in the gym



Kaneka employee instructing students

Note 1: The Avogadro constant is the number of constituent particles (molecules, atoms, ions, etc.), or moles in a substance. It is named after Italian chemist Amedeo Avogadro.

Reinforcing Crisis Management and Supporting Reconstruction Four Years after the Great East Japan Earthquake

In light of its experience following the Great East Japan Earthquake, the Kaneka Group has increased its ability to tackle disasters by regularly conducting disaster drills and educational activities. At the same time, we are providing disaster recovery support, and will continue to engage in diverse support initiatives.

Rebuilding the Only Local Plant Making Foam Fish Containers

Group company Kanae Co., Ltd. is the only plant to make polystyrene foam fish containers in the Kesennuma, Ofunato, and Shizugawa areas of Miyagi Prefecture. A tsunami washed away the plant following the Great East Japan Earthquake, shutting down its operations.

The Kaneka Group spent 600 million yen, which included a public subsidy, to rebuild the plant to stabilize production of fish containers, which are essential in the area, and ensure speedy distribution. The facility reopened in June 2013. It has boosted its production volume while increasing the number of employees as the area has recovered.



Hiroshi Konno, the plant manager at Kanae, says that, "We are sensing that the local economy is recovering. Because our shipments are increasing with the reconstruction of the fish processing plant and other local businesses. We are looking to hire more employees, and aim to supply high-quality products at low costs."

Kanae's shipments are growing as more local fish processing plants are rebuilt



Reinforcing Crisis Management to Maintain Business Continuity

Based on its experience from the Great East Japan Earthquake, the Kaneka Group prepares standards and manuals for initial responses and business continuity.

In 2014, we held night-time disaster drills at six Kaneka sites and one sales office, at 13 Group companies for a total of 5,200 participants. The drills covered providing information about the extent of and responses to damage and using a safety confirmation system to ensure the welfare of employees.

We held a crisis management seminar for more than 100 parent company employees that covered basic knowledge about earthquakes and tsunamis and reviewed regional earthquake risks and projected damage.

In keeping with activities in fiscal 2014, we will continue to conduct regular business continuity drills and educational activities.

Note 1: If you are interested in products from the Kesennuma Marine Resource Application Study Group, please visit the following site: <http://kesemo.com/>

Contributing to Industry and Employment in Kesennuma City

In April 2014, the Kaneka Group donated 12,700,000 yen to Kesennuma City, which is using the donations to run the Kesennuma Marine Resource Application Study Group. The group was established to help drive the recovery of the city through its creative industry. The organization aims to create advanced, highly profitable industries that attract young people by incorporating knowledge through collaboration between governments, industry, and academia.

The Kaneka Group will continue to support disaster-affected areas.



Hisashi Ishiwata, vice chairman of the Kesennuma Marine Resource Application Study Group says that, "The donations we received from many companies have enabled us to move swiftly to the next level. We aim to assist people awaiting the city's recovery."

Effective use of resources from Kesennuma City includes sea squirt seasoning and cosmetics incorporating shark collagen (see note 1)

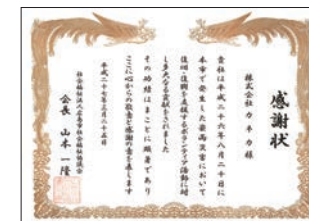


Support following Landslide in Hiroshima

We provided the following aid through Japan Platform, a certified non-profit organization, to aid recovery from a massive landslide in August 2014 in Hiroshima's Asaminami and Asakita wards:

- 50 pairs of long steel-capped boots from the PVC & Chemicals Division
- 100 tarpaulins (3.6 x 5.4 square meters) from Kaneka Kentec Co., Ltd.

We will continue providing support to disaster-stricken areas.



Letter of appreciation from the Hiroshima City Council of Social Welfare

Kaneka's CSR Activity Performances and Evaluations

Kaneka's CSR activities performances and evaluations in fiscal 2014 are as follows.
(Please see the PDF version for details.)

