

CSR

This year, for the first time, Kaneka Group released the Kaneka Report 2017 – Integrated Report, which combines the conventional Annual Report, the CSR Report, and the Intellectual Property Report. The released report is listed [here](#).
The CSR website will be sequentially updated.



TOP MESSAGE

We will create new value for social development by addressing global and social challenges and achieving business growth



Promoting Corporate Social Responsibility (CSR)

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Special Feature: Our Business Activities Contributing to Society



[Click here to download the entire CSR website](#)

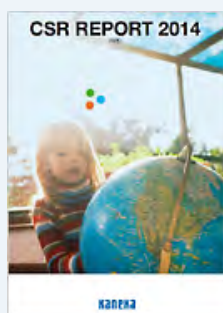
Back Number



2016



2015



2014



2013



2012



2011

For Kaneka's Value Creation (Innovation and Growth) Top Message

We will create new value for social development by addressing global and social challenges and achieving business growth



Chairman of the Board

President

K. Sugawara

M. Kadakura

Prompt Response to the Changing Environment to Take a Lead in Technical Innovation

The need for energy saving and a sustainable society, including the Zero-Energy House, are increasing along with the growing world population, increasing demand for resources and energy, and rising environmental awareness. Today, IoT integrates different industries and generates new business models. Business opportunities are also expanding globally in the fields of advanced medical technology, health care, and nursing care due to the progression of the aging society and expansion in the medical and health care markets. Food shortages in emerging nations and aging in advanced countries are promoting dietary diversification and the need for value-added foods as well.

Management System Reform to Accelerate the Growth Strategy Based on Social Problem-Solving Efforts

We have made a great change to our management system in the new medium-term management plan for fiscal 2017. This change is intended to address global environmental protection, population growth, food problems, health promotion in an aging society, and other social issues. We also aim to accelerate our social contributions through new values generated from technological innovation, such as IoT and AI.

Kaneka Group joined the United Nations Global Compact in 2015. We are working on sharing our corporate philosophy to gain the trust of our stakeholders worldwide by implementing corporate initiatives in line with the Ten Principles of the UN Global Compact in the four areas of human rights, labour, the environment, and anti-corruption.

Shifting from “Product Out” to “Solution”

Shifting from “product out” to “market in”: This management system reform is intended to empower us to turn our growth strategies into concrete actions from the solution provider’s point of view to steadily embody the reform scenarios.

Specifically, our business section was renamed Solutions Vehicle (hereinafter called “SV”) to carry out growth strategies from a solutions perspective. Nine new Solutions Vehicles were separated into the following four domains or Solutions Units (hereinafter called “SU”): the Material Solutions Unit, the Quality of Life Solutions Unit, the Health Care Solutions Unit, and the Nutrition Solutions Unit.

Setting R&D, globalization, and human resources development as growth drivers, we will actively promote open innovation to enhance the earning power of core businesses and accelerate business portfolio reform. Globally, we have

established our regional headquarters in Europe, the Americas, and Asia for speedy community-based management. It is essential for us to understand the customs and culture of the countries and regions where we operate, and offer products that suit local customer needs.

[Achieve results of the business portfolio reform]



Further Enhancing the Production Capacity for More Creative R&D Capability

As a solutions provider, we are conducting research activities to strengthen the technology of global sourcing and open innovation. We also actively introduce cutting-edge technologies, pursue market and customer-oriented values, and develop creative technologies to provide unique, global number-one, and excellent materials. Last year, an operation site for corporate research and business development was established in Silicon Valley on the U.S. West Coast, where world-class R&D institutions and industries exist.

Based on the belief that only tough materials can provide solutions, we will do our utmost to develop overwhelmingly competitive materials.

Transforming our management system

Evolving into a solution provider

We will evolve from a conventional supplier of materials into “a solution provider” that both delivers solutions for social issues and is also committed to realizing Innovation and growth.

Bold management system revamping

As a step towards becoming a solution provider, we transformed our management system from product-based business units to a new organizational structure comprising Solutions Vehicles (SVs) and Solutions Units (SUs).

Solutions Vehicle (Business Units)

- **The driving force for growth strategy execution** from a solutions perspective
- Create new business models and utilize open innovation, alliances, M&A and other types of insourced and outsourced operations to advance business growth

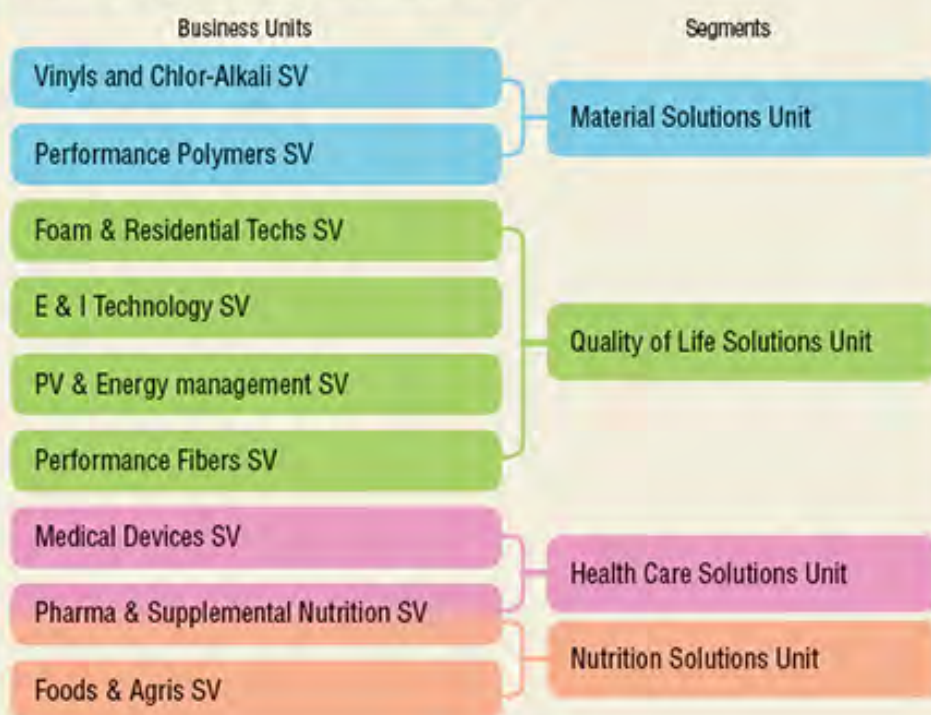
Solutions Unit (Segments)

- **Business domains set up based on solutions provided by SVs**
- Help solve social issues by strengthening ties between business units

(Current Business Units)



(New Organizational Structure)



Achieving Discontinuous Growth through M&A and Open Innovation

In addition to management system reform, M&A-based discontinuous growth is also essential for increasing sales volume to achieve our long-term vision. Integrated coordination between the Strategic Unit, corporate, and SV is expected to promote organizational M&A.

By breaking away from self-sufficiency policy and adopting open innovation, we will pursue technological innovation and cluster our business and products based on external technologies.

Kaneka will accelerate new business development through acquiring cutting-edge technologies, promoting open innovation with universities and venture companies, and facilitating partnership and M&A within and outside Japan.

Challenge to Business Innovation and Working-Style Reform

In order to promote business operation reform using digital technology and IoT and changing labor systems as a working-style reform, the Business Process Innovation Division was newly established. Company-wide cooperation for staff work management is also an important key to successful working-style reform. To achieve this, we have set up a Staff Function and Productivity Improvement Meeting to boost the cross-sectoral performance of the entire company.

Human Resources as a Source of Growth

Developing Capable Leaders and Promoting Diversity

We are currently working on building a system to facilitate reform. Above all, what is most important for reform is human resources that are also a source of growth for Kaneka Group.

While striving to develop leaders highly capable of driving reform within and outside Japan, we will also promote diversity, including women's active participation in society to enable us to work more globally. Our sustainable growth will be achieved by steadily cultivating human resources who will support Kaneka Group over the next few decades.

Safety Is Our Top Priority

Based on our belief that “safety is a competitive strength in itself” for manufacturers, Kaneka’s management policy for all operations is “Safety is our top priority.” To achieve our goal of zero accidents, we will further raise safety awareness and strengthen disaster prevention through continuous initiatives together with top management, including facility inspections by the Board of Directors and CSR safety and quality inspections.

Since fiscal 2017, we have defined and enhanced our original eco-friendly products under the concept of environmentally friendly management.

This medium-term management is important in achieving the goals in our long-term vision.

We will be committed to solving social issues, creating an attractive company image, and building a competitive business structure to be reborn as a company that meets the expectations of all of our stakeholders and is evaluated highly.

Examples of Efforts by Solutions Units

This section features the examples of efforts by Solutions Units working to provide solutions to various social problems.



[!\[\]\(a03a7eb2f4046e1d3c76772003e549ea_img.jpg\) Examples of efforts by the Quality of Life Solutions Unit](#)

[!\[\]\(cbe2492b119e39e02a1dab2af4a4b296_img.jpg\) Examples of efforts by the Health Care Solutions Unit](#)

[!\[\]\(e474458956c9a37fbf9586ddb60a7fa1_img.jpg\) Examples of efforts by the Material Solutions Unit](#)

Examples of efforts by the Quality of Life Solutions Unit

**A show home for
Net Zero Energy House was built,
and visitors can actually experience
the comfort of the house.**



Panoramic view of the Kaneka Sustainable New Town.

Examples of efforts by the Quality of Life Solutions Unit

Kaneka **Efforts for a Sustainable New Town**

For reduction of CO₂ emissions from houses, the government set the Net Zero Energy House (ZEH) as a standard for new houses by 2020.

With energy-saving technologies cultivated in the Solar Circuit House and energy creation technologies using solar panels, Kaneka will provide human-and eco-friendly solutions.



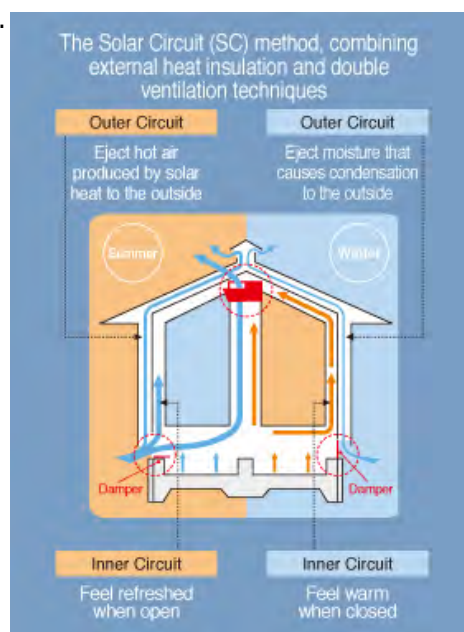
Inside the show home

The Solar Circuit House Providing Comfort and Energy-Saving Performance

Kaneka's Solar Circuit House is a highly airtight and heat-insulating detached house providing comfort and energy-saving performance. The entire house, from the roof to the foundation, is completely covered with an insulation material called Kanelite Foam, and the seams of insulation materials are filled with Airtight Sealing Tape. Doing so made it possible to provide high airtightness; for example, the airtight function (equivalent clearance area) for a housing unit of approximately 132 m² is equivalent to one postcard.

The space between exterior and interior walls is used to leverage natural energy. Dampers are also placed under the floor and in the attic. Wind flow can be generated by opening the damper in summer, while closing it can prevent heat from escaping in winter (see the diagram below).

In addition, pollen is removed by Refrain, a 24-hour ventilation system with filters and a dehumidification function. This system also dehumidifies the house in summer and brings warm air into the rooms in winter, bringing a comfortable life without relying too much on air conditioners. Since its release in 1988, more than 21,000 Solar Circuit Houses have been built.



Solar Circuit House for ZEH

In 2016 the Kaneka Sustainable New Town was established at the Takasago Plant, and a ZEH show home was also opened on the premises. ZEH is a house that generates the same amount of energy as is consumed at the house to achieve zero annual electricity consumption.



Equipped with VISOLA, which is a solar-cell system built into the tiles of the Solar Circuit House, the show home has storage batteries and an energy management system so that lightening equipment and air conditioners can be used with the electricity generated and stored during daylight hours. Surplus electricity can also be sold. Not limited to taking a look around, the show home provides an opportunity for visitors to stay a night at the house and discover the comfort of ZEH.

We will continue to work with construction companies to make ZEH more popular and reduce CO₂ emissions, while also striving to provide a comfortable and healthy life through our solutions for making residents' dreams come true.



Show home where visitors can experience the Solar Circuit House

Stakeholder Message

I expect to see the innovative ideas and technologies of Kaneka as a material provider.

My research theme is how to build comfortable and eco-friendly houses. Actually, there are many different means for achieving comfort and saving energy. I think my research should be based on residents' opinions, measurements, and actual conditions. Since last summer, I have been surveying the comfort and airtightness of a Solar Circuit House with the cooperation of the house's owner, and evaluating the aging of solar circuit performance. My interaction with Kaneka, a material provider, allowed me to find their unique ideas, which are different from assembly manufacturers. Kaneka, producing insulation materials, solar panels, storage batteries, and organic EL, can potentially evolve ZEH even further with their original material technologies.



Department of Architecture
Faculty of Engineering
Shinshu University
Associate Professor
Hideki Takamura

Voice of employee

Many of our customers say, "It was comfortable to stay here."

Since opening last September, many people have visited and stayed at the show home. Some of them stayed here with their children. We have received many favorable comments, such as, "It was comfortable to stay," and, "I comfortably took my clothes off in the dressing room because of no temperature difference." A visitor with an allergy said, "Stepping into the house, I found the air clean." Dampers are automatically opened and closed, so you do not even have to worry about difficult technical things and will find it comfortable to stay.



Kaneka Sustainable New Town
ZEH show home
concierge

Ayako Fumino Mariko Nakama

Examples of efforts by the Quality of Life Solutions Unit

Efforts for Net Zero Energy Building (ZEB)



Kaneka "Dreamology" Center

Kaneka is also committed to realizing ZEB. To promote ZEB, it is important to increase the energy self-sufficiency rate by introducing a photovoltaic system not only on the building's roof but also on the walls. However, installation of this system to the walls caused light pollution due to sunlight reflecting around it, which was considered a problem. To address this issue, we developed a low-reflection eco-friendly photovoltaic system in 2016 jointly with the New Energy and Industrial Technology Development Organization (NEDO), a National Research and Development Agency. At the Kaneka "Dreamology" Center (see the photo), which was opened last November as a training facility, low-reflective solar cells were installed on the walls, while handrails are equipped with thin-layer see-through solar cells that transmit light to verify the effectiveness of the photovoltaic system. In this way, we are making progress on ZEB solutions.

*A Net Zero Energy Building (ZEB) is a building whose energy consumption from fossil fuels, etc. is zero or roughly zero due to its building structure, energy-saving equipment, and utilization of renewable energy.

Examples of efforts by the Health Care Solutions Unit



**Contribute to Developing
a Healthy Society with
Our Biopharmaceuticals**

Production cultures of plasmids used as DNA vaccines for new treatments

Examples of efforts by the Health Care Solutions Unit

Enter the Biopharmaceutical Field with Our Biotechnology Knowledge, Cultivated through Producing Small Molecule Drugs

Biopharmaceuticals were put to practical use in the 1980s and have showed significant growth in recent years.

Today, more than 350 million people around the world enjoy the benefit of these medications.

Kaneka Group introduced biotechnology into its techniques for producing small molecule drugs, allowing us to successfully build relationships of trust with pharmaceutical companies worldwide.

In 2010 we made Belgium-based Eurogentec our subsidiary in order to enter into the biopharmaceutical field.

Our business on both small molecule drugs and biopharmaceuticals will provide health and medical solutions.

Biopharmaceuticals Generated from Advanced Biotechnology

Biopharmaceuticals are medicinal products produced through genetic recombination, cell fusion, cell culture, and other advanced biotechnologies. Genes (DNA) were found to be the blueprints of proteins, and technologies made it possible to recombine DNA, which eventually contributed to the evolution of biopharmaceuticals. Unlike small molecule drugs made using conventional organic synthetic techniques, biopharmaceuticals have large molecular weight and complicated shapes, because they are produced using DNA and proteins in the living things. The structure of biopharmaceuticals is similar to the original structure of living things. Because of this, they have not only a low risk of side effects but also high treatment effects for many diseases, and are also useful in disease diagnosis. Today, biopharmaceuticals are also drawing attention as medications that are effective for rheumatoid arthritis, cancer, and other intractable diseases.

Entered the Biopharmaceutical Field in 2010

Since the 1970s, Kaneka has built trustful relationships with pharmaceutical companies worldwide by developing its own technologies in the area of chiral compounds*1 through combining biotechnology and organic synthetic techniques for small molecule drugs. Taking advantage of our biotechnology and related know-how backed with experience, we made Eurogentec our subsidiary in 2010 to enter into the biopharmaceutical field. Eurogentec was founded in 1985 as a spin-off company of the University of Liège in Belgium. Having extensive experience and achievements in the biotechnology field, the company is mainly engaged in the contract manufacturing of biopharmaceuticals. They also produce and sell life-science products, including proteins, DNA, and peptides for research and diagnostic purposes.

*1 Chiral compounds: Substances having mirror stereoisomeric forms, just like right and left hands. In some cases, the right hand has medicinal properties, while the left hand causes side effects. General organic synthetic techniques generate both hands. Kaneka used biotechnology and made it possible to selectively produce just one hand of chiral compounds

Kaneka and Eurogentec Work Together on New Medications

Eurogentec's affiliation with Kaneka Group has brought numerous benefits to both companies.

Kaneka was able to set biopharmaceuticals as its new core business, while Eurogentec enjoys its increased social credibility thanks to Kaneka's presence.

The consolidation has also increased the number of transactions with major leading pharmaceutical companies. In technological development, the R&D divisions of Kaneka and Eurogentec are accelerating their joint research on plasmids, to be used as DNA vaccines and expected to become a key to new treatments. They have filed patents on efficient plasmid production techniques and have successfully mass-produced plasmid DNA molecules as well.

"In biopharmaceutical development, research on non-conventional treatments for cancer, diabetes, and other diseases has become increasingly active. Plasmids are essential for the creation of new medicines. The Kaneka Group's successful mass production of plasmids is expected to accelerate drug development and even achieve early detection and treatment of various diseases. Our customers highly evaluate our technology as being at the top international level. Going forward, we will install new large-scale GMP production equipment to meet the growing demand," says Lieven Janssens, Ph.D., Executive Vice President of Kaneka Eurogentec.



Kaneka Group's Network of Pharmaceutical Development and Production

Kaneka manufactures pharmaceutical intermediates and active pharmaceutical ingredients (APIs*2) at its Takasago Plant and Kaneka Singapore. We also have an open innovation base, the Kaneka US Innovation Center, in California, where many universities and bio-venture companies exist. Furthermore, Kaneka Eurogentec has its headquarters and manufacturing sites for biopharmaceuticals and life-science products in Belgium, and also manufacturing sites for life-science products in the United Kingdom and in California.

Takasago Plant



Osaka Synthetic Chemical Laboratories, Inc.



Kaneka Eurogentec S.A.



Kaneka US Innovation Center

Pharmaceutical Business

As part of pharmaceutical business, Kaneka Group is working on "active pharmaceutical ingredients and intermediates" , "protein A chromatographic carrier for antibody medical refinery (KANEKA KanCapA)", "generic medicine" , "regenerative and cell medicine", etc.

*2 APIs: Active Pharmaceutical Ingredients

Examples of efforts by the Health Care Solutions Unit

Become a Reliable Partner for Pharmaceutical Companies Worldwide in the Integrated Field of Biopharmaceuticals and Small Molecule Drugs



Kaneka Eurogentec covers biopharmaceuticals and all fields of biotechnology including agents for research and diagnostic purposes.

The company continues to maintain and enhance the quality control essential for pharmaceutical production by introducing the latest equipment, systematizing facilities, and developing human resources.

Credibility and Flexibility Required as a Partner for Pharmaceutical Companies

A contract manufacturing company trusted by pharmaceutical clients must not only have cutting-edge technologies but also be capable of safe and stable delivery of products.

Kaneka Eurogentec*3 has acquired certification of Good Manufacturing Practice (GMP), which is the international criteria for production management and quality control of pharmaceuticals, and also obtained certifications from the U.S. Food and Drug Administration (FDA), enabling the company to ensure its high credibility.

"Stringent quality systems are required for pharmaceutical production. We faced no problems in obtaining strict world-level GMP and FDA certifications. Since then, we have maintained and enhanced our quality control system.

The efforts include preparing, maintaining, and managing standard operating manuals pursuant to the criteria, providing periodic staff training, and undergoing customer and authority inspections," says Ingrid Dheur, Biologics Division Vice President, Kaneka Eurogentec.



At the early stage of pharmaceutical development, the structure of target materials and schedules frequently change; thus, the capability of providing flexible responses to customers' demands is also a must. Kaneka Eurogentec offers the "One-Stop Shop" system to collectively manage all procedures from process development to GMP production and quality control to provide efficient development support. The expertise and response ability of the project team involved in the operations and other staff members are highly appreciated, resulting in long-term and loyal customers.

*3 The company name was changed on April 1st, 2017

Providing Solutions for a Healthy Society

Kaneka Group's pharmaceutical business is not simple manufacturing work but has been focusing on the solution-providing approach by offering efficient production methods based on our original technologies which are suitable for pharmaceutical structures ordered by customers.

Setting biopharmaceuticals as our new core business allowed us to widely extend the scope of our proposals.

For prompt response to new technological development and customers' needs, Kaneka Eurogentec is currently developing platforms*4 of the technologies of producing biopharmaceuticals based on its many years of contract manufacturing knowledge.

"We need to further strengthen the technology platform for us to continually contribute to health care.

We will promote research synergy with Kaneka and reinforce our R&D capability to become the center of the Kaneka Group's biopharmaceutical business," states Ingrid Dheur.

"To keep the world's top solution-providing company, we need to continue to innovate technologies.

Kaneka Eurogentec has already started the development of gene therapy, which is drawing attention as the next-generation biopharmaceutical.

We will continually pursue frontline and unique technologies to advance the health care field and contribute to society," Lieven Janssens says.

Kaneka and Kaneka Eurogentec will continue to play a vital role in pharmaceutical development and provide health care solutions in the integrated field of biopharmaceuticals and small molecule drugs.

*4 Platform: To provide business foundations (technologies, equipment, services, etc.) to third parties.



Stakeholder's Message

Kaneka Eurogentec is an Ideal Company Connecting a Region to the World

AWEX is a public agency with the mission of developing the economy of the Wallonia region by assisting local companies in expanding overseas as well as by attracting and supporting foreign businesses. Today, there are more than 200 life-science companies in the region, which is growing remarkably as a science park.

In particular, Kaneka Eurogentec has an ideal business model to drive the regional growth.

The company provides customers with solutions for prompt and safe treatments and plays an innovative role in medical progress. Their efforts are highly valuable in improving the QOL (quality of life) of patients.

In 2016, we presented Kaneka Eurogentec with the top award for export business to the EU in the Wallonia region, the Grand Prix Wallonie à l'Exportation, in grateful acknowledgment of their social contributions.

We believe that Kaneka Eurogentec will continue to take leadership in contributing to global health care and further develop together with the Wallonia region.



Wallonia Export-Investment
Agency (AWEX), Belgium
CEO

Pascale Delcomminette(left)

Senior Business Development Manager for Asia-Pacific
Aicha Benmaalla (right)

Voice of employee

Kaneka Group will work integrally to realize management that takes health into consideration.

I used to be in charge of microbiology research and am currently serving as the Japan office's point of contact with Kaneka Eurogentec. Biopharmaceuticals are expected to grow even further while also being subject to strict evaluation, making this field attractive to me. In addition to symptomatic treatment, presymptomatic and preventive care is another key theme as well. Integrated coordination among Kaneka's business sections, the Kaneka U.S.

Innovation Center, and Kaneka Eurogentec will help develop sound societies and promote medical technologies based on big data and AI.



Takeru Ishige, Ph.D.

Assistant Manager

Business Planning & Development Team

Pharma Division

Pharma & Supplemental Nutrition Solutions Vehicle

Examples of efforts by the Material Solutions Unit



Kaneka Materials to Support Society

Kaneka's functional plastics products can be found in a variety of situations, such as sealing materials for the robustness of tall buildings (left: Nakanoshima Festival City, Osaka), aircraft (above), lightweight automotive materials, and adhesives for the blades of wind power generators (right). Kaneka's original materials contribute to society.

Examples of efforts by the Material Solutions Unit

Original Functional Plastics Offering New Values to Society

For a comfortable, eco-friendly society, efforts have been made to extend the life and reduce the weight of buildings, vehicles, wind generating systems, and information devices. Our five business sites in Japan, Belgium, the United States, Malaysia, and Germany provide our original functional plastics, contributing to creating effective solutions.

Production through Region-Oriented Application Development for Global Sales



Kaneka's Original Functional Plastics Open a New World of Plastics

The advent of resin modifiers capable of providing new functions to meet the needs of the times has promoted the active use of plastics. A modifier is a material that can enhance the heat resistance, weather resistance, and elasticity of plastics by being added in small amounts to vinyl chloride and other plastics. Kaneka has unique techniques and strong proposal capabilities in the field of functional plastics, including modifiers and liquid resins with special functionalities.



Kane Ace, a resin reinforce used for various purposes



Kane Ace used as tablet press-through packaging

Shift from Metals to Plastics

Kane Ace MX to Reduce Vehicle Weight

Plastics are increasingly used as automotive parts to reduce vehicle weight, and the demand for highly durable adhesives is accordingly increasing. Kane Ace MX is a modifier capable of enhancing the strength and flexibility of epoxy resin used for adhesives. Epoxy resin is liquid at room temperature. Since advanced techniques are required to mix powdered modifier and liquid, we offer technical services to mix Kane Ace MX and epoxy resin evenly at the nano level. Epoxy resin with high strength and flexibility is used as adhesives for automotive parts and the blades of wind power generators, making it possible to reduce weight and extend life.



For the blades of wind power generators

Kaneka MS Polymer to Make Buildings More Beautiful and Robust

Kaneka MS Polymer is used as weather-resistant, durable, elastic, beautiful, and highly workable sealing materials. Since houses and buildings expand and contract due to wind and vibration, gaps need to be inserted between building materials. Kaneka MS Polymer is a functional resin that can be changed from a liquid state to a rubber state when reacting with the moisture in the air, maintaining the robustness of buildings over a long period. It is also widely used as adhesive for the facing tiles of buildings.



Kaneka MS Polymer used as automotive repairing agents

Globally-Recognized Kaneka's Functional Plastics

Kaneka's Functional Plastics Having Large Japanese and Global Market Share

Kaneka is the only modifier manufacturer in Japan. Kane Ace, which improves the shock resistance of vinyl chloride without damaging its transparency, maintains an overwhelming lead in global market share. Kaneka MS Polymer, the world's first liquid resin developed by Kaneka, is an architectural sealing material having a large market share in Japan.

Our Creative Technologies for Social Development Win Five Awards of the Society of Polymer Science

The Award of the Society of Polymer Science is given to those who have made creative and excellent achievements to promote polymer science and technologies in Japan. Kaneka has received the award five times for the production methods of Kane Ace, the molecular design of Kaneka MS Polymer, the industrialization of KANEKA TA Polymer, and more.

Examples of efforts by the Material Solutions Unit

Solutions from Customer-Oriented Application Development

In addition to developing and selling products as a functional plastics manufacturer, Kaneka also develops new applications of products at our technical service laboratories to meet various customer needs.

Before starting the operation of a new Kaneka MS Polymer plant, to ascertain market needs, Kaneka (Malaysia) Sdn. Bhd. opened a technical service laboratory in 2015 in Kuala Lumpur, where the office is located.



Connecting ASEAN Needs and the Applications of Kaneka MS Polymer

The Association of Southeast Asian Nations (ASEAN) comprises diverse ethnicities and cultures; accordingly, the products, services, and quality in demand also vary. Region-specific needs should be identified to develop new applications of Kaneka MS Polymer. Thus, we visit potential customers and listen to their opinions to find out their needs.

At the laboratory, Japanese employees familiar with Kaneka MS Polymer and Malaysian members acquainted with local information share their ideas to develop new applications of the product.



Local employees sharing ideas from a local perspective at the Technical Service Office of Kaneka (Malaysia) Sdn. Bhd. in Kuala Lumpur



"Our ultimate goal is to develop new applications of Kaneka MS Polymer in the ASEAN market. The standard of living in the region has been getting better along with ASEAN's economic growth, and I'm sure that Kaneka has the power to make their lives even better. We will be finding completely new needs, not limited to the conventional use of sealing materials." -Atsushi Kawakami of Kaneka (Malaysia) Sdn. Bhd., at that time

"I want to develop new technologies for customers and their country." -Atsushi Kawakami of Kaneka (Malaysia) Sdn. Bhd., at that time

Developing New Applications to Provide Solutions for Life in the ASEAN Region

The hot and humid climate in the ASEAN region exposes buildings to harsh conditions.

Especially in Malaysia, strong sunlight and heavy precipitation severely deteriorate roofs, causing a leaky roof within two or three years.

Not only does this problem make residents' life inconvenient, but it is costly to maintain.

To address this issue, we are working jointly with our customers to develop a highly durable coating-film waterproof agent for external walls and roofs. To sell new materials in the ASEAN market, it is essential to combine our compounding technologies with customers' construction techniques to generate new added-value products.

Kaneka works with our customers to develop one product, from manufacturing to construction, so that we can provide our original technical support that no other competitor can offer.



Durability test

Collaborating with Our Customers for the Development of Malaysia

"Local customers can develop their own products using Kaneka MS Polymer to meet local needs. It is easy to import and sell foreign products, while this also may undermine local industry. Producing products with their own technologies will develop the country's industry. From this perspective, we aim to create new products with many customers, so that our materials can contribute to national development." -Atsushi Kawakami, mentioned above

How Our Products Are Distributed to the Market



Stakeholder Message

I expect Kaneka, adhesive manufacturers, and construction companies to jointly generate new solutions.

In the early 1980s, mortar was mainly used to attach facing tiles to building walls. After specifications for exterior adhesives were developed in 1997 by the public and private sectors, including Kaneka, adhesives were gradually used. JIS (Japanese Industrial Standards) and ISO (international standards specified by the International Organization for Standardization) were established as well. This movement improves reliability, and the tile industry is increasing its use of adhesives.

Kaneka is excellent at creating completely original products, such as Kaneka MS Polymer, which no other companies have. I expect to see new solutions based on the synergy effect among construction companies with rich experience in construction work, adhesive manufacturers familiar with actual needs, and Kaneka providing base polymers.



Department of Architecture
Shibaura Institute of Technology
Professor

Kenji Motohashi

Examples of efforts by the Material Solutions Unit

Develop Human Resources and Corporate Culture for More Advanced Manufacturing Technology

At Kaneka (Malaysia) Sdn. Bhd., the second phase of construction of the Kane Ace production line and the first-phase construction of Kaneka MS Polymer was completed in 2017. Human resources development for stable plant operation is also pivotal to ensure production increase and facilitate the manufacturing activities of customers in the ASEAN region.



Kaneka (Malaysia) Sdn. Bhd. established in 1995 to produce Kane Ace B, etc.

Reinforcing Human Resources Development to Increase Production in the Malaysian Market

It has been 18 years since Kaneka (Malaysia) Sdn. Bhd. started operating its functional plastics plant. An increasing number of product types due to a growing demand in Asia have made the operation more complicated, resulting in various challenges. It was also urgent to develop local human resources for the operation of the new plant. To address this, experienced leaders of operations at the Takasago Plant, a mother plant, were sent to Malaysia in April 2016 to stabilize and improve production. They worked with local employees, checked potential problems, and conducted on-site confirmation of remedial actions and assessed their effectiveness.

Various Improvement Activities and Information Sharing



The e-ICS activity to improve safety, productivity, and quality



Instructing the key points for process control



3S activity-related information to share goals and situations

Making Local Employees Aware of Manufacturing Culture



"To learn from each other and improve our production capability to bring benefits to society."
-Shinichi Kunizuka of Kaneka (Malaysia) Sdn. Bhd., at that time

"At first, as a production operator, I encouraged local employees to perform the 3S *1 activity and the pointing and calling-out procedures *2, but things were not that easy. I spent many days explaining to them the reasons and effectiveness of these efforts using graphic illustrations. I patiently kept having them carry out the activities. After a while, strict process control under the 3S activity successfully increased productivity, and the pointing and calling-out procedures also started to stabilize the production process. These efforts gradually produced measurable results." -Shinichi Kunizuka at Kaneka (Malaysia) Sdn. Bhd., at that time

In another activity called "pair patrol," an employee performs a periodic patrol with his/her supervisor to improve their capacity by identifying problematic points and checking safety status. Employees were also asked to summarize their findings from the patrol and make a presentation to their section to share information. Six months later, the patrol training was provided to younger employees. Such efforts successfully made all members aware of the importance of improvement efforts.



