

Asahi**KASEI**

Care for People, Care for Earth

Asahi Kasei Group
Sustainability Report

2022

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Editorial Policy

Introduction

The Asahi Kasei Group issued our first Environment Report in 1991, and we began issuing a CSR Report in 2006 with content expanded to include social responsibilities. Through these reports, we have further enriched communication with our stakeholders and continually worked to fulfill our accountability.

In line with a trend mainly in Europe to combine financial and non-financial information in a single integrated report, in 2014 we issued an Asahi Kasei Report replacing our Annual Report and CSR Report. At the same time, since then we disclose information on the details of our CSR activities using this website.

Since fiscal 2019, we have termed this report the "Sustainability Report" both on our website and in its downloadable form. In the report, we present the Group's approach to sustainability and contributions to achieving a sustainable society through our business activities, in accordance with the concept "Care for People, Care for Earth." The framework for our activities is organized into Environment (E), Society (S), and Governance (G), and comprehensive information is provided on policies, systems, activities, numerical data, etc.

Reporting period

The primary focus is fiscal 2021 (April 2021 – March 2022). Some information pertains to the period subsequent to this.

Organizational boundary

Information herein pertains to Asahi Kasei Corp. and consolidated subsidiaries as of March 31, 2022, unless otherwise noted.

Data with differing scopes or coverage is presented in footnotes.

The report on ESH & QA activities applies to Japanese and overseas Group companies that are implementing the same activities. A list of the business sites implementing the program is presented below.

➤ Asahi Kasei Group's ESH & QA Activities

Inquiries

Please contact us via the website or telephone if you have an inquiry.

To submit an inquiry through the website, please use the following form:

➤ https://www.asahi-kasei.com/contact_us/contact/

Guidelines consulted

We reference the following guidelines and framework when disclosing information related to sustainability.

- GRI "Sustainability Reporting Standards"
- Ministry of the Environment "Environmental Reporting Guidelines (2018)"
- SASB (Sustainability Accounting Standards Board) Standards
- International Organization for Standardization "ISO 26000"

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Management Message



Continually taking challenges for sustainability with the dual perspective of "Care for People, Care for Earth"

The sustainability of human society is being threatened by a series of major issues, such as increasingly frequent and severe natural disasters caused by climate change, the prolonged impact of COVID-19, and the global tensions following Russia's invasion of Ukraine.

Due to a number of changes that have occurred as a result, there is increased awareness about life and health. People's values with respect to how they live and work have changed, and new social issues have come to the forefront as well.

Moreover, the urgent need to reduce greenhouse gas emissions in response to climate change has become more apparent than ever, and efforts to achieve carbon neutrality are accelerating around the world. Initiatives for respecting human rights in an effort to eliminate forced labor and other human rights abuses are another urgent necessity.

As such, the importance of taking action to achieve a sustainable society will only continue to rise.

Asahi Kasei's Group Mission is to contribute to life and living for people around the world. The expression "Care for People, Care for Earth" encapsulates our commitment. This is a key concept for our Group, and one that I constantly keep in mind as I proceed with management. Through our Group's business activities, we will actively promote initiatives that contribute to a sustainable society, which has become more important than ever, from the standpoint of "Care for People" and "Care for Earth."

Regarding Care for People, we are advancing initiatives that help achieve a society where people can lead active lives in the "new normal" both during the pandemic and thereafter. As the world's population ages and people live longer, we will expand our business in the Health Care field. This includes our pharmaceutical business that focuses on immunology and transplantation, our critical care business in the field of serious cardiopulmonary diseases, and our bioprocess business that contributes to improving the safety and productivity of pharmaceutical products, all in accordance with the "Improve and save patients' lives" policy, which is outlined in our new Medium-term Management Plan. We are also developing our Homes business both in Japan and abroad, which enables people to lead fulfilling lives in security and comfort.

Regarding Care for Earth, we are working to contribute to the achievement of a carbon-neutral sustainable society. In 2021, we announced our goal of becoming carbon neutrality in our GHG emissions by 2050. We will reduce our own GHG emissions through a variety of measures, including reducing energy use, energy derived from low carbonization and decarbonization, and innovation in our manufacturing processes. At the same time, we will continue to develop and provide products that reduce GHG emissions in society through our diverse array of businesses and technologies, including hydrogen-related, CO₂chemistry, energy storage, and eco-friendly housing and construction materials.

In May 2022, we celebrated the 100th anniversary of our founding. With the understanding and cooperation of our stakeholders, we have been taking on challenges and doing our best to provide products and services that respond to changes in the social environment.

As we take our first steps into the next 100 years, we are determined to rekindle our enterprising spirit and take on new challenges. We will carve out paths not taken and show the world the way (Be a Trailblazer), and we will contribute to a sustainable society through our business activities and enhance corporate value in a sustainable manner. This is the kind of sustainability we will pursue. We would like request everyone's continued understanding and support going forward.

Koshiro Kudo
President

Sustainability Vision - Asahi Kasei Group's Vision

The Direction of Sustainability with a View Toward 2050

In response to recent major changes in the environment, such as climate change and the COVID-19 pandemic, Asahi Kasei's commitment to "Care for People, Care for Earth" has become even more important.

Given this context, Asahi Kasei Group will take on the following two challenges as we look toward 2050. From the perspective of "Care for Earth," we aim to achieve a carbon-neutral and sustainable world, and from the perspective of "Care for People," we aim to achieve active life in the new normal.

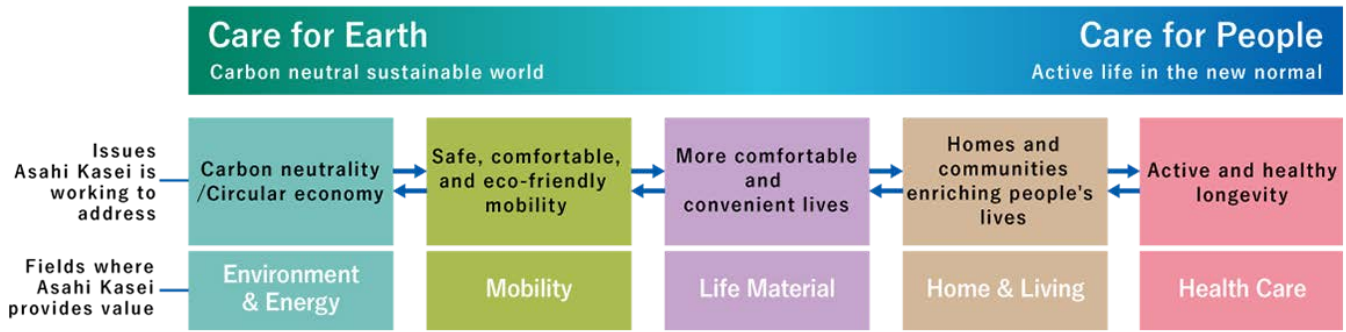


As we look ahead to 2050, it is predicted that we will be confronted with a variety of social issues. Our Group believes that we will be able to help resolve these issues and that our business opportunities will expand.

For example, in terms of "Care for Earth" (achieving a carbon-neutral and sustainable world), we can contribute to important subjects such as electric vehicles, a hydrogen society, carbon recycling, and achieving a circular economy. We will do so primarily through our businesses in the Material sector, such as recycling technologies, CO₂ separation and recovery, an alkaline water electrolysis system, and battery materials.

Note: To achieve a carbon-neutral world, it is essential to reduce GHG emissions from our business activities. For more information on the Asahi Kasei Group's policy toward carbon neutrality, please click [here](#)

In terms of "Care for People" (achieving active life in the new normal), we will contribute to the development of homes and communities that can withstand storm and flood damage and extreme heat. We will also contribute through our health care business to help people live healthy and vibrant lives.



In addition to aiming to provide value to society through our two challenges, we will enhance the fundamental activities that support our business activities, such as corporate governance, compliance, respect for human rights, and safety and quality. Our group will also pursue our two sustainability goals of contributing to a sustainable society and sustainable growth of corporate value.

➤ Asahi Kasei Group's Materiality

Initiatives for Achieving a Carbon-neutral and Sustainable World

Initiative for Achieving a Hydrogen Society

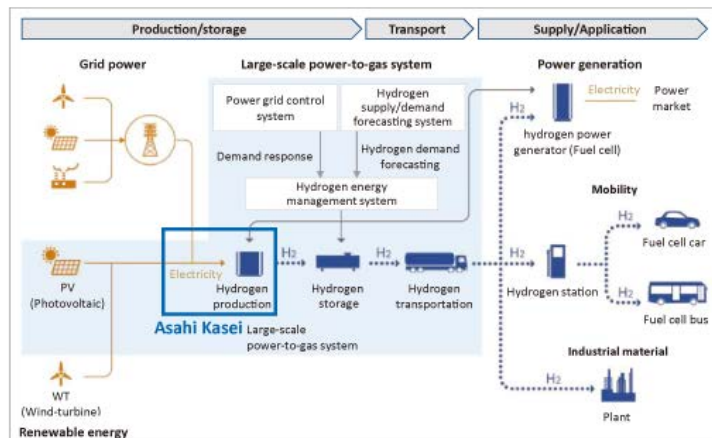
Significance of the initiative	Hydrogen is a key factor for carbon neutrality
Our vision	Becoming a key player in green hydrogen production
Specific initiative	Alkaline water electrolysis

Hydrogen, which is attracting attention as a fuel for automobiles and as a means of storing and transporting energy, is a key factor for carbon neutrality. Based on our knowledge of chlor-alkali electrolysis systems, our Group launched the world's largest alkaline water electrolysis system in Namie Town, Fukushima Prefecture in 2020, and began an efficient hydrogen supply operation using renewable energy. As expectations for hydrogen rise worldwide, with various countries in Europe announcing hydrogen strategies, we are also conducting demonstrations in Germany. Our Group aims to commercialize this technology as a frontrunner while leveraging our strengths.

Alkaline water electrolysis system to accelerate hydrogen society

Environment & Energy

The world's largest scale alkaline water electrolysis system using renewable energy at the Fukushima Hydrogen Energy Research Field (FH2R)

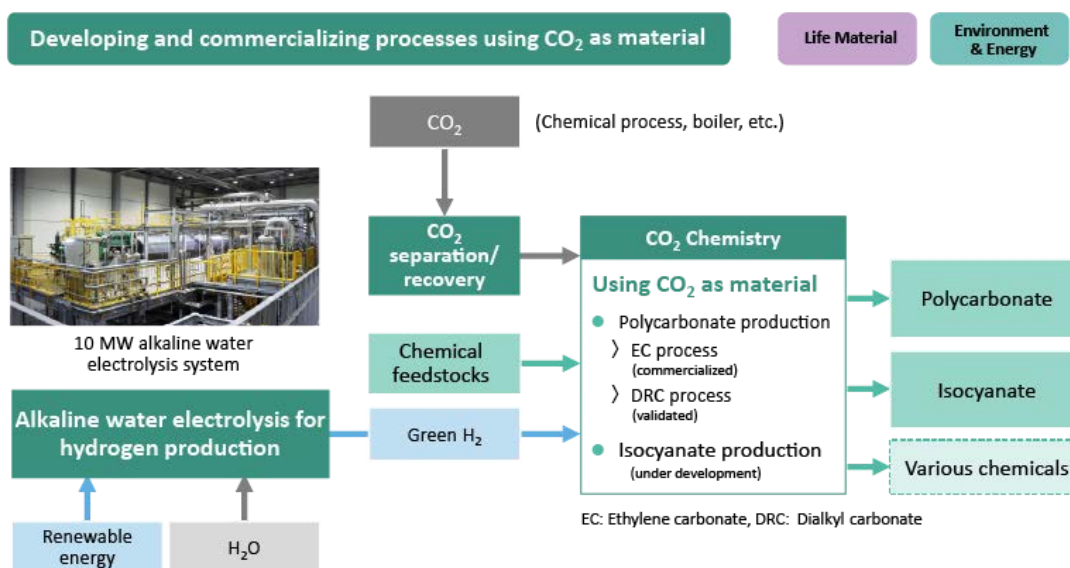


NEDO: Hydrogen social construction technical development project/ Hydrogen energy system technical development/Technical development concerning business model construction and the large scale actual proof of a re-energy use hydrogen system Source:NEDO

Producing Chemicals using CO₂

Significance of the initiative	The CO ₂ cycle will be an important element of a sustainable society
Our vision	Practical application of CO ₂ chemistry in addition to polycarbonate
Specific initiative	Production of functional specialty chemicals based on carbonyl group introduction technology

We are also focusing on CO₂ chemistry, which enables the production of chemical products using CO₂ as a raw material. In the area of polycarbonate production technology, the EC process has been used in practical applications and is being licensed around the world. The DRC process, which is a further refinement of the EC process, has already been demonstrated as viable and is attracting attention as a technology that enables production regardless of the location of petrochemical plants. We are also developing a technology to produce isocyanate (raw material for polyurethane) from CO₂. We have also started to use the EC process as a basis for the production of electrolyte materials for LIBs, which will become even more essential in society going forward. With regard to CO₂ separation and recovery, we are developing a system that uses our catalyst technology to efficiently separate and recover CO₂ from power plant and factory exhaust gas using a special zeolite (a type of mineral) with a precisely controlled pore structure.



Deploying Technologies, Products, and Services to Achieve a Circular Economy

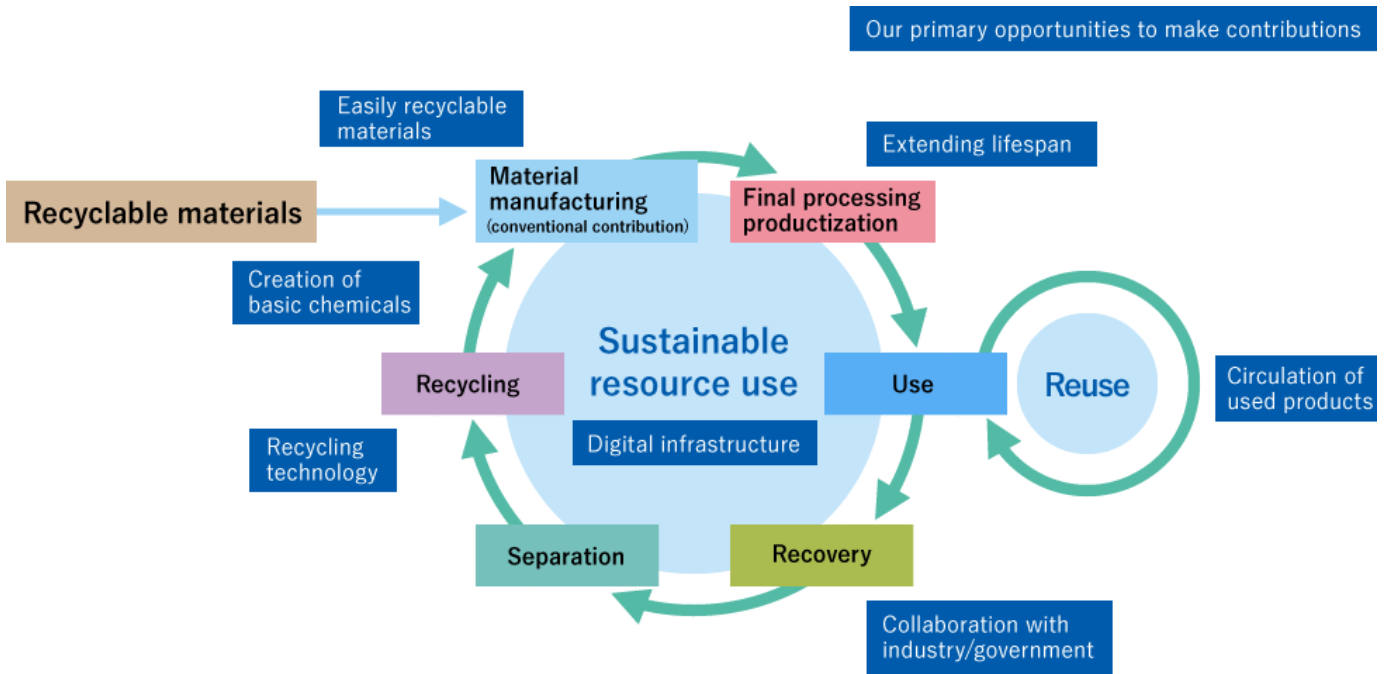
Significance of the initiative	Promoting sustainable resource usage is essential for decarbonization
Our vision	Development and practical application of technologies and infrastructures that have become bottlenecks in achieving the circular economy
Specific initiative	"BLUE Plastics" Project

In an age when global environmental conservation is a major concern, resource recycling and the use of recycled plastics are being promoted as ways to recycle plastic waste as resources to supply highly convenient products while being considerate of the environment.

However, until now, it has been difficult to prove the recycling chain for products made from recycled plastic and the recycling rate of materials.

We are developing a digital platform based on our belief that, to make a resource-recycling society a reality, it is necessary to visualize the recycling chain of recycled plastics to create an environment in which people can use them with confidence. The social issue of balancing resource recycling with convenience is difficult to solve through the efforts of individual companies alone, so we aim to create a widely accessible platform that can be used by a broad range of people, from every kind of company involved in the recycling chain to consumers.

➤ Initiative for Achieving a Circular Economy



Active life in the new normal

Achieving Healthy Longevity in an Era of Centernarians

Significance of the initiative	Health-related lifestyle issues are rising due to declining birthrate and aging population
Our vision	Provide homes and services according to changes in health and family circumstances
Specific initiative	Providing secure apartment buildings for senior citizens and homes with services for senior citizens

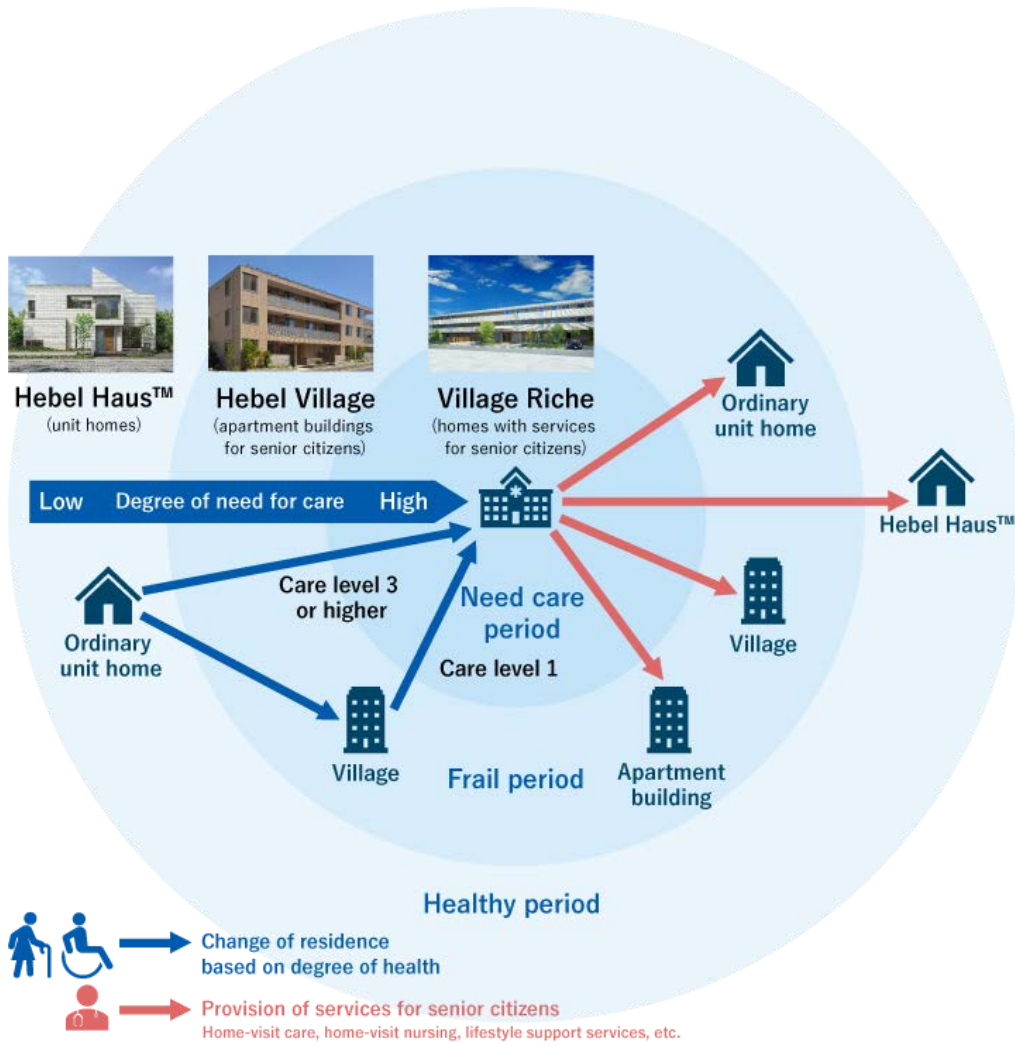
This is an era where people often live into their hundreds. As senior citizens' values with regard to homes become more diverse, the Asahi Kasei Group provides optimal homes based on their level of health.

There is the "healthy period," when people are active and healthy; the "frail period," when people's minds, bodies, and social skills decline; and the "need care period," when people need support. Each stage requires a different type of home.

We offer "Hebel Village," which consists of safe and reliable apartment buildings for senior citizens where those in the healthy to frail stages can lead healthier and safer lives than they can at their own home.

For senior citizens in need of care, we provide "Village Riche" housing, which includes extensive care services.

We contribute to the formation of a society of healthy longevity by providing senior citizens who feel anxious and inconvenienced living in their own aging homes with the option of changing their residence while they are still healthy to one that is safe, reliable, and conducive to healthy longevity. We also provide security for the future through senior citizen homes that includes services for those who require extensive care.



Contributing to the Resolution of Unmet Medical Needs

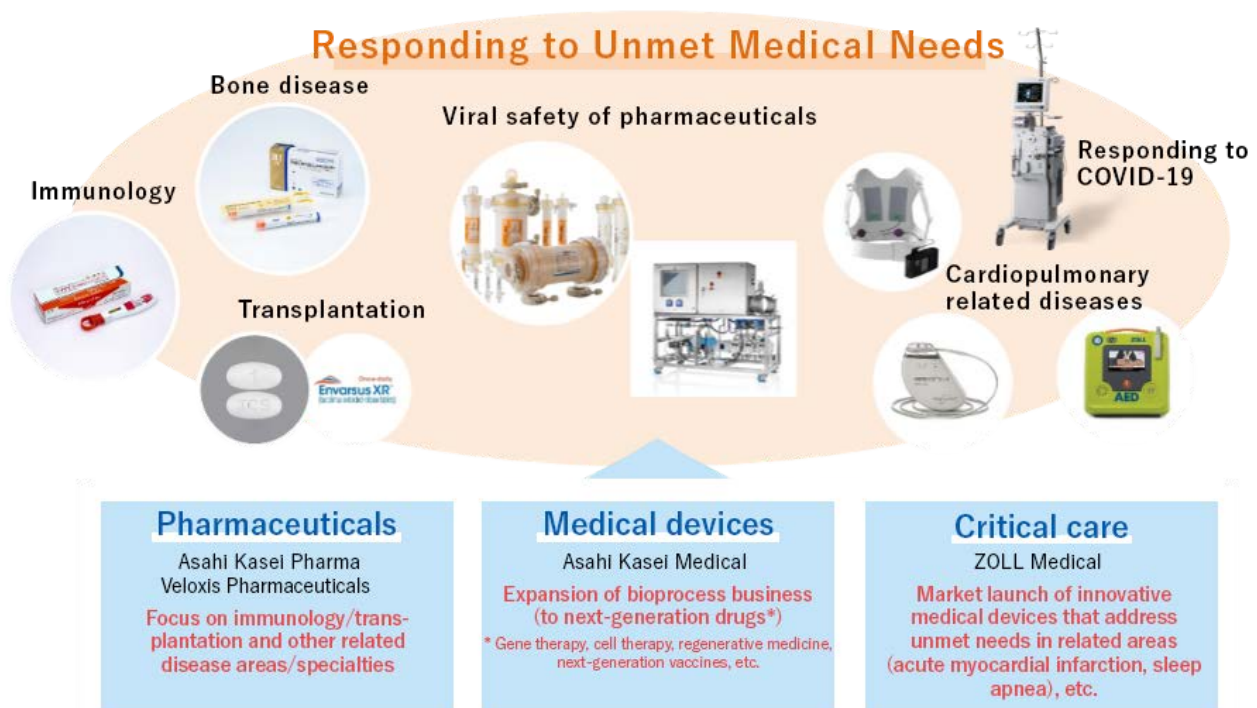
Significance of the initiative	The number of unresolved health-related medical issues is increasing due to the aging population, etc.
Our vision	Provide superior products and services globally
Specific initiative	Development and marketing of pharmaceuticals, medical devices, and related services/materials

As health-related issues are becoming more common due to the aging of the population and other factors, Asahi Kasei Group believes that addressing unmet medical needs will become ever more vital. The Group aims to provide superior products and services globally through its involvement in both pharmaceuticals and medical devices.

In the pharmaceuticals field, we will continue to make contributions in the immunology and transplantation fields.

In the medical devices field, we will focus on serious cardiopulmonary diseases and related fields (acute myocardial infarction, sleep apnea).

In addition, in our bioprocess business, we will address the area of next-generation pharmaceuticals such as gene therapy, cell therapy, regenerative medicine, and next-generation vaccines to further improve the safety and productivity of pharmaceutical formulations.

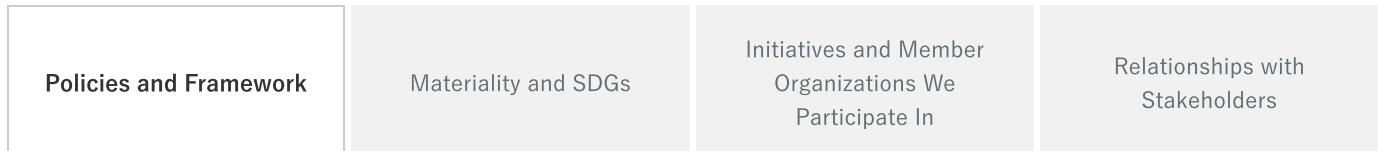


Related information

› Medium-term Management Plan

Further heightening corporate value with our medium-term management plan.

Sustainability Management



In 2021, to further promote initiatives aimed at making a sustainable society a reality, we established the Asahi Kasei Group Sustainability Policy.

Asahi Kasei Group Sustainability Policy

The Asahi Kasei Group is contributing to life and living for people around the world. We strive for two mutually reinforcing aspects of sustainability: “contributing to sustainable society” and “sustainable growth of corporate value.” By creating value for “contributing to sustainable society” we seek to gain high earnings that lead to “sustainable growth of corporate value” which enables us to make further contributions in a virtuous cycle.

In order to achieve this, we pursue the optimal corporate governance while practicing the following.

Value creation through contribution to sustainable society

- Resolving issues for People and the Earth through our high value-added businesses (Care for People, Care for Earth)
- Leveraging our strengths of diversity and capability to change for the creation of value (Connect, Communication, Challenge)

Responsible business activities

- Complying with laws/regulations and respecting international standards regarding business activities (Compliance)
- Prioritizing ESH (environment, safety, and health), human rights, and quality assurance throughout all of our activities
- Performing appropriate information disclosure and dialogue with our stakeholders

Empowerment of personnel

- Respecting diversity and inclusion
- Encouraging each employee's growth, performance, and challenging spirit

➤ [Asahi Kasei Group Sustainability Policy](#) (131.4KB)

Our Group Mission is "contributing to life and living for people around the world," and we have grown by continually contributing to solutions for society. Our commitment has remained constant ever since our founding with the aim of improving people's standard of living.

Today, discussions about achieving sustainability are taking place around the world. Since sustainability is a challenge that concerns people and the global environment, we believe that the pursuit of "living in health and comfort" and "harmony with the natural environment" as set forth in our Group Vision will lead to sustainability.

"Sustainable growth of corporate value" in conjunction with "contributing to sustainable society" is also important. "Contributing to sustainable society" leads to earnings which enhance the corporate value of the Asahi Kasei Group, which in turn enables further "contributing to sustainable society."

To make this virtuous cycle a reality, we will strive to create value by contributing to a sustainable society, conduct our business activities in a responsible manner, and promote the empowerment of our employees based on our approach of "Care for People, Care for Earth."

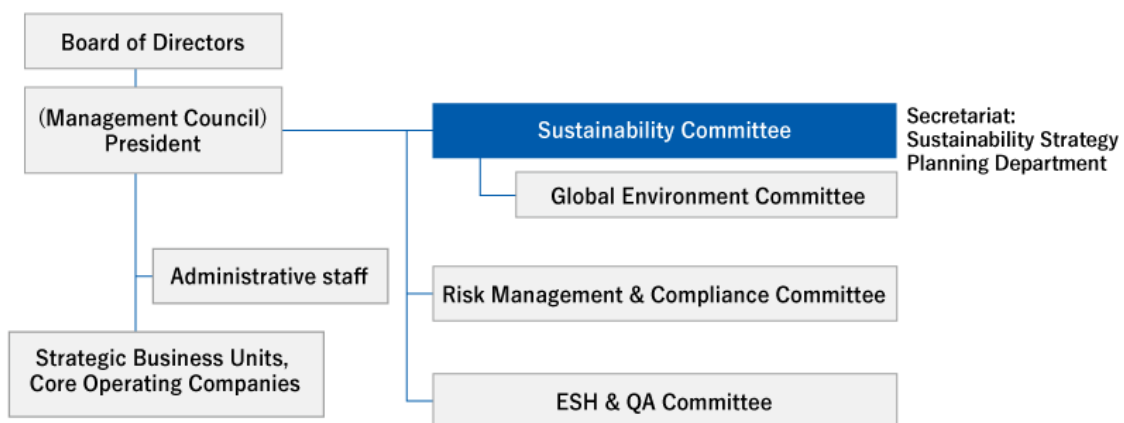
Our ultimate aim is to continue to proactively contribute to the world as a leader in solving challenges for society, carrying on the commitment we have had since the founding of our company.