■ Kaneka's CSR Activity Performances and Evaluations

😊 Significantly outperformed
 😊 Achieved/nearly achieved
😞 Underperformed
 😞 Significantly underperformed

Key Stakeholders	Item	Fiscal 2014 Results	Results Evaluations	PDF Version Page Numbers
All Stakeholders	CSR Management	Bolster Governance and Compliance <ul style="list-style-type: none"> Conducted CSR suitability audits at Kaneka and Group companies in Japan, the United States and Europe. Launched a compliance e-learning program for all Kaneka employees. Responded to seven cases reported to the Kaneka consultation desk. Reinforced supervision by increasing the frequency of internal audits to improve internal controls. 	😊	P26 P27
		CSR Implementation <ul style="list-style-type: none"> Held CSR Committee meetings three times and four subcommittee meetings as scheduled. Disseminated information regularly through the intranet and fostered employee understanding of CSR through the CSR Handbook (Practical Guide). Conducted job-specific and other training 23 times. 	😊	P28 P29
		Management CSR Safety and Quality Inspection <ul style="list-style-type: none"> Continued to implement management-level CSR Safety and Quality Inspections at all parent plants and one research center, 17 plants of 15 domestic Group companies, and seven overseas Group companies as scheduled. 	😊	P28
		Reinforce Risk Management <ul style="list-style-type: none"> Implemented companywide preparation drills. At plants, implemented drills in the holidays and evenings without prearranged scenarios. Conducted earthquake and tsunami risk seminars. 	😊	P61
The Environment	Environmental Protection Improvement (reducing environmental impact)	Prevention of Global Warming <ul style="list-style-type: none"> Energy intensity (see note 1) was 86.0, down 3.2% from a year earlier, for an annual target reduction of 1%, which was slightly below the 0.7% average decrease over five years. The carbon dioxide emissions intensity was 78.0, exceeding the target of 78.6. 	😊	P39
		<ul style="list-style-type: none"> Reduced the energy intensity for logistics by 1.5% from a year earlier and reached the annual goal. Also achieved a five-year average reduction goal of 3.5%. 	😊	P40
		Reduction of Industrial Waste <ul style="list-style-type: none"> Achieved a final landfill rate of 0.006% for all parent plants for the ninth consecutive year. Also improved domestic Group companies' landfill to 0.07%, down from 0.08% a year earlier. Checked compliance among waste contractors and confirmed the absence of problems. 	😊	P43 P43
		Reduction of Volatile Organic Compound (VOC) Emissions <ul style="list-style-type: none"> Achieved the annual target of 1,830 metric tons, with emissions of 1,669 metric tons. 	😊	P45
Customers	Customer Satisfaction (ensuring quality and product safety)	Quality Management <ul style="list-style-type: none"> Provided information about Quality Management Rules and Change Management Standards. Laid down technological transfer and design review guidelines. 	😊	P50
		Chemical Substance Management <ul style="list-style-type: none"> Notified inventories of existing chemical substances in Taiwan and collected information on chemical substance management laws in Taiwan and South Korea for sharing in-house. Operated a database that centralizes the management of chemical substances used. 	😊	P50
Vendors	Proper Procurement	Green Procurement <ul style="list-style-type: none"> Investigated 18 types of imported raw materials and confirmed non-contamination with prohibited substances. Reviewed the substance list of Green Procurement Standards four times in line with revised laws. 	😊	P54