All members keeping in mind the pointing and calling-out procedures to check the safety

One year later, they came to become conscious of manufacturing culture, resulting in reduced downtime. Unusual noises from pumps and other defects still occur as before, but employees, who keep problem prevention in mind, clean the pump before it gets blocked. This practice has clearly decreased the number of troubles.

"New operators are actively hired to address plant expansion. If having a corporate culture where capable next-generation employees can grow, they will surpass the mother plant in the future. We will learn from each other and improve our production capability to provide quality products to the world." - Shinichi Kunizuka, mentioned above

- * 1. 3S: seiri (organize), seiton (arrange), and seisou (clean up).
- * 2. Pointing and calling-out procedures: To check the safety by pointing at each item with a finger and calling out its name and status.



Through the activities, I want to find the importance of on-site confirmation

Working Overseas to Improve the Capacity of Japanese Employees

The Takasago Plant is planning to send next-generation leaders to the plant in Malaysia over the next three years. This is not just an assistance project; they should have a sense of contributing to manufacturing and work integrally with local members. This opportunity will allow them to experience a "battlefield" that cannot be found in Japan. Their responsibility for optimizing both work sites and the entire plant will enable them to take a broad view of manufacturing, logistics, the market, and the overall business. Employees cultivated through this opportunity are expected to become Kaneka's global leaders, not limited to Japan.

Voice of employee

Our awareness has been changed, and we are now motivated to enliven manufacturing.

Working with Mr. Kunizuka made me realize his tenacity to verify the results of his efforts. Although we have the PDCA cycle as well, his check was much stricter than ours. At first, we thought it was difficult for us to imitate him. But his approach significantly improved productivity and the quality level.

This success gradually changed supervisors' mind-set, and we eventually came to strengthen these efforts.
In this spring, Kaneka (Malaysia) Sdn. Bhd. enhanced its production equipment and hired many new operators.
We will work as a team and achieve quality and stable production to boost the manufacturing industry in Malaysia.



Modifier Manufacturing Division Chief
Kaneka (Malaysia) Sdn. Bhd.
Nahar Ahmad Mahir

Promoting Corporate Social Responsibility (CSR)

Kaneka Group's corporate philosophy, as expressed in the "Declaration of Kaneka United" is dedicated to breaking 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. In keeping with these ideals, we continually strive to be a global corporate citizen for growth and innovation through providing valuable products, technologies and services.

▶ [Our Corporate Philosophy and CSR](#)

▶ [CSR Targets, Achievements, and Evaluations](#)

▶ [About the Guidelines](#)

▶ [Promoting CSR](#)

▶ [Promoting and Implementing Responsible Care](#)

▶ [Kaneka Group Overview / Registered Trademarks and Other Trademarks for Kaneka Group Products](#)

▶ [Corporate Citizenship Stakeholder Dialogue](#)

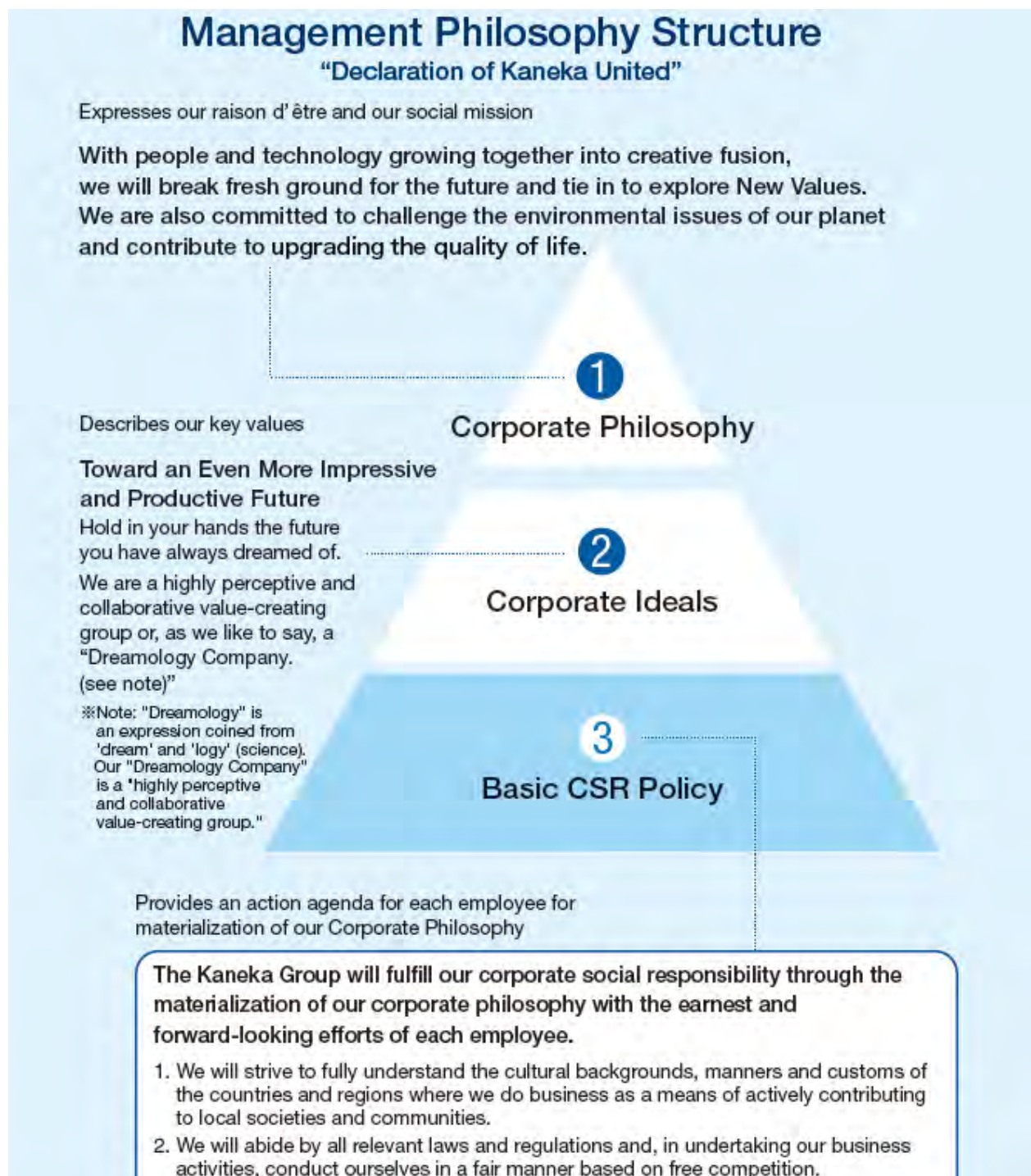
▶ [Organizations Covered in This Report](#)

Our Corporate Philosophy and CSR

Kaneka Group defines its Basic CSR Policy as a guideline for action for each employee and the foundation of its management philosophy, the Declaration of Kaneka United.

Guided by this policy, we strive to improve our social responsibility performance as well as our corporate value to further improve the satisfaction of our key stakeholders—employees, society, customers, the environment, shareholders and investors, and vendors.

■ Management Philosophy Structure “Declaration of Kaneka United” and Kaneka Group’s Stakeholders

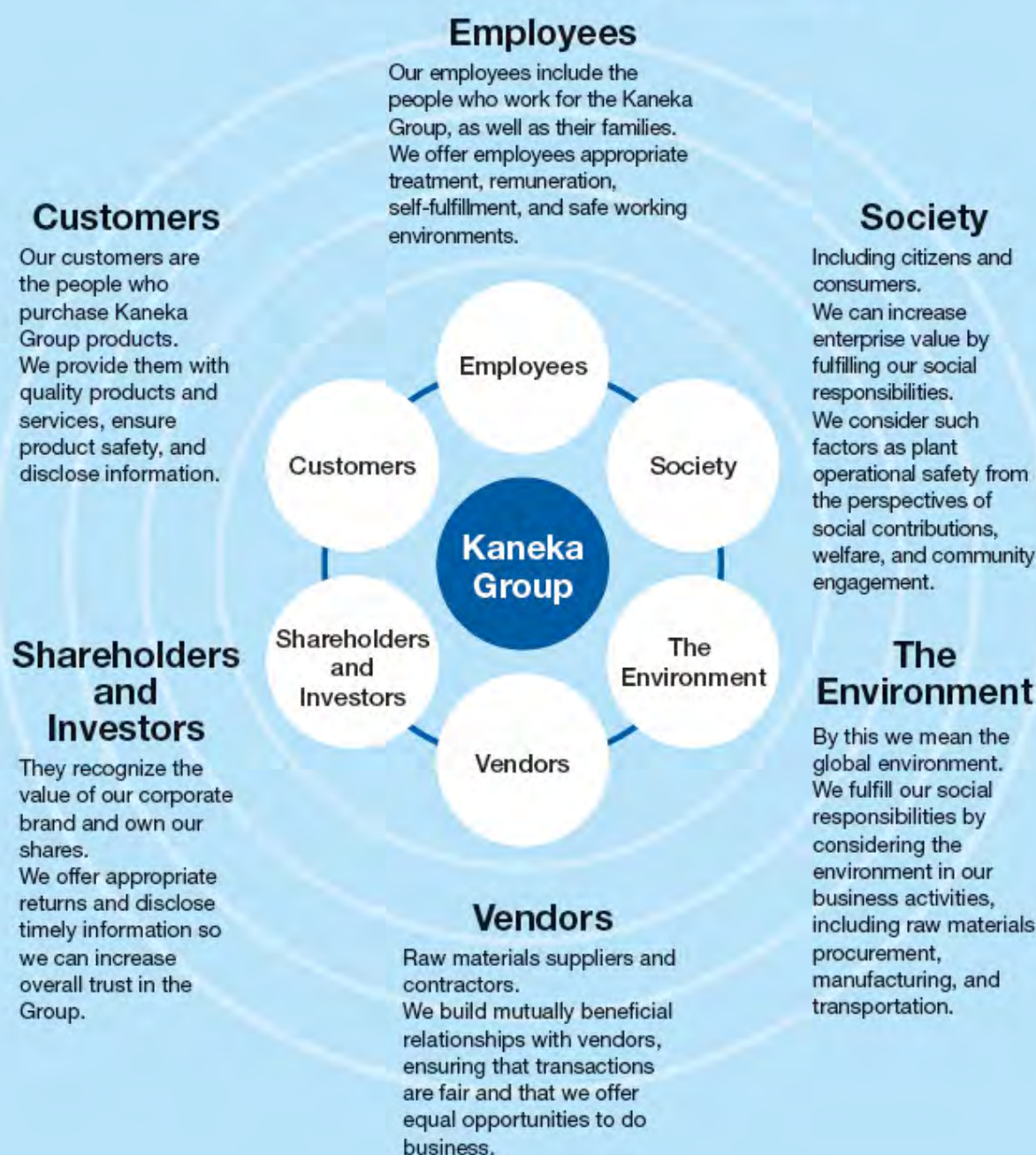


3. We will place high priority on communicating with all our stockholders and stakeholders, and will disclose all pertinent information.
4. We will respect the personalities and individuality of all our employees to support and encourage the development and utilization of their abilities.
5. We will 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



The full list is available in PDF format.



CSR Targets, Achievements, and Evaluations

Our fiscal 2016 targets, achievements, and evaluations, fiscal 2017 targets, and medium- to long-term goals are outlined below.

Evaluation: ◎ Well above target ○ Achieved/almost achieved △ Not achieved × Significantly underperformed

Key Stakeholder	Item		Fiscal 2016 Targets	Fiscal 2016 Achievements	Evaluation	Fiscal 2017 Targets	Medium- to Long-Term Targets
All Stakeholders	CSR Management	Bolster Governance and Compliance	•Make compliance a part of our culture. •Continue the CSR audit. •Launch the e-learning program for the Group companies in Japan. •Maintain the whistleblowing system. •Continue holding training courses at group companies in Japan. •Detail specific actions concerning the operation of the newly established Appointment and Remuneration Advisory Committee and the meeting of independent external directors, and actions regarding evaluation of the effectiveness of Board of Directors' meetings.	•Conducted Anti-Monopoly Act seminars at Kaneka and Group companies in Japan, with 158 participants in a total of 10 seminars. •Conducted CSR evaluation audits, including visiting consultations at 4 parent plants and 20 Group companies in Japan. •Conducted compliance e-learning at Group companies in Japan, with 4,656 participants from 42 companies. •Held an appointment and remuneration advisory committee and obtained approval for selection of executive officer candidates and compensation paid to executive officers. •Held independent external directors' meetings, shared opinions on the operation, etc., of the Kaneka's Board of Directors, and reported the meeting minutes to the chairperson of the Board of Directors.	○	•Make compliance part of our culture in Group companies in and outside Japan. •Continue the operation of and visiting training for the compliance education system. •Effectively operate the Appointment and Remuneration Advisory Committee and the meeting of independent external directors, and support highly effective operation of Board of Directors meetings.	Step up corporate governance and compliance to improve enterprise value for the entire organization.
		CSR Implementation	•Convene CSR Committee meetings at least twice a year, and hold meetings of the four subcommittees as planned. •Disseminate information regularly to enhance employees' understanding of CSR. •Hold briefings for Group companies in Japan in addition to various training courses.	•Held two CSR Committee meetings and meetings of the four subcommittees, as planned. •Encouraged Kaneka employees to improve their understanding of CSR through periodic monthly information-sharing via the Intranet. •Conducted 18 training courses. Held briefings for six Group companies at seven sites in Japan.	○	•Convene four CSR Committee meetings as planned. •Further enhance employee's understanding of CSR. •Continue necessary training courses and CSR briefings.	In line with the Declaration of Kaneka United, share basic CSR policies for the Group to implement all corporate activities.
		Management CSR Safety and Quality Inspection	•Continue CSR safety and quality inspections by management (covering all parent plants, 9 Group companies in Japan (10 plants), and three Group companies outside Japan).	•Conducted CSR safety and quality inspections by management for all parent plants, nine Group companies in Japan at 10 plants, and three Group companies outside Japan at three sites.	○	•Continue CSR safety and quality inspections by management.	Continue to implement management inspections and audits.
		Reinforce Risk Management	•Ensure that everyone in the Group is familiar with the risk management handbook, and improve risk management awareness.	•Held various training sessions and chief leader meetings in Kaneka offices for managers and Group companies in Japan to enhance their risk management awareness. •Made employees fully understand the response to emergency situations and improved their risk management awareness.	○	•Sufficiently publicize the review of risk management regulations and the handbook to improve risk management awareness.	Ensure the use of business continuity plans and pursue ongoing improvements to enhance risk management.
The Environment	Environmental Protection Improvement (reducing environmental impact)	Prevention of Global Warming	•Reduce the energy intensity index (see note 1) by at least 1% annually. •By fiscal 2020, reduce the CO ₂ emissions intensity index (see note 2) to 74 or below, using fiscal 1990 as the baseline (=100). The target for fiscal 2016 is 77.0. •Reduce the transport-related energy intensity index (see note 3) by 1% annually.	•Reduced the energy intensity index (see note 1) to 92.1, down 2.3% from fiscal 2015. Achieved the reduction target on a five-year average basis by scoring 1.9%. •CO ₂ emissions intensity index (see note 2): 93.4; target (97.0) achieved. The target was modified to 93.2 (coefficient fixed) in fiscal 2020 compared to fiscal 2013, as the basic year was changed in fiscal 2013. •Increased the transport-related energy intensity index (see note 3) by 3.3% from fiscal 2015 (target not achieved). Achieved the target on a five-year average basis, 3.1% reduction.	◎ △	•Reduce the energy intensity index (see note 1) by at least 1% annually. •Reduce the CO ₂ emissions intensity index (see note 2) to 93.2 or below, using fiscal 2013 as the baseline of 100. The target for fiscal 2017 is 96.1. •Promote and plan effective efforts to reduce the transport-related energy intensity index (see note 3) by 1% annually.	Reduce energy intensity index (see note 1) by at least 1% annually. Reduce the CO ₂ emissions intensity index (see note 2) to 93.2 or below, using fiscal 2013 as the baseline of 100. Reduce the average energy intensity index (see note 3) for logistics by at least 1% annually by planning and promoting energy efficiency measures.
		Reduction of Industrial Waste	•Keep the final landfill rate at 0.2% or below for all parent plants. Achieve zero emissions by reducing waste and final landfill volumes from Group companies in Japan. •Continue checking the compliance status of waste disposal companies.	•Achieved a final landfill rate of 0.005% (target achieved). Group companies in Japan failed to achieve zero emissions (1.8%) due to increased final landfill disposal volume. •Checked the compliance status of contractors and confirmed the absence of problems.	△ ○	•Control the waste generation intensity to reduce the final disposal volume, and keep the final landfill rate at 0.2% or below for parent plants. Achieve zero emissions by reducing landfill disposal volumes from Group companies in Japan. •Continue checking the compliance status of waste disposal companies.	Keep the final landfill rate to 0.2% or below for all parent plants. Maintain zero emissions at Group companies in Japan. We will confirm compliance among waste disposal companies.
		Reduction of Volatile Organic Compound (VOC) Emissions	•Continue VOC emissions reduction measures and maintain emissions at 1,800 tons or below.	•1,556 tons of VOC emissions (target achieved).	○	•Identify trends in VOC emissions and determine the direction of emission reduction measures to maintain emissions at 1,800 tons or below.	Continue to cut VOC emissions in line with domestic trends.
		Preservation of Biodiversity	•Continue priority initiatives under the biodiversity guidelines mainly focusing on community initiatives.	•Conducted as part of social contribution activities mainly by the Takasago, Osaka, and Shiga Plants.	○	•Continue community initiatives in accordance with activity guidelines.	In line with our biodiversity activity policy, we will continue to focus on this area.
Customers	Customer Satisfaction (ensuring quality and product safety)	Quality Management	•Ensure safety of products in new business domains.	•Appointed external experts for product review in the early stage of development before placing new products on the market in order to secure product safety. •Voluntarily recalled two end products made by Group companies in Japan.	△ ○	•Fully enhance and operate quality management as a solutions provider.	Ensuring thorough risk management (prevention and crisis management) that meets diverse market needs.
		Chemical Substance Management	•Collect and share information on amendments of laws related to chemical substances in Japan and abroad (the U.S., Asia, etc.). •Make the chemical substance database available to a broader range of users.	•Revised and publicized the internal standards for chemical risk assessment to respond to the Revised Industrial Safety and Health Act, which came into force in 2016.	○	•Ensure chemical substance management, including appropriate response to laws and regulations in Japan and abroad, including utilizing the chemical substance database.	Improving the management level by accurately identifying the trends in legal revisions in and outside Japan, as well as by appropriately controlling chemical substances using database
Vendors	Proper Procurement	Green Procurement	•Based on the plan, conduct tests to check the contamination of prohibited substances in the order of priority and covering all raw materials. •Continue studies to assess the feasibility of CSR procurement.	•Continued to check the contamination of prohibited substances in all raw materials based on the plan. •Revised the Green Procurement Standards three times in line with amendments of laws and regulations.	○	•Continue tests based on the plan to check for contamination by prohibited substances covering all raw materials.	Ensuring thorough green procurement including new development projects, while also taking into account the global environment throughout the entire Group, based on the Basic Procurement Policy.
	Bolstering Distribution Safety		•Prepare and revise Yellow Cards as required and ensure that people carry them when required. •Continue compliance checks and voluntary inspections of mobile tanks.	•Conducted site patrol with transportation companies to: check whether Yellow Cards are being carried at the Takasago Plant; and to identify unsafe aspects and propose improvements in cargo handling at the Osaka Plant. •Conducted compliance checks and voluntary inspections of mobile tanks, jointly with a transportation company.	○	•Prepare and revise Yellow Cards as required and ensure that people carry them when required. •Continue compliance checks and voluntary inspections of mobile tanks.	Newly create and revise Yellow Cards and check that people carry them when required. Continue to implement legal compliance and voluntary inspections of mobile tanks, thereby enhancing safety.
			•Continue holding emergency response drills for transportation.	•Together with transportation companies, reconfirmed the emergency contact networks at the Kashima Plant, and conducted product-specific training at the Takasago Plant concerning risks involved in transportation.	○	•Continue to hold emergency response drills for transportation.	Continue holding emergency response drills for transportation.
Shareholders and Investors	Timely and Appropriate Disclosure		•Issue securities reports, financial results, interim reports for shareholders and other investors, and other materials relating to investor relations.	•Issued securities reports, financial results, interim reports for shareholders and investors, and other investor-relations materials.	○	•Issue securities reports, financial results, interim reports for shareholders and other investors, and other materials relating to investor relations.	Make disclosure speedy, timely, and appropriate to foster understanding of the Kaneka Group and build trust and meet the expectations of investors.
Society	Improving Communication with Society		•Issue a CSR report and post it on our website. Change the format of the detailed version from PDF to HTML format, which is search engine friendly. •Continue holding stakeholder dialogues and youth events. •Have all parent plants issue site reports, and post them on our website.	•Periodically issued the CSR report and converted the detailed version into HTML to significantly improve search performance. •Held stakeholder dialogues and youth events. •All parent plants issued site reports, which were posted on our website.	○ ○	•Issue a CSR report periodically. Enhance the detailed version and guide readers to the booklet version. •Continue holding stakeholder dialogues and youth events.	Extensively disclose information on our CSR activities to stakeholders and engage them in dialogue.
					○	•Have all parent plants issue site reports, and post them on our website.	Continue to issue site reports for all parent plants.
	Reinforcing Process Safety and Disaster Prevention		•Check how the weaknesses identified through process safety assessment have been addressed. •Implement effective risk-reduction measures in readiness for a severe disaster or accident.	•Conducted three risk-assessment method (HAZOP) training sessions at all four parent plants. •Introduced risk assessment focusing on major risks at all four parent plants. •Underwent safety competency assessment by the Safety Competency Center for the Takasago and Shiga Plants. •There were many incidents, including chemical substance leakages and other events, at Group companies outside Japan. •Fires broke out at parent and Group companies.	○ ×	•Introduce and conduct risk assessments according to the type and size of the business, including Group companies. •Develop a prediction technology and a system to minimize damage from disasters by utilizing external resources.	Reduce risks, primarily through risk assessments, undertaking ongoing efforts to minimize risks.
Employees	Emphasis on Diversity	Employing, Training, and Recruiting Diverse People	•Based on the action plan under the law to promote women in the workplace, accelerate efforts to promote the women's networking scheme and to increase female recruits.	•The Women's Network System had final proposals from 17 members in its first phase. The second phase was started to form another network by 14 new members. •The ratio of new female employees who graduated from colleges of technology and universities exceeded 30% for the first time.	○	•Continue to actively hire female employees and enhance capacity-building opportunities based on the Action Plan for Women's Active Participation.	Based on the Kaneka Spirit of fostering personnel reforms and growth, we will overhaul mechanisms for employment, education, and rotation.
		Work-life Balance	•Pursue better work-life balance by revisiting the corporate working culture and through a new management system for attendance.	•Introduced a new attendance management system to visualize working hours. •Along with the Osaka Head Office, Tokyo Head Office also started to simultaneously turn off its lights at 7 p.m. •Introduced the annual paid leave system to encourage members to take paid leave, assist in balancing work and child care, and foster awareness of productivity per hour.	○	•Promote diverse ways of working, encourage employees to take paid holidays, and further reduce working hours.	Consider introducing and running systems that enhance the work environment and enable people to fulfill their professional and personal commitments.
		Labor and Management Relationships	•Continue supporting personnel development for future union leaders and maintain good labor and management relationships.	•Each branch office played a central role in promoting business reform. •Established a labor-management working group to discuss the ideal benefits package.	○	•Continue supporting personnel development for future union leaders and maintain good labor and management relationships.	Based on joint labor and management targets, both parties will work together to ensure employee growth and enhance lifestyles.
		Respect for Human Rights	•Continue training for new employees and executives on human rights.	•Conducted training on human rights targeting 148 new employees and 45 newly promoted executives.	○	•Continue training for new employees and executives on human rights.	We will position human rights as a fundamental commitment that the Kaneka Group and employees must respect. We will educate employees through training and other tools to accept diverse values, respect personalities and individuality, and reject discrimination.
	Reinforcing Occupational Safety and Health	Occupational Safety	•Conduct effective management training to ensure a corporate culture of putting safety first. •Continue improving safety standards by revising and using the good practice case studies booklet.	•Enhanced the educational contents of Line Manager Training by inviting external lecturers and incorporating programs identifying issues based on accident/disaster case studies. •Good practices on safety and health activities were picked up through CSR safety and quality inspections of parent and Group companies, while these were not reflected in the collection of examples. •18 industrial accidents occurred.	×	•Enhance education and support for line managers, including those in Group companies, to improve their safety-first awareness.	Continue to reinforce the safety activities of Group companies.
		Occupational Health	•Conduct stress checks and create a worker-friendly environment.	•Conducted a stress check after establishing the basic policy and guidelines of the stress-check system.	○	•Develop a system to improve the worker-friendly environment based on the results of stress checks.	Continuously improve the mental health of employees and the workplace environment.
		Management Systems	•Continue the use of quantitative assessment methods. •Review the criteria for specialized internal environmental safety audits and reinforce the checking mechanism based on internal criteria.	•Continued CSR safety and quality inspections by applying quantitative assessment methods, and conducted inspections focusing on rules management. •Performed environmental safety and health internal audits on one department at each of the four parent plants based on the process audit method, to check their compliance with internal regulations. Also, revised the internal audit standards.	○	•Continue the use of quantitative assessment methods for CSR safety and quality inspections. •Based on the revised internal audit criteria, reinforce the checks to determine whether activities are conducted pursuant to internal regulations.	Continue to improve occupational health and safety based on occupational safety and health management systems (OSHMS).

Note 1. Energy intensity index is a numerical value calculated by dividing the amount of energy used in manufacturing of all parent plants by the active mass and indexing it against the baseline year of 2013 as 100. In this report, the basic year was changed from fiscal 1990 to fiscal 2013, and past intensity indexes were recalculated.

Note 2. CO₂ emissions intensity is a numeric value calculated by dividing the amount of energy-derived CO₂ emitted from production activities figured out by fixing the coefficient of fiscal 2013 (Kaneka's original calculation) by the active mass and indexing it against the baseline year of fiscal 2013 as 100. This value visualizes our activities and is used to set the targets for fiscal 2020. The basic year was changed from fiscal 1990 to fiscal 2013.

Note 3. The transport related energy intensity index is a value indexed against the energy intensity of fiscal 2006, the baseline year (=100).

About the Guidelines

The Kaneka Group pursues CSR activities in keeping with the principles of the UN Global Compact, which we signed in March 2015, and the G4 Sustainability Reporting Guidelines of the Global Reporting Initiative (GRI). Our CSR Report provides information relevant to all of the Ten Principles of the UN Global Compact.

■ Relationship between the Ten Principles of the UN Global Compact and the GRI Guidelines.

UN Global Compact Principles		Global Reporting Initiative guidelines	Website locations:
Principle 1	Businesses should support and respect the protection of internationally proclaimed human rights.	Sub-Category: Human Rights (all Aspects) Sub-Category: Society · Local Communities	▶ CSR Targets, Achievements, and Evaluations ▶ Respect for Human Rights ▶ Safety and Disaster Preparedness
Principle 2	Businesses should make sure that they are not complicit in human rights abuses.	Sub-Category: Human Rights (all Aspects)	▶ CSR Targets, Achievements, and Evaluations ▶ Respect for Human Rights
Principle 3	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	G4-11 Sub-Category: Labor Practices and Decent Work · Labor/Management Relations Sub-Category: Human Rights · Freedom of Association and Collective Bargaining	▶ Securities Report (Japanese only). ▶ Respect for Human Rights
Principle 4	Businesses should uphold the elimination of all forms of forced and compulsory labour.	Sub-Category: Human Rights · Forced and Compulsory Labor	—
Principle 5	Businesses should uphold the effective abolition of child labour.	Sub-Category: Human Rights · Child Labor	—
Principle 6	Businesses should uphold the elimination of discrimination in respect of employment and occupation.	G4-10 Sub-Category: Labor Practices and Decent Work (all Aspects) Sub-Category: Human Rights · Non-discrimination	▶ Kaneka Group Overview ./ Registered Trademarks and Other Trademarks for Kaneka Group Products ▶ Promoting Diversity & Inclusion ▶ Site Reports (Environmental Reports for each plant). (Japanese only). ▶ CSR Targets, Achievements, and Evaluations
Principle 7	Businesses should support a precautionary approach to environmental challenges.	Category: Environmental (all Aspects)	▶ For the Environment ▶ Community Initiatives (environmental activities).

Principle 8	Businesses should undertake initiatives to promote greater environmental responsibility.	Category: Environmental (all Aspects)	▶ For the Environment ▶ Community Initiatives (environmental activities)
Principle 9	Businesses should encourage the development and diffusion of environmentally friendly technologies.	Category: Environmental (all Aspects)	▶ For the Environment ▶ Community Initiatives (environmental activities)
Principle 10	Businesses should work against corruption in all its forms, including extortion and bribery.	Sub-Category: Society · Anti-corruption · Public Policy	▶ Compliance

Promoting CSR

Kaneka Group established a CSR Committee to promote the Group's Corporate Social Responsibility (CSR) activities. This committee, chaired by the president, oversees four subcommittees: the Safety & Human Health Subcommittee, the Earth Environment Subcommittee, the Product Safety Subcommittee and the Compliance Subcommittee.

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Implementing CSR

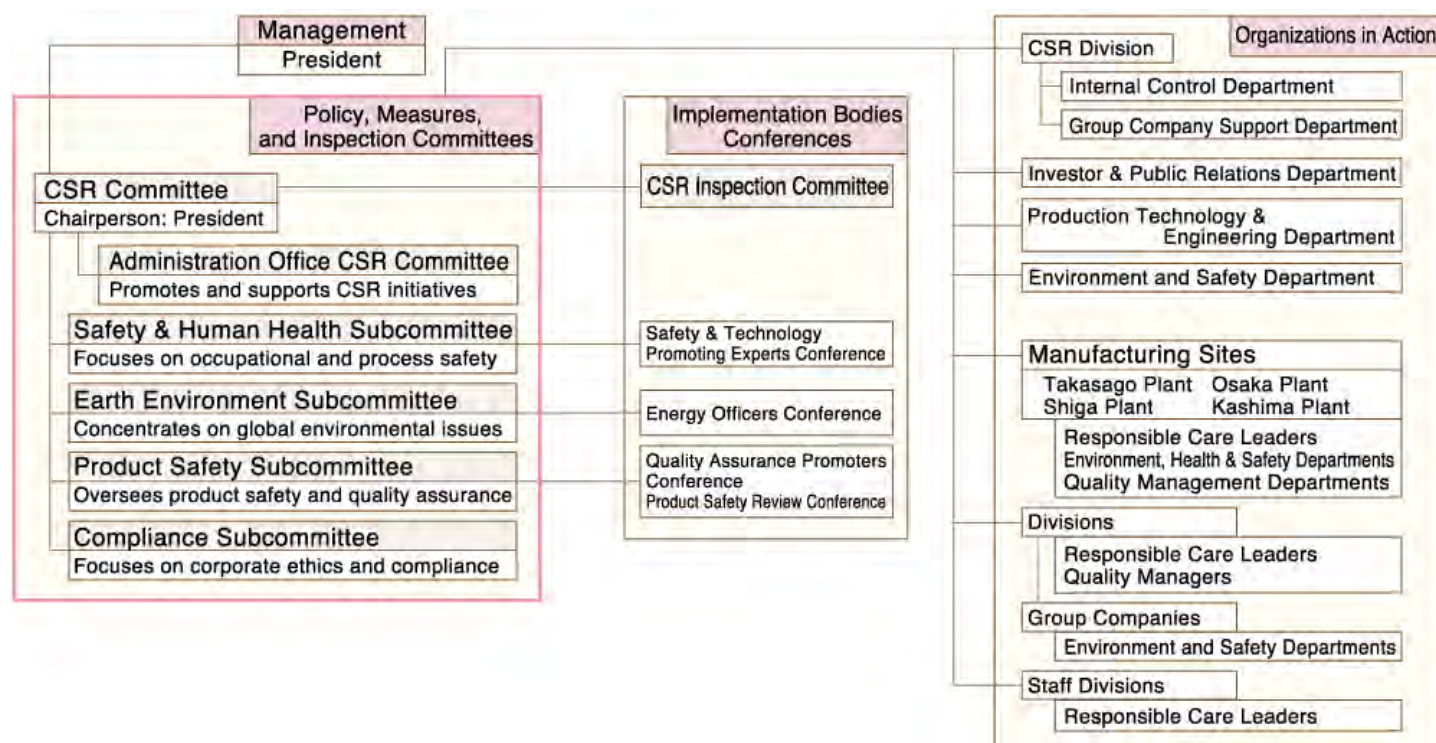
K J W

In order to strengthen its organizational problem-solving capacities related to CSR matters, Kaneka Group created the CSR Committee in March 2009.