Management Framework

The Asahi Kasei Group considers sustainability to be an important focus of management and incorporates it into both its medium-term and annual management plans, in addition to discussing it at Board of Directors meetings. We have also established a Sustainability Committee to promote sustainability group-wide.

The Sustainability Committee consists of the President, Executive Officers for Business Sectors, and the Executive Officer for Technology Functions, and is responsible for disseminating information, orienting sustainability-related activities, and so on. The Sustainability Committee coordinates with the Risk Management & Compliance Committee and the ESH & QA Committee, which handle more technical and specific matters.

All three of these committees are chaired by the President of Asahi Kasei. Our Global Environment Committee holds specialized discussions on global environmental measures as a subcommittee of the Sustainability Committee.



Framework for Sustainability Strategy (as of August 1, 2022)

Sustainability Management

Policies and Framework

Materiality and SDGs

Initiatives and Member Organizations We Participate In

Relationships with Stakeholders

Asahi Kasei Group effort for the SDGs

Transforming our world: the 2030 Agenda for Sustainable Development was adopted by the UN Sustainable Development Summit in September 2015. The agenda includes 17 Sustainable Development Goals (SDGs) and 169 targets such as ending poverty and inequality, and taking action on climate change.

Through its diverse array of businesses and technologies, the Asahi Kasei Group contributes to achievement of the SDGs in accordance with the Group Vision of providing new value to society by enabling "living in health and comfort" and "harmony with the natural environment"



Asahi Kasei Group's Materiality

In fiscal 2017 we designated the priority issues and subjects to address as the materiality of the Asahi Kasei Group. We revised our materiality in May 2021 amidst the worsening climate crisis and the acceleration of domestic and international sustainability-related trends. We added "Initiatives toward Carbon Neutrality" and "Initiatives toward a Circular Economy" as matters of the highest importance.

Identifying Our Materiality

1. Identifying Issues

We referred to international guidelines including ISO 26000 and the GRI Standards, as well as the evaluation items used by major ESG evaluation organizations (FTSE, etc.), to identify issues according to the demands of societies and our mission, vision, and values.

2. Determining the Impact

We assessed the level of impact on both society and our Group and mapped it onto two axes.

3. Evaluating Validity

We confirmed the validity of the plan by examining it from a variety of perspectives, such as through deliberations among divisional managers, discussions with other companies, and interviews with outside directors.










4. Deliberation and Approval








After deliberation by the Management Council, the proposal was approved by the Board of Directors.

The relationships between this materiality and the sustainable development goals (SDGs) are shown in the following table. We will continue to advance our initiatives while incorporating the perspectives of various stakeholders.



Materiality List

Theme	Materiality	Related SDGs	Supervising organization (Joint supervision: Sustainability Strategy Planning Department)	Main KPIs
<p>Harmony with the environment</p> <p>We position initiatives for the global environment as important issues, and we are working on measures regarding climate change, preventing pollution, development of a circular economy, and other initiatives. Using our diverse technologies, we will also develop materials and products that contribute to conserving energy and reducing CO₂ emissions.</p>	Global environment*	   	Strategic Business Units and Core Operating Companies Corporate Research & Development	Environmental Contribution Products
	Initiatives toward Carbon Neutrality	 	Corporate ESH, Strategic Business Units, and Core Operating Companies Corporate Research & Development	GHG emissions
	Initiatives toward a Circular Economy		Corporate ESH, Strategic Business Units, and Core Operating Companies Corporate Research & Development	—
	Wastewater		Corporate ESH	Number of accidents involving environmental pollution and number of significant issues
	Industrial Waste		Corporate ESH	—
	Biodiversity		Corporate ESH	Awareness-raising Activities
<p>Living in health and comfort</p> <p>We will contribute to healthy and comfortable lifestyles and affluent living with our distinctive products and technical capabilities.</p>	Health and longevity*	  	Strategic Business Units and Core Operating Companies Corporate Research & Development	—
	Comfortable life*		Strategic Business Units and Core Operating Companies Corporate Research & Development	—

Theme	Materiality	Related SDGs	Supervising organization (Joint supervision: Sustainability Strategy Planning Department)	Main KPIs
Basic Activity We will strengthen the base for business development, leading to the creation of new value.	Corporate Governance	 	General Affairs	Effectiveness assessment and improvement
	Compliance /sincerity	 	General Affairs	—
	Risk management		General Affairs	—
	Safety/quality	 	Corporate ESH/Corporate Quality Insurance	Major security incidents Disabling injury frequency rate
	Human rights		Human Resources/Corporate Procurement & Logistics	Employee survey
	Human Resources		Human Resources	—
	Diversity		Human Resources	Number of female managers
	Supply chain management		Corporate Procurement & Logistics	Administered CSR Procurement Questionnaire
	Communication with stakeholders		Investor Relations/Human Resources/General Affairs and others	—
	Social contribution		General Affairs	Amount of activity (in monetary terms)

* Contribution through business

Sustainability Management





Policies and Framework











Materiality and SDGs







**Initiatives and Member
Organizations We
Participate In**

Relationships with Stakeholders

Participation in initiatives (major initiatives)

 <p>Network Japan WE SUPPORT Global Compact</p>	<p>The Asahi Kasei Group supports the United Nations Global Compact.</p> <ul style="list-style-type: none"> ➤ UN Global Compact <input type="checkbox"/>
 <p>Business Call to Action (BCtA), a multilateral alliance led by the United</p>	<p>Nations Development Programme (UNDP), challenges companies to advance core business activities that contribute to the achievement of the Sustainable Development Goals (SDGs). Asahi Kasei joined with an initiative to support the fiber industry in India through the creation of a comprehensive value chain for Bemberg™ cupro.</p> <ul style="list-style-type: none"> ➤ Business Call to Action <input type="checkbox"/>
 <p>Clean Ocean Material Alliance (CLOMA)</p>	<p>The Clean Ocean Material Alliance (CLOMA) is a platform established to accelerate innovation by strengthening collaboration among a wide range of stakeholders across industry sectors amid a need to implement worldwide initiatives to overcome the marine plastic litter problem, a global-scale challenge.</p> <ul style="list-style-type: none"> ➤ Clean Ocean Material Alliance <input type="checkbox"/>
 <p>BASC Battery Association for Supply Chain Battery Association for Supply Chain (BASC)</p>	<p>The Battery Association for Supply Chain (BASC), established as a general incorporated association on April 1, 2021, is an organization engaged in activities such as the international standardization of the battery supply chain (industries related to battery materials, components, and raw materials) and the creation of a battery ecosystem, with the aim of achieving a decarbonized society.</p> <ul style="list-style-type: none"> ➤ BASC <input type="checkbox"/>

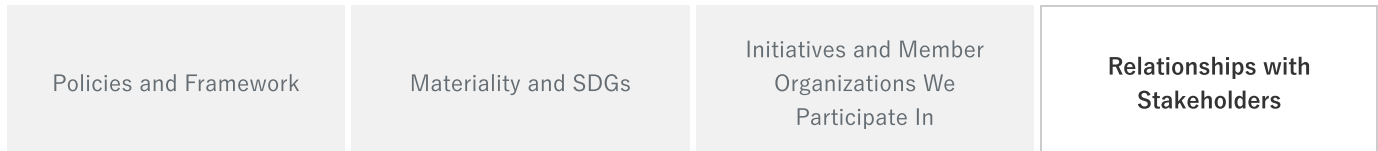
<p>White Logistics Movement</p>	<p>The White Logistics Movement is aimed at ensuring stability in logistics needed for people's daily lives and industrial activity and contributing to economic growth in response to the truck driver shortage, which continues to intensify. The Ministry of Land, Infrastructure, Transport and Tourism, the Ministry of Economy, Trade and Industry, and the Ministry of Agriculture, Forestry and Fisheries are the advocates of the movement. Asahi Kasei has made a statement of voluntary action endorsing the movement and is working to improve logistics.</p> <p>➤ White Logistics Movement </p>
<p>Challenge Net Zero Carbon Innovation (Challenge Zero)</p>	<p>Challenge Zero is an initiative promoted by the Japan Business Federation (Keidanren) in coordination with the Japanese government to support companies and groups in their efforts to achieve a decarbonized society. Asahi Kasei supports this initiative and has announced specific efforts and policies:</p> <p>➤ Challenge Zero </p>
 <p>RE100 CLIMATE GROUP RE100</p> 	<p>RE100 is an international collaborative initiative consisting of companies committed to running their business operations on 100% renewable energy. Asahi Kasei Homes is a member of this initiative, and it has announced specific targets and is working to achieve them.</p> <p>➤ RE100 </p>
<p>Keidanren Biodiversity Declaration Initiative</p>	<p>The Keidanren Biodiversity Declaration Initiative is a support effort by the Japan Business Federation (Keidanren) to promote autonomous, active efforts by companies to partake in biodiversity preservation activities, with the aim of achieving harmony between the environment and the economy. Asahi Kasei supports this initiative and has announced specific efforts and policies:</p> <p>➤ Keidanren Biodiversity Declaration Initiative </p>
 <p>Pinfa (Phosphorus, Inorganic & Nitrogen Flame Retardants Association)</p>	<p>Through Asahi Kasei Europe, its European headquarters, Asahi Kasei has become the first Japanese resin manufacturer to join Pinfa (Phosphorus, Inorganic & Nitrogen Flame Retardants Association), an organization dedicated to improving the safety and lowering the environmental impact of both non-halogenated flame retardants and plastic products that use non-halogenated flame retardants.</p> <p>➤ Pinfa </p>
 <p>Clean Fuel Ammonia Association</p>	<p>Ammonia shows promise as an energy carrier for hydrogen. This association aims to establish a value chain from supply to utilization of CO₂-free ammonia through technology development/evaluation, economic evaluation, policy recommendations, international collaboration, and other efforts.</p> <p>➤ Clean Fuel Ammonia Association </p>

 <p>JAPAN HYDROGEN ASSOCIATION Japan Hydrogen Association</p>	<p>The Japan Hydrogen Association advances global collaboration in the hydrogen field as well as the creation of hydrogen supply chains.</p> <p>As a chemical manufacturer that utilizes hydrogen, Asahi Kasei will take an active role in offering proposals in the Association's working group activities with regard to issues that should be addressed to generate and expand demand for hydrogen.</p> <p>➤ Japan Hydrogen Association </p>
 <p>GX League GX League</p>	<p>The GX League is an initiative led by the Ministry of Economy, Trade and Industry (METI) involving efforts to transform the overall economic system through measures such as decarbonization and carbon neutrality. Asahi Kasei is a supporter of the GX League.</p> <p>➤ GX League </p>
 <p>30by30 Alliance</p>	<p>Asahi Kasei and Asahi Kasei Homes are participating in the 30by30 Alliance for Biodiversity, a program established by the Ministry of the Environment to conserve natural environments, with the goal of conserving biodiversity in 30% of Japan's land and sea areas by 2030.</p> <p>➤ 30by30 Alliance </p>

Membership in organizations (main organizations)

Name of organization	Asahi Kasei's role
Japan Business Federation (Keidanren)	Vice Chair Chair of Committee on Environment and Safety, Chair of Committee on Social Security
Japan Chemical Industry Association (JCIA)	Director

Sustainability Management



Relationships with Stakeholders

The Asahi Kasei Group's business operations depend on relationships of trust with our stakeholders. We believe that corporate value is raised by understanding the requirements and meeting the expectations of various stakeholders such as customers, shareholders and investors, business partners, local communities, the general public, and employees.

We provide many opportunities for communication to enable our business operations to be improved through dialog with stakeholders.

Communication with stakeholders

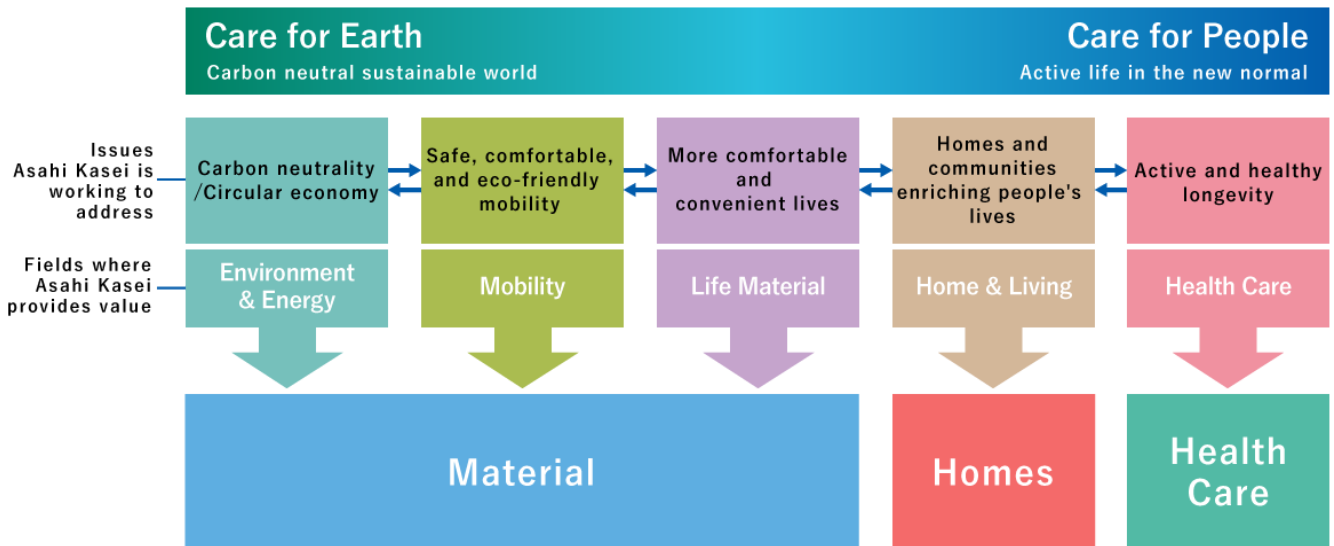
Main stakeholders	Basic premises	Main opportunities for communication
Customers	We believe that it is by maintaining customer satisfaction and providing reliable and enjoyable products and services that we contribute to society.	<ul style="list-style-type: none"> • Face-to-face discussion by marketing and sales personnel • Taking inquiries via telephone, website, etc.
Shareholders and investors	We strive to disclose information in a timely and fair manner to enable our domestic and international investors to gain an accurate understanding of the Asahi Kasei Group.	<ul style="list-style-type: none"> • Briefings and meetings with securities analysts and institutional investors • Seminars for individual investors • Website disclosure of information • Taking inquiries via telephone, website, etc. • Shareholders meeting
Suppliers	A relationship of mutual trust with our suppliers is fostered through fair and principled purchasing practices based on regulatory compliance and respect for the environment and human rights.	<ul style="list-style-type: none"> • Safety discussion forums • CSR surveys • Whistleblower System (compliance hotline)

Main stakeholders	Basic premises	Main opportunities for communication
Local communities and the general public	We work to honor and respect the local culture of each community where our operations are based, and to maintain effective dialog and communication with community members.	<ul style="list-style-type: none"> • Periodic community dialog meetings • Community outreach initiatives
Employees	The Asahi Kasei Group considers fulfilling and satisfying working conditions and workplace culture, in which employees feel motivated to achieve and take pride in their career, to be a key to business performance.	<ul style="list-style-type: none"> • Training and interviews • Discussion and interaction with management • Internal magazine and intranet • Whistleblower System (compliance hotline)

Contribution through Business Activities

In fiscal 2022, the Asahi Kasei Group launched its three-year Medium-term Management Plan centered on sustainability focused on the theme "Be a Trailblazer." In order to contribute to building a sustainable society, Asahi Kasei will continue contributing to the solutions of diverse social issues through our business activities.

In our medium-term management initiative, we continue to expressed the stance of the Asahi Kasei Group, which will continue contributing to sustainable development for people and the Earth going forward, in the phrase "Care for People, Care for Earth." With this as a perspective on the provision of value that is shared throughout our business activities, we will create new value that leads to a sustainable future in diverse locations and fields.



Areas of Contribution and Business Examples

* Under development

Fields for provision of value		Care for People	Care for Earth
Material	Environment & Energy		<p>Clean energy</p> <ul style="list-style-type: none"> • Battery separators <ul style="list-style-type: none"> ➢ Hipore™ □ ➢ Celgard™ □ ➢ Daramic™ □ ➢ Alkaline water electrolysis system (green hydrogen)* □ • Solar cell parts <ul style="list-style-type: none"> ➢ Lightweight resins □ <p>Conservation of energy and improvement of the environment</p> <ul style="list-style-type: none"> ➢ CO₂ sensors □ ➢ Water filtration modules □ ➢ Ion-exchange membranes □ <p>Contribution to low-carbon society</p> <ul style="list-style-type: none"> • Next-generation CO₂ chemistry* • New CO₂ separation and recovery system*
	Mobility	<p>Safety and reliability</p> <ul style="list-style-type: none"> ➢ Airbag material □ ➢ Alcohol sensor □ • Contactless pulse sensing* <p>Comfortable space</p> <ul style="list-style-type: none"> ➢ Lamous™ artificial suede □ • Low VOC material ➢ Air conditioning CO₂ sensors □ 	<p>Fuel efficiency</p> <ul style="list-style-type: none"> ➢ S-SBR for tires □ • Weight-saving materials ➢ Daramic™ lead-acid battery separator □ <p>EV/HEV</p> <ul style="list-style-type: none"> • Lithium-ion battery (LIB) separators <ul style="list-style-type: none"> ➢ Hipore™ □ ➢ Celgard™ □ • LIB-related materials <ul style="list-style-type: none"> ➢ Lightweight resins □

Fields for provision of value		Care for People	Care for Earth
	Life Material	<p>Comfort and convenience</p> <ul style="list-style-type: none"> > Disposable diaper material □ • 5G-related (glass fabric, etc.) > Regenerated cellulose fiber □ <p>Health</p> <ul style="list-style-type: none"> • Pharmaceutical and food additives > UVC LEDs for disinfection □ 	<p>Food loss reduction and low environmental impact</p> <ul style="list-style-type: none"> • Saran Wrap™ • Ziploc™ > Water-washable printing plates □
Homes	Home & Living	<p>Safety and reliability/Comfort and health</p> <ul style="list-style-type: none"> • Hebel Haus™ unit homes • Hebel Maison™ apartment buildings • High-quality pre-owned Hebel Haus™ homes 	<p>Contribution to the environment</p> <ul style="list-style-type: none"> • Net zero energy houses/solar power generation systems, etc. • High-performance insulation

Fields for provision of value		Care for People	Care for Earth
Health Care	Health Care	<p>Acute conditions (critical care and circulatory)</p> <ul style="list-style-type: none"> ➤ Reomodulin™ anticoagulant □ ➤ Thermogard System™ □ ➤ Therapeutic apheresis □ ➤ LifeVest™ wearable defibrillator □ • Myocardial infarction and cerebral infarction* <p>Chronic conditions (orthopedics and dialysis)</p> <ul style="list-style-type: none"> ➤ Teribone™ osteoporosis therapy □ ➤ Reclast™ osteoporosis therapy □ ➤ Kevzara™ rheumatoid arthritis therapy □ ➤ Dialysis products □ • Autoimmune disease, pain relief* ➤ Honeken™ – Bone Checkup Project □ <p>Provision of safe biopharmaceuticals</p> <ul style="list-style-type: none"> ➤ Planova™ virus removal filters □ ➤ Bioprocess equipment □ 	

Asahi Kasei Group's ESH & QA

ESH & QA

The Asahi Kasei Group's operations are expanding in the three sectors of Material, including chemicals and electronics businesses which handle chemical substances, Homes, including construction materials, and Health Care, including pharmaceuticals and medical devices. Along with the expansion of these three sectors, we have recharacterized the activities previously identified as Responsible Care* which are now referred to as ESH & QA (Environment, Health, Safety, and Quality Assurance). We remain committed to environmental protection, quality assurance, and occupational health and safety through risk management and responsible business activities to achieve comfortable workplaces in accordance with our Group Vision of providing new value to society by enabling "living in health and comfort" and "harmony with the natural environment" and Group Mission of contributing life and living for people around the world.

* Responsible Care, advocated by the Japan Chemical Industry Association, represents the commitment and initiative to secure and improve safety and environmental protection at every step of the product life cycle through the individual determination and responsibility of each firm producing and handling chemical products, together with measures to gain greater public trust through disclosure and communication.



Risk management and responsible business activities of the Asahi Kasei Group

Message from the Executive for ESH & QA

In May 2022 we celebrated the centennial of Asahi Kasei's founding. During the past hundred years we continued sustainable growth by successively cultivating new fields of business with every employee passionately taking challenges. We are now turning to new challenges for the next hundred years together with 45,000 colleagues around the world.

The corporate operating environment has changed dramatically with efforts for decarbonization and greater awareness of companies' place in society. Asahi Kasei's unchanging Group Mission is to contribute to life and living for people around the world. We aim to achieve a virtuous cycle of two mutually reinforcing aspects of sustainability by contributing to a sustainable society and achieving sustainable growth of corporate value. While advancing transformation regarding "GDP" (Green, Digital, People) we are rolling out various measures for environmental protection, quality assurance, and health and productivity management as we provide reliable solutions to customers.

Safe and stable operation is a prerequisite for the virtuous cycle of sustainability we seek, and essential for our existence as a going concern. As we have had serious accidents in recent years, we are working to avoid recurrence by strengthening preventative measures and curtailment measures, while fostering a culture of safety through our company-wide Life Saving Actions program. Regarding GHG, we are targeting a 30% reduction of our own emissions by 2030 from the fiscal 2013 level, and aiming for the goal of net-zero by 2050. Furthermore, we continue to advance the development of products that contribute to reduced emissions throughout society. We believe such measures will enable us to provide high corporate value to our various stakeholders.



Masatsugu Kawase
Executive Officer for ESH &
QA
Asahi Kasei Corp.

Policy

ESH & QA at the Asahi Kasei Group is guided by the following policy.

Asahi Kasei Group ESH & QA Policy

We give the utmost consideration to environmental protection, quality assurance, operational safety, workplace safety and hygiene, and health maintenance, throughout the product life cycle from R&D to disposal, as preeminent management tasks in all operations.

- We give full consideration to the global environment and make efforts to reduce the environmental burden of all operations.
- We continuously provide safe products and services with the quality that gives customers a sense of security and satisfaction.
- We strive for stable and safe operation while preventing workplace accidents and securing the safety of personnel and members of the community.
- We strive for a comfortable workplace environment, and support the maintenance and promotion of employee health.

In addition to maintaining legal compliance, we set self-imposed targets for continuous improvement, while performing proactive information disclosure and communication to gain public understanding and trust.

Revised on April 1, 2022

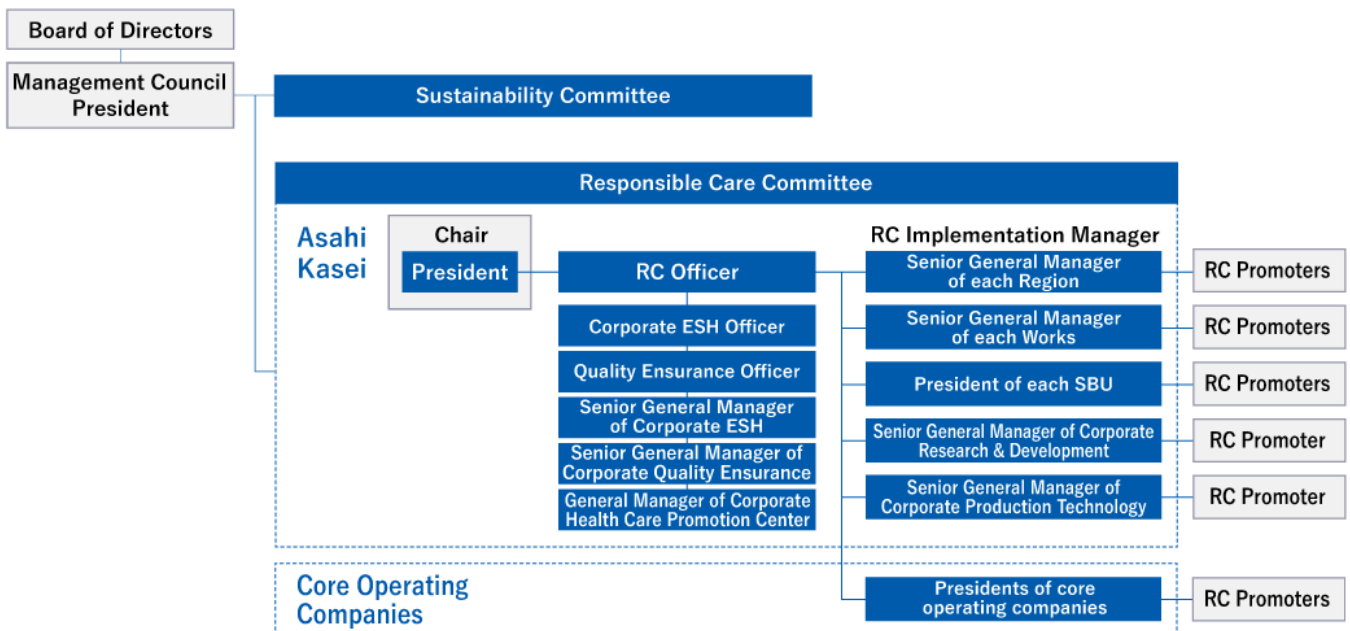
Management framework

The management system of Asahi Kasei Group ESH & QA is maintained in accordance with our Group ESH & QA Management Guidelines and other internal standards. The ESH & QA Committee has been established under the direct control of the President to deliberate concerning plans and their results. This committee also cooperates with the Sustainability Committee, which promotes sustainability across the Group. In addition, the ESH & QA Promotion Council sub-committee gathers regularly, and ESH & QA initiatives are continuously improved with the repetition of Plan-Do-Check-Act (PDCA) cycles at the Regions and Works*, business units, and Group-wide.

Concerning ESH & QA management systems, we have obtained ISO 14001 environmental management system certification for environmental protection and an Occupational Health & Safety Management System (OHSMS) has been adopted for workplace safety, hygiene, and health. Regarding Quality Assurance, under the supervision of Corporate Quality Assurance, each Strategic Business Unit and Core Operating Company establishes a management system such as ISO 9001, working daily to reinforce quality assurance, to ensure the provision of safe and reliable products and services to customers and society. Regarding health and productivity management, our Health & Productivity Management Committee meets twice per year in principle, to formulate basic policy regarding health & productivity management, set targets, and evaluate results.

* A site or group of sites consisting of several plants and facilities is called a Region or Works. The Senior General Manager of each Region or Works is responsible for the unified implementation of ESH & QA in the respective Region or Works.

ESH & QA Committee Management Organization



ESH & QA Committee/ESH & QA Promotion Council

ESH & QA Committee	Chair	Asahi Kasei President
	Committee members	Asahi Kasei Executive Officer for ESH & QA, Asahi Kasei Corporate ESH Officer, Asahi Kasei Corporate Quality Assurance Officer, Asahi Kasei ESH & QA Implementation Manager, Asahi Kasei Senior General Manager of Corporate ESH, Asahi Kasei Senior General Manager of Corporate Quality Assurance, General Manager of Corporate Health Care Promotion Center, Core Operating Company ESH & QA Implementation Managers
	Observers	Asahi Kasei Audit & Supervisory Board Members, persons designated by the Committee Chair
	Secretariat	Corporate ESH, Corporate Quality Assurance
	Frequency of meetings	Once per year
ESH & QA Promotion Council	Chair	Asahi Kasei Executive Officer for ESH & QA
	Committee members	Asahi Kasei Corporate ESH Officer, Asahi Kasei Corporate Quality Assurance Officer, Asahi Kasei Senior General Manager of Corporate ESH, Asahi Kasei Senior General Manager of Corporate Quality Assurance, General Manager of Corporate Health Care Promotion Center, Asahi Kasei ESH & QA Promoters, Core Operating Company ESH & QA Promoters
	Secretariat	Corporate ESH, Corporate Quality Assurance
	Frequency of Meetings	4 times per year

➤ Organizations implementing ESH and QA

Targets and results

➤ FY2021 ESH Objectives and Attainment

ESH & QA education and training

In order to ensure the advancement of ESH & QA activities, the Asahi Kasei Group conducts practical ESH & QA education and training concerning basic knowledge of and theories about ESH & QA. The training program applies to all key personnel who implement ESH & QA, including production managers and EHS managers, as well as candidates for those positions, group leaders of research departments, and EHS personnel.

Each fiscal year, we hold 4-day training courses especially for newly appointed staff covering general ESH activities, employee health, operational safety, environmental protection, and workplace safety & hygiene. In fiscal 2021, the course was offered both as a self-study course and a one-day web lecture, with a total of 125 personnel taking the course. In addition, with the goal of improving the Group's ESH & QA level, a training course for assistant chiefs that was formally initiated in fiscal 2012 continues to be held and improved while incorporating feedback. In fiscal 2021, the course was offered both as a self-study course and a half-day web lecture, with a total of 221 personnel taking the course.

Regarding QA training, we have held the Quality Assurance Forum since fiscal 2017 as training for core personnel involved in QA. Over a six-month period, selected younger and mid-level employees across the Group attend lectures by outside experts (mainly university professors at the forefront of the Japanese Society for Quality Control) and join in group discussions. In fiscal 2021, 55 employees took part. Regarding chemical substances control and product safety, various training programs are held throughout the Group each year. In fiscal 2021, nine different curriculums were implemented. Especially with respect to Japan's Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc., Industrial Safety and Health Act, and Poisonous and Deleterious Substances Control Act, basic training is continually held several times each year, with some 800 employees participating in fiscal 2021. We will continue to promote education and training to meet various needs both inside and outside the company.

ESH & QA Conference

The Asahi Kasei Group has held annual RC Conferences, at Asahi Kasei Corp., Core Operating Companies, and each Region. The conferences were held to share information and revitalize RC activities by reporting on their status, holding presentations on activities, listening to lectures by experts invited from outside the company, and presenting Safety Awards. The fiscal 2021 Asahi Kasei RC Conference was held in December in hybrid format with 2,300 participants. Starting from fiscal 2022, it will be held as an ESH & QA Conference with a framework of more clear responsibility for revitalizing ESH & QA activities and sharing information.