		Bolstering Distribution Safety <ul style="list-style-type: none"> The Takasago Plant collaborated with transportation companies to patrol sites to check that people were carrying their Yellow Cards, while the Osaka Plant identified unsafe locations during cargo handling and examined improvements. Together with transportation companies conducted legal compliance checks and voluntary inspections on mobile tanks. 	😊	P54
		<ul style="list-style-type: none"> In collaboration with transportation companies, the Kashima Plant checked and reconfirmed emergency contact networks. The Takasago Plant held transportation danger detection training. 	😊	P54
Shareholders and Investors	Timely and Appropriate Disclosure	<ul style="list-style-type: none"> Issued business reports, financial results, interim reports for shareholders and other investors, and other investor relations materials. 	😊	P56 P57
Society	Improving Communication with Society	<ul style="list-style-type: none"> Issued a CSR report and posted it on our website. Continued to engage in shareholder dialogue. Held youth events. 	😊	P59 P62 P64
		<ul style="list-style-type: none"> Issued site reports for all parent plants and posted them on our website. 	😊	P--
Employees	Emphasis on Diversity	Employing, Training, and Recruiting Diverse People <ul style="list-style-type: none"> Positioned the participation of women as a first step toward diversity, launching support programs in the areas of promoting equal opportunities, work-life support, and corporate culture reforms. Prior to reviewing the systems, we held 33 orientations for a total of 461 employees. 	😊	P76
		Work-life Balance <ul style="list-style-type: none"> As well as initiating a system for working from home, provided day-care cost subsidies and started a temporary leave system for spouses who are transferred overseas, and continued discussions between labor and management to reduce the total number of actual working hours. 	😊	P77
		Labor and Management Relationships <ul style="list-style-type: none"> Continued discussions to realize joint goals for labor and management through central labor and management meetings, management conferences, meetings of representatives, and workplace labor and management gatherings and other groups. 	😊	P79
		Respect for Human Rights <ul style="list-style-type: none"> Educated 98 new employees in April 2014 and 38 newly promoted executives about human rights. Held eight inter-cultural communication classes during the year. 	😊	P79
	Reinforcing Occupational Safety and Health	Occupational Safety <ul style="list-style-type: none"> The Takasago Plant implemented risk assessments for targeted accidents tracked through fault tree analysis (FTA, see note 2). E-mailed a Disaster Calendar to employees to highlight previous accidents at Kaneka. Implemented risk awareness training at 22 sites of 11 domestic Group companies with mobile hands-on learning equipment. The number of occupational accidents soared from the previous fiscal year to 22. 	😞	P80
		Occupational Health <ul style="list-style-type: none"> Reviewed solvent handling operations and improved work environments by enhancing ventilation. Implemented mental health training for new executives, plant managers, and people in charge of mental healthcare. 	😊	P81
		Management Systems <ul style="list-style-type: none"> Continuing from fiscal 2013, switched to quantitative assessments to reinforce checks. Test-deployed specialized internal environmental safety audits at departments at four parent plants. 	😊	P80

