

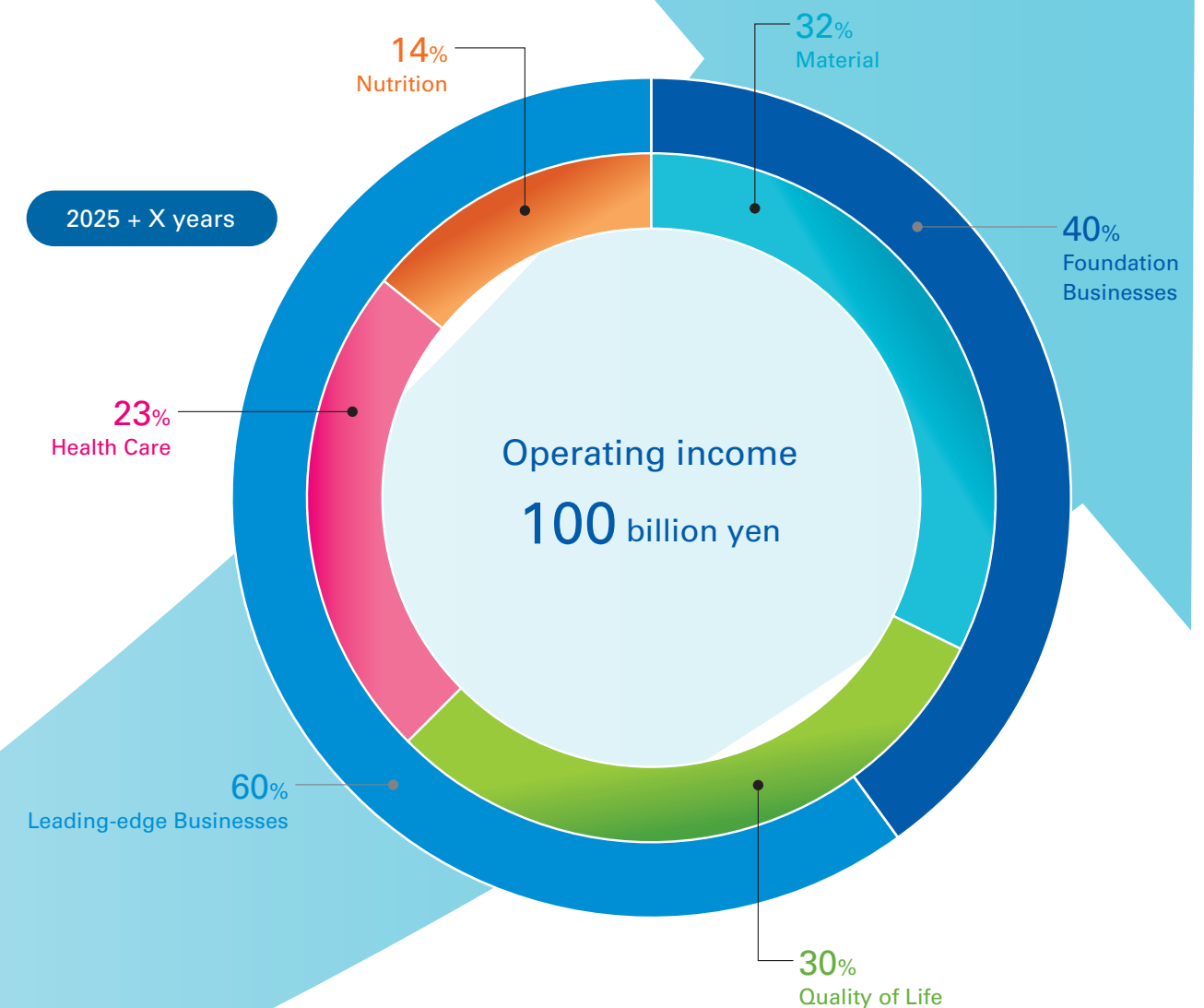
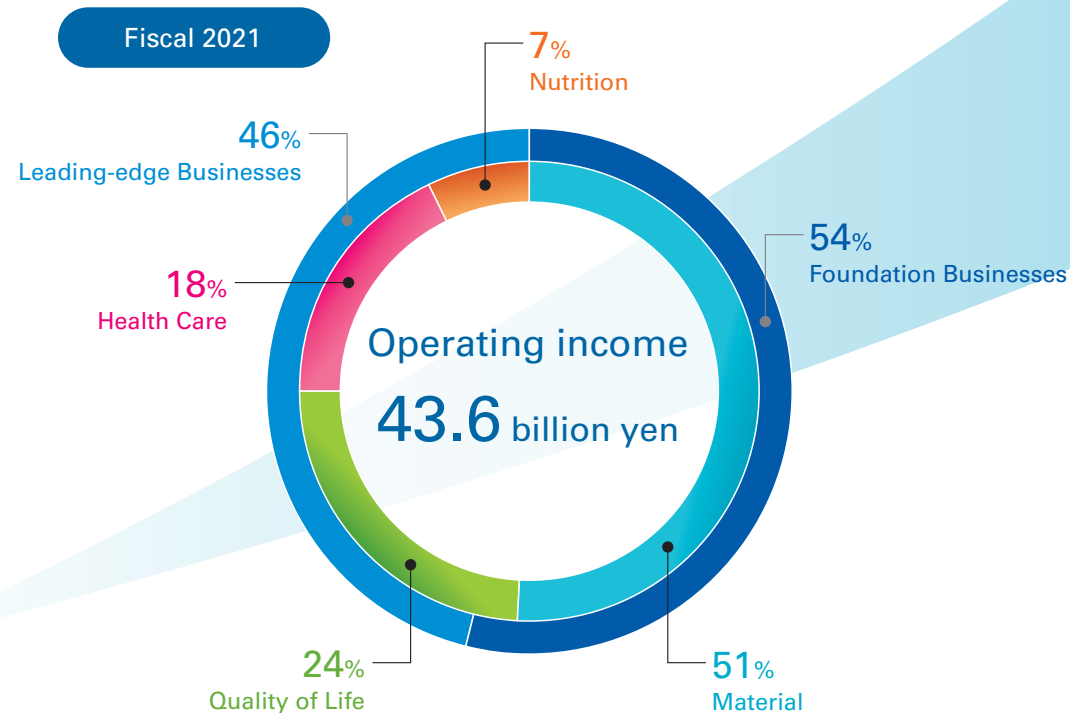
The Path of Hybrid Management - Promoting Portfolio Transformation -

Our hybrid management approach aims to create unique and valuable new solutions by combining a wide variety of different technologies and solutions, thereby helping to solve social problems. We will accelerate our selection and concentration of investments and hasten the transformation of our business portfolio.

We will strategically invest resources (people, goods, and money) to develop unique and differentiated technologies that cannot be copied. We will expand the business of our advanced business groups to achieve significant earnings growth.

Our foundation businesses will also work to bolster their business foundations by thoroughly strengthening differentiation capabilities and making capital investments to enhance supply capabilities, continuously ramping up earnings.

Operating Income Ratio by Solutions Unit (SU)



Investing in Leading-edge Businesses

Nutrition SU

- Construct new dairy product plant
- Construct new probiotics product plant

Leading-edge Businesses 60%

Health Care SU

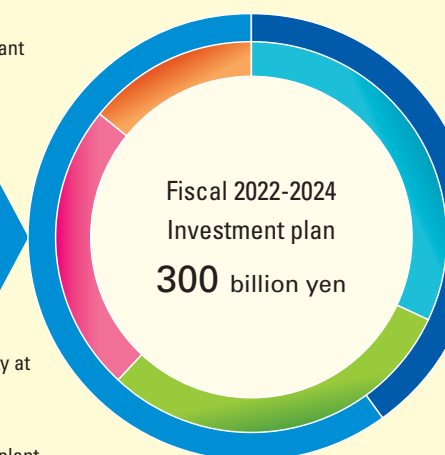
- Increase biopharmaceutical capacity at Kaneka Eurogentec S.A.
- Increase API capacity
- Construct blood purification system plant
- Construct new catheter plant

Material SU

- Increase biodegradable polymer capacity
- Increase MS capacity
- Increase PVC capacity
- Increase MOD capacity

Quality of Life SU

- Construct additional high-performance polyimide film and optical film facilities
- Increase PV heterojunction cell capacity
- Construct additional modacrylic fiber facilities



Earthology Chemical Solution

Material Solutions Unit

To support the advancement of life and the environment by drawing out the richness of materials
Material Value Creator

Social issues to be solved



Solutions provided by the Material Solutions Unit

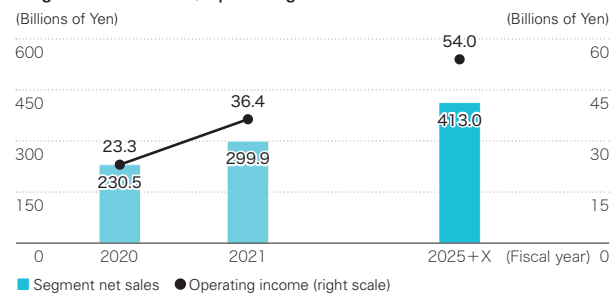
[Automotive] Lightweighting and increased fuel efficiency
[Aerospace] Lightweighting and increased functionality

[Social infrastructure]
Infrastructure development in response to global population growth and urbanization

[Environmental issues]
Solving the marine microplastics pollution problem

Major product lines by Solutions Vehicle (SV)	Vinyls and Chlor-Alkali SV	Performance Polymers (MOD) SV
	<p>Chemicals Caustic soda, sodium hypochlorite, hydrochloric acid</p>	<p>Polyvinyl chloride Kanevinyl™</p>
	<p>Impact modifiers Kane Ace™MB, Kane Ace™TM</p>	<p>Processing aids/Specialty additives Kane Ace™MPA</p>
	Performance Polymers (MS) SV	
	<p>Cross-linked PVC Kaneke XEL™, Kanevinyl™</p>	<p>PVC-PVAc polymers Kanevinyl™</p>
	<p>Silyl-terminated polyether KANEKA MS POLYMER™, KANEKA SILYL™</p>	<p>Acrylic silicon polymer KANEKA GEMLAC™</p>

Segment Net Sales/Operating Income



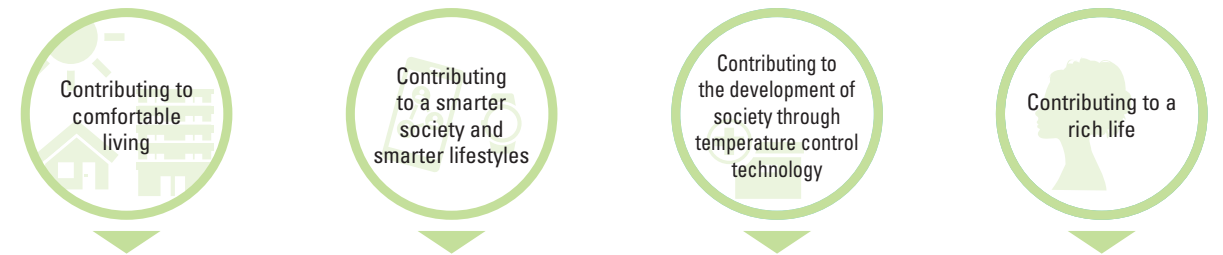
- Strengthening the glocal supply system of local production for local consumption
- Developing new products and providing solutions that meet the needs of each market.
- Shifting to high-value-added areas

We bring innovation to lifestyles and the environment by harnessing the unlimited potential of chemical materials to help communities achieve sustainability.

