## **ESG Promotion**

# **Management Approach**

## **Basic Policy**

In 2018, Kaneka Group established the ESG Charter to evolve its ESG management. Aiming to provide valuable solutions globally with a focus on chemistry, the ESG Charter serves as an action agenda for each employee to materialize our Corporate Philosophy.

#### **ESG Charter**

### **Putting the Corporate Philosophy Into Practice**

- 1. We offer solutions characterized by value to global markets and contribute to the evolution of lifestyles and the environment through innovative chemistry.
  - We bring innovation to lifestyles and the environment by harnessing the unlimited potential of chemical materials to help communities achieve sustainability. (Earthology Chemical Solution)
  - By adopting a unified approach to food and medicine that is defined by a focus on chemistry, we provide innovative solutions that empower people to live healthier lives. (Active Human Life Solution)
- 2. We fulfill our social responsibility by empowering individual employees to put our corporate philosophy into practice through serious, forward-looking effort.
  - We actively contribute to our communities by cultivating understanding of the cultures and customs of the countries and regions where we do business and by pursuing corporate activities that are deeply rooted in those communities.
  - We operate our businesses in a fair and impartial manner based on the principles of free competition and legal compliance.
  - 3 We're committed to communicating with shareholders and other stakeholders and to making information about our operations available in a timely and appropriate manner.
  - We strive to foster an organizational culture that respects the personalities and uniqueness of all employees so that they can enjoy good health, feel motivated, and make the most of their abilities.
  - 5 Reflecting a commitment to make safety the top priority in our operations, we work to create safe and healthy workplaces, ensure product safety, and protect and preserve the environment.

## **ESG Promotion System**

To achieve ESG management, the ESG Committee is working to resolve environmental, social, and governance issues, coordinating the Compliance Subcommittee, the Safety & Human Health Subcommittee, the Earth Environment Subcommittee, and the Product Safety Subcommittee. In April 2019, the ESG Conference was newly established to set policy directions to promote ESG management, wellness-first management, and work culture innovation, aiming to enhance sustainable corporate value.

#### ■ Diagram of ESG Promotion System



#### **ESG Promotion**

## **ESG Promotion Activities**

## **ESG** Committee

In fiscal 2019, the ESG Committee met twice, and the four Subcommittees met individually (Compliance: twice, Safety & Human Health: twice, Earth Environment: twice, and Product Safety: twice). The ESG Committee assessed the implementation status of each Subcommittee's activities, shared information on key issues, deliberated the fiscal 2020 action policy plan, and decided on necessary management measures.

## **ESG Inspections**

To inspect the legal and regulatory compliance status of the Kaneka Group and to improve its occupational safety and health performance, ESG inspections are carried out, comprising ESG safety and quality inspections and ESG evaluation audits, targeting all Group companies within and outside Japan. To monitor progress of ESG activities, we conduct ESG safety and quality inspections for environmental protection, occupational health and safety, product safety, and quality assurance. ESG evaluation audits ensure compliance with the Antimonopoly Act.

Kaneka's Environmental Health and Safety Management Regulations and Quality Management Regulations clearly define the actions and responsibilities expected of Group companies. Encouraging employees to be proactive, we endeavor to reduce environmental impacts and occupational accident risks, as well as to improve our crisis response capabilities in case of natural disasters and product accidents.

In fiscal 2019, we conducted ESG safety and quality inspections at all parent manufacturing sites, 20 sites of 16 Group companies in Japan, and four sites of four Group companies outside Japan, focusing on serious risk management, compliance, implementation of basic safety actions (greetings, 3Ss, and handrail holding), and internal audits.

We also conducted ESG evaluation audits relating to competition laws, including the Antimonopoly Act, for all business operations divisions, 28 Group companies in Japan, and 14 outside Japan.





ESG safety and quality inspection

#### **ESG Education**

We engage in educational activities to promote ESG within the company through training sessions and our Intranet.

In fiscal 2019, we conducted two training sessions for mid-career employees. On our Intranet, we overviewed the SDGs and familiar efforts to achieve them, and in the company, we displayed posters that encourage employees to go paperless and save water and electricity.

We will continue to enhance employees' understanding of ESG to resolve social issues through corporate activities.

# Support for the United Nations Global Compact

In March 2015, 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. 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

# ■ The Ten Principles of the UN Global Compact

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

## **ESG Promotion**

# **Promoting Responsible Care**

# **Promoting Responsible Care**

Since 1995, Kaneka Group has put in place policies governing safety and Responsible Care(\*), and internal regulations ensuring effectiveness of the Responsible Care approach.

In September 2008, we signed the Declaration of Support for the Responsible Care Global Charter and announced that we would undertake Responsible Care activities worldwide. The Responsible Care Global Charter was revised at the board meeting of the International Council of Chemical Associations (ICCA) in May 2014. Responding to the revision, we signed the revised Responsible Care Global Charter in October 2014 to continue to actively promote our Responsible Care activities.

\* Responsible Care refers to actions undertaken on a voluntary basis by the chemical industry to revised in 2014 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 JCIA Responsible Care Committee (former Japan Responsible Care Council) established by the Japan Chemical Industry Association.



Signed the Responsible Care Global Charter revised in 2014

## Basic Policies for Responsible Care

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.

## **Responsible Care Activities**

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. In fiscal 2019, we implemented e-learning for all employees as part of environmental education, and enhance employees' understanding of the environmental initiatives of the company.

## **Environment**

# **Management Approach**

## **Basic Policy**

In keeping with our ESG Charter, we at the Kaneka Group will contribute to realizing sustainable development and the enrichment of society by conserving resources and reducing environmental impacts at each stage of the entire product lifecycle.

**Policy** 

#### **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.
- 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.
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## **Promotion System**

Important matters pertaining to the protection of the global environment are decided by the Earth Environment Subcommittee and decided by the ESG Committee. Meanwhile, issues on global environment protection are shared and further discussed at the management meeting, the Plant Management Committee, and other meetings. The mid-term management plan also focuses on strengthening initiatives on important matters to further improve our ESG management.

#### ■ Diagram of Promotion System



## **Environment**

# **Environmental Management**

Kaneka Group engages in various environmental initiatives based on the ESG Charter by providing solutions that contribute to the global environment and a rich life and working to reduce environmental impacts and disclose timely information in fundamental business domains.

To realize a sustainable society, Kaneka Group continues working to reduce environmental impacts and risks, by complying 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 and by checking compliance with them through various means, including internal audits and ESG safety and quality inspections.

## **Eco-Friendly Products**

Focusing on eco-friendly management, Kaneka Group has defined, enhanced, and expanded its ecofriendly products (\*1), as listed below, since fiscal 2017.

\*1 Products that can contribute to reducing global environmental impacts at the stages of customer use, disposal and recycling, compared to conventional products.



Product name VISOLA SoltileX GRANSOLA

Intended use Solar power generation systems

Reason for environmental contribution Creating energy with

houses equipped with

this product

**Energy Storage** 



Product name Residential electricity storage systems

Intended use Residential stationary batteries

Reason for environmental contribution Storing energy by houses equipped with this product

**Energy Saving** 



Product name Kanepearl

Reason for

Intended use Residential/ automotive foams

environmental contribution Saving energy as insulation and lightweight residential/ automotive materials

**Energy Saving** 



**Product name** Eperan

Reason for

Intended use Automotive parts Package cushioning materials

environmental contribution Saving energy as lightweight automotive parts

**Waste Reduction** 



Product name Green Planet

Intended use Biodegradable Polymers (Packaging materials, garbage bags, foams)

Reason for environmental contribution

A naturally derived and biodegradable polymers that has little environmental impact when discarded

**Chemical Pollution** Prevention

Product name KANEKA Surfactin

Intended use Biosurfactant. Cleaning agents

Reason for environmental contribution

A naturally derived and biodegradable material friendly to the environment

Eco-friendly products have been defined as follows.

Type of Environmental Contribution	Qualitative Definition
GHG Reduction	Products reducing greenhouse gas (GHG) emissions
Energy Saving	Products lowering energy consumption
Energy Creation	Products creating energy
Energy Storage	Products storing energy
Waste Reduction	Products reducing waste
Resource Saving	Products achieving resource savings
Biomass	Products (derived from non-fossil materials) reducing reliance on fossil materials
Water Resources	Products saving water and improving the water environment
Chemical Pollution	Products preventing chemical pollution
Biodiversity	Products conserving biodiversity
Intermediate Materials	Intermediate materials essential to ensuring that finished products contribute to the environment
Disaster Control	Products helping disaster prevention and preparedness and reducing environmental impacts during a disaster
Adaptive Contribution	Products adapting to global warming

# **Environmental Management Systems**

We operate 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.

### ■ ISO 14001 Certification

Manufacturing Sites and Group Companies	Registration No.
Takasago Manufacturing Site	JCQA-E-0105
Osaka Manufacturing Site	JCQA-E-0053
Shiga Manufacturing Site	YKA4004950
Kashima Manufacturing Site	JCQA-E-0054
Vienex Corporation	JSAE1511
Osaka Synthetic Chemical Laboratories, Inc.	JCQA-E-0343
Kaneka Solartech Corporation	JQA-EM6704
Kanto Styrene Co., Ltd.	JEN-2024,0
Sanvic Inc.	JMAQA-E841
Showa Kaseikogyo Co., Ltd. Hanyu Headquarters Factory	E0062
Cemedine Co., Ltd. Ibaraki Office, Mie Office	JCQA-E-0366
Cemedine Co., Ltd. Kinuura Plant	497791UM15
Tatsuta Chemical Co., Ltd. Koga Plant	3571208
Tochigi Kaneka Co., Ltd.	YKA0958035
Kaneka Belgium N.V.	97 EMS 002g
Kaneka (Malaysia) Sdn. Bhd.	ER0523
Kaneka Innovative Fibers Sdn. Bhd.	ER0523
Kaneka Eperan Sdn. Bhd.	ER0523
Kaneka Paste Polymers Sdn. Bhd.	ER0523
Kaneka Apical Malaysia Sdn. Bhd.	ER0916

### ■ Eco-Action 21 Certification

Group Company	Certification and Registration No.
OLED Aomori Co., Ltd.	0010329
Kaneka Kanto Styrol Co., Ltd.	0004259
Kaneka Sun Spice Corporation	0003556
Kaneka Chubu Styrol Co., Ltd.	0006600
Kaneka Tohoku Styrol Co., Ltd.	0010773
Kaneka Nishinippon Styrol Co., Ltd. Headquarters, Saga Plant, Kagoshima Plant, and Nagasaki Plant	0003949
Kaneka Foods Manufacturing Corporation	0003491
Kaneka Foam Plastics Co., Ltd. Moka Plant	0003247
Kaneka Hokkaido Styrol Co., Ltd.	0001805
Kaneka Medix Corporation	0001893
Kyushu Kanelite Co., Ltd.	0001637
Kochi Styrol Co., Ltd.	0011039
Taiyo Yushi Corporation	0003575
Tokyo Kaneka Foods Manufacturing Corporation	0003473
Nagashima Shokuhin Co., Ltd.	0003093
Hokkaido Kanelite Co., Ltd.	0001905

### Material Balance in Production Activities

Kaneka Group is working to reduce environmental impacts by aggregating the status of energy and resource inputs and material outputs through emissions and products to grasp production activity volume, targeting Kaneka and Group companies within and outside Japan.

In fiscal 2019, raw material input decreased by 59 thousand tons from the previous year. The product, GHG, SOx, and NOx outputs decreased by 68 thousand tons (3.3%), 109 thousand tons- $CO_2e$  (6.9%), 22.8 tons (20.7%), and 37.5 tons (4.0%), respectively. Meanwhile, final landfill waste output increased by 494 tons (8.9%) due to a rise in production volume and differences in the product mix for some Group companies outside Japan.

#### FY 2019 Results INPUTS Energy and Resources OUTPUTS Discharges, Recycling, and Products Products (\*3) Into the atmosphere Into water systems As waste Legend (from top) Kaneka Products GHG (\*4) SOx Group companies in Japan Group companies outside Japan 1,494 1,027 70.1 thousand 235 thousand tons 158 16.6 tons tons-CO2e 306 275 0.9 Main raw materials PRTR Law designated Soot and dust 1,130 796.0 21.7 61.5 301 thousand tons 36.2 tons 1.0 tons 107.1 tons 369 77.6 3.3 Kaneka Energy Chemical oxygen PRTR Law designated Group companies Suspended solids (Crude oil equivalents) demand substances in Japan 227.7 178.7 17.6 424 46 thousand 7.0 tons 5.7 tons 0.04 tons 76 kiloliters Group companies 170 158.9 64.1 outside Japan 15 Phosphorous Nitrogen Water 146.6 5.4 21.4 1.2 tons 0.1 tons 3.5 million m 1.5 0.8 11.7

23.1

5,294.4

737.7 tons

39,885

4,545

7,498 tons

625

6,090 tons 4,366

<sup>\*2</sup> Raw materials calculated in or converted to tons

<sup>\*3</sup> Products calculated in or converted to tons

<sup>\*4</sup> Greenhouse gas

#### Calculation Methods for Energy Consumption and Greenhouse Gas (GHG) Emissions

Index	Calculation Methods
Energy Consumption (Crude Oil Equivalents)	Energy consumption is calculated based on the Energy Saving Law (Act on the Rationalization etc. of Energy Use of Japan). The boundaries are consistent with the Energy Saving Low and the Action Plan for a Low Carbon Society prepared by the Japan Chemical Industry Association and include all manufacturing sites and other facilities.
GHG Emissions	GHG emissions, calculated in accordance with the Act on Promotion of Global Warming Countermeasures, are the total amount of energy origin $\mathrm{CO}_2$ emissions, non-energy origin $\mathrm{CO}_2$ emissions, and the $\mathrm{CO}_2$ equivalent of methane and $\mathrm{N}_2\mathrm{O}$ emissions. For emission factors for electricity, the basic emission factors are used for calculation. The boundaries are the same as those for energy consumption.

# **Environmental Accounting**

We efficiently and effectively promote environmental conservation activities by quantitatively grasping the investment and expenditure costs related to environmental conservation and the quantitative and economic impacts of environmental measures. We calculate these costs and effects based on the 2005 edition of the Environmental Accounting Guidelines by Japan's Ministry of the Environment with Kaneka's own unique way of thinking, targeting all parent manufacturing sites and 30 Group companies in Japan (manufacturing companies).

In fiscal 2019, environmental costs (investments) were 1,321 million yen, an increase of 419 million yen from the previous fiscal year.

Environmental costs (expenditures) increased by 74 million yen, 112 million yen, and 1,887 million yen for pollution prevention, resource recycling, research and development on energy conservation, respectively, year-on-year.

Regarding the economic impacts of environmental measures, the cost reduction effect due to better resource efficiency (output per unit of input) increased by 42 million yen year-on-year. Meanwhile, revenue from recycling, the reduction effect on waste disposal costs due to recycling, and the cost reduction effect due to energy conservation and other savings decreased by 82 million yen, 197 million yen, and 20 million yen, respectively, year-on-year.

(Millions of yen)

Cost Classifications	Main Efforts		cal 17	Fiscal 2018		Fiscal 2019	
Cost Classifications	Main Efforts		Expendi- tures	Invest- ments	Expendi- tures	Invest- ments	Expendi- tures
Business Area		1,177	5,036	901	5,460	1,314	5,647
1. Pollution Prevention	Air and water pollution prevention	1,130	3,236	899	3,476	1,293	3,550
2. Environmental Conservation	Addressing climate change and energy saving	-	-	-	-	-	-
3. Resource Recycling	Waste processing, recycling, and reduction	47	1,800	2	1,984	20	2,096
Upstream and Downstream	Product recycling, collection, and processing	0	8	0	6	0	8
Management Activities	Environmental education for employees and environmental impact monitoring and measurement	10	412	1	444	7	463
Research and Development	Research and development of products contributing to environmental conservation	-	7,203	-	7,477	-	9,364
Social Activities	Greening, beautification, and disclosure of environmental information	2	82	0	78	0	113
Environmental Damage	Payment of sulfur oxide emission charges	0	10	0	10	0	9
Total		1,188	12,752	902	13,475	1,321	15,604

Note: Figures do not include global environment conservation investments and expenditures and research and development investments. Amounts reported here may not fully match, due to rounding.

# Quantitative Impact of Environmental Conservation Efforts

Category	Initiatives	Items	Units	Fiscal 2017	Fiscal 2018	Fiscal 2019
		SOx emissions	Tons	102.4	109.5	86.7
		NOx emissions	Tons	919.5	867.6	832.2
Pollution Prevention	Atmospheric and water discharges of hazardous substances	Chemical oxygen demand	Tons	264.1	248.7	234.7
		PRTR Law- designated chemical emissions	Tons	168.5	183.6	186.3
-	Greenhouse gas emissions	GHG emissions	Thousand tons- CO <sub>2</sub> e	1,279.9	1,264.0	1,185.5
Environment	Energy consumption	Crude oil equivalents	Thousand kiloliters	509.0	516.0	500.0
Resource Recycling	Final landfill	Final landfill	Tons	806.9	877.2	760.8
	External recycling	Amounts recycled	Tons	44,900.0	51,002.0	47,383.3

#### ■ Economic Impacts of Environmental Measures

(Millions of yen)

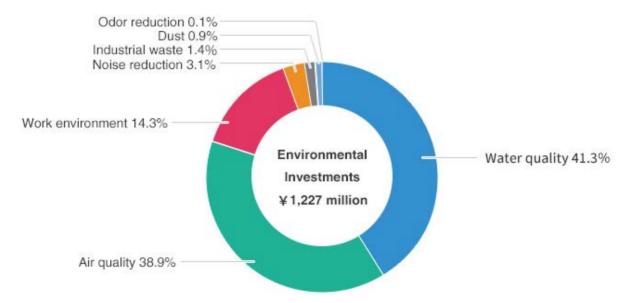
Measures	Fiscal 2017	Fiscal 2018	Fiscal 2019
Revenue from recycling	258	213	131
Cost reductions by better resource efficiency (output per unit of input)	4	-34	8
Waste disposal cost reductions by recycling	327	450	253
Cost reductions by energy conservation	177	247	227
Total	766	876	619

# Environmental Investments (Kaneka)

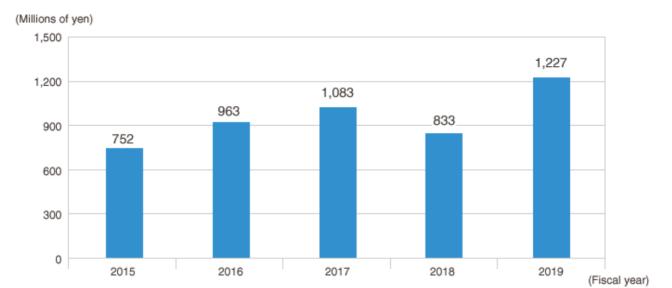
We continue to invest in environmental conservation.