Asahi Kasei President Hideki Kobori gives the opening remarks at the 2021 RC Conference



Special lecture by Professor Mori

Organizations implementing ESH and QA

[Japan]

Prefecture	Location	Business category	Company	Plant, laboratory, or department	Main products/business line		
Gunma	Ota	Chemicals	Asahi Kasei Pax Corp.	Gunma Plant	Molded plastic containers		
Ibaraki	Kasama	Chemicals	Asahi Kasei Metals Ltd.	Tomobe Plant	Aluminum paste		
			Asahi SKB Co., Ltd.	-	Explosive devices		
	Sakai	Construction Materials	Asahi Kasei Construction Materials Corp.	Sakai Plant	Autoclaved aerated concrete panels		
			Sakai Kako Co., Ltd.	Neoma Foam Plant	Phenolic foam insulation panels		
			Construction Materials R&D Dept.	Improvement of construction and insulation materials and development of new products			
Tochigi	Mibu	Chemicals	Asahi Kasei Color Tech Co., Ltd.	Mibu Plant	Plastic coloring & compounding		
Saitama	Kamisato	Chemicals	Asahi Kasei Techno Plus Co., Ltd.	Saitama Plant	Molded plastic products		
	Ageo	Chemicals	Asahi Kasei Pax Corp.	Ageo Plant	Film lamination		
	Kawagoe	Health Care	Med-Tech Inc.	-	Manufacture and sale of medical devices		
Yamanashi	Fujiyoshida	Fibers	Fuji Seisen Co., Ltd.	-	Dyeing and finishing of yarns and fabrics		
Chiba	Chiba	Chemicals	Asahi Kasei Corp.	Chiba Plant	Acrylic resin and polystyrene resin		
				Compound Prod. Control Dept.	Development of compound production technology, support for processing facilities		
				Xyron Dev. Dept., Leona Plastics Dev. Dept.	Applied research for performance plastics and plastic processing		
				Sodegaura Plant	R&D for plastic compounding technology		
				PS Japan Corp.	Chiba Plant	Product management and production technology development for polystyrene	
				Asahi Kasei Energy Service Corp.	-	Operation of power plant of Nakasode Clean Power Corp. and Shin Nakasode Power Corp.	
			Electronics	Asahi Kasei Corp.	Electronics & Functional Products Div.	R&D for plastic optical fiber	
				Asahi Kasei EMS Co., Ltd.	Chiba Plant	Plastic optical fiber	
			Others	Asahi Kasei Advance Corp.	Kashiwa PDC	Construction materials processing	
				Asahi Kasei Home Products Corp.	-	Development and sale of cling film and other household products	
Tokyo	Tokyo	Chemicals	Sun Delta Corp.	-	Sale of synthetic resin products		
		Electronics	Asahi Kasei Foundation Systems Co., Ltd.	-	Installation of piles		
		Construction Materials	Asahi Kasei Advance Corp.	-	Trading company handling fibers, resins, chemicals, construction materials, etc. of Asahi Kasei		
		Others	Asahi Kasei Create Co., Ltd.	-	Management and sales of real estate, insurance agency, subcontracted office work		
			Asahi Kasei Amidas Co., Ltd.	-	Personnel placement, agency and training; ISO consulting		
			Asahi Kasei Ability Corp.	-	Printing, bookbinding, and office work		
			Asahi Research Center Co., Ltd.	-	Information and analysis		
			Asahi Kasei Benefits Management Corp.	-	Company housing, recreational facilities		
		Kanagawa	Kawasaki	Chemicals	Asahi Kasei Corp.	Monomers Prod. Dept.	Methyl methacrylate, cyclohexyl methacrylate, acetonitrile
						ABS & SB Latex Prod. Dept.	Styrene-butadiene latex
Synthetic Rubber Prod. Dept.	Synthetic rubber, elastomer, utilities (electricity, steam, water)						
Acrylic Plastics Prod. Dept.	Acrylic resin						
Ion Exchange Membranes Prod. Dept.	Ion-exchange membranes						
R&D units	Creation of new high performance materials, R&D for performance products and systems, applied research for plastics and plastic processing						
R&D Dept.	Polystyrene R&D						
R&D	Asahi Kasei Corp.		Sustainable Polymers Lab.	Development of performance polymer, resin processing technology, application development			
Others	Asahi Kasei Engineering Corp.		-	Design, installation, development, inspection, and maintenance of facilities, development of information systems			
Kawasaki	Others		Asahi Kasei Engineering Corp.	-	Plant, equipment, process engineering, and related work/development		
Atsugi	R&D	Asahi Kasei Corp.	Informatics Initiative	Business support by informatics, promotion of digital transformation			
Shizuoka	Fuji	Chemicals	Asahi Kasei Corp.	Microza Plant	Filtration membranes and modules		
				Fuji Power Supply Dept.	Utilities (electricity, steam, water)		
		Homes	Asahi Kasei Homes Corp.	Housing Tech. R&D Labs.	R&D to actualize and advance the Long Life Home		
		Health Care	Asahi Kasei Pharma Corp.	Fuji Pharmaceuticals Plant	Pharmaceutical intermediates		
				Asahi Kasei Medical Co., Ltd.	Bioprocess Div./Product Dev. Dept.	Development of filters and adsorbents for separation and purification in manufacture of biopharmaceuticals	
		Electronics	Asahi Kasei Corp.	Photoproducts Plant	Liquid photosensitive resin, photosensitive printing plates		
				Electronics Materials Plant	Photosensitive polyimide production and development		
				Fuji 2nd Plant	Photosensitive dry film, fuel cell materials		
				WGF Project	Optical materials and components		
				R&D Planning and Business Dev.	Development of products in the Material sector		
	UVC Project			Development of UVC LEDs			
	Corporate Production Tech.			Design, installation, development, inspection, and maintenance of facilities, development of information systems			
	R&D units	Development of products in the Material sector					
	Asahi Epoxy Co., Ltd.	Fuji Plant	Epoxy curing agent				
	Asahi Kasei Microdevices Corp.	R&D Ctr.	R&D for compound semiconductors				
			Fab 3	Wafers of Hall elements and infrared sensors			
	Others	Asahi Kasei Engineering Corp.	-	Design, installation, and development of facilities, development of information systems			
-			Insurance agency				
-			Training, consulting, personnel placement				
-			Delivery of mail, guidance for obtaining qualifications and training				
-			Management of benefits				
R&D	Asahi Kasei Corp.	Analysis & Simulation Ctr.	Analysis and computer simulation				
		Energy Solutions Ctr.	Medium to long term R&D, advancement of synergy and creation of new business				
		Healthcare R&D Ctr.	Health Care sector R&D (diagnostic reagents, regenerative medicine, etc.)				
		Advanced Materials Research Lab.	R&D for technologies and products related to Performance Materials				
		-					
Ohito	Health Care	Asahi Kasei Pharma Corp.	Ohito Pharmaceuticals Plant	Pharmaceutical intermediates			
			Ohito Diagnostics Plant	Diagnostic enzymes, diagnostic reagent kits			
			Pharmaceuticals Research Ctr.	New pharmaceuticals R&D			
			-				
Others	Asahi Kasei Benefits Management Corp.	-	Management of benefits				
		Toyo Kensa Center Co., Ltd.	Measurement, evaluation, analysis, clinical testing				
		Asahi Kasei Create Co., Ltd.	Insurance agency				
Aichi	Miyoshi	Health Care	Asahi Kasei Pharma Corp.	Nagoya Pharmaceuticals Plant	Pharmaceuticals		
Gifu	Hozumi	Construction Materials	Asahi Kasei Construction Materials Corp.	Hozumi Plant	Autoclaved aerated concrete panels		
			Hozumi Kako Co., Ltd.	-	Construction materials processing		
Fukui	Echizen	Fibers	Kyokujitsu Textile Mills Co., Ltd.	-	Woven fabrics		
	Fukui	Others	Asahi Kasei Advance Corp.	-	Trading company handling fibers, resins, chemicals, construction materials, etc. of Asahi Kasei		
			Asahi Kasei Advance Fukui Corp.	-	Processing of industrial materials and nonwovens		
	Awara	Others	Asahi Kasei Advance Corp.	Kanazu Logistics Center	Storage of fiber products		

Shiga	Moriyama	Chemicals	Asahi Kasei Corp.	Moriyama Power Supply Dept.	Utilities (electricity, steam, water)			
				Hipore Plant	Microporous membrane			
				Hipore R&D Dept.	Development of electronic and energy-related materials			
		Asahi-Schwebel Co., Ltd.	Moriyama Plant	Glass fabric				
		Fibers	Asahi Kasei Corp.	Spunbond Plant	Spunbond			
			Roica Plant	Elastic polyurethane filament				
	Electronics	Asahi Kasei Microdevices Corp.	Electronics Materials Plant Prod.Dept	Apparel and industrial functional textiles R&D				
	Others	Asahi Kasei Amidas Co., Ltd.	Moriyama Office	Photosensitive polyimide				
		Asahi Kasei Engineering Corp.	-	Contract work				
	Takashima	Chemicals	Asahi Kasei Corp.	Aibano Branch	Design, installation, and development of facilities, development of information systems			
Higashiomi	Homes	Asahi Kasei Jyuko Co., Ltd.	Shiga Plant	Metal cladding				
Mie	Suzuka	Chemicals	Asahi Kasei Corp.	Suzuka Plant	Steel frames, roofing, insulation, opening panels			
			Suzuka Sun Business Co., Ltd.	-	Cling film, plastic foam and film			
			Sundic Inc.	Mie Plant	Plastic processing			
Wakayama	Gobo	Chemicals	Asahi Kasei Corp.	Wakayama Plant	Polystyrene sheet			
Osaka	Osaka	Chemicals	Asahi Kasei Finechem Co., Ltd.	Osaka Plant	Acrylic latex			
				-	Specialty chemicals			
		Others	Asahi Kasei Advance Corp.	-	Trading company handling fibers, resins, chemicals, construction materials, etc. of Asahi Kasei			
Hyogo	Ono	Chemicals	Asahi Kasei Pax Corp.	Ono Plant	Molded plastic containers			
Okayama	Mizushima	Chemicals	Asahi Kasei Corp.	Monomers Prod. Dept. 1	Cyclohexanol, cyclohexane, cyclohexene, pyrolysis gasoline			
				Monomers Prod. Dept. 2	Acrylonitrile, methacrylonitrile, acetonitrile, styrene, polycarbonatediol			
				Polymers Prod. Dept. 2	High density polyethylene, low density polyethylene, polyacetal			
				Polyolefins Development Dept.	R&D on polyolefins			
				Tenac Dev. Dept.	R&D on polyacetal			
				Power Supply Dept.	Utilities (electricity, steam, water)			
				PS Japan Corp.	Mizushima Plant	Polystyrene		
				R&D	Asahi Kasei Corp.	Chemistry & Chemical Process Lab.	Research on chemical processes and functional products	
		Others	Asahi Kasei Engineering Corp.	-	Design, installation, development, inspection, and maintenance of facilities, development of information systems			
			Asahi Kasei AS Tech Co., Ltd.	-	Processing of polyethylene pipe			
Yamaguchi	Iwakuni	Construction Materials	Asahi Kasei Construction Materials Corp.	Iwakuni Plant	Autoclaved aerated concrete panels			
			Iwakuni Sun Products Co., Ltd.	-	Construction materials processing			
Fukuoka	Chikushino	Chemicals	Asahi Kasei Corp.	Chikushino Plant	Metal cladding			
Oita	Oita	Chemicals	Asahi Kasei Corp.	Oita Plant	Defense explosives			
			Japan Elastomer Co., Ltd.	Oita Plant	Synthetic rubber, elastomer			
		Health Care	Asahi Kasei Medical MT Corp.	Sepacell Plant	Leukocyte reduction filters			
				Planova Oita Plant	Virus removal filters			
				Dialysis Products Plant	Artificial kidneys and other medical devices			
		Therapeutic Apheresis Plant	Therapeutic apheresis devices					
Kumamoto	Yatsushiro	Others	Asahi Kasei Advance Corp.	Yatsushiro Chemical Center	Storage of caustic soda			
Miyazaki	Nobeoka/ Hyuga	Chemicals	Asahi Kasei Corp.	Core Chemical Prod. Dept.	Manufacture of nitric acid, caustic soda, chlorine, hydrochloric acid, etc.			
				Saran™ Materials Prod. Dept.	Manufacture of vinylidene chloride resin and latex			
				Electrolysis System Manufacturing Dept.	Development and manufacture of electrolyzers for chlor-alkali, manufacture of polymers for ion-exchange membranes			
				Ceolus Plant	Microcrystalline cellulose			
				Leona Plastics & Materials Plant	AH salt, adipic acid, hexamethylenediamine, polyamide 66			
				Fastening Prod. Planning & Tech. Dept.	Resin anchors			
				Hyuga Chemicals Plant	Coating materials			
				Hipore Hyuga Plant	Microporous membrane			
				Nobeoka Power Supply Dept.	Utilities (electricity, steam, water)			
				-	Receiving and storage of fuel and feedstocks			
				-	Polyamide 66 compounding			
				-	Resin anchors, detonator housings/leads			
				-	Electricity and steam			
				-	Operation and facilities management of hydropower plants			
				-	Specialty chemicals			
				-	Pharmaceutical intermediates			
				-	Industrial explosives			
				-	Detonators			
				Health Care	Asahi Kasei Medical Co., Ltd.	Medical Tech. and Materials Lab.	R&D for medical materials	
					Asahi Kasei Medical MT Corp.	Okatomi Plant	Artificial kidneys and other medical devices	
						Planova Plant	Virus removal filters	
				Fibers	Asahi Kasei Corp.	Leona Filament Plant	Nylon 66 filament	
						Bemberg Plant	Cuprammonium rayon, nonwoven cellulose filament	
						Nonwovens Plant	Artificial suede, melt-blown and spunlace nonwovens	
						R&D Lab. for Fibers & Textiles Tech.	R&D for new fibers	
						-	Cellulosic filament, synthetic nonwovens	
						-	Nylon 66 filament	
				-	Processing of nylon 66 filament			
				-	Processing of nonwoven cellulosic filament			
				Electronics	Asahi Kasei Microdevices Corp.	Fab 1	Magnetic sensors	
						Fab 2	LSIs	
						Asahi Kasei Electronics Co., Ltd	Nobeoka Manufacturing	Magnetic sensors
						Asahi Kasei Microsystems Co., Ltd	Nobeoka Manufacturing	LSIs
						Asahi Kasei Technosystem Co., Ltd.	Nobeoka Plant	Plant diagnostic and environmental surveillance devices
						Asahi Kasei EMS Co., Ltd.	Nobeoka Plant	Pellicles
		Others	Asahi Kasei Office One Co., Ltd.	-	Utilization of Asahi Kasei Group assets, subcontracting			
				-	Insurance agency, cellular phone sales, bowling alley			
				-	Design, installation, development, inspection, and maintenance of facilities, development of information systems			
				-	Measurement, evaluation, analysis			
				-	Company housing, recreational facilities			
				-	Printing, bookbinding, and office work			
				-	IT-related business			
				-	Cable TV			
				-	Sale of pharmaceuticals (reagents)			
				-	R&D for fibers & textiles			
R&D	Asahi Kasei Corp.	South Kyushu Office	Sale of pharmaceuticals (reagents)					
		Fibers & Textiles Tech. Ctr.	R&D for fibers & textiles					
Miyazaki	Others	Asahi Kasei Advance Corp.	Miyazaki Chemical Center	Repackaging sodium hypochlorite and PAC				

Note: This table lists plants, laboratories, and subsidiaries. Although ESH & QA activities are implemented in sales offices and other offices not performing production activities, these are not listed here.

Others covers services, engineering, and other business categories.

[Overseas]

Regions	Countries/Cities	Business category	Company	Main products/business line
Americas	USA	-	Asahi Kasei America, Inc.	Business support services
		-	Asahi-Kasei Holdings US, Inc.	Holding company of ZOLL Medical Corporation
		Chemicals	Asahi Kasei Plastics North America, Inc.	Coloring and compounding of performance resin
			Asahi Kasei Plastics America, Inc.	Compounded performance resin operations
			Asahi Kasei Asaclean Americas Inc.	Sale of purging compound
	Electronics	Crystak IS, Inc.	Development of aluminum nitride substrates and UVC LEDs	
	Homes	AKM Semi Conductor, Inc.	Sale of LSIs	
	Health Care	Asahi Kasei Homes North America, Inc.	Holding company of housing business	
	Mexico	Chemicals	Asahi Kasei Bioprocess America, Inc.	Bioprocess equipment and systems
			Asahi Kasei Plastics Mexico S.A. de C.V.	Sale of performance plastic compounds
Asia /Oceania	Korea	Chemicals	Tongshuh Petrochemical Corp., Ltd.	Acrylonitrile, sodium cyanide, acrylamide, EDTA
			Asahi Kasei Chemicals Korea Co., Ltd.	Sale of adipic acid
		Electronics	Asahi Kasei E-materials Korea Inc.	Lithium-ion battery separator
	Taiwan	Fibers	Asahi Kasei Microdevices Korea Corp.	Electronic devices marketing and technical support
			Formosa Asahi Spandex Co., Ltd.	Spandex
		Electronics	Asahi Kasei Wah Lee Hi-Tech Corp.	Photosensitive dry film
			Asahi-Schwebel (Taiwan) Co., Ltd.	Glass fabric
	Hangzhou	Chemicals	Asahi Kasei Microdevices Taiwan Corporation	Electronic devices marketing support
			Asahi Kasei EMD Taiwan Corp.	Sale of electronic materials
		Health Care	Asahi Kasei Microza (Hangzhou) Co., Ltd.	Industrial filtration membranes and systems
	Guangzhou	Fibers	Hangzhou Asahikasei Spandex Co., Ltd.	Spandex
			Hangzhou Asahikasei Textiles Co., Ltd.	Warp-knit spandex textiles
		Health Care	Asahi Kasei Medical (Hangzhou) Co., Ltd.	Hemodialyzers, sale of medical devices
	Shanghai	Chemicals	Asahi Kasei Plastics (Guangzhou) Co., Ltd.	Sale of performance resin
			-	Asahi Kasei (China) Co., Ltd.
		Fibers	Asahikasei Plastics (Shanghai) Co., Ltd.	Sale of performance resin
			Asahi Kasei Performance Chemicals Corp.	HDI-based polyisocyanate, polycarbonatediol
		Electronics	Asahi Kasei Advance (Shanghai) Co., Ltd.	Processing and sale of fibers and textiles
			Asahi Kasei Microdevices (Shanghai) Co., Ltd.	Electronic devices marketing and technical support
	Health Care	Asahi Kasei Bioprocess China (Shanghai)	Promotion of Planova and other bioprocess products	
Changshu	Chemicals	Asahi Kasei Electronics Materials (Changshu) Co., Ltd.	Photosensitive dry film	
		Asahi Kasei Plastics (Changshu) Co., Ltd.	Processing and sale of synthetic resin	
Suzhou	Chemicals	Asahikasei (Suzhou) Plastics Compound Co., Ltd.	Coloring, compounding, and sale of performance resin	
		Asahi Kasei Electronics Materials (Suzhou) Co., Ltd.	Photosensitive dry film	
Zhangjiagang	Chemicals	Asahi Kasei POM (Zhangjiagang) Co., Ltd.	Polyacetal	
		Asahi Kasei Transfusion Technology Co., Ltd.	Medical devices	
Beijing	Health Care	Asahi Kasei Pharma (Beijing) Co., Ltd.	Regulatory affairs and business support in China	
		Asahi Kasei Plastics (Hong Kong) Co., Ltd.	Sale of performance resin	
Hong Kong	Fibers	Asahi Kasei Fibers (H.K.) Ltd.	Promotion and marketing of fibers and textiles	
		Asahi Kasei Plastics Vietnam Co., Ltd.	Analysis and development of performance plastic parts using CAE technology	
Vietnam	Fibers	Asahi Kasei Advance Vietnam Co., Ltd.	Fiber products	
		Asahikasei Jyuko Vietnam Corp.	Steel-frame members	
	Homes	PTT Asahi Chemical Co. Ltd.	Acrylonitrile, methyl methacrylate, etc.	
Thailand	Chemicals	Asahi Kasei Plastics (Thailand) Co., Ltd.	Coloring and compounding of performance resin	
		Asahi Kasei Spunbond (Thailand) Co., Ltd.	Spunbond nonwovens	
	Fibers	Asahi Kasei Advance Thailand Co., Ltd.	Processed yarn	
Thai Asahi Kasei Spandex Co., Ltd.		Spandex		
Singapore	Chemicals	Asahi Kasei Synthetic Rubber Singapore Pte. Ltd.	Synthetic rubber	
		Asahi Kasei Plastics Singapore Pte. Ltd.	Performance resin	
		Polyxylenol Singapore Pte. Ltd.	PPE powder	
India	-	Asahi Kasei India Pvt. Ltd.	Business support services	
Australia	Homes	Asahi Kasei Homes Australia Pty.	Holding company of McDonald Jones Homes Group	
Europe	Sweden	Electronics	Senseair AB	Provision of sensing solutions, development, manufacture, and sale of gas sensor modules
			-	Asahi Kasei Europe GmbH
	Germany	Fibers	Asahi Kasei Spandex Europe GmbH	Spandex
			Asahi Kasei Microdevices Europe GmbH	Electronic devices marketing and technical support
			Asahi Kasei Medical Europe GmbH	Sale of medical devices, medical systems
	Health Care	Asahi Kasei Bioprocess Deutschland	Technical and sales support of bioprocess equipment	
		Asahi Photoproducts (Europe) SA/NV	Sale of photopolymer, printing-plate making systems	
	Belgium	Health Care	Asahi Kasei Bioprocess Europe SA/NV	Sale of virus removal filters
	Italy	Fibers	Asahi Kasei Fibers Italia S.r.l.	Sale of cupro cellulosic fiber and nonwovens
	United Kingdom	Electronics	Asahi Photoproducts (UK) Ltd.	Sale of photopolymer, printing-plate making systems

FY2021 ESH Objectives and Attainment

★★★Complete ★★Satisfactory ★Unsatisfactory

General

FY2021 ESH Objectives	FY2021 Results	Attainment	FY2022 ESH Objectives
Develop human resources specializing in ESH	<ul style="list-style-type: none"> Considered ways to strengthen ESH staff at the head office Started hiring and training future ESH personnel 	★★	Develop and retain human resources specializing in ESH
Cultivate values of safety	<ul style="list-style-type: none"> Maintained activities to foster rule compliance and safety culture in each organization Continued program of safety activities shared across the Asahi Kasei Group (Life Saving Actions) 	★★	Implement Company-wide Life Saving Actions (LSA) program Related training, LSA program for construction, review of the impacts of these actions
Further concentrate on ESH education	<ul style="list-style-type: none"> Moved various training programs online Continued e-learning for fundamental safe working procedures in office areas Continued ESH training in China 	★★	Further concentrate on training for ESH staff
Support in improving each site (especially domestic independent factories and foreign factories)	<ul style="list-style-type: none"> Fully transferred ESH management for local subsidiaries in China to local employees Continued one-to-one auditing interviews 	★★	Horizontal deployment of safety-related activities in frontline locations Consideration and implementation of effective auditing methods

Environment Conservation

FY2021 ESH Objectives	FY2021 Results	Attainment	FY2022 ESH Objectives
Maintain zero environmental accidents and serious environmental incidents Zero environment incidents (air, water quality, etc.)	No environmental contamination accidents or serious incidents occurred. Incidents involving water/air quality or similar: 1 incident Freon leaks: 13 incidents	★★	Maintain zero environmental accidents and serious environmental incidents Zero environment incidents (air, water quality, etc.)
Reduce industrial waste: <ul style="list-style-type: none"> Final disposal rate: 0.3% or less Final disposal rate (except for the construction materials business): 0.1% or less Waste plastics consigned to landfill (by FY2021): zero 	Goal reached with final disposal rate of 0.09% Goal reached with final disposal rate (except for the construction materials business) of 0.02% or less Goal unmet with 0.5 tons of waste plastics consigned to landfill	★★	Limit generation of industrial waste and promote recycling <ul style="list-style-type: none"> Identify the current situation regarding waste plastic generation and disposal and promote thermal reduction Waste plastics consigned to landfill: zero
Promote preservation of biodiversity <ul style="list-style-type: none"> Expand the "Town Woods" program to all offices (by FY2021) Earn total "Town Woods" points (MMP) of 2600 MMP 	<ul style="list-style-type: none"> Implemented the "Town Woods" program at all 41 domestic sites Earned total "Town Woods" points (MMP) of 3747 MMP 	★★★	Promote preservation of biodiversity <ul style="list-style-type: none"> Promote initiatives in line with the next-term National Biodiversity Strategy of Japan

Global Environmental Countermeasures

FY2021 ESH Objectives	FY2021 Results	Attainment	FY2022 ESH Objectives
Improve GHG emissions intensity (emissions relative to net sales) by 35% by 2030 as compared to 2013	FY2021 results: reduced GHG emissions intensity by 39%	★★★	<ul style="list-style-type: none"> Improve the accuracy of our calculations through third-party verification Construct new systems and promote monitoring through visualization and use of data Improve the accuracy of our calculations, including with regard to boundaries
Improve the five-year annual average specific energy consumption rate by 1% or more	2021 results (average improvement rate of the past 5 years): 4.4% improvement	★★★	<ul style="list-style-type: none"> Creation and followup of regular reporting under a new system Respond to revisions to the Act on the Rational Use of Energy¹ and the Act on Promotion of Global Warming Countermeasures²

¹ A law concerning the rationalization of energy use, etc.

² A law concerning the promotion of global warming countermeasures, etc.

Operational Safety

FY2021 ESH Objectives	FY2021 Results	Attainment	FY2022 ESH Objectives
Maintain a record of zero serious industrial incidents	1 serious industrial incident occurred.	★	Maintain a record of zero serious industrial incidents
Maintain a record of zero industrial incidents	No industrial incidents occurred.	★	Maintain a record of zero industrial incidents
Industrial incident intensity of 0.5 or less (average)	Industrial incident intensity: 1.11	★	Industrial incident intensity of 0.5 or less (average)

Workplace Safety and Hygiene

FY2021 ESH Objectives	FY2021 Results	Attainment	FY2022 ESH Objectives
No serious workplace injuries*	2 serious workplace injuries occurred.	★	Zero deaths/lasting injuries
The numerical targets are as follows, assuming zero serious occupational accidents			The numerical targets for lost time injuries other than the above are as follows
Domestic employees: Achieve rate of lost-worktime injuries of 0.1 or less	Domestic employees: <ul style="list-style-type: none"> The rate of lost-worktime injuries was 0.38 	★	Domestic employees: Achieve rate of lost-worktime injuries of 0.1 or less
Achieve severity rate of lost-worktime injuries of 0.005 or less	<ul style="list-style-type: none"> The severity rate of lost-worktime injuries was 0.133 	★	Achieve severity rate of lost-worktime injuries of 0.005 or less
Overseas employees: Achieve severity rate of lost-worktime injuries of 1.0 or less	Overseas employees: <ul style="list-style-type: none"> The rate of lost-worktime injuries was 1.86 	★	Overseas employees: Achieve severity rate of lost-worktime injuries of 0.9 or less

* Accidental deaths and injuries resulting in permanent damage

Environment

The Asahi Kasei Group will contribute to the achievement of a carbon neutral and sustainable world by reducing the environmental impact of our business activities and improving the environment around the world through our businesses.



> Environmental Management

We have established a group-wide management system in recognition of environmental initiatives as important management tasks.



> Climate Change

We implement measures that deal with climate change by reducing greenhouse gas emissions and developing innovative technologies.



> Pollution and Natural Resources

We strive to use natural resources and energy efficiently throughout the entire life cycle of our products, as well as achieve resource circulation in society.



> Water Resource Preservation

We strive to enhance water use efficiency in our business activities while contributing to the conservation of water resources worldwide.



> Biodiversity

We work towards the sustainable use of biological resources in our business activities while taking biodiversity into account.



> Environmental Contribution Products

We define products that help improve the environment throughout their entire life cycle as environmental contribution products, and we are making efforts in this area.

Environmental Management

Policy

As expressed in [our Group Vision](#) that includes "harmony with the natural environment," the Asahi Kasei Group places high priority on environmental initiatives. The Group Policy regarding global environmental measures is shown below.

The Asahi Kasei Group's Global Environmental Policy

1. Building a low-carbon society

- (1) Taking into account Japan's Plan for Global Warming Countermeasures and Nippon Keidanren's "Proposal on Japan's long-term growth strategy under the Paris Agreement," the Asahi Kasei Group aims for greenhouse gas emissions related to its business activities to meet reduction targets by 2030.
- (2) The Asahi Kasei Group will promote energy conservation across the full range of our business activities with the aim of preventing global warming and conserving limited resources.
- (3) The Asahi Kasei Group will develop a plan to reduce CO₂ (Scope 3) emissions from its supply chain.
- (4) The Asahi Kasei Group will help create a low-carbon society incorporating our proprietary technologies, contributing to the reduction of global greenhouse gas emissions by providing products, technologies, and services to the global market.

2. Preserving water resources

The Asahi Kasei Group will contribute to preserving global water resources through our water purification membrane module business, water recycling service business, and the sale of water quality monitoring equipment and wastewater treatment products. It will measure the quantity of its water intake while striving to maintain and improve the efficiency of its water usage.

3. Recycling

The Asahi Kasei Group will promote the reduction of environmental impacts and the efficient utilization of resources and energy throughout the entire life cycle in its business activities in order to contribute to a circular economy. Specifically, it will promote the 3Rs of reduction, reuse, and recycling, and increase the usage of resources and energy with lower environmental impacts as well as renewable resources and energy.

4. Achieving harmony with nature

The Asahi Kasei Group will give due consideration to the conservation of natural capital and biodiversity, and promote the reduction of environmental impacts of its business activities. We will also monitor and carefully manage our use of land and biological resources.