Quality of Life Solutions Unit

To produce the leading edge of the enhancement of the quality of life through the power of materials
Quality of Life Pathfinder

Social issues to be solved



Solutions provided by the Quality of Life Solutions Unit

[Energy saving]
ZEH/ZEB design and construction

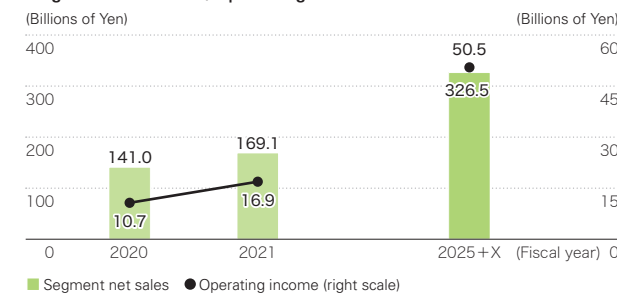
[Digital devices]
Lightweight, compact, wearable, high performance

[Transportation solutions]
Products requiring temperature control, such as pharmaceuticals

[New functional textiles]
Textiles that make living spaces more vivid

Major product lines by Solutions Vehicle (SV)	Foam & Residential Techs SV	PV & Energy management SV
	<p>Polypropylene foam made with the bead method Eperan-PP™</p>	<p>Polystyrene foam made with the bead method Kanepearl™</p>
	<p>Roof-integrated photovoltaics VISOLA™, others</p>	<p>Photovoltaic power generation systems for public and industrial installations GRANSOLA™</p>
	E & I Technology SV	Performance Fibers SV
<p>Super heat-resistant polyimide film Pixeo™, Apical™</p>	<p>Optical acrylic resin</p>	
<p>Materials for hair accessory products KANEKALON™</p>	<p>Performance fibers eco fur KANECARON™</p>	

Segment Net Sales/Operating Income



- Providing a wide range of solutions using the power of superior materials and unique services
- Business expansion leveraging breakthrough technologies

Active Human Life Solution

Health Care Solutions Unit

To create a world where advanced medical means are available to as many people as possible
Medical Edge Explorer

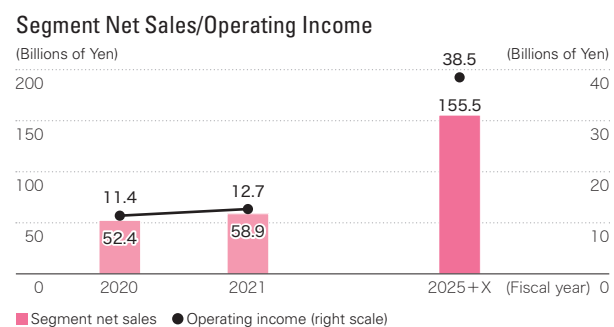
Social issues to be solved



Solutions provided by the Health Care Solutions Unit

- [Regenerative medicine and cell therapy] Early application and promotion of regenerative medicine and cell therapy, Automated cell culture system, drug discovery support
- [Leading-edge pharmaceuticals] Protein A carriers, biopharmaceuticals, nucleic acid pharmaceuticals
- [Leading-edge medical devices] Drug-coated balloon
- [Small molecule pharmaceuticals] Active pharmaceutical ingredients, generics

Major product lines by Solutions Vehicle (SV)	 Medical device Balloon catheter for vessel stenosis dilatation	 Adsorption Type Blood Purification Device Rheocarna™
	 Regenerative medicine and cell therapy Cell washing concentration system	 Genetic diagnostic products
	 APIs and intermediates for small molecule pharmaceuticals	 Affinity chromatography resin for purification of monoclonal antibody KANEKA KanCap™ series
	Pharma & Supplemental Nutrition SV (Pharma)	



- Accelerating R&B and promoting the use of external resources through activities such as M&A and open innovation
- Delivering unique, cutting-edge medical solutions to global markets

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.

Nutrition Solutions Unit







To re-innovate food and health
Nutrition Value Chain Innovator

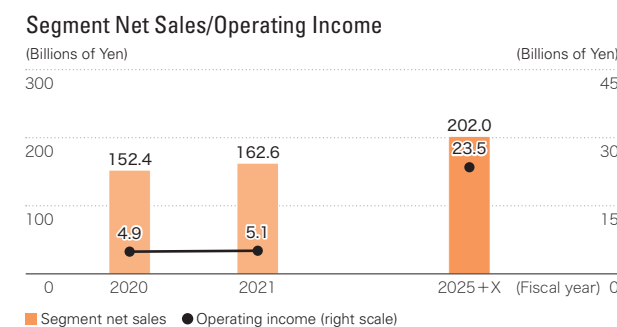
Social issues to be solved



Solutions provided by the Nutrition Solutions Unit

- [Dietary supplements and health foods business] Dietary supplements that help maintain and improve health
- [High-value-added foods] Functional oils and fats, antifreeze materials
- [Food production support] New high-performance fertilizer, fish meal substitute feed

Major product lines by Solutions Vehicle (SV)	 Dietary ingredients Kaneka Ubiquinol™	 Dietary supplements Watashi no Chikara™ Supplement series
	 AB-Biotics probiotics Floradap™ series	 Licorice glabra polyphenol Kaneka Glavonoid™
	 Margarine/Shortening NOVA™/EMPEROR™	 Whipping cream/Cream for kneading and other uses LACHENTE™/FRANJE™
	Foods & Agris SV	

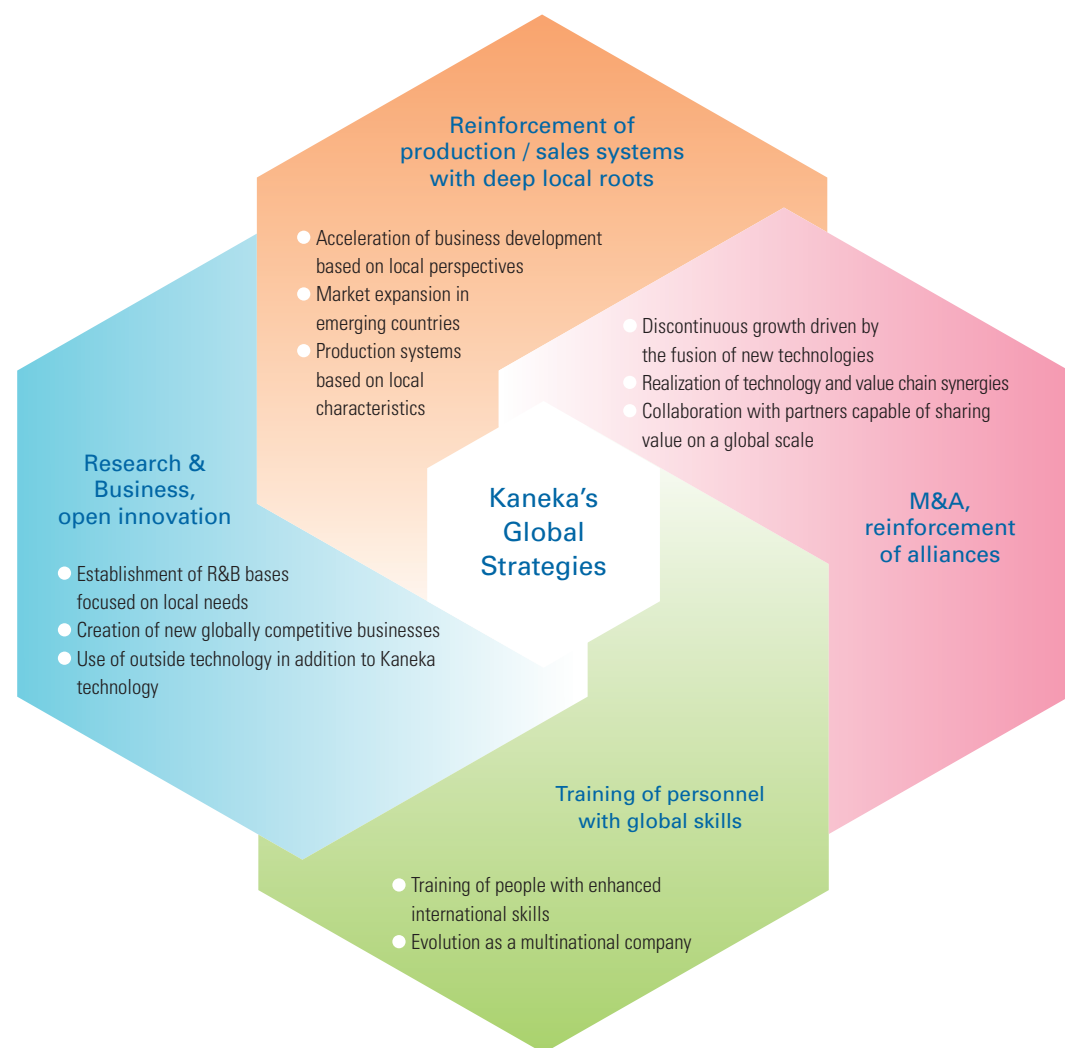


- Delivering solutions that contribute to production in the fields of food diversification, food enrichment, disease prevention, wellness, agriculture, livestock, and fishery
- Using digital technology to strengthen customer contact points and brands

Global Strategies - Think Global, Act Local -

Our global network enabling business development deeply rooted in local communities

We aim to become a company that delivers unique technologies and products all over the world, in order to save human lives and resolve social issues. To do so, we promote activities deeply rooted in local communities worldwide. We advance transculturation from a global perspective. There is no border in chemistry, and when we do business in foreign land, we focus on conducting local-based business (glocal business) by overcoming cultural differences. Our goal is to become a company with a global presence by offering valuable solutions to the world market in a timely manner. Think Global, Act Local.



We establish a headquarter in each region in order to make speedy business development that makes much closer connection with the local community.