Investments in fiscal 2019 totaled 1,227 million yen due to the replacement of equipment, which 41.3% for water quality, 38.9% for air quality, 14.3% for the work environment, and 3.1% for noise reduction. Environmental investment over the past five years averages about 971.6 million yen, leading with air quality (30.5%), followed by the water quality (27.1%) and the work environment (25.3%). We will continue to invest proactively to maintain and improve the environment.

#### ■ Environmental Investments in Fiscal 2019



#### Cumulative Environmental Investments



## **Environment Efficiency (Kaneka)**

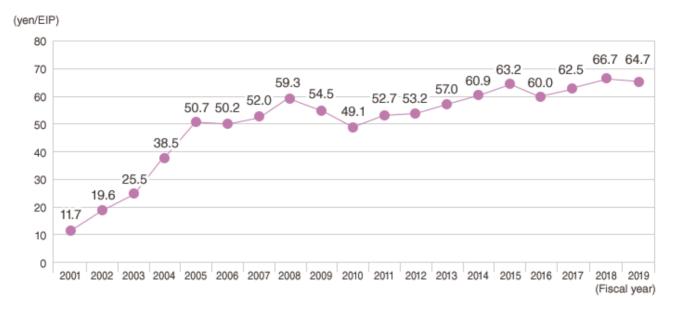
Kaneka assesses the environmental impacts of our production activities using Environmental Impact Points (EIP), which are compiled using the JEPIX methodology (\*5), and we use those points to assess our environmental efficiency (\*6).

Our total environmental impact in fiscal 2019 increased in terms of ozone-depleting substances, hazardous air pollutants, and phosphorous discharges in coastal waters. However, it decreased in terms of greenhouse gases, nitrogen oxides, chemical oxygen demand discharges in coastal waters, and nitrogen discharges. Consequently, it was 4.51 billion EIPs, an improvement of about 1.3% year-on-year. Meanwhile, our environmental efficiency declined by 3.0% from the previous fiscal year due to a reduction in sales.

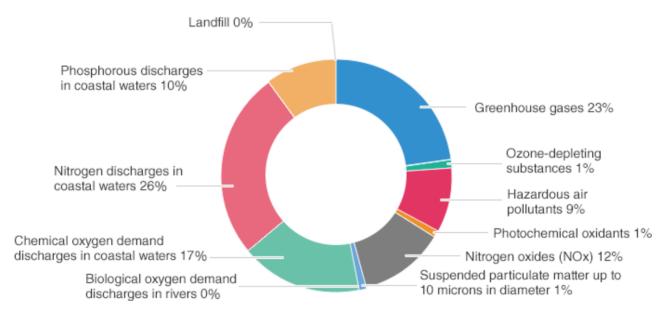
<sup>\*5</sup> The Japan Environmental Policy Priorities Index (JEPIX) methodology involves the calculation of an "eco-factor" coefficient for each emitted substance that has an environmental impact, using a ratio of the annual target for emissions under national environmental policies versus actual annual emissions ("Distance to Target"). The eco-factors are then multiplied by a quantity for each environmental impact to produce a single integrated indicator known as Environmental Impact Points (EIP). Calculations of eco-factors are done by the JEPIX Project (www.jepix.org, in Japanese).

<sup>\*6</sup> 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.

#### Environment Efficiency



## ■ Details of Total Environmental Impact



Fiscal	Net Sales (million yen)	Environmental Impact (100 million EIPs)	Environmental Efficiency (yen/EIP)
2017	293,016	46.9	62.5
2018	304,951	45.7	66.7
2019	292,084	45.1	64.7

## **CHECK & ACT**

Under environmentally friendly management, we continue working to reduce environmental risks by complying with environmental regulations and legislation and criteria in agreements with local governments and by checking compliance with them through various means, including ISO 14001 internal audits and ESG safety and quality inspections.

We will also continue working to further reduce environmental impact and improve environmental efficiency by promoting energy conservation activities.

# TOPIC

# Green Bond (Environmental Bond) Issued

As its 7th unsecured straight bond, Kaneka issued a green bond (environmental bond) to procure funds for the manufacture and R&D of KANEKA Biodegradable Polymer Green Planet (\*7) ("Green Planet") in September 2019. A green bond is an ESG bond, and fund usage is limited to projects that contribute to resolving environmental issues. It is the first such industrial bond issued by a Japanese chemical company.

Green Planet is a 100% plant-based polymer extracted from microorganisms that process plant oils and is biodegradable in the sea and soil. It is expected to contribute to reducing marine pollution caused by microplastics.

For the issuance of the green bond, Kaneka has established the Green Bond Framework, which conforms to the Green Bond Principles 2018 of the International Capital Market Association (ICMA) and the Green Bond Guidelines 2017 Edition of Japan's Ministry of the Environment. To obtain eligibility for and transparency of this green bond and raise its appeal for investors, as a third-party evaluation, Kaneka has obtained a second opinion from Rating and Investment Information, Inc. (R&I) of how this framework conforms to the Green Bond Principles 2018 and the Green Bond Guidelines 2017 Edition. Kaneka has also obtained top-level evaluation in the green bond assessment by R&I, the GA1 preliminary evaluation.

The relevant business segments of the green bond principles and the relevant development objectives of the SDGs are shown in the table below.

<sup>\*7</sup> We changed our product registered trademark from "KANEKA Biodegradable Polymer PHBH" to "KANEKA Biodegradable Polymer Green Planet" in February 2021.

# Green bond principles / Green project categories

## SDGs Development objectives

- Pollution Prevention and Control
- Eco-Efficient and/or Circular Economy Adapted Products, Production Technologies and Process









## **Environment**

# **Climate Change Initiatives**

To address prevention of global warming, we at the Kaneka Group are working to promote energy conservation and reduce CO<sub>2</sub> emission intensity through various measures, for example by utilizing our own environmental capital investment program.

We also use carbon-Life Cycle Analysis ( $_{c}LCA$ ) to calculate  $CO_{2}$  emission reduction benefits by quantitatively assessing  $CO_{2}$  emissions throughout product lifecycle, making comparisons with similar products. We also calculate indirect greenhouse gas (GHG) emissions (Scope 3) associated with our business activities through supply chains.

# Announcing Support for TCFD to Address Climate Change

Kaneka has announced that it supports the recommendations of the Task Force on Climate-related Financial Disclosures (referred to below as TCFD), a task force created by the Financial Stability Board at the request of the G20.

As recommended by the TCFD, Kaneka conducted a structural analysis of the activities of the Kaneka group companies based on risk and opportunity and selected areas of importance and urgency that need to be addressed. Specifically, Kaneka selected three areas they will address from here on: (1) cutting emissions of greenhouse gas (GHG), (2) contributing to a recycling-oriented society, and (3) increasing production of food resources. The progress of these initiatives will be conveyed to all stakeholders in a timely manner.

Kaneka defines its purpose (meaning of existence) as "to solve social issues and realize a sustainable society by providing innovative materials as solutions through the break-through technology and global network". Kaneka has defined the three crises of "Global Environment / Energy", "Food" and "Wellness (living an enriched life)" as domains. Kaneka will put into practice ESG management. Through solving problems related to climate change, Kaneka will help realize a more sustainable society and aim for "Wellness First" to make the world healthy.

We will endeavor to realize carbon neutrality by 2050.

Changes in the social environ-	Supposed changes in the social environment			9	Direction of measures		
ment due to climate change	2025 (short term)	2030 (medium term)	2050 (long term)	Business risk and opportunity	Existing efforts	Additional efforts	
1. Cutting emissions of g	reenhouse gas (GHG)						
1-1. Reduction of GHG emissions	Reduced GHG emission*; 20% compared to fiscal 2015	Produced GHG emission*: 30 % compared to fiscal 2015	Reduced GHG emission*: 60% compared to fiscal 2015	[Opportunity] • Increase in demand for renevable energy [Risk] • Rise in cost	Establishment of GHG emission reduction target by 2000 and implementation of measures     Promotion of investment for energy saving     Improvement in energy intensity	Establishment of a committee that investigates carbon neutral technology and examination of strategies     Realization of an energy-saving plant through production process innovation     RESD of products useful for CING emission reduction and business expansion.	
1-2. Energy policy Drastic changes in industrial structure due to a major pol- icy shift across the world	Acceleration of conversion to non-fossil fluid     Increase in demand for remeable energy     Changes in social structure	Expansion of renovable ener     Progress of electrification     Increase in EVs is the tran     Acceleration of use of rene	n society	[Opportunity]  © Expansion of carbon neutral-related businesses, such as energy saving, energy creation, and energy storage (Risk)  © Rise in cost.	Production and operation innova- tion through implementation of lo? technology Development of a business related to energy-swing and confloration Solar Circus (RVs, insulation materials) Laterch of in-house PV power gen-	Implementation of DX strategies (A), IoT, etc.) at manufacturing sites     Overloopment and social implementation of next-generation PV systems and high host-resultaing materials and their uses for ZEHs/ZEBs     R&D of storage batteries     Procurement of green power	
2. Contributing to a recyc	cling-oriented society	0.0 .01		1/1			
Acceleration of circular economy	Increase in demand for renewable materials in the fields of automobiles, apparel, and electronics     Establishment of recycling technology for various materials	Acceleration of social implemmers and non-dead polymers     Evolution of SRs society		[Opportunity]  Rise in demand for products and technologies that resize resource recycling	Social implementation of KANEKA Sidegradable Polymer Green Planet**     Implementation of 3Rs and landfill waste reduction in production process	Expansion of application of KANEKA. Biodegradable Polymer Green Planes!**     Overelopment of waste recycling technology and social implementation of a recycling system.	
3. Increasing production	of food resources						
Crisis of sustainability in the primary industry, such as spriculture, livestock, and fisheries	Decine in agricultural productivity caused by deterioration of criprensistance due to severe environmental change such as soit depression and desertfactors     Issue in the supply of proteins, such as fish and meet	Expansion of market for safe     Food shortage	and reliable food	[Opportunity]  ® Rise in reset for the development of sustainable technology capable of enhancing production (production (production) in agriculture and levestock industry  ® Increase in demand for safe and reliable food  [Risk]  © Concerns about the procurement of safe food raw materials	Development of food production support technology with no reliance on excessive pesticides or chemical fertilizers (bootemulants, etc.)     Promotion of the deep products and lactic and businesses that support a safe and rich detaily.     Development of technology that reduces food waste	Development and social implementa- tion of products made using biotech- nology faced business, biopersionles- eta.     Promotion of environmentally-friendly- recycling-based organic dary farming R&D toward a one health approach	

<sup>\*</sup> Amount of GHG emission reduction required of the chemical sectority. EA based on the IEA's Sustainable Development Scenario (SC)

► Enlarge the figure (42.8KB) 🖹 🎫

# **Energy Conservation Efforts**

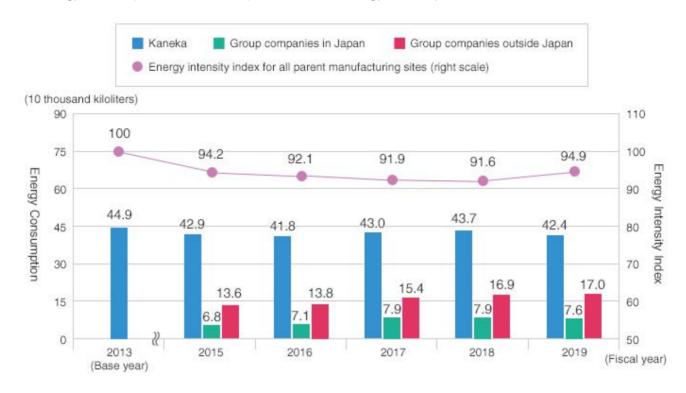
We are engaged in energy conservation activities, using the energy intensity index (\*1) as an indicator for management.

The energy intensity index for all parent manufacturing sites in fiscal 2019 was 94.9, an increase of 3.6% from the previous fiscal year. This was due to the impact of the decrease in production volume, which significantly reduced energy use efficiency. The average rate of change over the past five years was an increase of 0.2%, which did not reach our goal (an annual average decrease of 1%).

Non-consolidated energy consumption(\*2) was 424 thousand kiloliters, a decrease of 3.0% from the previous fiscal year, mainly due to a decrease in production volume.

- \*1 Energy intensity index: Energy intensity is a numerical value calculated by dividing the energy used in manufacturing by the volume of activity (production volume at all parent manufacturing sites). The energy intensity index is calculated by indexing the energy intensity, with fiscal 2013 used as the base year of 100.
- \*2 Energy consumption is calculated based on the Energy Saving Law (Act on the Rationalization etc. of Energy Use of Japan). The boundaries are consistent with the Energy Saving Low and the Action Plan for a Low Carbon Society prepared by the Japan Chemical Industry Association and include all manufacturing sites and other facilities.

■ Energy Consumption (Crude Oil Equivalents) and Energy Intensity Index



## Initiatives to Cut CO<sub>2</sub> Emission Intensity

At Kaneka, we are working to reduce  $CO_2$  emission intensity, using a  $CO_2$  emission intensity index (\*3) as an indicator for management, based on  $CO_2$  emissions from energy consumption associated with production activities.

The energy origin CO<sub>2</sub> emission intensity index for all parent manufacturing sites in fiscal 2019 was 95.7, which did not achieve our fiscal 2020 target of 93.2.

Our greenhouse gas (GHG) emissions (\*4) decreased by 6.3% from the previous year to 1,027 thousand tons- $CO_2$ e due to a reduction in production volume, a decrease in the  $CO_2$  emission factor for electricity, and the results of energy conservation activities.

We will continue to streamline our production processes through innovation to reduce GHG emissions.

- \*3 CO<sub>2</sub> emission intensity index: CO<sub>2</sub> emission intensity is a numerical value calculated by dividing CO<sub>2</sub> emissions from energy consumption associated with production activities, which are calculated using a fixed emission factor unique to Kaneka, by the volume of activity. The CO<sub>2</sub> emission intensity index is calculated by indexing the CO<sub>2</sub> emission intensity, with fiscal 2013 used as the base year of 100. Our target for fiscal 2020 is 93.2.
- \*4 GHG emissions, calculated in accordance with the Act on Promotion of Global Warming Countermeasures, are the total amount of energy origin CO<sub>2</sub> emissions, non-energy origin CO<sub>2</sub> emissions, and the CO<sub>2</sub> equivalent of methane and N<sub>2</sub>O emissions. For emission factors for electricity, the basic emission factors are used for calculation. The boundaries are the same as those for energy consumption.

■ GHG Emissions and Energy Origin CO<sub>2</sub> Emission Intensity Index



# GHG Emissions from Business Activities throughout the Supply Chain

We have calculated indirect GHG emissions (Scope 3) associated with our business activities through supply chains. The following tables show our GHG emissions by scope and Scope 3 emissions calculated by category.

■ GHG Emissions by Scope (FY 2019 results at Kaneka)

	GHG emissions [Thousand tons- CO <sub>2</sub> e/year] (year-on-year)	
Scope 1	Direct emissions (*5)	769.6 (+0.3%)
Scope 2	Indirect emissions from energy consumption (*6)	257.5 (-21.8%)
Scope 3  Other indirect emissions (upstream/downstream) (*5)		2,580.1 (+24.0%)
Total GHG emissic	ons	3,607.2 (+13.5%)

<sup>\*5</sup> Non-energy origin CO₂ emissions and CO₂-equivalent emissions of methane and N₂O are included.

<sup>\*6</sup> As emission factors for electricity, the basic emission factor for each power company was used for calculation. GHG emissions calculated using the location-based method were 322.4 thousand tons-CO<sub>2</sub>e (-15.9%).

#### Scope 3 Emissions (FY 2019 results at Kaneka)

	Category	GHG emissions [Thousand tons- CO <sub>2</sub> e/year]
1	Purchased goods/services	1,911.7 (*7)
2	Capital goods	62.4
3	Fuel-and energy-related activities not included in Scope 1 or Scope 2	145.6
4	Upstream transportation and distribution	21.9
5	Waste generated in operations	3.3
6	Business travel	10.1
7	Employee commuting	1.1
8	Upstream leased assets	0.0
9	Downstream transportation and distribution	- (*8)
10	Processing of sold products	- (*8)
13	Downstream leased assets	0.0
14	Franchises	- (*9)
15	Investments	423.9
Scope 3	3 total	2,580.1

Note: Amounts reported here do not fully match, due to rounding in each category.

Methods for calculating GHG emissions for Category 11 "Use of sold products" and Category 12 "End-of-life treatment of sold products" are under consideration. GHG emissions for these categories will be reported from the next fiscal year onward.

<sup>\*7</sup> Due to the revision of the calculation method, the calculated values increased by 441 thousand tons-CO<sub>2</sub>e compared to those calculated using a conventional method.

<sup>\*8</sup> GHG emissions for this category were not calculated because we were unable to determine a rational calculation method due to the high percentage of intermediate products.

<sup>\*9</sup> GHG emissions for this category were not calculated because we have no franchise stores.

# ■ Calculation Methods for Scope 3 Emissions

Category	Description of the Calculation Method
1	The calculation was made using emission factors listed in the LCI database "IDEA ver. 2.3" (National Institute of Advanced Industrial Science and Technology / Sustainable Management Promotion Organization) with the purchase results in this fiscal year considered as the volume of activity. The coverage rate was 100% on a main raw material weight basis.
2	The calculation was made by multiplying investments in each capital formation area by emission factors listed in the Emissions Unit Database for Calculation of Greenhouse Gas Emissions, etc. by Organizations throughout the Supply Chain, (ver. 3.0) published by the Ministry of the the Environment of Japan. The coverage rate was 100%.
3	The calculation was made by multiplying electric power, steam, and fuel consumption by emission factors listed in the Emissions Unit Database for Calculation of Greenhouse Gas Emissions, etc. by Organizations throughout the Supply Chain (ver. 3.0) published by the Ministry of the Environment of Japan and in the IDEA database ver. 2.3 (for the calculation of supply chain GHG emissions) published by the National Institute of Advanced Industrial Science and Technology and the Sustainable Management Promotion Organization. The coverage rate for organizations subject to the calculation was 100%.
4	The calculation was made using a calculation method stipulated in the Measures Pertaining to Consigners of the Energy Saving Law. Emission results have been calculated every year since fiscal 2006 according to the Energy Saving Law. The coverage rate was 100%.
5	The calculation was made by multiplying the volume of waste by type from manufacturing sites by emission factors listed in the Emissions Unit Database for Calculation of Greenhouse Gas Emissions, etc. by Organizations throughout the Supply Chain (ver. 3.0) published by the Ministry of the Environment of Japan. The coverage rate was 100%.
6	The calculation was made by multiplying travel costs by transportation mode and the number of stays by emission factors listed in the Emissions Unit Database for Calculation of Greenhouse Gas Emissions, etc. by Organizations throughout the Supply Chain (ver. 3.0) published by the Ministry of the Environment of Japan. The coverage rate was 100%.
7	The calculation was made by multiplying travel costs by transportation mode by emission factors listed in the Emissions Unit Database for Calculation of Greenhouse Gas Emissions, etc. by Organizations throughout the Supply Chain (ver. 3.0) published by the Ministry of the Environment of Japan. The coverage rate was 100%.
8	According to company policy, we do not use leased assets for upstream operations, in principle. However, if some assets are leased, out of necessity, the emissions from them are included in Scope 1 or 2. The coverage rate was 100%.