Note 1: Energy intensity is a numeral value calculated by dividing the energy used in manufacturing by the active mass and indexing it against the baseline year of fiscal 1990 as 100.

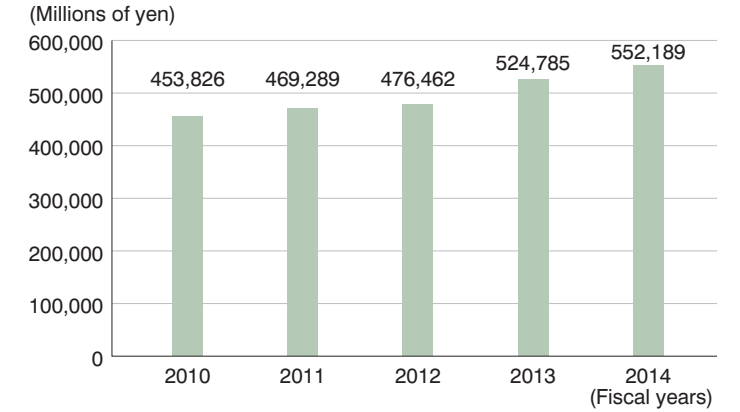
Note 2: Fault tree analysis is a technique for analyzing product breakdowns and resulting accidents.

Kaneka Group Profile

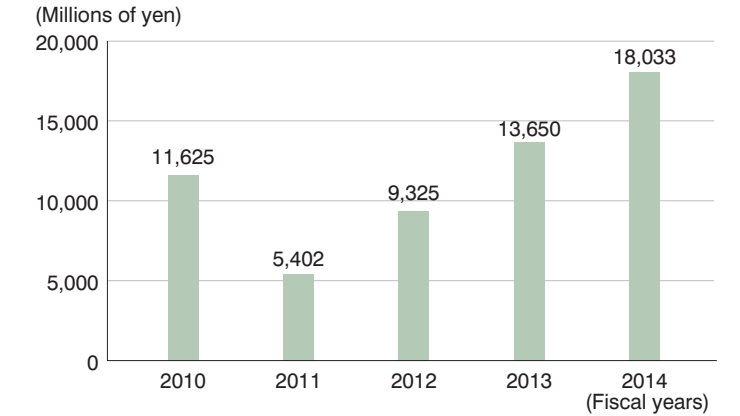
■ Corporate Profile

Name	KANEKA CORPORATION
Head Office	2-3-18, Nakanoshima, Kita-ku, Osaka 530-8288, Japan Tel: +81-6-6226-5050 Fax: +81-6-6226-5037
Tokyo Head Office	1-12-32, Akasaka, Minato-ku, Tokyo 107-6025, Japan Tel: +81-3-5574-8000 Fax: +81-3-5574-8121
Date of Establishment	September 1, 1949
Paid-in Capital	33,046 million yen (as of March 31, 2015)
Domestic Facilities	Sales Office Nagoya Plants Takasago (Hyogo Prefecture) Osaka (Osaka Prefecture) Shiga (Shiga Prefecture) Kashima (Ibaraki Prefecture)
Research Institutes	Frontier Materials Development Laboratories, Medical Device Development Laboratories, Biotechnology Development Laboratories, Photovoltaic & Thin Film Device Research Laboratories, Molding & Processing Development Center, Thin-Film Process Technology Development Center, and Process Technology Laboratories
Overseas Facilities	U.S.A., Belgium, Singapore, Malaysia, China, India, Taiwan, Korea, Australia, Brazil, and others
Kaneka Group	92 subsidiaries (including 36 domestic and 26 overseas consolidated subsidiaries)

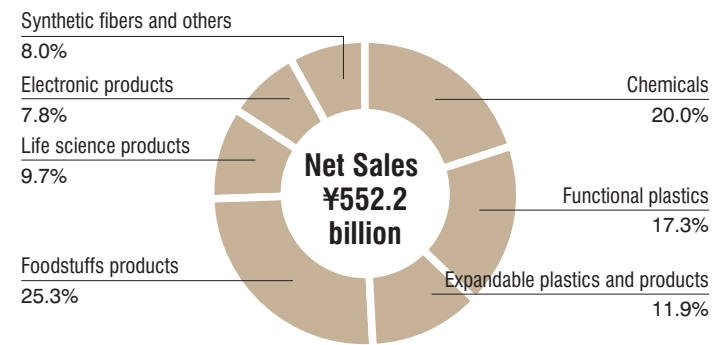
■ Net Sales (Consolidated)



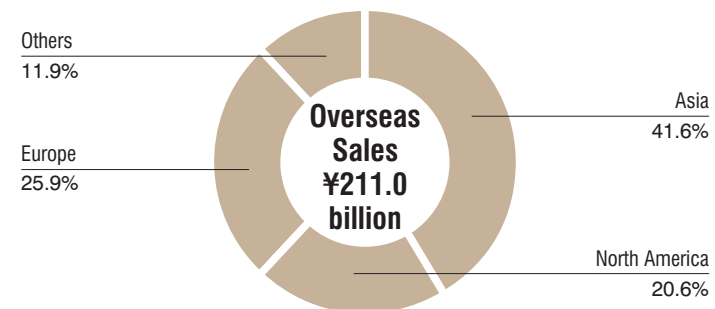
■ Net Income (Consolidated)