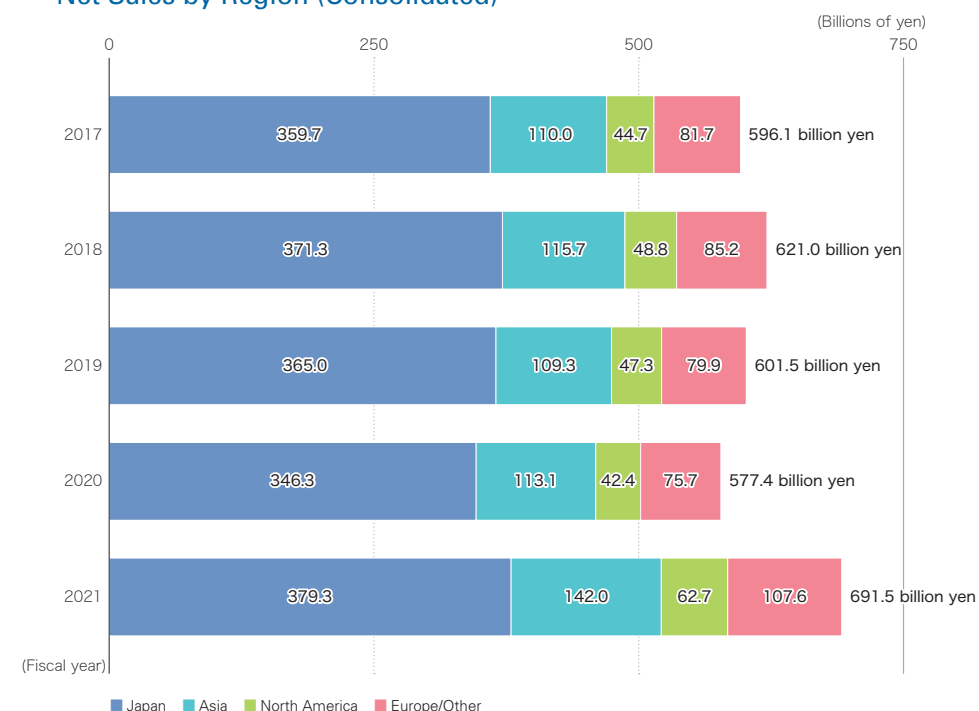
Each of 4 "Solutions Units" draws up a global strategy for products and services it handles that incorporates both domestic and overseas subsidiaries, and develop business activities based on such strategy.

We have approximately 50 overseas subsidiaries, as well as 2 research institutes in 20 countries of overseas. The consolidated number of employees is approximately 11,000, and among them, 3,000 are working in overseas sites.

Net Sales Share by Region

In fiscal 2021, we significantly increased sales both domestically and internationally (+16.0% over fiscal 2017). In particular, overseas sales expanded, and the proportion of overseas sales reached 45%, the highest ever.

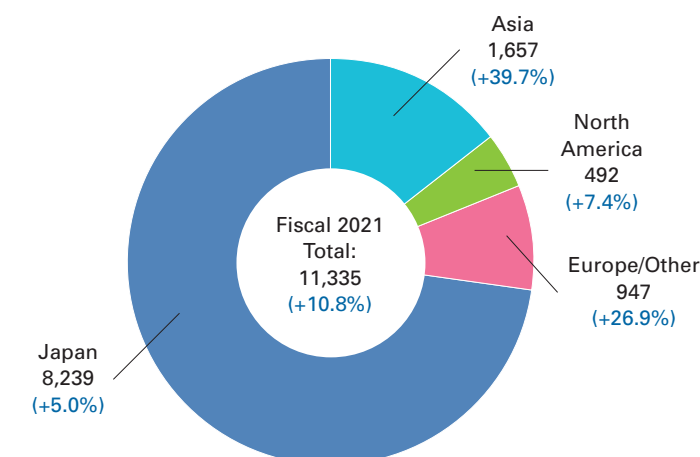
Net Sales by Region (Consolidated)



Number of Employees by Region

In fiscal 2021, the number of employees globally increased by 10.8% over 2017. The numbers of overseas employees in Asia, in North America, and in Europe all exceeded the rate of increase in Japan, a figure that is in line with business expansion overseas.

Number of Employees by Region (Consolidated)



* () is compared to fiscal 2017

A Limitless Adventure

To be limitless is to remove the rigid mind of self-restraint that says “I can’t do it. It’s impossible.”
We are embarking on a limitless adventure.

Kaneka delivers valuable solutions for the “Wellness” of the world

— Human Resource Strategies Trust & Respect

Kaneka is a Human Driven Company

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Development of Human Resources and Leaders Centered on Kaneka 1-on-1/
Promotion of Diversity - Beyond Attributes - /Promotion of Wellness

— R&B Strategies

Bringing people and technology together to venture into uncharted domains
R&B at Kaneka, the Dreamology Company

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Biomanufacturing/R&B IP Strategy

— Manufacturing Strategies

Achieving a sustainable plant that combines digital transformation with
carbon neutrality

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Carbon Neutrality/Digital Transformation (DX)

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[Interview with an External Director]

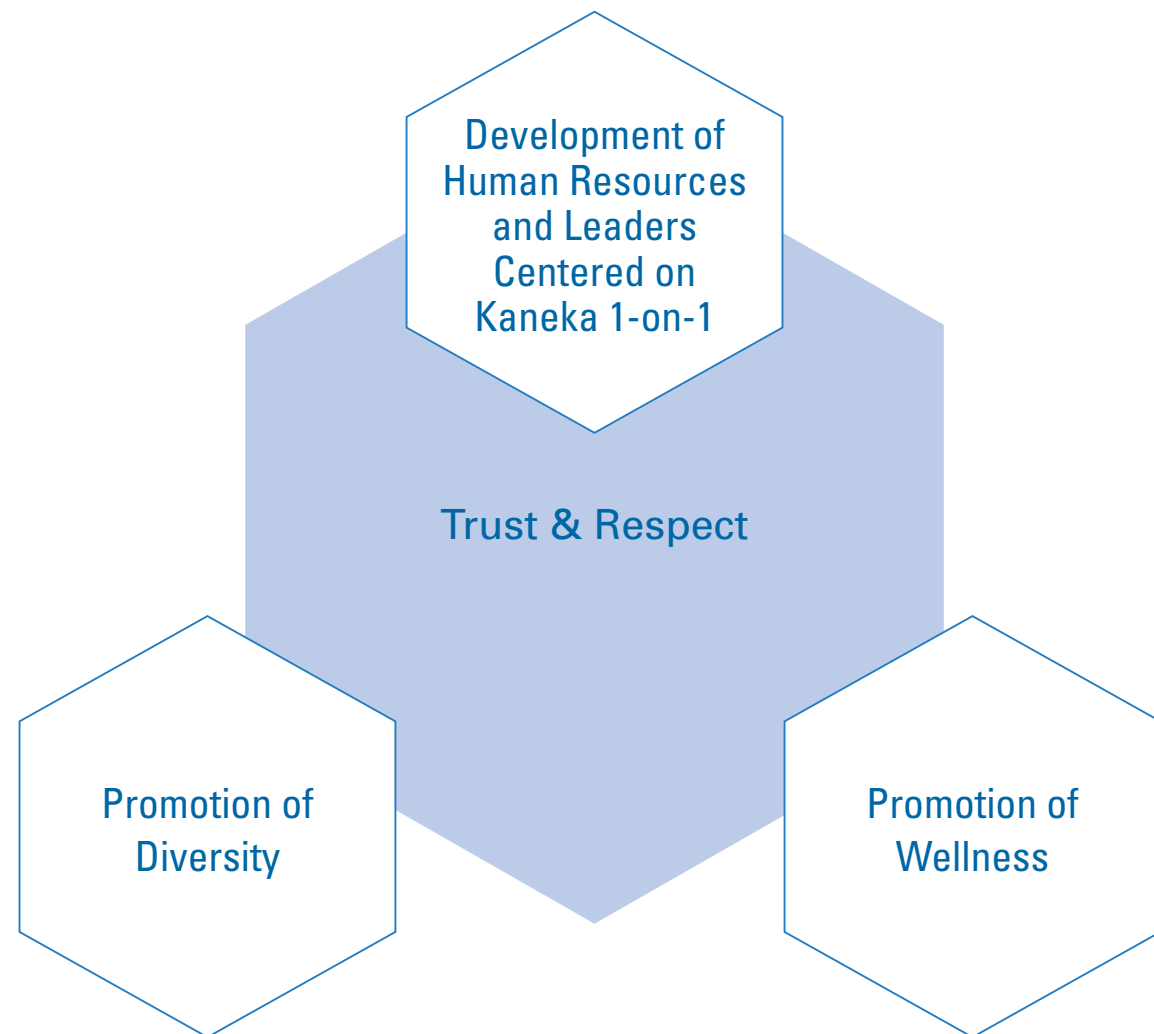
Kaneka’s Diversity Brings Broader Possibilities

Human Resource Strategies

Trust & Respect
Kaneka is a Human Driven Company

Our growth is driven by the willingness of each employee to take on challenges. We create an environment of openness to challenges—one that provides opportunities, fosters growth, and enables change. That guides Kaneka’s human resource strategies as a Human Driven Company.

Human Resource Strategy the Three Pillars



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

We use Kaneka 1-on-1 to provide high-quality on-the-job training. Through Hitotsubu-no-Tane Momi Juku, top management is working to develop our next-generation leaders.



Promotion of Diversity - Beyond Attributes -

New ideas emerge from the diverse viewpoints of diverse personalities. That is the kind of diversity we aim for.



Promotion of Wellness

The physical and mental health of each employee is an indispensable foundation for each individual to boldly take on challenges. We are also working to nurture ties between coworkers so that they can cooperate with each other.

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

Kanaka 1-on-1: lighting a fire in people’s hearts

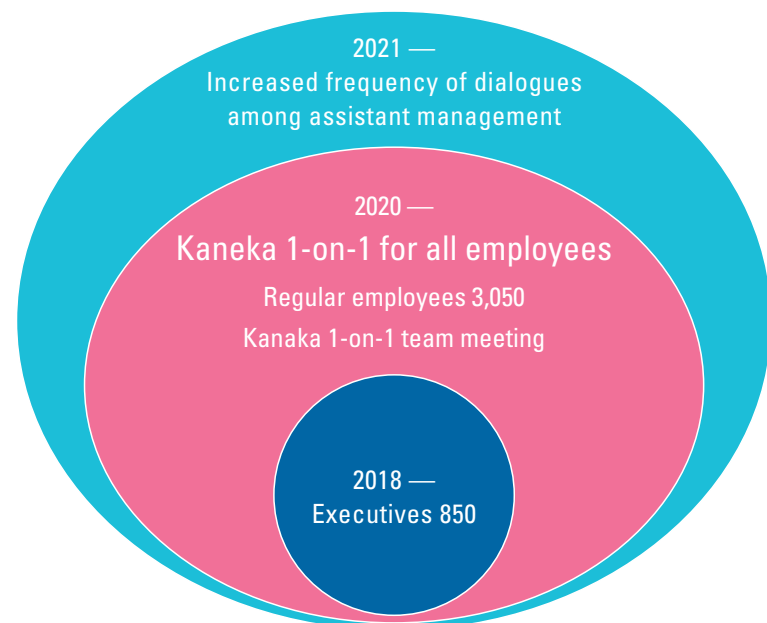
People are everything. A major challenge for management is to improve communication skills to think of people and be close to them.

We want to light a fire in people’s hearts. With this in mind, we created Kaneka 1-on-1.

The aim of Kaneka 1-on-1

- Increase corporate value through the growth of people and drive the growth of the Company.
- Team supervisors and subordinates frequently conduct one-to-one dialogues that focus on reviewing progress against plans and on building skills that will help subordinates develop their careers.
- Empowering people and organizations (lighting a fire in their hearts) by building relationships through dialogue.

Expansion of Kaneka 1-on-1 (to Kaneka 1-on-1 for all employees)



Cumulative number of dialogues: approximately 50,000/year

Kaneka 1-on-1 is our original system for year-end personnel evaluation. Through it, supervisors and subordinates engage in frequent dialogue and review organizational goals and personal growth.