Category	Description of the Calculation Method
9	This category was excluded from the scope of calculation because it is difficult to accurately grasp a wide range of downstream logistics operations due to the high percentage of intermediate products and to calculate the emissions using a rational calculation method.
10	This category was excluded from the scope of calculation because it is difficult to accurately grasp a wide range of downstream product processing operations due to the high percentage of intermediate products and to calculate the emissions using a rational calculation method.
13	The calculation was made by multiplying the activity volume of leased assets by emission factors stipulated in the Act on Promotion of Global Warming Countermeasures according to the Basic Guidelines on the Calculation of Greenhouse Gas Emissions throughout the Supply Chain (ver. 2.3) published by the Ministry of the Environment of Japan. Since the emissions associated with assets leased to Group companies are included in the Scope 1 or 2 emissions of each company, they are included in Category 15.
14	This category was considered as an exception for calculation because Kaneka Corporation has no franchise stores.
15	The emissions of Group companies were calculated using a calculation method stipulated in the Act on Promotion of Global Warming Countermeasures according to the Basic Guidelines on the Calculation of Greenhouse Gas Emissions throughout the Supply Chain (ver. 2.3) published by the Ministry of the Environment of Japan and then being multiplied by the relevant equity ratio. Investment in companies other than Group companies was excluded from the scope of calculation because it has not been made to obtain profits.

# Investments in Energy-Efficient Facilities

To continue reducing energy intensity and  $CO_2$  emission 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 – global warming prevention, effective use of resources, and environmental impact reduction – that are priorities in Kaneka's environmental management program. In fiscal 2019 we continued allocating a large portion of this fund to projects that address climate change, including broader initiatives such as visualizing energy consumption. Based on the recognition that a certain effect has been produced, we will promote the use of this investment program for activities to reduce intensities.

#### Results of Our Own Environmental Capital Investment Program

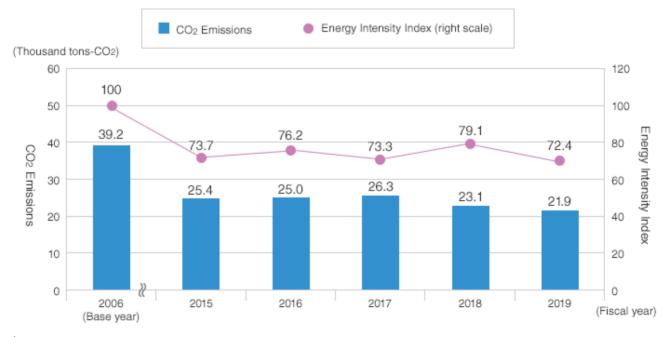
Fiscal Year	Investments	Number	Reduced CO <sub>2</sub> Emission
2015	¥200 million	22	1,435 tons-CO <sub>2</sub> /year
2016	¥200 million	23	1,688 tons-CO <sub>2</sub> /year
2017	¥200 million	15	1,654 tons-CO <sub>2</sub> /year
2018	¥200 million	24	1,748 tons-CO <sub>2</sub> /year
2019	¥200 million	29	1,227 tons-CO <sub>2</sub> /year

# **Energy-Efficiency Initiatives in Logistics**

To achieve an annual 1% reduction in energy intensity and a continuation of 1% improvement in five-year average energy intensity as a specified consigner under the amended Act on Rational Use of Energy, we continued working plant by plant towards implementing modal shifts, promoting joint distribution, and improving cargo load ratios.

In fiscal 2019, the transportation volume (ton-kilometer) increased year-on-year. Meanwhile, our  $CO_2$  emissions decreased by 1,200 tons- $CO_2$  year-on-year due to the promotion of shipping transportation, resulting in an improvement of 6.7 points in the energy intensity index.

#### ■ CO<sub>2</sub> Emissions and Energy Intensity Index from Logistics (\*10)



<sup>\*10</sup> Energy intensity index from logistics is a numerical value calculated using a CO<sub>2</sub> emission calculation method stipulated in the Measures Pertaining to Consigners of the Energy Saving Law, with fiscal 2006 used as the base year of 100 for indexing the logistics energy intensity.

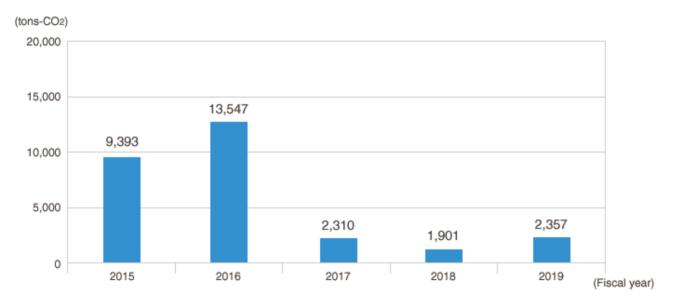
# Response to the Fluorocarbons Emission Control Law

Complying with the Act on Rational Use and Appropriate Management of Fluorocarbons in Japan, we are promoting the replacement of aging equipment as well as strengthened management of equipment. The estimated leakage amount of fluorocarbons generated from all parent manufacturing sites in fiscal 2019 was 2,357 tons-CO<sub>2</sub>, an increase of 456 tons-CO<sub>2</sub> over the previous fiscal year. No Group companies in Japan exceeded an estimated 1,000 tons-CO<sub>2</sub> leakage of fluorocarbons.

To reduce the estimated leakage of fluorocarbons to less than 1,000 tons-CO<sub>2</sub> by the end of fiscal 2020, we will update aging equipment in a planned way, selecting equipment with low global warming potential (\*11) and promoting fluorocarbon-free production. We will also reduce the leakage of fluorocarbons by inspecting equipment to detect and eliminate fluorocarbon leaks at an early stage. For equipment using CFCs, called specific fluorocarbons, we have formulated a plan to update all equipment by 2025.

\*11 Global warming potential is a figure that shows, on the basis of carbon dioxide, how other greenhouse gases have the property of causing global warming.

#### Estimated Leakage of Fluorocarbons at Kaneka



## **Environment**

# **Preventing Pollution and Managing Chemical Substances**

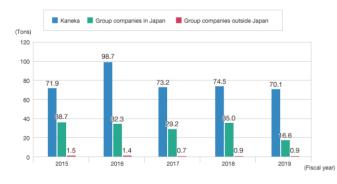
Kaneka Group works to prevent air and water pollution, appropriate management of toxic chemical substances, and the reduction of their emissions.

## **Preventing Air and Water Pollution**

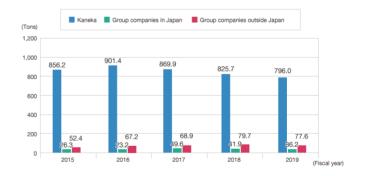
Kaneka engages in production activities in compliance with the standards specified in the Air Pollution Control Act and the Water Pollution Control Act as well as the criteria included in agreements made with local governments.

Regarding the atmosphere, SOx, NOx, and soot and dust emissions from all parent manufacturing sites decreased in fiscal 2019 from the previous fiscal year. SOx and NOx emissions from Group companies in Japan also decreased year-on-year. In terms of water, there were a decrease in COD and nitrogen emissions and an increase in phosphorous and SS emissions at all parent manufacturing sites and non-manufacturing facilities. At Group companies outside Japan, water consumption and COD emissions increased due to the influence of product types.

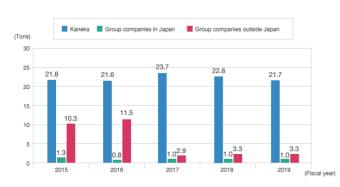
#### SOx Emissions



#### NOx Emissions



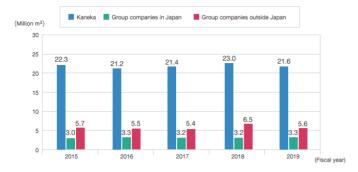
Soot and Dust Emissions



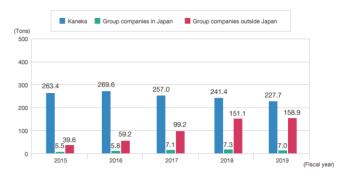
#### ■ Water Consumption (\*1)



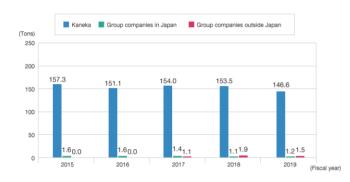
#### ■ Wastewater Discharges (\*1)



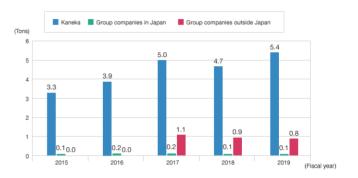
### ■ Chemical Oxygen Demand in Wastewater (\*1)



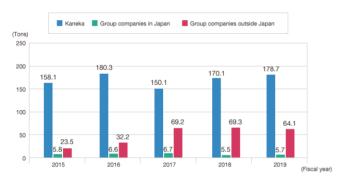
#### Nitrogen in Wastewater (\*1)



#### ■ Phosphorous in Wastewater (\*1)



## Suspended solids in Wastewater (\*1)

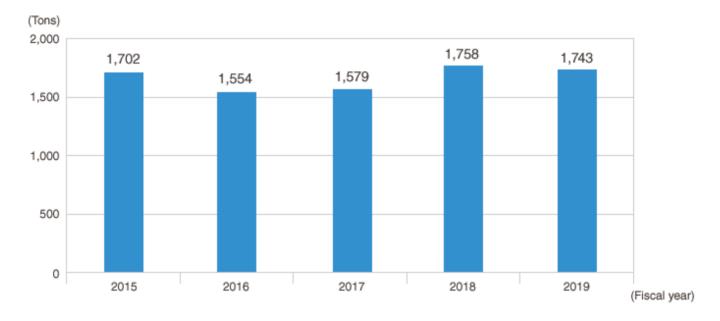


<sup>\*1</sup> From fiscal 2015, our water consumption and wastewater volume include those generated from non-manufacturing facilities other than the plant department.

# **Volatile Organic Compounds Emission Reduction**

We are committed to reducing the emission of VOCs (\*2), which are known to cause photochemical smog. In fiscal 2015, we at Kaneka set the goal of controlling VOC emissions to below 1,800 tons. In fiscal 2019, total emissions were 1,743 tons, a decrease of 0.9% from the previous fiscal year. We will continue our efforts to manage VOC emissions.

■ Volatile Organic Compounds Emissions (All parent manufacturing sites)



<sup>\*2</sup> Volatile Organic Compounds (VOCs) are organic chemical substances that cause suspended particulate matter and photochemical oxidants.

# Hazardous Atmospheric Pollutants (Data of six substances for each manufacturing site of Kaneka)

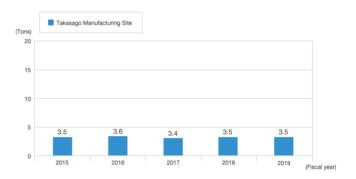
Total emissions in fiscal 2019 of six hazardous atmospheric pollutants (shown by manufacturing site in the following graphs) were 21.4 tons, which represented a year-on-year decrease of 4.3%. The stabilization of operation of exhaust gas treatment equipment and a reduction in product production volume at the Takasago Manufacturing Site led to a decrease in chloroethylene emissions and dichloromethane and 1,3-butadiene emissions, respectively, and contributed to lowering total emissions.

We will continue to make efforts to control total emissions for environmental impact reduction.

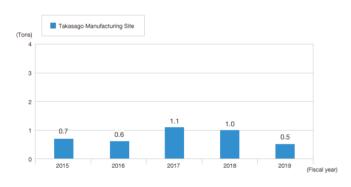
#### Chloroethylene Emissions



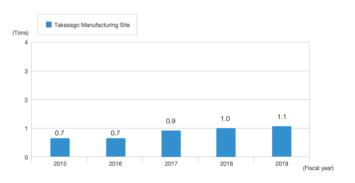
#### ■ 1,2-Dichloroethane Emissions



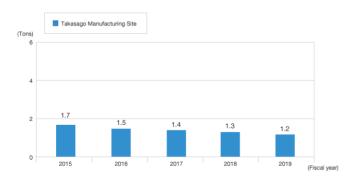
#### Chloroform Emissions



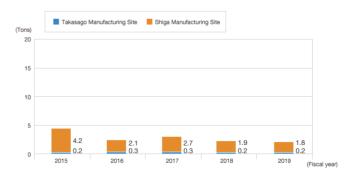
Acrylonitrile Emissions



#### ■ 1,3-Butadiene Emissions



#### ■ Dichloromethane Emissions



# PRTR Discharge

Based on the Pollutant Release and Transfer Register (PRTR) Law, we calculate the release and transfer amount of chemical substances subject to the law. In fiscal 2019, Kaneka's total discharge of the relevant substances was 79.2 tons, a decrease of 3.1 tons from the previous fiscal year. The total discharge by Group companies in Japan was 107.1 tons, an increase of 5.7 tons compared to the previous fiscal year.

■ Fiscal 2019 Kaneka Emissions Subject to the Pollutant Release and Transfer Register Law (Kilograms)

	Designated Number under Ordinance	r Chemical Substances	Fiscal2019					Fiscal 2018	
			Emissions				Transferred	Emissions	
			Atmospheric Emissions	Discharges into Public Waterways	Discharges into Soil	Internal Landfill	Total	Total	Total
Large Discharges of 10 Substances	392	N-hexane	13,600	0	0	0	13,600	101,938	13,500
	94	Chloroethylene (vinyl chloride)	13,100	200	0	0	13,300	970	13,610
	275	Sodium dodecyl sulfate	0	8,200	0	0	8,200	0	8,300
	240	Styrene	5,410	39	0	0	5,449	9,740	5,840
	420	Methyl methacrylate	5,200	5	0	0	5,205	10	5,606
	134	Vinyl acetate	4,200	240	0	0	4,440	0	4,320
	7	N-butyl acrylate	4,150	0	0	0	4,150	2,840	4,360
	157	1,2- dichloroethane	3,400	80	0	0	3,480	0	3,450
	232	N,N- dimethylfor- mamide	2,500	930	0	0	3,430	220,000	5,200
	336	Hydroquinone	0	2,400	0	0	2,400	0	2,300
Total Other than the 10 Substances Above		9,969	5,551	0	0	15,521	276,521	15,778	
Grand Total for All Substances			61,529	17,645	0	0	79,175	612,019	82,264

Note: Of the 462 substances subject to the PRTR, Kaneka reports about 61 items. Amounts reported here may not fully match, due to rounding.

■ Fiscal 2019 Group Company in Japan Emissions Subject to the Pollutant Release and Transfer Register Law

(Kilograms)

	Designated		Fiscal 2019						Fiscal 2018
	Number	Chemical	Emissions					Transferred	Emissions
	under Ordinance	Substances	Atmospheric Emissions	Discharges into Public Waterways	Discharges into Soil	Internal Landfill	Total	Total	Total
	232	N,N- dimethylfor- mamide	62,000	0	0	0	62,000	5,900	54,005
	300	Toluene	28,320	0	0	0	28,320	198,038	28,731
	186	Dichloromethane (methylene dichloride)	9,780	0	0	0	9,780	153,210	11,703
	296	1,2,4- trimethylbenzene	2,309	0	0	0	2,309	0	2,359
Large Discharges	80	Xylene	2,152	0	0	0	2,152	0	2,187
of 10	392	N-hexane	1,050	0	0	0	1,050	20,160	210
Substances	355	Bis (2- ethylhexyl) phthalate (DEHP)	592	40	0	0	632	97,000	587
	213	N,N- dimethylacetami de	- 600	0	0	0	600	30,000	300
	127	Chloroform	255	0	0	0	255	3,505	150
	31	Antimony and its compound	0	1	0	0	1	5	1
Total Other Above	than the 10	Substances	0	0	0	0	0	8,867	1,167
Grand Total for All Substances		ances	107,058	41	0	0	107,099	516,685	101,399

Note: Of the 462 substances subject to the PRTR, group companies in Japan reports about 25 items. Amounts reported here may not fully match, due to rounding.

## **CHECK & ACT**

We are working to reduce environmental impacts on air and water quality and ensure rapid response to any abnormality. The increase in emission by Group companies in Japan is mainly due to increased production of products using N,N-dimethylformamide. We will continue our efforts to reduce the discharge of chemical substances.

## **Environment**

## **Reducing Waste and Recycling Resources**

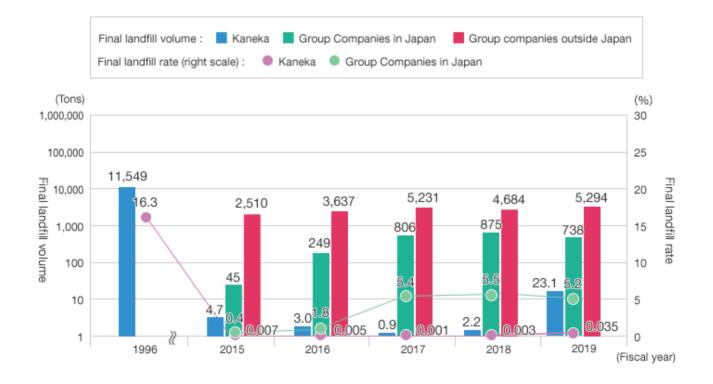
Through pursuing the 3Rs (reduce, reuse and recycle) aimed at the reduction and recycling of industrial waste from our operations, Kaneka has been able to achieve zero emissions (\*1) for 14 consecutive years. We are also working toward all group companies in Japan being able to achieve zero emissions.

\*1 Zero emission defined by Kaneka: The final landfill waste must be less than 0.5% of the generated waste.

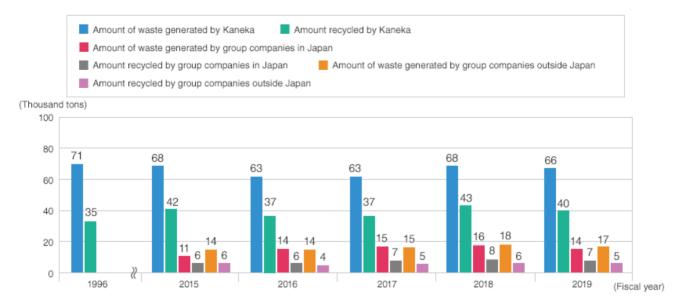
## **Cutting Waste Sent to Landfill**

In fiscal 2019, we effectively achieved zero emissions, with a final landfill volume for all parent manufacturing sites of 23.1 tons, equivalent to a final landfill rate of 0.035%. The final landfill rate of 46 Group companies in Japan was 5.2%, showing an improvement of 0.3% from the previous year, but failed to achieve zero emissions.