5. Improve the level of management at our overseas plants

The Asahi Kasei Group will create monitoring items that enable environmental management practices equivalent to those at its plants in Japan.

6. Collaboration with our supply chain partners

The Asahi Kasei Group will proactively collaborate with members of its supply chain to undertake the abovementioned activities.

Management framework

The Group's global environmental countermeasures are part of our activities for ESH & QA, and we have established a management system based on ISO 14001 requirements.

Please see below for our ESH & QA promotion framework.

➤ Asahi Kasei Group's ESH & QA

Targets and results

Based on the Asahi Kasei Group's Global Environmental Policy, we promote activities with the following indicators and targets. Regarding climate change measures, we have set greenhouse gas reduction targets to be met by fiscal 2030.

Quantitative indicators and targets of global environmental measures

1. Low-carbon society

GHG emissions

By 2050, carbon neutral

By 2030, emissions reduction of 30% or more (from fiscal 2013)

Clean power generation

Maintain use of biomass fuel at 60% or more by energy content in mixed combustion at the biomass power plant in Nobeoka.

2. Energy management target

Management target

Improve unit energy consumption by an annual average of at least 1% over a 5-year period.

3. Water resource preservation activity target

Our target is shown in the response to question W8.1a of the CDP Water Security Questionnaire 2022 posted on the Water Resource Preservation page.

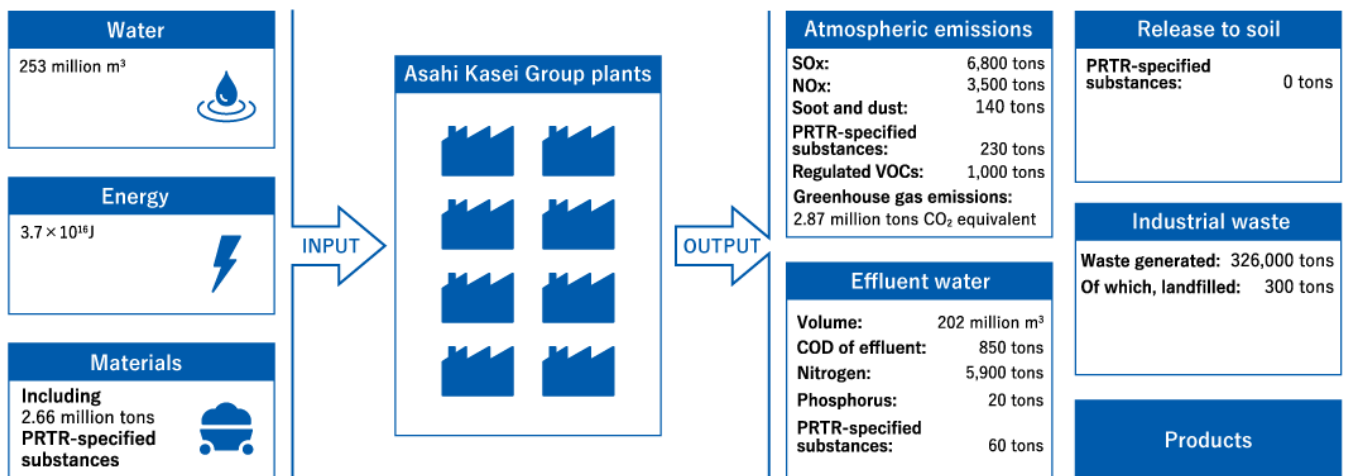
➤ [Click here to read our response concerning CDP Water Security 2022](#) 📄 (207.8KB)

Details of activities and achievements for fiscal 2021 are posted here.

➤ [FY2021 ESH & QA Program Targets and Attainments](#)

Environmental impacts

The diagram below describes the environmental impacts of business activities at Asahi Kasei Group plants.



Asahi Kasei Group (domestic) Main Environmental Impacts (FY2021)

Notes:

- Energy consumption does not include externally sold energy, but includes hydroelectric power generation (based on the Energy Saving Act conversion) Energy consumption including overseas consumption is 5.2 x 10¹⁶ J.

* Figures with have received independent assurance by KPMG AZSA Sustainability Co., Ltd. (March 2023 updated)

Violations of Environmental Laws and Regulations, Fines, etc.

There were no violations or fines related to environmental laws and regulations in fiscal 2021.

Climate Change

Responding to Climate Change

Disclosure based on TCFD Recommendations

➤ [Click here to read our response concerning CDP Climate Change 2022](#) 📄 (345.1KB)

Asahi Kasei Group's Carbon Neutrality Policy

In accordance with its Group Mission, the Asahi Kasei Group is committed to contributing to life and living for people around the world. The Asahi Kasei Group has long been aware that climate change is a global issue that will have a significant impact on both the natural environment and society, and we see it as our mission to use the scientific expertise we have cultivated since our founding to deal with this issue leveraging our combined strength.

In May 2021, the Asahi Kasei Group adopted a policy for carbon neutrality.

Greenhouse gas (GHG) emission targets for the Asahi Kasei Group

2050 : Carbon neutral

2030 : Emissions reduction of 30% or more (from fiscal 2013)*

* Scope 1 (direct GHG emissions) and

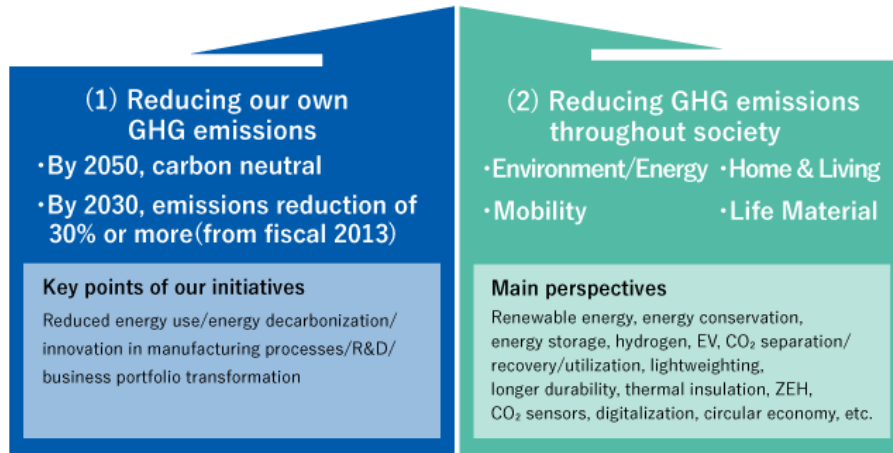
Scope 2 (indirect emissions use of electricity, heat, and steam supplied by other companies), absolute quantity

Initiative Policy

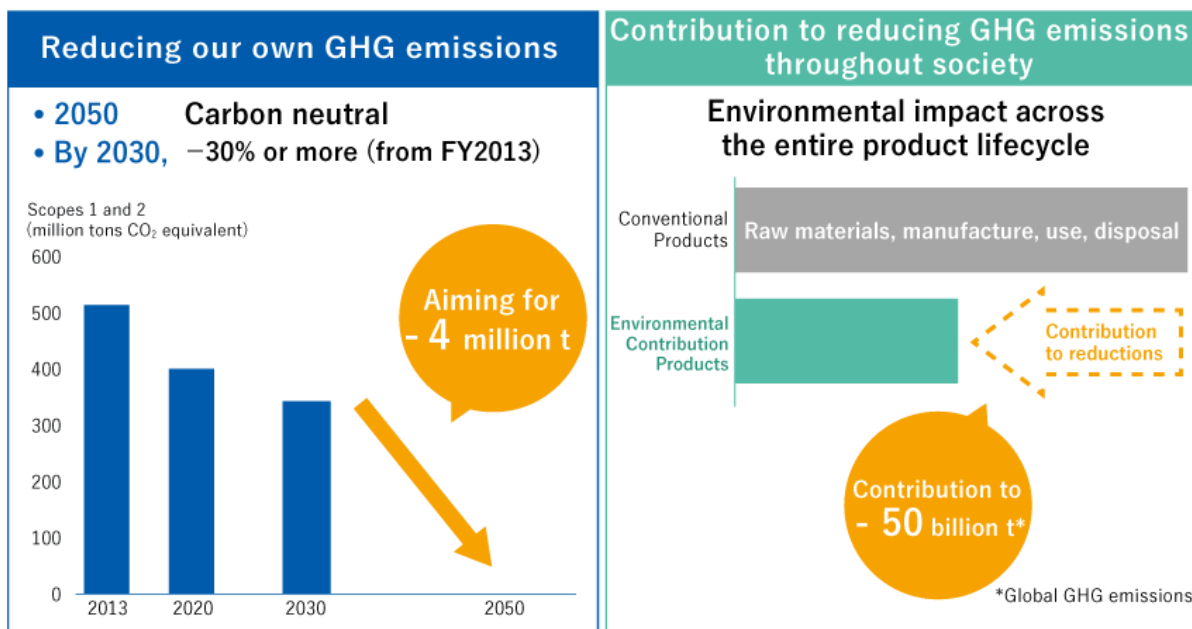
In addition to reducing GHG emissions from our own business activities, we believe that it is also important to help to reduce GHG emissions in society through our diverse array of technologies and businesses to deal with climate change. In April 2021, we launched a Green Solution Project reporting directly to the President, and we are working to create new businesses for a carbon neutral society.

Regarding "Care for Earth," we are committed to addressing climate change issues group-wide, both in terms of (1) reducing the amount of GHGs emitted by our own business activities and (2) helping to reduce GHGs throughout society through our businesses and technologies.

Contributing to a carbon neutral and sustainable society



Key Points of Effort for Carbon Neutrality



Two Initiatives for GHG Reduction

- The Asahi Kasei Group's ESH & QA and Health Management Policy
- The Asahi Kasei Group's Global Environmental Policy

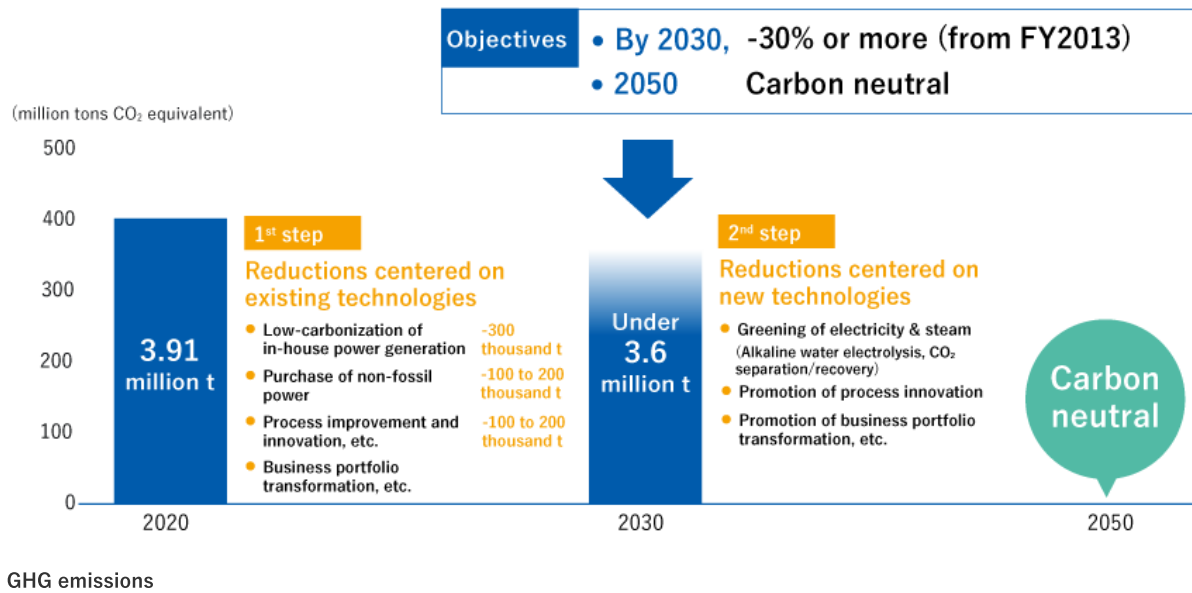
Reducing GHG Emissions

Concrete GHG reduction measures and their projected impacts

We are targeting a reduction in GHG emissions by at least 30% by 2030 as compared to fiscal 2013, with a goal of becoming carbon neutral by 2050. Measures will be advanced as described below.

In the first stage, by 2030 we aim to reduce our GHG emissions by approximately 300 thousand tons by adopting low-carbon methods for in-house power generation, by 100 to 200 thousand tons through the purchase of non-fossil fuel power, and by 100 to 200 thousand tons by curtailing emissions from our manufacturing processes. We will also promote GHG emissions reductions through transformation of our business portfolio, etc.

In the second stage through 2050, we will work toward greening both electricity and steam and the introduction of innovative processes through practical application of technologies developed by Asahi Kasei, such as alkaline water electrolysis and CO₂ separation and recovery. In addition, we will promote further transformation of our business portfolio, etc., and move forward with reductions toward attainment of our objectives.

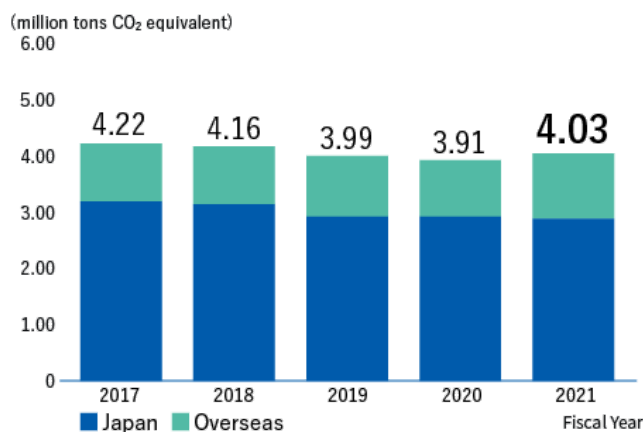


Scope 1 and 2 GHG emissions

All production sites of Asahi Kasei Corp. and its consolidated subsidiaries under management control are subject to calculation of Scope 1 and Scope 2 GHG emissions of the Asahi Kasei Group, and GHG emissions from generation of electricity and steam sold outside the Asahi Kasei Group are included.

In fiscal 2021, our Scope 1 GHG emissions were 3.10 million tons of CO₂-eq[✓], and Scope 2 GHG emissions were 0.94 million tons of CO₂-eq[✓], bringing the total of Scope 1 and 2 to 4.03 million tons of CO₂-eq[✓]. This is a reduction in GHG emissions of approximately 21% compared to the 5.11 million tons of CO₂-eq released in the baseline year of 2013.

* Figures with [✓] have received independent assurance by KPMG AZSA Sustainability Co., Ltd. (March 2023 updated)

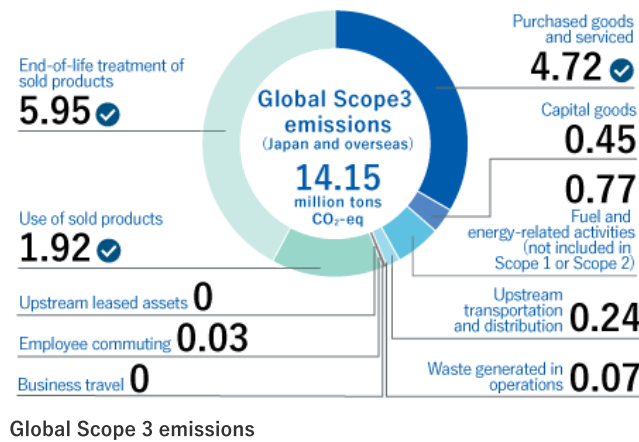


GHG emissions*

* 74.6% coverage (Our company sales included in GHG emissions / Consolidated sales of our group × 100)

- Global greenhouse gas emissions by segment (ESG Data)
- Overseas greenhouse gas emissions by fiscal year (ESG Data)

Global Scope 3 emissions*



* Figures with ✓ have received independent assurance by KPMG AZSA Sustainability Co., Ltd. (March 2023 updated)

* Scope 3 emissions: Greenhouse gases emitted indirectly by a company throughout its supply chain. The methods for calculating Scope 3 emissions from Category 1, 5, 11 and 12 are described in Environmental data.

➤ Scope 3 emissions by fiscal year (ESG Data)

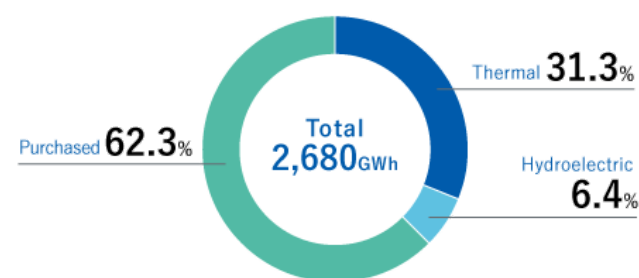
Efforts to Reduce CO₂ Emissions

Renewable energy

The Asahi Kasei Group has 9 hydroelectric power generation plants in the Nobeoka Region, which provided approximately 6% of the total electricity we used both in Japan and overseas in fiscal 2020. Generation of the equivalent amount of power at thermoelectric plants would result in approximately 70 thousand tons* of CO₂ emissions annually.

We also have a biomass power generation facility.

* Using Japan's Ministry of Economy, Trade and Industry and Ministry of the Environment, Order No. 3 of 433g CO₂/kWh.



Electricity sources, FY2021* (global)

Using Renewable Electricity in the Homes Business

As part of its efforts to address climate change, Asahi Kasei Homes joined the RE100 Initiative in 2019, aiming to achieve sustainable urban living with both decarbonization and resilience.

Asahi Kasei Homes has a target of procuring 100% of the electricity consumed for its business activities from renewable energy sources, and is on track to achieve this in 2025, significantly sooner than the initial outlook of 2038.

➤ Asahi Kasei Homes Sustainability

Domestic energy saving in logistics

The Asahi Kasei Group promotes environmentally friendly railway shipment.

Product shipments for our operations in Japan amounted to some 1.1 billion ton-kilometers in fiscal 2021—an 5% decrease from fiscal 2020—generating approximately 85 thousand tons of CO₂ emissions—a 4% decrease. In cooperation with the transport firms contracted for shipment, a wide range of measures are employed to reduce energy consumption and alleviate the environmental effects of physical distribution.

We have received Eco-Rail Mark certification in recognition of our preferential shipment of products by rail, an ecological mode of transport which results in lower CO₂ emissions for a given weight and distance than many other means of transportation.



The Eco-Rail Mark

- ▶ CO₂ emissions from product shipment (ESG Data)




Domestic promotion of low emission vehicles

The Asahi Kasei Group is phasing in low-pollution vehicles for use in marketing and within plant grounds. In fiscal 2021, some 95% of company-owned vehicles were low-pollution vehicles.

- ▶ Low-pollution vehicles (ESG Data)

Asahi Kasei green bond

Please see here for more details.

- ▶ Asahi Kasei green bond  (218.0KB)
- ▶ Annual Reporting (fiscal 2020)  (96.1KB)
- ▶ Annual Reporting (fiscal 2021)  (24.0KB)

Climate Change

Responding to Climate Change

Disclosure based on TCFD Recommendations

Climate Change Initiatives (Disclosure based on TCFD^{※1} Recommendations)

Carbon dioxide emissions have increased significantly since the industrial revolution, and in particular during the 20th century with its major population growth. The global scientific consensus is that carbon dioxide accumulation is causing climate change, and the IPCC's Sixth Assessment Report and other publications have clarified the gravity of this situation. Climate change is progressing slowly but steadily, and we recognize that worldwide cooperation and the implementation of specific measures to address it are urgent issues.

In the century since our founding, we have developed our business in response to the needs of society. Now that climate change measures have become a social necessity, we are committed to Care for Earth as part of our management strategy to contribute to the global environment. As the impact of climate change on business is of great concern to investors and other related parties, companies need to be clear about its potential impact and maintain an ongoing dialogue with them. Based on TCFD recommendations, we have examined the changes potentially arising as a result of climate change and their impact on our business from a variety of perspectives. While climate change presents risks for Asahi Kasei, it also offers us opportunities, and we are currently advancing a Medium-term Management Plan (MTP) formulated with these in mind.

Using our diverse technologies and businesses, we will contribute to a sustainable society while proactively developing measures for climate change mitigation and adaptation as growth opportunities.

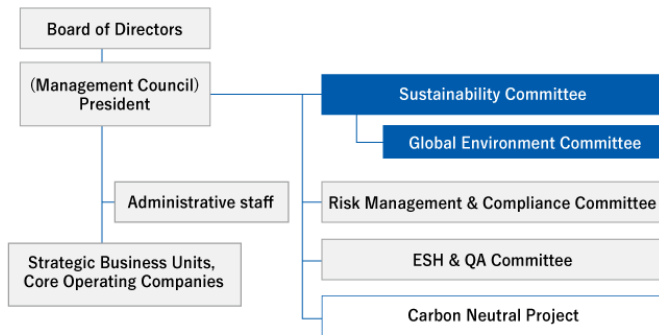
※1 TCFD: Task Force on Climate-related Financial Disclosures, established and announced by the Financial Stability Board (FSB) in 2017.

Governance

Measures to tackle climate change are an important management issue and we consider it one of the central themes of our management strategy. Our climate change policy and high priority concerns are deliberated on and determined by the Board of Directors, while specific matters relating to these areas are deliberated on and determined by the Management Council, our decision-making body for business execution. Specific operations of these bodies are listed below.

- Setting targets for greenhouse gas (GHG) emissions reduction and confirming progress toward them
- Deliberating, determining, and following up on the progress of our MTP, which takes climate change into account
- Determining investment plans that take GHG emissions into account, etc.

In order to promote these Board of Directors and Management Council decisions at a business level, we have a Sustainability Committee chaired by the President, where members of executive management share and discuss issues concerning sustainability, including climate change. Results of Sustainability Committee meetings are reported to the Board of Directors, which discusses topics including appropriate company-wide initiatives. In fiscal 2022, Asahi Kasei assigned an Executive Officer for achieving our GHG reduction targets, and established a Carbon Neutrality Project to formulate a specific roadmap.



Sustainability Committee

- Sharing, discussion, and alignment of all aspects of ESG, including climate change
- Chair: Asahi Kasei President
Committee members: Executive Officer for Technology Functions, Executive Officer for Business Management Functions, Executive Officers for the 3 business sectors

Global Environment Committee

- Sharing, discussion, and alignment of all aspects of the E (Environment) of ESG
- Chair: Executive Officer for Technology Functions (Environment & Safety)
Committee members: Presidents of SBUs, Senior General Manager of the Production Center, Senior General Manager of Corporate Production Technology, Senior General Manager of Corporate Research and Development, and others

Carbon Neutrality Project

- Sharing, discussion, and developing plans for a specific roadmap and initiatives aimed at achieving our 2030 GHG reduction targets and 2050 carbon neutrality goal
- Project oversight: Executive Officer for Carbon Neutrality, dedicated Project General Manager

Strategy

Underlying assumptions

While a variety of scenarios can be envisaged, depending on the progress of measures to counter global warming, we have analyzed the following two representative scenarios.

- A scenario in which measures to counter global warming make insufficient progress and temperatures rise by 4° C compared with pre-industrial levels (IPCC SSP3-7.0^{※2})
 - We consider extreme weather events and changes to society and ecosystems as the baseline physical risk scenario
- A scenario in which CO₂ emissions are strictly controlled in order to limit the temperature increase to 1.5° C (WEO: Net Zero Emissions by 2050 Scenario [NZE]^{※3})
 - We consider strengthening of regulations and significant transformation of society and markets as the baseline transition risk scenario

With reference to each of these scenarios, we explored impacts on our current business toward 2050, as well as new opportunities.

Note: These analyses are based on a variety of assumptions, and changes to these assumptions may result in actual risks and opportunities differing significantly.

- ※2 One of the scenarios in the sixth report of the Intergovernmental Panel on Climate Change (IPCC). “SSP” stands for “Shared Socioeconomic Pathway” and the SSP3-7.0 is a scenario in which regional rivalry results in climate policies not being adopted, and temperatures rise by up to 4° C in 2100.
- ※3 One of the scenarios listed in *World Energy Outlook (WEO) 2021* by the International Energy Agency (IEA). NZE is a scenario for achieving net-zero emissions worldwide in 2050 in order to limit the temperature rises to 1.5° C by 2100.

Risks

Based on these scenarios, we have considered the climate change risks to Asahi Kasei from various perspectives.

In a scenario in which global temperatures rise by 4° C, we primarily anticipate physical risks such as intense heat, heavy rain, and flooding. In particular, we perceive damage to production sites caused by the effects of increasingly severe storms and floods and the resultant cost of such damage to be a risk for our major sites in Japan and overseas.

In a scenario in which global temperatures rise by 1.5° C, we primarily anticipate risk in the form of a shift in demand toward materials conducive to decarbonization, alongside strengthening of regulations through carbon pricing and other policies aimed at decarbonization. We also anticipate risk in the form of changes in market structures brought about by an accelerating transition to a circular economy and the advent of innovative technologies aimed at decarbonization.

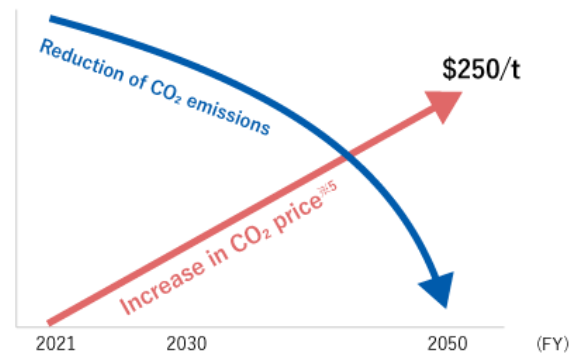
While the above risks vary in their intensity, we view all of them as having the potential to arise amid the climate change to come, and we will continue to pursue risk reduction initiatives.

Risks			
	Important Changes	Main Risks	Major Initiatives
+4° C scenario	Serious storm and flood damage	"Physical" production risks <ul style="list-style-type: none"> •Suspension of production due to plant damage •Disruption of raw material supply network due to suppliers suffering from disasters 	<ul style="list-style-type: none"> •Continuous revision of BCP and reinforcement of preemptive response (review inventory levels, consider switching to multiple suppliers/locations, etc.)
	Rise in temperature	"Human" production risks <ul style="list-style-type: none"> •Deterioration of working environment and productivity at construction sites 	<ul style="list-style-type: none"> •Promotion of industrialization and utilization of IT in housing construction •Promotion of heat stroke prevention measures at construction sites
+1.5° C scenario	Decarbonization	<ul style="list-style-type: none"> •Rise in cost due to stricter regulations (manufacturing and raw material costs) •Changes in materials needs (decarbonization requirements, necessary specifications) 	Promotion of action for carbon neutrality <ul style="list-style-type: none"> •Expansion in utilization of renewable energy, etc. •More efficient energy use; development and commercialization of industrial processes for decarbonization •Decarbonization of raw materials •Acceleration of product decarbonization by ascertaining carbon footprints^{※4}
	Changes in market structures	<ul style="list-style-type: none"> •Contraction of existing markets due to transition to a circular economy •Contraction of existing markets due to the advance of alternative technologies 	<ul style="list-style-type: none"> •Development of material and chemical recycling technologies, promotion of their practical application •Adoption of biomass feedstock •Review of management resource allocation

※4 A product's GHG emissions from material extraction to production

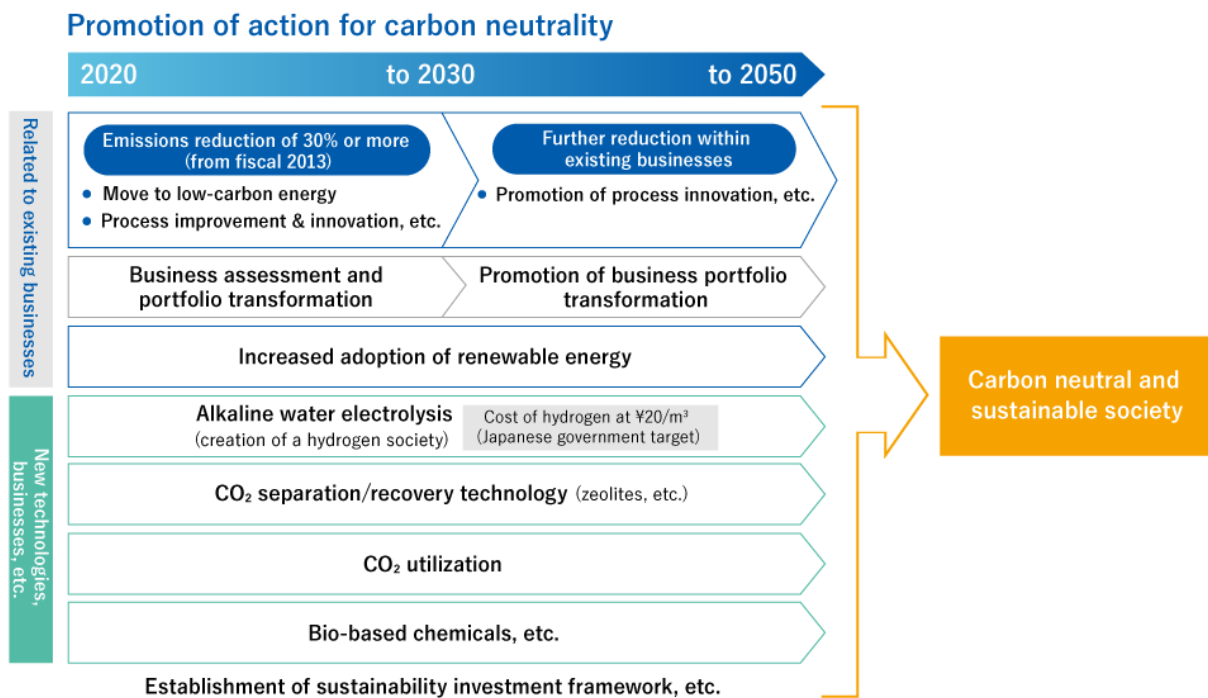
Reference: Estimated cost of CO₂ under the +1.5° C scenario

Asahi Kasei currently emits approximately 4 million tons of CO₂ equivalent annually (Scopes 1 and 2). Assuming a CO₂ price of ¥10,000 per ton, the annual cost would be ¥40 billion. As we are reducing our emissions toward the goal of carbon neutrality by 2050, this cost will decrease. Under a trial calculation of total costs up to 2050 based on the required carbon price^{※5} and our CO₂ emission reduction targets, our cumulative total cost would be approximately ¥530 billion (using a present value discount rate of 5%).