The CSR Committee determines and revises the basic policies that provide direction for the Group to fulfill its responsibility as a good corporate citizen. The Committee also develops comprehensive strategic plans and produces action plans for CSR activities, and assesses their implementation status.

In fiscal 2016, the CSR Committee met twice, and the Safety and Human Health Subcommittee once, the Earth Environment Subcommittee twice, and the Product Safety and the Compliance Subcommittees each met three times.

CSR Structure



CSR Inspections

K J W

To ensure that the Kaneka Group is fully in conformance with the relevant laws and regulations, as well to pursue increased performance for occupational safety and health, CSR safety and quality inspections by the CSR Inspection Committee are conducted every year at all four parent plants, and once every two years at all Group companies around the world.

In fiscal 2016, we conducted CSR safety and quality inspections focusing on 3S activity (seiri [organize], seiton [arrange], and seisou [clean up]) and management change at four parent plants, 10 sites of nine Group companies in Japan, and three sites of three Group companies outside Japan.

In addition, we conducted CSR evaluation audits relating to competition laws, including the Antimonopoly Act, for all of the business operations divisions, 24 Group companies in Japan, and eight outside Japan. We will continue to conduct such audits to improve our CSR performance.

CSR Education

K J W

We at Kaneka conduct CSR trainings for employees at all levels, based on our CSR Handbooks covering fundamental and practical aspects. In fiscal 2016, training sessions were held three times for new employees, twice for mid-career entrants, and one time each for those newly promoted to managerial and supervising positions.

We also held 18 sessions to explain our CSR activities, including at meetings of Group company presidents and Group company top management, as well as at briefing sessions held for new employees of Group companies and Group companies in Japan.

We strive to fulfill our responsibility and be a good member of the local community by having everyone in our Group consciously implement CSR activities through our businesses.

Booklet on Community Initiatives

K J W

We at the Kaneka Group place great importance on our outreach and communications activities.

As part of such efforts, we issued a booklet that highlights our community initiatives as a good corporate citizen. Distributing these booklets mainly to our external stakeholders will promote a greater appreciation and understanding of our Group and help improve our corporate brand.



Booklet on Kaneka Group
Community Initiatives

CSR Briefings (for Kaneka and Group companies in Japan)

K J W

As part of our ongoing education activities starting in fiscal 2014, CSR Briefing sessions were held for employees of Group companies in Japan using our CSR Report 2016 and the CSR Handbook: Practical Guide in fiscal 2016 at six companies in a total of seven locations. These sessions helped to assure better understanding of the role of our CSR, the interrelated factors between CSR and improvement in corporate performance, the Declaration of Kaneka United, our health, safety, and environmental initiatives, and our goals for our CSR activities. There were 310 people who participated in these sessions.

Thus far, such sessions have cumulatively reached 43% of Group companies in Japan, and we will continue to systematically provide the sessions even after fiscal 2017.

■ Fiscal 2016 CSR Briefings for Group companies in Japan

Date	Company Name	Number of Participants
November 7, 2016	Kochi Styrol Co., Ltd.	29 (plant manager and employees)
November 18	Kaneka Takasago Service Center Co., Ltd.	46 (president and employees)
November 28	Vienex Corporation	68 (president and employees)
December 9	Koyama Plant, Kanto Styrene Co., Ltd.	36 (president and employees)
December 10	OLED Aomori Co., Ltd.	62 (senior managing director and employees)
January 27, 2017	Ojima Plant, Kanto Styrene Co., Ltd.	33 (plant manager and employees)
February 10	Taiyo Yushi Corporation	36 (president and female employees)



CSR Briefing for Vienex





Support for the United Nations Global Compact

K J W

In March 2015, the Kaneka Group became a signatory to the United Nations Global Compact. The UN Global Compact is a voluntary code of conduct through which the top management of signatory companies commit themselves to take action aimed at achieving ten principles in the four areas of Human Rights, Labour, Environment, and Anti-Corruption. Starting in fiscal 2015, the Group has participated in the working groups of the Global Compact, which enables us to gather a wealth of information about CSR for our new initiatives through enhanced communication with other companies. As a group with a global network, we actively share information about our commitment to global sustainable growth as a responsible corporate citizen with our stakeholders and the international community.

■ United Nations Global Compact's Ten Principles



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

Promoting and Implementing Responsible Care

Responsible Care is important to the Kaneka Group. We have put in place policies governing safety and Responsible Care, as well as internal regulations to ensure proper implementation of the Responsible Care approach.

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Group Management

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All members of the Kaneka Group share a commitment to Responsible Care (RC) (see note 1), and all of our activities are managed in keeping with Responsible Care principles.

We carry out CSR safety and quality inspections for all Group companies in and outside Japan. These address considerations related to environmental protection, occupational health and safety, product safety and quality assurance, and compliance. We also actively monitor the progress of implementation of the relevant policies and actions.

Kaneka's Environmental Health and Safety Management Regulations and Quality Management Regulations clearly define the actions and responsibilities expected of Group companies. Employees of Group companies are urged to be proactive, and together we endeavor to reduce the environmental impact and risks of occupational accidents, as well as to improve our capacity to respond to natural disasters or product-related accidents that may occur.

Note 1: Responsible Care refers to actions undertaken on a voluntary basis by the chemical industry to promote improvements in aspects of environmental, safety, and health performance, throughout the entire process from the development of chemical products to their manufacture, usage and disposal. The initiatives and achievements are communicated to the public to raise public confidence in their operations. Kaneka has been actively promoting this approach since 1995 as a founding member of the Japan Responsible Care Council (which merged with the Japan Chemical Industry Association in fiscal 2012).

Basic Policies for Responsible Care

K J W

In keeping with our corporate philosophy, we at the Kaneka strive to ensure the conservation of resources and reduce environmental impact throughout the entire product lifecycle, while working to help realize the sustainable development and prosperity of society.

■ Basic Policies for Responsible Care

1	Protect the natural ecosystem and reduce environmental impact Focusing on the impact of corporate activities on the global environment and the ecosystem, we endeavor to reduce environmental impact and promote resource conservation and energy saving throughout the lifecycle of products.
2	Offer safe products and information We endeavor to offer products that are safe to distribute and use, and to provide adequate information on the products such as instructions on how to use and handle products correctly.

3	Develop products and technologies in consideration of the environment and safety Upon the development of new products, we give consideration to the environment and safety throughout the lifecycle of the products to the greatest extent possible, and endeavor to develop products and technologies with low environmental impact.
4	Reduce waste and promote the recycling of plastics We reduce waste associated with manufacturing and its processes. We actively develop technologies for the adequate disposal or recycling of plastic waste concerning our products in cooperation with relevant industries, and endeavor to dispose of and recycle waste in a proper manner.
5	Enhance process safety, disaster-prevention, and occupational safety and health Safety and disaster prevention constitute the foundations of the local community's trust, and occupational health and safety are issues that need to be fulfilled by chemical companies. We persistently strive to make improvements in these areas.
6	Win public confidence From the management to every employee, all our members shall act in compliance with laws, regulations, standards, etc. relating to environment and safety both at home and abroad. Our approach to Responsible Care as such shall be publicized accurately to the public, in hope of rightfully gaining public recognition and confidence.

Implementing Responsible Care

K J W

At Kaneka, we carry out a range of Responsible Care activities to further promote measures that can be taken by the chemical industry to protect human health and safety and preserve the environment. To ensure progress with respect to the six RC codes (environmental protection, process safety and disaster prevention, occupational safety and health, chemicals and product safety, distribution safety, and interaction/communication with the public), Kaneka has set up a system to guide its initiatives.

The CSR Committee, chaired by the president and its four subcommittees, provides venues for the consideration and establishment of policies governing the operations of the Kaneka Group as a whole, as well as for monitoring related progress. Such venues are also used for information sharing and discussions to solve problems.

Responsible Care Education

K J W

At Kaneka, we conduct Responsible Care education activities in a thorough manner tailored to each of our facilities and employees' areas of responsibility. RC training is provided to staff members in their third year and to newly promoted executives, in order to deepen their understanding of, and to enable them to act on, our company's activities related to the RC codes: such as environmental protection; process safety and disaster prevention; occupational safety and health; and chemicals and product safety.

Participated in a Responsible-Care Community Dialogue

K J W

Community dialogues were held by the Japan Responsible Care (RC) Council in Osaka and Hyogo on November 16, 2016, and February 18, 2017, respectively.

The Osaka Plant belongs to the Osaka district and the Takasago Plant to the Hyogo district; this fiscal year, we participated in the dialogues as a member of the group of managing companies.

Community dialogue is intended to introduce the activities of district RC member companies to community residents and administrative officials and enable them to have better understanding of our business activities. The activities are mainly composed of five codes: environmental protection, process safety and disaster prevention, occupational safety and health, chemical and product safety, and distribution safety.

On the day, member companies gave presentations on their RC activities and outcomes. This was not just a briefing session; we spent sufficient time answering questions. Such efforts resulted in a vigorous exchange of views among the competent authorities, relevant companies, local residents, and residents' associations. We will continue to promote mutual understanding with local communities through RC activities.



A presentation at the RC Community Dialogue in Hyogo



Dialogue in Osaka with many participants, including the pertinent authorities, relevant companies, and local residents

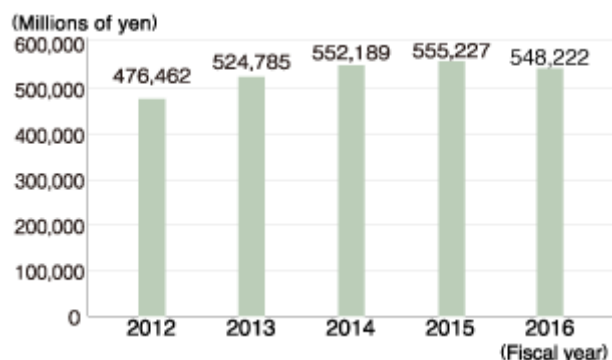
Kaneka Group Overview / Registered Trademarks and Other Trademarks for Kaneka Group Products

Kaneka Group Profile

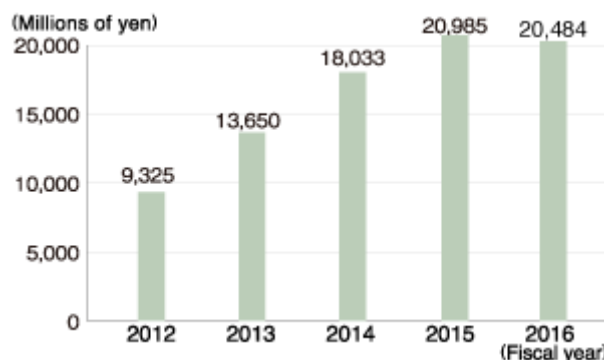
■ Corporate Profile

Name	KANEKA CORPORATION
Head Office	1-12-32, Akasaka, Minato-ku, Tokyo 107-6028, 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, 2017)
Facilities in Japan	Osaka Head Office Sales Office Nagoya (Aichi Prefecture) Plants Takasago (Hyogo Prefecture) Osaka (Osaka Prefecture) Shiga (Shiga Prefecture) Kashima (Ibaraki Prefecture)
Research Institutes	<ul style="list-style-type: none">• Material Solutions Research Institute• Health Care Solutions Research Institute (Biotechnology Development Laboratories) (Regenerative Medicine and Cell Therapy Laboratories)• Process Development Research Laboratories• Process Technology Laboratories• Photovoltaic & Thin Film Device Research Laboratories
Overseas Facilities	U.S.A., Belgium, Singapore, Malaysia, China, India, Taiwan, Korea, Australia, Brazil, and others
Kaneka Group	104 subsidiaries (including 41 (in Japan) and 35 (outside Japan) consolidated subsidiaries)

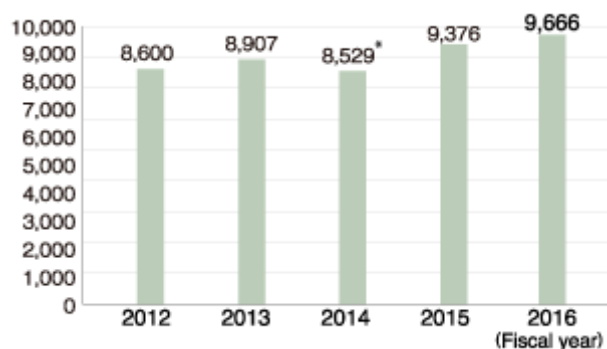
■ Net Sales (Consolidated)



■ Net Income (Consolidated)

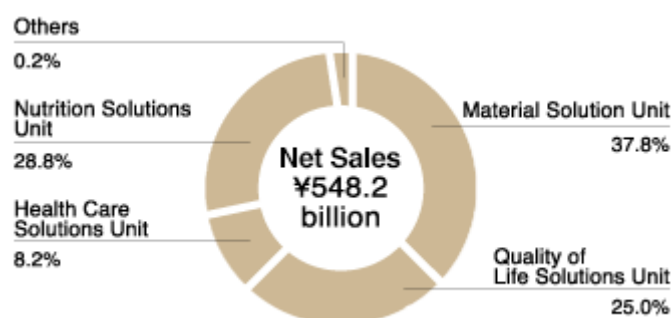


■ Number of Employees (Consolidated)

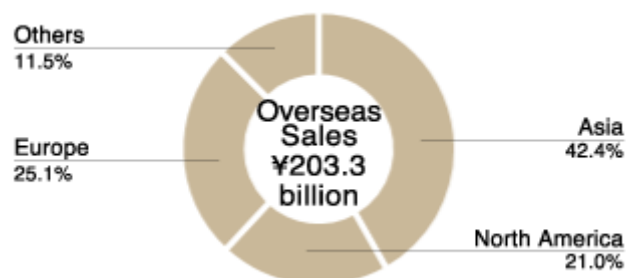


*From fiscal 2014, we changed the basis on which we calculate the number of employees at Group companies (excluding temporary employees).

■ Consolidated Sales by Business Segment (Fiscal 2016)



■ Consolidated Overseas Sales by Area (Fiscal 2016)



Kaneka Group Product Registered Trademarks and Other Trademarks

The following product names in the CSR website and Integrated Report 2017 are registered trademarks of the Company or Group.

APICAL

EPERAN

EPERAN PP

KANE ACE

KANE ACE MX

KANEKA Q10

KANEKA PEPTIDE

KANEKA TELALLOY

KANEKA FLUX

KANEKALON

KANEKA MS POLYMER

KANEKA TA POLYMER

KANEPEARL

Kanepearl Soil Block

KANELITE

KANELITE FOAM

SILYL

SUNDUREN

Kaneka Hyperite

LIXELLE

LIPOSORBER

ELMECH

Graphinity

KANEKA QH

KANEKA XMAP

PIXEO

SIBSTAR

SOLAR CIRCUIT NO IE

KANEKA KANCAPE

SILASCON

VISOLA

SoltileX

GRANSOLA

Stakeholder Dialogue

At the main office of Japan Platform, a Specified NPO, on March 1, 2017

Seventh Stakeholder Dialogue

Kaneka holds dialogues with various stakeholders to exchange different perspectives and opinions to deepen mutual understanding, and collaborate by sharing common issues.

On March 1, 2017, we had a dialogue with Japan Platform (JPF), Kaneka's partner for the Great East Japan Earthquake and the Kumamoto earthquake.

About Japan Platform

Japan Platform (JPF), an international humanitarian organization, was established as a platform where NGOs, financial circles, and the government cooperate with one another and utilize their strengths and resources to provide efficient and prompt emergency assistance for refugees and people affected by natural disasters. By seeking financial aid from the government and raising contributions from private companies and individuals, this platform promptly secures initial activity funds for emergency assistance, so that NGOs can swiftly start support activities.



Participants



Yukihiro Akutsu
Domestic Division
Manager
Head of Tohoku
Office,
Japan Platform,
a Specified NPO



Naoya Hirano
Acting Manager,
External Relations
Japan Platform,
a Specified NPO



Minetoshi Marufuji
Senior Officer,
General Manager CSR
Division
Administration Office
CSR Committee
Kaneka Corporation



Kiyotaka Kondo
Manager
Administration Office
CSR Committee
Kaneka Corporation



Mika Fujii
Assistant Manager
Administration Office
CSR Committee
Kaneka Corporation

“Cooperating with a company that has cutting-edge technologies will enhance the regional capability and save many lives.” —JPF

“We continue to provide reconstruction support through business activities, such as by supplying our products.” —Kaneka

- Mr. Hirano:** JPF is an all-Japan system for overseas humanitarian assistance and provides extensive support activities that cannot be covered only by one organization. Our strength is to offer support activities that meet international standards, such as the required number of toilets based on disaster scales. Leveraging our foreign experience, we provided the first full-scale support activities in Japan when the Great East Japan Earthquake occurred. This effort is still ongoing.
- Mr. Akutsu:** Regardless of the scale of a disaster, the lives of affected people shift in the order of evacuation center, temporary housing, daily life, and independent reconstruction. We focus on preventing both deaths directly caused by disasters and deaths in the reconstruction phase. We believe that cooperating with Kaneka, which has cutting-edge technologies, will enhance regional capability and save many lives.
- Kondo:** There were two decisive factors in cooperation with JPF. You have sufficient information on sending supplies to those in need, and you report how donations and relief goods are used. We thought these two factors would lead to effective support activities.
- Mr. Hirano:** We do not see companies only as funders. After asking them for information on the supplies they can provide, we share this information with NGOs in the field to determine what relief goods are necessary and their destinations. At the time of the Great East Japan Earthquake, before our request, Kaneka actively offered us solar panels to deal with power shortages. That offer was so helpful.
- Fujii:** At the time, our employees in charge of the solar battery business proposed that they could produce portable and easy-to-install solar panels. So, we sent you around 100 solar panels via our distribution network, and you let us know about many words of thanks

from affected people and gave us their pictures, which made us aware that how our products were helpful to them.

Kondo: After the disaster, for early reconstruction of the fishery industry in Kesennuma, we started to rebuild Kanae, the only company making styrene foam fish containers in the city, and the company began operation again in 2013. We also provided nuclear decontamination agents and Soil Block (large-size styrene foam for civil engineering work) for highway recovery. We also have carried out social contribution activities through the Ippo Ippo Nippon Project, and the Tohoku-Kumamoto Food and Product Fair.

Mr. Hirano: Kaneka has a concept of Build Back Better, meaning better reconstruction. This is great. We think private companies have the power to revive afflicted areas, such as by helping recover businesses and even creating jobs.



“CSR activities play a pivotal role in passing down the wish for reconstruction.” —Kaneka

“We found that the management of Kaneka has a strong commitment.” —JPF

Marufuji: Kaneka learned a lot from the Great Hanshin-Awaji Earthquake. The plant had little damage, but our employees and partner companies were afflicted. Our members, who had warm support from people around the country, want to repay them. CSR activities play a pivotal role in passing down their wishes to young members.

Kondo: The Great Hanshin-Awaji Earthquake was worse than anticipated, and we were totally confused. It also took us a long time to confirm the safety of our employees and their families. Based on this experience, we conduct annual safety confirmation training as the first step in the business continuity plan (BCP). We also created and provided employees with the Crisis Management Handbook, containing intelligible graphs of emergency response rules. Continuing such efforts will protect us and even encourage us to take actions to fulfill our responsibility to provide relief supplies.

Mr. Hirano: Companies’ business continuity efforts have the power to realize regional disaster prevention. Getting the community involved in cooperation activities can save many lives. After reading the CSR Communication Book 2016, I found the management of Kaneka has a strong commitment. I think Kaneka’s strength is that the president serves as the head of CSR Committee, sets up the administration office, and creates a companywide CSR system.

Mr. Akutsu: The CSR Communication Book 2016 emphasizes the importance of having a dialogue with society and verifying the inconsistency between the direction of Kaneka CSR activities and social needs. I was very impressed with Kaneka's humble attitude. Even NGOs and NPOs sometimes fail to accurately meet the needs of humanitarian activities. It is not easy to catch up with and respond to rapidly changing social needs. But, we must avoid being self-righteous. I was inspired by your CSR activities of being humble and thinking about affected people first. This is what we need to be.

"Cooperating with a company providing a dialogue opportunity makes support activities innovative." — JPF

"Kaneka will aim to become a solution provider to meet future needs." —Kaneka

Mr. Hirano: Today, the world faces the highest number of refugees since World War II, while the scale of natural disasters has also increased. NGOs and various sectors other than supporters are required to get involved in addressing complicated global issues. There are high global expectations for innovative support activities. Sustainable activities will be provided through cooperation among universities, research institutions, and private companies that cope with social problems from a business perspective. In this respect, Kaneka is taking the lead. In your Kanekalon wig business, instead of sticking to the top of the value chain as a material manufacturer, you actively hold dialogues with African people and establish your own value chain to provide products that meet local demand. Cooperating with a company providing dialogue opportunities will bring better support activities.

Mr. Akutsu: We expect Kaneka to make many dreams come true. For example, a Tokyo metropolitan earthquake is anticipated to trigger large-scale fires. Land readjustment is required to prevent this disaster, which will take 30 to 40 years to complete. Therefore, curtains and external walls should be produced with fireproof materials. Innovation in chemistry will enhance regional capability, which is our goal as well.

Marufuji: I think the role of private companies has been changing. The era of selling popular goods is over. Today, our products are expected to contribute to society and make our lives better. Our management team has a strong desire to become a solution provider to satisfy social and future needs. Another important role of companies is to build a profitable business model that also contributes to society and continues their business activities. Making full use of our original and strong technologies, we need to complete products and accomplish our business goals as well. For this reason, we will continue to have dialogues with stakeholders and make sound efforts.



Kaneka made a donation of 10 million yen through JPF to the Kumamoto earthquake that occurred in April 2016.



We provide relief supplies, including Kanelite Foam, a resin foam product used as a floor insulation material, for gymnasiums serving as evacuation centers.



We made a company donation through JPF to people affected by the Great East Japan Earthquake in 2011.

Organizations Covered in This Report(Scope of Responsible Care activities data as of March 31, 2017)

This report covers Kaneka and 60 Group companies (45 in Japan and 15 outside Japan) that conduct Responsible Care (RC) activities. Regarding environmental accounting, parent manufacturing plants and 29 manufacturing companies in Japan are covered.

Kaneka	Manufacturing Plants Takasago Plant Osaka Plant Shiga Plant Kashima Plant
	Laboratories outside Manufacturing Plants Toyooka Technical Center Foods & Agris Solutions Vehicle Technology Management Division Development Center Process Technology Laboratories Health Care Solutions Research Institute (Regenerative Medicine and Cell Therapy Laboratories) Medical Devices Solutions Vehicle Research Division
	Offices Osaka Head Office Tokyo Head Office Nagoya Sales Office
Group companies (in Japan) (45)	Manufacturing Companies (29) Kaneka Hokkaido Styrol Co., Ltd. Kaneka Tohoku Styrol Co., Ltd. Kaneka Kanto Styrol Co., Ltd. Kaneka Chubu Styrol Co., Ltd. Kaneka Nishinippon Styrol Co., Ltd. Kanto Styrene Co., Ltd. Kochi Styrol Co., Ltd. Kaneka Foam Plastics Co., Ltd. Hokkaido Kanelite Co., Ltd. Kyushu Kanelite Co., Ltd. Kaneka Sun Spice Corporation Kaneka Foods Manufacturing Corporation Tokyo Kaneka Foods Manufacturing Corporation Taiyo Yushi Corporation Nagashima Shokuhin Co., Ltd.

	<p> Tamai Kasei Co., Ltd. Shinka Shokuhin Co., Ltd. Tatsuta Chemical Co., Ltd. Showa Kaseikogyo Co., Ltd. Tochigi Kaneka Corporation Vienex Corporation Osaka Synthetic Chemical Laboratories, Inc. Kaneka Solartech Corporation Sanvic Inc. Kaneka Medix Corporation OLED Aomori Co., Ltd. River Seiko Corporation Dia Chemical Co., Ltd. Cemedine Co., Ltd. </p>
	<p>Non-manufacturing Companies (16)</p> <p> Kaneka Foods Corporation Hane Co., Ltd. Kaneka Kentech Co., Ltd. Kaneka Solar Marketing Co., Ltd. Kaneka Takasago Service Center Co., Ltd. Kaneka Osaka Service Center Co., Ltd. Shiga Denshi Co., Ltd. NJF Co., Ltd. Gene Frontier Corporation Kaneka Your Health Care Co., Ltd. SC Housing System Corporation Kaneka Hoken Center Co., Ltd. Kaneka Techno Research Corporation Kaneka Creative Consulting Corporation KM Transderm Ltd. Biomaster, Inc. </p>
<p>Group companies (outside Japan) (15)</p>	<p> Kaneka Belgium N.V. Kaneka North America LLC Kaneka Singapore Co. (Pte) Ltd. Kaneka (Malaysia) Sdn. Bhd. Kaneka Eperan Sdn. Bhd. Kaneka Paste Polymers Sdn. Bhd. Kaneka Innovative Fibers Sdn. Bhd. Kaneka Pharma Vietnam Co., Ltd. Kaneka Apical Malaysia Sdn. Bhd. Kaneka MS Malaysia Sdn. Bhd. Kaneka Eperan (Suzhou) Co., Ltd. </p>

HiHua Fiber Co., Ltd.

Kaneka Eurogentec S.A.

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

PT.Kaneka Foods Indonesia



For the Environment

By “environment,” we mean the entire global environment.

We fulfill our corporate social responsibilities by considering the environment at every stage of our business activities and working to reduce environmental impacts—not only in the manufacturing-related functions such as raw materials procurement, manufacturing, and transportation, but also in our office operations.

▶ [Eco-Friendly Management](#)

▶ [Material Balance in Production Activities](#)

▶ [Environmental Accounting](#)

▶ [Addressing Climate Change](#)

▶ [Environmental Management Systems](#)

▶ [Reducing Waste and Preventing Pollution](#)

▶ [Reducing Chemical Substance Discharge](#)

▶ [Biodiversity Conservation](#)

Eco - Friendly Management

Kaneka Groups is engaged in various environmental initiatives.

Focusing on eco-friendly management from fiscal 2017, we will define, enhance, and expand our eco-friendly products.

Kaneka's Eco-Friendly Management



< Basic Policy >

To be continually engaged in the top three priorities for environmental activities and contribute to creating a sustainable society by creating new products and processes.

Top Three Priorities for Environmental Activities

Prevention of Global Warming

Promote activities to save energy and reduce CO₂ emissions

Effective Use of Resources

Promote zero-emission activities

Reduction of Environmental Burdens

Facilitate chemical substance control

Eco-Friendly Products

					
<p>Energy Creation</p> <p>Product name VISOLA/Soltilex/ GRANSOLA</p> <p>Intended use Solar power generation systems</p> <p>Reason for environmental contribution Creating energy with houses equipped with this product</p>	<p>Product name Kaneka residential electricity storage systems</p> <p>Intended use Residential stationary batteries (Lithium ion secondary battery)</p> <p>Reason for environmental contribution Storing energy by houses equipped with this product</p>	<p>Product name Kaneparl</p> <p>Intended use Residential/automotive foams</p> <p>Reason for environmental contribution Saving energy as insulation and lightweight residential / automotive materials</p>	<p>Product name Eperan</p> <p>Intended use Automotive parts Package cushioning materials</p> <p>Reason for environmental contribution Saving energy as lightweight automotive parts</p>	<p>Product name PHBH</p> <p>Intended use Biodegradable polymers (Packaging materials, garbage bags, foams)</p> <p>Reason for environmental contribution A naturally derived and biodegradable polymers that has little environmental impact when discarded</p>	<p>Product name KANEKA Surfactin</p> <p>Intended use Biosurfactant Cleaning agents</p> <p>Reason for environmental contribution A naturally derived and biodegradable material friendly to the environment</p>

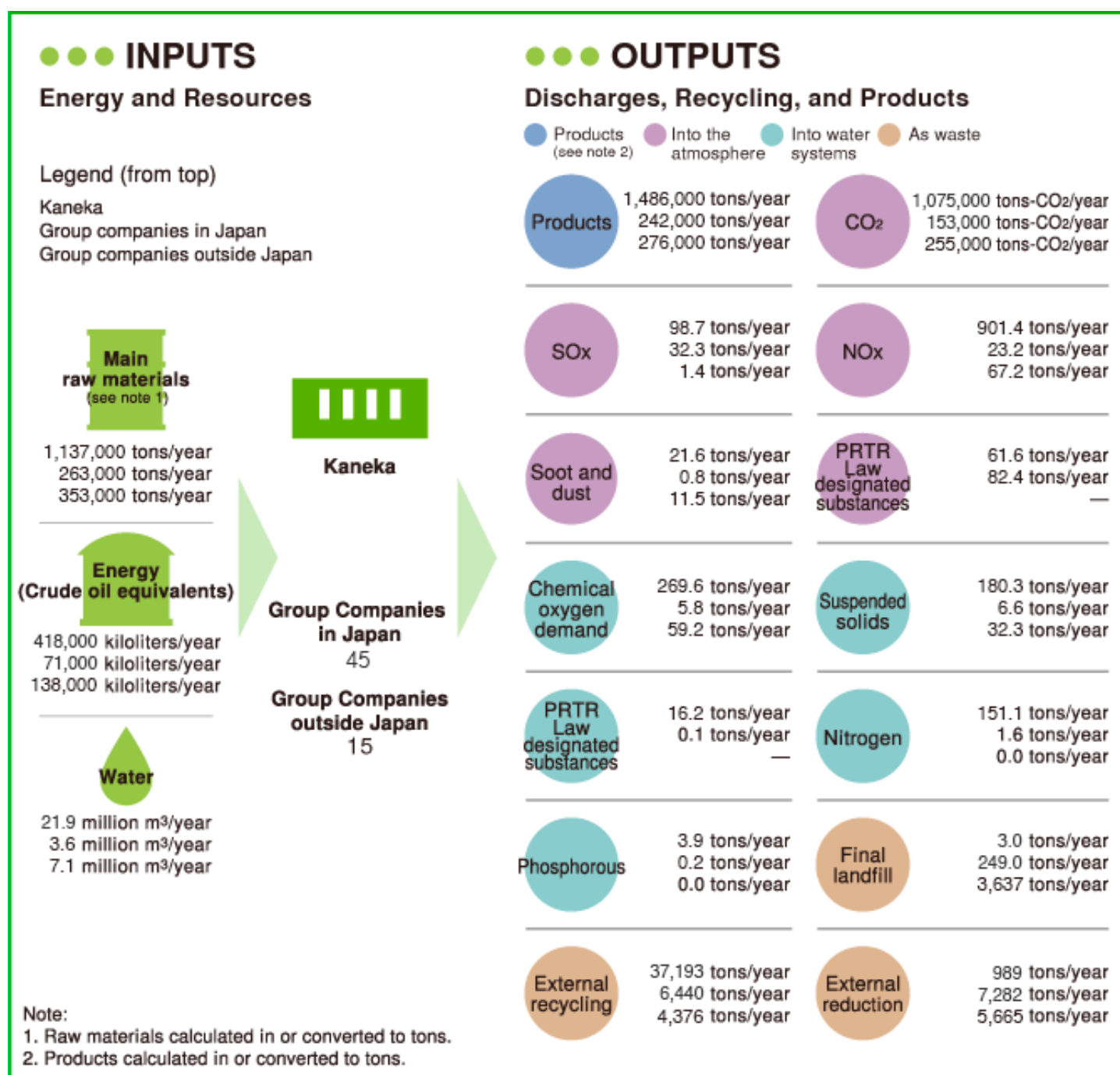


Material Balance in Production Activities

Kaneka Group's fiscal 2016 energy and resource inputs, as well as material outputs through emissions and products, are listed below.

K KANEKA
J JAPAN
W WORLDWIDE

K J W



Environmental Accounting

We calculate the environmental costs (investments and expenditures) and benefits (material quantities), as well as economic impacts (in monetary units) of environmental measures on a consolidated basis for four parent plants and 29 Group companies in Japan (manufacturing companies).

K KANEKA
J JAPAN
W WORLDWIDE

Results of Environmental Accounting for Fiscal 2016

K J W

Environmental costs (for investments) were 1.05 billion yen, similar to the previous fiscal year. Environmental costs (for expenditures) declined by about 120 million yen and 180 million yen for pollution prevention and resource recycling, respectively, but increased by about 50 million yen for research and development. Regarding the economic impacts of environmental measures, the reduction effect of waste disposal costs due to recycling, etc. increased by about 330 million yen, but the cost reduction effect due to better resource efficiency (output per unit of input) declined by about 640 million yen, and the cost reduction effect due to energy conservation and other savings decreased by about 510 million yen, compared to the previous fiscal year.

Note: These calculations are based on the 2005 edition of the Environmental Accounting Guidelines by Japan's Ministry of the Environment and other reference materials, with partial modifications.