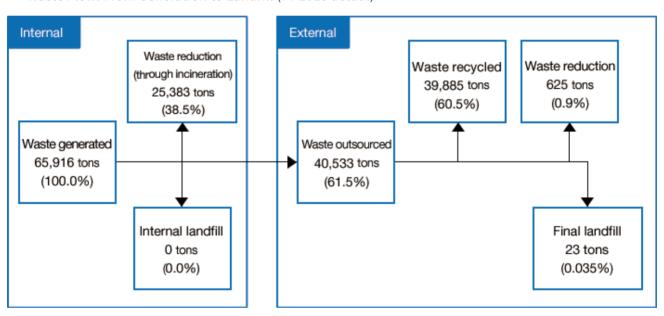
■ Volume and Rate of Waste Sent to Landfill



#### Waste Generated and Recycled



■ Waste Flow: From Generation to Landfill (FY 2019 actual)



## Proper Disposal of Industrial Waste

In fiscal 2019, we formulated the Guidelines for the Industrial Waste Treatment Commission to disseminate points to note at the time of signing a commission contract. 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**

Because reducing waste leads to improving global sustainability by means of resource savings, cost reduction, as well as CO<sub>2</sub> 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.

We also facilitate continuous improvement activities through process analysis using Material Flow Cost Accounting (MFCA).

## **CHECK & ACT**

For industrial waste, we will control waste generation to increase the recycling rate of waste from our operations at home and abroad.

## **Environment**

## **Biodiversity**

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.

#### Partnership for Biodiversity Conservation

We join the following initiatives.

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

# Takasago Manufacturing Site "Kaneka Forestry for the Future"

Since 2012, employees at the Takasago Manufacturing Site have been involved in the Kaneka Forestry for the Future project, aimed at preserving a private forest. They have helped to protect a forest of roughly 15 hectares in Taka Town, Hyogo Prefecture.

Since 2013, training of newly hired employees has been part of the project. Assisting each other on the forest terrain in cutting and transporting timber, the participants build solidarity and teamwork. In April 2019, 70 newly hired employees carried out tree thinning, and 47 employees and their family members participated in another session in November. The carbon sink since the start of the project amounts to 2.08 tons-CO<sub>2</sub>. We will continue this private forest preservation project.



Timber felling through cooperation among newly hired employees



Tree thinning by employees and their family members

## Osaka Manufacturing Site "Settsu-no-mori Kaneka Biotope"

Since 2012, we have operated the Settsu-no-mori Kaneka Biotope(\*) on the premises of the Osaka Manufacturing Site in collaboration with the Settsu Firefly Society, to create a firefly habitat in Settsu City.

Since 2015, along with the appearance of fireflies (May/June), we have held a firefly viewing gathering, inviting local residents. In 2019, the biotope was open to the public for firefly viewing from May 25 to June 2. From 2017, we have also held an ensemble concert by the Japan Century Symphony Orchestra at the Osaka Manufacturing Site during the firefly viewing period. In 2019, a total of 80 local residents, employees, and their family members attended the concert. We will continue our activities as a plant open to the local community.

\* 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.



"Firefly Evening Concert"



Adult firefly



Firefly viewing gathering

## Shiga Manufacturing Site "Walnut School"

Employees at the Shiga Manufacturing Site have joined the Walnut School's efforts to conserve the Konooka Biotope as a steering committee member.

The Konooka Biotope is a habitat of diverse creatures. Established as a collaborative effort by Shiga Prefecture, Otsu City, and local community members including employees at the Shiga Manufacturing Site, the Walnut School works to preserve this precious natural environment of Lake Biwa for future generations. We participated in its seasonal nature observation gatherings and regular activities in July and December, such as grass mowing, sidewalk maintenance, the updating of tree signs and so on.

The natural observation gatherings provide valuable learning opportunities for children to observe rare plants, wild birds, and insects in the biotope and to understand its importance. We will continue to contribute to the conservation of the beautiful natural environment of Lake Biwa.



Nature observation gathering

# Safety / Quality Management Approach

## **Basic Policy**

Placing the top priority for management on safety, we have established the Basic Policy on Safety, under which all employees as well as all persons working at the Kaneka Group and our partner companies work to create safe and healthy workplaces and share the importance of safety with the goal of no accidents and no disasters.

As for product quality, aiming to benefit society and satisfy customers through a stable supply of safe and reliable products, we have set Quality Management Regulations to ensure product safety at all stages, from product design and development to delivery to customers.

#### **Basic Policies for Responsible Care**

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.

### **Promotion System**

As for safety, the Safety & Human Health Subcommittee, with the director in charge of process safety as the chair, sets policies and goals related to occupational safety, process safety, and disaster prevention and checks the progress of goals. To share the importance of safety first between management and on-site staff, members of top management inspect plants to check the on-site situation and create an opportunity to talk with employees.

As for product quality, the Product Safety Subcommittee sets policies and goals related to product safety and quality assurance and checks the progress of the goals. Established as its implementation bodies, the Product Safety Review Conference and Quality Management Conference oversee the quality assurance structure throughout the Kaneka Group.

■ Diagram of Promotion System



# Safety / Quality Process Safety and Disaster Prevention

## **Targeting Zero Process Accidents**

Placing the top priority for management on safety, the Kaneka Group share the importance of safety first between management and on-site staff and work to ensure zero process accidents. In fiscal 2019, we worked on two key challenges: ensuring the intrinsic safety of equipment and fostering a safe culture.

- Ensuring the Intrinsic Safety of Equipment
  We are promoting our efforts from the perspective of multiple protection based on risk assessment
  (safety assessment) of plants. We are also working to establish a smart plant by actively adopting DX
  (digital transformation) with a view to realizing an unmanned plant.
- Fostering a Safe Culture

  To have employees recognize the importance of observance of rules, we develop basic safety actions (greetings, 3Ss, handrail holding) and encourage these actions through posters and questionnaires.

  Based on the questionnaire results, we provide feedback to organization administrators and promote discussion at the workplace to help employees recognize the importance of basic actions and raise their safety awareness. We also take measures to recognize the importance of preventing human errors.

Although five process accidents, including minor accidents, occurred in fiscal 2019, there were no serious accidents related to process safety. When the accidents occurred, we promptly notified the relevant public fire department. And, we apologized to local residents and anyone affected by the disturbance. When occupational and process accidents occur, we share information on them throughout the Group, determine their causes, and share prevention measures against them across the Group. We have also created the Best Practices Guide, a collection of reference cases for safety educations. Using the guide for safety education at Group companies, we will continue our efforts to enhance safety awareness and techniques.

### **Basic Safety Policies**

- Safety forms our management foundation, and is the basis of all corporate activities. We take action with priority given to ensuring safety in all activities in the company.
- Safety is the foundation of local and worldwide communities' confidence in Kaneka. We do our best to develop their trust.
- Safety is based on our belief that "All accidents can be prevented."
   We always move forward without being satisfied with lukewarm results.
- Safety is the responsibility of every employee in accordance with his/her duties. We fulfill our responsibilities by mutually clarifying the duties we have assumed.
- Safety must be maintained continuously.
   We ensure safety through steady efforts on a daily basis.

## Implementation of Disaster Drills

We annually conduct comprehensive disaster drills, based on a scenario of a large-scale earthquake and a fire caused by hazardous material leakage, at all parent Manufacturing Sites jointly with local governments and an industrial complex so that we can promptly and effectively respond to emergency situations.

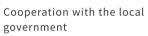
We advance countermeasures against natural disasters in order to priority, including promoting the earthquake-proofing of equipment in preparation for large-scale earthquakes, and implementing risk assessment for typhoons and heavy rain, which have frequently occurred in recent years, based on hazard maps for all parent Manufacturing Sites and Group companies in Japan.

We also learn how to initially respond to a fire and how to use a hydrant to prevent the spread of a fire. To improve disaster coping skills, we join a hydrant operation competition held locally, ranking higher every year.

## ■ Comprehensive Disaster Drills

Manufacturing Site	Date	Participants	Details
Takasago Manufacturing Site	December 16, 2019	2,158	An earthquake resulting in a fire caused by hazardous material leakage
Osaka Manufacturing Site	November 6, 2019	1,087	An earthquake resulting in a fire caused by harmful material leakage
Shiga Manufacturing Site	November 27, 2019	464	An earthquake resulting in a fire
Kashima Manufacturing Site	March 4, 2020	90	An earthquake resulting in a fire caused by hazardous material leakage









## **Plant Safety Initiatives**

We assess the safety of equipment using HAZOP (\*). We make it compulsory that employees registered as evaluators through the in-house certification program should assess the safety of equipment. To foster safety evaluators, we annually hold a HAZOP workshop, inviting external experts as lecturers. In fiscal 2019, 68 employees attended the workshop. Currently, 43 employees are registered as safety evaluators. We have established a technique for assessing the risk of accidental chemical mixing and a method for evaluating thermal runaway in chemical reactions. We will continue to improve these safety techniques to ensure plant safety.

\* HAZOP (Hazard and Operability Studies): A hazard identification technique used for chemical plants.



#### CHECK & ACT

The number of process accidents decreased. However, toward further reduction of accidents, we will ensure risk assessment and intrinsic safety by setting risk assessment standards and fostering safety evaluators. We will make company-wide efforts to prevent similar accidents.

# Safety / Quality Occupational Safety and Health

## Occupational Safety and Health Initiatives

Safety is a top management priority for the Kaneka Group, and it is our social mission to improve safety. To ensure safe and secure operations, we believe it is important to create a workplace environment where employees can work in good physical and mental health.

While being committed to continuing to protect safety, we have established the Zero Accident Principles, based on which all employees, including members of top management, make a point of following the rules. We also conduct ESG safety and quality inspections to check the safety management status of plants on-site. We assess the evidence of the status and share items that need improvement between the Head Office and the relevant plant. Based on a one-year-term improvement plan, we implement the PDCA cycle throughout the year.

In 2019, 19 occupational accidents occurred in the Kaneka Group, of which 10 resulted in lost work time, and nine did not. In particular, the number of machine accidents, such as being caught in machinery, was large. The main causes were the shortage of safety inspections by supervisors, the unconscious and careless behavior of workers, and the leakage of risk identification.

We will boost personal safety awareness by promoting safety activities in compliance with the Zero Accident Principles, including identifying potential danger, ensuring the intrinsic safety of equipment, and taking safeguarding measures.

#### **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%)

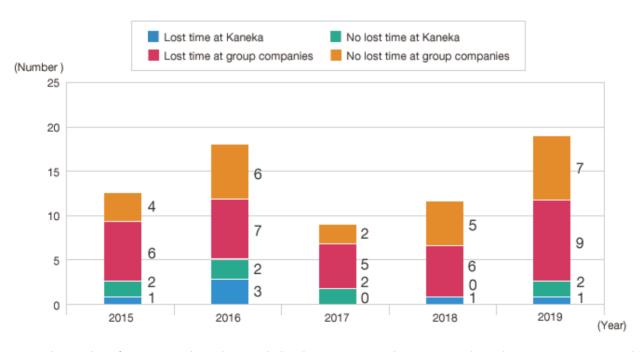
## Enhancing Our Occupational Safety and Health Management System

Our all parent Manufacturing Sites 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

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

#### Accidents Resulting / Not Resulting in Lost Time



Note: The number of occupational accidents includes those among employees at Kaneka and partner companies working in the Kaneka Group.

#### Accident Frequency Rate and Accident Severity Rate

Area	All Kanel	ka Group	Kaneka		Group Companies in Japan and Overseas	
Year	2018	2019	2018	2019	2018	2019
Accident Frequency Rate	0.23	0.52	0.00	0.00	0.36	0.78
Accident Severity Rate	0.02	0.01	0.00	0.00	0.03	0.02

Note: Accident Frequency Rate: An indicator that shows the frequency of occupational accidents that caused death and/or injury by indicating the number of casualties per total 1 million actual working hours.

Accident Severity Rate: An indicator that shows the level of severity of occupational accidents by indicating the number of lost work days per total 1,000 working hours.

Both rates are calculated targeting employees at Kaneka and Group companies.

## **Prevention of Machine Accidents**

To prevent machine accidents, such as being caught in machinery, we foster experts in machine safety. In fiscal 2019, we registered 32 employees who acquired safety sub-assessor (SSA) (\*) qualification as safety experts.

\* Safety sub-assessor (SSA) qualification is provided to machine designers who have the basic knowledge and skills required to check the validity of machine safety.

## Hands-on Safety Experience Programs

We have established hands-on safety experience facilities to have employees experience the fear of occupational accidents.

For Group companies in Japan, we provide employees with the opportunity to gain simulated experience, using in-vehicle hands-on safety experience equipment, to raise their safety awareness. We also promote the introduction of a system that enables virtual reality experience.







## Safety Commendation

We present the President's Safety Award to all business sites that have achieved no accidents (no process accidents) and no disasters (no accidents resulting / not resulting in lost time) based on the internal standards.

In fiscal 2019, the award was granted to four Group companies within and outside Japan. Taiyo Yushi Corporation was certified as a Safety-conscious Company by the Japan Chemical Industry Association. We will continue to actively commend efforts to improve safety in order to raise safety awareness toward achieving zero accidents.

#### ■ In-house Safety Commendation

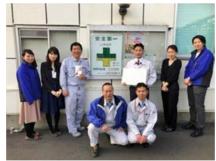
Group Company	Award for Zero Accident and Disaster Period
Kaneka Medical Vietnam Co., Ltd.	July 2007 - (12 years)
Kaneka Sun Spice Corporation	July 2014 - (5 years)
Showa Kaseikogyo Co., Ltd.	January 2015 - (5 years)
Taiyo Yushi Corporation	January 2016 - (4 years)

#### Certification as a Safety-conscious Company by the Japan Chemical Industry Association

Group Company	Certification for Zero Accident and Disaster Period
Taiyo Yushi Corporation	January 2016 - (3 years)



Kaneka Medical Vietnam Co., Ltd.



Taiyo Yushi Corporation

## **CHECK & ACT**

In 2019, 19 occupational accidents occurred. To achieve zero accidents, we will work to promulgate basic safety actions to all employees, improve production line management, and strengthen the risk assessment foundation.

# Safety / Quality Product Responsibility

### **Quality Management**

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 product safety at all stages of product design and development, raw material procurement, manufacturing, and sales.

In fiscal 2019, related activities included the followings:

- Self-inspection was conducted to check management review implementation in each division for more improvement.
- We checked product inspection implementation at the plants of Group companies and found no serious compliance violations.
- We held four Quality Management conferences, inviting persons in charge of quality management in each business division, to instill the policy and instructions of the ESG Committee and the Product Safety Subcommittee, exchange views, and share information on product quality.
- We undertook a range of activities to improve the capacity of our employees, including through outside seminars and in-house lectures by external experts.

## **Product Safety Review Conference**

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 targeted at general consumers.

To respond to emerging opportunities in a timely and speedy manner, in fiscal 2019 the Product Safety Review Conference and its administration office carried out related pre-consultations (hearings). In new food fields, in particular, we asked external experts to check risks to ensure product safety.

## **Chemical Substance Management**

We appropriately manage chemical substances at all stages of product development, manufacturing, transportation, sales, and disposal, following Japanese and international laws and regulations. For raw material procurement, we have established the Green Procurement Standards to prevent mixing of chemicals prohibited under the Chemical Substances Control Act (\*1). We also actively offer information for the proper handling of our products through displaying Globally Harmonized System of Classification and Labelling of Chemicals (GHS) (\*2) labels and providing a safety data sheet for products.

- \*1 Chemical Substances Control Act: Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.
- \*2 GHS: A worldwide system for classifying and labelling chemicals according to their hazardous properties.

# **Audits and Inspections**

We 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 ESG safety and quality inspections and internal auditing.

In fiscal 2019, related activities included the followings:

- We conducted an inspection and checked business operations with external experts, targeting expandable plastics, food, high-performance resin, and regenerative medicine and cell therapy.
- We continued to clarify the strengths and weaknesses of our product quality through quantitative evaluation and conducted an audit at all Group companies in Japan, including the production, sales, and administration divisions, through self-inspection using an audit checklist.
- We continued to develop and train internal auditors to further improve internal audit capabilities.

#### **CHECK & ACT**

The expansion of the scope of internal audits led to enhancing our ability to inspect and improve product manufacturing as well as services for customers.

We will optimize the quality management system with the Product Safety Subcommittee serving as a center and through the improvement of frontline execution.