We will evolve Kaneka 1-on-1 with the aim of enhancing leadership and followership.

Development of Leaders Hitotsubu-no-Tane Momi Juku

Hitotsubu-no-Tane Momi Juku, our training program led by top management, entered its eighth year in 2022.

This program provides job rotations and challenging assignments, offering participants a chance to gain new experience and strengthen their leadership and management skills in different environments.

The graduates in this program have been positioned to management-level executives, such as directors and department heads.

We are increasing the participation of female executives and promoting the development of female leaders.



Completion ceremony at the final presentation session

Number of Participants in Hitotsubu-no-Tane Momi Juku

Fiscal year	2018	2019	2020	2021	2022 (currently enrolled)	Cumulative total since start of course
Number of participants	12	12	12	12	12	97
Of which, female	1	0	0	3	3	7

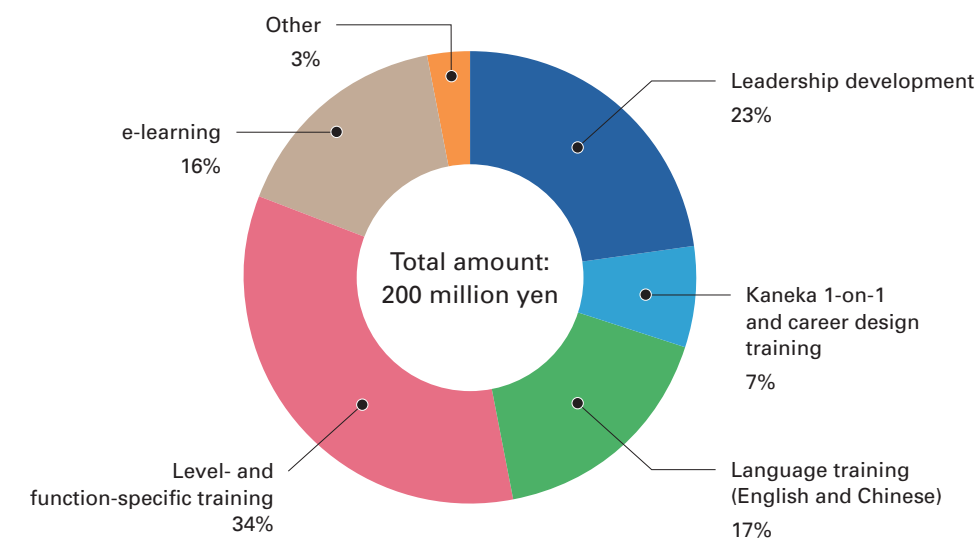
Developmental Training

We focus on three areas in our developmental training:

- Leadership development
- Kaneka 1-on-1 training
- Language training (English and Chinese)

We are also using e-learning to expand our training menu to include information security, compliance, harassment, and labor management.

Results of Company-wide Training in Fiscal 2021



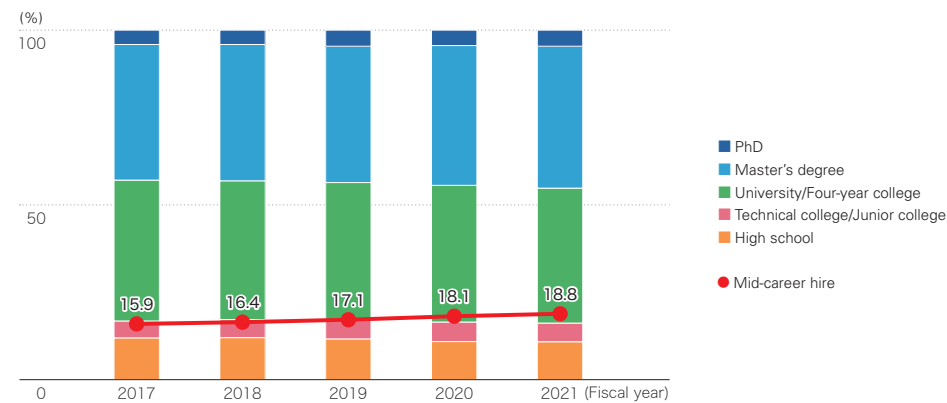
Promotion of Diversity - Beyond Attributes -

We want to attract a wide variety of human resources DNA, and through diversity in ideas create new value to inspire the world.

Composition of Executive Team

We place human development at the core of both our management philosophy and our labor agreement philosophy. We promote executives on the basis of merit, regardless of academic background or length of service.

Composition of Executive Team (as of April 1 each year)



Supporting Senior Employees

We offer career design training for each age group, creating opportunities for employees to think about their career development and about their financial plans for post-retirement.

As part of a reemployment system, we have introduced a job matching system that aligns the needs of the individual employee and the Company in five different courses classified by job category. It allows employees to work vigorously even after retirement.

Employing People with Disabilities

Our fiscal 2021 employment rate for people with disabilities is 2.53%, up from last year.

We will continue to improve this employment rate by creating a comfortable working environment and expanding job opportunities.

Supporting Employees of Foreign Nationalities

We are also resuming our development of leadership human resources at overseas group companies, having paused these activities due to the COVID-19 pandemic.

In 2022, we hosted an executive from Kaneka (Malaysia) Sdn. Bhd. in Japan, increasing their experience as management executives.

Active Participation of Female Employees

We promote the active participation of women, with the aim of increasing the number of female employees involved in decision-making.

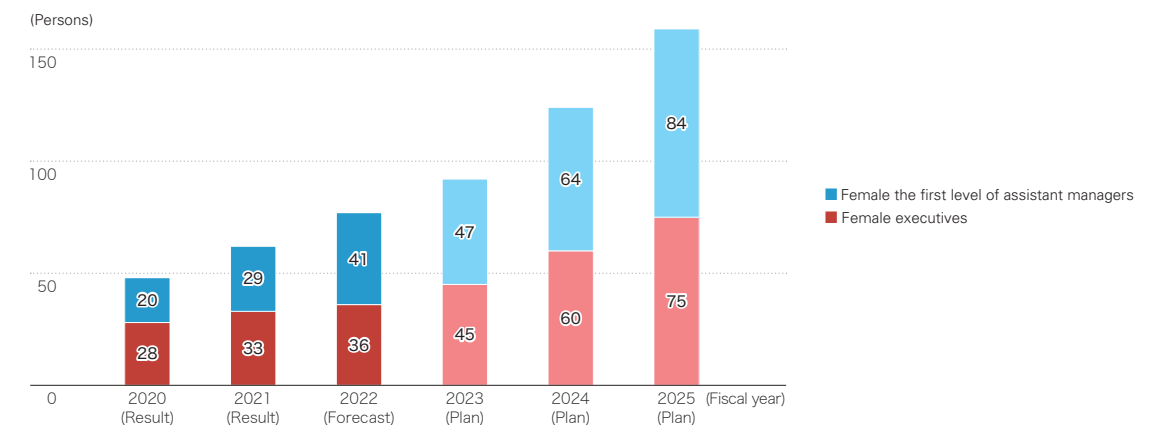
Action Plans for Promotion of Active Participation of Female Employees (Plan period: April 2021 to March 31, 2026)

Target 1	Increase the number of female executives threefold or more.
Target 2	Increase the rate of male employees who take childcare leave for 2 consecutive weeks or longer within a year after their child is born to 30% or more.
Target 3	Work on preparing workplace environment for female employees.

Executive Level

We are accelerating the development and promotion of female executives so that we can achieve our action plans. The number of female candidates for executive positions, as the first level of assistant managers, is increasing each year.

Female Executives and Candidates

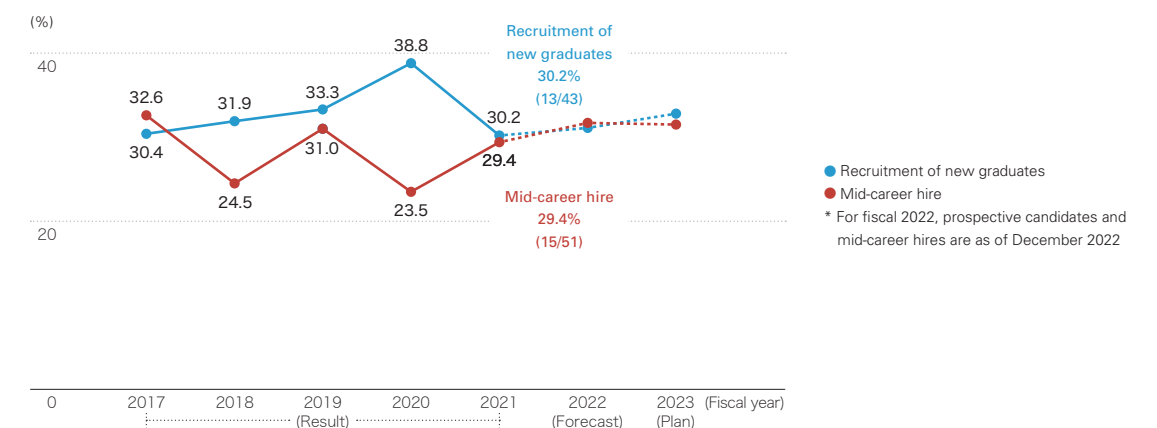


Recruitment

In our recruitment in fiscal 2021, women accounted for 30.2% of the technical college and university graduate hires and 29.4% of mid-career hires.

We will continue to increase our recruitment of women and work to provide an environment where women can play an active role.

Percentage of Female Among New Recruits



Promotion of Wellness

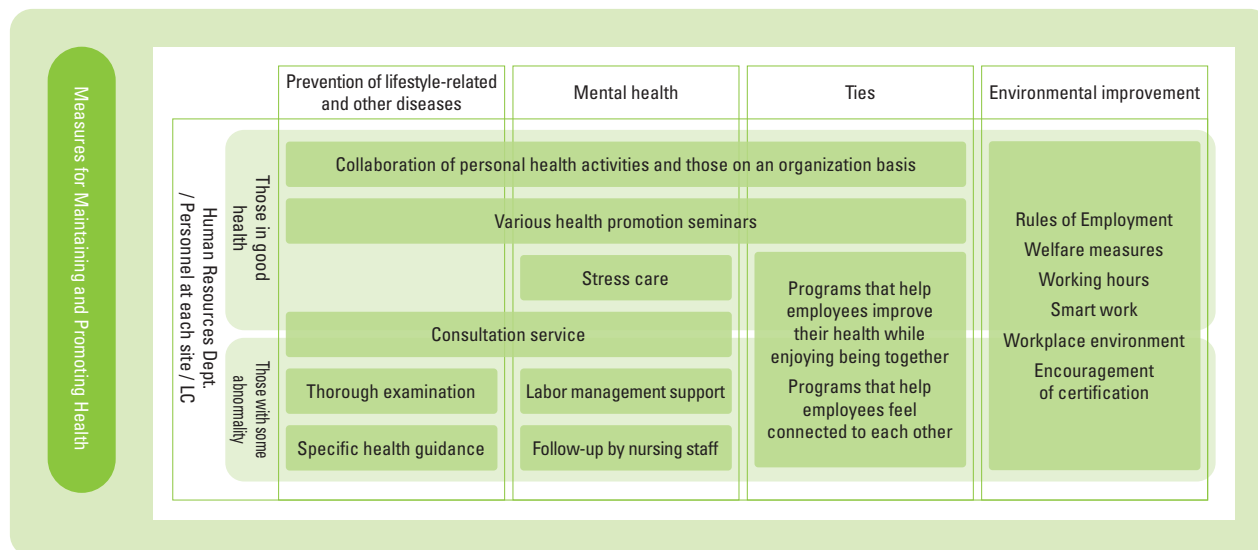
To be able to boldly take on challenges, each employee must be healthy in body and mind. We have defined Vision for Health based on which we are working to improve the wellness of our employees and our organization.