■ Environmental Costs

Millions of yen

Cost Classifications	Main Efforts	Fiscal 2016	
		Investments	Expenditure
Business Area		1,046	4,884
1. Pollution Prevention	Air and water pollution prevention	1,011	3,150
2. Environmental Conservation	Addressing climate change and energy saving	-	-
3. Resource Recycling	Waste processing, recycling, and reduction	35	1,734
Upstream and Downstream	Product recycling, collection, and processing	0	8
Management Activities	Environmental education for employees and environmental impact monitoring and measurement	0	457
Research and Development	Research and development of products contributing to environmental conservation	0	6,728
Social Activities	Greening, beautification, and disclosure of environmental information	0	72
Environmental Damage	Payment of sulfur oxide emission charges	0	8
Total		1,046	12,157

Figures do not include research and development investment and global environment conservation costs.

■ Quantitative Impact of Environmental Conservation Efforts

Category	Initiatives	Items	Units	Changes between Previous Year and Fiscal 2016
Pollution Prevention	Reduce atmospheric and water discharges of hazardous substances	SOx emissions	Tons	20.4
		NOx emissions	Tons	42.1
		Chemical oxygen demand	Tons	6.3
		PRTR Law-designated chemical emissions	Tons	12.0
Environment	Lower greenhouse gas emissions	CO ₂ emissions	Thousands of tons CO ₂	97.0
	Use less energy	Crude oil equivalents	Thousands of kiloliters	56.0
Resource Recycling	Reduce final landfill	Final landfill	Tons	195
	Increase external recycling	Amounts recycled	Tons	- 4,917

■ Economic Impacts of Environmental Measures

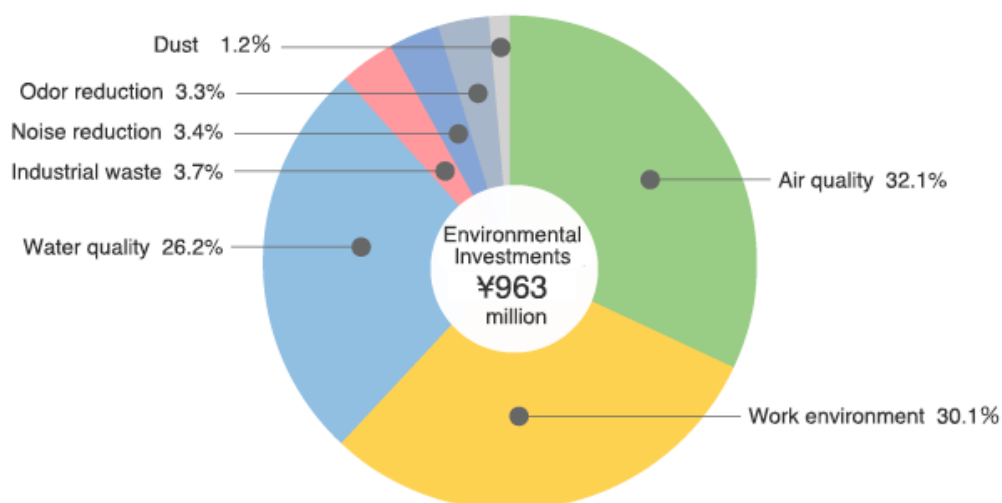
		Millions of yen
Measures		Fiscal 2016
Revenue from Recycling		130
Cost Reductions by Better Resource Efficiency (Output per Unit of Input)		- 297
Waste Disposal Cost Reductions by Recycling		489
Cost Reductions by Energy Conservation		123
Total		445

Environmental Investments

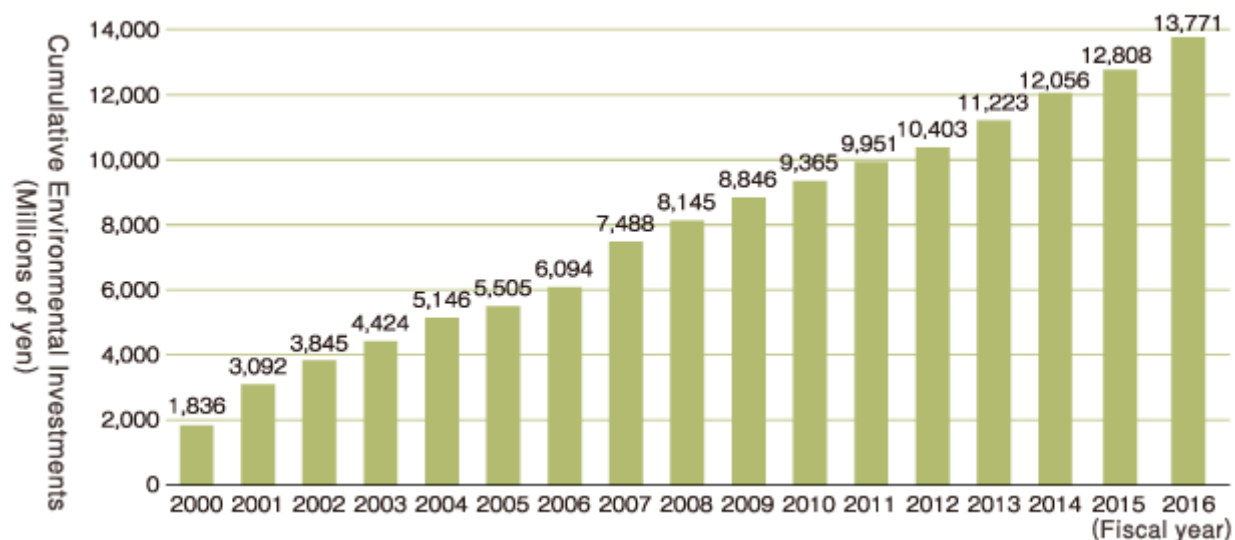
K J W

We continue to invest in the environment. Investments related to the environment in fiscal 2016 totaled about 960 million yen, of which 32.1% was for air quality, 30.1% for the work environment, and 26.2% for water quality. Cumulative environmental investments come to about 13.8 billion yen during the 17 years since fiscal 2000, with the most being for air quality (42%), followed by water quality (22%), and the work environment (17%). We will continue to invest proactively to maintain and improve the environment.

■ Environmental Investments in Fiscal 2016



■ Cumulative Environmental Investments



Addressing Climate Change

We are undertaking efforts to address climate change, with the Earth Environment Subcommittee established under the CSR Committee, and the Energy Officers Conference in charge of implementation. We are working to conserve energy and to reduce carbon intensity through various measures, for example by utilizing our own environmental capital investment program.

We are also using carbon life cycle analysis (cLCA), which involves calculating a product's contribution to carbon dioxide emission reductions by quantitatively assessing the emissions throughout the product lifecycle and making a comparison with similar products. We also calculate our indirect carbon dioxide emissions (Scope 3) through the supply chain.

K KANEKA
J JAPAN
W WORLDWIDE

Energy Conservation Efforts

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Our efforts at the Kaneka Group to address climate change include energy conservation, using the energy intensity index (see note 1) as an indicator for management.

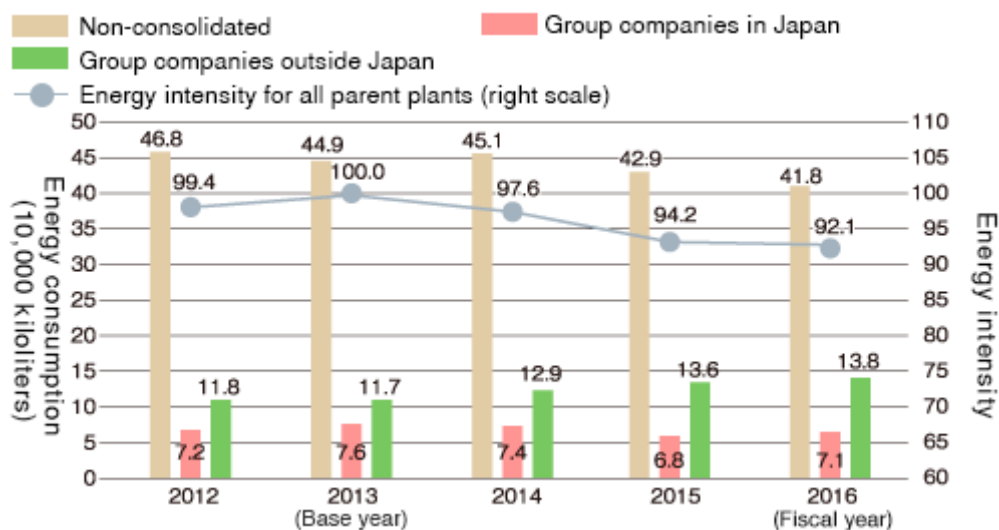
The energy intensity index of all parent plants in fiscal 2016 was 92.1, a reduction of 2.3% from the previous fiscal year due to factors such as energy conservation activities and differences in the product mix. Annual reduction over the five years was 1.9% on average, which means we met our target.

Non-consolidated energy consumption (see note 2) was 418,000 kiloliters, a decrease of 2.6% from the previous fiscal year.

Notes:

1. Energy intensity index is a numeral value calculated by dividing the energy used in manufacturing (at all our parent plants) by the active mass and indexing it against the baseline year of fiscal 2013 as 100. The amount of activity is an index representing the production volume of all our parent plants. Energy consumption is calculated based on the Energy Saving Law (the Act on Rational Use of Energy).
This time, the base year was changed from fiscal 1990 to fiscal 2013, and past intensity indexes were recalculated.
2. This energy consumption is the total for Kaneka alone (manufacturing plants and other facilities), with the boundaries being consistent with the Act on the Rational Use of Energy and the Action Plan for a Low Carbon Society prepared by the Japan Chemical Industry Association.

■ Energy Consumption (Crude Oil Equivalents) and Energy Intensity



Initiatives to Cut Carbon Intensity

K J W

At Kaneka, we are working to reduce carbon intensity, using a carbon intensity index (see note 3) as an indicator for management, based on carbon dioxide emissions from energy consumption associated with production activities. Since the base year was changed from fiscal 1990 to fiscal 2013, the target was accordingly changed to "93.2 or below compared to fiscal 2013 (100) in fiscal 2020" without changing the target level.

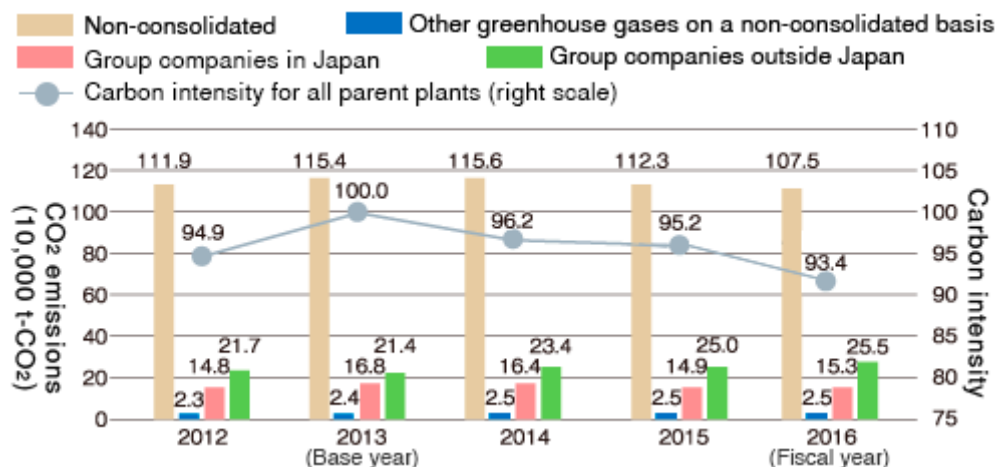
The carbon intensity index of all parent plants was 93.4 in fiscal 2016, so we achieved our target of 97.0 for the year, based on a target of 93.2 for fiscal 2020.

Non-consolidated carbon dioxide emissions (see note 4) decreased by 4.3% from the previous fiscal year to 1,075,000 tons. Main factors in the decrease included activities to reduce carbon intensity, differences in the product mix, CO₂ emission factors of purchased electricity, and so forth.

Notes:

- The carbon intensity index is calculated as carbon dioxide emissions from energy consumption in production activities divided by activity volume, with the index set at 100 in the base year of fiscal 2013, using fixed numbers for Kaneka. It helps in the visualization of the impact of our activities, and was used to establish targets for fiscal 2020.
- Carbon dioxide emissions are calculated as prescribed by the Act on Promotion of Global Warming Countermeasures, and as with energy the figure is a non-consolidated total for Kaneka.

■ CO₂ Emissions from Energy Consumption and Carbon Intensity



Other greenhouse gases on a non-consolidated basis include carbon dioxide, methane, and dinitrogen monoxide from non-energy sources. Emission volumes are calculated in keeping with the Act on Promotion of Global Warming Countermeasures.

Investments in Energy-Efficient Facilities

K J W

To continue reducing energy intensity and carbon intensity, we are implementing our own environmental capital investment program, with an annual budget of 200 million yen for small and medium investments that have a relatively long payback period, through activities in three areas-addressing climate change, efficient use of resources, and reducing environmental impacts-that are priorities in Kaneka's environmental management program.

In fiscal 2016 we continued allocating a large portion of this fund to projects that address climate change, including broader initiatives such as visualizing energy consumption.

Going forward we will promote the use of this investment program for activities to reduce intensities.

■ Results of Our Own Environmental Capital Investment Program

Fiscal Year	Investments	Number	Reduced CO ₂ Emission
2012	¥200 million	19	1,929 tons-CO ₂ per year
2013	¥200 million	29	1,993 tons-CO ₂ per year
2014	¥200 million	37	1,644 tons-CO ₂ per year
2015	¥200 million	22	1,435 tons-CO ₂ per year
2016	¥200 million	23	1,688 tons-CO ₂ per year

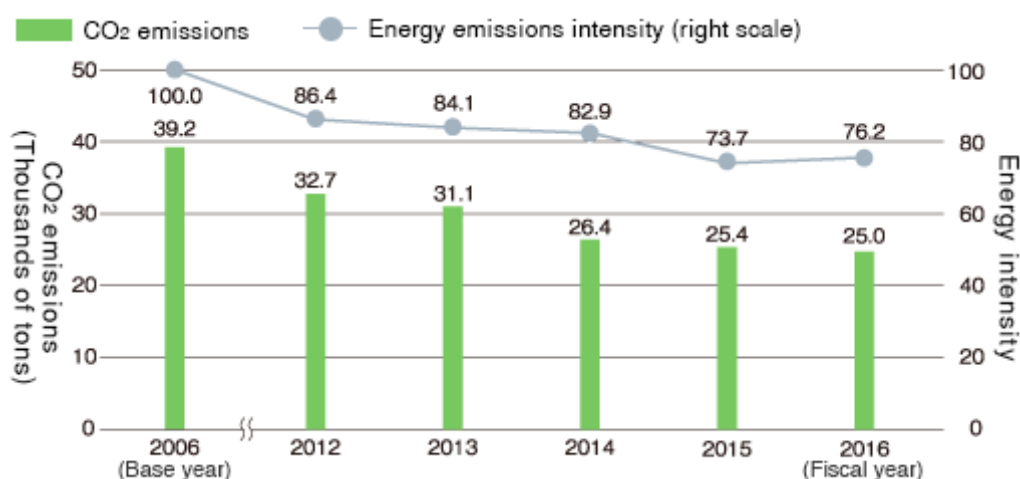
Energy-Efficiency Initiatives in Logistics

K J W

To achieve an annual 1% reduction in energy intensity as a specified consigner under the amended Act on Rational Use of Energy, in fiscal 2016 we continued working plant by plant on the theme of new reductions of energy intensity, with a focus on modal shifts and improved cargo load ratios.

In fiscal 2016 we worked to improve cargo load ratios and greater use of the Japan Freight Railway Company, but it resulted in a 3.3% increase in energy intensity compared to fiscal 2015. Carbon dioxide emissions decreased by 400 tons compared to fiscal 2015 due to active use of the Japan Freight Railway Company container transportation.

■ CO₂ Emissions and Energy Intensity from Logistics



Fiscal 2006 is the base year for indexing the logistics energy intensity as 100.

Response to the Fluorocarbons Emission Control Law

K J W

The estimated leakage amount of fluorocarbons generated from our commercial freezing and refrigeration equipment and air conditioning units in fiscal 2016 was 13,547 tons - CO₂, an increase of 4,154 tons - CO₂ over the previous fiscal year.

The increase in the leakage amount was due to aging refrigerating machines.

There were no Group companies in Japan that exceeded 1,000 tons - CO₂ estimated leakage amount of fluorocarbons.

To reduce the estimated leakage amount of fluorocarbons contributing to the greenhouse effect, we will ensure equipment inspections to detect leaks at an early stage and take necessary measures, as well as update aging machines producing a large amount of leakage.

For machine updating, we will select low-GWP (see note 5) fluorocarbons and promote fluorocarbon-free production activities.

Note:

5. GWP (Global warming potential) is a figure that shows, on the basis of carbon dioxide, how other greenhouse gases are capable of causing global warming.



Environmental Management Systems and Environmental Efficiency Indices

Kaneka Group operates based on ISO 14001 and Eco-Action 21 standards.

We also use the Japan Environmental Policy Priorities Index (JEPIX) to assess the total environmental impact of our business, in the context of aiming for a sustainable society.

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Environmental Management Systems

K J W

Kaneka Group operates based on ISO 14001 and Eco-Action 21 environmental management systems, with the aim of reducing environmental impacts, preventing environmental problems, and responding quickly if any problems arise.

■ Parent and Group Company Certification under ISO 14001

Business Sites and Group Companies	Registration No.
Shiga Plant	4004950
Osaka Plant	JCQA-E-0053
Kashima Plant	JCQA-E-0054
Takasago Plant	JCQA-E-0105
Tochigi Kaneka Co., Ltd.	4004384
Osaka Synthetic Chemical Laboratories, Inc.	JCQA-E-0343
Tatsuta Chemical Co., Ltd.	3571208
Showa Kaseikogyo Co., Ltd. Hanyu Headquarters Factory	E0062
Cemedine Co., Ltd. Ibaraki Office	JCQA-E-0366
Cemedine Co., Ltd. Mie Plant	JCQA-E-0176
Vienex Corporation	JSAE1511
Kaneka Solartech Corporation	JQA-EM6704
Sanvic Inc.	JMAQA-E841
Kaneka Belgium N.V.	97 EMS 002f R1
Kaneka (Malaysia) Sdn. Bhd.	ER0523
Kaneka Paste Polymers Sdn. Bhd.	ER0523
Kaneka Eperan Sdn. Bhd.	ER0523
Kaneka Innovative Fibers Sdn. Bhd.	ER0523
Kaneka Apical Malaysia Sdn.Bhd.	ER0915

■ Eco-Action 21 Certification

Group Company	Certification and Registration No.
Kyushu Kanelite Co., Ltd.	0001637
Kaneka Hokkaido Styrol Co., Ltd.	0001805
Kaneka Medix Corporation	0001893
Hokkaido Kanelite Co., Ltd.	0001905
Kaneka Tohoku Styrol Co., Ltd.	0003274
Nagashima Shokuhin Co., Ltd.	0003093
Kaneka Foam Plastics Co., Ltd. Moka Plant	0003247
Kaneka Chubu Styrol Co., Ltd.	0006600
Tokyo Kaneka Foods Manufacturing Corporation	0003473
Taiyo Yushi Corporation	0003575
Kaneka Foods Manufacturing Corporation	0003491
Kaneka Sun Spice Corporation	0003556
Kaneka Nishinippon Styrol Co., Ltd. Headquarters, Saga Plant, Kagoshima Plant, and Nagasaki Plant	0003949
Kanto Styrene Co., Ltd.	0004035
Kaneka Kanto Styrol Co., Ltd.	0004259
OLED Aomori Co., Ltd.	0010329
Kochi Styrol Co., Ltd.	0011039

Environmental Compliance

K J W

Kaneka Group continues working to reduce environmental risks through various means, including ISO 14001 internal audits and CSR safety and quality inspections, to check compliance with environmental regulations and legislation such as the Air Pollution Control Act and the Water Pollution Control Act, and with criteria in agreements with local governments.

Environmental Efficiency

K J W

We assess the environmental impacts of our production activities using Environmental Impact Points (EIP), which are compiled using the JEPIX methodology (see note 1), and we use those points to assess our environmental efficiency (see note 2).

Our total environmental impact in fiscal 2016 decreased slightly, by 0.4% from the previous year, to 4.58 billion EIPs, while our environmental efficiency dropped by 5.1% from the previous year due to a decline in sales.

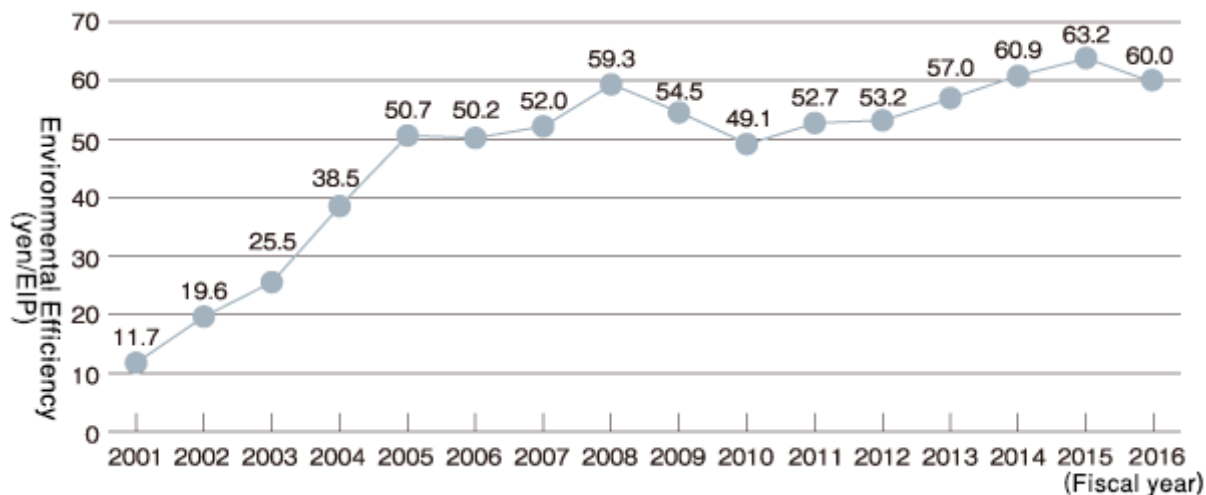
Notes:

1. The Japan Environmental Policy Priorities Index (JEPIX) methodology involves the calculation of an "eco-factor" coefficient for each emitted substance that has an environmental impact, using a ratio of the annual target for emissions under national environmental policies versus actual annual emissions ("Distance to Target"). The eco-factors

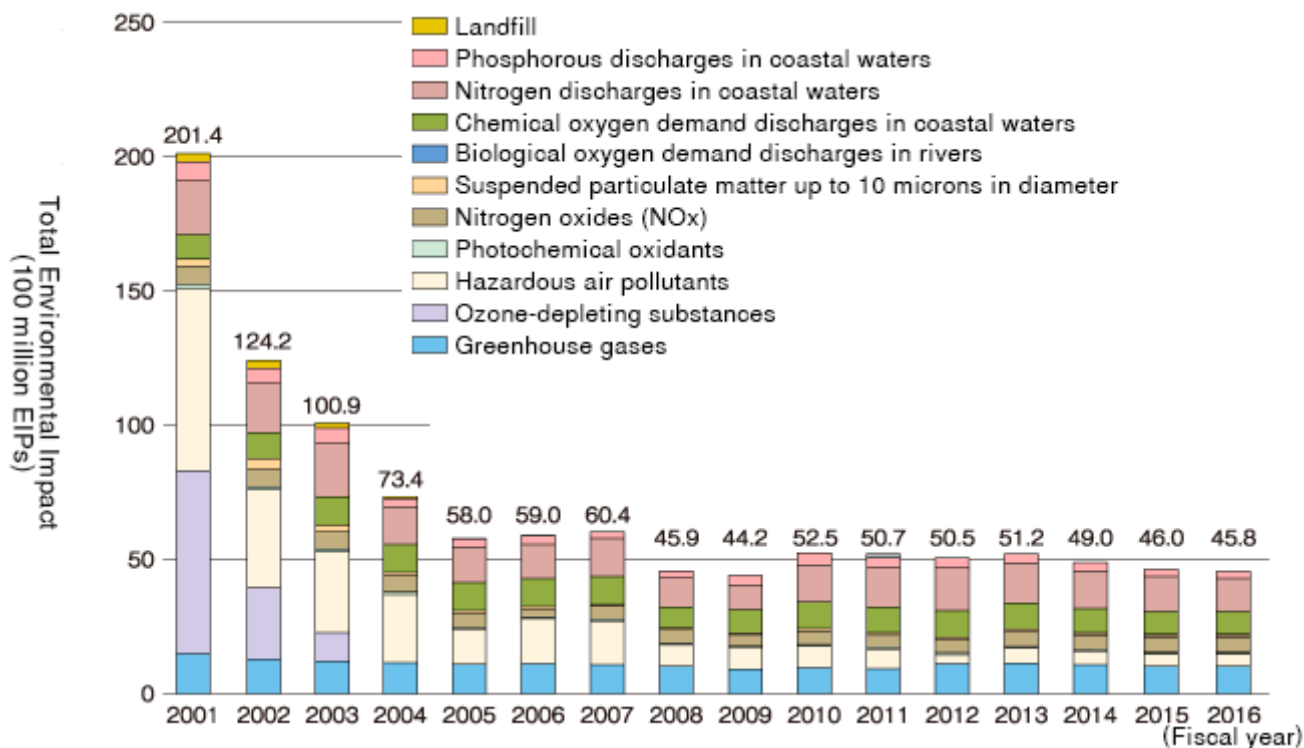
are then multiplied by a quantity for each environmental impact to produce a single integrated index known as Environmental Impact Points (EIP). Calculations of eco-factors are done by the JEPIX Project (www.jepix.org, in Japanese).

2. Environmental efficiency is a yardstick to measure efforts to maximize value while minimizing environmental impacts, with the aim of achieving sustainable growth. Kaneka calculates this by dividing net sales (yen) by the EIP.

■ Environmental Efficiency



■ Details of Total Environmental Impact



Check & Act

The environmental impact of greenhouse gas, hazardous air pollutants, and nitrogen discharge to coastal waters declined compared to the previous fiscal year, while the environmental impact of NOx and COD discharge to coastal waters increased, resulting in a slight decrease in the total environmental impact.

We will continue working to reduce environmental impact and improve environmental efficiency by promoting energy-saving activities.



Reducing Waste and Preventing Pollution

Through pursuing the 3Rs (reduce, reuse and recycle) aimed at the reduction and recycling of industrial waste from our operations, Kaneka has been able to achieve zero emissions (see note 1) for eleven consecutive years. We are also working toward all group companies in Japan being able to achieve zero emissions.

We also meet all standards for environmental pollution levels in applicable laws and regulations, and in agreements concluded with various municipalities.

Note 1: Kaneka defines "zero emissions" to mean that the final landfill volume is less than 0.5% of total waste generated.

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Cutting Waste Sent to Landfill

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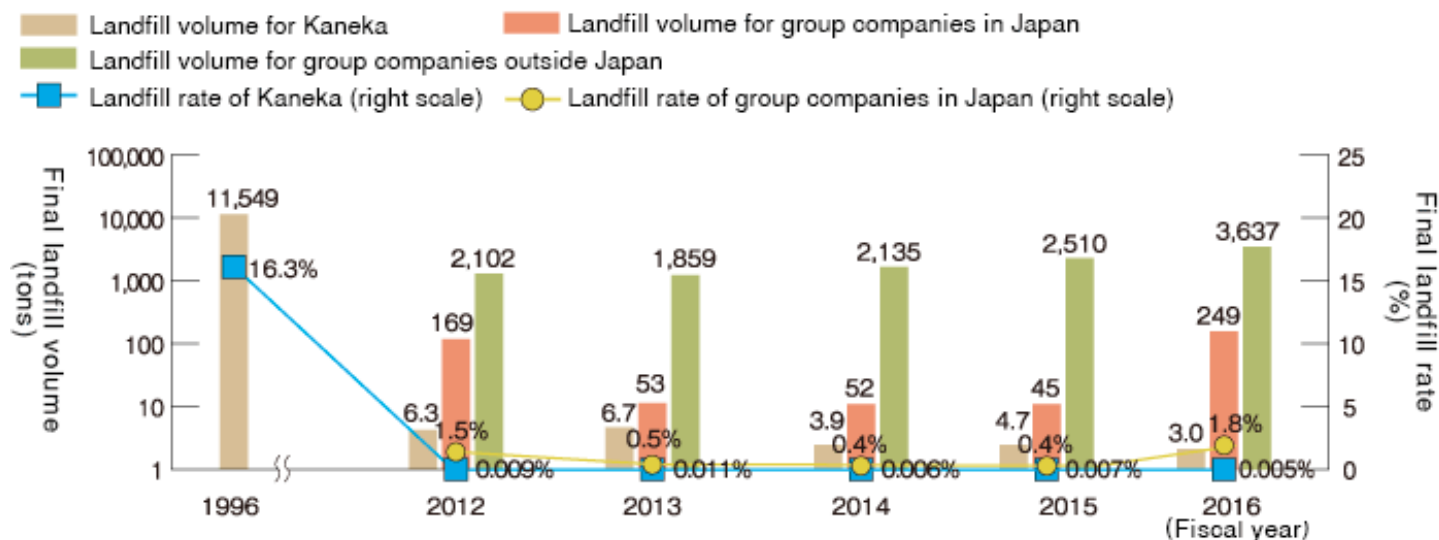
We effectively achieved zero emissions in fiscal 2016, with a final landfill volume for Kaneka (see note 2) of 3.0 tons, equivalent to a final landfill rate of 0.005%.

The final landfill rate of 45 Group companies in Japan (see note 2) in fiscal 2016 failed to achieve zero emissions, with a rate of 1.8%.

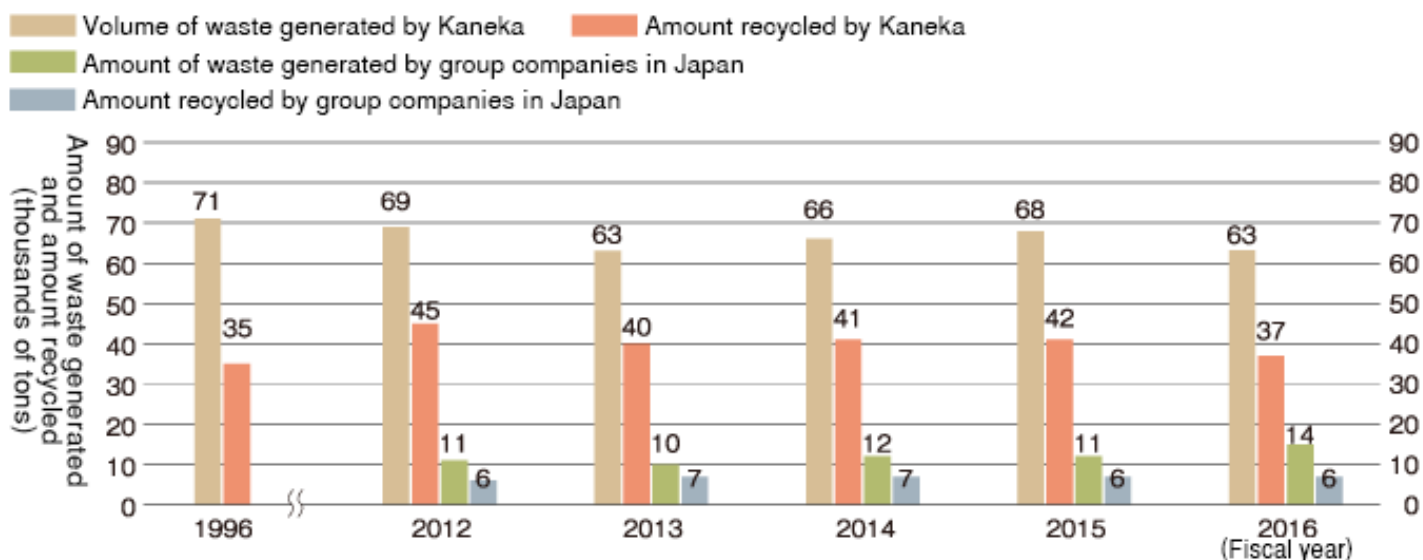
We will work on controlling the emission intensity of industrial wastes and reducing the final landfill rate.

Note 2: The landfill volume, landfill rate, industrial waste volume, and recycling amount of Kaneka and Group companies in Japan indicate totals for the company as a whole, including its facilities and companies other than the plant department.