# Certification Acquisition Status

## ■ ISO 9001 Certification

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 (MOD) SV	Impact modifiers (Kane Ace B etc.), processing aids and specialty additives (Kane Ace PA etc.), toughener for thermosetting resins (Kane Ace MX), engineering resin for injection molding (Kaneka Hyperite), zero birefringence PMMA material (Kaneka Hyperite), and Acrylic film (Sunduren)	LRQA / 10189365	
Performance Polymers (MS) SV	Silyl-terminated polyether (Kaneka MS Polymer etc.), acrylic silicon polymer (Kaneka Gemlac), terminally reactive liquid acrylic polymer (KANEKA XMAP etc.), and isobutylene-based thermoplastic elastomer (SIBSTAR)		
Foam & Residential Techs SV	Bead technique-based polyolefin resins and molded	JCQA / JCQA-0673	
Hokkaido Kanelite Co., Ltd.	products (Eperan, Eperan PP), bead technique-based expandable polystyrene (Kanepearl), and extruded polystyrene foam board (Kanelite)		
Kyushu Kanelite Co., Ltd.			
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, high thermal-conductive graphite sheet (Graphinity), thermal conductive elastomer, and flexible cover coat ink	LRQA / YKA0935762	
	Highly heat-resistant and light-resistant resins and molded products	DNV / 01635- 2006-AQ-KOB- RvA/JAB	

Division or Group Company (SV : Solutions Vehicle)	Major Products	Registry Organization and Number
PV & Energy management SV		
Kaneka Solartech Corporation	Photovoltaic modules	JQA / JQA- QMA13200
Kaneka Solar Marketing Corporation		
Foods & Agris SV		
Takasago Manufacturing Site Foods Manufacturing Department	Margarine, shortening, edible oils and fats, edible refined oils and fats, whipped cream, concentrated milk products, modified milk, fermented milk	JQA / JQA- QMA10274
Kaneka Foods Manufacturing Corporation	products, flour paste, butter cream, chocolate, frozen dough, cheese, mayonnaise, cooking fillings, prepared foods, yeast, antifreeze protein, antifreeze polysaccharide, and seasoning materials	
Tokyo Kaneka Foods Manufacturing Corporation		
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	Organic electroluminescent lighting	JMAQA / JMAQA- 2532
OLED Aomori Co., Ltd.		2332
Showa Kaseikogyo Co., Ltd.	Plastic compounds	ASR / Q0556

Division or Group Company (SV : Solutions Vehicle)	Major Products	Registry Organization and Number
Tatsuta Chemical Co., Ltd.	Plastic film, plastic sheet	BVJ / 4503769
Sanvic Inc.	Synthetic resin sheets and films	JMAQA / JMAQA- 1824
Tobu Chemical Co., Ltd.	Plastic wallpaper, vinyl chloride resin wallpaper	LRQA / YKA0958154
Cemedine Co., Ltd.	Development and manufacture of general and industrial adhesives, sealants and special paints	JCQA / JCQA-0386
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
Kaneka Foam Plastics Co., Ltd. Kyusyu Plant	Bead technique-based polyolefin molded products	JACO / QC17J0033
Tamai Kasei Co., Ltd.	A series of operations related to order receipt, manufacturing, inspection, and shipping of Phase Change Material (PCM) (Patthermo)	ASR / Q4131
Vienex Corporation	Electronic products	JSA / JSAQ2593
Shinka Shokuhin Co., Ltd.,	Modifiers for bread and confectionery, processed fruit products, outsourced products (margarine, cooking fillings, modified milk)	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
Corporation	Cosmetics for hair and skin care, dental care items, body soaps, and soaps for clothes, dish washing and house cleaning	BVJ / 4171923

Division or Group Company (SV : Solutions Vehicle)	Major Products	Registry Organization and Number
Kaneka Sun Spice Corporation	<ul><li>(1) Spices and secondary processed products incorporating spices</li><li>(2) Purchase and sales of general processed foods and their ingredients</li></ul>	JQA / JQA- QMA11351
Nagashima Shokuhin Co., Ltd.	Frozen puff pastry dough and frozen cookie sheets	JQA / JQA- QMA15844
Tochigi Kaneka Corporation	Bonded magnets (Kaneka Flux), multilayer insulation materials, and high thermal-conductive graphite sheet (Graphinity)	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 028i
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 / QMS 00900
Kaneka Paste Polymers Sdn. Bhd.	Vinyl chloride paste resin	SIRIM QAS / QMS 00900
Kaneka Apical Malaysia Sdn. Bhd.	Ultra-heat-resistant polyimide films (Apical), High thermal-conductive graphite sheet (Graphinity)	SIRIM QAS / QMS 00900
Kaneka MS Malaysia Sdn. Bhd.	Modified silicone polymer (Kaneka MS Polymer)	SIRIM QAS / QMS 00900
Kaneka Innovative Fibers Sdn. Bhd.	Synthetic fibers	SIRIM QAS / QMS 00900
Kaneka Eperan Sdn. Bhd.	Bead technique-based polyolefins (Eperan, Eperan PP)	SIRIM QAS / AR2598
Kaneka Eperan (Suzhou) Co., Ltd.	Bead technique-based polyolefins (Eperan, Eperan PP)	SGS / CN18/20031

Division or Group Company (SV : Solutions Vehicle)	Major Products	Registry Organization and Number
Kaneka (Foshan) High Performance Materials Co., Ltd.	Bead technique-based polyolefins (Eperan, Eperan PP)	Beijing East Allreach certification Center Co., Ltd. / USA19Q44009R1S
Kaneka (Thailand) Co., Ltd.	Bead technique-based polyolefin resins and molded products (Eperan, Eperan PP)	BSI / FM714676
KSS Vietnam Co., Ltd.	Processed spices, herbs, dried vegetables, and mixed spices	Intertek Certification Limited / CPRJ- 2015-040996
Kaneka Eurogentec S.A.	Products and services for research and development in life science	BSI / FS 638601
Anaspec Inc.	Peptides, antibodies, synthetic resins, amino acids, and reagents for research	SQA/09.357.1

## ■ ISO 13485 Certification (\*3)

Division or Group Company (SV : Solutions Vehicle)	Main Products	Registry Organization and Number	
Medical SV			
Kaneka Medix Corporation	Lixelle, liposorber, catheters, silascon, and ED coil	TÜV SÜD / Q5 024736 0069	
Kaneka Medical Vietnam Co., Ltd.	Catheters (parts)		
Kaneka Medix Tech Corporation	Endoscopic instruments		
Kaneka Eurogentec S.A.	In vitro diagnostic oligonucleotides	BSI / MD 638600	

#### ■ ISO 22000 Certification (\*4)

Production Unit or Group Company	Main Products	Registry Organization and Number	
Takasago Manufacturing Site Pharmaceutical Department	Coenzyme Q10 (Kaneka Q10, Kaneka QH)	SGS / JP10 / 030379	
Kaneka Sun Spice Corporation	Spices and secondary processed products incorporating spices	JQA / JQA-FS0123	
KSS Vietnam Co., Ltd.	Processing of spices, herbs, dried vegetables, and mixed spices	Intertek Certification Limited / 38191405003	

<sup>\*4</sup> ISO 22000 is an international standard for food safety management systems.

## ■ Food Safety System Certification 22000 (FSSC 22000) Certification (\*5)

Division or Group Company (SV : Solutions Vehicle)	Main Products	Registry Organization and Number	
Foods & Agris SV	Margarine, shortening, flour paste, butter cream, edible oils and fats, edible refined oils and fats, concentrated milk products, modified milk, cheese, whipped cream, yeast, fermented milk products, antifreeze protein, antifreeze polysaccharide, and seasoning materials	JQA / JQA-FC0047	
Takasago Manufacturing Site Foods Manufacturing Department	Margarine, shortening, edible oils and fats, edible refined oils and fats, whipped cream, concentrated milk products, modified milk, and yeast	JQA / JQA- FC0047-1	
Kaneka Foods Manufacturing Corporation	Margarine, flour paste, buttercream, cheese, fermented milk products, antifreeze protein, antifreeze polysaccharide, and seasoning materials	JQA / JQA- FC0047-2	

<sup>\*3</sup> ISO 13485 is an international standard covering the comprehensive management system requirements for the design and manufacture of medical equipment.

Division or Group Company (SV : Solutions Vehicle)	Main Products	Registry Organization and Number	
Tokyo Kaneka Foods Manufacturing Corporation	Margarine, shortening, flour paste, buttercream, 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 contectionery)		

<sup>\*5</sup> FSSC22000 is a sector for food safety management system, which based on ISO 22000 with the addition of ISO/TS 22002-1 requirements.

### ■ ISO 22716 Certification (\*6)

Group Company	Main Products	Registry Organization and Number	
Taiyo Yushi Corporation			

<sup>\*6</sup> ISO 22716 is guidelines on the Good Manufacturing Practices (GMP) of cosmetic products.

## ■ ISO17025 Certification (\*7)

Group Company	Main Products	Registry Organization and Number	
Tokyo Kaneka Foods Manufacturing Corporation	Microbial testing (viable bacteria count, coliform count)	JAB / RTL04360	

<sup>\*7</sup> ISO17025: General requirements for the competence of testing and calibration laboratories; Criteria based on which an accreditation body assesses whether the relevant testing and calibration laboratory can produce accurate measurement and calibration results.

## **CSR Procurement**

## **Management Approach**

## **Basic Policy**

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.

**Policy** 

## **Basic Procurement Policy**

- We will engage in procurement activities that enhance the corporate value of both Kaneka and our business partners.
- We will endeavor to reduce environmental damage by engaging in green procurement.
- 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.
- We will abide strictly by the relevant Japanese and foreign laws and regulations.

### **CSR Procurement**

### **CSR Procurement**

# Green Procurement Based on Basic Procurement Policy

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.

## **Procurement Initiatives**

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.

For CSR procurement, we asked our business partners to respond to our questionnaire survey in fiscal 2019. We will gradually provide feedback to them based on the survey results to further develop a relationship of trust with them through dialogue.

## **Initiatives for Logistics Safety**

In fiscal 2019, jointly with our transportation contractors, we carried out a year-long awareness-raising initiative on the premises to promote safety in logistics operations. It included the implementation of a risk prediction training program and checking safety behavior during loading. We also held transport accident emergency reporting drills based on specific scenarios. Simulated training on emergency handling of poisonous materials was held at the Takasago Manufacturing Site. Through continuous implementation of these activities, all staff members reaffirm how to take action in the event of accidents and the importance of prompt reporting to relevant departments to control emergency situations.



## **CHECK & ACT**

Kaneka Group continues to engage in procurement activities based on the Green Procurement Standards.

## **Human Resource Strategies**

# Wellness and Growth of Individual Employees as a Source of Innovation and Value Creation

Being a "Human Driven Company" is the DNA of Kaneka. In the VUCA world, individual employees in good physical and mental health generate the results and value of work and realize innovation. Considering that only such employees can help organizations maintain and improve health and achieve high productivity, we are involved in various activities while cultivating our capacity for innovation and creativity.









#### Work Culture Innovation

## Changing "Pain" to "Gain"

To make effective use of time, information, and human resources and maximize the productivity of organizations and employees from the perspectives of "Life in Work" and "Work in Life," we have formed the Work Culture Committee under the ESG Conference to streamline business processes and change office environments. We also work to enhance value communication and create a robust organization where members are united toward the same purpose.

We have promoted the reform of working practices by introducing various systems that allow employees to choose a flexible working style, including the adoption of remote working. We have also introduced shorter and staggered work hours programs, a child and nursing care leave system, and a babysitting expense aid system to help employees achieve a better work-life balance.

The COVID-19 pandemic has drastically changed the conventional working environment. We are accelerating innovation to create a new way of working adaptable to this drastic paradigm shift. While continuously engaging in remote working, making full use of online technologies, individual employees need to cultivate their imagination, creativity, and intuition to acquire more effective and productive job performance skills and achieve discontinuous innovation and growth.

With the slogan "Change pain to gain!" we will further deepen our efforts and continue to innovate toward smart work that leads to better working conditions and higher productivity.

#### **New Style Work Culture**

#### (1) Improvement of telecommuting system

Our conventional telecommuting system has been improved to respond to the COVID-19 pandemic. We have improved our IT infrastructure and have established a telecommuting aid system to make the system more available, thereby ensuring the health and safety of employees. We have also increased the value of telecommuting by raising its efficiency using online platforms. Some employees work at remote offices converted from company housing.

The use of flexible and staggered work hours programs enables employees to avoid commuter rush hours.

#### (2) Changes in meetings

We have abolished large meetings and regular meetings. Instead, we often hold small meetings to share and discuss information in a timely manner. With a limitation of up to 10 members and 50 minutes per meeting, we hold both in-person and online meetings. By innovating the way to prepare for, operate, and facilitate a meeting, we promote speedy decision-making and implementation.

#### (3) Revision of the working environment

To ensure a safe working environment, we conduct body temperature checks, provide partitions and antiseptic solution, and secure social distancing through a non-territorial office system. In association with changes in meetings, we have increased spaces for small meetings and have promoted standing meetings by removing some chairs from meeting rooms. We are seeking to create a working environment adapted to a new way of working.



## "Kaneka 1-on-1" lighting a fire in people's hearts



- I. Set the business goals and implement
- II. Communicate with each boss about progress for goals

Kaneka 1-on-1
involving all
employees

1-on-1 communication with a boss
Communication for enhancing personal job
performance and growth

Regular team meetings
Meetings organized by
organization administrators

The growth of people and the results of work are like the two sides of a coin. We aim to realize human resource development and goal achievement through Kaneka 1-on-1. To create a more united organization as One Team, we have expanded the system to involve all employees.

In Kaneka 1-on-1 involving all employees, we promote frequent 1-on-1 communication with one's boss and regular meetings on a smallest unit (team) basis to enhance collaboration and information sharing and resolve issues together, aiming to increase organizational power. Through communication and team meetings, we deepen mutual trust and encourage autonomous and voluntary behavior to reinforce human resource development and organizational power.

Moreover, to enhance the coaching ability of bosses, we hold skill-up workshops for them, measure their effects through surveys and hearings, and provide feedback to improve value communication.

#### Development of Human Resources and Leaders Centered on "Kaneka 1-on-1"



We conduct training programs for employees, including those at group companies in and outside Japan, to develop future executive candidates and leaders who will strongly lead businesses and operations. Some participants in the programs have been appointed to division chief and executive positions at overseas group companies.

#### Development of Leaders

Program Name	Content	Fiscal 2017 No. of participants	Fiscal 2018 No. of participants	Fiscal 2019 No. of participants	Total from the start of the program
Hitotsubu- no Tane Momi Juku	Lectures and exercises by the top management and first-class instructing staff targeted at future leaders and management personnel	12	12	12	61
Kaneka Creative Corner	Lectures and exercises by the top management and first-class instructing staff targeted at future leaders of national staff	12	12	Not implemented	34
Leadership Challenge	Acquiring and practicing leadership skills and follow-	(outside Japan) 24	(outside Japan) 21	(outside Japan) 36	(outside Japan) 464
	enge	(in Japan) 236	(in Japan) 288	(in Japan) 187	(in Japan) 1,138



## Toward the Active Participation of Diverse Workforce

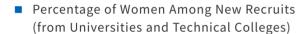
We are trying to resolve various social issues as a Trial & Error experiment driven company. Considering that new ideas are generated from conflicts between and respect for different values, we promote active participation of diverse personnel with high motivation and leadership skills in the workplace, regardless of age, gender, or nationality.

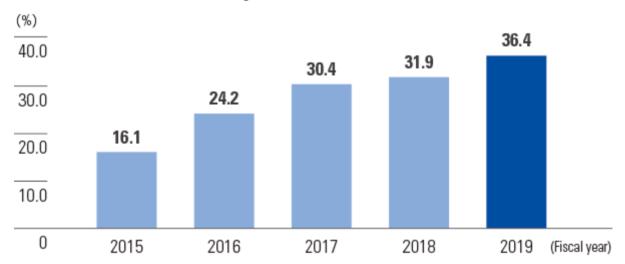
#### **Active Promotion of Female Employees**

Women's power is essential to business growth. We have hired more women in all fields, including food, health, and SNS-based marketing. More female employees play a central role in a newly established sales promotion section for Kaneka Ubiquinol and other sections.

The percentage of women among new recruits (from universities and technical colleges) is increasing yearly. We promote the active appointment of female managers to nurture future leaders in business and management.

We will more actively promote female recruitment and manager appointment based on action plans to provide useful solutions for society, making use of diverse values in business.





#### **Use of Senior Employees**

Amid a decrease in the working population, we need to retain highly motivated and skilled personnel, in anticipation of the advent of the 100-year lifespan. To ensure that senior employees after retirement age can work with motivation regardless of age, we have shifted to a job-specified re-employment system. In the new system, senior employees design a second career based on their experience and skills through in-house job matching. To support them, we are creating a career design training program for employees in their 50s.

We will create a system that helps senior employees use their experience and expertise to form a new career and increase their willingness to work.

#### ■ Implementation of Career Development and Life Design Support Activities

Program Name	Fiscal 2017  No. of participants (No. of training sessions)	Fiscal 2018  No. of participants (No. of training sessions)	Fiscal 2019  No. of participants (No. of training sessions)
Career-design training	382	272	139
Life-design training	63 (7)	75 (6)	-(*1)

<sup>\*1</sup> A life planning booklet was distributed to employees.

#### Hiring and Support of Employees with Various Nationalities

Of about 11,000 employees in the Kaneka Group, about 3,000 employees of foreign nationality are engaged in operations worldwide in line with our global business expansion.

We have introduced a hiring system that recruits new graduates in spring and October to hire more employees of foreign nationality. To smoothly accept them, we provide a Japanese learning program, promote OJT jointly conducted by the Human Resources Department and the relevant division, and conduct regular interviews to boost their retention.

We also focus on developing future global leaders by having them gain experience in countries other than their home country through the Study Abroad Program and the Overseas Trainee Dispatch Program.

#### **Employment of Persons with Disabilities**

The employment rate of persons with disabilities at Kaneka in fiscal 2019 was 2.21%. We are providing them with more work opportunities, including pickup and delivery work, greening and cleaning of plants, computerization of documents, and in-house creation of business cards.

We will create a welcoming workplace, expand occupational fields, and support employment efforts by group companies to increase their employment rate throughout the Kaneka Group.

#### **Efforts for Wellness**

#### **Basic Policy**

We define ESG management as "Wellness First" health management. To make the world more wellness-first, we aim to ensure that individual employees in the Kaneka Group lead vibrant and colorful lives and work with enthusiasm through efforts to build their physical and mental health.

In a virus era, it is important that all employees work together to create a healthy and vigorous workplace where they can play a positive role and to build an ever-evolving work culture. We believe this leads to the implementation of our mission "Kaneka thinks 'Wellness First'".

#### Framework for Health Promotion

We will promote the health of employees and their family members and build a healthy organization and workplace from three perspectives: (1) prevention of lifestyle-related and other diseases, (2) mental health, and (3) ties. We will also implement various programs that they can enjoy together, feeling connected to each other.

Listening to employees' views, we will offer health promotion programs through cooperation between the company, the health insurance society, and the labor union and through value communication.

#### ■ Framework for Health Promotion





#### Mother Center for Wellness "KANEKA Wellness Center" to Be Newly Established

In November 2020, we decided to establish the KANEKA Wellness Center [Design supervision: Mr. Kengo Kuma(\*2)] at the Takasago Manufacturing Site as a place to accelerate health promotion (construction completion scheduled for 2022).

At the Center, classroom lectures on healthy diet, sleep, and exercise and hands-on seminars, including physical training and yoga, will be offered. Through these programs, we will help employees develop a considerate attitude and deepen ties with their families and colleagues, their body and mind, and our health food products. We thereby aim to decease those with some abnormality by half and reduce to zero those with mental problems.

We plan to provide health promotion programs and devices developed at the Center to other business sites to help Kaneka Group employees and their family members maintain their physical and mental health. We will also offer health information and events for local residents through the Center to deepen ties and communication with them and help them improve their health.

\*2 An architect and designer active around the world who is associated with designing the New National Stadium, the main stadium for the 2020 Tokyo Olympic and Paralympic Games.