The Engine of Sustainability Management will lead a company-wide task force to promote wellness and create a healthy organization. This initiative focuses on three perspectives: prevention of lifestyle-related and other diseases, mental health, and ties between people.

Goals of Our Vision for Health

- Organization: A workplace where everyone can work healthy and freely as one team, and each person can develop and show the full potential of one's unique character and ability
- Coworkers: Employees who spend their healthy and vibrant lives, and work on their jobs

Measures for Maintaining and Promoting Health



Wellness Promotion System



Wellness centers around the ties between people, organizations and the Group.

We are working to break down the physical and psychological barriers created by the COVID-19 pandemic and to restore the ties between our employees and the Group.

Participation of Group Employee Runners in the Hokkaido Marathon

The Hokkaido Marathon, of which Kaneka is a sponsor, was held for the first time in three years. Approximately 100 runners from the Kaneka Group ran the Sapporo course.



Run, Run, Run. Kaneka 2022

The group ekiden was held for the first time in three years. Around 2,400 employees and family members of the Group attended the event.

In keeping with the theme of the event, to breathe the same air, laugh, cheer, and celebrate, there were smiles all around and ties between people were formed.



KANEKA Wellness Center Kaze no Mori Creating a New Culture - Bringing Takasago Manufacturing Site Together -

In July 2022, Kaze no Mori was completed at Takasago Manufacturing Site. It will serve as a base for promoting the wellness of our employees and the local community.

We have begun an initiative to create a new Takasago Manufacturing Site culture centered on Kaze no Mori. The main gate has also been updated so that employees leaving Kaze no Mori can feel nature and come to work feeling refreshed.



Photo by Norihito Yamauchi



R&B Strategies

Bringing people and technology together to venture into uncharted fields
R&B at Kaneka, the Dreamology Company

To help build sustainability in society, we have defined our business domains in terms of three crises: "Environment and Energy," "Food," and "Wellness." Our Research & Business is guided by the belief that it is only when research extends to social implementation (business) that it becomes true research.

We have the courage to go outside the box (our own fields), to take in cutting-edge technologies, and to combine these with our own proprietary technologies. That is how we drive Creative Innovation.

Actions to embody the concept of Kaneka as "Trial & Error experiment driven company"

Promoting innovation through three "I"s

Identifying promising technologies through three "I"s

- Impactful
- Innovative
- Implementable

A group of individuals who believe in serendipity and set the stage for happenstance with "Scientific Mindset"

From R&D to R&B

- Global research network
- Solution Provider
- Social implementation

Clustering domains

Born small and grow big

Macromolecular technology

Self-developed Technologies

Fermentation technology

Open Innovation

Self-developed Technologies with Introduced Technologies

Drug-coated balloon technology

Cell separation and culturing technology

Microbial biopharmaceutical production technology

Precision polymerization technology

Bioorganic synthesis technology

Biotechnology

Adsorption separation technology

Resin foaming technology

Functional film processing technology

Powder granulation technology

Resin modification / blending technology

Spinning technology

Metal microfabrication technology

Thin-film formation technology

OLED device designing technology

Key Technologies and Key Drivers for the Future

Polyimide resin



Super heat-resistant polyimide film

Heat-resistant composite materials



Aerospace and aircraft materials

Biodegradable polymer



Biodegradable polymer

Energy management



Roof-integrated photovoltaics

OLED Lighting devices



Organic LED lighting

Next-generation breeding technology



Genome edited crop

Food production support



New high-performance fertilizer

Catheters



Drug-coated balloon catheter

Regenerative medicine and cell therapy



iPS cells / Stem cells

Thermosetting resin compounding / processing technology

Three Crises
Resolution of Social Issues
Social Implementation of New Materials and Systems

Environment / Energy

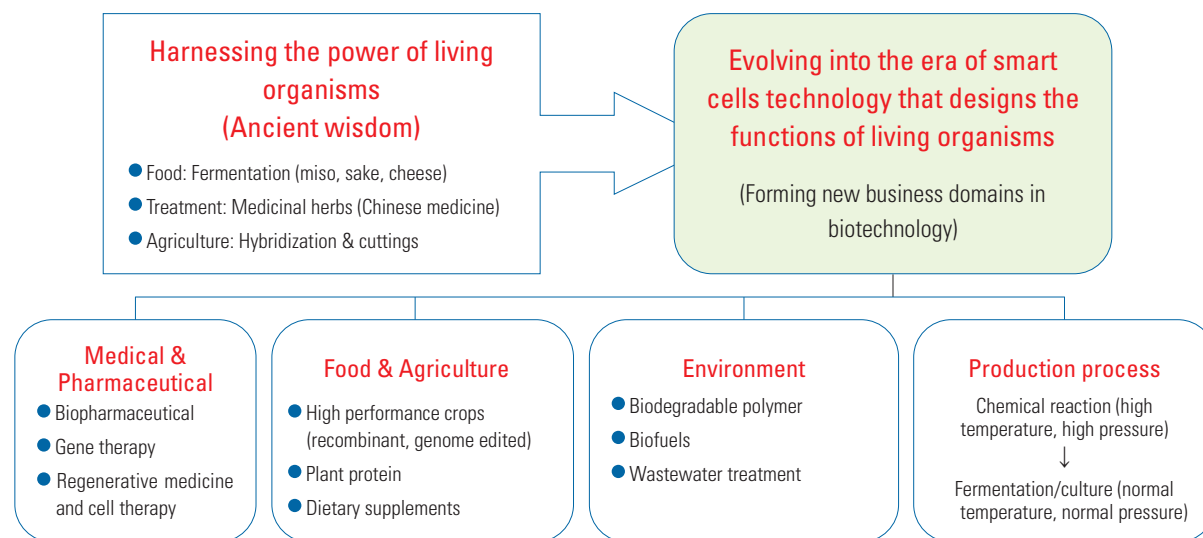
Food

Wellness

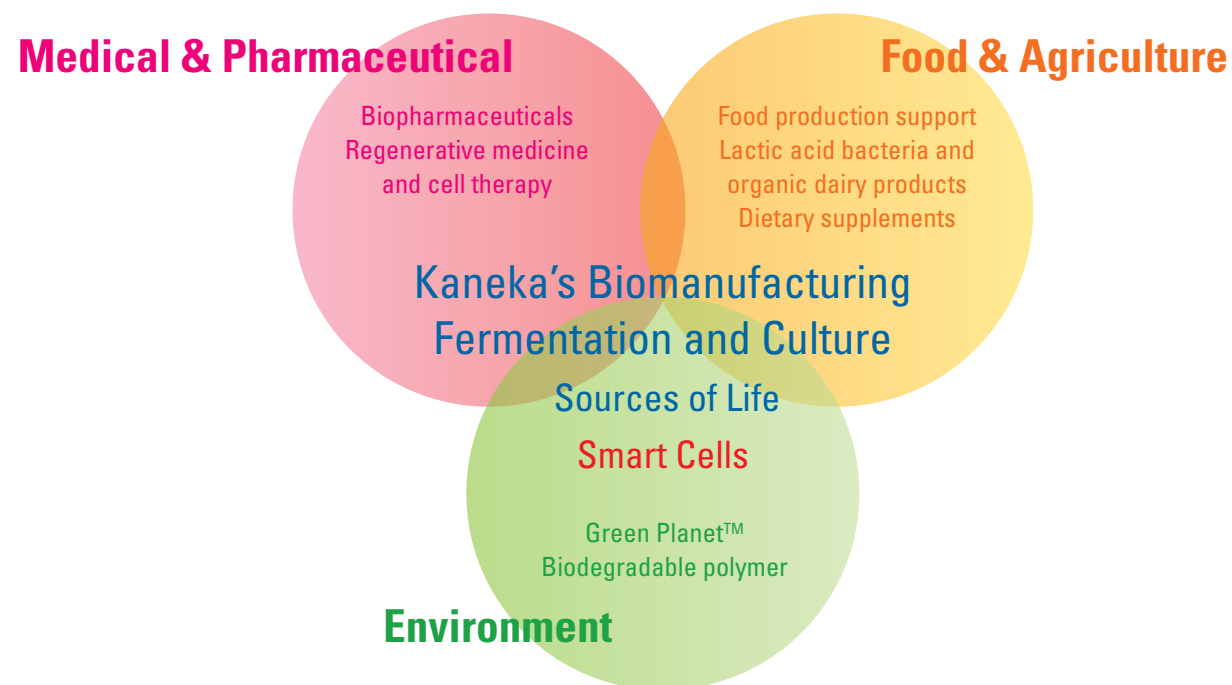
Biomanufacturing

Accelerated technological advances in recent years have greatly expanded the potential of biomanufacturing. This has made it possible to harness the power of living organisms to produce complex substances that cannot be produced by chemical processes. It has also enabled eco-friendly production technologies that use fermentation and culture processes without the need for high temperatures and pressures.

Kaneka is **an advanced biomanufacturing company** that started out with technologies for yeast and other fermentation. We have accumulated technologies in various fields such as pharmaceuticals, agriculture, and environmental fields.



Kaneka's Biomanufacturing Contributes to Three Strategic Areas



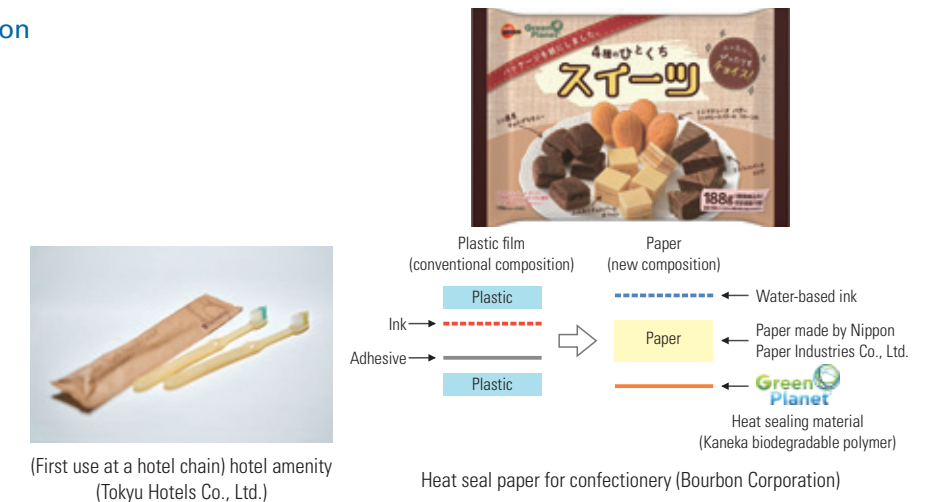
The Miraculous Polymer Green Planet™: A Creative Fusion of People and Technology

Green Planet™ is derived from 100% biomass and is highly biodegradable even in the ocean. We are implementing this miraculous polymer in response to the growing needs of society. It is the outcome of a

creative fusion of various people and technologies at Kaneka and of many years of accumulated breeding and culture technology and process development technology in the field of polymer materials.