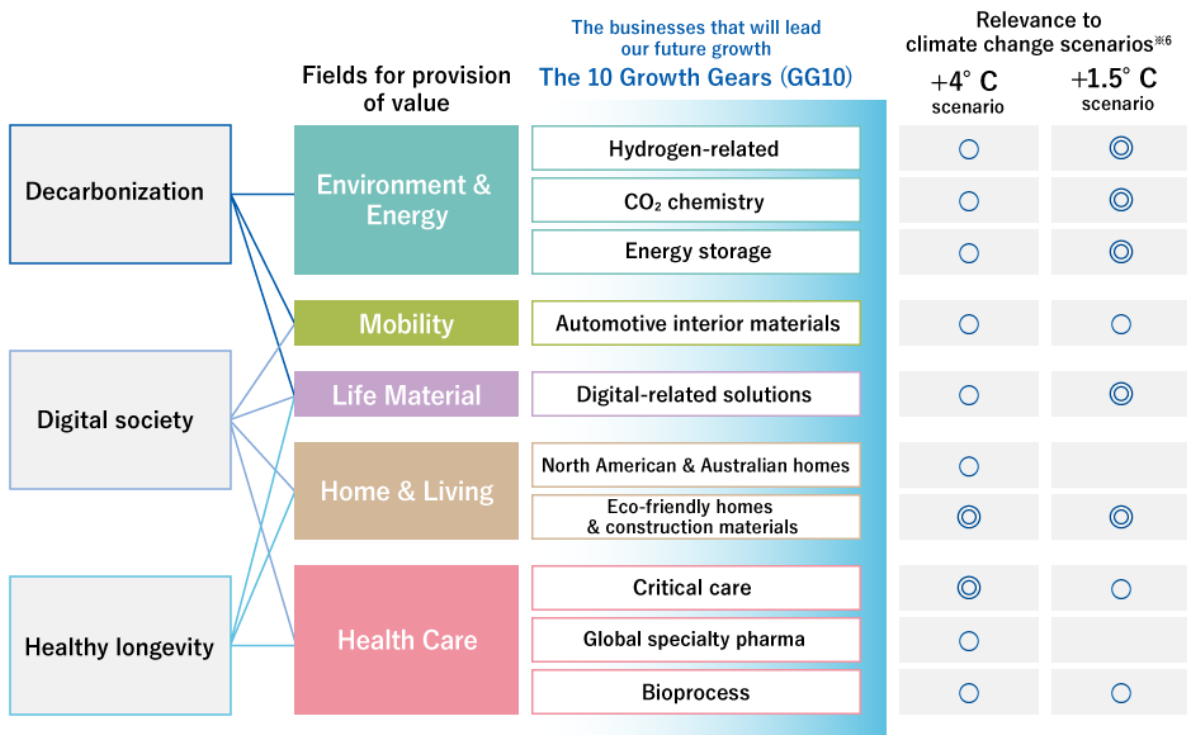
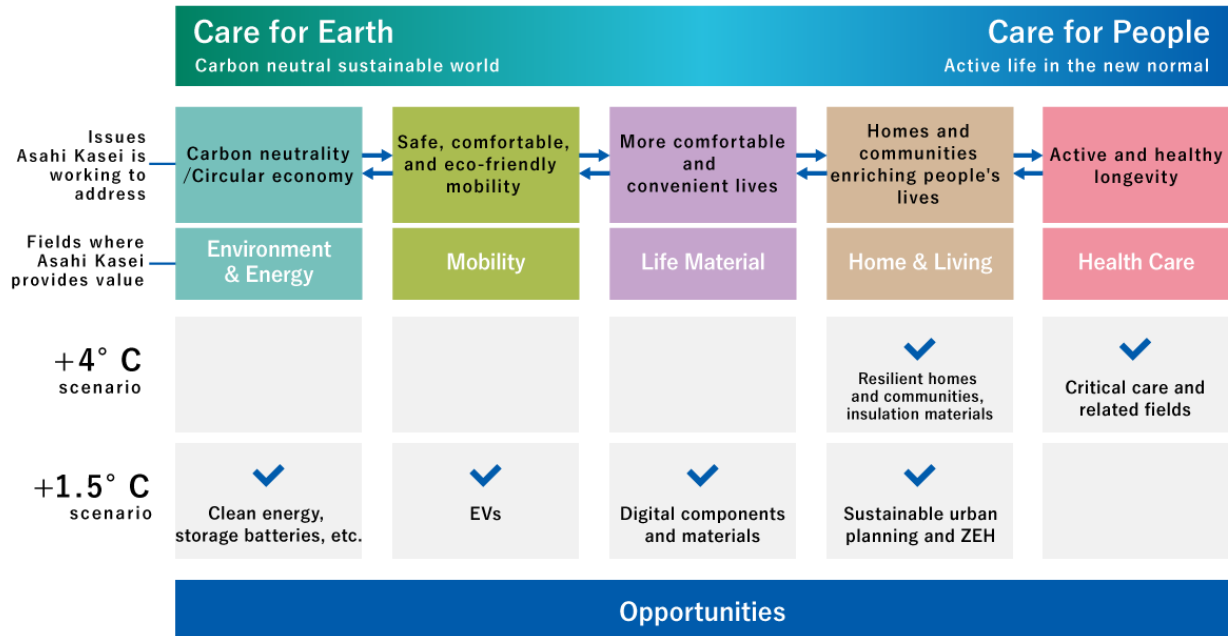
On the other hand, our net income (forecast at ¥164.5 billion in fiscal 2022) is raising our net assets (approximately ¥1.7 trillion as of March 31, 2022) year by year. While appropriately recognizing climate change risks, we are also pursuing business opportunities and evolving our business portfolio, and striving to expand net assets and enhance stakeholder returns through strategic investments in businesses that contribute to the environment.

※5 Carbon price under NZE in *WEO 2021* (\$/t-CO₂): \$130 in 2030, \$205 in 2040, \$250 in 2050



Opportunities

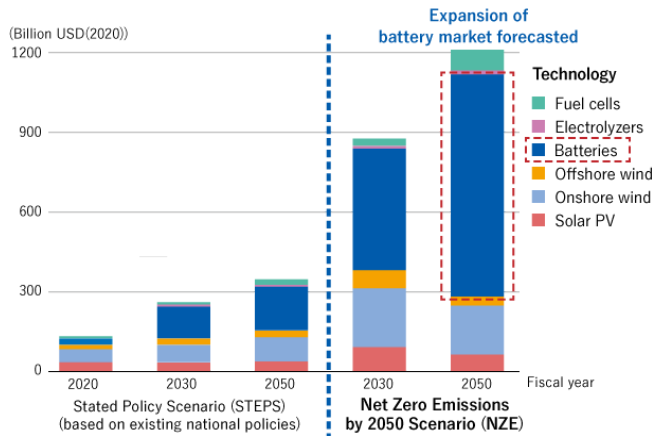
The "10 Growth Gears" (GG10), set out in our MTP as high-priority businesses for resource allocation to achieve growth, present business opportunities within climate change scenarios. We plan to invest approximately ¥600 billion in these businesses over a three-year period. We recognize that our business expansion and direction can provide business opportunities in the form of a variety of products and services for a changing climate.



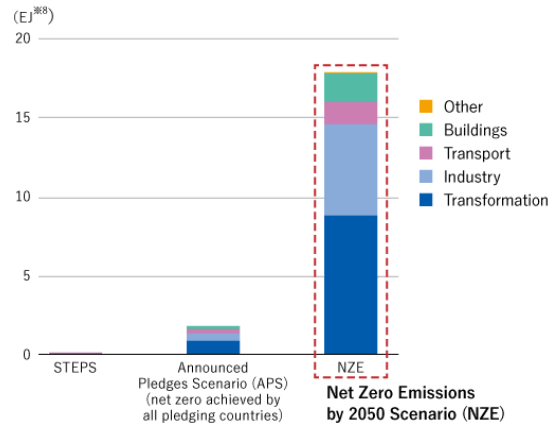
※6 Items judged highly relevant, including those directly addressed in the IPCC's Sixth Assessment Report and WEO 2021, indicated by double circle: ◎

Items not covered by the above but estimated to be broadly related indicated by single circle: ○

For example, to achieve carbon neutrality by 2050, it is expected that the battery market will expand significantly and that hydrogen demand will increase significantly. These two areas are among Asahi Kasei’s highest priority business fields.



Estimated market size for various clean energy technologies (2020–2050)^{※7}



Demand for hydrogen in each scenario (2030)^{※7}

※7 Graphs by Asahi Kasei based on the IEA’s *World Energy Outlook 2021*

※8 EJ stands for exajoule, one quintillion (10¹⁸) joules

Opportunities			
	Important changes	Main opportunities	Principal initiatives
+4° C scenario	Serious storm and flood damage	<ul style="list-style-type: none"> Increasing need for disaster-resilient housing 	Enhancing resilience of homes and communities, including Hebel Haus™ and Hebel Maison™
	Higher incidences of heat stroke and infectious diseases	<ul style="list-style-type: none"> Increased demand for existing medicines, new medicines, and the critical care business 	<ul style="list-style-type: none"> Provision of emergency medicines and medical equipment for infectious diseases and heat stroke Provision of consumables, equipment, and services for biopharmaceutical manufacturing processes

Opportunities			
	Important changes	Main opportunities	Principal initiatives
+1.5° C scenario	Decarbonization	<ul style="list-style-type: none"> • Promotion of the spread of Net Zero Energy Houses (ZEH^{※9} and ZEH-M^{※9}) through government policies • Increased demand for decarbonized products 	<ul style="list-style-type: none"> • Decarbonization of homes and communities through expansion of ZEH-compatible Hebel Haus and Hebel Maison • Promoting decarbonization and enhancing competitiveness by ascertaining the carbon footprint of products • Decarbonization of energy • Energy conservation and process innovation • Decarbonization of raw materials (use of biomaterials, etc.) • Development of chemicals using CO₂ as material
	Spread of electric vehicles (EVs)	Increase in EV-related demand (Battery components, materials for reducing vehicle weight)	<ul style="list-style-type: none"> • Development and provision of components and systems for next generation mobility • Strengthening of collaboration with automobile and battery manufacturers
	Advent of a hydrogen society	• Increased demand for water electrolysis that utilizes renewable energy	• Development and commercialization of green hydrogen production systems (alkaline water electrolysis)
	Transition to a circular economy	<ul style="list-style-type: none"> • Growing demand for components compatible with a circular economy • Development of circular economy infrastructure 	<ul style="list-style-type: none"> • Development of material recycling and chemical recycling technologies, promotion of their practical application • Use of biomass feedstock
	Expansion of the digital market	• Digital decarbonization solutions in society, life, and industry	• Promotion of business in electronic devices, such as current sensors and CO ₂ sensors, and semiconductor and substrate-related electronics materials

※9 ZEH (Net Zero Energy House) and ZEH-M (ZEH-Mansion): Houses and apartment buildings with a net energy consumption of zero or less as a result of advanced insulation and energy saving combined with power generation such as solar

In our MTP, we have positioned Environment & Energy, Mobility, Life Material, Home & Living, and Health Care as fields in which we will provide value. These fields were identified considering climate change and other megatrends, including reference to the latest IPCC and WEO reports, as fields in which we can provide value within climate change mitigation and adaptation.

Risk management

Asahi Kasei evaluates its GHG emissions performance once annually, including independent assurance. Performance figures, together with progress toward our targets, are shared with the Sustainability Committee and its subcommittee the Global Environment Committee, and future initiatives are discussed.

In addition, tracking of our GHG emissions reductions, consideration of our business strategy, reporting to the Board of Directors, and other tasks are also carried out as part of the formulation and annual reviews of our MTP. Related matters are also assessed on a quarterly and monthly basis.

Capital investment is considered and proposed as needed, with its profitability evaluated and implementation decided in light of our internal carbon pricing system.

Metrics and goals

Asahi Kasei considers the following metrics to be related to climate change risks and opportunities.

GHG emissions ^{※10}	Target: By 2030, reduction of 30% or more (compared to fiscal 2013) By 2050, achieve carbon neutrality
GHG emissions ^{※10} / operating income	(Fiscal 2021 result: 2,000 tons CO ₂ -eq/¥100 million) Interpreting this metric: a decrease indicates a lower carbon tax risk
ROIC	By around 2030, 10% or more Interpreting this metric: an increase indicates progress toward becoming a high-earnings enterprise capable of adapting to change
Operating income of the GG10	By around 2030, 70% or more of total operating income (fiscal 2021 results: 35%) Interpreting this metric: indicates expansion of related businesses able to contribute to tackling climate change

Others

Internal carbon pricing	¥10,000/ton of CO ₂ , utilized in our investment decision-making, awards program, etc.
Incorporation of climate change issues into remuneration of executives	Attainment of “promoting sustainability,” including climate change-related initiatives, reflected in performance-linked remuneration

※10 Includes Scope 1 GHG emissions directly linked to Asahi Kasei business activities (our own direct GHG emissions) and Scope 2 emissions (indirect emissions arising from use of electricity, heat, and steam supplied by other companies)

Overview of the Asahi Kasei Group response to climate change



Pollution and Natural Resources

Policy

Recycling is a major plank of the Asahi Kasei Group's Global Environmental Policy, and we work to efficiently utilize resources and energy and to reduce the environmental burden throughout the entire life cycle in our business activities. In order to contribute to a circular economy, we have worked to reduce industrial waste, reduce the burden of chemical substances, prevent air and water pollution, and use resources effectively.

We are also contributing to the creation of a circular economy to achieve a carbon neutral and sustainable world as part of our focus on Care for Earth, under our Medium-term Management Plan for fiscal 2022–2024 focused on the theme "Be a Trailblazer."

› Sustainability Vision - Asahi Kasei Group Vision > Sustainability with a View Toward 2050

Reducing industrial waste

The Asahi Kasei Group is working to reduce the amount of industrial waste for final disposal through the "3-Rs" of reduction, reuse, and recycling.

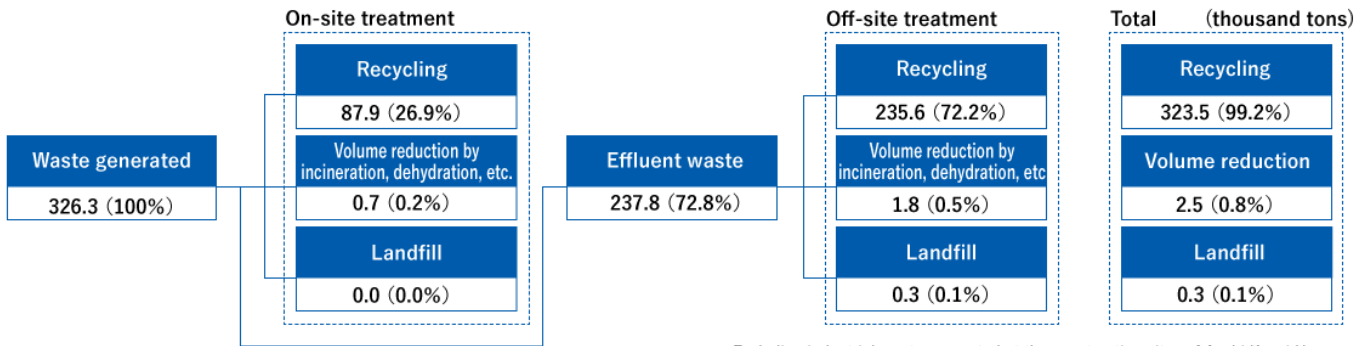
In fiscal 2021, 326.3 thousand tons of industrial waste was generated, of which 23.1 thousand tons was specially managed industrial waste.

We adopted targets of (1) an overall final disposal rate of 0.3% or less and (2) a final disposal rate for non-construction companies of 0.1% or less of the total amount of industrial waste generated. As a result, we achieved our overall fiscal 2021 targets, with a final disposal rate of 0.09% and a final disposal rate for non-construction companies of 0.02%. We will continue to promote the reduction of final disposal rates through sorting and the selection of disposal sites.

We have also been working towards the goal of zero landfill waste plastic by fiscal 2021. However, we could not achieve this target in fiscal 2021 due to being unable to conduct sufficient separation of mixed waste, with the result that 0.5 tons of waste plastic were landfilled in fiscal 2021. We will continue to separate wastes and promote chemical and material recycling, as well as working towards reducing landfilling to zero.

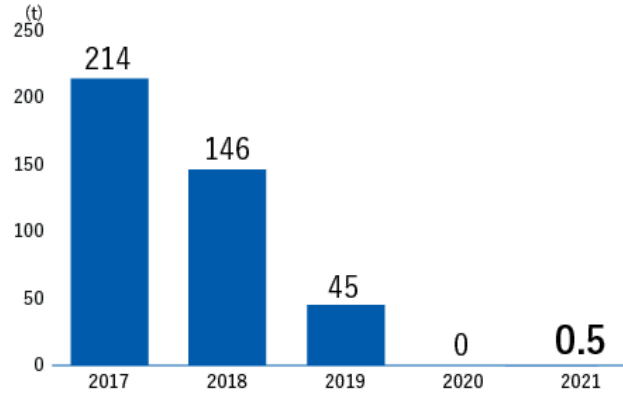
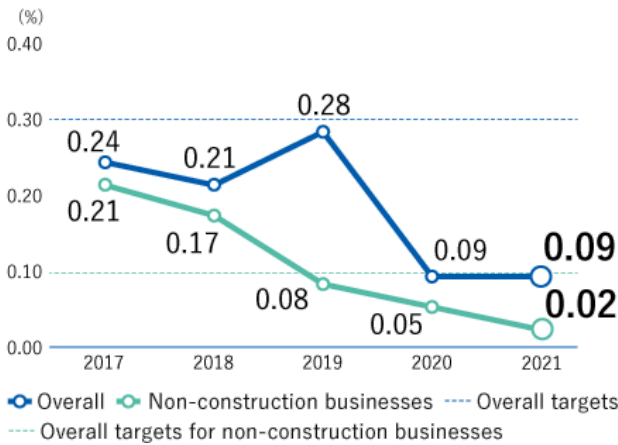
Waste containing PCBs* is stored under strict control in stainless steel vessels. Plans for disposal are advancing, including for waste with minimal amounts of PCBs. We are systematically identifying and replacing electrical equipment containing PCBs and proceeding with their disposal. We will also proceed systematically with disposal of waste containing minimal amounts of PCBs. We enhanced our management of off-site treatment of industrial waste by expanding the use of electronic manifests. We also performed periodic on-site inspections of consigned firms to ensure that proper treatment is performed in accordance with sound systems of control.

* PCBs (polychlorinated biphenyls) are persistent and pose a risk to the living environment and human health. Their manufacture and use are essentially prohibited in Japan.



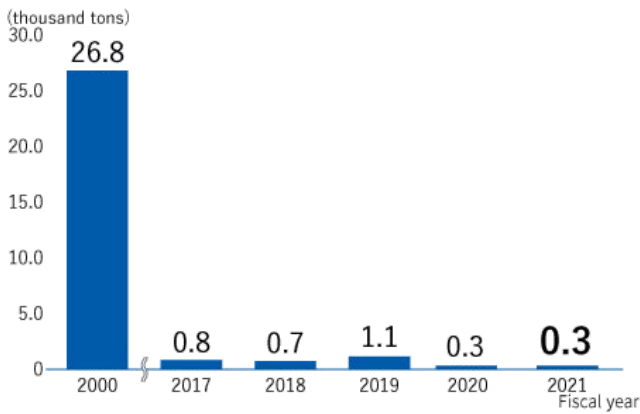
Excluding industrial waste generated at the construction sites of Asahi Kasei Homes. Note that sums of individual figures may differ from the totals shown due to rounding.

FY2021 flow of industrial waste

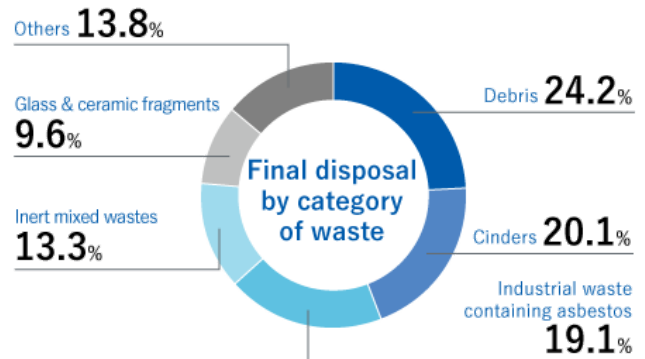


Landfill volume of plastic waste

Final disposal rates (overall, non-construction-related)



Final disposal volume

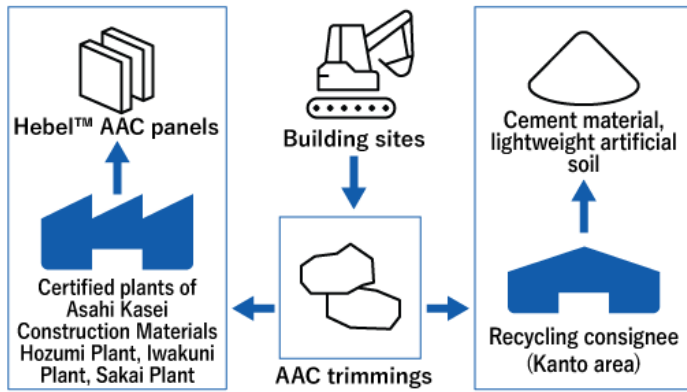


FY2021 final disposal by category of waste

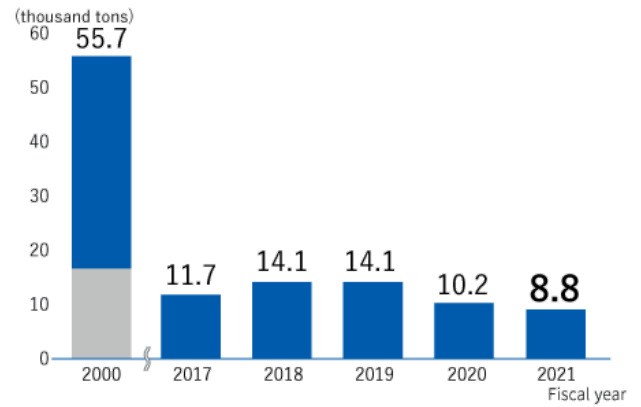
(Excluding waste generated at the construction sites of Asahi Kasei Homes)

Reducing industrial waste from construction materials and housing businesses

Asahi Kasei Construction Materials recycles trimmings of Hebel™ autoclaved aerated concrete (AAC) panels in its own plants and others, utilizing its certification for "wide-area recycling"^{*} which permits the transport of waste from different construction sites. Asahi Kasei Homes is also reducing the volume of waste as well as implementing sorted waste collection at housing construction sites. With these measures, waste for final disposal has been reduced to zero at new construction sites.



Recycle flow for trimmings of Hebel™ AAC panels



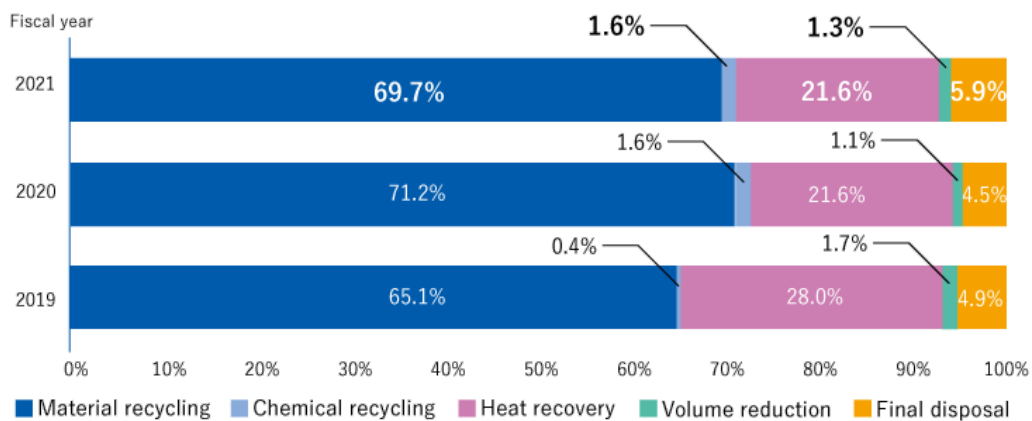
Final disposal industrial waste generated at construction sites

^{*} Certificate for wide-area recycling : For certain parties, who perform recycling in a wide-area, Japan's Minister of the Environment eliminates the need to obtain separate waste transport permits for each local area. The system was established to promote further recycling of industrial waste.

Waste recycling initiatives

As an initiative aimed toward the creation of a circular economy, the Asahi Kasei Group is promoting efforts to recycle^{*} industrial waste.

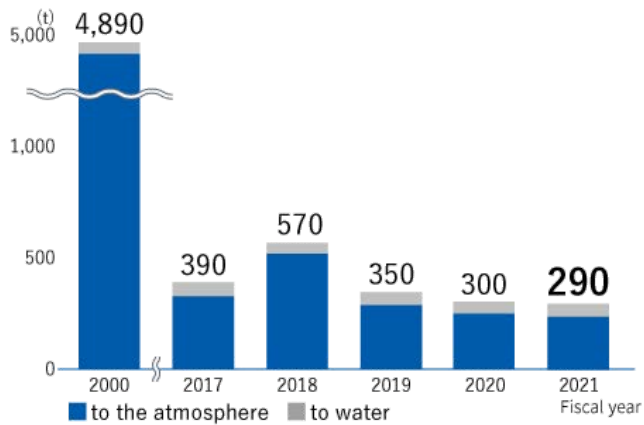
^{*} Recycling refers to material recycling, which reuses waste as materials, and chemical recycling, which uses chemical processing to turn wastes into other chemical substances for reuse.



Asahi Kasei Group waste recycling

Reducing emissions of chemical substances

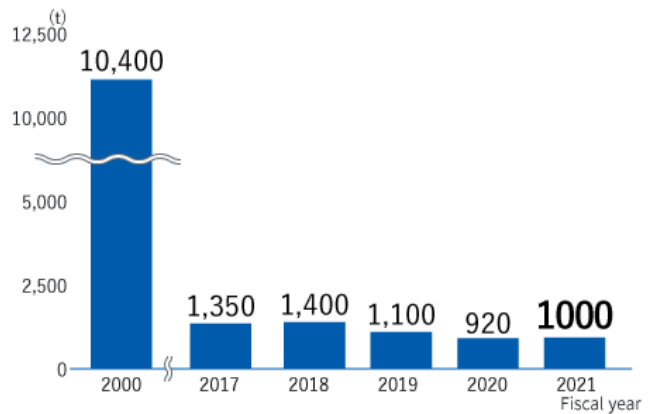
The Asahi Kasei Group works to reduce the release of chemicals substances specified in the PRTR¹ Law and other chemical substances which we have voluntarily designated for reduction with priority based on the degree of hazardousness and amount of release. As shown in the graphs below, releases of PRTR-specified substances and VOC² emissions were reduced by 94% and 90%, respectively from fiscal 2000. We will continue to enhance control of operation and equipment to prevent any accidental release. From fiscal 2021, the calculated amount of leaked fluorocarbons will be aggregated for the Asahi Kasei Group as a whole. The Asahi Kasei Group's calculated amount of leaked fluorocarbons in fiscal 2021 was 1,725 tons of CO₂-equivalent.



Notes:

- No releases to soil.
- The number of PRTR-specified substances changed in FY2010 due to regulatory revision.

Releases of PRTR-specified substances

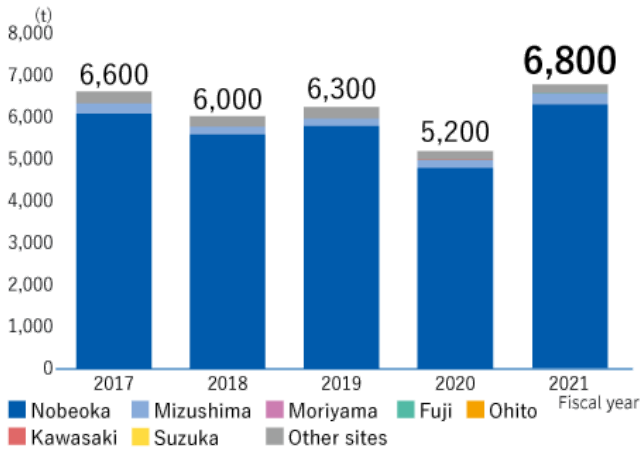


Releases of VOCs

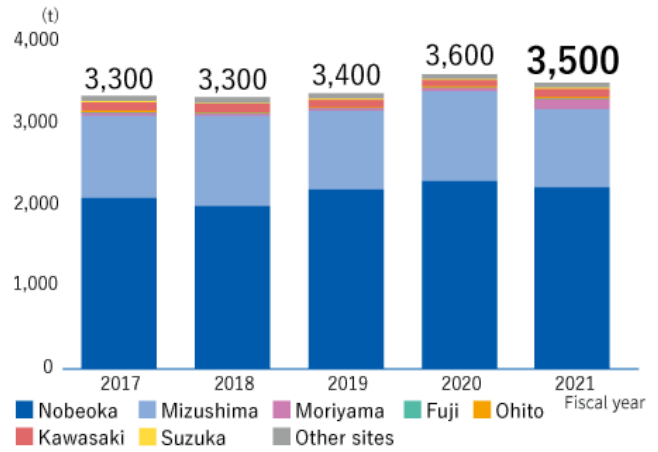
- ¹ PRTR : Pollutant release and transfer register. Under the PRTR Law, releases to the environment and off-site transfers of specific hazardous chemical substances must be monitored and recorded for each production facility and operating site. Results are reported to the government, which publishes aggregated results.
- ² VOC : Volatile organic compound. Although the term generally applies to any organic compound which is in gaseous state at the time of release, regulations for the control of their release exclude methane and some fluorocarbons which do not form oxidants.