Conceptual drawing of the KANEKA Wellness Center (exterior from the sky and interior) : Courtesy of © Kengo Kuma and Associates

#### Mental Health Care

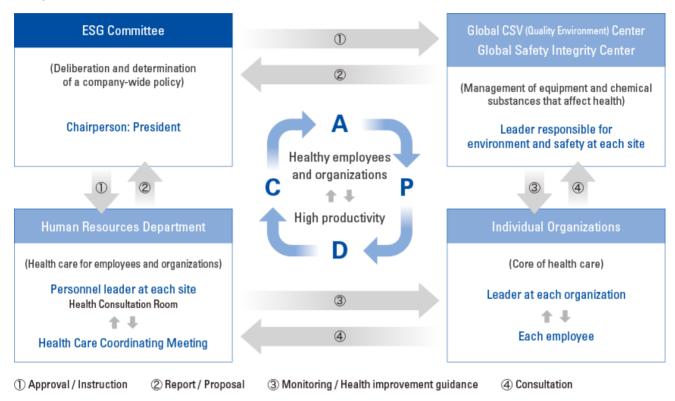
Mental health care activity is necessary to maintain employees' mental health. We provide interview opportunities with experts at the Health Consultation Room, a telephone consultation service in cooperation with the health insurance society, and health care to those with high stress levels who were identified through stress checks launched in 2016. We also are continuing efforts to improve the workplace environment by identifying issues at each workplace through stress check group analysis. We are seeking to ensure that individual employees can work in good mental health with colleagues.

- Improving the group analysis method at each workplace (adding new stress check items, such as work engagement and unity at the workplace, to conventional items)
- Enhancing the consulting system for loan employees in and outside Japan
- Improving education and training programs and online contents for providing information

#### System toward Health Maintenance and Promotion

The ESG Committee determines measures to resolve health issues, and each employee and organization, the safety division, the Health Consultation Room (industrial physicians and nursing staff), the health insurance society, the labor union, the personnel at each site, the general affairs division, and the human resources division work together to implement the CAPD cycle while maintaining value communication.

System toward Health Maintenance and Promotion



#### Enjoying Exercise and Deepening Ties through "Run & Walk"

We consider it important that all employees in the Kaneka Group and their family members lead colorful lives in good health, mentally and physically.

To this end, we provide various opportunities to help individual employees raise their health awareness and change their behavior so that they can improve self-care awareness and establish a healthy lifestyle. Many employees actively participate in these activities.

 The long-distance relay race "Run, Run, Run. kaneka 2019" (launched in 2015) was held, gathering employees and their families from Kaneka group companies in and outside Japan and partner companies, with 2,699 people entering the race.



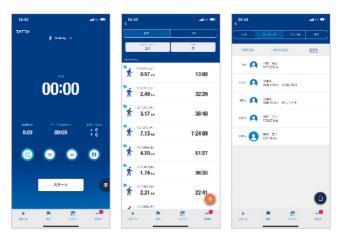


Long-distance relay race "Run, Run, Run. kaneka 2019"



At the closing ceremony of the long-distance relay race "Run, Run, Run. kaneka 2019"

- While various activities were restricted due to the COVID-19 pandemic, we held "Run & Walk 2020 in kaneka," a race between five-member teams that could be entered online. A total of 1,576 employees (89 teams in the running section; 230 teams in the walking section) ran and walked at nearby places for a month while remotely communicating with each other.
- We sponsored the Hokkaido Marathon (fiscal 2019).
- We won the Runners Award hosted by the Runners' Foundation for the first time as a company for a Group-wide long-distance relay race, sponsorship of the Hokkaido Marathon, support for participants, and a marathon training program targeting even beginners.
- The Kashima Manufacturing Site was certified as a Sports Yell Company by the Japan Sports Agency for its health promotion activities in fiscal 2019 (for two consecutive years from fiscal 2018).
- The Takasago and Shiga Manufacturing Sites offered smart meals, certified as healthy diets, at their canteens.
- We supported various health initiatives for those who wish to start some form of exercise and try to run a marathon to enhance health awareness, maintain and improve fitness, and increase physical strength.
  - Implementation of an online marathon training session and seminar.
  - Provision of hands-on programs, such as a health seminar by a RIZAP trainer, an office yoga program, and a seminar on sleep.
  - Abolition of office smoking areas and prohibition of smoking during working hours to eliminate passive smoking.



Running distance measured using the smartphone application "TATTA," which enables to check team members' distance, and encourage each other









Online running training session that connects each runner online



Office yoga program is useful to increase work efficiency, improve health, and relieve stress

## **Social Contributions**

## **Management Approach**

## Basic Policy

As a good corporate citizen, Kaneka Group engages in various activities to deepen stakeholder understanding, such as disaster reconstruction support, youth development, international contributions, and environmental conservation. Thereby, we work to build strong ties with communities and society as a highly open and transparent company.

### **Social Contributions**

## **Supporting Disaster Reconstruction**

## Establishment of the KANEKA UNITED Kizuna Foundation

In fiscal 2018, Kaneka decided to move toward ESG Management. Hoping to maintain and improve employees' health, Kaneka thinks "Wellness First." Under this management philosophy, we set up the KANEKA UNITED Kizuna Foundation in September 2019 to help areas severely affected by natural disasters, such as a typhoon and an earthquake, return to normal and healthy condition as soon as possible.

This Foundation consists of reserves contributed by the company at the time of founding and on a regular basis and reserves contributed periodically and voluntarily by directors and employees who agree with the purpose of the Foundation. An annual report is delivered to these directors and employees each year, and the provision of donations is reported on our Intranet.

## Support Concerning Damages from Typhoon Nos. 15/19 in 2019

When typhoon Nos. 15 and 19 hit Japan in September and October 2019, respectively, we donated 10 million yen to the Japan Platform through the KANEKA UNITED Kizuna Foundation to aid disaster victims and reconstruction.

We also donated part of the proceeds from a summer festival held at the Takasago Manufacturing Site through the Japan Red Cross Society.

We hope that disaster-stricken areas will achieve rehabilitation and reconstruction in the quickest possible time.

## Support for Tohoku and Kumamoto

We organized the product fair "Waku-Waku Market," targeting employees at the Osaka Manufacturing Site, in April and December 2019 to support disaster-stricken areas in the Tohoku region. On market days, employees from our group company Kaneka Osaka Service Center Co., Ltd. worked with market staff to sell products, including sake, side dishes to go with rice, and sweets, from the Tohoku region. The fair provided access for employees to purchase products only available in Tohoku and led to assistance from the Kansai region to disaster-stricken areas. We will continue these support activities.

We also donated part of the proceeds from a summer festival held at the Takasago Manufacturing Site as

We also donated part of the proceeds from a summer festival held at the Takasago Manufacturing Site as a reconstruction support fund for Kumamoto Earthquake-stricken areas through the Kobe Shimbun Welfare Foundation.





"Waku-Waku Market," a product fair to support disaster-stricken areas in the Tohoku region

#### **Social Contributions**

## **Fostering Youth Development**

Kaneka Group is active in efforts to foster youth development in communities where it operates. We will make a continuous contribution to local communities through youth development.

## Kaneka Manufacturing Class

We provide support to Core-Net, a certified non-profit organization that aims to foster youth development, using know-how from industry and the experience and knowledge of retired executives of companies.

Core-Net is mainly involved in education support (manufacturing and science experiment classes for kindergarten, elementary, and junior high school students) and corporate support (entrepreneurship and vocational courses for senior high school and university students). Continuing from 2014, we worked together with Core-Net to annually offer Kaneka Manufacturing Classes, in which sixth graders assembled Scrollers II (a small self-powered rolling robot) kits, aiming to increase children's interest and improve understanding of manufacturing.

The classes were offered in July 2019 at Torikai Nishi Elementary School, near the Osaka Manufacturing Site, to 88 students; in October at Takasago Elementary School, near the Takasago Manufacturing Site, to 58 students; and in December at Shimosakamoto Elementary School, near the Shiga Manufacturing Site, to 159 students.

Newly hired employees at these Manufacturing Sites and retired employees of the company joined the classes as lecturers to assist students and show them the enjoyment and sense of achievement that can come from creating something. After assembling the kits, students were very excited to see the trial runs in gymnasiums. These classes provided a good opportunity for newly hired employees to realize the difficulty of providing guidance and reaffirm the basics of manufacturing. We will continue to offer these classes.



Takasago Manufacturing Site



Osaka Manufacturing Site



Shiga Manufacturing Site

## Effort of the Kaneka Group

#### (All parent manufacturing sites, Group companies in Japan and overseas)

Regularly accepted internship, on-the-job training, career experience, and workplace visit offers from local students. Also participated in Hyogo Prefecture's work experience programs for junior high school students and conducted plant and facility visits for neighborhood schools, local community associations, and other groups.



Experiencing a manufacturing process in the work experience program (Kaneka Foods Manufacturing Corporation)



Plant visit by local university students (Kaneka (Malaysia) Sdn. Bhd.)



Acceptance of plant visit by local elementary school students (Kaneka Nishinippon Styrol Co., Ltd.)

#### (All parent manufacturing sites, Group companies in Japan and overseas)

Conducted outreach lectures and lab classes for students and teachers above elementary school level.



Offered the environmental class "Toyooka Environment Innovation" to local elementary school students (Kaneka Solartech Corporation)



Delivered a lecture on fostering youth development to local elementary school teachers (Tokyo Kaneka Foods Manufacturing Corporation)



Offered a soap class at the "EcoPro 2019" exhibition (Taiyo Yushi Corporation)

#### **(Takasago Manufacturing Site)**

- Planted seedlings in May (240 participants) and did potato-digging in November (362 participants) in the field located at the Takasago Manufacturing Site with local kindergarten, elementary, and special needs school students.
- Invited elementary school students in Takasago City to offer a child summer holiday class, where they visited a plant and produced erasers and bread.





Potato-digging

Experience producing an eraser

#### **Osaka Manufacturing Site**

- Offered a hands-on safety experience program and a safety lecture to about 160 technical college students to help them obtain knowledge on danger and safety in the handling of equipment.
- Offered internships and plant visits to high school and technical college students. Also dispatched employees to the high school and technical college from which they graduated to offer a lecture to students to raise their working awareness and improve their expertise.



Safety lecture offered to technical college students



Acceptance of plant visit

#### (Shiga Manufacturing Site)

- Offered the "Welcome Seniors" program to local sixth graders, where employees (in a research position or a management-track position) from the Shiga Manufacturing Site introduced specific jobs at Kaneka and had them think about working.
- Accepted plant visits by first-grade high school students from a Super Science High-school (SSH) (\*1) and the Super Global High-school (SGH) (\*2) in Shimane Prefecture to explain about products manufactured at the Shiga Manufacturing Site and about Kaneka.
- \*1 Super Science High-school (SSH): a high school designated by the Ministry of Education, Culture, Sports, Science and Technology to provide advanced education focused on scientific technology, science, and mathematics.
- \*2 Super Global High-school (SGH): a high school designated by the Ministry of Education, Culture, Sports, Science and Technology to foster global leaders who have interest in social issues, a good education, communication skills, and an international grounding in resolving issues and can play active roles internationally in the future.







Acceptance of SSH and SGH students

#### **(Kashima Manufacturing Site)**

Conducted an outreach science lecture under the theme of polystyrene foam, which is manufactured at the Kashima Manufacturing Site, for 132 local fifth graders to show the enjoyment of science and teach the shock absorbing and heat insulating properties of polystyrene foam and how it is used in daily life.



Outreach lecture

#### ⟨Kaneka Americas Holding, Inc.⟩

Continued to provide an annual four-year scholarship of \$1,000 to local high school students through the Kaneka Foundation for 25 years from 1994.

#### **(Kaneka Sun Spice Corporation)**

Participated in the "Gathering with Graduates to Develop Career Views and Work Views," held as part of high school education, as graduates.

#### **Kaneka Solartech Corporation**

Participated in the "Ottorossha! Manufacturing VI" program, hosted by the Toyooka Industries Association, to offer the Interesting Course, where elementary school students learned about global warming and created electricity themselves to compete with solar panels.

#### **(Kaneka Medical Tech Corporation)**

Delivered a lecture on the medical device industry in Japan and the design/development of our products and medical devices and offered a demonstration to about 20 first graders at a local SSH. Also accepted their plant visit.

#### (Kaneka Medix Corporation)

Donated bell marks to a local elementary school.



A box set to collect bell marks

#### ⟨Cemedine Co., Ltd.⟩

- Sponsored the All Japan Technical College Robot Contest (Technical College Robocon), aimed at supporting young engineers with a passion for manufacturing, and the Elementary School Student Robocon, which was launched in 2019. Also sponsored the Youngsters' Science Festival in Koga.
- Participated in the Bell Mark activities, aimed at enabling every child to receive equal education in a quality environment.
- Presented adhesive products for wood to all new first graders in Koga City, Kameyama City, and Hekinan City, where its plants are located.
- Supported the activities of the Japan Wrestling Federation, involved in spreading and developing wrestling and fostering wrestlers.



Presented woodworking adhesive products

## **Social Contributions**

## Local Communities (Efforts of the Kaneka Group)

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

## With Local Communities

#### (All parent manufacturing sites, Group companies in Japan and oversea)

Held summer festivals and other events for neighborhood residents, employees, and employees of partner companies.



Kaneka Summer Festival 2019 (Takasago Manufacturing Site)



Kaneka Summer Festival 2019 (Osaka Manufacturing Site)



Participated in a local summer festival (Tokyo Kaneka Foods Manufacturing Corporation)

#### (All parent manufacturing sites, Group companies in Japan and overseas)

Provided donations and support through advertisements for various local events, such as a grand festival and a firework display. Also opened a stall store to offer products, foods, and beverages at such events.



Sponsored a lantern festival (Nagashima Shokuhin Co., Ltd.)



Offered freshly made rice cakes and pork miso soup (Kaneka Foods Manufacturing Corporation)

#### (All parent manufacturing sites, Group companies in Japan and overseas)

Participated in and sponsored various sports events hosted by neighborhood companies, industrial park associations, and other organizations, including marathon relay races, marathon, jogging, walking, soccer, softball, volleyball, bowling, and long rope jumping.



Participated in the Takasago Hamakaze Marathon Relay Race as executive committee members and runners (Takasago Manufacturing Site)



Paid sponsorship fees for paper fans to support the volleyball tournament of the Ibaraki National Sports Festival (Kaneka Sun Spice Corporation)



Participated in a charity walking event and donated the proceeds to the American Heart Association (Kaneka Americas Holding, Inc.)

(All parent manufacturing sites, Kaneka Medix Corporation, Tokyo Kaneka Foods Manufacturing Corporation, Tochigi Kaneka Corporation, Kaneka (Malaysia) Sdn. Bhd., Kaneka Solartech Corporation)

Carried out a comprehensive disaster drill with a local fire department.

Also actively participated in a New Year firefighters parade, a hydrant operation competition, a firefighting drill, traffic safety/safety promotion activities, and so on.



Took supreme command and received training on how to fight a fire caused by hazardous material leakage at a firefighting drill hosted by the Settsu City Fire Prevention and Safety Association (Osaka Manufacturing Site)



Implemented a firefighting and disaster drill at the business site (Kaneka Solartech Corporation)



Won third prize at the In-House Firefighting Team Competition held by Iruma Tobu Rescue, Saitama Prefecture (Tokyo Kaneka Foods Manufacturing Corporation)



Won the championship at several events of an emergency response competition hosted by the Pahang Fire and Rescue Department, Malaysia (Kaneka (Malaysia) Sdn. Bhd.)

# (All parent manufacturing sites, Kaneka Sun Spice Corporation, Kaneka Medix Corporation, Kyushu Kanelite Co., Ltd., Tokyo Kaneka Foods Manufacturing Corporation)

Accepted plant and facility visits by neighborhood community associations, social workers, and workplace associations and participated in regional exchange activities.



Plant visit by local social worders (Osaka Manufacturing Site)





Supported the editing of a local PR magazine (Kaneka Medix Corporation)

#### (Osaka Manufacturing Site)

Provided a presentation on natural disaster prevention and preparedness activities at the Disaster Prevention Summit held by Settsu City to consider how to build a disaster-resilient city.

#### ⟨Kaneka Americas Holding, Inc.⟩

Participated in community meetings held monthly with local residents in the Bay Area to discuss directly the chemical industry and the problem awareness of the local community.

Implemented a Leadership Challenge Workshop for the leaders of local NPOs in cooperation with the local Chamber of Commerce and Industry.

Employees provided support and guidance to NPOs in the state and local communities and assumed an organizational role on their board of directors.

#### (Kaneka Africa Liaison Office)

Regularly implemented an educational program for local hairdressers to explain how to operate a beauty salon and identify and enjoy high-quality hair products, making reference to our product "Kanekalon."



#### ⟨Kaneka Singapore Co. (Pte) Ltd.⟩

Continued to visit an elderly facility and carry out volunteer exchange activities such as communication, games and donations.



#### **(Taiyo Yushi Corporation)**

- Received a letter of appreciation from the Governor of Kanagawa Prefecture by donating hand soap to the Yokohama City Fire Bureau, which is engaged in the transportation of patients with COVID-19.
- Received a letter of appreciation from the Mayor of the City of Yokohama by donating soap and related products to the Children and Families Division of the Children and Youth Bureau, City of Yokohama.
- Participated in an event for the promotion of the SDGs hosted by the City of Yokohama and other bodies.



Participated in an event for the promotion of the SDGs

#### **Environmental Initiatives**

#### (All parent manufacturing sites, Group companies in Japan and overseas)

Each plant, individually and in collaboration with local governments, cleaned up main roads around business sites and company dorms, industrial complexes, grass- and reed-mowing areas, rivers, seas, and cleared away snow.



Cleaning up of neighborhood roads (Kaneka Sun Spice Corporation)



Cleaning up of neighborhood roads (Kaneka Tohoku Styrol Co., Ltd.)



Cleaning up of neighborhood roads (Taiyo Yushi Corporation)



Cleaning up of neighborhood roads (Tamai Kasei Co., Ltd.)

#### ⟨Kaneka, Taiyo Yushi Corporation⟩

As a company using palm oil, gained full membership in the RSPO (Roundtable on Sustainable Palm Oil), a global non-profit organization that aims to promote sustainable palm oil production and use, focusing on the environment and human rights.

Taiyo Yushi Corporation assumed the office of director of the Japan Sustainable Palm Oil Network (JaSPON), founded to accelerate the procurement and consumption of sustainable palm oil in the Japanese market.

#### (Osaka Manufacturing Site)

Participated in the "Citizen Environmental Festival 2019 – Global warming countermeasures from the two perspectives of migration and adaptation Part II" hosted by Settsu City. Won a special award at the Green Curtain Contest, one of the events at the festival.



Participated in the Citizen Environmental Festival



Won a special award at the Green Curtain Contest

#### **(Kashima Manufacturing Site)**

Accepted a visit to the megasolar facility in the west area of the Kashima Manufacturing Site.



#### ⟨Kaneka Americas Holding, Inc.⟩

- Provided longtime support to the Armand Bayou Nature Center, a nearby large nature reserve.
- Supported the Galveston Bay Foundation working to preserve the Galveston Bay and marine creatures around the river mouth in the bay.

#### **(Kaneka Sun Spice Corporation)**

Supported projects aimed at protecting the environment and fishing grounds in the neighborhood.

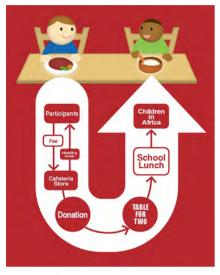
#### **(Taiyo Yushi Corporation)**

Offered a soap class to encourage thinking about global environment issues, such as biodiversity loss and global warming, from a piece of soap.