Progress in Social Implementation

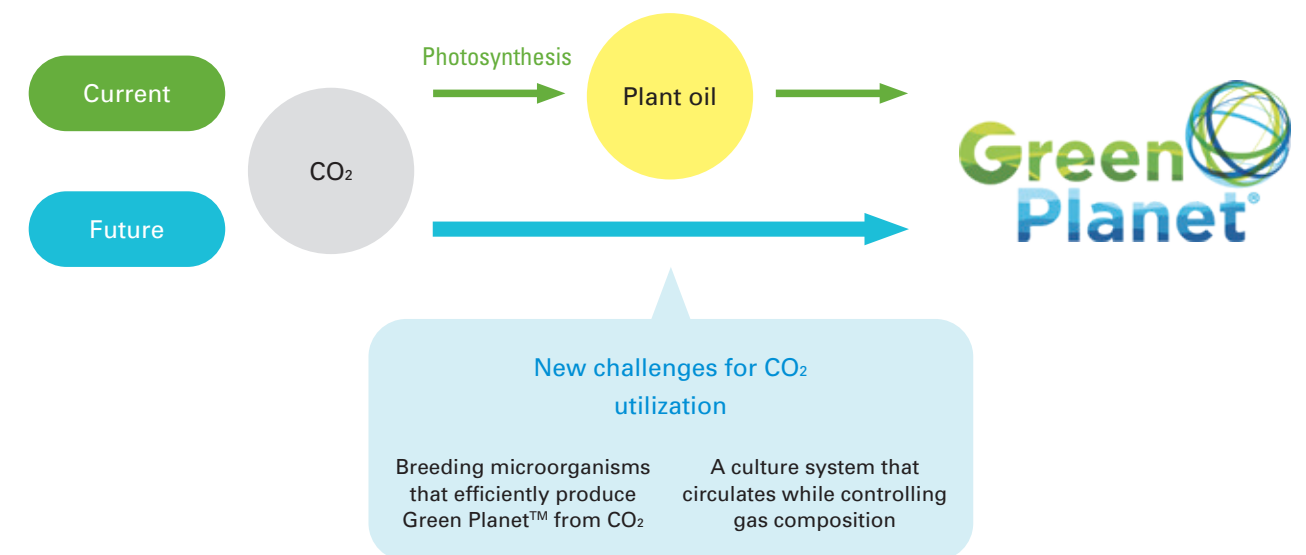
In 2022, with new national laws and regulations being enforced, the public awareness of the issue of plastics further grew. Inquiries have surged from brand holders needing to reduce their use of disposable plastics. We are advancing our development of processing technology to meet this need and expanding applications.



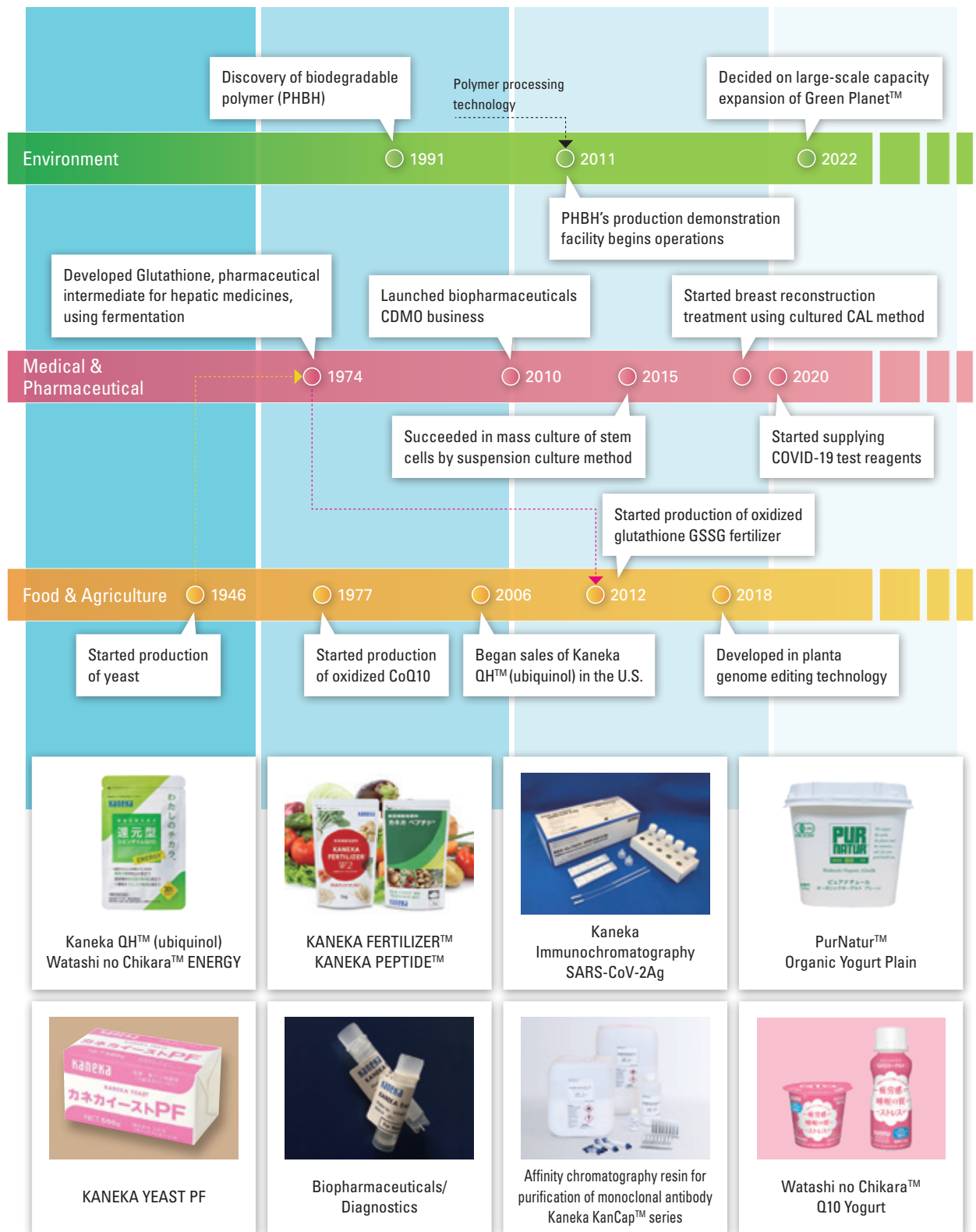
Further Evolution of Green Planet™ Toward a Decarbonized Society

To help tackle the growing social issue of reducing GHG emissions, we are working to develop technologies that use carbon dioxide as a direct resource. Research into producing Green Planet™ from carbon dioxide and hydrogen has already been successful at the laboratory level. Going forward, we will continue to

develop technologies for breeding high-productivity microorganisms and for building the world's first gas culture demonstration plant for practical use. We will also continue researching applications for producing a wide variety of polymers.



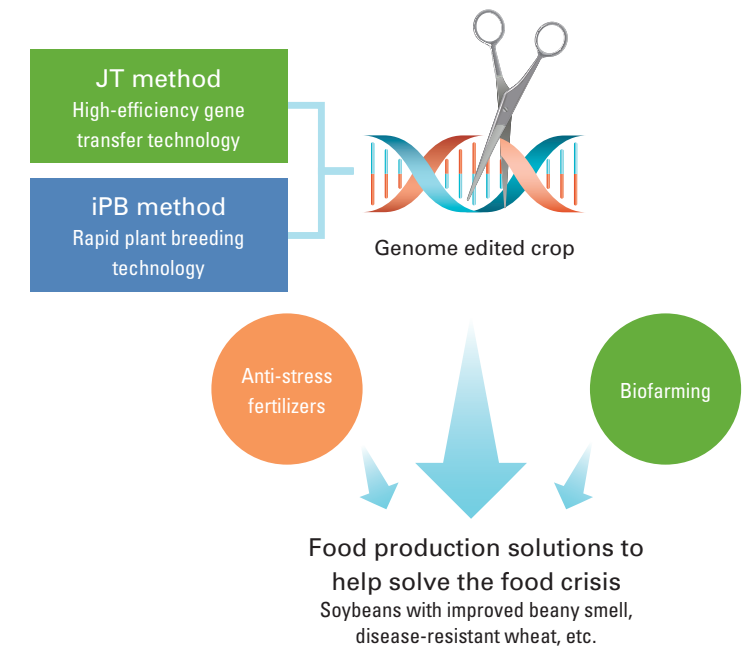
Kaneka Is a Leader in Biomanufacturing



Product lines (partially) based on biomanufacturing in key strategic areas (environment, medical & pharmaceutical, food & agriculture)

Biomanufacturing to Break Through the Food Crisis

Advances are being made in genome-editing technology for improving crops. We are moving ahead with deploying technology that will lead to the creation of new business models, focusing on combining two unique breeding technologies, the iPB method and the JT method. In addition, we will combine our proprietary food production support technologies, such as anti-stress fertilizers and bio-pesticides, to expand into large-scale seed-related businesses.



Biomanufacturing to Diversify Pharmaceutical Modalities



At Kaneka Eurogentec S.A., we have decided to increase our GMP* manufacturing capacity for mRNA. Production capacity will be about five times the current level. Kaneka Eurogentec provides drug discovery companies with plasmid DNA, proteins, and oligonucleic acids as active pharmaceutical ingredients for biopharmaceuticals. We have also started manufacturing services for mRNA since 2020, and we will continue to expand our business by enhancing our capabilities.

* GMP (Good Manufacturing Practice): A system for ensuring that products are consistently produced and controlled according to quality standards.

The Challenge of Bringing Regenerative Medicine and Cell Therapy to Society

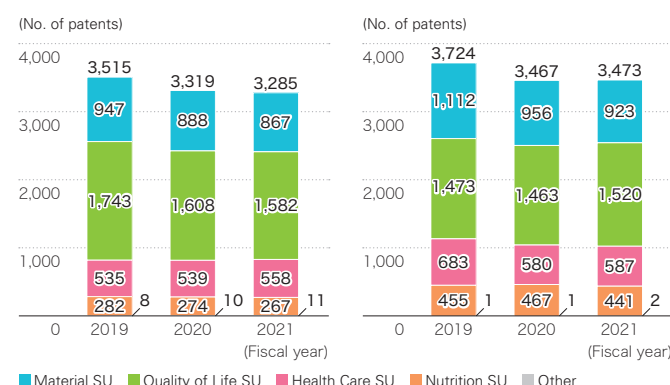
Cellport Clinic YOKOHAMA, which is operated by Group company Biomaster, Inc., has established autologous cell therapy technology and accumulated a world-leading clinical record of more than 1,300 cases. In addition to the field of plastic surgery focusing on breast reconstruction, we will expand into the field of orthopedic surgery for conditions such as knee osteoarthritis.