Preventing air pollution

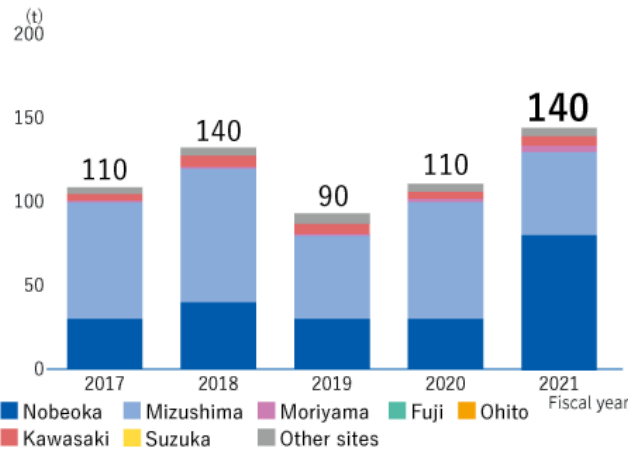
The Asahi Kasei Group works to control emissions and prevent spills in order to avoid the pollution of air, water, soil, and groundwater. Measures to prevent noxious odors include the installation of exhaust gas absorption equipment and increasing the capacity of our wastewater treatment facilities. To prevent soil pollution, we perform tests and take appropriate measures in accordance with the Soil Contamination Countermeasures Act and related regulations. Substances covered by the Air Pollution Control Act are managed within regulatory standards.



SOx emissions



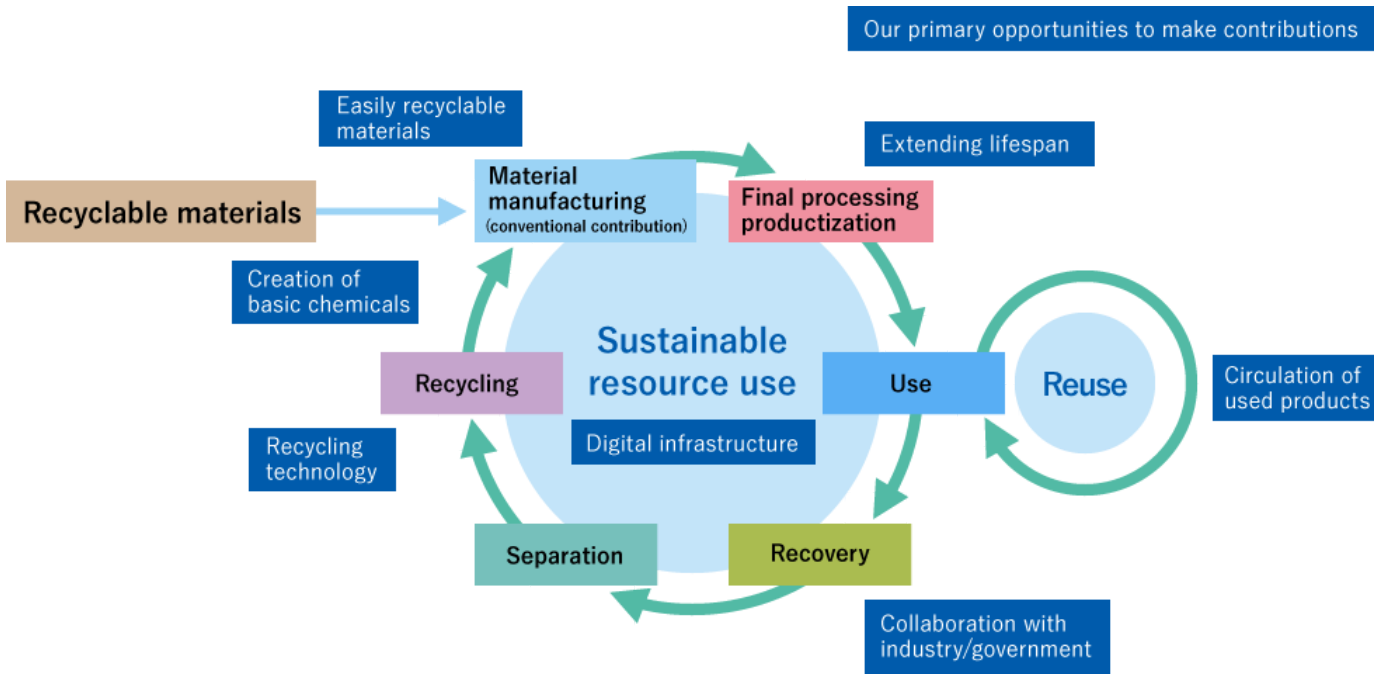
NOx emissions



Soot and dust emissions

Effective resource use

As indicated by the Osaka Blue Ocean Vision at the G20 summit in 2019, the issue of marine plastic waste will require global cooperation to solve. In order to understand how marine microplastics are generated, we are working in collaboration with Kyushu University and participating in awareness-raising activities with industry groups dealing with proper use and disposal of plastics. It is important to make effective use of used plastic resources, so we also promote the 3Rs (Reduce, Reuse, Recycle).



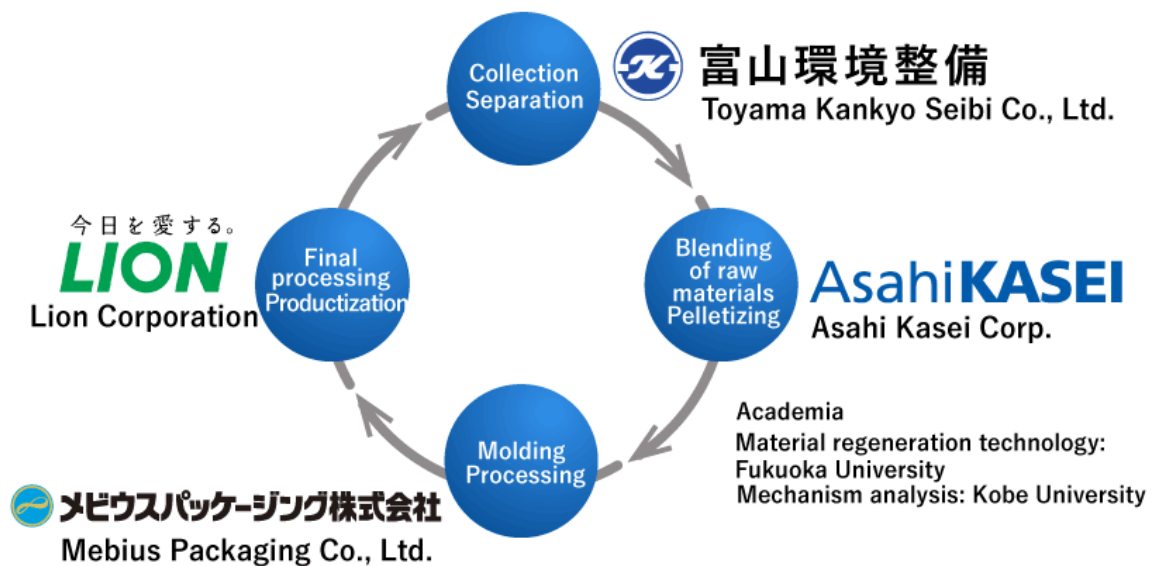
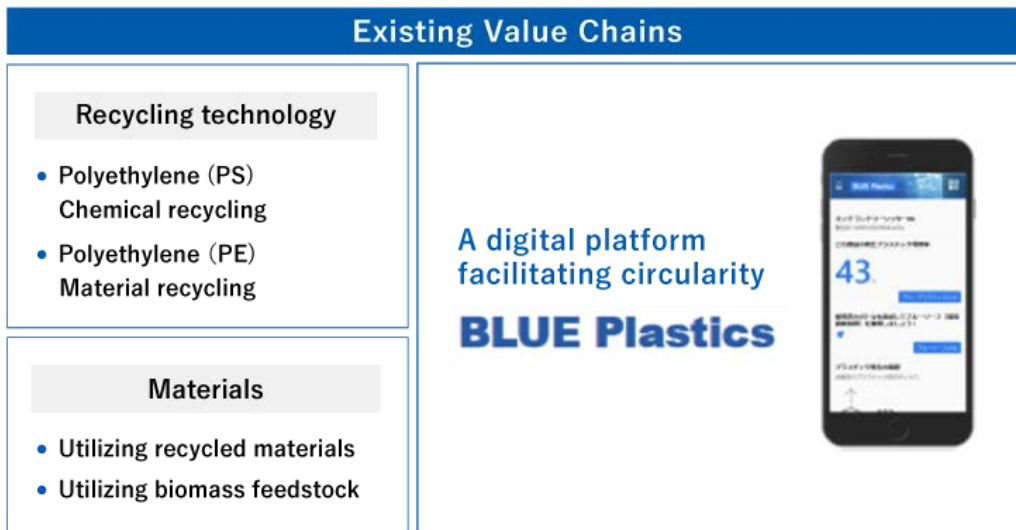
Approach to the Circular Economy

Initiative for Achieving a Circular Economy

"BLUE Plastics" Project

As part of our sustainability efforts, which are symbolized by the SDGs (Sustainable Development Goals), we are working with academia and other companies to achieve a circular economy.

For the material recycling of polyethylene, we have launched the "BLUE Plastics" project* with the technical support of IBM Japan, Ltd. We are striving to make a circular economy a reality through collaboration with recycling company Toyama Kankyo Seibi; Mebius Packaging Co., Ltd., which specializes in molding and final product processes; and brand owner Lion Corporation.



* Overview of the "BLUE Plastics" Project

The "BLUE Plastics" project was launched by Asahi Kasei Corp. to create a digital platform that promotes resource recycling. IBM Japan will support the construction of the digital platform by utilizing blockchain technology that runs on the IBM Cloud. Blockchain technology is an irreversible database technology that maintains a continuous record of operations, which ensures traceability as it is accessible to all parties involved and cannot be altered. Toyama Kankyo Seibi, Mebius Packaging Co., Ltd., and Lion Corporation, which together specialize in the collection, pelletizing, molding, and conversion of waste into final products, will collaborate using IBM Japan's blockchain technology to accelerate the achievement of a circular economy.

Water Resource Preservation

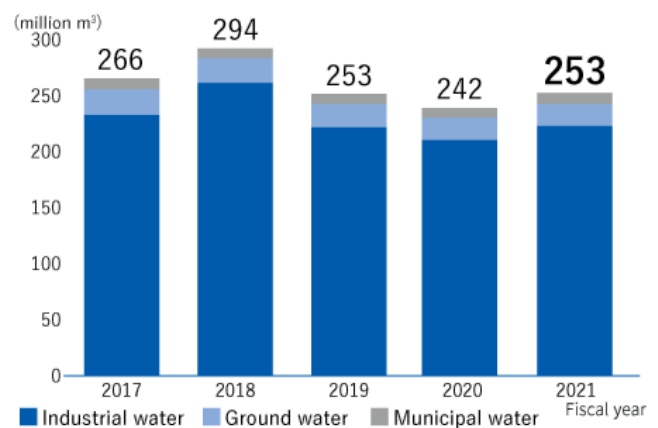
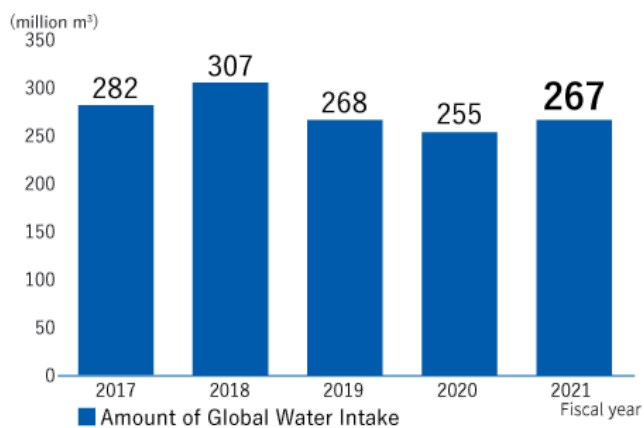
➤ [Click here to read our response concerning CDP Water Security 2022](#) 📄 (207.8KB)

Policy

Asahi Kasei Group's business is intrinsically related to water resources. Ensuring their future viability is one of our societal missions and a prerequisite for the continuity of our business. We will contribute to the conservation of water resources around the world through our domestic and overseas water purification membrane module business, seawater desalination business, the development of sludge reduction products for wastewater treatment, and the expansion of our surface oil detector series. We also have a policy of ascertaining the quantity of our water intake while striving to maintain and improve the efficiency of our water usage.

Reducing water use

The Asahi Kasei Group endeavors to reduce the amount of water used in our plants and to make efficient use of water by recycling it.



Actions in the Moriyama Area

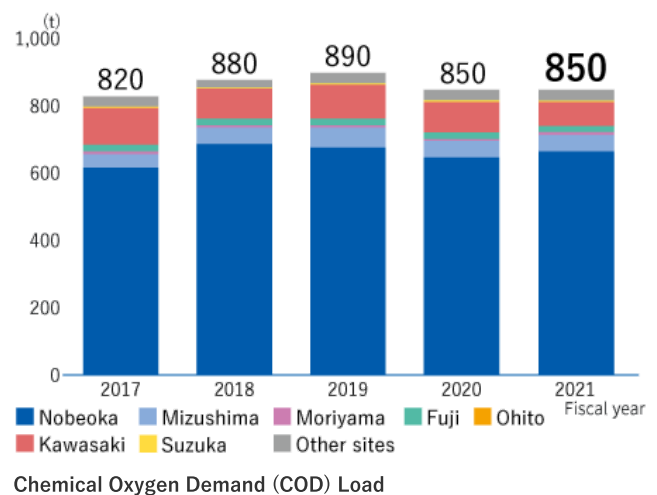
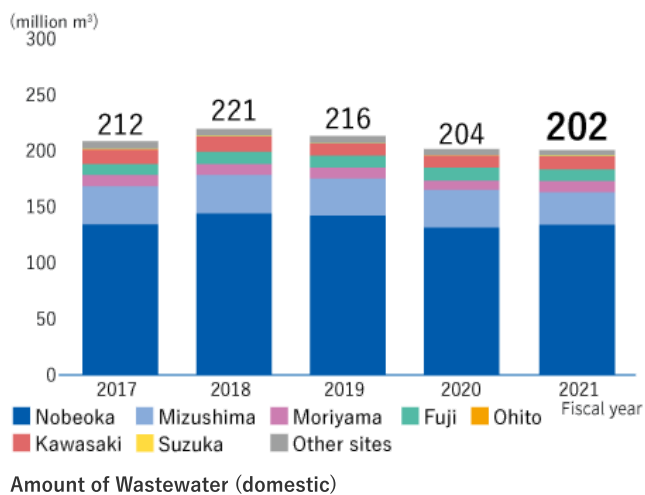
All water used at our Moriyama Works is drawn from groundwater systems. This water is primarily used as a coolant to cool machinery and equipment via heat exchange, but we are also promoting the reuse of the water we draw. The water reuse rate for fiscal 2021 was approximately double that of the previous fiscal year. We will continue working to reuse water within our Moriyama Works, from the perspective of long-term water resource security.

Prevention of water pollution

The Asahi Kasei Group is thorough in its water discharge management and leakage countermeasures in order to prevent contamination of bodies of water or groundwater. In addition, we have set a group-wide annual target of zero instances of leakage as covered by the Water Pollution Prevention Act.

In 2012, we issued our Guidelines on Wastewater Management. In addition to affirming our commitment to wastewater management based on this, we are also working on enhancing the capacity of wastewater treatment facilities and other equipment. Items regulated by the Water Pollution Prevention Act are managed within those standards.

In fiscal 2021, there were neither instances of leakage as related to the Water Pollution Prevention Act nor violations or fines related to environmental laws and regulations.



Asahi Kasei products and technologies for water conservation

Microza™ hollow fiber membrane filtration module

We are a top-tier supplier of water treatment membranes and filtration systems. Microza™ is a hollow fiber membrane we have developed for water treatment. It is used in more than 1,600 water purification plants and wastewater treatment plants worldwide, including in the United States, China, Korea, Singapore, Thailand, Indonesia, and Middle Eastern countries. Singapore's NEWater, Asia's largest wastewater reclamation plant, has continued to use this product since 2007.

Going forward, we will continue to work on global water and environmental issues with the aim of resolving various problems related to water resources.

➤ [Microza™ hollow fiber membrane filtration module](#)

Saran™ Polyvinylidene Chloride Fiber

One important issue in wastewater treatment is reducing the amount of sludge generated, which is directly tied to decreasing its environmental impact. The Asahi Kasei Group conducts research and development into new commercial products that feature a unique technology using microorganism immobilized carrier that flows, making use of the characteristics of Saran™ fiber, which microorganisms inhabit easily.

Existing facilities can adopt these products by making simple improvements like installing screens, without requiring major modifications. This improves processing capabilities and reduces the amount of sludge generated.

➤ [Saran™ fiber on the Asahi Kasei Home Products website](#)

Apolarm™ series environmental monitoring products

Asahi Kasei Technosystem's Apolarm™ Series detects a wide range of oil leaks, including floating oil (oil film and oil layers), sediment oil, and water-soluble oil. We will continue to expand our product line and protect the aquatic environment with oil detection devices for specific applications.

Apolarm C	Oil layers of 3 mm or more trigger a capacitance shift and sound an alarm.
Apolarm M	A non-contact laser detector that can sense minuscule amounts of oil film on the water surface.
Apolarm B	Detects oil and organic solvents that have a greater specific gravity than water, causing them to sink.
Apolarm F	Detects leakage of fluorescent water-soluble oils.

➤ [Apolarm™ Series on the Asahi Kasei Technosystem website](#) 

Biodiversity

Policy

To ensure the sustainable utilization of living resources, the Asahi Kasei Group gives due consideration to reducing the impact of our business activities on biodiversity, and we have established guidelines for the preservation of biodiversity. Based on these guidelines, we have been working to understand the relationship between our business activities and biodiversity since 2010. In order to promote business activity mindful of biodiversity, we are working to raise awareness among personnel by various means including our ESH education program.

Participation in the 30by30 Alliance for Biodiversity

The 30by30 Biodiversity Alliance was established by members of interested companies, local governments, and organizations in April 2022 in order to advance initiatives to gain OECM certification for areas safeguarded as company green spaces or under similar designations, with the aim of achieving the 30by30 target. We have joined the Alliance and are pursuing pilot projects for certification.



Investigation of impact on biodiversity by procurement

Regarding the impact of our business activities on biodiversity when there is a newly used raw material or a change in use of raw materials, we use a survey sheet on the relationship between business operations and biodiversity to examine the country of origin of raw materials, processors and manufacturers, and primary vendors (trading companies, etc.), in order to confirm the absence of any problem.

Group-wide activities for biodiversity

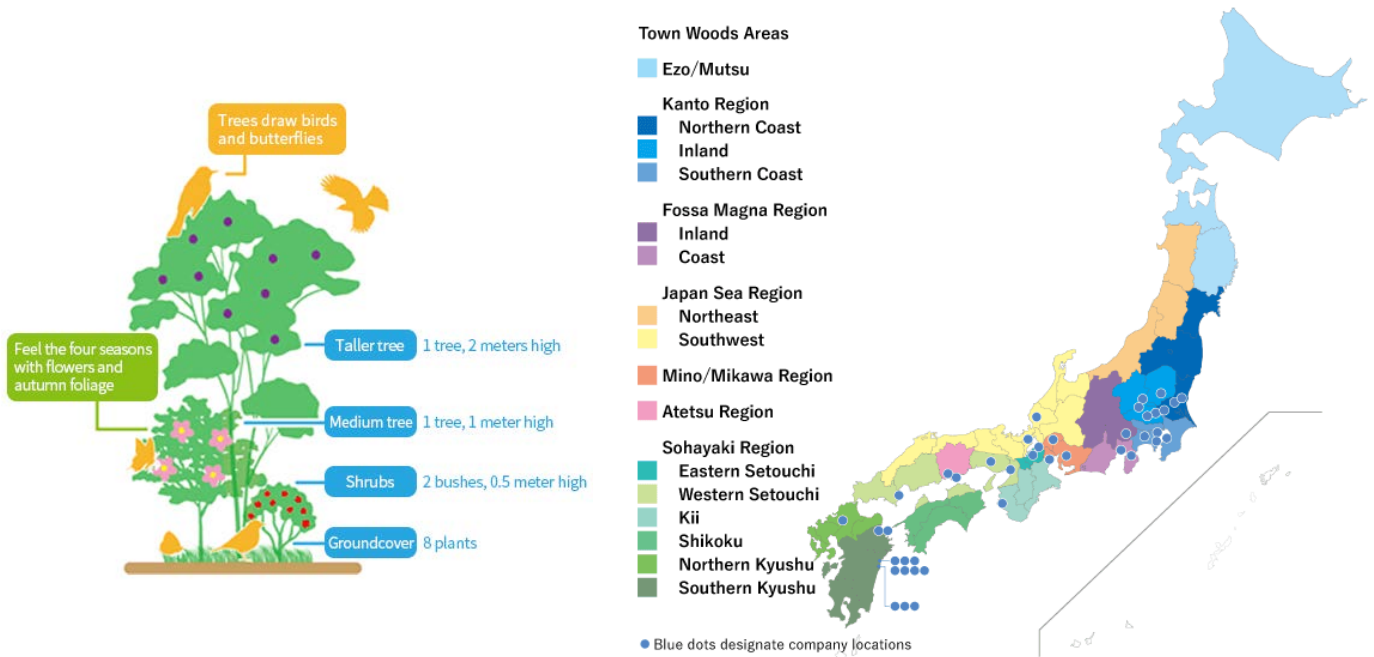


What is the "Town Woods" Program?

We aim to increase value from the perspective of biodiversity while enhancing green spaces at Asahi Kasei Group operating sites in Japan. We will use Town Woods Pots as a tool to heighten understanding and awareness of the value of biodiversity among personnel.

What are Town Woods Pots?

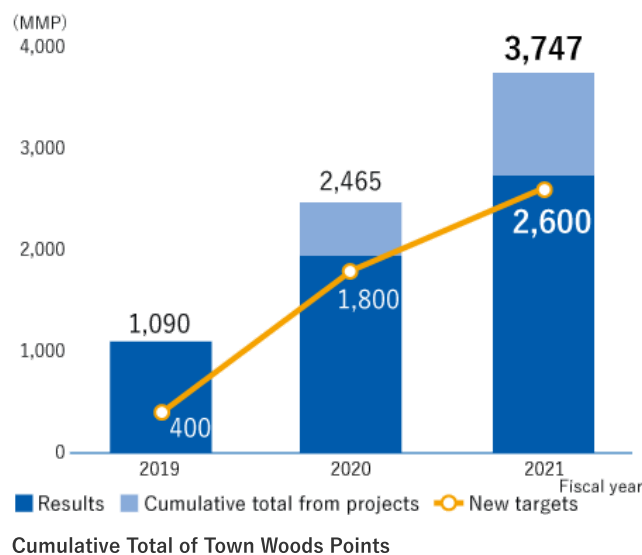
This new way of landscaping by Asahi Kasei Homes combines four layers of vegetation of varying heights: Tall, medium, short, and groundcover. While compact enough to integrate with urban residential areas, they increase the space for other plants and wildlife in artificial environments that otherwise have little greenery. Our Town Woods Program uses the phytosociological method to classify green spaces at operating sites throughout Japan, selecting the most suitable regional vegetation when creating the Town Woods plantings.










Town Woods Project: (FY2019–2021) Phase 1 Targets and FY2021 Results

	First Phase Targets (FY2019–2021)	FY2021 Results
Target I	Install Town Woods Pots at all 41 Asahi Kasei Group operating sites in Japan	Achieved goal of installing "Town Woods" pots at all 41 sites in Japan by FY2020
Target II	Accumulate a total of 2,600 "Town Woods Points" (MMP) during the period.	Achieved goal with cumulative MMP total of 3,747 points by fiscal 2021, including MMP from submissions within projects

Town Woods Points (Machi-Mori Point: MMP) Initiatives at Asahi Kasei Group sites are divided into four stages. Each initiative earns Town Woods Points and the points are aggregated across the group.



Stage	Example Initiatives
<p>Stage 1: Installation</p>	<ul style="list-style-type: none"> • Installing the Town Woods Pots • Posting information about the Town Woods Pots • Maintaining them properly so they thrive <div style="display: flex; justify-content: space-around;">   </div>
<p>Stage 2: Observation</p>	<ul style="list-style-type: none"> • Recording trunk thickness and tree height • Photographing and recording information on features like flowering, fruiting, and foliage • Photographing and recording information on the wildlife that visits the Town Woods Pots • Photographing and recording information on naturally occurring vegetation <div style="display: flex; justify-content: space-around;">   </div>
<p>Stage 3: Dissemination</p>	<ul style="list-style-type: none"> • Actively disseminating information including photographs and records of observed plant and animal life both within and outside the site. The dissemination will take place online, through bulletin boards, directly communicating with the local community, etc. <div style="display: flex; justify-content: space-around;">   </div>
<p>Stage 4: Development Initiatives in other locations</p>	<ul style="list-style-type: none"> • Expanding the initiative to other locations • Collaborating with other programs both within and outside the site • (In FY2021, as in FY2020, we refrained from holding the event due to COVID-19)

➤ We reported a summary of our FY2019 to FY2021 (Phase 1) initiatives in our tenth issue of Town Woods Program News.  (469.7KB)

FY2021 Project: "Town Woods" Plant Watching

With work-at-home measures continuing in fiscal 2021 due to the COVID-19 pandemic, we expanded viewing locations to include home gardens and neighborhood parks and roadsides in addition to the areas around our Town Woods Pots, and organized a limited-time project with the goal of considering environmental issues close to home through observing plants. For this initiative, we split the project into a summer season (July 15 to September 22) and a fall season (September 23 to November 15), during which we observed plants, bearing in mind the categories of "native species" and "non-native species," to record the range of plants and the condition of the natural settings immediately around us. Through this initiative, we received 167 submissions (1,032 MMP) and identified a total of 58 families, 98 genera, and 119 species of plants, of which 86 species were identified as native and 24 as non-native. Experts praised the project as an excellent and highly unique activity, commenting that carrying out an initiative of this kind on a company-wide scale not only increased environmental awareness within the company but also enabled the recording of core data about regional natural environments.



➤ Town Woods Program News, Issues 8 and 9  (1.0MB)

Town Woods Program Awards

We presented awards for excellent initiatives from fiscal 2019 to fiscal 2021 (Phase 1) at the sites and plants taking part in the Town Woods Program.

Award-winning sites and plants were selected on the basis of assessment criteria that comprised taking the details of sites' and plants' initiatives and totaling Town Woods Points for each of their stages, and evaluating stand-out initiatives from both regular submissions and submissions under our FY2020 and FY2021 projects.

Rather than presenting awards on the basis of attaining a large number of Town Woods Points, we identified and assessed creative initiatives and those with potential for expansion, and selected initiatives that reflected our award titles and points of particular merit.

Award-winning sites & plants and points of particular merit

Oita Plant:	The Regional Award—attention paid to the site as a whole and the region beyond, with a focus on observation of Town Woods Pots, is hoped to lead to more substantial initiatives
Mizushima Works:	The Collaboration Award—effective environmental education and outreach not only by the Environment Manager but also with successful collaboration from employees from the wider staff body
Asahi Kasei Pax Corp. Ono Plant:	The Perseverance Award—steadily conducting observations and submissions every year even as a small-scale site
Moriyama Works:	The Development Award—expanding initiatives to other sites by planting new Town Woods Pots during the tree planting carried out at the time of the plant's expansion
Asahi Kasei Juko Co., Ltd. Shiga Plant:	The Innovation Award—contributing to biodiversity by implementing diverse initiatives thanks to a wealth of ideas at each initiative stage

➤ Town Woods Program News, Issues 11 and 12  (1.1MB)

Establishing Town Woods Tree Planting Guidelines

Utilizing knowledge gained through the results of Town Woods Program initiatives carried out from fiscal 2018 to fiscal 2021, we established our Town Woods Tree Planting Guidelines in August 2022 in order to promote Group-wide tree planting, which will contribute to the preservation of biodiversity.

Notable activities in fiscal 2021

Actions in the Moriyama Area

Ex-situ conservation of smallhead stickleback, an endangered freshwater fish, and joint effort among companies and communities for dragonfly conservation

In Moriyama, we draw groundwater for industrial use in cooling equipment. Its quality is strictly monitored, and it is discharged to nearby rivers after use. A portion of the discharged water from our Moriyama Works is also used for agriculture, which has become vital for local farmers as well as wildlife inhabiting the waterfront areas.

Against this backdrop, and since water is intrinsically related to our business operations, in fiscal 2010 we started initiatives to protect biodiversity with a focus on water resources.

In fiscal 2015, we began ex-situ conservation of smallhead stickleback, an endangered freshwater fish, and in fiscal 2016, we began dragonfly conservation activities in cooperation with companies that have operations located in Shiga Prefecture and local communities. In fiscal 2021, we carried out ecological surveys of the smallhead stickleback, which we are working to protect and help to proliferate in the "Moribio" biotope at our Moriyama Works, and confirmed that over 100 individuals of the species are inhabiting the biotope. When conducting a study of their release into the wild, we also collaborated with curators from Shiga's Lake Biwa Museum to carry out a survey of smallhead stickleback in the Noto River. Further, to safeguard smallhead stickleback in the Kanegamori (Moriyama) Residents' Association's Yusui Park, we eradicated Louisiana crawfish and put in place enclosures designed to protect the smallhead stickleback and help them to proliferate. We will continue to work for the protection and proliferation of the smallhead stickleback in collaboration with the local community.

In collaboration with companies that have operations located in Shiga Prefecture (Biodiversity Biwako Network), we are involved in "Operation Dragonfly 100: Save Shiga's Dragonflies!" This project involves working with local communities to survey the habitat of the *Sympetrum kunckeli* variety of dragonfly, which resides in wetlands, and to conserve it using a container biotope. In fiscal 2021, we were able to confirm breeding and emergence of the *Sympetrum kunckeli* variety of dragonfly in the Moribio for the first time. In addition, a species survey of the Moribio confirmed the presence of the rare four-spotted skimmer, water scorpions, the Ricciocarpos natans variety of liverwort, and more, giving us first-hand experience of the Moribio's indispensability as a site for conserving regional biodiversity. We intend to continue our work to conserve biodiversity in collaboration with various organizations.