## **International Contributions**

# ⟨Tokyo Head Office, Takasago Manufacturing Site, Osaka Manufacturing Site, Shiga Manufacturing Site⟩

Continuously participated in the social contribution activities of Table for Two (TFT) by donating 20 yen for every TFT lunch bought at company cafeterias to school lunch for children in developing countries. In fiscal 2019, made a donation of 249,420 yen equivalent to 12,471 school meals.





TFT menu (Shiga Manufacturing Site)

System of TFT

#### ⟨Kaneka, Kaneka Sun Spice Corporation⟩

As a corporate partner, Kaneka has supported the school meal program of the United Nations World Food Programme (WFP) since 2013. In Africa, the largest market for our synthetic fiber product, Kanekalon, we made donations to support the WFP's activities. They include the provision of school meals, aimed at increasing enrollment rates, and the distribution of food for home use in areas where the female enrollment rate is low. We also supported as a sponsor the 2019 WFP Essay Contest, a charity event hosted by the UN WFP. Kaneka and Kaneka Sun Spice sponsored another charity event, "WFP Walk the World 2019 in Osaka."

We will continue to provide support so that many children can attend school, thanks to the provision of school meals, and be hopeful about their future.



Sponsored WFP Walk the World 2019 in Osaka

#### (Kaneka Medix Corporation)

Agreed with the activities of the Japan Committee, Vaccines for the World's Children and implemented a plastic bottle cap collection campaign.

#### **Awards**

#### (Kaneka)

- Won the 3rd Japan Bioindustry Award from the Japan Bioindustry Association for its "Biodegradable plastic with marine degradability: research on microbial production system and development of large-scale production," which was worked on in cooperation with Yoshiharu Doi, Professor Emeritus at the Tokyo Institute of Technology.
- Won the 51st JCIA Technology Award's "Grand Prize" from the Japan Chemical Industry Association for the "R&D and Industrialization of KANE ACE MX."
- Won the Runners Award hosted by the Runners' Foundation for the first time as a company for a Group-wide long-distance relay race, sponsorship of the Hokkaido Marathon, support for participants, and a marathon training program targeting even beginners.

#### **(Takasago Manufacturing Site)**

- Won the Governor's Award for Distinguished Service for Environmental Protection from the Governor of Hyogo Prefecture for its long-term contribution to environmental protection and management. Highly appreciated for its consecutive service in a director's position in the Hyogo Prefecture Association for Corporate Environmental Conservation and its promotion of environmental management and protection at its company and business sites.
- Won the Takasago City Commendation Award (Group Division) for its donations to the city.

#### (Osaka Manufacturing Site)

Certified by the Osaka High-Pressure Gas Safety Association as a distinguished professional and a gas safety contributor.

#### **Kaneka Sun Spice Corporation**

Received a certificate of commendation from the Governor of Shiga Prefecture as a 2019 Excellent Food Hygiene Facility for its exemplary and outstanding commitment to food hygiene.



#### (Kaneka Medix Corporation)

Certificate of commendation awarded from the Odawara Industrial Trade Union Federation to a supervisor who recognized the importance of industrial safety and worked to prevent workplace accidents.

#### ⟨HiHua Fiber Co., Ltd.⟩

Labor Leadership Award granted by the Qingdao Federation of Trade Unions to the Quality Management Division. Also recognized for its implementation of safety production, inspection, and education and won the title of Qingdao Safety Production Standardization Enterprise.



Labor Leadership Award granted to the Quality Management Division



Won the title of Qingdao Safety Production Standardization Enterprise

#### **(Tokyo Kaneka Foods Manufacturing Corporation)**

Recognized to have recorded no occupational accidents with more than four days of absence for 3.4 million hours (about nine years) from February 16, 2011 to October 15, 2019, and received a record certificate of accident-free operation from the Tokorozawa Labor Standards Association.

#### **(Tochigi Kaneka Corporation)**

- Won the Excellent Workplace Award from the Moka Labor Standards Association for its efforts to improve safety and health management.
- Won the Excellent Workplace Award from the Moka District Council of the Tochigi Prefecture Safety Driving Administrator Council for its active promotion of traffic safety measures and its contribution to accident prevention.



Improvement of safety and health management



Promotion of traffic safety measures and accident prevention

## Other Initiatives

#### ⟨Kaneka⟩

We have sponsored the Japan Century Symphony Orchestra as a corporate supporter. In addition to regular concerts, the orchestra focuses on community-based activities, such as educational programs to encourage children to become more familiar with music, and outreach concerts at hospitals and special needs schools.



Outreach concert at a special needs school

⟨All parent manufacturing sites, Kaneka Sun Spice Corporation, Kaneka Tohoku Styrol Co., Ltd., Kaneka Hoken Center Co., Ltd., Shiga Denshi Co., Ltd.⟩

Donated to the Japanese Red Cross Society, the Central Community Chest of Japan, regional social welfare councils, and other organizations.

#### **(Kashima Manufacturing Site)**

Certified as a Sports Yell Company for its active efforts toward the implementation of sports programs to improve employee wellness.



⟨Cemedine Co., Ltd. , HiHua Fiber Co., Ltd.⟩

Blood donations were given by many employees.

#### Stakeholder Communication

#### **Shareholder Reporting**

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 & Representative Director'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.



Reports (for Shareholders)

We also print our publications using environmentally friendly vegetable ink and use easy-to-read Universal Design fonts.

## Information Disclosure and Investor Relations

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 Representative Director or Director in charge providing explanations. We also hold business briefing sessions and business inspection tours, where the Representative Director and Director in charge provide explanations. Our website also carries a variety of reports, including financial briefs, securities reports, quarterly reports, Kaneka integrated reports, and financial results briefing materials.

#### **CHECK & ACT**

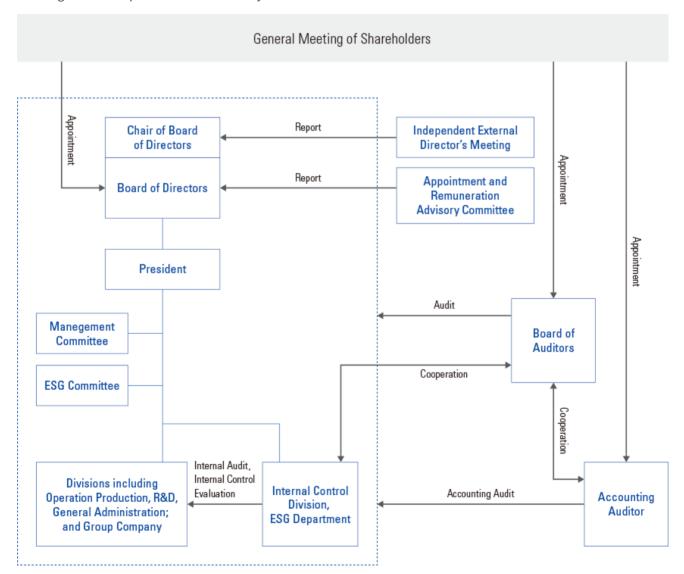
In this fiscal year, we will continue to build on our efforts in the previous fiscal year to ensure proper information disclosure to shareholders and investors.

## **Corporate Governance**

## **Basic Policy**

Guided by our Corporate Philosophy, Kaneka aims to achieve sustainable growth, improve medium- to long-term corporate value, and build trust among all stakeholders, including shareholders, investors, customers, local communities, vendors, and employees, realizing optimum corporate governance to fulfill our social responsibility.

■ Diagram of Corporate Governance System



▶ Please see here for the Board of Directors.

### **Corporate Governance Structure**

#### Organizational Design

We currently have four 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 seeks to ensure efficient and effective corporate governance in order to realize the company's sustainable growth and increase corporate value in the medium to long term.

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, four are independent external directors, in principle, 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 seek to ensure healthy and sustainable corporate growth and to establish 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 ESG Department Internal Control Division's. 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.

# Appointment and Remuneration Advisory Committee / Independent External Director's Meeting

The Appointment and Remuneration Advisory Committee discusses the remuneration of Directors and the appointment of Director and Auditor candidates to report to the Board of Directors. The Independent External Director's Meeting discusses the effectiveness of the Board of Directors to report to the Chair of the Board of Directors.

#### Implementation of Business Operations

Kaneka has adopted the executive officer system to harmonize the oversight function of directors with 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. The Executive Officers' Meeting is held monthly to share management policies and issues with the aim of achieving management goals speedily. Division heads, including executive officers appointed by the Board of Directors, are given extensive authority over daily business execution. Monthly division head meetings are held to enable the directors and auditors to directly hear progress reports from each division head. The Internal Control Division of the ESG Department evaluates the effectiveness of internal control and conducts an internal audit.

# Standards for Independence of External Directors/Audit & Supervisory Board Members

We have defined the Standards for Independence of External Directors/Audit & Supervisory Board Members to guarantee the independence of independent external directors and auditors in practice. The standards are disclosed in our notice of convocation of general meeting of shareholders, corporate governance report, etc.

#### **Selection Criteria for Directors**

At Kaneka, directors are selected by the Board of Directors, on the basis of character, judgment, expertise and experience as well as ethics without limitations on gender, age, nationality and other attributes, after deliberation by the Appointment and Remuneration Advisory Committee, which is comprised of representative directors and independent external directors.

## Analysis and Evaluation of Effectiveness of the Board of Directors

Kaneka regularly implements an analysis and evaluation of the effectiveness of the Board of Directors, and discloses a summary of the evaluation results. Specifically, the Chair of Board of Directors periodically receives reports from the Independent External Director's Meeting and opinions from the internal directors. Based on these reports, the current status of operations of the Board is evaluated. In the evaluation process in fiscal 2019, the Independent External Director's Meeting held discussions focusing on the operation of the Board of Directors (number of meetings held, frequency, length, contents of information provided beforehand, contents of agendas, deliberations, etc.), role of external directors, information provision to external directors , and risk management. Based on the discussion results, the Board of Directors conducted a self-evaluation. As a result, it has been confirmed that the Board of Directors functions effectively in making decisions on important matters for the Group such as risk management and supervising business execution. We will continue to enhance the effectiveness of our Board of Directors through effectiveness evaluations.

## Our Efforts to Strengthen the Governance Capacity

2006	<ul> <li>Introduced the executive officer system</li> <li>Changed the number of directors from 21 to 13</li> <li>Formulated the Basic Policy on Internal Control System</li> </ul>
2011	Appointed an external director
2013	<ul> <li>Formulated the Criteria for Independence of External Directors</li> </ul>
2015	<ul> <li>Increased the number of external directors from 1 to 2</li> <li>Formulated the Basic Policy on Corporate Governance</li> <li>Established the Appointment and Remuneration Advisory Committee</li> <li>Established the Independent External Director's Meeting</li> </ul>
2016	Commenced the effectiveness evaluation on the Board of Directors
2019	<ul> <li>Revised part of the Basic Policy on Corporate Governance</li> </ul>
2020	<ul> <li>Increased the number of external directors from 2 to 4</li> <li>Revised part of the Basic Policy on Corporate Governance</li> </ul>

### **Business Risks and Uncertainties**

#### **Basic Policy**

Kaneka Group has formulated a basic risk management policy to respond to potential risks in business operations, aiming for the goal of "Wellness First" to make the world healthy.

Our basic risk management policy is that each division identifies operational risks and other types of risks that it may face, takes appropriate preventive measures, and responds appropriately in cooperation with other relevant divisions if a risk manifests itself.

For preventive measures against potential risks including those related to ethics and legal compliance, the Compliance Subcommittee of the ESG Committee oversees the development and implementation of the company-wide plans.

When a risk occurs or is likely to occur, the ESG Committee handles the risk in cooperation with the relevant divisions.

We regularly check whether the above-mentioned activities are implemented properly to prevent our risk management system from falling into mere formality, and strive to maintain and improve its effectiveness.

### **Business-Related Risks**

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, 2020 and that this is not an exhaustive list of risks borne by the Group.

- 1. Risks related to the spread of COVID-19
- 2. Risks related to the Group's ability to maintain operational advantages and trends in the Japanese and overseas economic environments
- 3. Risks associated with the globalization of our business (overseas business development and fluctuations in foreign exchange rates)
- 4. Risks of price fluctuations of raw materials and fuels
- 5. Risks associated with product liability, industrial accidents and large-scale disasters
- 6. Risks associated with the protection of intellectual property rights
- 7. Impact of environment-related regulations
- 8. Risks associated with legal action
- 9. Other risks
- ▶ See the Financial Section for more details.

## **Enhancing Crisis Management Systems**

Based on our basic risk management policy, we have set basic matters concerning emergency response (basic system, roles, emergency examples and ranks, etc.) in the Crisis Management Regulations. We will continue to fulfill our social responsibility by maintaining corporate activities while avoiding and reducing adverse effects on the Kaneka Group as much as possible. In preparation for an emergency, we regularly conduct a disaster drill and a safety confirmation system drill. We also provide employees with the Crisis Management Handbook, which contains intelligible graphs of emergency initial response rules. This handbook explains emergency procedures: proper incident notification, instructions, consultation, and response, as well as the smooth flow of information.

## Strengthening of Information Security

We appropriately manage information based on our Basic Information Management Policy to avoid information leakage and other risks, and we promote effective use of information and efficiency in operations.

To protect our information assets from risks, including cyberattacks, we strive to enhance security levels by using the knowledge of external experts. We also take measures to reduce risks associated with rapid change in the information security environment, including reviewing existing facilities and enhancing various security systems and tools.

Given that more employees engage in telecommuting due to the COVID-19 pandemic, we also seek to appropriately manage information on employees. In addition to disseminating our Basic Information Management Policy to employees, we hold training programs, audits, drills, and e-learning education programs, using the Information Security Guidebook.

#### **Basic Information Management Policy**

#### 1. Observance of laws/regulations and rules

The trust and confidence of society and customers is the most precious asset the Group must protect.

Complying with laws and regulations, social norms, and internal regulations/procedures is the basic principle that all individuals engaged in business activities should follow.

#### 2. Protection of confidential information

Confidential information concerning manufacturing processes, research, sales, etc. is the source of the Group's competitiveness.

All individuals engaged in business activities must be fully aware of this, and must not leak such information or use it for illicit purposes. In particular, data requiring strict handling, such as personal information and information entrusted as confidential from other entities, must be identified as such and managed strictly by the person in charge of information management at each company.

#### 3. Establishment of systems/structures

In order to sustain and expand the Group's business, it is essential to make effective use of information and increase the efficiency of business operations.

In addition to establishing rules regarding information security and continuing to improve information systems to ensure safe, effective use of information, the persons responsible for information management should be determined to ensure appropriate information management.

#### 4. Implementation of training and awareness-raising programs

With the strengthening of Group management and increased use of external resources, people with diverse values and ethics are involved in Kaneka's business operations. To ensure smooth cooperation with these members, efforts should be made to raise awareness of information security risks and to enhance and continue training on information security including ethical aspects.

## Compliance

#### **Basic Policy**

Viewing compliance as an important management issue, we implement various initiatives to ensure all directors and employees comply with all applicable laws and regulations.

#### **Promotion System**

The Compliance Subcommittee under the ESG Committee is responsible for ensuring corporate ethics and compliance throughout the company while promoting and overseeing activities such as checking employees' understanding and observance and providing consultation hotlines.

■ Diagram of Promotion System



## **Compliance Awareness Raising**

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.



Compliance Guidebook

## Self-Check in Training Session

The compliance online course for all employees, launched in fiscal 2014, was expanded to include Group companies in Japan in fiscal 2016; employees from 43 companies were encouraged to participate in fiscal 2019.

Training sessions on the Antimonopoly Act are conducted regularly with all of managerial officers from the Kaneka and Group companies in Japan who are involved in sales, purchasing, and business development, all of whom are required to submit a pledge.

## Internal Audits and Establishment of Consultation Hotlines

We at the Kaneka Group conduct ESG evaluation audits related to the Antimonopoly Act. In fiscal 2019, audits were conducted in all business operations divisions and at 28 Group companies in Japan and 14 in the U.S., Europe, and China. For Group companies in Malaysia, we plan to conduct audits from fiscal 2020 according to the Fair Trade Management Regulations formulated in October 2019.

We have also 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.

## **Intellectual Property**

#### **Basic Policy**

We secure intellectual property rights, such as patents for our R&B results, aiming to provide prompt solutions to help resolve social issues.

From a glocal perspective, intellectual property staffs are allocated to each regional headquarters in the Americas, Europe, and Asia, with the Intellectual Property Department serving as the center, to respond directly to local issues. We also strengthen cooperation with Group companies within and outside Japan to avoid intellectual property risks and trade secret leakage.

We formulate and implement intellectual property strategies along with reform for R&B structures in cooperation with the business and R&D divisions.

We also perform a wider range of analysis that combines intellectual property information with market and corporate information, using intellectual property information analysis software and AI technology. We also actively work to create intellectual property by revising our invention incentive programs at the time of patent application to further increase application incentives for employees.

We respect the intellectual property rights of other companies and, to avoid disputes, we conduct careful patent searches, securing patent clearance, at each phase of development, including theme proposal, commercialization, and specification changes.

## **Establishment of Patent Portfolio**

In fiscal 2019, we acquired parent rights mainly in the technological field, which contributes to our wellness-first management. In Japan, patents were registered for textiles and compositions made of marine biodegradable KANEKA Biodegradable Polymer Green Planet, catheters for the electrophysiology business, cold storage compositions which can replace dry ice could be useful for the transportation of pharmaceuticals and specimens, building integrated photovoltaics (BIPVs), and see-through photovoltaic modules

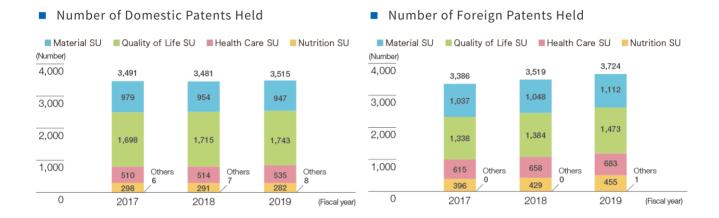
Outside Japan, we acquired patent rights for a cell production method for antibody drugs and endoscopic clips for the gastrointestinal business, mainly in the U.S.

## Number of Patents Held

We are actively filing domestic and foreign patent applications to secure intellectual property rights toward transforming our business portfolio.

In fiscal 2019, 270 domestic patents and 303 foreign patents were newly registered. Although some product patents expired, domestic and foreign patents held as of the end of fiscal 2019 numbered 3,515 and 3,724, respectively, showing a year-on-year increase. Domestic patents greatly increased in the Quality of Life and Health Care SUs. Globalization of businesses significantly increased the number of foreign patents in the Material and Quality of Life SUs.