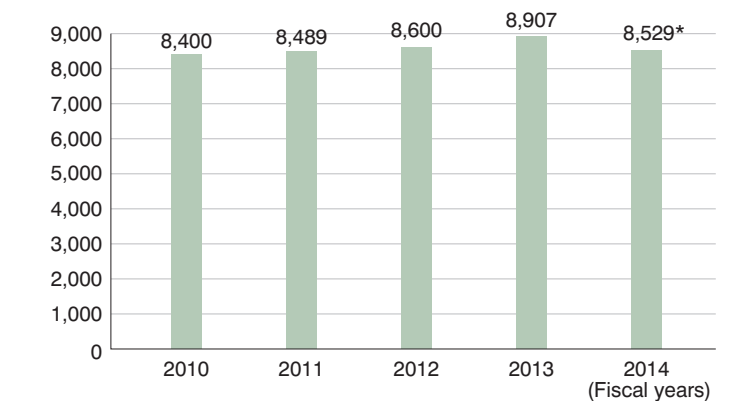
■ Consolidated Sales by Business Segment (Fiscal 2014)



■ Consolidated Overseas Sales by Area (Fiscal 2014)



■ Number of Employees (Consolidated)



*From fiscal 2014, we changed the basis on which we calculate the number of employees at Group companies (excluding temporary employees).

My Impressions from Reading CSR Report 2015



Chieko Minami

Doctor of Commerce and Professor of Marketing, Graduate School of Business Administration, Kobe University.

Graduated from the Faculty of Letters of Kobe University.

Completed a Master's Degree in Communication from the Graduate School of Michigan State University.

Completed the first semester of a doctoral course at the Graduate School of Business Administration, Kobe University.

Left late in doctoral course.

Assistant Professor, Faculty of Economics and Business Administration, Yokohama City University.

The Role of a CSR Report is to Convey a Company's Stance as well as Provide their Standards and Foster Stakeholder Understanding

This is my third third-party opinion for Kaneka. When reviewing the report this time it became even more evident to me that the role of a CSR report is to convey a company's stance. I found that the report endeavored to clearly convey Kaneka's stance by presenting a variety of information. This was particularly noticeable to me in the ongoing efforts to disseminate environmental data. Corporate activities have an environmental impact at the raw materials procurement, manufacturing, logistics, and other stages. I think that the company deserves great praise for its ongoing efforts to gather, process, and disclose data on its efforts to lower its environmental impact. If there were anything I would like improved, it would be to explain the backdrop for the standards that the company uses for its numerical targets and self-assessments. I think that this would enable the company to convey its ongoing endeavors to more people and gain their understanding.

Meriting Praise for a Structure Focused on Key Strategic Fields

I also read the Communication Book, which is even more compact than the previous version. I assume that the goal here was to relate Kaneka's social contributions through business activities to its four key strategic fields, presenting special features that highlighted two of those fields. Many B2B companies have numerous products that are hard to understand even if presented comprehensively, with the end result that the information ironically does not get across. In that light, I think that readers will easily understand Kaneka's direction and technologies from its sharp focus in its priority

fields. To top it off, the special spotlighted such topical areas as regenerative medicine and next-generation lighting, so I read with interest about Kaneka's specific approach to contributing to social progress through its new technologies.

Looking for Further Social Contributions from Kaneka as a Signatory to the UN Global Compact

I also noted in the report that it included a section on Kaneka signing the UN Global Compact. Unfortunately, the section did not spell out how the company would contribute to the international community by taking part in this initiative. I have heard of examples of other companies making an effort by identifying new CSR activities as part of their overseas business deployments. Thus, since Kaneka only became part of the UN Global Compact in spring 2015, specific activities and contributions lie ahead. I would like the company to deploy and share its specific contributions with the international community while pushing forward with its activities.