A *Sympetrum kunckeli* dragonfly that bred and emerged in the Moribio



A field guide to the creatures inhabiting the Moribio

Actions by Asahi Kasei Juko Co., Ltd.

Project to rediscover living with the woods and water in Higashiomi

We are carrying out conservation works at Asahi Kasei Juko Co., Ltd.'s Shiga Plant—principally at the “Yuya Hebel Biotope” created on the plant's grounds—in aid of the four-spotted skimmer (our “nominated dragonfly”), a keystone species on the Shiga red list and which surveys of dragonflies in the surrounding area show to be at risk of extinction due to habitat degradation in recent years. In May 2021, 75 four-spotted skimmer eggs were taken from neighboring habitats and transferred to a simple biotope created using a container and installed on the plant grounds. One year later, we were able to confirm that approximately 25 dragonflies had emerged as a result, bring the total number to emerge (including imagoes that emerged in the wild) to nearly the same level as that of the previous year at approximately 100 individuals.

Emerged imagoes were marked on the back of the abdomen before release into the “Yuya Hebel Biotope” on the Shiga Plant's grounds. We later confirmed that approximately 50 four-spotted skimmers, including some with marks, had flown to the Yuya Hebel Biotope and engaged in breeding activities, allowing us to conclude that the four-spotted skimmer has essentially established itself in the biotope over a five-year period.

In September 2021, we also carried out a seedling survey of the area around the biotope in the aim of both obtaining a basic survey of the planting structure designed to allow four-spotted skimmers that have emerged in the biotope to remain there for a given period and establish themselves at the site, and getting a picture of the biotope's plants. We plan to raise plants from those seedlings in fiscal 2022.



The “Yuya Hebel Biotope” created at our Shiga Plant



Our “nominated dragonfly,” the four-spotted skimmer

Actions in the Suzuka Area

A river known as the No. 19 River cuts through the grounds of our Suzuka Plant from north to south, and water used to cool equipment is discharged into this river, with strict water-quality monitoring. Despite its narrowness, the No. 19 River has been found to be home to a wide variety of aquatic life. Distinctive aquatic creatures that can be seen in this river include turtles (shown on land on a rainy day in the photograph below), as well as catfish, the presence of which we had been unable to confirm until last year. You can also see small freshwater crabs of 2–3 cm in size between the rocks of the stone embankments on either side of the river, apparently—as further testified to by the presence of other aquatic organisms—playing their part in the food chain.

Reliably conducting quality monitoring of discharged water is vital not only in the aim of compliance with legal and regulatory water discharge standards but also in order to maintain this No. 19 River waterside environment inhabited by a range of aquatic species. We will continue our efforts toward environmental protection, such as not only conducting water quality monitoring in all production departments but also monitoring water quality near the gates where effluence is combined and discharged into the river, so that these aquatic creatures can safely inhabit the area.



Actions in Nobeoka and the Hyuga Area

Since 2007 we have participated in a reforestation program led by Miyazaki prefecture to create forests in cooperation with companies. We planted more than 44 hectares of broad-leaf trees and other trees native to the area, replacing plantations of cedar and cypress. This included 20 hectares in Hinokagecho, 20 hectares in Takachiho, 1 hectare in Gokase, and 3 hectares in Kitakatacho.

Having postponed our tree planting event in the approximately five hectares of field made available by Hinokagecho since fiscal 2020 due to COVID-19, we were able to recruit participants and hold the event in fiscal 2022 for the first time in three years. While we would normally hold this event with 400 participants, this fiscal year we limited the number of participants to approximately 150 and planted 1,500 trees over approximately one hectare of land.



Tree planting



Commemorative photo after tree planting session

Please refer to the document below to see Asahi Kasei Homes initiatives.

➤ [Asahi Kasei Homes Group CSR Policy](#) □

The Asahi Kasei Group's Environmental Contribution Products

Our Initiatives

Description of Environmental Contribution Products

Contribution to reducing GHG emissions throughout society

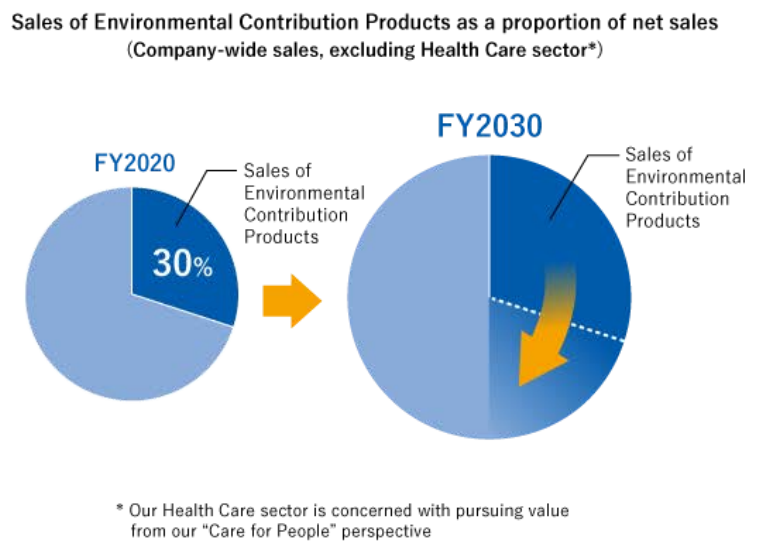
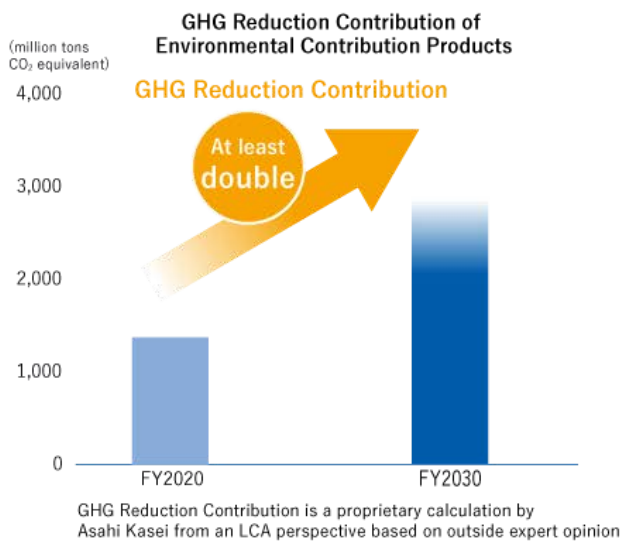
Alongside aiming to achieve decarbonization and reducing our own GHG emissions, the Asahi Kasei Group works to contribute to reducing GHG emissions throughout society. In order to realize both business growth and environmental contributions, we are working toward the following targets for 2030.

Contribution to reducing GHG emissions through Environmental Contribution Products

Objectives

By FY2030

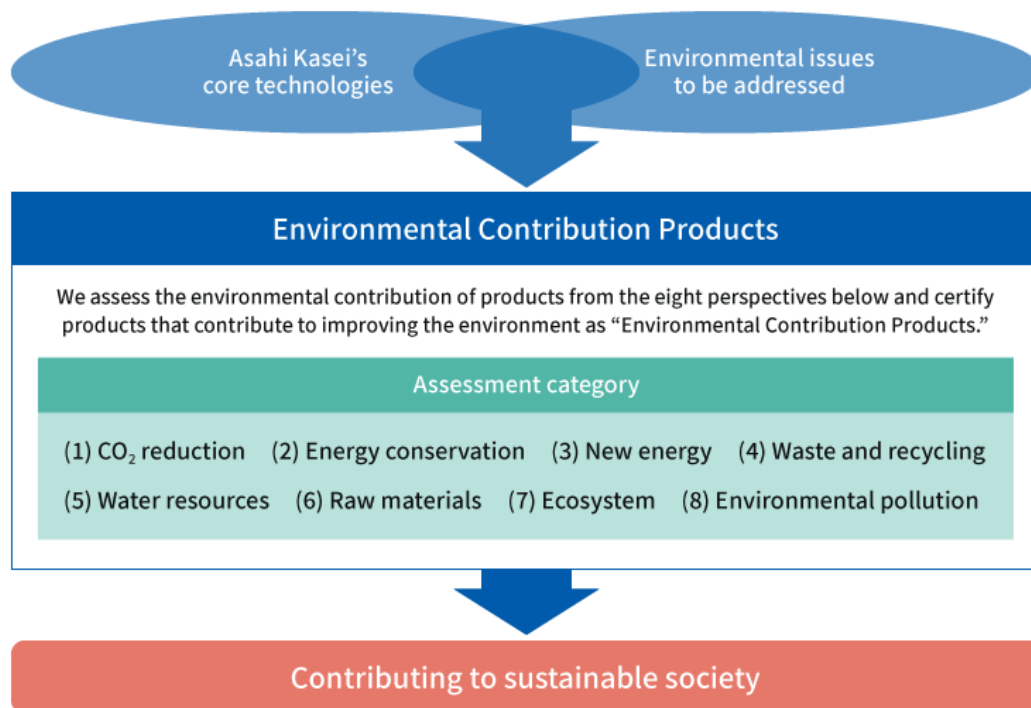
- At least double our GHG Reduction Contribution
- Increase sales of Environmental Contribution Products as a proportion of net sales



What are Environmental Contribution Products?

For sustainable society, we believe it is important to develop products and businesses that contribute to reducing the impact of society on the environment in addition to reducing emissions, such as greenhouse gases, at our production sites. The Asahi Kasei Group defines products that contribute to the improvement of the environment over the entire life cycle when compared with products considered to be the standard in the current market and products that contribute to the improvement of the environment when compared with our existing products as Environmental Contribution Products.

Our Environmental Contribution Products are managed under our own Guidelines for Environmental Contribution Products, which were prepared with reference to Guidelines for Assessing the Contribution of Products to Avoided Greenhouse Gas Emissions (The Institute of Life Cycle Assessment, Japan), Guideline for Calculating the Reduction in CO₂ Emissions (Japan Chemical Industry Association), Guideline for Quantifying GHG Emission Reduction Contribution (Ministry of Economy, Trade and Industry), and other reference materials.

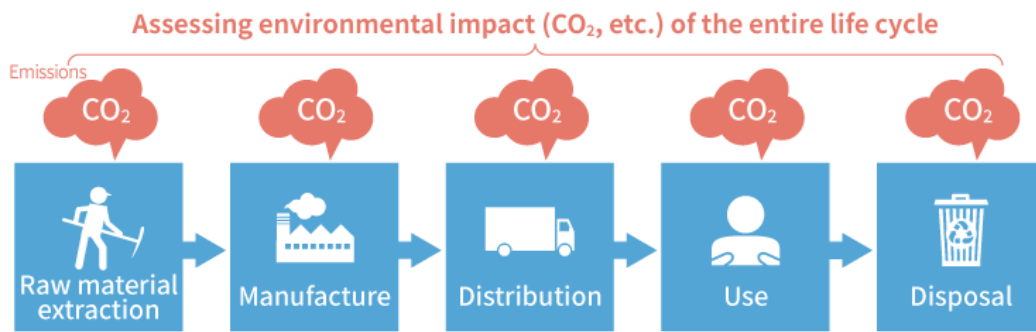


In making the abovementioned calculations, we use MiLCA, an LCA tool provided by the Sustainable Management Promotion Organization (SuMPO).

What is Life Cycle Assessment (LCA)?

Although CO₂ is generated during the manufacture of materials and intermediate products in the Asahi Kasei Group, there are also many examples of products which contribute to improving the environment by reducing environmental impact, including CO₂, during use considering the entire product life cycle, such as contributions to energy conservation.

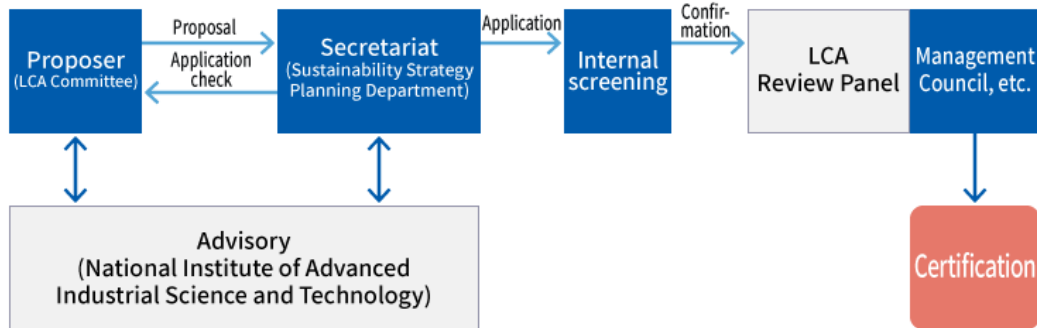
The evaluation of the environmental impact of products over their entire life cycle is Life Cycle Assessment (LCA).



Internal Certification Process

Strategic business units and core operating companies propose products for internal certification. The Asahi Kasei Group receives advice from a third-party organization on the suitability of the environmental contribution calculation methodology and approach from an LCA perspective for the proposed products, and defines products that have been internally certified as Environmental Contribution Products.

We also receive advice on the appropriateness of our calculations of environmental contribution from outside experts when reviewing certifications.



LCA Review Panel (held on July 20, 2022)

- Chair:** Atsushi Inaba (Chief Director of Japan Life Cycle Assessment Facilitation Centre (LCAF))
- Committee Members:** Kensuke Kobayashi (Associate Professor, Prefectural University of Hiroshima)
Keigo Matsuda (Associate Professor, Yamagata University)
Hiroyuki Uchida (Senior Consultant, Mizuho Research & Technologies, Inc.)



(Reference) Fiscal 2022 meeting

At the LCA Review Panel, Asahi Kasei Group personnel explain the details of environmental contributions and receive comments and advice from outside experts on the suitability of the establishment of baselines and our approach to environmental contribution. The LCA Review Panel held in fiscal 2022 used a hybrid format combining face-to-face and online attendance, with measures in place to prevent the spread of COVID-19.


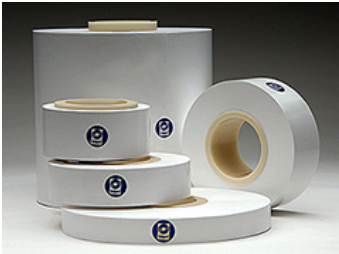


The Asahi Kasei Group's Environmental Contribution Products











Our Initiatives

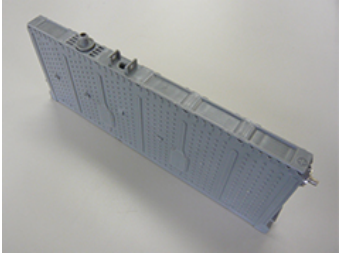










Description of Environmental Contribution Products






















Description of Environmental Contribution Products

Contributes to resource and energy conservation at the product use stage










Product name	Reason for certification	SDGs contributed to
<p>Lithium-ion battery (LIB) Separators</p>  <p>> Hipore™</p>  <p>> Celgard™</p>	<p>The separator is one of the four main components (cathode, anode, electrolyte, and separator) that make up the batteries (LIBs) for electric vehicles (EV/HEV/PHEV).</p> <p>As a result of their growing popularity, electric vehicles are contributing to a reduction in CO₂ during driving, compared with gasoline vehicles. Improving the battery performance (extending range and ensuring safety) is essential to the popularization of electric vehicles, and Asahi Kasei's development of separator technology is playing a part in this.</p>	 







Product name	Reason for certification	SDGs contributed to
 <p>› Ion-exchange membrane process for chlor-alkali electrolysis</p>	<p>Caustic soda and chlorine are manufactured through the electrolysis of brine. The methods of electrolysis are the mercury process, the diaphragm process, and the ion-exchange membrane process. The ion-exchange process is a method that does not use the harmful materials mercury or asbestos. We are the only manufacturer in the world that manufactures and sells ion-exchange membranes, electrolytic cells, and electrodes, and we boast the top share of the global market. We have engaged in continual development to enable electrolysis using even less electricity, and our latest ion-exchange membrane grade has significantly lowered power consumption (compared with Asahi Kasei products: approximately 2% less than the current grade).</p>	  
 <p>› Elastomer for Asphalt Modification</p>	<p>This product is used as an additive for the modified asphalt used in road surfaces. This original elastomer specially designed by Asahi Kasei can improve road durability and decrease the frequency of maintenance and repairs.</p>	 
 <p>› S-SBR synthetic rubber for fuel-efficient tires</p>	<p>S-SBR is used for the tread (the part in contact with the road) on passenger vehicle tires. Based on the development of original technology, it balances low fuel consumption and braking performance of tires at a high level, contributing to dramatically increasing the fuel efficiency of automobiles.</p>	 

Product name	Reason for certification	SDGs contributed to
<p>Xyron™ lightweight resin</p>  <p>➤ Electric vehicle battery module materials</p>  <p>➤ Solar cell connector material</p>	<p>Xyron™, a type of engineering plastic, is an environmentally-friendly material with non-halogen flame retardance and reduction of resin usage due to its low specific gravity. Its properties also include dimensional precision, mechanical strength, and resistance to electrolyte solution. Widely used for electric vehicle battery packs and modules, it has played a major role in the spread of electric vehicles. It is also used in high-voltage photovoltaic systems due to its excellent insulation properties. The number of modules required for high-voltage systems is reduced, which saves resources. Its low specific gravity also contributes to the reduction of CO₂ emissions during transport.</p>	 
 <p>➤ ASACLEAN™</p>	<p>ASACLEAN is a cleaning agent (purging agent) for use in plastic molding machines.</p> <p>At plastic molding work sites, when switching between production of different colors and resin types, it is necessary to keep the materials flowing to a certain extent, which inevitably results in loss.</p> <p>By using ASACLEAN during the production switching process, it is possible to make the switch using about 1/3 to 1/10 the amount compared to not using ASACLEAN, which contributes to conserving resources and reducing CO₂ by decreasing plastic waste.</p>	 
 <p>➤ AWP™ Photosensitive Resin for Printing Plates</p>	<p>This is a printing plate material that does not use VOC (volatile organic compound; a cause of worsening air quality) solvents during the development process.</p> <p>Moreover, simplifying the drying process contributes to reduced CO₂ emissions by lowering energy consumption. Printing losses can also be reduced due to excellent printing quality and high productivity during printing, thereby contributing to a reduction in CO₂ emissions.</p>	  

Product name	Reason for certification	SDGs contributed to
 <p>➤ CO₂ sensors</p>	<p>This compact, highly accurate, energy-saving gas sensor can detect the concentration of CO₂ in the air. Equipping this product to industrial air-conditioning systems and optimizing the amount of ventilation while monitoring the CO₂ density will contribute to reductions in power consumption for air conditioning.</p>	 
 <p>➤ UVC LED for water sterilization</p>	<p>The high-output UVC LED, which emits 265 nm deep ultraviolet (UVC), the most effective wavelength for sterilization, is installed in water servers etc. Since UVC LEDs can be instantly turned on and off, it is possible to design equipment that uses power only when sterilization is required, which helps to save energy.</p> <p>Recently, UVC LEDs have been used for air sterilization.</p> <p>In addition, unlike the conventional mercury lamps (UV lamps) used for UV sterilization, these lamps do not use mercury, which is hazardous to the environment.</p>	    
 <p>Hebel Haus™</p>  <p>Hebel Maison™</p>	<p>Long Life Homes and Net Zero Energy Houses: Compared with regular housing, our homes contribute to reduction of CO₂ during manufacture of all components and construction by meeting the standards for Net Zero Energy Houses, which balance household energy usage at zero or lower through power generation, advanced insulation, and energy conservation, and providing Long Life Home products with a basic structural life of at least 60 years.</p>	    
 <p>Neoma Foam™ Insulation Material</p>	<p>This is a top-class insulating material, providing high insulation and maintaining its insulating properties for long periods of time.</p> <p>In addition, this insulation material reduces environmental impacts in a variety of ways, such as by being the first in the industry to succeed in not using any CFC or CFC substitutes as foaming gases.</p>	   

Resource and energy conservation at the product production stage

Product name	Reason for certification	SDGs contributed to
<p>Manufacturing process for Acrylonitrile</p> 	<p>Acrylonitrile, which is the raw material for carbon fiber, ABS resin, and acrylic fiber, is manufactured by making propylene react with ammonia. We have continually developed catalysts that assist reactions in order to enable efficient manufacture of acrylonitrile from less raw materials.</p> <p>As compared to production processes using other, ordinary catalysts (in the model case), production processes using our catalysts have a low environmental impact due to the fact that these processes can (1) reduce raw material consumption, (2) reduce emissions of by-products, particularly CO₂, and (3) lower CO₂ emissions associated with waste processing.</p>	 
<p>Cyclohexanol Production Process</p> 	<p>This production process produces cyclohexanol, an intermediate material for nylon and other chemical products, through the cyclohexane process, which Asahi Kasei were the first in the world to develop. The cyclohexane process is notable in that it generates virtually no waste and has a carbon yield of nearly 100%. Compared to conventional methods, this method uses fewer raw materials and generates less CO₂ in waste treatments, which reduces the impact on the environment.</p>	 
<p>Adipic Acid Production Process</p> 	<p>This process produces adipic acid, a raw material for plasticizers for polyurethane and resins. The Asahi Kasei adipic acid production process, which uses cyclohexanol produced by our cyclohexane process as a raw material, efficiently breaks down the nitrous oxide (N₂O) produced by the production process and reduces GHG emissions, thereby contributing to reducing environmental impacts.</p>	 

Product name	Reason for certification	SDGs contributed to
 <p>➤ Polycarbonate Production Process Using CO₂ as a Raw Material</p>	<p>This is a process using CO₂ as one of its raw materials to produce polycarbonate. We license a technology for this manufacturing process.</p> <p>This process utilizes CO₂ released into the atmosphere by other plants as a raw material, thereby contributing to reducing CO₂.</p> <p>The product, polycarbonate, is used for automobile headlight covers; materials for carport roofs; helmets; water bottles; and substrate layers for CDs, DVDs, and BDs; as well as exterior materials and other components for electric and electronic devices in the form of an ABS-PBT alloy.</p> <p>Ethylene glycol—used as a raw material for polyester fibers, PET resins, and antifreeze—is a secondary product of this process.</p> <p>A further strength of the process is that it manufactures its product without the use of solvents and with no inputs other than its raw materials, avoiding the environmental impacts associated with processing used solvents.</p>	 
 <p>➤ Dimethyl Carbonate Production Process Using CO₂ as a Raw Material</p>	<p>This is a process using CO₂ as one of its raw materials to produce dimethyl carbonate. We license a technology for this manufacturing process.</p> <p>This process utilizes CO₂ released into the atmosphere by other plants as a raw material, thereby contributing to reducing CO₂.</p> <p>Demand is rising sharply for the product, dimethyl carbonate, as a raw material for polycarbonate and the electrolytes in lithium-ion batteries (LIB) for electric vehicles (EVs) and other products.</p> <p>Ethylene glycol—used as a raw material for polyester fibers, PET resins, and antifreeze—is a secondary product of this process.</p>	 

Other Environmental Contribution Products

■ Contributes to resource and energy conservation for customers

- [Microza™ water filtration modules](#) □

■ Use of materials with low environmental impact

- [ECORISE™ bio-PLA nonwoven fabric \(for coffee cartridges\)](#) □
- Biogreen Promax™ (for plastic cups)

Society

The Asahi Kasei Group aims to be a corporate entity that contributes to sustainable society in harmony with the community by taking social issues into consideration and striving for fair information disclosure.



> Quality Assurance

We deliver safe and reliable products and services to our customers and strive for genuine communication with them.



> CSR Procurement

We work to promote CSR in partnership with our suppliers through fair and transparent business activities that take account of environmental issues and human rights.



> Human Resources

We respect each and every employee and aim to create a rewarding and vibrant workplace.



> Human Rights

We respect the human rights of all people involved in the business activities of the Asahi Kasei Group, and encourage each and every one of them to achieve their full potential.



> Health & Productivity Management and Occupational Health & Safety

We engage in diverse activities based on an occupational safety management system to achieve employee health and safety in the workplace.



> Process Safety

We continually make voluntary efforts to ensure operational safety in accordance with our Basic Policy on Safe Operation.



> Social Activities

We aim to contribute to community development through proactive communication with everyone in the local community and a diverse community fellowship program all around Japan.

Quality Assurance

Policy

Products and services provided by the Asahi Kasei Group internally and externally include materials, products, installations, various services, and after-sales support. We believe that providing safe and reliable products and services that satisfy our customers is our ultimate mission.

In 2016, we established the Asahi Kasei Group Quality Policy and Group Quality Assurance Bylaws. Based on these, we promote quality assurance to provide products and services that satisfy our customers and society.

As we enter an era of coexistence with the coronavirus and the post-coronavirus era, we have changed the Asahi Kasei Group Quality Policy on August 1, 2020, to reflect our strong awareness of the need to regard discontinuous and irreversible structural changes as opportunities for reform and to act on our own initiative.

Asahi Kasei Group Quality Policy

The Asahi Kasei Group flexibly anticipates the constantly changing needs of customers and society to create and provide products and services with quality that ensures safety and security.

Management framework

In April 2019, we appointed a dedicated Executive Officer for Quality Assurance to further reinforce the management framework. The Corporate Quality Assurance department of Asahi Kasei Corporation oversees and coordinates Group-wide quality assurance activities.

Corporate Quality Assurance consists of three groups: the Quality Assurance Group, which supports the enhancement of each internal organization's quality assurance activities; the Product Safety Group, which functions to ensure our product safety as a comprehensive chemical manufacturer; and the Quality Assurance Planning Group, which proposes new plans and provides smooth connections between internal and external organizations. Corporate Quality Assurance performs a head-office function as a hub for the Group's quality assurance framework and strives every day to reinforce quality assurance activities throughout the Asahi Kasei Group to deliver safe and reliable products and services to our customers and society.

Corporate Quality Assurance prepares a Monthly Quality Assurance Report, based on which the Executive for ESH & QA and the Executive for Quality Assurance hold monthly quality assurance meetings to discuss information related to quality assurance.

Each core operating company and strategic business unit within the Group performs quality assurance in accordance with the products and services provided in each business area in conformity with uniform Group guidelines and bylaws.

The Group Quality Assurance Bylaws stipulate quality assurance activities for ESH & QA Administrators, such as the Presidents of the core operating companies and strategic business units, to lead. The bylaws also define the designation and roles of Quality Assurance Managers who play a central role in activities to enhance quality assurance. The Quality Assurance Managers' Conference is held four times a year to transmit and share information among the entire Asahi Kasei Group. In addition, from fiscal 2019, we have started to provide an opportunity for the Executive Officer for Quality Assurance and the Senior General Manager of Corporate Quality Assurance to meet directly with ESH & QA Administrators, Quality Assurance Managers, and others to discuss

the enhancement of quality assurance and to exchange frank opinions through face-to-face meetings, thereby creating an environment that enables us to build a reliable quality assurance system.



Diagram of quality assurance framework

Quality Assurance Meeting (held each month):

Based on the Monthly Quality Assurance Report prepared by Corporate Quality Assurance, the Executive Officer for ESH & QA, the Executive Officer for Quality Assurance, and the Senior General Manager of Corporate Quality Assurance hold the Quality Assurance Meeting to discuss information related to quality assurance.

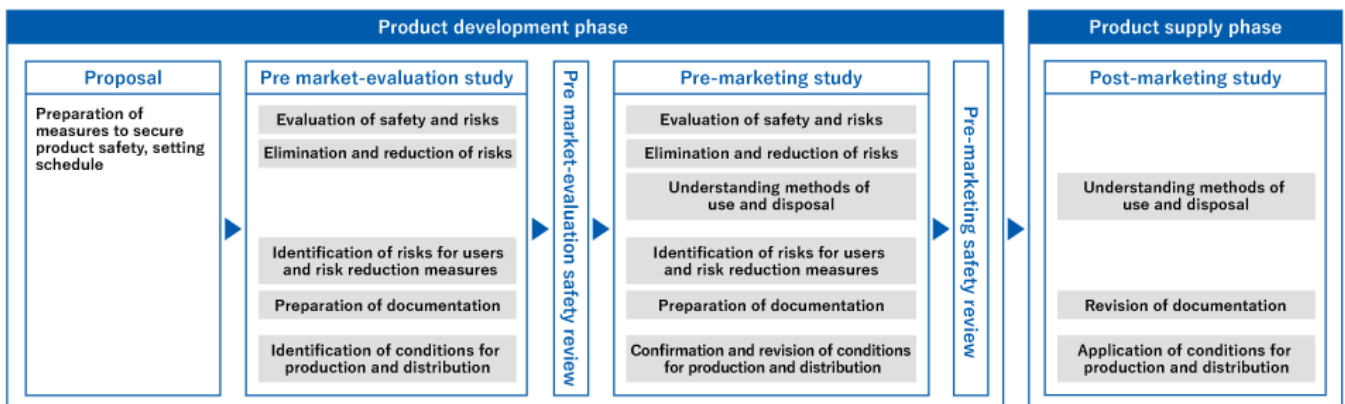
Quality Assurance Managers' Conference (held four times a year):

Quality Assurance Managers, who play a central role in strengthening quality assurance, meet to transmit and share information among the entire Asahi Kasei Group.

Product safety initiatives

The Asahi Kasei Group has also formulated the Group Guidelines for Product Safety Measures in order to make the approach to product safety in the Group Quality Assurance Bylaws even more specific.