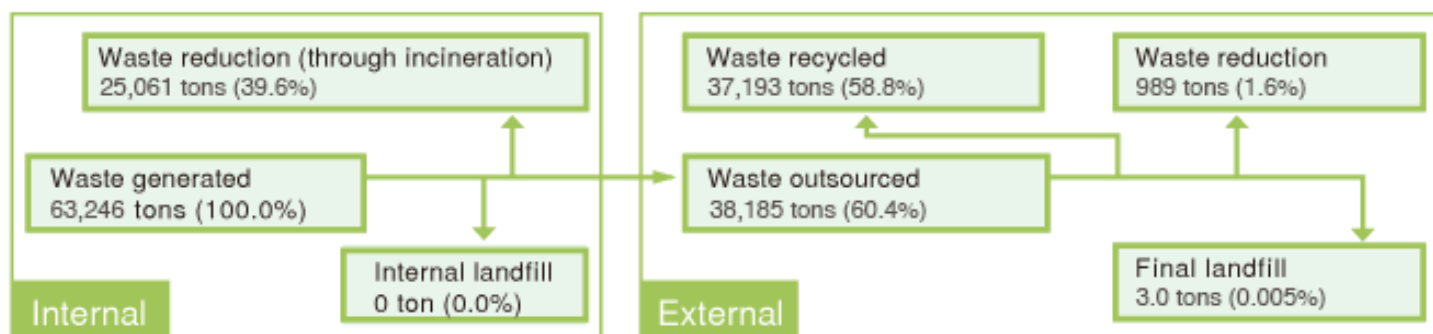
■ Volume and Ratio of Waste sent to Landfill



■ Waste Generated and Recycled



■ Waste Flow: From Generation to Landfill (FY 2016 actual)



Proper Disposal of Industrial Waste

K J W

We conduct regular site visits of our waste processing contractors, and carry out inspections based on a checklist to confirm that waste is being processed in the proper manner.

3R Initiatives

K J W

Because reducing waste leads to improving global sustainability by means of resource savings, cost reduction, as well as carbon dioxide emissions reduction, Kaneka is pursuing waste reduction on a company-wide basis.

We at Kaneka and group companies in Japan are pursuing activities at each of our production facilities, mainly through the "3R" approach to achieve waste reduction and recycling of materials. In addition, we have been pursuing improvements, utilizing the Material Flow Cost Accounting (MFCA) approach, which involves all employees in manufacturing, research and other sections.

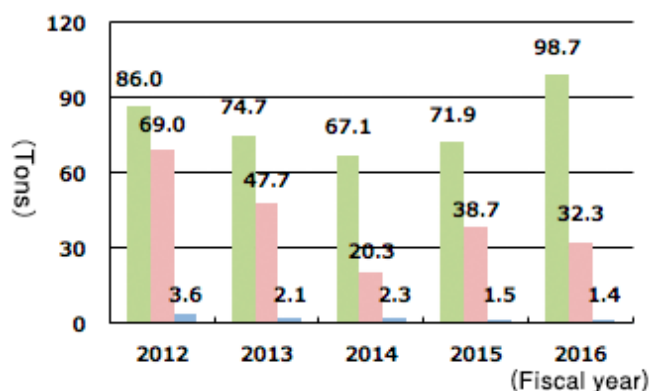
Preventing Air and Water Pollution

K J W

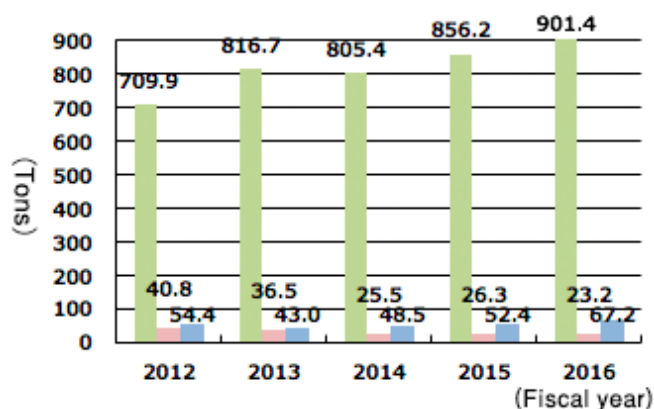
Kaneka is in compliance with the standards specified in the Air Pollution Control Act and the Water Pollution Control Act as well as the criteria included in agreements made with local governments. Regarding the atmosphere, soot and dust emissions levels for Kaneka in fiscal 2016 were slightly lower than the previous fiscal year, while SOx and NOx emissions were increased. All substances excluding nitrogen increased in water.

■ All parent plants ■ Group companies in Japan ■ Group Companies outside Japan

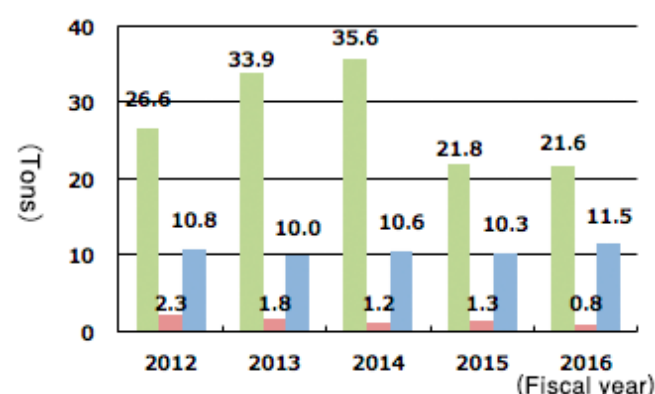
■ SOx Emissions



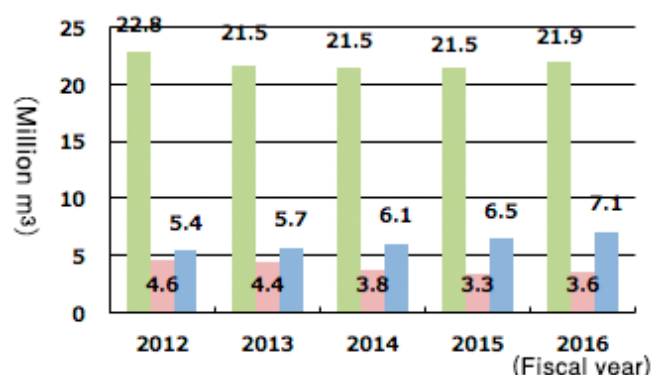
■ NOx Emissions



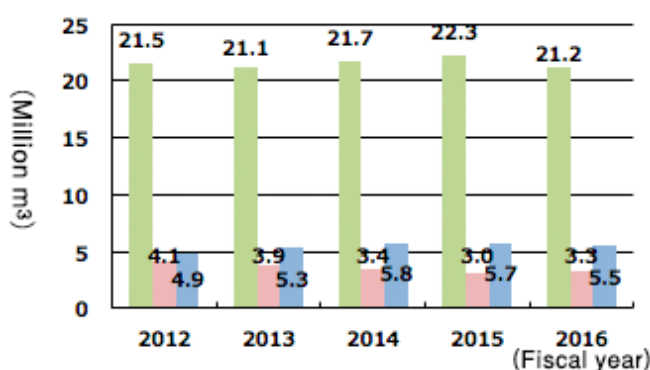
■ Soot and Dust Emissions



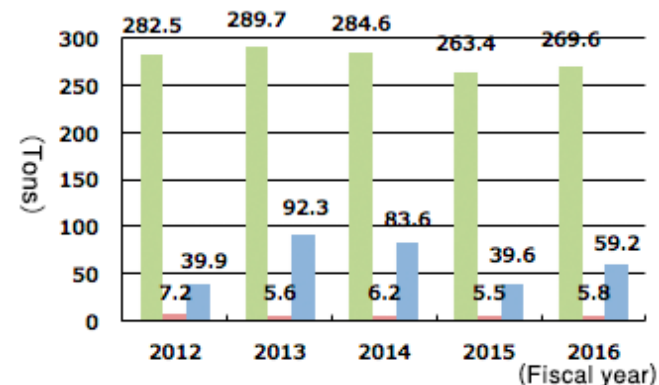
■ Water Consumption (see note 3)



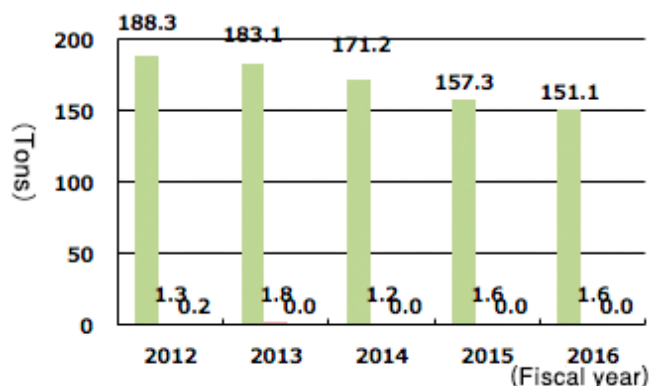
■ Wastewater Discharges (see note 3)



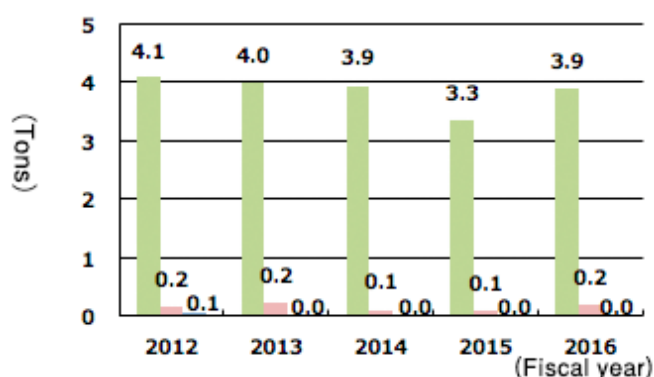
■ COD in Wastewater (see note 3)



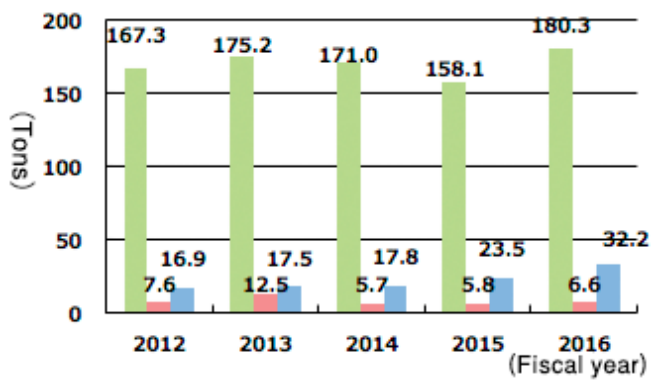
■ Nitrogen in Wastewater (see note 3)



■ Phosphorous in Wastewater (see note 3)



■ Suspended solids in Wastewater (see note 3)



Note3: From fiscal 2015, our water consumption amount and wastewater volume include those generated from non-manufacturing facilities other than the plant department.

Check & Act

The increase in final landfill volume of Group companies in Japan in fiscal 2016 was because substances that had been treated as valuables were landfilled and also because there was an increase in the number of companies subject to data collection. We will improve the landfill volume reduction.

We will continue to work to further reduce our impacts on the water and the air, and to respond rapidly in the event of any abnormalities.



Reducing Chemical Substance Discharge

We at Kaneka are working in an ongoing manner to reduce the discharge of volatile organic compounds (VOCs), as well as to voluntarily reduce emissions of six hazardous atmospheric pollutants subject to the Pollutant Release and Transfer Register (PRTR).

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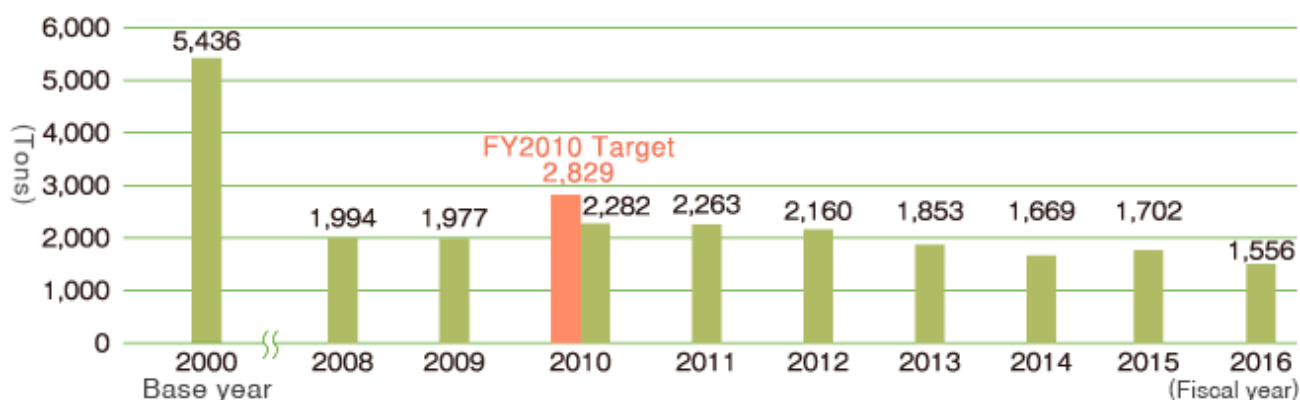
Voluntary Plan to Cut VOC Discharge

K J W

We are committed to reducing the discharge of VOCs (see note 1), which are known to cause photochemical smog. In fiscal 2016, total discharge was 1,556 tons, an 8.6% decrease compared to the previous year. We will continue our efforts to reduce VOC discharge through prevention of leaks from equipment.

Note 1: Volatile Organic Compounds (VOCs) are organic chemical substances that cause suspended particulate matter and photochemical oxidants.

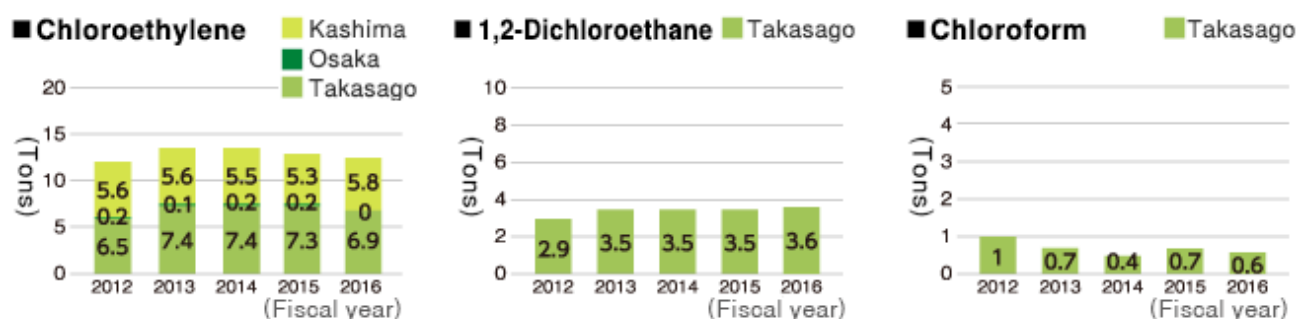
■ VOC Discharge: Voluntary Plan and Performance

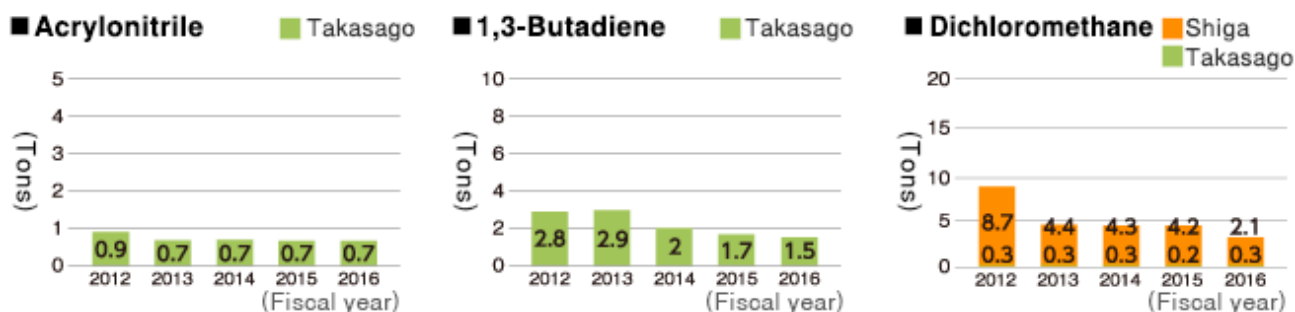


Hazardous Atmospheric Pollutants

K J W

Total emissions in fiscal 2016 of six hazardous atmospheric pollutants (shown in the following graphs) were 21.5 tons, which represented a year-on-year decrease of 10%. A decline in dichloromethane contributed to the drop in total emissions. We will continue to make efforts to control total emissions for environmental impact reduction.





PRTR Discharge

K J W

In fiscal 2016, our total discharge of substances subject to the PRTR was 77.9 tons, an increase of 0.8 tons from the previous year.

The total discharge by Group companies in Japan was 82.5 tons, an increase of 11.2 tons compared to the previous year.

■ Fiscal 2016 Parent Company Emissions Subject to the Pollutant Release and Transfer Register Law

(Kilograms)									
	Designated Number under Ordinance	Chemical Substances	Emissions						Transferred
			Atmospheric Emissions	Discharges into Public Waterways	Discharges into Soil	Internal Landfill	Total	Fiscal 2015	Total
Large Discharges of 10 Substances	392	Normal hexane	14,500	0	0	0	14,500	10,900	99,539
	94	Chloroethylene (PVC)	12,700	110	0	0	12,810	12,870	1,000
	275	Sodium dodecyl sulfate	0	8,500	0	0	8,500	8,600	0
	240	Styrene	5,770	40	0	0	5,810	6,169	7,860
	420	Methyl methacrylate	5,000	3	0	0	5,003	5,103	9
	7	Acrylic acid butyl	4,170	0	0	0	4,170	4,130	3,030
	134	Vinyl acetate	3,960	53	0	0	4,013	3,450	5,500
	157	1,2-dichloroethane	3,600	0	0	0	3,600	3,500	0
	232	N,N-dimethylformamide	2,000	830	0	0	2,830	3,510	270,000
	186	Dichloromethane (methylene chloride)	2,352	0	0	0	2,352	4,451	31,764
Total Other than the 10 Substances Above			7,566	6,704	0	0	14,270	14,359	45,326
Grand Total for All Substances			61,618	16,240	0	0	77,858	77,042	464,028

Of the 462 substances subject to the PRTR, Kaneka reports about 65 items.

■ Fiscal 2016 Group Company in Japan Emissions Subject to the Pollutant Release and Transfer Register Law

(Kilograms)

	Designated Number under Ordinance	Chemical Substances	Emissions						Transferred
			Atmospheric Emissions	Discharges into Public Waterways	Discharges into Soil	Internal Landfill	Total	Fiscal 2015	Total
Large Discharges of 10 Substances	232	N,N-dimethylformamide	39,020	0	0	0	39,020	26,020	11,450
	300	Toluene	22,354	0	0	0	22,354	23,282	270,804
	186	Dichloromethane (methylene chloride)	11,600	0	0	0	11,600	10,084	210,201
	80	Xylene	4,400	0	0	0	4,400	5,100	0
	392	Normal hexane	1,800	0	0	0	1,800	2,100	33,178
	213	N,N-dimethylacetamide	1,600	0	0	0	1,600	1,900	75,000
	56	Ethylene oxide	1,022	0	0	0	1,022	657	0
	127	Chloroform	568	0	0	0	568	200	6,950
	355	Bis(2-ethylhexyl) phthalate (DEHP)	57	53	0	0	110	124	522
	13	Acetonitrile	0	0	0	0	0	0	7,360
Total Other than the 10 Substances Above			0	0	0	0	0	1,852	18,589
Grand Total for All Substances			82,421	53	0	0	82,474	71,319	634,054

Of the 462 substances subject to the PRTR, group companies in Japan report about 31 items.

Check & Act

The increase in discharge by Group companies in Japan is mainly due to the difference in product type mix that resulted from an increase in the number of specific product types using N,N-dimethylformamide. We will continue our efforts to reduce the discharge of chemical substances.

Biodiversity Conservation

Considering the impacts of our businesses on ecosystems, we at Kaneka strive to develop technologies, materials and products that have less environmental impacts, as well as to mitigate environmental impacts of our production. As part of our corporate social responsibility efforts, we also collaborate with stakeholders outside the company in biodiversity conservation activities.

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Partnership for Biodiversity Conservation

We join the following initiatives.

- Promotion Partners of the Declaration of Biodiversity by Keidanren
- Japan Business and Biodiversity Partnership

Lake Biwa Walnut School

K J W

We join the Steering Committee of the Walnut School, established to manage and conserve the Konooka Biotope (see note 1), located near our Shiga Plant.

Established as a collaborative effort by Shiga Prefecture, Otsu City and the local community members including our Shiga Plant, the Walnut School works to preserve this precious natural environment for future generations. Such activities include grass mowing, sidewalk maintenance, and updating educational signboard, and it also hosts seasonal nature observation gatherings some three times each year.

The gatherings provide valuable learning opportunities for children to observe rare plants, wild birds, insects and other wildlife living in the biotope.

We will continuously contribute to the conservation of the beautiful natural environment of Lake Biwa.

Note 1: Biotope: A place where organisms live as they do in nature. In human environments such as cities, biotopes are artificial environments created to regenerate and preserve a natural habit.



Outdoor activities by the Walnut School



Children enjoy tasting *tempura* made from wild herbs

New Employee Training at the "Kaneka Forestry for the Future"

K J W

Since 2012, we have been participating in a private forest preservation project promoted by Hyogo Prefecture. Named "Kaneka Forestry for the Future", employees at our Takasago Plant have maintained the habitat in Taka Town, Hyogo. In April 2016, 73 employees, mainly newly hired, carried out tree thinning, and 52 employees and their family members participated in another session in November.

Since 2013, training for all newly hired employees has been carried out as part of the project. Through assisting each other on the precarious forest terrain in cutting and transporting timber, the participants were able to deepen their bonds of solidarity and learn to function well as a team.

At first, these activities were to be carried out in an area of forest of roughly 15 hectares over the five-year period from June 2012 through May 2017, but the period has been extended for another five years.



Forest conservation activity by new employees



Reforestation by employees and their family members

Firefly Viewing at Settsu-no-mori Kaneka Biotope, Osaka Plant

K J W

Since November 2012, our Osaka Plant has maintained the Settsu-no-mori Kaneka Biotope. We have leased part of the greenery area of the plant to Settsu City, and managed the biotope collaborating with the Settsu Firefly Society. The biotope provides a wetland environment where fireflies and other wildlife can be observed.

Following on from the previous year, the biotope was open to the public for firefly viewing in 2016 from May 22 to 29, and local residents enjoyed watching the dance of the fireflies in flight.

This was the third firefly watching gathering held since 2014, and this year we had 743 visitors. Firefly viewing has become an annual event in the community.

We look forward to the biotope serving as a recreation area for the local community in the future.



Entrance sign of the biotope



The dance of the fireflies was seen again this year

With Our Customers

Our customers are the people who purchase Kaneka Group products.

A business cannot survive without the support of its customers.

We provide them with quality products and services, ensure product safety, and disclose information.

 [Examples of Our Efforts](#)

 [Quality Management](#)

 [Certification of Kaneka and Group Companies](#)

Examples of Our Efforts

Kaneka Joined the Tokyo International Conference on African Development (TICAD)

Kanekalon to Make African Women More Beautiful



The Kanekalon booth at the Japan Fair

Africa, with abundant natural resources and a high population growth, has been seen as a future global growth center.

Sub-Saharan Africa (south of the Sahara Desert), on the contrary, has faced stagnant development due to poverty, political instability, and delayed infrastructure development.

Under these circumstances, Kaneka has, for more than 30 years, provided women's hairdressing products using Kanekalon, a synthetic fiber, throughout much of the sub-Saharan region.

Jointly working with local hairdressing product manufacturers and beauty salons, we established a value chain and develop the local industry.

On August 27 and 28, 2016, the Sixth TICAD, focusing on African development, was held in Nairobi, the capital of Kenya, under the auspices of the Japanese government. This international conference was attended by Prime Minister Shinzo Abe as well as 77 companies and organizations as economic missions from Japan. We also joined the plenary session, the business conference, and an exhibition, the Japan Fair.

The latest styles in wigs and hair extensions were revealed at the Kanekalon booth of the Japan Fair in cooperation with Miss Kanekalon. The African women wearing Kanekalon were confident about and proud of themselves, making them more attractive. Shifting from meeting a demand for clothing, food, and housing to pursuing the joy of living and beauty, Kaneka will continue to support the African growth and development with Kanekalon.



Gave a lecture at the business conference



TICAD meeting
where many economic missions attended

The Kaneka US Innovation Center in Silicon Valley, United States

Established a Development Site for Life Science and Information-Communication Technology (ICT)

Silicon Valley, in California, the United States, is the center of the world's most advanced research and development activities and front-line industries. This area is known as a place of open innovation, where companies are working with university researchers and venture companies to develop new technologies and industries.

In September 2016, the Kaneka US Innovation Center was established in Newark, in Silicon Valley, as a development site for research and business activities. This is our second R&D base, following one in Texas. This center promotes open innovation and surveys the advanced technological trends in life science and information-communication technology.

Kaneka Pharma America, a sales company, pioneers the sales of catheters and other medical equipment, while Europe-based Kaneka Eurogentec exports biopharmaceuticals to the United States. The Kaneka US Innovation Center investigates the needs for and technical trends in life science in the U.S. market to develop new technologies and products.

As IoT becomes increasingly sophisticated, and automated driving is getting closer to practical use, potential needs for highly functional materials exist in the information and communication field. We will explore advanced and specific material needs and propose various solutions by working with the Kaneka US Material Research Center at Texas A&M University, which is the Kaneka's first open innovation center in the United States.



The Kaneka US Innovation Center



A meeting at the Kaneka US Innovation Center

Kaneka Group Food Festivals

For Continual Customer Service



Serving suggestions cooked with our products



Displayed "World's Creative Breads." This photo shows a stollen-style Baumkuchen.

Consumer needs for sweets and breads are changing rapidly, and new textures, flavors, and menus are in constant demand. Producing bakery yeast, margarine, and a wide range of other food products, Kaneka Group has continued to develop new products and share information to address challenges in the bread and confectionery industries. One of the efforts is the annual Food Festival. Under the theme "The Power to Make Dreams Come True: Bring Your Forward-Looking Idea to Fruition," the Food Festival in 2016, held in Tokyo, Osaka, and Fukuoka, featured products using Kaneka's cutting-edge technologies as well as our information and proposal capabilities.

This event also introduced the latest trend in sweets and breads and suggested creative menus using Kaneka Group's new and key products. We also enhanced several special corners, such as "World's Creative Breads" and "Made in Japan Sweets." More than 90 client companies participated in this event with Kaneka. In addition to proposing new products, multiple companies made collaborative proposals, as was the case last year.



Held a seminar on the trends in bread and confectionery



Quality Management (Product Safety and Quality Assurance)

The Product Safety Subcommittee under the CSR Committee and its implementation bodies, namely the Product Safety Review Conference and Quality Assurance Promoters Conference, are responsible for all matters relating to product safety and quality assurance within the Kaneka Group.

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Quality Management Activities

K J W

We at the Kaneka Group strive to benefit society and satisfy our customers, through providing a stable supply of safe and reliable products. To that end, we undertake quality management activities to ensure the safety and quality of our products at all stages of design, development, manufacturing and sales.

In fiscal 2016, related activities included the following:

- We inspected the status of product tests to verify conformity with laws and regulations as well as with certification and accreditation criteria.
- We conducted on-site inspections of food logistics management in terms of legal compliance and food defense and found no problems.
- We undertook a range of activities to build the capacity of our employees, including through outside seminars and in-house lectures by external experts.
- We provided employees in the business and research divisions with e-learning regarding quality control as part of strengthening the foundation of quality management.

Product Safety Review Conference

K J W

Due to expanded business operations and diversified activities of the Group, we need to conduct an increasing number of reviews of our new services and products.

To respond to emerging opportunities in a timely and speedy manner, in fiscal 2016 the administration office of the Product Safety Review Conference carried out related pre-consultations (hearings).

Moreover, for products in new business fields, we involved external experts in the reviews, receiving their input from the initial stages of product development.

Chemical Substance Management

K J W

Internationally, regulatory systems are becoming more stringent in order to achieve appropriate management of chemical substances related to consumer products.

We strictly follow Japanese and international laws and regulations, and also actively offer information for the proper handling of our products, through displaying the Globally Harmonized System of Classification and Labelling of Chemicals

(GHS) labels and providing a safety data sheet for products.

We will also continue our efforts on information disclosure, including working with the Japan Initiative of Product Stewardship (JIPS), an initiative supported by the Japan Chemical Industry Association, which promotes voluntary efforts within the chemical industry to minimize chemical risks.

In addition, we revised and publicized the internal standards for chemical risk assessment to respond to the Revised Industrial Safety and Health Act, which came into force in 2016.

Audits and Inspections

K J W

Companies within the Kaneka Group regularly undergo reviews and audits by external organizations, based on established standards and criteria such as the ISO 9001 standards.

In addition, we are working to improve our performance through CSR safety and quality inspections and internal auditing.

In fiscal 2016, the CSR safety and quality inspections included:

- We conducted inspections involving external experts in the pharmaceutical and medical device businesses as well as functional food products.
- In addition to continued efforts to clarify the strengths and weaknesses of our CSR activities through quantitative evaluations, we continued to derive best practices for adoption by all plants of the Kaneka Group.
- We revised the internal audit standards and conducted auditor training to further strengthen our auditing capability.

CHECK & ACT

Based on a review by the Product Safety Subcommittee, we will continue to improve the quality management system, while taking into account business reforms and product commercialization.