We will work to increase the number of patent applications and registrations to strengthen our intellectual property rights through cooperation with the R&B Division.



#### **CHECK & ACT**

We will work to increase the number of patent applications and registrations to strengthen our intellectual property rights through cooperation with the R&B Division.

# "Divergent Discussion" and "Edge of Technology" as Starting Points!

### - Cultivating the ability to identify future seeds

Kaneka is a "Trial & Error experiment driven company." We believe only such a company can generate unconventional ideas and wisdom through failures and facilitate discussion that leads to the sprouting of new seeds. Researchers at the Kaneka Group are enthusiastically searching for future seeds with "divergent discussion" and "edge of technology" as keywords to identify themes that contribute to realizing a sustainable society through resolution of the three crises. Divergent discussion helps us to have multiple 360-degree perspectives, and the edge of technology refers to the forefront of cutting-edge technology that contributes to resolving social issues. These are starting points to create future seeds. Through divergent discussion and the edge of technology, we will cultivate the ability to create exciting seeds to achieve our mission "Kaneka thinks 'Wellness First'".



### **Report Download**

Kaneka Group strengthen efforts for ESG (Environment, Social, and Governance) management to contribute to the sustainability of the earth and the establishment of a sustainable society.

The Kaneka Integrated Report 2020 delivers information on how we contribute to resolving social issues, while keeping expectations high, by ensuring the creation of both social and economic value in a healthy manner through business activities. Thus, we aim to realize our management philosophy "Kaneka thinks 'Wellness First'".

We trust that our shareholders, investors, and other stakeholders understand the significance of the Kaneka Integrated Report 2020.



### Report Download

- ► Kaneka Integrated Report 2020 Full Report (5.60MB) □ PDF
  - I Management Philosophy (259KB) ₽ PDF
  - II Top Message (957KB) ₽₽₽₽
  - Ⅲ Management Strategies (3.20MB) PDF
  - IV Business Foundation (1.80MB) ₽₽₽₽
  - V Appendices (469KB) ₽PDF
- ▶ Business Foundation 2020 (Detailed Version) Full Report (6.20MB) 🖹 PDF
- ► ESG Promotion (415KB) 🖹 🍽
- ► Environment (1.30MB) 🖹 🏴
- ► Social (3.70MB) EPDF

Safety / Quality CSR Procurement Human Resource Social Contributions Stakeholder Communication ► Governance (571KB) EPDF

Corporate Governance Business Risks and Uncertainties Compliance Intellectual Property

► Report (646KB) PDF

Report Download From the Editorial Team

Product Registered Trademarks and Other Trademarks Organizations Covered in This Report

► Appendices (521KB) PDF

Corporate Profile / Global Network History of Kaneka's Reform

▶ Data Sheet 2020 (3.7MB) 🖹 🎫

For data of indicators related to climate change in the Date Sheet 2020, we have received the third-party assurance by KPMG AZSA Sustainability Co., Ltd. to ensure the reliability and transparency of data. The indicators subject to assurance are marked with the "\*" symbols. We will continue to expand the scope of information covered which is assured, in the future.

Independent Assurance Report (1.6MB) ₽₽₽₽

From the Editorial Team

Product Registered Trademarks and Other Trademarks

Organizations Covered in This Report

### **Back Numbers of Report**

- ► Kaneka Integrated Report 2019 (6.07MB) 🖹 距
- ▶ Date Sheet 2019 (0.97MB) 🖺 🏴
- ► Kaneka Integrated Report 2018 (4.22MB)
- ► ESG Website 2017 (5.51MB) [ PDF
- ► Kaneka Group CSR Report 2016 (8.01MB) 🖺 🍽 F
- ► Kaneka Group CSR Report 2015 (15.9MB) 🖹 🎫
- ► Kaneka Group CSR Report 2014 (15.0MB) 🖹 🏴
- ► Kaneka Group CSR Report 2013 (8.35MB) 🖹 🎫
- ► Kaneka Group CSR Report 2012 (6.11MB) 🖹 🍽
- ► Kaneka Group CSR Report 2011 (5.20MB) 🖹 🍱
- ► Kaneka Group CSR Report 2010 (4.41MB) 🖹 🏴

- ► Business Foundation 2019 (Detailed Version)
  Full Report (8.10MB) PDF
- ▶ Data Sheet 2018 (1.0MB) ₽□F
- ► Kaneka Integrated Report 2017 (5.57MB) 🖹 🍽
- ► The Digest Edition 2016 (14.7MB) 🖹 PDF
- ► The Digest Edition 2015 (5.16MB) 🖹 🏴
- ► The Digest Edition 2014(4.00MB)
- ► The Digest Edition 2013 (2.85MB) 🖺 🍽 🗗
- ► The Digest Edition 2012 (4.68MB) 🖹 PDF
- ► The Digest Edition 2011(3.15MB) 🖹 🍱

### From the Editorial Team

### From the Editorial Team

Kaneka Integrated Report 2020, covering both financial and non-financial information, has been issued to enhance the understanding of our stakeholders regarding the Kaneka Group's value creation in the medium to long term.

It was created based on FY 2019 results and the New Mid-Term Management Plan as of October 5, 2020. For the product registered trademarks and other trademarks of the Kaneka Group, please refer to the page listed below.

▶ Product Registered Trademarks and Other Trademarks

### 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 61 Group production subsidiaries (46 in Japan and 15 outside Japan).

▶ Organizations Covered in This Report

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.

Numerical values listed in the graphs and tables may not add up to the totals shown due to rounding, and some past data may be modified.

### Third-Party Guarantee

For data of indicators related to climate change in the Date Sheet 2020, we have received the third-party assurance by KPMG AZSA Sustainability Co., Ltd. to ensure the reliability and transparency of data. The indicators subject to assurance are marked with the " $\star$ " symbols. We will continue to expand the scope of information covered by the guarantee in the future.

▶ Data Sheet 2020 (3.7MB) □ PDF

#### **Period Covered**

Fiscal 2019 (April 1, 2019 to March 31, 2020). In some cases, reporting covers activities before or after fiscal 2019.

### Reference Guidelines

This report has been produced with reference to the following sources:

- GRI Standards
- Environmental Reporting Guidelines (2012 edition) issued by the Ministry of the Environment of Japan

### **Notes Regarding Future Prospects**

Statements in this report regarding performance forecasts and other future prospects are based on currently available information and certain assumptions that we consider reasonable, and Kaneka Corporation does not guarantee their achievement. Actual results may differ greatly due to various factors.

### Inquiries

Kaneka Corporation ESG Department Planning Group 2-3-18, Nakanoshima, Kita-ku, Osaka 530-8288, Japan

Tel: +81-6-6226-5091 Fax: +81-6-6226-5127

## **Product Registered Trademarks and Other Trademarks**

# Product Registered Trademarks and Other Trademarks

The following product names in the ESG section on Kaneka's official website and the Integrated Report 2020 are registered trademarks of the Company or Group.

- APICAL
- EPERAN
- EPERAN-PP
- KANE ACE
- KANEKA PEPTIDE
- KANEKA Q10
- Kaneka Ubiquinol
- KANEKA MS POLYMER
- KANEKA BIODEGRADABLE POLYMER
- KANEKA TELALLOY
- Kaneka Hyperite
- KANEKA FLUX
- Kanekalon
- KANEPEARL
- KANELITE
- GRANSOLA
- SUNDUREN
- SILASCON
- GEMLAC
- Café au lait for bread
- Milk for Bread
- Milk Tea for Bread
- LIXELLE
- LIPOSORBER
- ELMECH

- Floradapt
- Graphinity
- Green Planet
- KANEKA QH
- KANEKA XMAP
- PATTHERMO
- PHBH
- PIXEO
- SIBSTAR
- SoltileX
- VISOLA

### **Organizations Covered in This Report**

# Organizations Covered in This Report

This report covers Kaneka and 61 Group companies (46 in Japan and 15 outside Japan) that conduct Responsible Care (RC) activities.

Regarding environmental accounting, all parent manufacturing sites and 30 manufacturing companies in Japan are covered.

#### **KANEKA**

<Manufacturing Sites>

- Takasago Manufacturing Site
- Osaka Manufacturing Site
- Shiga Manufacturing Site
- Kashima Manufacturing Site
- Foods & Agris Solutions Vehicle Eniwa Office

<Laboratories outside Manufacturing Sites>

- Toyooka Technical Center
- Foods & Agris Solutions Vehicle Foods Technology Center Development Group
- Process Technology Laboratories
- Regenerative Medicine and Cell Therapy Laboratories

### <Offices>

- Tokyo Head Office
- Osaka Head Office
- Nagoya Sales Office

### **Group Companies in Japan**

### <Manufacturing Companies (30)>

- 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.
- 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.
- Kaneka Medical Tech Corporation
- Dia Chemical Co., Ltd.
- Cemedine Co., Ltd.
- Tobu Chemical Co., Ltd.

### < Non-manufacturing Companies (16)>

- 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.

### **Group Companies outside Japan**

<Manufacturing Companies (15)>

- Kaneka Belgium N.V.
- Kaneka Eurogentec S.A.
- 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 Apical Malaysia Sdn. Bhd.
- Kaneka MS Malaysia Sdn. Bhd.
- Kaneka Medical Vietnam Co., Ltd.
- Kaneka Eperan (Suzhou) Co., Ltd.
- HiHua Fiber Co., Ltd.
- Kaneka (Foshan) High Performance Materials Co., Ltd.
- PT.Kaneka Foods Indonesia

### **Company Profile**

### Corporate Profile / Global Network

# Corporate Profile (As of March 31, 2020)

Name KANEKA CORPORATION

Offices Tokyo Head Office

1-12-32, Akasaka, Minato-ku, Tokyo 107-6028, Japan

Tel: +81-3-5574-8000 Fax: +81-3-5574-8121

Osaka Head Office

2-3-18, Nakanoshima, Kita-ku, Osaka 530-8288, Japan

Tel: +81-6-6226-5050 Fax: +81-6-6226-5037

Date of Establishment September 1, 1949

Paid-in Capital 33,046 million yen

Net Sales 601.514 billion yen (Including consolidated subsidiaries)

Number of employees 11,013 (Including consolidated subsidiaries)

3,552 (Non-consolidated)

Facilities in Japan Sales Office

Nagoya (Aichi Prefecture)

Manufacturing Site

Takasago (Hyogo Prefecture) Osaka (Osaka Prefecture) Shiga (Shiga Prefecture) Kashima (Ibaraki Prefecture)

Research Institutes Material Solutions New Research Engine

**BDP Technology Laboratories** 

Regenerative Medicine and Cell Therapy Laboratories
Photovoltaic & Thin Film Device Research Laboratories

Process Development Research Laboratories

**Process Technology Laboratories** 

Affiliated Companies 111 Subsidiaries (Including 43 (in Japan) and 45 (outside Japan)

consolidated subsidiaries)

### Investor Information (As of March 31, 2020)

Common Stock Traded Tokyo, Nagoya

Transfer Agent Mitsubishi UFJ Trust and Banking Corporation, Osaka Branch

3-6-3, Fushimimachi, Chuo-ku, Osaka 541-8502, Japan

Accounting Auditor KPMG AZSA LLC

Ginsen Bingomachi Bldg., 3-6-5, Kawaramachi, Chuo-ku, Osaka 541-0048,

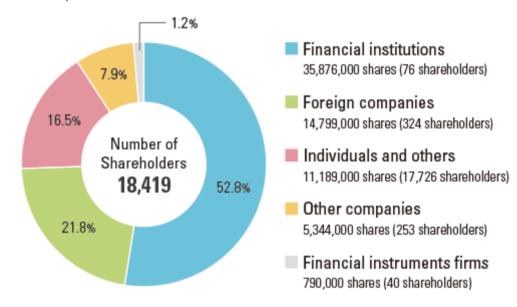
Japan

Authorized Capital 150,000,000 shares

Issued Shares 68,000,000 shares

Number of Shareholders 18,419

#### Shareholder Composition



<sup>\*</sup> Share numbers are rounded down to the nearest thousand. Percentages are rounded to the nearest decimal point.

#### ■ Common Stock Price Range (Tokyo Stock Exchange; Yen)

Years ended March 31	2016	2017	2018	2019	2020
High	1,278	1,061	1,114	5,620	4,535
Low	810	643	815	3,640	2,112

<sup>\*</sup> The above figures are stock prices quoted at the Tokyo Stock Exchange (First Section).

Our shares were consolidated on the basis of one new common share for five existing common shares as of October 1, 2018.

### Global Network (As of December 2020)

### EUROPE / AFRICA

- Kaneka Europe Holding N.V.
- Kaneka Belgium N.V.
- Kaneka Pharma Europe N.V.
- Kaneka Eurogentec S.A.
- Kaneka Modifiers Deutschland GmbH
- Eurogentec Deutschland GmbH
- Eurogentec Proteomics GmbH

- Eurogentec Ltd.
- Eurogentec France S.A.S.U.
- Eurogentec Nederland B.V.
- AB-Biotics, S.A.
- Kaneka Africa Liaison Office
- Kaneka's European Photovoltaics Research Laboratory



Kaneka Europe Holding N.V. Kaneka Belgium N.V. Kaneka Pharma Europe N.V.



#### ASIA / OCEANIA

- Kaneka Asia Co., Ltd.
- Kaneka Trading (Shanghai) Co., Ltd.Showa Global (Thailand) Co., Ltd.
- Kaneka Eperan (Suzhou) Co., Ltd.
- HiHua Fiber Co., Ltd.
- Kaneka (Foshan) High Performance Materials Co., Ltd.
- Cemedine Shanghai Co., Ltd.
- Dalian Showa Plastic Co., Ltd.
- Kaneka (Malaysia) Sdn. Bhd.
- Kaneka Eperan Sdn. Bhd.
- Kaneka Paste Polymers Sdn. Bhd.
- Kaneka Innovative Fibers Sdn. Bhd.
- Kaneka Apical Malaysia Sdn. Bhd.
- Kaneka MS Malaysia Sdn. Bhd.
- Kaneka Singapore Co. (Pte) Ltd.
- Maneka Medical Vietnam Co., Ltd.
- Vina Showa Co., Ltd.
- Kaneka (Thailand) Co., Ltd.

- Asia Cemedine Co., Ltd.
- Cemedine (Thailand) Co., Ltd.
- Kaneka India Pvt. Ltd.
- PT. Kaneka Foods Indonesia
- Kaneka Taiwan Corporation
- Taiwan Cemedine Co., Ltd.
- Kaneka Korea Corporation
- Cemedine Philippines Corporation
- Showa Global Ltd.
- TGA Pastry Company Pty. Ltd.



Kaneka Asia Co., Ltd. Kaneka Trading (Shanghai) Co., Ltd.

### THE AMERICAS

- Kaneka Americas Holding, Inc.
- Kaneka North America LLC
- Kaneka Medical America LLC
- Kaneka Aerospace LLC
- Anaspec Inc.
- Cemedine North America LLC
- Eurogentec North America Inc.
- Kaneka South America Representative Ltd.
- Kaneka US Material Research Center
- Kaneka US Innovation Center



Kaneka Americas Holding, Inc. Kaneka North America LLC

### **Company Profile**

### History of Kaneka's Reform

Since its foundation in 1949, Kaneka Group has achieved growth by overcoming changes in the times and business environment through a creative fusion of people and technology. We will provide value globally to resolve social and global issues by offering various innovative products.

### **Foundation**

Establishment of foundation businesses leading to future growth and promotion of global business expansion

1949 Kanegafuchi Chemical Industry Co., Ltd. established

#### Establishment of foundation businesses

- Successively turned foundation businesses based on macromolecular and fermentation technologies, which covered polyvinyl chloride, fermentation-based butanol, modacrylic fiber and polystyrene foam made with the bead method, into commercially feasible businesses. Actively strengthened the food business covering margarine and shortening (1949–)
- Created new businesses covering cocoa butter equivalents, MBS resin and polystyrene foam resin (1961–)
- Developed metabolic cardiotonic drug bulk "ubidecarenone (CoQ10)" using the fermentation method (1977)
- Developed photovoltaic modules and ultraheat-resistant polyimide film (1984)



Takasago Manufacturing Site at the time of its founding (Takasago City, Hyogo Prefecture)

### Acceleration of global expansion

- Successively established Kaneka Belgium N.V., Kaneka America Corporation, Kaneka Singapore Co. (Pte.) Ltd., and Kaneka Texas Corporation (now Kaneka North America LLC), to accelerate the global expansion of its business (1970–)
- Established Kaneka (Malaysia) Sdn. Bhd. and Kaneka Consulting (Shanghai) Co., Ltd. (now Kaneka Trading (Shanghai) Co., Ltd.) to expand its business in Asia (1995–)



Distant view of Kaneka Belgium N.V. at the time of founding



Kaneka (Malaysia) Sdn. Bhd.

### **Second Foundation**

Change of its company name and management system and successive establishment of new businesses

2004 Trade name changed to Kaneka Corporation

2009 Long-term vision (Declaration of Kaneka United / Basic CSR Policy) formulated

### Development of innovative technologies and products

- Released the functional food material "Kaneka Coenzyme Q10" (2002)
- Industrialized the world's first telechelic polycylate, followed by the development of nanocomposite technology, a new modifier for epoxy resin, a transparent resin with heat and light resistance, and a high thermal conductive graphite sheet (2006–)
- Developed a balloon catheter for heart disease of the nation's smallest size among its own products (2007)
- Began the full-fledged development of 100% plant-based biodegradable polymer (2009)



Functional food material "Kaneka Ubiquinol" (reduced form of coenzyme Q10)



Balloon catheter for heart disease of the nation's smallest size among its own products



Usage example of 100% plantbased biodegradable polymer

### **Third Foundation**

Becoming a solution provider that contributes to a sustainable society

2017 A new management system adopted

2018 ESG Charter established as guiding principles for the materialization of the Corporate Philosophy

### Active promotion of M&A and open innovation

- Acquired full ownership of a bio-pharmaceutical company, Eurogentec S.A. (2016)
- Established Kaneka US Innovation Center (2016)
- Introduction of drug-coated balloon technology (2017)
- Acquired an aircraft composite business (Kaneka Aerospace LLC) and invested in a company specializing in lactic acid bacteria (AB-Biotics, S.A.) (2018)



Introduction of drug-coated balloon technology



Acquisition of an aircraft composite business (Kaneka Aerospace LLC)



Investment in a company specializing in lactic acid bacteria (AB-Biotics, S.A.)

### Provision of value on a global scale

- Established Kaneka Taiwan Corporation, Kaneka Korea Corporation and Kaneka South America Representative Ltd. (2011-)
- Established regional headquarters Kaneka Asia Co., Ltd. (2012), Kaneka Americas Holding, Inc. (2012) and Kaneka Europe Holding N.V. (2015) to strengthen the Group's functions







Overseas holding companies in Asia, the Americas and Europe