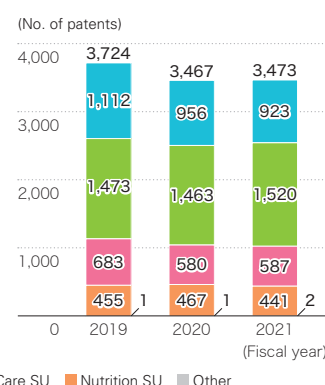
R&B Intellectual Property Strategy

We aim to secure rights to the results of our research and development and to provide solutions at an early stage. We consider intellectual property to be one of the outputs of R&B's activities and strive to acquire intellectual property such as results and know-how. In addition, non-research employees also understand the importance of intellectual property and use it in their work.

Number of Domestic Patents Held



Number of Foreign Patents Held

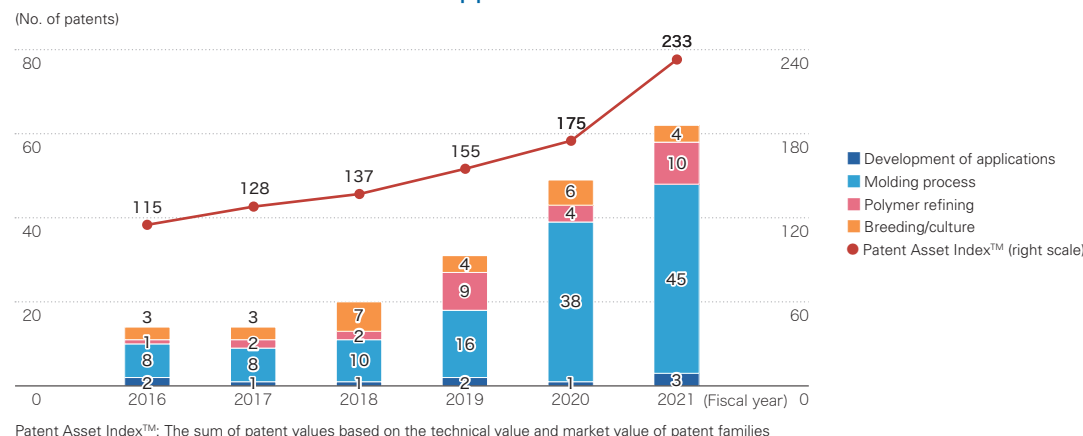


In fiscal 2021, we newly registered 258 domestic patents and 280 foreign patents. At the same time, we strive to manage our intellectual property expenses efficiently, and actively abandon unused patents. At the end of fiscal 2021, the number of patents held was 3,285 domestic patents and 3,473 foreign patents, roughly level with the previous fiscal year.

We evaluate patents in terms of qualitative as well as quantitative aspects. We have introduced LexisNexis' PatentSight™, and continue to monitor the Patent Asset Index™, a patent value index based on the technical value and market value of patent families, as one of our indicators. We are forming a network of rights strategically, both in terms of quality and quantity.

PatentSight™ and Patent Asset Index™ are registered trademarks of PatentSight GmbH.

Number of Green Planet™ Patent Applications and Value of Patents



As a fusion of our unique technologies, Green Planet™ is a key theme that we focus on from the perspective of intellectual property, and we are actively applying for patents. A wide variety of applications have been developed from the breeding and culture of bacterial strains and polymer refining to molding processing technology. This has led to an increase in the number of applications. The Patent Asset Index™ has been steadily increasing, showing that the value of patents is improving. Going forward, we will continue to accelerate our acquisition of rights with a view to delivering results in social implementation.

Actively Using Data

Strong Promotion of Intellectual Property and Digital Transformation

To check for relevant prior art, we have embarked on an attempt to use AI search tools to optimize our pre-patent application prior art search while shortening

the time frame required for reporting. In addition, we are carrying out trials of AI tools for searches of other companies' patents done by researchers.

IP Landscape™ Initiatives

We are also making use of IP landscape™ that combine intellectual property and non-intellectual property information for analysis. In fiscal 2021, we assigned a full-time staff member in the Intellectual Property Department to identify the needs of the R&B departments and explore our own IP landscape™ through trial and error.

For example, in searching for applications for newly developed resins, we structure the results of analyses so as to combine information such as patent trends and press releases of other companies in similar materials. This provides information to aid decisions on business strategy.

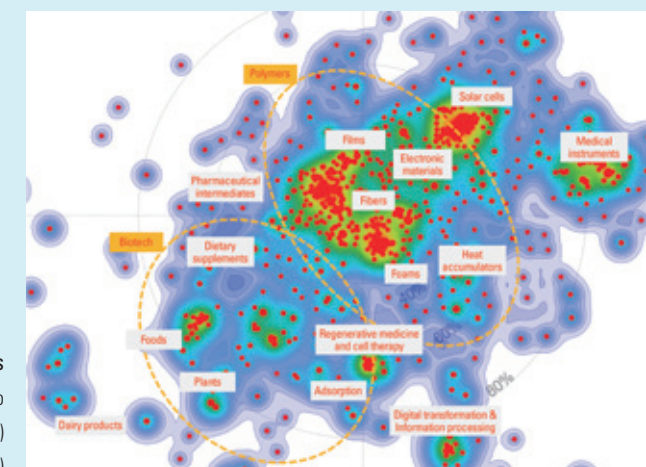
IP landscape™ is a registered trademark of Shobayashi International Patent & Trademark Office.

Accumulating Intellectual Property for Kaneka's Technological Challenges

We have created a landscape map for a full overview of our accumulation of technology. From the map, we can see that we have expanded our technology mainly to core polymer technology and biotechnology. At the same time, we have also ventured into uncharted domains that appear to be technological enclaves, such as medical instruments and solar cells.

In recent years, we have accumulated experience in developing technologies that use information processing technology and also in tackling new fields such as dairy products in the food field.

Going forward, we will continue to take on the challenge of creating value in new areas. We will also work on new challenges by combining existing technologies and external technologies.



Landscape map of Kaneka's proprietary technologies
 Overview of our published patents (applications filed from 2002 to 2021) by VALUENEX Radar (VALUENEX Japan Inc.)
 (The plotline (in red) indicates 2017-2021 applications)

Manufacturing Strategies

Achieving a sustainable plant that combines digital transformation with carbon neutrality

The Future of Kaneka Will Be Created from the Practice of Manufacturing in the Field.

Based on a safe and reliable plant that puts safety first, we are realizing production technology and process technology that enable new product production, cost reduction, workload reduction, and high efficiency, and thoroughly strengthening the global competitiveness of our manufacturing.

Reviving Manufacturing at Kaneka

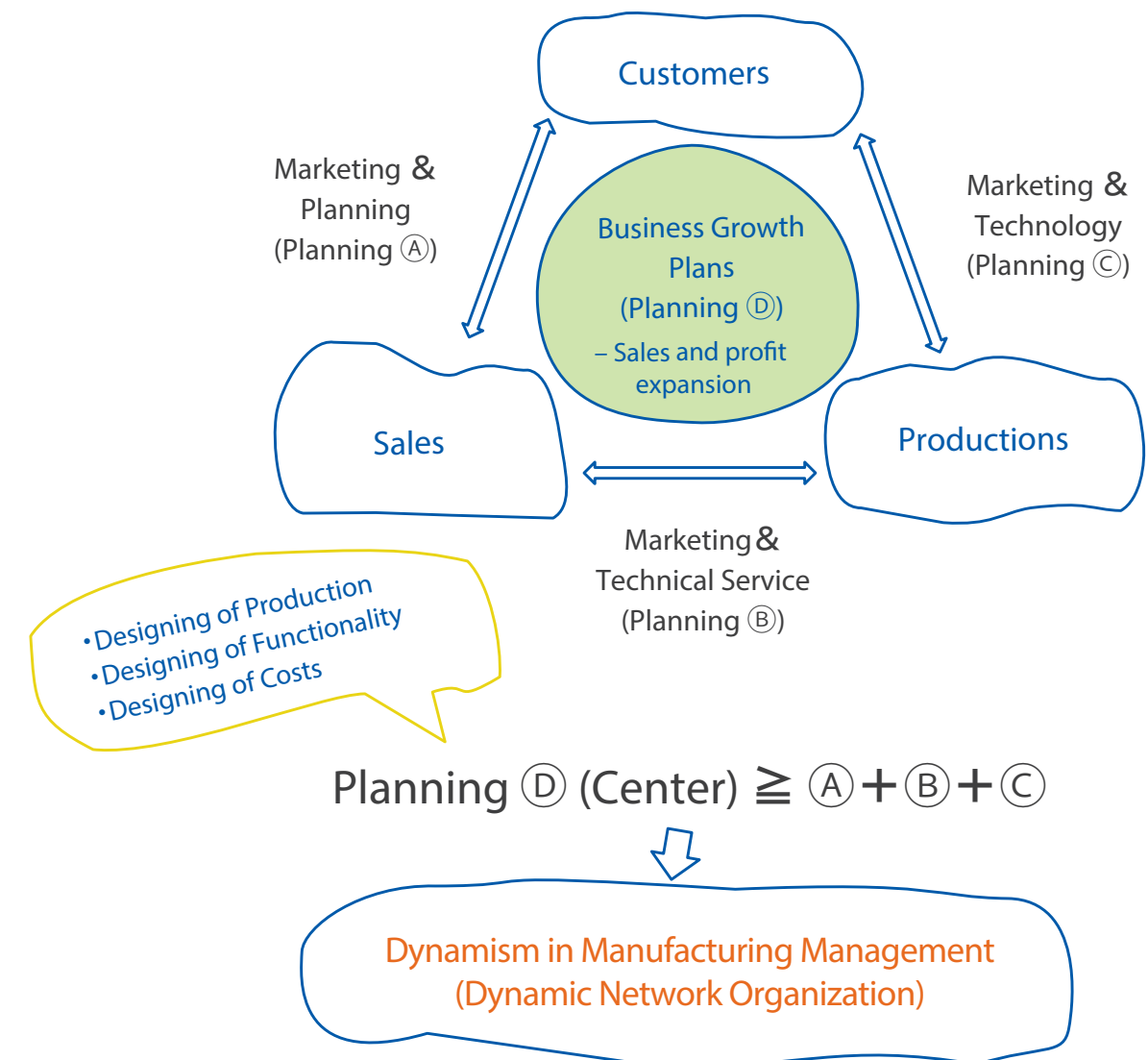
We will strengthen our R&B+P initiative, which strongly integrates R&B and manufacturing, and we will quickly implement new technologies in a competitive manner. We have launched the "Manufacturing R&B" & Production Technology Collaboration Council to accelerate our efforts. To realize the strong manufacturing of an R&D-driven company, we are enhancing our network planning functions and capabilities to connect our organizations for manufacturing, sales, and customers and markets. We are also improving the planning function that oversees these functions and manages overall design.

Digital and Environmental Initiatives

As a reactive company that responds properly to the changing times, we are promoting the use of digital technology to quickly realize innovations manufacturing and operations. We believe that proactively staying ahead of society's rapid shift toward carbon neutrality is vital for businesses to survive. In addition to our own decarbonization, we are working to realize carbon neutrality for society as a whole.