Certification of Kaneka and Group Companies

■ ISO 9001 Certification of Kaneka and Group Companies

Division or Group Company (SV:Solutions Vehicle)	Major Products	Registry Organization and Number
Vinyls and Chlor-Alkali SV	Caustic soda, hydrochloric acid, sodium hypochlorite, liquid chlorine, vinyl chloride monomers, polyvinyl chloride, polyvinyl chloride paste, heat-resistant polyvinyl chloride, and OXY chlorination catalyst	JCQA / JCQA-1263
Performance Polymers SV	Modifier resins (Kane Ace and Kaneka Telalloy), modified silicone polymer (Kaneka MS Polymer), polymer-based adhesive (Silyl), weather-resistant methyl methacrylate film (Sunduren), isobutylene-based thermoplastic elastomer (SIBSTAR), terminally reactive liquid acrylic polymer (KANEKA XMAP), and telechelic polyacrylate (Kaneka TA Polymer)	LRQA / YKA0927477
Foam & Residential Techs SV Hokkaido Kanelite Co., Ltd. Kyushu Kanelite Co., Ltd.	Bead technique-based polyolefin resins and molded products (Eperan, Eperan PP), bead techniquebased expandable polystyrene (Kanepearl), and extruded polystyrene foam board (Kanelite)	JCQA / JCQA-0673
E & I Technology SV	Ultra-heat-resistant polyimide films (Apical, Pixeo), optical film (Elmech), bonded magnets (Kaneka Flux), multi-layered insulation materials, PVC pipes for underground electric cables, and high thermal-conductive graphite sheet (Graphinity), Thermal conductive elastomer, Flexible cover coat ink	LRQA / YKA0935762
	Highly heat-resistant and light-resistant resins and molded products	DNV / 01635-2006-AQ-KOB-RvA/JAB
PV & Energy management SV Kaneka Solartech Corporation Kaneka Solar Marketing Corporation	Photovoltaic modules	JQA / JQA-QMA13200
Foods & Agris SV Takasago Plant Foods Manufacturing Department Kaneka Foods Manufacturing Corporation Tokyo Kaneka Foods Manufacturing Corporation Nagashima Shokuhin Co., Ltd.	Margarine, shortening, edible oils and fats, edible refined oils and fats, whipped cream, concentrated milk products, fermented milk products, flour paste, butter cream, chocolate, frozen dough, cheese, cooking fillings, prepared foods, yeast, and yeast cultures	JQA / JQA-QMA10274
Kaneka Foods Corporation	Purchase, design, sales, technological services, and quality assurance for processed foods and raw materials, and sales of food processing machinery	
NJF Co., Ltd.	Production instruction of processing contractors	

OLED Business Development Project OLED Aomori Co., Ltd.	Organic electroluminescent lighting	JMAQA / JMAQA-2532
Showa Kaseikogyo Co., Ltd.	Plastic compounds	ASR / Q0556
Tatsuta Chemical Co., Ltd.	Plastic film, plastic sheet	BVJ / 3167872
Sanvic Inc.	Synthetic resin sheets and films	JMAQA / JMAQA-1824
Kaneka Hokkaido Styrol Co., Ltd.	Polystyrene foam molded products for engineering and construction	LRQA / YKA 4002793/J
Kanto Styrene Co., Ltd.	Polystyrene foam molded products	JACO / QC03J0233
Kaneka Foam Plastics Co., Ltd. Moka Plant	Bead technique-based polyolefin molded products	ASR / Q1919
Vienex Corporation	Electronic products	JSA / JSAQ2593
Shinka Shokuhin Co., Ltd.,	Design, development and production of modifiers for bread and confectionery and processed fruit products; manufacture of edible oils (margarine) and cooking fillings and modified milk (outsourced)	JQA / JQA-QMA15323
Taiyo Yushi Corporation	Margarine, shortening, edible refined oils and fats, edible vegetable oils and fats, refined lard, other edible oils and fats, processed fats, dairy products, and food additives	JQA / JQA-QMA14671
Kaneka Sun Spice Corporation	Spices, secondary processed foods	JQA / JQA-QMA11351
Tochigi Kaneka Corporation	Bonded magnets (Kaneka Flux), multilayer insulation materials, PVC pipes for underground electric cables, and high thermal-conductive graphite sheet (Graphinity), Solar battery assembly	LRQA / YKA0958035
Kaneka Belgium N.V.	Modifier resins (Kane Ace), bead technique-based polyolefins (Eperan, Eperan PP), modified silicone polymer (Kaneka MS Polymer), and acrylic sol	AIB-VINCOTTE / BE-91 QMS 028h
Kaneka North America LLC	Ultra-heat-resistant polyimide films (Apical), Modifier resins (Kane Ace and Kaneka Telalloy), heat-resistant vinyl chloride resins, and modified silicone polymers (Kaneka MS Polymer)	BSI / FM72722
Kaneka (Malaysia) Sdn. Bhd.	Modifier resins (Kane Ace)	SIRIM QAS / AR2321
Kaneka Apical Malaysia Sdn. Bhd.	Ultra-heat-resistant polyimide films (Apical) High thermal-conductive graphite sheet (Graphinity)	SIRIM QAS / AR6269 SIRIM QAS / AR6270
Kaneka Eperan Sdn. Bhd.	Bead technique-based polyolefins (Eperan, Eperan PP)	SIRIM QAS / AR2598
Kaneka Paste Polymers Sdn. Bhd.	Vinyl chloride paste resin	SIRIM QAS / AR2321

Kaneka Eperan (Suzhou) Co., Ltd.	Bead technique-based polyolefins (Eperan, Eperan PP)	UL DQS Inc. / 439438 QM08
Kaneka (Foshan) High Performance Materials Co., Ltd.	Bead technique-based polyolefins (Eperan, Eperan PP)	Beijing East Allreach certification Center Co., Ltd. / USA16Q27833R0S
Kaneka Innovative Fibers Sdn. Bhd.	Synthetic fibers	SIRIM QAS / AR5612
KSS Vietnam Co., Ltd.	Processed spices, herbs, and dried vegetables	Intertek(UK) / FM541299
Kaneka Eurogentec S.A.	Products and services for research and development in life science	BSI / FS 638601

■ ISO 13485 Certification of Kaneka and Group Companies (see note 1)

Division or Group Company (SV: Solutions Vehicle)	Main Products	Registry Organization and Number
Medical Devices SV Kaneka Medix Corporation	Lixelle, liposorber, catheters, silascon, and ED coil	TÜV SÜD / Q1N 14 05 24736 040
Kaneka Pharma Vietnam Co., Ltd.	Catheters (parts)	
River Seiko Corporation	Endoscopic instruments.	TÜV SÜD / Q1N 16 05 84323 006
Kaneka Eurogentec S.A.	<i>In vitro</i> diagnostic oligonucleotides	BSI / MD 638600

Note 1: ISO 13485 is an international standard covering the comprehensive management system requirements for the design and manufacture of medical equipment.

■ ISO 22000 Certification of Kaneka and Group Companies (see note 2)

Production Unit or Group Company	Main Products	Registry Organization and Number
Takasago Plant Pharmaceutical Manufacturing Department	Coenzyme Q10 (Kaneka Q10, Kaneka QH)	SGS / JP10 / 030379
Kaneka Sun Spice Corporation	Spices and secondary processed products incorporating spices	JQA / JQA-FS0123

Note 2: ISO 22000 is an international standard for food safety management systems.

■ **Food Safety System Certification 22000 (FSSC 22000) Certification of Kaneka and Group Companies (see note 3)**

Production Unit or Group Company	Main Products	Registry Organization and Number
Takasago Plant Foods Manufacturing Department	Margarine, shortening, edible oils and fats, edible refined oils and fats, whipped cream, concentrated milk products, and yeast	JQA / JQA-FC0047-1
Kaneka Foods Manufacturing Corporation	Margarine, flour paste, buttercream, cheese, and fermented milk products	JQA / JQA-FC0047-2
Tokyo Kaneka Foods Manufacturing Corporation	Margarine, shortening, flour paste, buttercream, chocolate, and whipped cream	JQA / JQA-FC0047-3
Taiyo Yushi Corporation	Margarine, shortening, edible refined oils and fats, edible vegetable oils and fats, refined lard, other edible oils and fats, processed fats, and dairy products (butter)	JQA / JQA-FC0044
Nagashima Shokuhin Co., Ltd.	Frozen dough (pies and confectionery)	JQA/JQA-FC109

Note 3: FSSC22000 is a sector for food safety management system, which based on the ISO 22000 with the addition of ISO/TS 22002-1 requirements.

■ **ISO 22716 Certification of Group Companies (see note 4)**

Group Company	Main Products	Registry Organization and Number
Taiyo Yushi Corporation	Shampoos, conditioners, body soaps, and hand creams	BVJ / 3209543

Note 4: ISO 22716 is guidelines on the Good Manufacturing Practices (GMP) of cosmetic products.



With Our Business Partners

Kaneka's business partners are vendors that supply our raw materials and contractors that conduct out-sourced activities.

We consider them as equal partners that share with us the goal of growing our respective businesses.

We build mutually beneficial relationships with vendors, ensuring that transactions are faire and that we offer equal opportunities to do business.

 [Sustainable Procurement](#)



Sustainable Procurement

We draw on our Basic Procurement Policy to engage in rational procurement that is fair, equitable, and environmentally friendly to mutually improve corporate value with our business partners.

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Green Procurement Based on Basic Procurement Policy

K J W

To reduce burdens on global environment, we adopted our Basic Procurement Policy, which declared our goal to pursue green procurement; this served as the foundation of our Green Procurement Standards established.

In pursuit of green procurement for all raw material inputs, we periodically undertake surveys on the status of environmental management system certifications attained by our suppliers, as well as inspections of materials for the presence of any prohibited substances.

■ Basic Procurement Policy

1. We will engage in procurement activities that enhance the corporate value of both Kaneka and our business partners.
2. We will endeavor to reduce environmental damage by engaging in green procurement.
3. We will provide opportunities for business partners to make fair and rational transactions in consideration of quality, price, supply stability, technical development capabilities, environmental protection, and safety.
4. We will abide strictly by the relevant Japanese and foreign laws and regulations.

Procurement Initiatives

K J W

Our procurement departments stay in close communication with our business partners, continually working with them to strengthen our partnerships.

Together with our business partners, we keep our eye on continually changing market conditions to create new value and to grow together.

In accordance with our Green Procurement Standards, we strive to keep up-to-date concerning the environmental activities undertaken by our business partners, and are exploring ways to make effective use of our website to share information about Kaneka's initiatives and perspectives to further promote green procurement efforts.

Initiatives to Prevent Transportation Disasters

K J W

For fiscal 2016, jointly with our transportation contractors, we carried out a year-long awareness-raising initiative to promote safe driving. It included patrols to check whether drivers carried the Yellow Card (see note 1), and programs to raise safety awareness on the premises through safety behavior checks at the time of in-plant loading work. In addition, we monitored the status of legal compliance checks of mobile tanks, and held transport accident emergency reporting drills based on specific scenarios. A simulated training on emergency handling of poisonous materials was held at the Takasago Plant. All these activities have contributed to making staff members confident with the actions to be taken in the event of accidents, and on quick reporting to prevent worsened emergency situations.

Note 1: The emergency response card on transportation of hazardous materials.



Joint drills held with business partners are filled with a sense of urgency (Takasago Plant)



On-site training using protective suits (Takasago Plant)

Check & Act

In fiscal 2016, Kaneka Group will carry out methodical investigations based on the Green Procurement Standards set in fiscal 2013 and in keeping with plans formulated in fiscal 2015, which require inspection of all existing raw materials, in the order of priority, to ensure they do not contain substances that have been prohibited by the company.



With our Shareholders and Investors

Shareholders and investors recognize the value of our corporate brand and own our shares.

For them we not only provide stable and consistent returns, but also enhance management transparency through appropriate and timely information disclosure.



[Dividend Policy and Information Disclosure](#)

Dividend Policy and Information Disclosure

Kaneka Group strives not only to provide stable and consistent returns to shareholders and investors, but also to disclose information in an appropriate and timely way, in order to maintain their trust, meet their expectations, and help them accurately understand the Group.

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W WORLDWIDE

Shareholder Composition and Dividend Policy

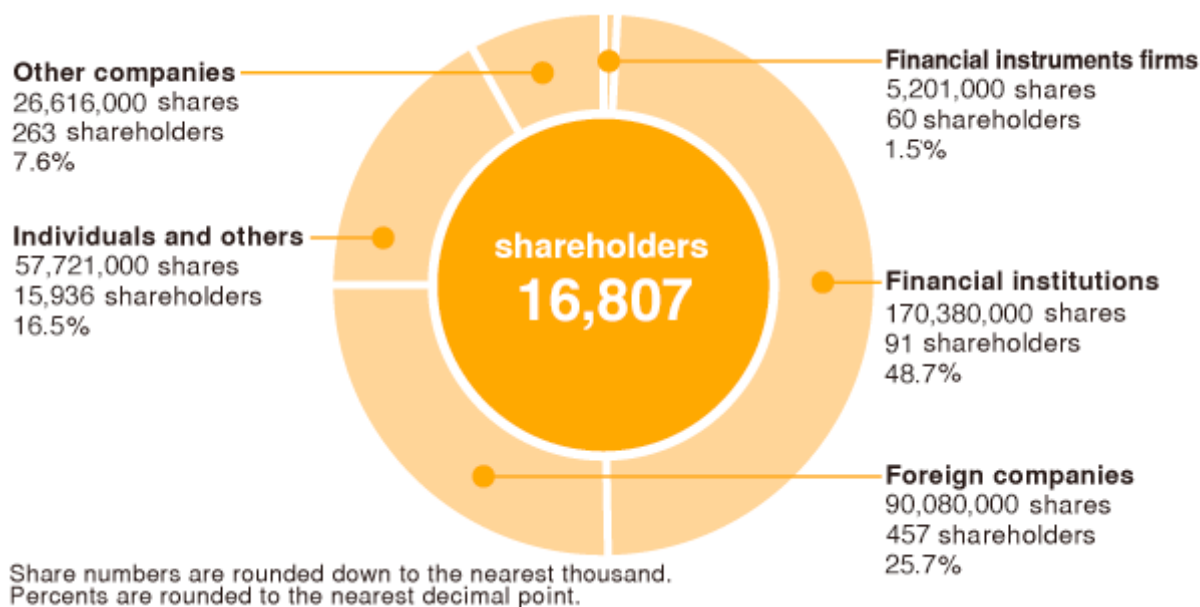
K J W

As of March 31, 2017, there were 350 million shares issued and outstanding, and 16,807 shareholders. Financial institutions accounted for 48.7% of the total, foreign companies 25.7%, and individuals 16.5%, while other companies and financial instruments business operators constituted the remainder.

Our basic policy on profit sharing for shareholders is stability and consistency, with a target of 30% for the consolidated payout ratio through dividends, combined with flexible repurchasing of company shares. (The payout ratio for the year ended March 31, 2017 was 29.2 %.)

Regarding retained earnings, we work to make the best use of these funds in order to realize sustained growth for the company, while also ensuring financial stability in the face of highly changeable economic conditions.

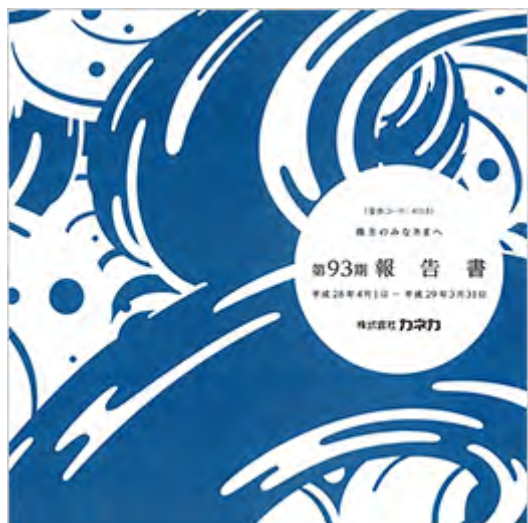
■ Shareholder Composition



Shareholder Reporting

K J W

We issue reports to shareholders twice per year and also publish them on our website for anyone to read. For topics the reports cover developments of the preceding period using photos and a readable format, and interim reports carry the president's explanation of the company's management strategy, as well as special articles of interest to shareholders. We fully redesigned the report cover in 2010 and adopted a larger page format in 2013, all in an effort to improve the look. We also print our publications using environmentally friendly vegetable ink and use easy-to-read Universal Design fonts.



Reports (for Shareholders)

Information Disclosure and Investor Relations

K J W

Kaneka prepares management strategy and plans based on its management philosophy, and in order to maintain the understanding and support of shareholders and other stakeholders, works to provide appropriate and timely information and enhance management transparency.

We conduct briefings after announcing annual and quarterly results, with the president or director in charge providing explanations.

Our website also carries a variety of reports, including financial briefs, securities reports, quarterly reports, annual reports, and financial summaries.



Annual Report 2016



An investor relations meeting

Check & Act

In fiscal 2017, we will continue to build on our fiscal 2016 efforts to ensure proper information disclosure to shareholders and investors.



With Local Communities

We can boost corporate value by fulfilling our responsibilities to citizens and consumers.

Our efforts extend from contributions to society and welfare and community engagement to ensuring that our plants operate safely. We are also proactive in other activities to meet the needs of society, such as fostering youth development, and promoting safety and disaster preparedness.

[▶ Preparedness for Regional Disasters and Support for Reconstruction](#)

[▶ Fostering Youth Development](#)

[▶ Examples of Our Efforts \(Visiting Science Class Program\)](#)

[▶ Safety and Disaster Preparedness](#)

[▶ Community Initiatives \(Awards\)](#)

[▶ Community Initiatives \(Youth Development\)](#)

[▶ Community Initiatives \(Local Communities\)](#)

[▶ Community Initiatives \(The Environment\)](#)

[▶ Community Initiatives \(Global Community\)](#)

[▶ Community Initiatives \(Others\)](#)



Preparedness for Regional Disasters and Support for Reconstruction

Based on experience from the 2011 earthquake and tsunami in Japan, Kaneka Group routinely conducts drills and educational activities to ensure that our companies are robust and resilient in the event of a disaster. We also provide support for reconstruction after earthquakes and other disasters, and will continue a variety of support activities in the future.

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Enhancing Crisis Management Systems

K J W

In fiscal 2016, five significant earthquakes occurred in Japan, including those in Kumamoto and Tottori. The final response rate of the safety confirmation system in these disasters was 92% on average, targeting Kaneka employees in all offices in Japan. This system has been almost entirely recognized at Kaneka, and we will introduce it to Group companies in Japan from fiscal 2017.

We also held training sessions and chief leadership meetings in Kaneka offices for managers and seminars for the presidents of Group companies in Japan, in order to help them have a better understanding of emergency response procedures as well as to enhance their awareness of crisis management. We also provided employees with the Risk Management Handbook, containing intelligible graphs of emergency initial response rules. This handbook helps them clearly understand the emergency procedures: proper incident notification, instructions, consultation, and response, as well as the smooth flow of information.

Reconstruction Support for the Great East Japan Earthquake and the Kumamoto Earthquake

K J W

Kaneka Group has been providing relief and recovery support during the six years since the Great East Japan Earthquake. We will continue to provide a variety of reconstruction support activities in the future.

Support for People Affected by the Kumamoto Earthquake

For the Kumamoto earthquake that occurred on April 14, 2016, Kaneka made a donation of 10 million yen through JPF, a specialized NPO, as relief money for affected people and reconstruction. In addition, a donation of three million yen was made by Cemedine Co. Ltd., our Group company, and 640,000 yen by the Kaneka Labor Union through the Japanese Red Cross Society.

In response to requests from the afflicted areas, we sent them relief supplies, including Kanelite Foam, an insulation material.

Participation in the Ippo Ippo Nippon Project for Tohoku and Kumamoto

We donated 500,000 yen annually to the disaster reconstruction support activities of the Japan Association of Corporate Executives (Keizai Doyukai). We installed learning equipment at vocational high schools in the coastal areas of the Tohoku region from 2013 to 2016.

Similar to support activities for Tohoku, this project is intended to rebuild the environment where practical special education is provided to vocational high school students in Kumamoto who want to work in the industrial field. We agree with this project concept and made a donation of 200,000 yen in total for a term between September 2016 and July 2017.

Reconstruction Assistance for Main Roads in Disaster-Affected Areas

For road reconstruction in disaster-affected areas, we provided Soil Blocks, a large polystyrene foams designed for civil engineering work.

Reconstruction of Only Manufacturing Plant for Molded Polystyrene Foam Products in Kesennuma City, Miyagi Prefecture

Group company Kanae Co., Ltd. manufactured molded polystyrene foam products for storing and transporting fish, but operations were halted when the tsunami swept over the plant. We invested 600 million yen (including government subsidies) to rebuild the plant, which reopened in June 2013. It is contributing to local employment and the recovery of the fisheries industry.

Tohoku-Kumamoto Products Fair at Takasago and Osaka Plants

We organized the Tohoku-Kumamoto Products Fairs, dubbed the Waku-Waku Market, at the Takasago Plant on April 22, 2016, as well as at the Osaka Plant on June 30 and July 1, 2016, and February 22-23, 2017. These events were implemented as part of the support activities of the Kansai Economic Federation, of which Kaneka is a member. The concept of the fair was to provide access for people to purchase special products only available in Tohoku and Kumamoto. The goal was to help Tohoku and Kumamoto businesses develop marketing channels and improve their employment situation, and thereby to provide assistance from the Kansai region to the disaster-affected areas. On market days, employees from our group companies Kaneka Takasago Service Center Co., Ltd. and Kaneka Osaka Service Center Co., Ltd. worked with market staff to sell products, including sake, side dishes to go with rice, and sweets, from six Tohoku prefectures and Kumamoto.

Many employees from the Group and partner companies came to the market, resulting in sales of 450,000 yen at the Takasago Plant and 750,000 yen at the Osaka Plant.



Tohoku-Kumamoto collaborative goods sold at the Osaka Plant



Many visitors purchasing various goods at the Takasago Plant

Fostering Youth Development

Kaneka is active in its efforts to foster youth development in communities where it operates.

We continued to support learning in elementary schools through the activities of Core-Net, a non-profit organization of retired executives from Kaneka and other companies, while also participating in the Children's Chemistry Show hosted by the Dream Chemistry 21 Committee.

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Kaneka Manufacturing Class

K J W

Pro bono activities have been in the spotlight as a new trend in Japan, and these include activities in which professionals from various fields volunteer their knowledge, experience, and skills as a contribution to the community, and Core-Net is one such organization. Its activities include support for elementary school education using know-how from industry to foster youth development.

Continuing from 2014, we offered Kaneka Manufacturing Classes in which participants assembled kits to build Scrollers II (a small self-powered rolling robot). The classes were offered in June 2016 at Torikai Nishi Elementary School, near the Osaka Plant, to 106 students in sixth grade; in October at Takasago Elementary School, near the Takasago Plant, to 58 students in sixth grade; and in December at Shimosakamoto Elementary School, near the Shiga Plant, to 117 students in sixth grade. Students were very excited about the trial runs in the gymnasiums.

Kaneka employees, mainly newly hired at these plants, joined the classes to guide and assist the students, and to show them the enjoyment and sense of achievement that can come from creating something. In their questionnaire responses, more than 90% of the students said the class was interesting and they would like to do it again. We will continue our efforts to contribute to the community by fostering youth development.



Kaneka employees instructing students



Unveiling the Scroller II in the gym

The Children's Chemistry Show for Youth Development

K J W

The Children's Chemistry Show, a Chemistry Day event for experimenting with chemistry, was held at the Kyocera Dome in Osaka on October 22 and 23, 2016, and was sponsored by the Dream Chemistry 21 Committee. Chemistry Week celebrations are held annually during the week of October 23, the date of Chemistry Day, which commemorates the Avogadro constant (see note 1). This was the fourth show held in the Kansai region, following the first held in Kobe in January 2014.

Around 7,300 people attended the two-day event, with approximately 330 children visiting Kaneka's booth for eraser making. The children were given 25 minutes each to experiment with creating their "one and only eraser in the world" in three different colors. Drawing on the assistance from the staff, the children and their parents were absorbed in making their very own eraser.

We will continue to show children the power of science through the wonders of chemistry. We look forward to continuing our support for educating the next generation at the next Children's Chemistry Show to be held in Kansai in fiscal 2017.

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.



Children make their "one and only eraser in the world," listening closely to the explanation of the staff



Letting children experience the "wonders of science"



Examples of Our Efforts (Visiting Science Class Program)

For development of the next generations

Kashima Plant Providing Visiting Science Class Program for Local Elementary Schools



Elementary students feeling the texture of styrene foam they made

Since fiscal 2016, the Kashima Plant has provided a visiting science class program for local elementary schools. They developed a special curriculum featuring polystyrene foam, which is a popular plastic material around children. The participating fifth graders listened avidly to the explanation that plastic is something made from fibers, just like a thread ball. They were excited about the experiment in creating polystyrene foam from beads using a steamer. This program also offered a buffering experiment using eggs, an insulation experiment using hot water, and other science experiments that can be provided only by a chemical manufacturer.

There were many favorable comments from students, such as "I came to like science" and "I learned that many things around us are made from plastics." This program encourages employees to have a deeper responsibility for the community, making the plant more open to local residents. The Kashima Plant strives to cultivate lecturers and develop new curricula for sustainable social contributions.



Buffering experiment where an egg is dropped onto styrene foam from a height of three meters



"I was happy to hear that many children came to like science," says a visiting class lecturer, Keiko Osaki from General Affairs Team.



Safety and Disaster Preparedness

Our plants operate in a close relationship with local communities.

Kaneka Group works to ensure that its plants earn the confidence of local communities through a variety of safety-related initiatives aimed at maximizing safety and security.

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Targeting Zero Process Accidents

K J W

Safety is a top management priority for the Kaneka Group, and we have various initiatives aimed at completely eliminating process accidents. Despite our efforts, 20 process accidents occurred in fiscal 2016. In particular, there were a large number of accidents at the plants of Group companies outside Japan; therefore, the entire Kaneka Group is working on improving the level of safety techniques, including on-site safety inspections and instructions. We will continue these activities to promote safe and secure business operations.

■ Basic Safety Policies

- | |
|---|
| ◇ Safety forms our management foundation, and is the basis of all corporate activities. |
| ◇ Safety is the foundation of local and worldwide communities' confidence in Kaneka. |
| ◇ Safety is based on our belief that "All accidents can be prevented." |
| ◇ Safety is the responsibility of every employee in accordance with his/her duties. |
| ◇ Safety must be maintained continuously. |

Emergency Drills

K J W

In fiscal 2016, as in previous years, we held comprehensive disaster drills at all parent plants, as shown in the table below. Based on a scenario postulating a large-scale earthquake, fire due to leaked dangerous substances, and other disasters, we carry out disaster drills to enhance emergency response capacity, including joint emergency training with local fire departments.

■ Comprehensive Disaster Drills

Plant	Date	Participants	Details
Takasago Plant	December 7, 2016	2,356	The plant held a joint firefighting drill with the Takasago City Fire Department based on the scenario of an earthquake resulting in a harmful gas leak, and a fire outbreak due to aftershocks.
Osaka Plant	February 24, 2017	996	The plant held a joint emergency and evacuation drill with the Settsu City Fire Department and the city office based on the scenario of an earthquake resulting in a harmful gas leak.
Shiga Plant	November 22, 2016	395	The plant held a firefighting and evacuation drill based on the scenario of an earthquake resulting in a building on fire.
Kashima Plant	November 21, 2016	240	The plant held firefighting training based on the scenario of fire outbreak at the time of pumping hazardous substances into a storage tank.



Emergency drill at the Shiga Plant

Plant Safety Initiatives

K J W

To prevent explosions and fire accidents, we will continue to implement efforts to reduce the risk of accidents by hearing the opinions of experts to establish control standards for high-boiling-point substances and also determine the safety of tank conversion for construction of plants outside Japan. We will continue to improve these safety techniques to ensure the safety of our plants.

Check & Act

20 process accidents occurred in fiscal 2016, showing an increase from the 14 in fiscal 2015. Many of the accidents occurred in a non-steady state at Group companies outside Japan; thus, we will provide on-site instructions and improve the safety management level.

Fire at Foam Extrusion Equipment at the Osaka Plant

Incident Outline

At about 3 p.m. on July 1, 2016, a foam material caught fire when extruded polystyrene foam boards were being produced at the Osaka Plant in Settsu, Osaka, and we notified the public fire department. Employees promptly extinguished the fire using extinguishers, resulting in no casualties or property damage being caused. We apologize to local residents and anyone affected by the disturbance.

Cause of Accident

It is thought that when the extruded polystyrene foam boards were removed from the production line and built up at the time of switching product types, static electricity was generated, which ignited flammable gas.

Safety Measures to Prevent a Recurrence

The mechanism of ignition was clarified in our laboratory. We will strive to prevent reoccurrence by strengthening antistatic measures from equipment and management perspectives and taking these measures at other plants.



Community Initiatives (Awards)

Kaneka Group engages in highly open and transparent corporate activities to build strong ties with communities and deepen stakeholder understanding of its operations as a good corporate citizen.

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Awards

K J W

Kaneka Takasago Service Center Co., Ltd.

Received the Excellent Safety and Health Best Workplace from the Kakogawa Labor Standards Association.



Tokyo Kaneka Foods Manufacturing Corporation

Received the Encouragement Award of the Director of the Saitama Labor Bureau as the Saitama Safety and Health Commendation.



Kaneka Medix Corporation

- Received the Encouragement Award of the Director of the Kanagawa Labor Bureau as the Kanagawa Safety and Health Commendation.
- Received proof of confirmation from the Japan Chemical Industry Association for our workplace with 100-249 employees and no accidents for more than five years.

Kaneka (Malaysia) Sdn. Bhd.

- Received the first Excellence Award for a Human Resources Development Program in the Employer Category at the Human Resources Development Gala Dinner 2016, 5th in the Major Company Employer Category (Manufacturing Industry) of the national level Minister's Award.
- Received Private Sector High Performance Award for the License Manufacturing Warehouse (LMW) Category the Pahang state-level.



Takasago Plant	<ul style="list-style-type: none"> Received a letter of appreciation from the Takasago City Social Welfare Council for our donation of the revenue of the summer festival.
Kaneka Sun Spice Corporation	<ul style="list-style-type: none"> Commended for our long-term contribution to environmental beautification under the environmental beautification partnership with Yuki City.
HiHua Fiber Co., Ltd.	<ul style="list-style-type: none"> Received a certificate of Qingdao City A-Class Taxpaying Individual or Company. Received a certificate of the Labor Security, Legal Compliance, and Diligence Model Company from the Qingdao City Human Resources Bureau and the Social Security Bureau. Received a certificate of Safe Production A-Class Company (First Class) from the Safety Supervision Bureau of the Qingdao City Development Area. Received an Authorized Economic Operator (AEO) Certificate from the Qingdao City Customs Bureau.
Kaneka Eurogentec S.A., AnaSpec, Inc.	<ul style="list-style-type: none"> Received a certificate of commendation from the local community for our remarkable exporting business.



Community Initiatives (Fostering Youth Development)

Kaneka Group engages in highly open and transparent corporate activities to build strong ties with communities and deepen stakeholder understanding of its operations as a good corporate citizen.

K KANEKA
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Fostering Youth Development

K J W

All parent plants, group companies in Japan and overseas

Conducted regular plant and facility visits, on-site job experience programs, extracurricular classes, outreach lectures, seminars and other events for neighborhood students, local community associations and other groups. Also welcomed student interns and participated in Hyogo Prefecture's work experience programs for junior high school students.



Plant visit by local high school students (Kashima Plant)



Hyogo Prefecture's work experience programs (Kaneka Foods Manufacturing Corporation)



Internship (Kaneka Sun Spice Corporation)

Takasago Plant, Kaneka Takasago Service Center Co., Ltd.

- Held an eraser-making event at the Children's Chemistry Show in Osaka by the Dream Chemistry 21 Committee. Around 330 children visited the Kaneka booth over two days. Also invited 10 children from local elementary schools and held an eraser-making event.
- Conducted a plant visit and cake-making for 60 third-graders in the neighborhood.
- Held a series of events, from planting sweet potatoes in May to a harvesting festival, for children from neighborhood kindergartens, elementary schools, and special needs groups of people with disabilities.



Harvesting potatoes with kindergarten children

Takasago Plant, Osaka Plant, Shiga Plant

Held the Kaneka Manufacturing Class with NPO Core-Net to teach elementary school children how to make things.



Kaneka Manufacturing Class (Osaka Plant)

Shiga Plant

For the Walnut School (a local multi-stakeholder initiative), conducted for elementary school children in the biotope neighboring the plant, programs such as nature observation trips and wild-herb tempura food tasting.



Food tasting

Hokkaido Kanelite Co., Ltd.

Held an environmental class for local fourth-graders, on the topic of global warming, for the eighth time in fiscal 2016.



Environmental class

Tokyo Kaneka Foods Manufacturing Corporation, Kaneka Hokkaido Styrol Co., Ltd., Tamai Kasei Co., Ltd., Kaneka Foam Plastics Co., Ltd. Shinka Shokuhin Co., Ltd., Nagashima Shokuhin Co., Ltd., Osaka Synthetic Chemical Laboratories, Inc., Kaneka Eurogentec S.A., AnaSpec, Inc., Kaneka Americas Holding, Inc., Kaneka North America LLC

Accepted students from neighborhood schools, including a special needs school, for vocational training. Showed students around the facilities, involved them in packing and lining boxes, explained recycled products, made company presentations at events of the local manufacturing business, and conducted facility tours.



On-the-job training (Tamai Kasei Co., Ltd.)



On-the-job training (Nagashima Shokuhin Co., Ltd.)

Kaneka Belgium N.V.

Provided support for Musilene, a local youth symphony orchestra composed of young members, to offer opportunities for music and arts education.

Kaneka (Malaysia) Sdn. Bhd.

Accepted and explained the business outline to 25 prospective doctors from the medical school of the International Islamic University Malaysia (IIUM).



Provided support for Musilene, a local symphony



Accepted medical students

HiHua Fiber Co., Ltd.

Invited employees and their family members to the beach sports festival and the New Year's party to celebrate the 13th anniversary of the foundation and provided an opportunity where they gave performances, such as playing the Yangqin dulcimer and performing martial arts.



Employees and their family members performing a martial art

Kaneka Americas Holding, Inc., Kaneka North America LLC	<ul style="list-style-type: none"> • Provided research grants to local graduate students and faculty members.
Kaneka North America LLC	<ul style="list-style-type: none"> • Made a donation of 4,000 dollars to high school scholarships in fiscal 2016 by the Kaneka Foundation, an organization that plans and carries out social contribution activities.
Kaneka Eurogentec S.A., AnaSpec, Inc.	<ul style="list-style-type: none"> • Human resources managers and site managers joined networking events with local universities for career counseling.



Community Initiatives (Local Communities)

Kaneka Group engages in highly open and transparent corporate activities to build strong ties with communities and deepen stakeholder understanding of its operations as a good corporate citizen.

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Local Communities

K J W

Kaneka, Kaneka Hoken Center Co., Ltd., Kaneka Foods Corporation, Hokkaido Kanelite Co., Ltd

- Became a special sponsor of and provided contributions to the 2016 Hokkaido Marathon.
- Distributed 10,000 pieces of Brioche and steamed cheese breads for free at the Kaneka booth in the 2016 Hokkaido Marathon Expo.



Cheering at the Hokkaido Marathon (Hokkaido Kanelite Co., Ltd.)

All parent plants, Kaneka Sun Spice Corporation, Kaneka Tohoku Styrol Co., Ltd., Kaneka Hokkaido Styrol Co., Ltd., Tatsuta Chemical Co., Ltd., Kaneka Takasago Service Center Co., Ltd., Kaneka Osaka Service Center Co., Ltd., Kaneka Hoken Center Co., Ltd., Shiga Denshi Co., Ltd., River Seiko Corporation, Tochigi Kaneka Corporation, Kaneka Medix Corporation, Tokyo Kaneka Foods Manufacturing Corporation, Shinka Shokuhin Co., Ltd., Kaneka Solartech Corporation, Kaneka Foods Manufacturing Corporation, Sanvic Inc.