To date, B2B enterprises have set about establishing businesses by communicating with direct customers. As globalization evolves, however, companies will have to engage more with societies as they deploy products and technologies in different fields. I hope that Kaneka can more broadly convey to stakeholders how its products and technologies are used and how they contribute to society in keeping with the company's goal of seeking to make wishes come true through science.



Meeting between a member of the Administration Office CSR Committee and Professor Minami

Suggestions and Improvements from the 2014 Version

Kaneka made the following improvements in response to Professor Minami's suggestions regarding the 2014 version.

1. Kaneka needs to explain its criteria for establishing its CSR activity targets and self-assessments. → In the PDF version, we presented the bases for setting the standards in the text and endeavored to add an explanation of the self-assessments. In particular, we included explanations in areas where content was lacking.
2. I expect the company will more broadly communicate a globally valid message. → From the 2015 version, we ensured that the content was even more relevant for an overseas readership. Having become a signatory of the UN Global Compact, we will present stronger messages through the CSR report.

Editorial Afterword (Response to Third-Party Opinion)

The 2015 version of our CSR Report carries special features that spotlight our thinking and activities in contributing to society through Health Care and the Environment and Energy, two of the company's key strategic fields. In presenting examples from Information and Communications and Food Production Support, we had in mind the notion of materiality in keeping with the fourth-generation of our Global Reporting Initiative guidelines that are set for formal deployment. Near the beginning of the report, we presented the "How? CSR" section in a question-and-answer format to illustrate how best to deliver corporate value to all stakeholders.

Professor Chieko Minami, who wrote the Third-Party Opinion, pointed out several areas in which she would like to see improvements. One is that Kaneka needs to explain its criteria for establishing its CSR activity targets and self-assessments, and the other is that she would like to see how we engage with the international community as a signatory to the UN Global Compact. We will endeavor to reflect her views in our next report.

We aim to increase the satisfaction of all stakeholders by conveying our specific CSR initiatives through our business activities. We would appreciate your sharing your impressions, requests for improvements or corrections, or other feedback on this report.

Finally, we appreciate you taking the time to read this report.

Administration Office
CSR Committee
Kaneka Corporation

•Editorial Policy

The Communication Book presents simplified content for those learning about Kaneka for the first time or those wishing to gain an overview of our CSR activities. The special features in this report highlight the Group's endeavors in Health Care and the Environment and Energy from the perspectives of business activities and stakeholders.

The PDF version discloses all of our CSR information. You can download a copy at the following URL : <http://www.kaneka.co.jp/kaneka-e/csr/index.html>

•Organizations Covered in This Report

This report covers Kaneka Corporation and its domestic and overseas consolidated subsidiaries.

The data on Responsible Care activities encompass the parent and all 40 Group production subsidiaries. In this report, "the Company" or "Kaneka" refers specifically to Kaneka Corporation. The "Group" or "Kaneka Group" encompasses Kaneka and its consolidated subsidiaries. References to "Group company/companies" do not include Kaneka Corporation.

•Language Versions

We publish the Communication Book in Japanese and English.

•Third-Party Verification and Opinions

The Japan Chemical Industry Association verified the Responsible Care data in this report. Professor Chieko Minami of the Graduate School of Administration of Kobe University provided a third-party opinion of the overall content.

•Report Period

This issue covers fiscal 2014 (April 1, 2014 to March 31, 2015) with some additional information outside this period.

•Date of Publication

September 2015

•Publication of the Previous Report

September 2014

•Next Report

September 2016

•Reference Guidelines

The Global Reporting Initiative's Sustainability Reporting Guidelines 2006 and The Environmental Reporting Guidelines (2012 version) issued by the Ministry of the Environment of Japan.

•Inquiries

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Note: We have included a questionnaire form with this report and invite you to record your opinions and impressions to help us improve our initiatives and disclosure in the years ahead.