Manufacturing Means Applying R&B+P

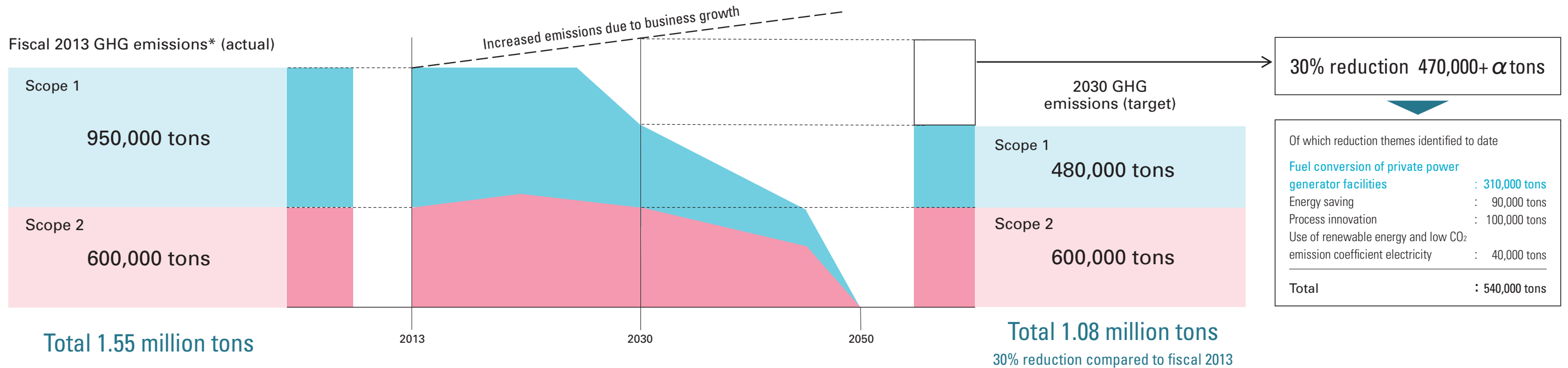
- Enhancement of four planning functions and capabilities
- P stands for Productions.



Carbon Neutrality

The Kaneka Group aims to reduce Scope 1 and 2 GHG emissions, which include domestic and overseas Group companies, by 30% by 2030 (compared to fiscal 2013) and to achieve carbon neutrality by 2050.

We are currently working to identify and implement themes for reducing GHG emissions. To further accelerate capital investment, we have designed an internal carbon pricing system, which will be operational from fiscal 2023.



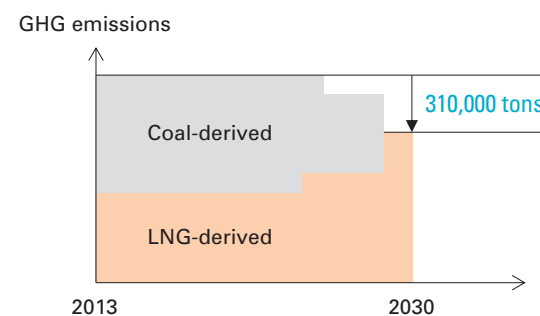
* GHG emissions: a value indicating the sum total of energy-origin CO₂ emissions, non-energy-origin CO₂ emissions, and the CO₂ equivalents of methane and N₂O emissions, calculated in accordance with the GHG protocol.

Progress to Date - Identifying GHG Emissions Reduction Themes -

In fiscal 2022, for the GHG emissions reduction of 30% (470,000+ α tons) set out in our 2030 target, we have identified themes for 540,000 tons. We will proceed with technical verification for each theme. Going forward, we will expand our GHG emissions reduction themes to domestic and overseas Group companies. We will actively incorporate Scope 2 reduction measures, including at our overseas sites.

1) Fuel Conversion

The fuel for private power generators at Takasago Manufacturing Site will be converted from coal to natural gas (LNG) in stages, and the use of coal will be discontinued by 2030.



2) Energy Saving

As a new energy saving technology, we have started to examine exhaust heat recovery by heat pumps, which has a wide range of application for each of our plants.

3) Process Innovation

We are acquiring pilot demonstration facilities to establish innovative technologies at our manufacturing plants, including vinyl chloride monomers.

4) Use of Renewable Energy and Low CO₂ Emission Factor for Electricity

Kaneka (Malaysia) Sdn. Bhd. has started to purchase low CO₂ emission factor for electricity as a way of reducing Scope 2 emissions. In addition, we are promoting the use of renewable energy, through measures such as installing in-house photovoltaic modules and self-transporting the power that we generate.



Photovoltaic power generation equipment installed at the Kaneka Takasago Distribution Center

Digital Transformation (DX)

We are accelerating our efforts to integrate DX and carbon neutrality (CN) in the area of manufacturing as we work to create new value.

We will transform our work culture by promoting production innovation using digital technology and by upgrading our Company-wide digital platform, including R&B.

Smart Work and New Value Creation
Business Portfolio Transformation
 SX = Sustainable + DX

Accelerating DX to Maximize Social and Economic Value

DX roadmap

	2020	2030	Metrics
Society Customers	Creating new value Technology establishment and mass production through R&B+P Reform of contacts with markets and customers		Net sales of new products Portfolio GHG emissions reduction
	Digital marketing "Manufacturing R&B" & Production Technology Collaboration Council		
In-house	Field Operation Zero Zero on-site work in the plant		Workload rate Labor productivity Cost Quality, safety, environment
	Optimizing costs through production and logistics Using AI to check operational safety Shift to monitoring-driven operations		
	Strengthening digital platform Strengthening infrastructure Developing digital talent	Stabilizing production process Data storage infrastructure, use of AI Developing digital talent	

Progress on DX Roadmap

(1) Data storage infrastructure

Deploying a common infrastructure to integrate production data globally



Operational data
 Image data
 Textual data



Use of data for optimal operation of each plant and reduction of production costs



(3) Use of AI

Built an AI infrastructure (Example 1) that all employees can use; each manufacturing site is now promoting themes for automation that makes human judgment unnecessary



Manufacturing with AI



(Examples)
 Automation of operations
 Automatic detection of product anomalies and defects
 Optimization of production planning, etc.

(2) Developing digital talent

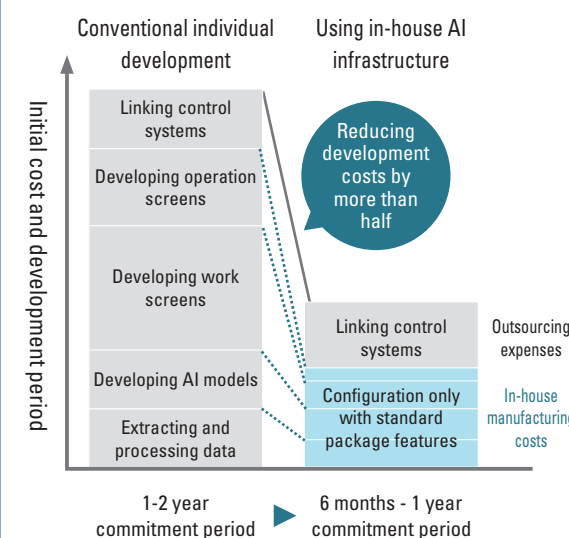
- Since 2018, we have been developing engineers who can use AI (a total of 90 people) and promoting AI themes at each manufacturing site
- Providing digital transformation literacy education to all employees

Field Operation Zero

Specific Examples

Example 1: Effects of using AI infrastructure

We have introduced a Company-wide AI infrastructure to reduce development costs and shorten timeframes. We are working on a total of more than 100 AI utilization themes at each site.



Example 2: Automation of transport work

Automated the transfer of molded products in the factory, reducing the number of workers to zero. (Kaneka Hokkaido Styrol Co., Ltd.: Field Operation Zero initiative at Shibetsu Plant)



Kaneka's Diversity Brings Broader Possibilities



New External Director

Yuko Sasakawa

Representative Director and President of
IMAGINENEXT INC.
Outside Director of Gakujo Co., Ltd.

Half a year has passed since you became an external director of Kaneka. How do you see the Company now?

The first thing that struck me about the Company was that the Corporate Philosophy and Management Philosophy have taken deep root throughout the organization, and are guiding Kaneka to become a company that works steadfastly toward resolving social issues. The more I find out about efforts the Company is taking to make this happen, the more wonderful I think it is.

To initiate a direct dialogue with employees, you also set up a round-table discussion with female executives.

I was struck by how diverse the participants were. They came from a range of age brackets, and I was surprised to hear that some had joined the Company through mid-career hiring or switched from being contract employees to their current positions. I've worked in the HR industry for a long time, and have heard about the efforts various client companies are making, but I think that such an approach to hiring is still uncommon among large Japanese companies, especially long-standing companies in the manufacturing sector.

In a broad sense, I think diversity, more than being just about women's empowerment, involves the coming together and expansion of various businesses, technologies, and people.

I believe diversity will be the most crucial aspect of corporate management going forward. Management will be called on more and more to consider how many standpoints and perspectives they take into account and the height and breadth of these perspectives.

Kaneka is poised to make great strides forward, having positioned becoming embedded in and part of the culture of local communities as the route to becoming a global company. In Japan as well, the Company is pursuing activities that are grounded in Hokkaido and other regional communities. I think this is another facet of diversity that I want to affirm.

Because I see Kaneka as a company that takes on challenges in a range of areas rather than simply trying to grow a single business as large as possible, I think having more diverse talent to take the lead in various fields will be increasingly important.

I attended an internal research conference the other day. It was thrilling to hear from researchers who are pursuing challenges in a number of directions. I gathered that venues like that are where cross-fertilization between researchers takes place. It was an opportunity to get a feel for the culture of a Trial & Error experiment driven company that creates innovation through unexpected combinations.

It occurred to me that Green Planet™, launched more than 30 years ago, has also come as far as it has because biotechnology researchers, macromolecular researchers, and people from various other areas of expertise came together as a team. That's amazing, and I look forward to the wealth of innovation we can expect down the road.

The Company is also investing in the future, such as deciding to build a new factory for medical devices in Hokkaido. Every time I see the Board of Directors give approval for different large-scale projects it makes me excited to anticipate how they will bear fruit in the future.

As a Trial & Error experiment driven company, Kaneka faces a wide range of challenges. Of course, not only in research, but also in manufacturing, sales, and other roles, Kaneka employees all share an attitude of taking on challenges.

I think the Company has a climate that encourages employees to take on challenges and a robust framework for supporting them in doing that. I would like to see all employees move forward with confidence. Each upward step opens out onto a different vista. I feel most people waver between the fear of taking a step forward and the courage to take a leap. But since Kaneka is a Trial & Error experiment driven company, I encourage employees to view opportunities as another kind of experiment and seize upon them. I think it's fine to go on trying and sometimes failing. That's the kind of company Kaneka is.



Interviewers

(back left) **Shinichiro Kametaka**

Executive Vice President, In charge of Human Resources,
General Manager of The Engine of Sustainability Management

(front left) **Sahori Tanaka**

Member of Diversity Committee
Head of Public Relations Group
Investor & Public Relations Department

(right) **Mami Yuki**

Secretariat of Diversity Committee
Head of Recruiting Team, Recruiting and People Development Group
Human Resources Department