Held summer festivals and other events for neighborhood residents, employees, and employees of partner companies. Also provided donations for various local events, exhibited to industrial fairs, and offered polystyrene foam materials and other items



Kaneka Summer Festival (Takasago Plant)



Interacted with community residents at a local festival (Tokyo Kaneka Foods Manufacturing Corporation)



Tatsuta Chemical Summer Festival



Participated in a local industrial fair (Kaneka Solartech Corporation)

Takasago Plant, Kaneka Foods Manufacturing Corporation, Kaneka Takasago Service Center Co., Ltd., Tatsuta Chemical Co., Ltd., Kaneka Solartech Corporation, Kaneka Medix Corporation, Kaneka Foam Plastics Co., Ltd., Tochigi Kaneka Corporation, Kyushu Kanelite Co., Ltd., Hokkaido Kanelite Co., Ltd., Kaneka Eurogentec S.A., AnaSpec, Inc., HiHua Fiber Co., Ltd.

Participated and cooperated in sports events sponsored by neighborhood companies, industrial park associations and others that include marathon relay races, soft volleyball games, ground golf, bowling, jogging, walking, futsal, soccer, marathon, and softball, as well as in environmental festivals, etc. Also raised funds as part of various activities.



Participated in the Takasago Hamakaze Marathon Relay Race (Takasago Plant)



Played in a friendship volleyball competition held by the industrial park (Kaneka Solartech Corporation)



Joined a bowling competition hosted by the local government (Kyushu Kanelite Co., Ltd.)

Takasago Plant, Osaka Plant, Shiga Plant, Kaneka Hokkaido Styrol Co., Ltd., Kaneka Medix Corporation, Shinka Shokuhin Co., Ltd., Kaneka Solartech Corporation, Tochigi Kaneka Corporation, Hokkaido Kanelite Co., Ltd., Sanvic Inc., Osaka Synthetic Chemical Laboratories, Inc.

Actively participated in traffic safety activities, safety week district promotion events, New Year firefighters parades, local safety public meetings, safe driving campaigns, and other safety activities. Also carried out disaster prevention training jointly with fire departments and accepted inspections by Labor Standards Inspection Offices, local police departments, and community residents.



Participated in the Ako Public Meeting on Ant-violation and Local Safety (Osaka Synthetic Chemical Laboratories, Inc.)



Disaster prevention training (Kaneka Solartech Corporation)

Shiga Plant

- Actively participated in opinion exchange sessions, including the Female Employees' Discussions, the 100 Meetings, and the Life Design Seminar hosted by Otsu City and its mayor.
- Participated in the Omi Kaneishi-Kai meeting held by the governor of Shiga Prefecture, to share opinions mainly on regional disaster prevention and cooperation, industry-university cooperation, future human resources development, and the social infrastructure of the operating environment.



Female Employees' Discussion

Tokyo Kaneka Foods Manufacturing Corporation

Gave a lecture at the seminar for community residents hosted by the Town Development Network Education and Culture Group, with the theme of "Food security from the perspective of processed oil and fat food products."



Food security seminar for community residents

Kaneka Takasago Service Center Co., Ltd., Kaneka Osaka Service Center Co.,

- Held the Tohoku-Kumamoto Product Fair and sold products, including sake, side dishes to go with rice, and sweets, from six Tohoku prefectures and Kumamoto.
- People with disabilities cultivated winter and spring vegetables at open areas in the company residence and distributed them to community people. Also donated funds collected through local vegetables and fruits to a charity center.



Tohoku-Kumamoto Product Fair (Osaka Plant)

Kaneka (Malaysia) Sdn. Bhd.

Participated in Local Agenda 21 in Kuantan, conducted visits to the 2016 program focusing on preventing dengue fever in Kuantan and to the program of clean up activities and awareness-raising, and made comments on these programs.



Local Agenda 21

Kaneka Belgium N.V.

- Worked together with the federal government, organizations, and local governments to raise funds for disabled people through the G Sports Flanders Fund-Raising Campaign.
- Provided support for building a "healing garden" through the Memory Sensory Garden Project for elderly residence.



Community Initiatives (The Environment)

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Environmental Initiatives

K J W

Takasago Plant, Osaka Plant, Shiga Plant

As part of efforts to preserve biodiversity, employees and their family members trimmed trees, cut underbrush, and performed other maintenance work for the Kaneka Forestry for the Future in Takasago, Settsu-no-mori Kaneka Biotope in Osaka, and Konooka Biotope Preservation in Shiga.



Kaneka Forestry for the Future (Takasago Plant)



Walnut School (Shiga Plant)



Firefly Viewing at Settsu-no-mori Kaneka Biotope (Osaka Plant)

All parent plants, group companies in Japan and overseas

Each plant, individually and in collaboration with local governments and chambers of commerce, cleaned up main roads around business sites and company dorms, industrial complexes, reed mowing areas, rivers, and seas.



Year-end local cleanup activity (Kaneka Sun Spice Corporation)



Joint cleanup activity with neighborhood associations (Kaneka Hokkaido Styrol Co., Ltd.)



Participated in a cleanup campaign held by a local industrial association (Kaneka Foods Manufacturing Corporation)

Kaneka Americas Holding, Inc., Kaneka North America LLC

- Made a donation of 7,000 dollars through the Kaneka Foundation to the recovery of biodiverse swamps in Jamaica Bay.
- Installed nest boxes for purple martins, which eliminate mosquitoes.



Nest boxes for purple martins installed on the premises (Kaneka North America LLC)

<p>Kaneka Foods Manufacturing Corporation, Kaneka Sun Spice Corporation, Kaneka Tohoku Styrol Co., Ltd., Kaneka Hokkaido Styrol Co., Ltd., Tamai Kasei Co., Ltd., Tokyo Kaneka Foods Manufacturing Corporation, Hokkaido Kanelite Co., Ltd., Kaneka Takasago Service Center Co., Ltd., Kaneka Medix Corporation, Shiga Denshi Co., Ltd., Nagashima Shokuhin Co., Ltd., Kaneka Solartech Corporation, Osaka Synthetic Chemical Laboratories, Inc., Tochigi Kaneka Corporation</p>	<ul style="list-style-type: none"> • Regularly picked up trash around the industrial parks and plants, collected empty cans, mowed grass, and performed other cleanup, greening, and recycling activities. Actively engaged in volunteer activities, including cleanups of neighborhood roads and rivers.
<p>Kaneka Takasago Service Center Co., Ltd.</p>	<ul style="list-style-type: none"> • Carried out the Hana Ippai (flower planting) Campaign using planters in green spaces.
<p>Kaneka Eurogentec S.A., AnaSpec, Inc.</p>	<ul style="list-style-type: none"> • Participated in an environment activity in Seraing and an environment program in the Bay Area, California.



Community Initiatives (Global Community)

Kaneka Group engages in highly open and transparent corporate activities to build strong ties with communities and deepen stakeholder understanding of its operations as a good corporate citizen.

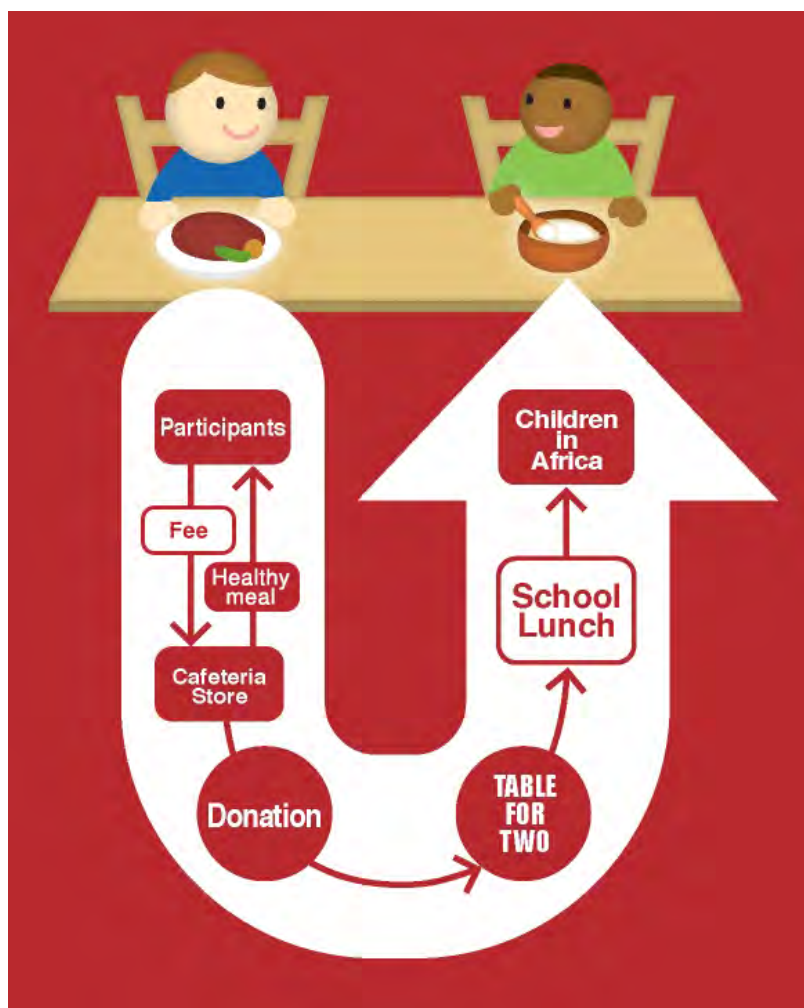
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International Contributions

K J W

Takasago Plant, Osaka Plant, Shiga Plant, Tokyo Head Office

Continuously participated in Table for Two (TFT) by donating ¥20 for every TFT lunch bought at four company cafeterias to school lunch for children in Africa. (ongoing)



Ongoing Support for the WFP School Meal Program

As a corporate partner, Kaneka has provided support to the World Food Programme (WFP) since 2013. We donated part of our African sales of the synthetic fiber product, Kanekalon, to the WFP school meal program. We have offered lunches to elementary school children and also provided rice and vegetable oil to girls whose families lack food in areas where the dropout rates of elementary school girls are high. And we continue the corporate sponsor for the 2016 WFP Essay Contest. In May 2016, the Japan Association for the UN WFP held a charity event, "Walk the World," for the first time in the Kansai region. Kaneka and Kaneka Sunspice sponsored the Osaka venue, where 1,263 participants, including elementary students, learned about the activities and the importance of the WFP.



Certificate of Partnership for the WFP Corporate Programme



Entrance to the venue

Community Initiatives (Others)

Kaneka Group engages in highly open and transparent corporate activities to build strong ties with communities and deepen stakeholder understanding of its operations as a good corporate citizen.

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Other Initiatives

K J W

Cosponsoring the Japan Century Symphony Orchestra

As part of our CSR activities, we have cosponsored the Japan Century Symphony Orchestra as a corporate supporter since October 2016.

In addition to regular concerts, the orchestra focuses on community-based social contributions, such as "hospital concerts" to cheer up the elderly and patients through music, and "Touch the Orchestra," which encourages children in the next generation to become more familiar with music. We will provide support mainly for such community-based social contributions.



"Touch the Orchestra" encouraging children to become more familiar with music



Many children participating in the program

Kaneka Takasago Service Center Co., Ltd.

- Provided 80 kg of acorns for deer through the Foundation for the Protection of Deer in Nara.
- Made a year-end donation to welfare facilities, including for people with disabilities.



Donated acorns for deer in the Nara Park

Osaka Plant, Nagashima Shokuhin Co., Ltd., Kaneka Medix Corporation, Tatsuta Chemical Co., Ltd., Kaneka Solartech Corporation, Kaneka Foods Corporation

Made a memorial donation to the city, made contributions to municipal events (the Lantern Festival, the Grand Festival, etc.), and provided our products and welfare panels to various organizations.



Donated to a local lantern festival (Nagashima Shokuhin Co., Ltd.)



Provided our products to a local industrial fair (Tatsuta Chemical Co., Ltd.)

Biomaster, Inc., HiHua Fiber Co., Ltd.

- Donated to the Smile Fund for Breast Cancer of the Japan Cancer Society, and made presentations on CAL breast reconstruction at academic meetings.
- Invited a doctor from a local hospital and had employees become familiar with first-aid procedures.



Dr. Tsuji gave a lecture on the latest breast cancer treatments at the Smile Seminar (Biomaster, Inc.)



Employee training in first-aid procedures with a doctor from a local hospital (HiHua Fiber Co., Ltd.)

Kaneka Americas Holding, Inc., Kaneka North America LLC

- Participated in a walking event to raise funds for the Heart Walk and provided support for the hearing for medical research and education; raised 28,000 dollars in total.
- The Kaneka Foundation raised 27,000 dollars in total for local and domestic charity groups.
- Participated in a community meeting in the same industry and citizens in the Bay Area. Had dialogues with local residents on environmental conservation, traffic safety, security, etc.



Community meeting

Kaneka (Malaysia) Sdn. Bhd.

Donated IT equipment units (CPUs, computers, printers, laptops, etc.) to eligible staff members and even to schools under CSR activities.



Members working for fundraising

Kaneka Singapore Co. (Pte) Ltd.

Continued to visit elderly housing and interact with the residents by playing communication games together with hospital volunteer guides.



Volunteer members

Kaneka, Cemedine Co., Ltd.	<ul style="list-style-type: none">Donated 10 million yen from Kaneka, 640,000 yen from the Kaneka Labor Union, and three million yen from Cemedine for the people affected by the Kumamoto earthquake. Also sent relief supplies, including 1,000 pieces of Kanelite Foam insulation material, as requested by the afflicted areas.
Shiga Plant, Kaneka Eurogentec S.A., AnaSpec, Inc.	<ul style="list-style-type: none">Conducted book donations as a supporting company for support groups for crime victims. Also visited facilities for disabled people to interact with them, carried out blood donation volunteer activities by employees, and made donations to food banks.
Kaneka Medix Corporation	<ul style="list-style-type: none">Sponsored a plastic bottle cap collection campaign to deliver vaccines to children around the world.
Osaka Synthetic Chemical Laboratories, Inc.	<ul style="list-style-type: none">Made donations to citizen's nights, Gishi-sai festival, international music festivals, and other events.



With Our Employees

Both employees and their families are our stakeholders.

Kaneka Group's most valuable asset is our employees—and it is their growth that makes our growth as a corporate group possible.

We offer employees appropriate treatment, remuneration, self-fulfillment, and safe working environments.

▶ [Basic Concepts for People and the Organization](#)

▶ [Respect for Human Rights](#)

▶ [Employee Development System](#)

▶ [Promoting Diversity & Inclusion](#)

▶ [Examples of Our Efforts
\(Active Promotion of Female Employees\)](#)

▶ [Work-Life Balance](#)

▶ [Occupational Safety and Health](#)

▶ [Examples of Our Efforts
\(The Safety Room\)](#)



Basic Concepts for People and the Organization

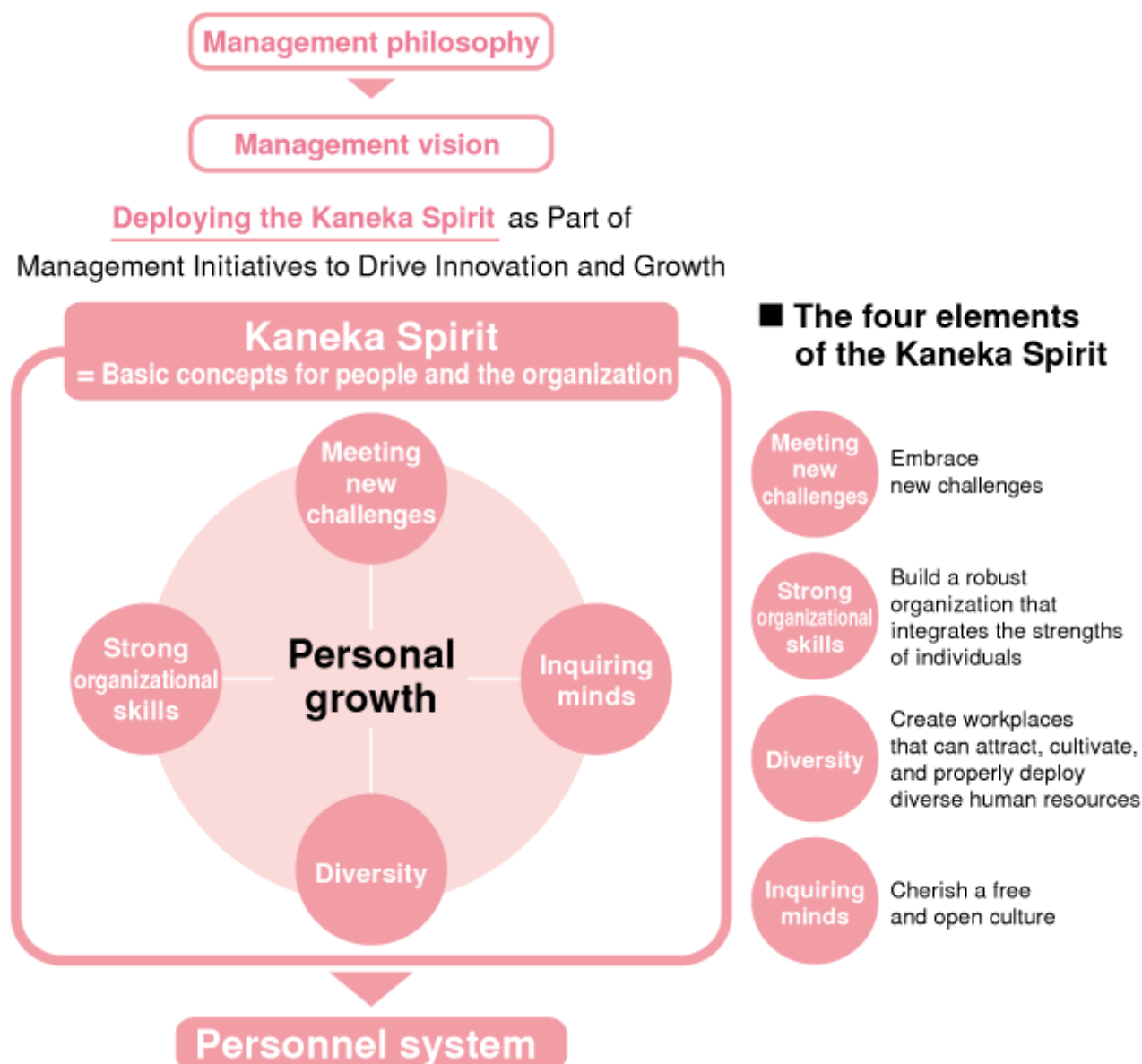
We work to achieve organizational change through fostering employee growth along with organizational growth.

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Basic Concepts for People and the Organization

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The basic concepts for people and the organization—based on our corporate philosophy and long-term vision—are also at the heart of our personnel system. This concept, the Kaneka Spirit, has derived from ongoing dialogues between labor and management and evolved through the infused human resources systems, through which we foster people eager to meet new challenges, as well as a strong organization, diverse human resources, and inquiring minds. In fiscal 2016, we revised the system of evaluating managers to accelerate the company reforms.



Check & Act

In fiscal 2017, we will further reduce working hours and revise the content of operations to promote the working-style reforms.

For promotion of diversity, we will also improve our work environment, where female and foreign employees can be more active.

Respect for Human Rights

Our company respects for human rights and acknowledges and appreciates the diversity of individual values. We do not act in a discriminatory manner toward any of our employees, while upholding all relevant laws and regulations.

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Human Rights Education

K J W

We have established respect for human rights as the most fundamental principle to be upheld by our employees and the company. We ensure that it is well understood through our Rules of Employment and Ethical Code of Conduct, as well as the trainings for new hires and newly promoted managers. This is also supplemented through participation in external trainings and conferences held by local governments.

■ Human Rights Education

Fiscal 2016	Content
Training sessions for new employees (148 participants)	Training concerning sexual harassment, power harassment, and discrimination based on nationality, and other issues.
New managers training (45 participants)	Human rights education session with external experts



New manager training session

Labor-Management Relations

K J W

In keeping with the labor and management joint targets, dynamic discussions are held through management conferences, central labor and management meetings, and meetings of representatives. Specialists committee of labor and management provides advice that is reflected in new policies concerning working arrangements or personnel systems. In fiscal 2016, a labor-management working group was established to discuss ideal welfare programs.

Labor and Management Joint Targets

Labor and management mutually seek to develop business and achieve rewarding lives for union members while contributing to social progress.



Labor-management working group

Employee Satisfaction Surveys

K J W

Surveys are held once a year for all employees to provide self-assessments regarding their career vision, and job and workplace satisfaction. In fiscal 2016, we conducted a new stress check in accordance with the Industrial Safety and Health Act.

Measures Against Sexual Harassment and Power Harassment

K J W

Aiming to maintain a work environment that is free from sexual harassment or power harassment, we take measures to ensure that all employees are aware of the Rules of Employment and the Compliance Guidebook; we also established consultation desks at each of our worksites and introduced an intranet-based reporting system. In fiscal 2016, we newly included maternity harassment measures in the Rules of Employment to deal with matters that may arise at an early stage.

Privacy Protection

K J W

To protect the privacy of our employees, customers and others, we have established a Personal Information Protection Policy in accordance with the relevant laws and regulations. We are also continually working to enhance levels of information security, through conducting trainings and various information security education sessions, making use of the Information Security Guidebook prepared by Business Process Reforms Department Information Systems Division.

Employee Development System

We develop our human resources to lead our company's long-term vision, the Declaration of Kaneka United, formulated in fiscal 2009.

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Commitment to People and Organizations

K J W

We will make efforts to develop human resources who support reforms at Kaneka Group through early career fostering of leaders, including global leaders; active use of job rotation for skills development; and enhanced recruitment. In fiscal 2016, we strengthened the measures to develop leaders and management personnel through the School of Leadership Challenge within and outside group sites. Furthermore, we were engaged in the active use of job rotation for skills development by enhancing cooperation between the personnel department and other functional divisions.

Career Development and Life Design

K J W

To cultivate professionals who embody the Kaneka Spirit, we carry out various off-site trainings, such as profession-specific programs and career development support programs. We also enhanced a self-development support program for employees to pursue capacity building at their own initiative based on their own selections. In fiscal 2016, we enhanced the basic skills of young members by significantly revising the induction training for new employees who graduated from colleges of technology and universities. We also improved voluntary training and expanded eligibility. Doing so successfully created a company environment where employees seeking self-improvement can enjoy diverse educational opportunities in a timely manner.

■ Implementation of Career Development and Life Design Support Activities (Fiscal 2016)

Program Name	Number of Sessions	Number Participating in Trainings
Career-design training	15	230
Life-design training	19	172
Nursing care seminars	5	69

Global Human Resource Development

K J W

In the Overseas Dispatch Training, the trainee system has been enhanced to allow young members to become familiar with overseas operations from an early stage. Employees who have worked for the company for two years or more are eligible to serve as voluntary trainees working at a Group company outside Japan. Not limited to advanced nations, the scope of personnel development has been expanded to India, Indonesia, and other emerging countries.

In the Global Employee Development Program (KG Program), in addition to the "show-of-hands" style language training, the company also provides an opportunity to learn languages for those who are assigned overseas by the business department and who are engaged in overseas operations, in order to improve their practical language and communication skills.

In fiscal 2016, we have newly started the Kaneka Creative Corner, a group training sessions where direct guidance from our top management, and Zen sitting practice are provided to prospective national staff leaders from group companies outside Japan to cultivate their potential as global leaders.

■ Global Human Resource Development Plan (Fiscal 2016)

Program Name		Content	Number of Participants
Language training in Japan	Global Employee Development Program	Practical acquisition of foreign language for communication	(registered participants) 2,021
	English and Chinese language trainings	Acquisition of languages required for overseas business	89
Overseas dispatch training	Overseas Trainee Dispatch Program	One-year work experience at a group company outside Japan	17
	Overseas language study program	Short-term study abroad and homestay experience	5
	Language training before overseas transfer	In-country language acquisition program before transfer	1
Group training	Kaneka Creative Career	Group training and Zen practice for prospective national staff leaders	(outside Japan) 10
	The Leadership Challenge Workshop	Acquiring and practicing leadership skills and follow-up	(outside Japan) 79 (in Japan) 195



Promoting Diversity & Inclusion

We at Kaneka seek out diverse human resources, and continually strive to build their capacity and provide an environment where they can capitalize on their strengths.

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Active Promotion of Female Employees

K J W

In fiscal 2016, we committed to the theme stipulated in the Action Plan of the Act on Promotion of Women's Participation and Advancement in the Workplace. We established the new time-based annual leave system and revised the telecommuting program in response to proposals from the participants in the first phase of the Women's Network System, where female employees address workplace-related issues.

In the second phase, all participants have created and accomplished a vision to enable female employees to be more active in Kaneka.

There were 16 voluntary participants in the training for fostering female leaders. The employment rate of female students who graduated from colleges of technology and universities in fiscal 2017 exceeded 30%. Our female members also gave career seminars at colleges to motivate students' willingness to work and cultivate future human resources. While creating a women-friendly company environment, we will be more active in hiring women and building their capacity.



Group work at a meeting of the Women's Network System



Our female employee giving a career seminar at a college

■ Action Plan under the Law to Promote Women in the Workplace

Through creating a workplace environment where highly motivated and skilled female employees can play a greater role, we actively promote their capacity building. To this end, we have developed the following action plan.

1. Time period

April 1, 2016 through March 31, 2021

2. Objectives, activities and timing

<Objective>

Doubling the number of female officers, as well as the appointment of multiple women to senior manager positions.

<Activities - 1>

To develop a work environment where female employees can play a greater role.

- 1) April 2016 - Create a model workplace where women play an active role. Based on this example, expand such supportive conditions to other workplaces.
- 2) April 2016 - Improve work arrangements in order for work duties to be more efficiently conducted within set working hours.
Promote the use of telecommuting and shorter work-hours programs for creating an environment where employees can balance work and personal life.
- 3) August 2016 - Expand the activities of the Women's Network Program for female employees to make further recommendations for transforming their activities and the company.
- 4) April 2017 - Establish a Career Consultation Desk within the Human Resources Department to provide advice for employees to improve their career vision, with more experienced female employees serving as advisors.

<Activities - 2>

Actively promote the capacity building of female employees.

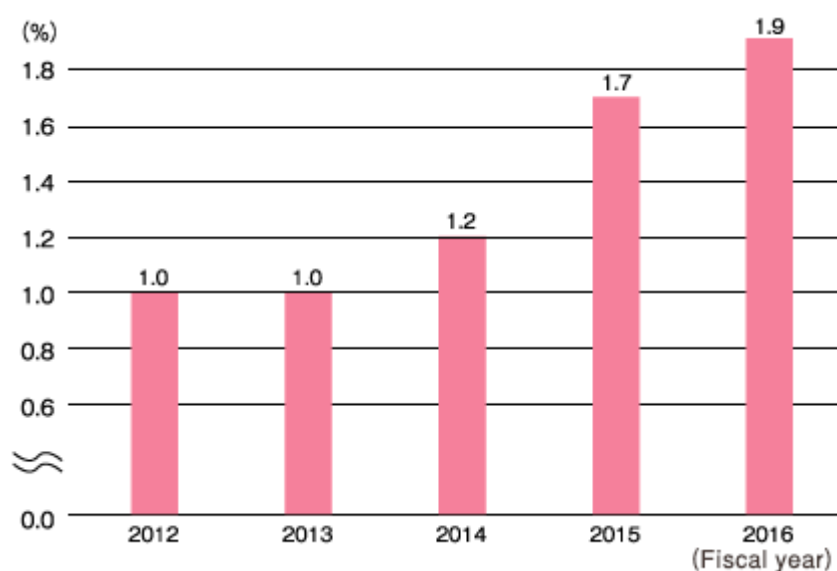
- 1) April 2016 - Create personalized training plans for manager candidates, provide them with jobs with greater responsibilities, and monitor the status of progress.
- 2) April 2016 - Encourage opportunities for female employees to actively exchange views with their peers in other companies, enabling them to gain a clearer vision for their career.
- 3) October 2016 - Through continued training sessions and lectures, train managers working with female subordinates to be advocates for women empowerment.

<Activities - 3>

Proactively recruit and hire female employees.

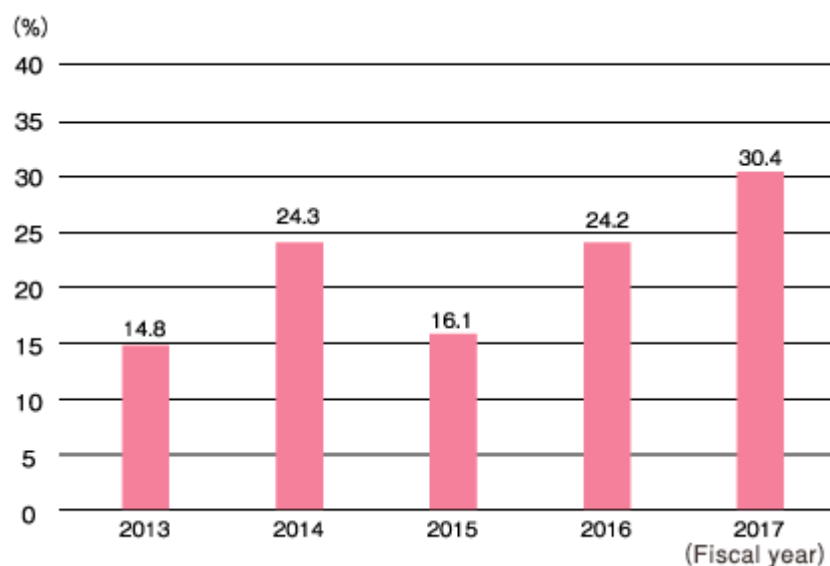
- 1) April 2016 - Expand information sessions for female students, and increase the percentage of new female graduates hired.
- 2) April 2016 - In order to expand the cohort of future manager candidates, proactively hire women for senior staff positions.
- 3) October 2016 - In collaboration with universities, plan and conduct seminars targeted to female students, providing opportunities for them to think about their employment options and life plans.

■ Change in Ratio of Female Managers



Percentage of female managers among all executive positions

■ Ratio of Women Hired



Percentage of women among all new employees who graduated from colleges of technology, universities, or higher

Hiring and Support of Employees with Various Nationalities

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We proactively recruit employees with various nationalities. In order for new foreign employees to quickly become accustomed to the workplace and play an active role, we offer them continuous support, including Japanese language training. In fiscal 2016, we held hearings for foreign employees and their supervisors to clarify their career track.

■ Changes in New Hires Who Come from Countries Other than Japan (New Graduates)

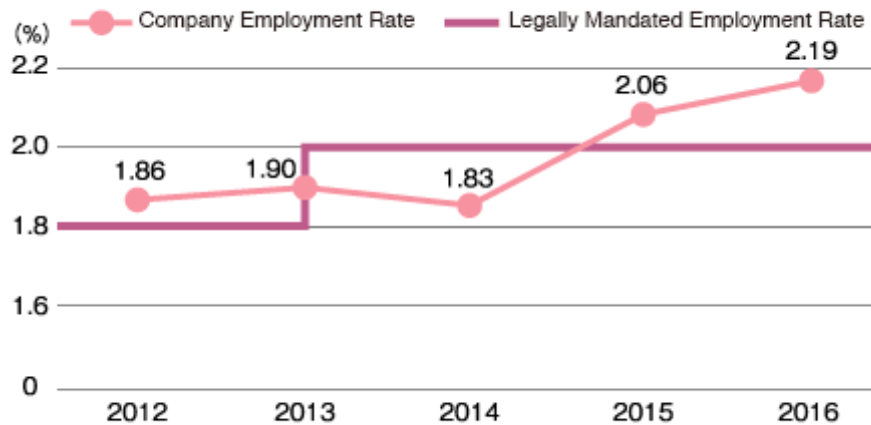
Year Hired	Technical Staff	Clerical Staff	Total
2013	1	2	3
2014	4	2	6
2015	2	2	4
2016	5	2	7
2017	3	1	4

Employment of Persons with Disabilities

K J W

The employment rate for persons with disabilities in fiscal 2016 reached 2.19%, achieving the legally mandated employment rate (2.0%). We will continue to actively employ persons with disabilities and support employment efforts by our group companies by expanding the range of occupational opportunities and creating a welcoming workplace.

■ Changes in Rate of Employment of Persons with Disabilities



Employment of Senior Citizens

K J W

In light of the Amended Act on Stabilization of Employment of Elderly Persons, which took effect in April 2013, we revised our system for senior contract employees to accommodate those who wish to continue their employment up to age 65. Continuing from 2015, we carried out career design training for 50- and 55-year-old employees in fiscal 2016, to encourage them to see their retirement from the company at age 60 as a turning point where they can take up new work with enthusiasm.



Examples of Our Efforts (Active Promotion of Female Employees)

Active Promotion of Female Employees

Organizational Culture to Make Women More Active in the Workplace

The Act on Promotion of Women's Participation and Advancement in the Workplace that came into force in April 2016 requires companies to take four steps, including identifying the working situation of female employees, analyzing issues, and developing action plans.

After 2013, when Kaneka started institutional reform for women's active participation, the two occupational categories of the management-track position and the regional career-track position were eliminated. Instead, the Work-at-Home System, the Leave of Absence for Spouse' Overseas Transfer System, and the Babysitting Expenses Aid System were newly established. We also actively sent female employees to external training to cultivate their leadership.

Action plans were developed in 2016 based on the act described above. In these plans, the number of female managers will be doubled, and several women will be appointed as senior managers by March 2021.

Under these plans, we will continue to improve our corporate culture and working conditions to make female employees more active in the workplace.



The Women's Network System, established in 2015 to encourage female employees to address work-related issues



Work-Life Balance

We enhance our flexible and self-managed work styles and promote balance between work and personal life, so that employees can be motivated and confident in their jobs.

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Work Style Reform

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We offer our employees various options for flexible and self-managed work arrangements, including flextime, discretionary work, and a telecommuting program.

In fiscal 2016, we introduced the time-based annual leave program, so that employees can take annual paid leave on a per-hour basis. This new program offers employees a wide range of holiday options, and we also encourage our members to use the program.

In order for employees to have a better understanding of this program and to actively use it, we provided them with the Work and Holiday Handbook in fiscal 2016.

In fiscal 2016, to address prolonged work hours, the Tokyo Head Office started to turn off its lights at 7 p.m. simultaneously with Osaka Head Office. We also introduced a new attendance management system to visualize working hours and enhance working hours management.

Going forward, we will continue to establish necessary systems and create a company environment where all employees can work in a lively and efficient way.



Work and Holiday Handbook

Childcare and Family Care Leave Programs

K J W

In fiscal 2009, Kaneka acquired Kurumin Mark certification, which is awarded to companies that support employees' childcare.

We have formulated action plans based on the Act on Advancement of Measures to Support Raising Next-Generation Children, and continue efforts to achieve our targets.

Utilization of these programs in fiscal 2016 is as follows:

■ Number of Users (Fiscal 2016)

Name of Program	Term and Period	Number of Users
Childcare leave	By the day before the child becomes 2 years and 6 months old	3 (male) 37 (female)
Nursing care leave	1 year or less for one eligible family member	1
Child nursing care leave	By the beginning of a semester for a child in the 4th grade (5 days per year per person)	46 (male) 60 (female)
Shorter work-hours program	By the beginning of a semester for child in 7th grade (maximum of 2 hours per day per person)	1 (male) 41 (female)
Telecommuting	Employees in pregnancy, child-rearing (by the beginning of a semester for child in 7th grade) or nursing care can work at home (4 days per month)	18
Babysitting Expenses Aid System	Company covers part of babysitting expenses for a child ages 0 to 2	29
Leave of Absence for Spouse's Overseas Transfer System	A maximum of 3 years from the day when the employee's spouse is transferred abroad	1

We are creating a company environment where employees can use various welfare programs.

To help balance work and family care, in fiscal 2016 we made some revisions to our work-life balance support programs, including allowing employees to divide one instance of nursing care leave into three (formerly, two) in a year for one care receiver.

We also focus on issuing the Nursing Care Handbook, holding nursing care seminars (five times a year), and providing information and consultation services jointly with external nursing care support companies.





The Kurumin Mark is awarded to companies that are certified for supporting childcare by their employees

Nursing care seminar

Employee Feedback Use of the childcare leave program



I took childcare leave when my son was about six or seven months old. This was because I wanted to stay with him and take care of him, and also because I wanted to maintain the dual-income life and become a compassionate person through child-rearing. I found it very tough to raise children, and this experience made me aware how difficult it is to balance work and child-rearing. I realized once again that I need to work more efficiently and go home early to share in the housework and child-rearing with my wife. And most of all, this program allowed me to deepen the bond with my wife and son.

Fumihiro Ishiguro, Legal Department



Occupational Safety and Health

Kaneka Group promotes various occupational safety and health measures aiming for zero occupational accidents, based on risk assessments at each business site, with consideration of factors relating to personnel, facilities, raw materials, and systems.

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Occupational Safety and Health

K J W

In 2016, a total of 18 occupational accidents occurred in the Kaneka Group, of which 10 resulted in lost work time, and eight did not. In response to the high number of accidents due to body parts getting caught in machines, we provide a risk sensory learning program using sensory equipment and a profession-specific safety education program to reduce the number of occupational accidents to zero, in order to boost personal safety awareness and strengthen our safety management capacity.

■ Zero Accident Principles

◆ All people, you and me, are indispensable	We ensure everyone is working safely.	Pledge of safety
◆ Safety is everyone's responsibility	We do not miss sparing the time to seek safety.	Participation in safety
◆ There is no trick to safety	We always value a fundamental approach to it.	Adherence to safety basics
◆ Be aware of potential danger	We endeavor to eliminate safety risks.	Safety in advance
◆ Where there is carelessness, there is the possibility of an accident	We do not allow even a small chance of negligence.	99%, yet 0%

Enhancing Our Occupational Safety and Health Management System

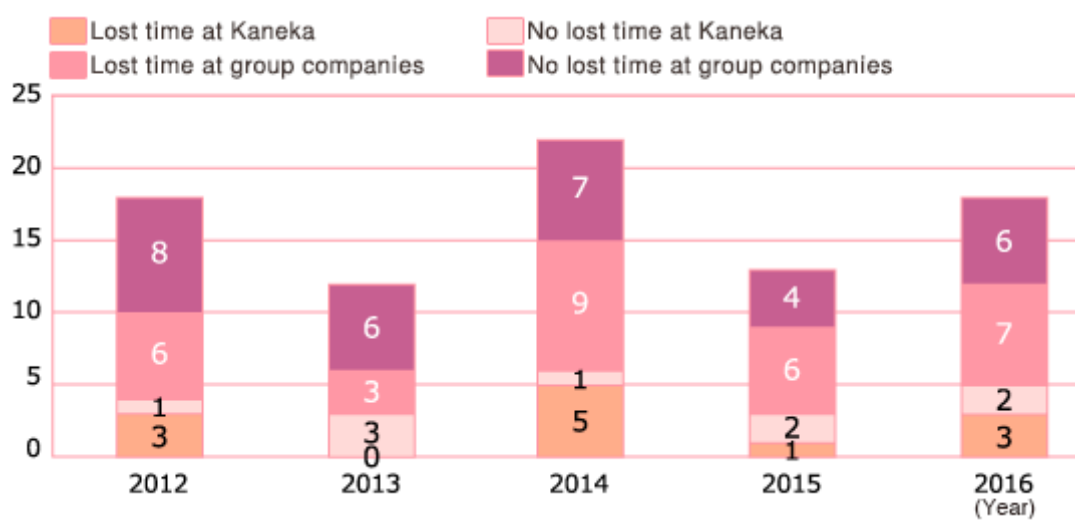
K J W

Our all four parent plants acquired Occupational Safety and Health Management System (OSHMS) certification from the Japan Industrial Safety & Health Association (JISHA) in fiscal 2007, and have continued our efforts to enhance these systems.

■ OSHMS Certifications

Plant	Location	Certification Date	Certification No.
Takasago Plant	Hyogo	March 10, 2008	08-28-13
Osaka Plant	Osaka	August 21, 2007	07-27-10
Shiga Plant	Shiga	January 15, 2008	08-25-6
Kashima Plant	Ibaraki	December 13, 2010	10-8-26

■ Number of Group Employee Accidents Resulting/Not Resulting in Lost Time



■ Accident Severity Rate and Accident Frequency Rate

	Area	All Kaneka Group		Kaneka		Group Companies in Japan and Overseas	
	Year	2015	2016	2015	2016	2015	2016
Employees of Kaneka and Group Companies	Frequency Rate	0.61	0.56	0.18	0.35	0.74	0.67
	Accident Severity Rate	0.01	0.01	0.008	0.01	0.01	0.01

Kaneka Takasago Service Center Co. Ltd. received the Excellent Safety and Health Best Workplace from the Kakogawa Labor Standards Association

K J W

Kaneka Takasago Service Center Co. Ltd. is mainly engaged in providing environmental and welfare services, along with greenery business, environmental improvement work, and management of welfare facilities and convenience stores in Takasago, Hyogo.

The company received the Excellent Safety and Health Best Workplace from the Kakogawa Labor Standard Association for its workplace, where safety and health programs are established and operated effectively and where employees and the management actively work together on occupational health with no accidents for more than three years.

We will continue to carry out occupational safety and health activities to maintain the excellent workplace.



Mental Health Care

K J W

Mental health care activity is necessary to maintain employees' mental health. We have long strived to prevent mental health disorders by placing professionals in workplaces and contracting with external special agencies to offer employees a mental health counseling service. In fiscal 2016, we conducted a stress check in response to new laws and regulations and encouraged employees to become aware of their mental stress. We also started a professional counseling service to provide intensive care for those who feel strong mental stress.



Talk with the expert

Check & Act

We have implemented safety and health activities under the concept of "safety wareness improvement" to achieve no accidents, while the number of accidents over the past five years remains flat. We will make efforts to make supervisors more aware of occupational risks and eliminate potential risks through risk assessment to accomplish the zero-accident goal.



Examples of Our Efforts (The Safety Room)

For Evolving the Safety-First Policy

The Safety Room, to Retain the Memory of Serious Accidents



The Safety Room, named Sokai-juku at the Kashima Plant, to retain the memory of the accident

Regarding safety as the highest priority in management, Kaneka Group actively makes its plants safe and secure for employees.

The Kashima Plant performs PDCA based on two concepts—equipment safety technology and employee safety awareness—to retain the safety mind-set alive and continually evolve safety activities. This PDCA is intended to retain the memory of the fatal accident caused by an explosion in 2009.

The Safety Room was opened in 2015 as a place to make all employees aware of and familiar with the mind-set and techniques of the safety-first policy. This place allows employees to understand the basics of safety by learning about the relationship between direct and indirect causes and discussing accidents that occurred at their workplace.

Furthermore, employees will actually experience and learn the potential risks, such as getting a body part caught in a machine and receiving an electric shock.

In addition to learning about the importance of strictly observing the working regulations, they will also develop self-maintenance skills in the maintenance training room to pursue safe and secure operations. This training has had more than 400 participants so far, which exceeds the total number of employees at the Kashima Plant. Every single employee carries out repetitive learning and makes a new pledge to work on safety, which improves safety awareness through the PDCA.

In 2017, the Safety Room received the Effort Award, one of the Responsible Care Awards, from the Japan Chemical Industry Association, as a benchmark example of popularizing the safety-first policy across the chemical industry.



Employees participating in the educational program will learn about the basics of safety



The experiential training room, where employees can experience and become more aware of potential risks, such as getting a body part caught in a machine and experiencing a small explosion caused by static electricity

Corporate Governance

Guided by our Corporate Vision, we at Kaneka aim to fulfill our corporate social responsibility and achieve good corporate governance, which will allow us to provide shareholders and investors with sustained corporate growth and improved corporate value over the medium and long term, while maintaining good relationships with our stakeholders, including our customers, the communities where we operate, our business partners, and our employees.

K KANEKA
J JAPAN
W WORLDWIDE

Corporate Governance Structure

K J W

Organizational Design

We currently have two independent external directors and two independent external auditors. Since both the overseeing of business operations by the Board of Directors and auditing by the Board of Auditors are functioning well, Kaneka has chosen to be a Company with Board of Auditors under the Companies Act.

Directors and the Board of Directors

The Board of Directors, on behalf of the shareholders, is responsible for the company's sustainable growth and for increasing corporate value in the medium to long term through efficient and effective corporate governance. The Board of Directors exercises its oversight functions on overall management to ensure fairness and transparency, as well as to appoint management positions, evaluate and determine remuneration, evaluate serious risks and determine strategies to counter them, and make the best decisions on important business operations. The Board of Directors makes resolutions on important matters related to the management of the Kaneka Group after deliberation by the Management Committee, which includes the president. There are at most 13 members on the Board of Directors. Of these, two are independent external directors to strengthen the oversight function. Directors serve for a period of one year to clearly define management responsibilities.

Auditors and the Board of Auditors

Auditors and the Board of Auditors, on behalf of the shareholders, are responsible for ensuring healthy and sustainable corporate growth, and for establishing a structure with good corporate governance that can gain social trust by checking on the performance of directors in regard to their duties. The Board of Auditors comprises four members, two of whom are independent external auditors in principle, and performs audits in coordination with the Accounting Auditor and the CSR Division's Internal Control Department. Auditors are given space to periodically exchange views with the president, and monitor the state of business operations when necessary, by attending key meetings of the Board of Directors and those of the Management Committee, which decides on the implementation of important matters, as well as division head meetings.

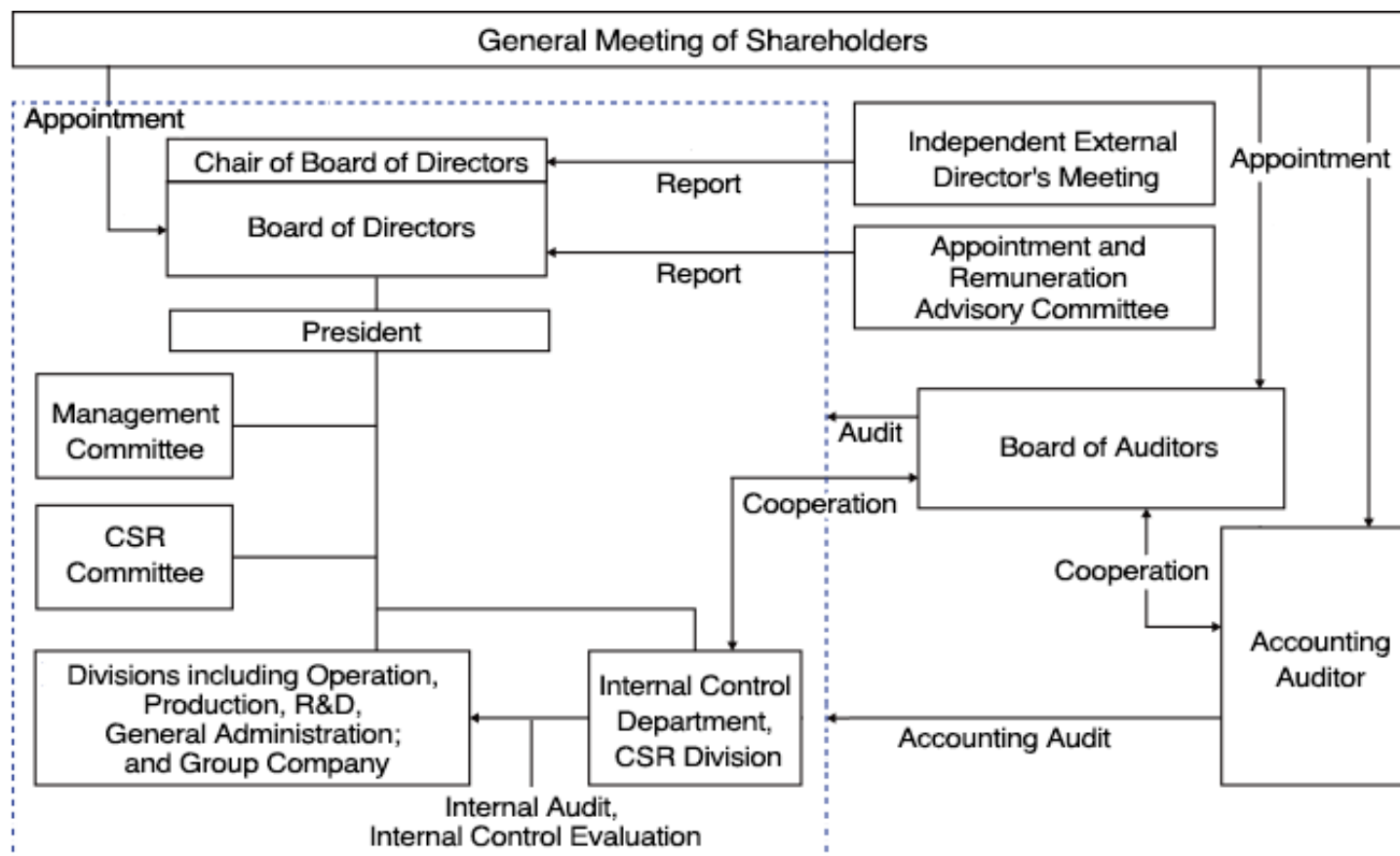
Ad Hoc Committees

Independent external directors meetings are held, and an appointment and remuneration advisory committee will be created as an ad hoc committee to make full use of independent external directors.

Implementation of Business Operations

Kaneka has adopted the executive officer system to separate the oversight function of directors from the implementation function of business operations, which also facilitates decision-making and clearly defines roles. The Board of Directors decides on key management strategies and business operations of the entire Kaneka Group, while executive officers handle business operations in their respective areas of responsibility. Division heads, as well as executive officers appointed by the Board of Directors, exercise extensive authority over daily operations. However, directors handle several divisions to ensure overall coordination, and hold monthly division head meetings to enable the directors and auditors to directly hear progress reports from each division head. The Internal Control Department of the CSR Division evaluates the effectiveness of internal control and conducts an internal audit.

■ Corporate Governance Structure



Compliance

Compliance

K J W

Compliance with relevant laws and regulations is important to our corporate management as well as to all directors and employees at the Kaneka Group.

Our corporate Intranet provides ready access to our Compliance Guidebook, which provides a clear explanation of our Ethical Code of Conduct as well as the laws and regulations to be observed by all of our directors and employees. Additionally, a variety of training sessions and meetings, and activities of the Compliance Subcommittee ensure that we strictly adhere to our compliance policies.

The compliance online course for all employees, launched in 2014, was expanded to include Group companies in Japan, and there were 4,656 participants from 42 companies in fiscal 2016.

Training sessions on the Antimonopoly Act are conducted regularly with all of managerial officers from Kaneka and Group companies in Japan who are involved in sales, purchasing, and business development, all of whom are required to submit a pledge. Additionally, CSR evaluation audits were carried out for all Group companies in Japan, the U.S. and Europe. Going forward, Group companies outside Japan will be included as well.

Moreover, we set up compliance consultation hotlines both internally and with outside law firms in order to answer inquiries from those within the Group. We strive to respond quickly to provide a rapid resolution to any concerns that may arise.



A compliance training session

Business Risks and Uncertainties

Basic Concepts for Business Risks and Uncertainties

Factors that may significantly affect the performance and the financial position of the Kaneka Group include those described below. Please note that the matters described are only those that we considered risks as of March 31, 2017 and that this is not an exhaustive list of risks borne by the Group.

- (1) Risks related to the Group's ability to maintain operational advantages and trends in the Japanese and overseas economic environments
- (2) Risks associated with the globalization of our business (fluctuations in foreign exchange rates and overseas business development)
- (3) Risks of price fluctuations of raw materials and fuels
- (4) Risks associated with product liability, industrial accidents and large scale disasters
- (5) Risks associated with the protection of intellectual property rights
- (6) Impact of environment related regulations
- (7) Risks associated with legal action
- (8) Other risks

▶ See the [Financial Section](#) for more details

Stakeholder Communication

Kaneka Group prioritizes communication with its stakeholders.
We will continue to improve our activities on social responsibility by reviewing the feedbacks we receive from the readers of our CSR report.

 [Third Party Comment/
Response to Third Party Comment](#)

 [Third Party Verification](#)

 [Stakeholder Feedback](#)

Third Party Comment/ Response to Third Party Comment

Third Party Comment on the 2017 CSR Report



Chieko Minami

Professor of Marketing, Graduate School of Business Administration, Kobe University.

Graduated from the Faculty of Letters, Kobe University.

Completed a Master's Degree in Communication from Michigan State University.

Completed a Master's Degree at the Graduate School of Business Administration, Kobe University.

Withdrew from the Doctoral Course.

Formerly an associate professor at the Faculty of Economics and Business

Administration, Yokohama City University before assuming current post.

Doctor of Commerce. Specializes in the field of marketing.

I expect this CSR Report to become more intelligible for readers to enhance information disclosure to stakeholders.

To make a third-party comment, I read over the back issues of the Kaneka Group CSR Report. I would like once again to evaluate the fact that Kaneka maintains a consistent stance of defining its CSR as "a social contribution through business activities" and publicizing it.

For example, the Special Feature, titled "Biopharmaceuticals," focuses on employees in the field and introduces their willingness to contribute to achieving a sound society using storytelling. The company's stance on CSR is fully highlighted by having employees describe their social contributions through technologies and products. The theme changes each year, but Kaneka maintains a consistent style.

I was also impressed by the visually appealing design of this year's report, which helps stakeholders easily understand the contents.

The meaning of environmental data is indicated compactly and graphically by making effective use of figures and graphs. What is important in production activities is to continue to publicize the company's efforts to reduce environmental burdens as well as reasons for failure if targets were not achieved. It is also meaningful to disclose each year the "Kaneka CSR Activities: Targets, Achievements, and Evaluations." Such active information disclosure will engender the trust of stakeholders, resulting in making the company more valuable.

The comment from a male employee who took child-care leave in the "With Our Employees" category in the website version should also include more detailed information, such as the specific period of absence, the support structure in the workplace, and the treatment of his career, in addition to his feedback on child-care leave. Working-style reforms have been promoted by the government, even though it is still difficult for male employees to take child-care leave in the manufacturing industry. Creating work-life balance is a high-profile social issue; thus the report will be more content-rich by having a quantitative perspective.

From the Editorial Team: Response to Third Party Comment

In the CSR Report 2017, for strengthening communication with stakeholders, near the beginning of the report we highlighted special features on our efforts for "Environment and Energy" and "Health Care" as well as "Making Our Lives Better" as our social contribution through business activities from among our various key strategic domains. These articles contain the concept for and significance of each initiative, together with messages from stakeholders.

In addition to evaluating our efforts and improvement activities since last year, Professor Minami also provided advice on several areas for improvement, and having a quantitative perspective on high-profile social issues. We will implement these recommendations in the next report to better communicate our efforts.

Our goal is to continue reporting specific CSR initiatives through business activities to all our stakeholders, and to address their concerns by producing a CSR report that provides full disclosure. We would appreciate any comments, suggestions, corrections, or other feedback on any information contained in this report. Finally, thank you to all our stakeholders for taking the time to read this report.



Personal talk with the CSR Committee head

Administration Office CSR Committee
Kaneka Corporation

Third Party Verification



CSR Report 2017 Independent Verification --Opinions

June 19, 2017

Mr. Mamoru Kadokura
President Kaneka Corporation

Japan Chemical Industry Association
Chief Director
Responsible Care Verification Center
Junji Takase

Purpose of verification

This verification is designed for the Responsible Care Verification Center to express an opinion of an expert representative of the chemical industry about the following items as presented in Kaneka Corporation's CSR Report 2017.

- 1) The rationality of calculation and collection methods of performance indices (numerical values) and accuracy of the values
- 2) The accuracy of non-quantitative information presented in the Report
- 3) Details of responsible care activities
- 4) The characteristics of the Report

Verification procedure

- For the corporate head office, we conducted investigations into the rationality of the calculation methods of values reported by each site (Business sites and plants), as well as the accuracy of other non-quantitative information. We conducted these investigations by questioning the people responsible for each business area and the people responsible for preparing the Report about the contents of the Report. We also received documents and explanations from them.
- For the Osaka Plant, we conducted investigations into the rationality of the calculation methods of values reported to the corporate head office and the accuracy of those values as well as the accuracy of other non-quantitative information. We conducted investigations by questioning people responsible for each business area and those responsible for preparing the Report. We also received documents and explanations from them, as well as physically confirming sites and checking evidential materials.
- We applied sampling techniques in our investigations of the values and other information presented in the Report.

Opinions

- 1) The rationality of calculation and collection methods of performance indices (numerical values) and accuracy of the values:
 - Rational methods were used to calculate and collect numerical values for both the corporate head office and the Osaka Plant.
 - As far as was investigated, performance values are accurately calculated and collected.
- 2) The accuracy of non-quantitative information presented in the Report:
 - The information presented in the Report was confirmed to be accurate. At the stage of drafting the Report, minor issues were pointed out regarding the suitability of expressions or the consistency of terms, etc.; however, these issues have been rectified in the final Report. At this stage, no material matters need to be rectified.
- 3) Responsible care activities and CSR activities:
 - We appreciate the stakeholder dialogue in Kaneka's specific CSR activity and expect the company to continue to strengthen the effort. We also highly evaluate the fact that Kaneka has enhanced its governance capacity, such as by establishing an independent committee of outside directors and assessing the efficacy of the Board of Directors.
 - CSR education is sufficiently provided for the entire company, including domestic group companies. We expect them to briefly cover the ethics of responsible care in their CSR education.
 - We value their effort in making a detailed audit through introducing a process audit approach to the internal audit on environmental safety and health.
 - Kaneka strives to improve the quality of the Osaka Plant by introducing the zoning technique to the comprehensive emergency drills and standardizing the methods of making announcements to community residents. We also appreciate the fact that such efforts have gained a favorable reputation from the local fire department.
- 4) The characteristics of the report:
 - The CSR Communication Book provides a clear description of the relationship between SDGs and the contents of the book. In addition, messages from persons in charge and from stakeholders are inserted at key points with their pictures, making the book more approachable.

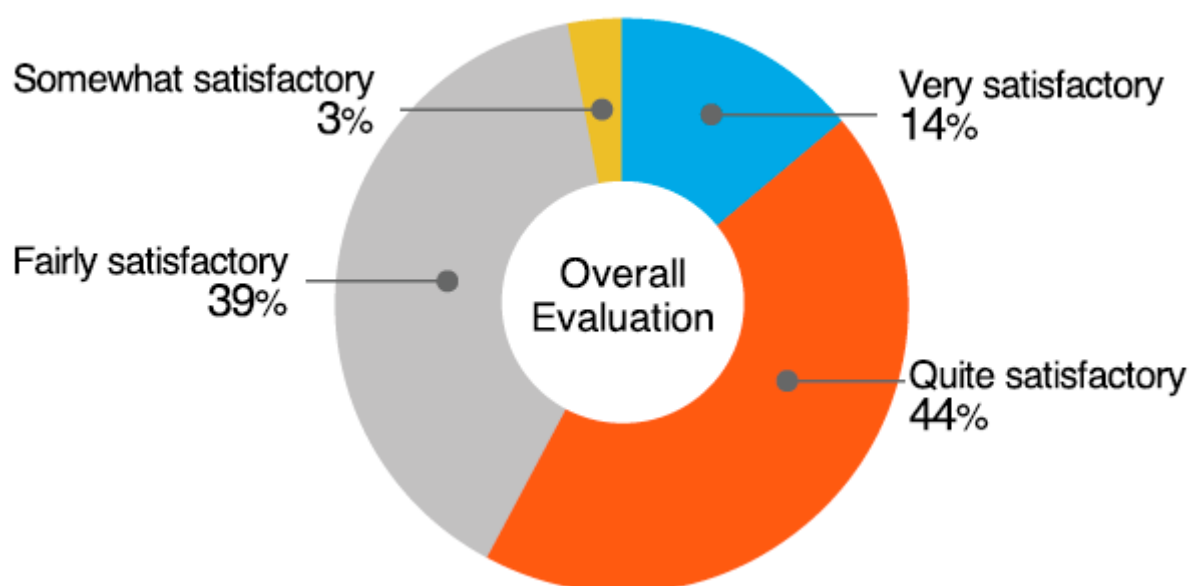
Stakeholder Feedback

We present feedback from the readers of Kaneka Group CSR Report 2016 below.

Overview

Survey Period	August 5 to October 24, 2016
Analyzed Period	August 5 to October 24, 2016
Survey Coverage	Kaneka Group CSR Report 2016
Number of Valid Responses	422

Q1 What were your impressions of the Kaneka Group CSR Report 2016?



Q2 Which articles in the Kaneka Group CSR Report 2016 interested you most or left an impression? (choose all that apply)

1. Addressing Climate Change	43%
2. Reducing Waste and Preventing Pollution	40%
3. Fostering Youth Development	30%
4. Community Initiatives (The Environment)	26%
5. Quality Management	25%
6. Biodiversity Conservation	24%
7. Community Initiatives (Global Community)	23%

8. Community Initiatives (Local Communities)	21%
9. Communication Is Our Start Line	20%
9. Community Initiatives (Fostering Youth Development)	20%

Key Opinions

Q3 Which areas would you like to see improved or know more about?

- I expect you to include more employee-related articles (women's active participation, employment of handicapped and elderly people, mental health, childcare/nursing care leave, etc.), as well as articles about community interaction efforts, current business activities, and future business plans.
- It would be better to provide more articles about your environmental conservation efforts, including detailed activity information, initiatives for global-scale issues, and voices of workers in the field.
- I found your CSR Report very intuitive, compared to those of other companies. I expect you to make the report even better, for example, by increasing the text size, decreasing the number of characters, and narrowing down topics.

Q4 What did you think about the special features?

Special Feature I: Food Production Support

Power of Science to Enrich Life with Food Worldwide

- I think that both Kaneka Peptide and antifreeze ingredients are amazing technologies. While having different approaches, these technologies will solve food-related issues around us.
- I have high expectations of your efforts to reduce food waste.

Special Feature II: Health Care

Making Smiles in Africa

- I was impressed with your initiatives to provide support for issues in developing countries through business activities. I expect you to offer continuous support, including the WFP school meal program.
- This special feature allowed me to understand your long-term support efforts for children and women in Africa who suffer from poverty and food shortages.

CSR Report / From the Editorial Team

CSR Website

[Full Report \(PDF:5.3MB\)](#)

[Top Message \(PDF:569KB\)](#)

[Special Features \(PDF:1.36MB\)](#)

[Promoting Corporate Social Responsibility \(PDF:1.1MB\)](#)

[For the Environment \(PDF:1.2MB\)](#)

[With Our Customers \(PDF:1MB\)](#)

[With Our Business Partners \(PDF:585KB\)](#)

[With Our Shareholders and Investors \(PDF:544KB\)](#)

[With Local Communities \(PDF:1.6MB\)](#)

[With Our Employees \(PDF:932KB\)](#)

[Corporate Governance \(PDF:516KB\)](#)

[Stakeholder Communication \(PDF:607KB\)](#)

[From the Editorial Team \(PDF:482KB\)](#)

From the Editorial Team

Kaneka Group issued its Responsible Care Report in 1999, and renamed it the CSR Report in 2010 to include more socially responsible content. Since 2013, we renamed the digest edition the Communication Book to position this publication as a key communication tool with all stakeholders.

This year, for the first time, Kaneka Group will issue the Kaneka Report, which combines the conventional Annual Report, the CSR Report, and the Intellectual Property Report to strengthen ESG which means Environmental, Social and Governance.

The Kaneka Report delivers information on how we will continue to create value, integrate ESG into our business, and contribute to achieving a sustainable society through business efforts.

This report and its detailed information can also be found on our website.

We hope that our shareholders, investors, and other stakeholders understand the significance of the Kaneka Report.



● Organizations Covered in This Report

This report covers Kaneka Corporation and its consolidated subsidiaries both in Japan and other countries. The data on Responsible Care activities encompass the parent and all 60 Group production subsidiaries.

The following icons indicate the scope of activities. A section displaying all icons indicates that activities encompass the entire Group.

Kaneka	K	K A N E K A
Group companies in Japan	J	J A P A N
Group companies outside Japan	W	W O R L D W I D E

In this report, “Kaneka” refers specifically to Kaneka Corporation. “Kaneka Group” encompasses Kaneka Corporation and Group companies (its consolidated subsidiaries). References to “Group company/companies” do not include Kaneka

Corporation.

In this report, one ton is equal to 1,000 kilograms (one metric ton).

● Languages

This report is available 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 Business Administration of Kobe University provided a third-party opinion on the overall content of the CSR Reports, following the 2015 version.

● Period Covered

Fiscal 2016 (April 1, 2016 to March 31, 2017). In some cases, reporting covers activities before or after fiscal 2015.

● Reference Guidelines

The G4 Sustainability Reporting Guidelines of the Global Reporting Initiative (GRI) and the Environmental Reporting Guidelines (2012 edition) issued by the Ministry of the Environment of Japan.

● Inquiries

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Back Number of CSR Report

Kaneka Group CSR Report 2016	The Digest Edition 2016
Kaneka Group CSR Report 2015	The Digest Edition 2015
Kaneka Group CSR Report 2014	The Digest Edition 2014
Kaneka Group CSR Report 2013	The Digest Edition 2013
Kaneka Group CSR Report 2012	The Digest Edition 2012
Kaneka Group CSR Report 2011	The Digest Edition 2011
Kaneka Group CSR Report 2010	



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This is our **Communication on Progress** in implementing the principles of the **United Nations Global Compact** and supporting broader UN goals.

We welcome feedback on its contents.