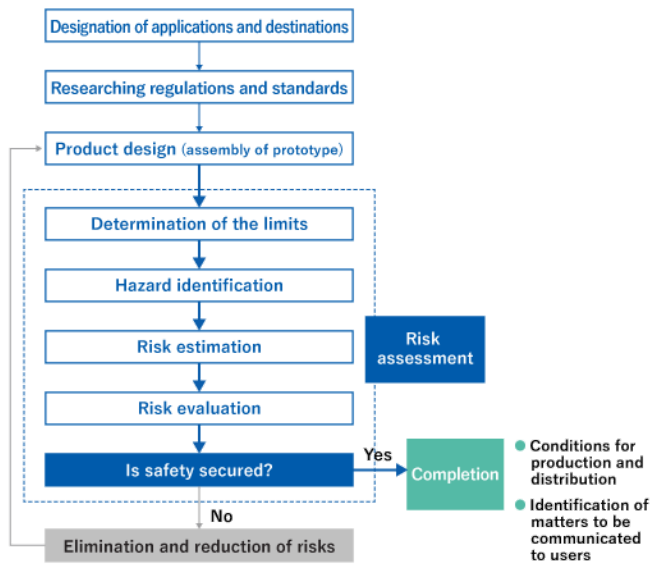
Product safety measures are implemented at each stage of product development and product supply, to ensure product safety and to prevent product problems and complaints from emerging. In addition, we have also established appropriate measures to be taken if a serious product problem or serious accident is likely to occur or if it does occur.



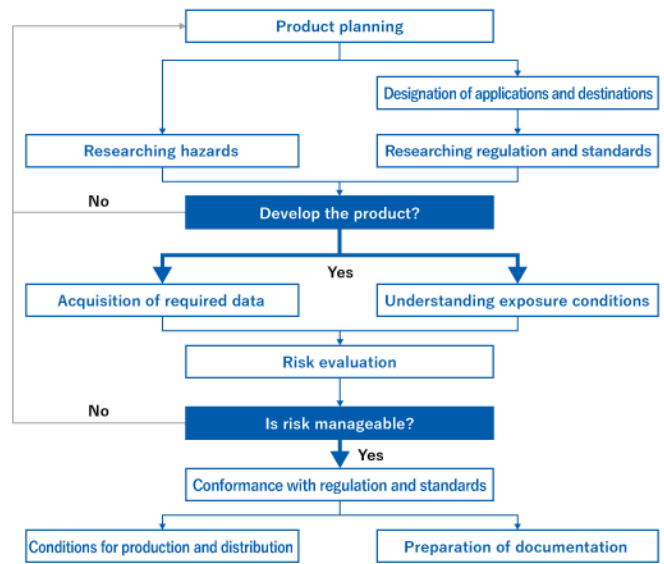
Flow of product safety measures

Safety assurance procedures

The procedures for realizing safe products and services are specified by the Guidelines for Ensuring Safety of Equipment and the Guidelines for Ensuring Safety of Chemicals.



Product safety procedure for equipment

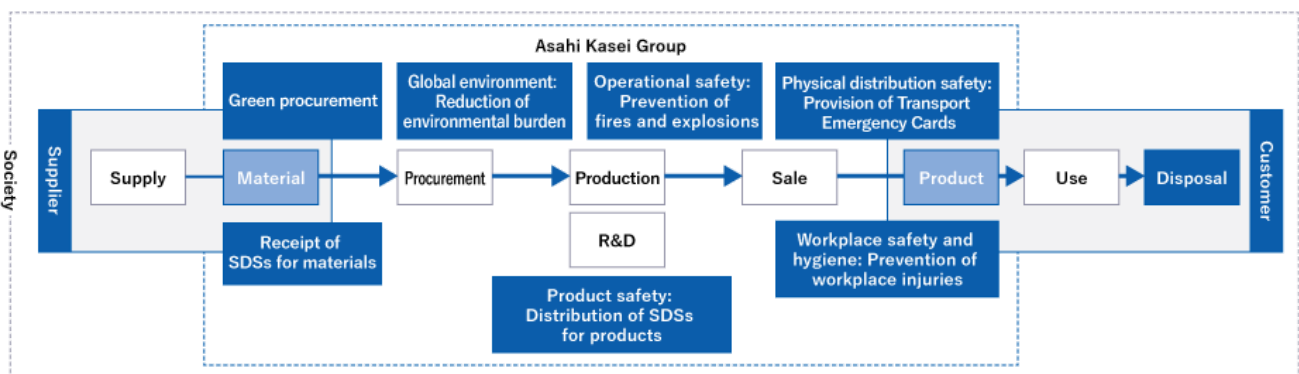


Product safety procedure for chemicals

Chemical substance management

The Asahi Kasei Group identifies the properties of chemical substances and appropriately manages each process from product development, raw material procurement, and production (including intermediates) through to use and disposal in order to ensure the safety of products and production processes. We implement the chemical substance management shown in the diagram below at each stage from the perspectives of the global environment, operational safety, workplace safety, hygiene, and health, and quality assurance (product safety).

Corporate Quality Assurance (Product Safety Group) serves as the secretariat for the implementation of chemical substance management in each business unit led by the Group's Quality Assurance Managers.



Note: SDS stands for Safety Data Sheet.

Chemical substance management flow

Research and development

The management of chemical substances begins in the R&D stage when the applications for chemical substances are determined, and is guided throughout every stage by a commitment to developing products and process characterized by safe, environmentally sound production, handling, and use. For products that are expected to be exported to other countries in the future in addition to being sold domestically, we conduct research on each country's laws and regulations and consider the requisite measures.

Materials purchase

When purchasing materials, information related to the safety of chemical substances is received from the supplier. This information serves as a guide to safe storage and handling.

Production

At the production stage, we manage chemical substances, including intermediates, in an appropriate manner to suppress emissions into the environment. We also strive to prevent fires, explosions, and leaks at facilities where chemical substances are handled to ensure the safety of local communities and preserve the global environment. The health of employees is protected by performing sound risk assessment for chemical substances and preventing workplace exposure to hazardous substances.

Sale, use, and disposal

Guidance for proper use and disposal of chemical substances and chemical products is provided in Safety Data Sheets (SDSs), technical bulletins, and product brochures.

Transport Emergency Cards are issued to guide the proper environmental and safety response in the event of an accident during physical distribution. Moreover, when products are exported outside of Japan, we take appropriate measures to comply with laws and regulations, such as complying with the EU REACH regulation.

Quality assurance and human resources development

Development of core human resources for quality assurance

We have held the Quality Assurance Forum since fiscal 2017 to continue heightening awareness of quality assurance among younger and mid-level employees across the Group. In fiscal 2021, 55 employees selected from throughout the Asahi Kasei Group gathered at the head office once per month for a period of six months for a group discussion on a certain subject each time, combined with lectures on each subject by outside experts (mainly university professors at the forefront of the Japanese Society for Quality Control). At the final session, participants in each business sector discuss issues in their own organizations based on what they learned, and prepare proposals to present to management.

In fiscal 2022, we are continuing this as a key project for in-house quality assurance training.

Fostering a quality assurance mindset among department and group managers

In fiscal 2021, we held a Quality Management Seminar for Managers and General Managers, inviting lecturers with extensive management experience in quality assurance to further deepen the understanding of the importance of quality assurance for department and group managers. In addition, a Quality Assurance Seminar for Managers was held to enhance on-site manufacturing.

Quality assurance training for department and group managers is slated to continue in fiscal 2022 and beyond.

Fostering a quality assurance mindset among all employees

Coinciding with Quality Month in November 2021, the President, the presidents of core operating companies, the president of each SBU, and the Senior General Manager of Corporate Quality Assurance issued messages for all Group employees about the importance of quality assurance. Training via e-learning was conducted as well, further raising awareness on the subject for employees. This is slated to continue in 2022 and beyond as well.

Chemical substance management training

We provide regular training to research, production, and sales staff in each area of the Asahi Kasei Group. Such training includes sharing the most up-to-date information on the latest domestic chemical substance-related laws and regulations (Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc., Industrial Safety and Health Act, Poisonous and Deleterious Substances Control Act, etc.) in Japan and overseas for the management of chemical substances and consideration of responses, and presentations of the latest themes in chemical substance management.

Appropriate labeling and information provision

Providing appropriate information to our customers

The Asahi Kasei Group, which provides customers with products and services that are end products for domestic and household-use products, provides information that includes product performance, precautions, and suggested usage to ensure safe use of our products and services.

We endeavor to provide descriptions of products and services to customers, including product labeling and advertisements, that are easy to understand and not misleading. In addition, we confirm the content of descriptions and advertisements of products and services at each stage from product development and introduction to sale, and continuously check that there is no infringement of related laws, regulations, or voluntary industry standards, and confirm that customers are able to properly use products and services safely and reliably.

Compliance with the revised Food Sanitation Act

In June 2020, the revised Food Sanitation Law came into effect, and a new positive list (below “PL”) system was introduced. The Group participates in a number of committees of the JCII (Japan Chemical Innovation and Inspection Institute) Food Contact Material Safety Center, and it is continuing its activities to ensure that nothing is overlooked in the PL system and to provide customers with appropriate information related to the PL system.

Responding to Globally Harmonized System (GHS)

Globally Harmonized System of Classification and Labelling of Chemicals (GHS) is a system for classifying and labelling chemicals in accordance with globally unified rules in order to help with accident prevention and health and environmental protection. The Asahi Kasei Group is advancing a program to classify the hazards of all of our chemical products in accordance with GHS categories, and revise our SDSs and label our products with safety information accordingly.

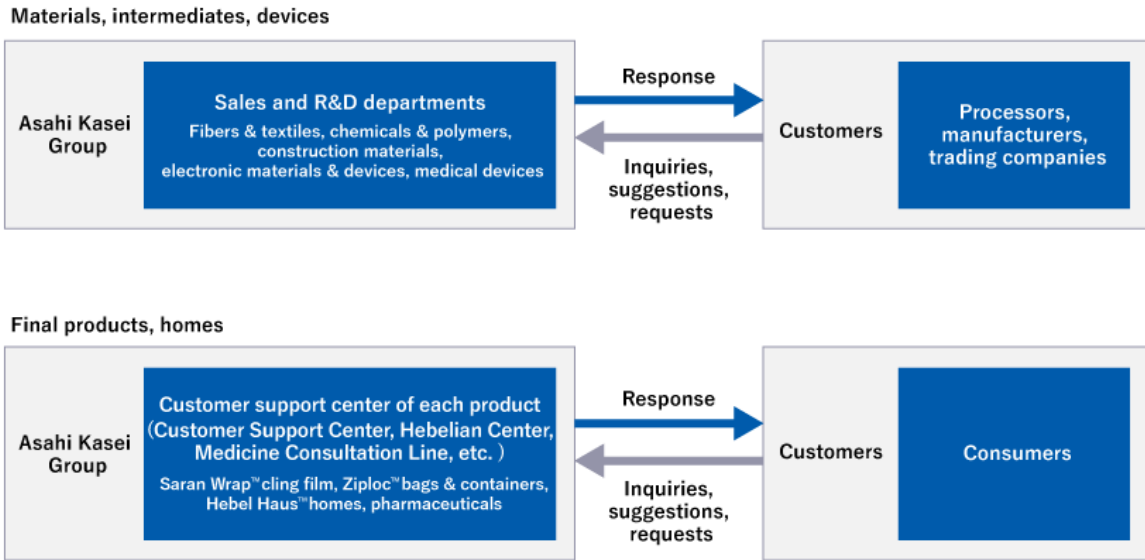
Compliance with chemical substance regulations around the world and sharing of information

As laws and regulations concerning chemical substances continue to be adopted around the world, such as the REACH Regulation¹ in the EU, we have been confirming, responding, and managing within the company to ensure compliance with them. In addition, some of these regulations require the sharing of information. Besides providing the necessary information to our customers, we actively work to provide information on chemical substances contained in products throughout the supply chain. One of our activities is participating in the Joint Article Management Promotion-consortium (JAMP) as an upstream company since its establishment in 2008. We continue to promote the use of chemSHERPA, a communication tool, as part of JAMP’s activities.

¹ Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) is a regulation in Europe on chemical substances. It obliges registration of the usage and safety of chemical substances imported to or produced in Europe. Substances judged to pose high risks are subject to authorization and restriction.

Mechanisms to utilize customer feedback

We believe satisfying customers and providing products and services that are a delight to use translates into contribution to society. In order to achieve this, we believe that it is most important to identify true needs by listening carefully to customer feedback to establish two-way communication. The Asahi Kasei Group has built frameworks for such communication with customers in each of our businesses and strives to listen to frank and honest feedback.



Communication with customers

- › Product and business inquiries

CSR Procurement

Policy

It is the policy of the Asahi Kasei Group to consider suppliers as important partners and to treat them with sincerity.

Our Mission and Vision for procurement are an expression of our ideals to apply in daily activities as we work to uphold our Procurement Policy and promote procurement practices with an emphasis on CSR.

Accordingly, we consider suppliers from environmental aspects including energy use, climate change, biodiversity, pollution, waste, and resource use, and social aspects including discrimination, equal opportunity, freedom of association, and compliance with local laws concerning working hours and wages. A relationship of mutual trust with our suppliers is fostered through fair and transparent purchasing practices based on regulatory compliance and respect for the environment and human rights.

Procurement Principles

Mission

Achieve trustworthy procurement that contributes to the sustainability of society and the sustainable growth of corporate value

Vision

Building a sustainable supply chain for the Asahi Kasei Group

Basic Policy

- 1. Compliance** We uphold all laws relevant to purchasing transactions as well as the Asahi Kasei Group's internal regulations.
- 2. Fairness and impartiality** Selection of bids and conclusion of contracts are performed in a fair and impartial manner.
- 3. Open door principle** We provide fair opportunities to any potential supplier, both domestic and overseas.
- 4. CSR-focused procurement** We perform purchasing in close coordination with our group-wide activities for CSR.
- 5. Partnership** We strive to deepen mutual understanding and build relationships of trust with suppliers.

The Asahi Kasei Group Procurement Principles

Formulation of Supplier Guidelines

We conduct business activities in various countries and regions around the world, and are expected to address social issues to achieve a sustainable society, including measures against climate change and respect for human rights, not only within the Asahi Kasei Group but throughout the entire supply chain as well.

For this reason, in 2021 we formulated our Supplier Guidelines as a tool for promoting CSR procurement based on our Procurement Policy. In order for our suppliers to understand our policies, we have made our Procurement Policy and Supplier Guidelines available on the website, and strive to publicize our issuance of CSR procurement questionnaires. We will also monitor compliance through CSR assessments of our suppliers and cooperate to improve our management.

➤ [Supplier Guidelines](#)  (92.2KB)

Management framework

Corporate Procurement & Logistics is responsible for the Asahi Kasei Group Procurement Policy, and the department cooperates with the Sustainability Strategy Planning Department to familiarize Group company personnel with the content. As part of our supply chain management, we use the latest version of the UN Global Compact's CSR/Sustainable Procurement Self-assessment Tool Set and disclose information in accordance with global standards.

Raising awareness of Procurement Policy and Supplier Guidelines among suppliers

To ensure that suppliers (buyers, etc.) are familiar with our Procurement Policy and Supplier Guidelines, we strive to raise awareness by disclosing them on the website and asking them to complete our CSR procurement questionnaires. We are currently considering participation in supply chain-related initiatives and organizations.

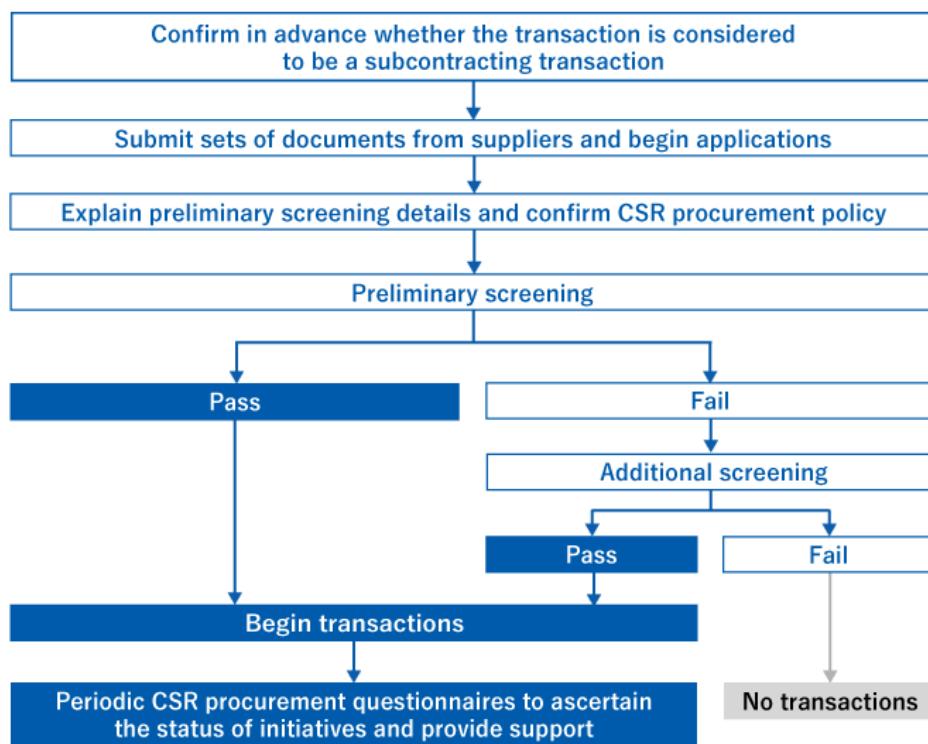
Evaluation of CSR at suppliers

The Asahi Kasei Group is working with its suppliers to promote CSR procurement with the aim of constructing a sustainable supply chain.

We conduct supplier surveys as part of our CSR procurement from two perspectives, 1) evaluation at the commencement of new transactions and 2) ongoing evaluation of suppliers.

Approach to new suppliers

Before commencing transactions with a new company, we conduct an evaluation which includes CSR through preliminary screening based on our Procurement Policy.



Process flow for new suppliers


If significant problems are detected during the preliminary screening, we encourage suppliers to make improvements as soon as possible. If subsequent screenings do not confirm that the issues have not been rectified, business dealings may not be possible.

Approach to ongoing suppliers

To encourage our ongoing suppliers to perform their business activities in line with CSR, we ask our major suppliers to complete a CSR procurement questionnaire in order to understand the status of CSR initiatives across the entire supply chain. In this way, we aim to improve the level of CSR by cooperating with our suppliers, and to avoid environmental and social risks in the supply chain.

Question categories

1. Corporate governance related to CSR
2. Human rights
3. Labor
4. Environment
5. Fair corporate activities (ethics and compliance)
6. Product safety and quality assurance
7. Information security
8. Supply chain
9. Harmony with the local community

➤ [FY2021 CSR Procurement Questionnaire](#)  (1.1MB)

FY2021 CSR Procurement Questionnaire Results

In fiscal 2021, we asked 105 of our major suppliers that had taken the survey in the past to complete the survey. Including overseas suppliers, we received responses from 101 suppliers.

Results of responses to our CSR Procurement Questionnaire

Rating	Fiscal 2019 (Raw material suppliers)	Fiscal 2020 (Material suppliers)	Fiscal 2021 (Raw material suppliers)
A	54 (68%)	77 (41%)	79 (78%)
B	15 (19%)	67 (36%)	17 (17%)
C	6 (8%)	31 (17%)	3 (3%)
D	5 (6%)	12 (6%)	2 (2%)
Total	80	187	101

By category, results for Information Security, Labor, and Fair Corporate Activities were high, while results for Supply Chain and Harmony with the Local Community were relatively low.



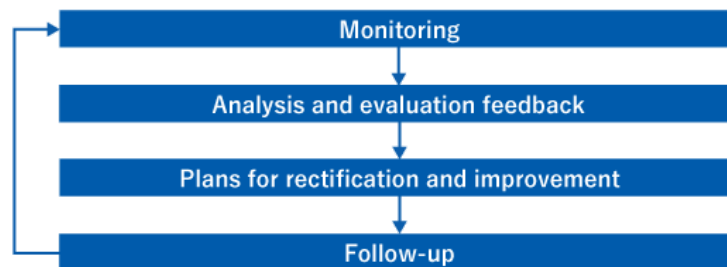
Results of CSR Procurement Questionnaire (FY2021)

We actually visited several of our suppliers who received a D rating in the previous survey, or had them visit us, to 1) explain the content and purpose of the survey and 2) support them in making improvements in accordance with their circumstances, which resulted in an improved rating at those suppliers in the fiscal 2021 survey. We will continue to communicate with them in the future. For suppliers ranked C and D in this questionnaire, we individually evaluated and analyzed all responses and risks to the supply chain, and are communicating with them as needed to regarding improvements based on our Group’s feedback.

In fiscal 2021, we provided guidance to five suppliers identified as at-risk in the previous year to help them address their issues, and conducted on-site evaluations of three suppliers. In total, we conducted assessments of approximately 10 suppliers over a two-year period.

If significant problems are detected during the screening, we hold discussions and such with suppliers as appropriate and encourage them to make improvements as soon as possible. If follow-up screenings do not confirm that the issues have been rectified, we will consider halting or reviewing business dealings.

In fiscal 2021, there were no suppliers where significant issues were detected.



Process flow for ongoing suppliers

Supplier environmental certification

In the questionnaire, we also surveyed the status of environmental management systems by acquiring a third-party certification system such as the international standard ISO 14001. We have currently confirmed that about 80% of our major suppliers (101 companies in total) have systems and mechanisms in place to promote environmental protection.

Training for Employees

To promote CSR procurement, Corporate Procurement & Logistics has been providing ongoing training to employees in procurement-related departments about CSR procurement in cooperation with the Sustainability Promotion Department and the procurement departments at subsidiaries and affiliates. In fiscal 2021, we conducted online training activities not only for the procurement division at our headquarters, but also for each region despite the COVID-19 pandemic.

The training details, trainees, and number of participants are as follows.

Training	Content	Summary of Training
Procurement Personnel Training (1)	Explanation of the importance of CSR Procurement	Target: Personnel in charge of raw materials, personnel in charge of materials Frequency: Four lectures
Procurement Personnel Training (2)	Explanations related to carbon neutrality from domestic and international perspectives	Target: Personnel in charge of raw materials Frequency: Two lectures
Lecture on Addressing Medium- and Long-term Issues (1)	The direction of major sustainability initiatives in business units	Target: Personnel in charge of raw materials, personnel in charge of materials Frequency: Two lectures
Lecture on Addressing Medium- and Long-term Issues (2)	Initiatives for carbon footprint of products	Target: Personnel in charge of raw materials Frequency: Three lectures
Personnel Training	Training on the Act against Delay in Payment of Subcontract Proceeds, etc. to Subcontractors	Target: Personnel in charge of raw materials, personnel in charge of materials Frequency: One lecture (e-learning)

Communication with stakeholders

Safety seminars are periodically held at our principal production sites to discuss accident prevention and exchange information with suppliers.

We also actively engage in close communication with our suppliers by actually visiting them or having them visit our offices to inform them about sustainability-related trends and promotional activities, as well as to exchange views. We will continue to enhance mutual communication going forward.

The Asahi Kasei Group compliance hotline also accepts reports and inquiries from suppliers.

Response to conflict minerals

It is a global trend that more and more countries are banning the procurement of minerals from inhumane armed groups, particularly in the Democratic Republic of the Congo and neighboring countries. In the US, this is required by the Dodd-Frank Act of 2010.

The Asahi Kasei Group considers conflict minerals to be a serious issue, and our policy is to ensure transparency in our supply chains and to procure minerals responsibly. We do not obtain, procure, or utilize minerals from armed groups, and avoid supporting conflict and inhumane activities.

Human Resources

Approach to human resources and employment

Human resources development and active engagement

Diversity

Basic policy regarding labor issues

The Asahi Kasei Group believes that all of the human resources working at the Group are the source of new value creation based on their diversity and capability to change.

As a signatory to the UN Global Compact, the Asahi Kasei Group supports and respects the labor-related principles set forth therein. We also endorse the United Nations Guiding Principles on Business and Human Rights and the Children's Rights and Business Principles, and we will use these frameworks to grasp and appropriately address labor issues in our business. The United Nations Global Compact stipulates the following labor principles.

- Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining
- Businesses should uphold the elimination of all forms of forced and compulsory labor
- Businesses should uphold the effective abolition of child labor
- Businesses should uphold the elimination of discrimination in respect of employment and occupation

Furthermore, the Asahi Kasei Group Code of Conduct clearly states that the Group, as well as its suppliers, does not allow inhumane practices such as child and forced labor, prohibits discrimination for any reason including employment status, respects human rights and diversity, and carries out its business with sincerity and a sense of responsibility.

Based on the above approach, we will not only comply with domestic and international labor laws and regulations on the following labor issues, but also strive to create a work environment where employees can reach their maximum abilities while working with safety and peace of mind.

- Prevention of child and forced labor
- Reduction of excessive working hours
- Formulation of working conditions based on consultation between labor and management
We will maintain a certain standard of living for our employees through compliance with locally stipulated minimum wages and the payment of fair wages.
- Guarantee of freedom of association and collective bargaining rights
We guarantee the freedom of association and collective bargaining rights for the employees we hire.

The Group's working conditions are formulated and implemented based on consultation and agreement between labor and management.

Management framework

General Affairs and the Human Resources and Organizational Development Group at Human Resources oversee initiatives related to personnel and labor management and human resource development. Each Group company operates its own personnel system and strives for human resource development. The Group-wide status is confirmed through regular audits to ensure there are no violations of laws and regulations or improprieties.

Initiatives for compliance with labor standards and work style reform

Consultation between labor and management regarding labor standards

We strive to ensure legal compliance through such means as sharing information on topic and amendments to labor-related laws with Group companies in order to ensure Group-wide legal compliance.

In fiscal 2017, our Group also established an expert committee for the labor union and company to examine work style reform, and measures such as a telecommuting system have been implemented.

Moreover, we have promoted the use of annual leave days to reduce working hours. In addition to this, we monitor workplaces that have comparatively long working hours with the aim of preventing excessive working hours at the level of each organization.

Specific work style reform initiatives (adopted in fiscal 2019)

- Work from home program
- Availability of paid annual leave in one-hour units
- Increase in number of annual leave days by one day, etc.

Promoting diverse work styles (July 2022 onward)

In response to the COVID-19 pandemic, we temporarily expanded the work from home program and other provisions, but this was changed from a temporary measure to a permanent system starting July 2022. In addition, we introduced work-from-home assistance. Specifics are as follows:

Work from home program	Eliminated limit on number of times the program can be used
	Expanded eligibility for new employees, etc.
	Introduced work-from-home allowance
Flexible work hours without core hours	Systematized concept of “interval” between working hours and applied to eligible employees

In fiscal 2021, there was one violation of the Labor Standards Law. The amount of overtime and holiday work exceeded the monthly limit (80 hours).

Immediately after the violation occurred, the labor union and human resources held a hearing with the supervisor of the organization in question to confirm the cause of the violation and the organization’s measures to prevent any recurrences. In addition to the workload being adjusted and the workplace support system being reviewed, compliance training was conducted to raise awareness. Moreover, the Human Resources Department shared the case with other organizations, alerted the entire company, and conducted work-time management training in the affected area. To further strengthen company-wide management of working hours, we plan to provide e-learning focused on work-time management.

Improving Employee Work Engagement

We aim to create an organization that can enhance vitality and spur the growth of both individuals and the organization. In fiscal 2020, our Group reviewed the content of our existing employee awareness survey and introduced KSA (Vitality and Growth Assessment), a new survey that aims to confirm work engagement and behaviors conducive to growth. The survey is provided once a year to all employees in Japan, and the report is provided to line managers as a reference for understanding the current state of their organizations. We also promote activities aimed at creating a better workplace through dialogue with employees. At the same time, we conduct stress checks to identify health risks and create an environment in which each employee can achieve sustainable growth while maintaining good physical and mental health.

In addition, the Group as a whole is also working to promote diversity in work styles, expand the Group Masters system to recognize employees with high levels of expertise, and cultivate the next generation of leaders. We aim to be a company where a diverse array of human resources can take on challenges, play active roles, and develop even in a time of rapid change.

➤ Group Masters

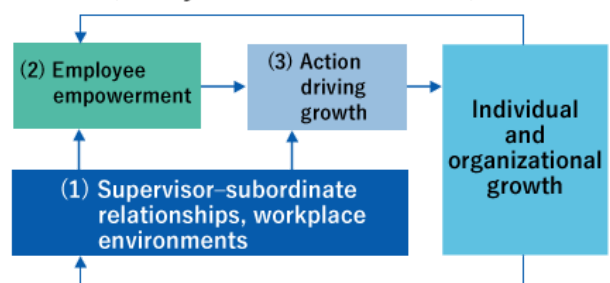
Overview of KSA (Vitality and Growth Assessment)

KSA is based on the Vitality and Growth Environment Model in Organizational Behavior by Professor Hirakimoto of Osaka University, and assesses the state of individuals and organizations in terms of three indicators (1) supervisor-subordinate relationship, workplace environments (2) employee empowerment (3) action driving growth.

By assessing the level of impact of those three indicators, it can:

- Clarify the effects of initiatives taken so far
- Indicate the current state of the organization to guide next steps.

The KSA (Vitality and Growth Assessment) Structure



Items measurable by KSA (Vitality and Growth Assessment)

(1) Supervisor-subordinate relationships, workplace environments (organizational resources)

- Supervisor encouragement
- Interpersonal relationships supporting work
- Inspiring ingenuity
- Respecting diversity
- Encouraging frank discussion

(2) Employee empowerment

- Ability to maintain a positive outlook (individual capabilities)
 - Self confidence, self actualization
 - Ability to overcome adversity
 - Ability to set a path toward a goal
 - Optimism
- Work engagement

(3) Action driving growth

- Experiential learning behavior
- Contribution to the organization
- Problem solving, making improvements
- Job crafting

Reference: KSA Index "Behavior Leading to Growth" Average

FY2020	FY2021
3.65	3.69

Note: Answers on a scale of 1 to 5.

These figures are disclosed internally and externally in the Medium-term Management Plan.

Communication between management and labor

The Asahi Kasei Group supports employees' freedom of association and right to collective bargaining and strives to maintain a constructive partnership between management and labor.

Discussions on the overall management of the Asahi Kasei Group are held on a regular basis between the management of Asahi Kasei Corp. and the labor union, and separate discussions are periodically held at each business unit and operating site. In addition, regular meetings with the federation of labor unions are held to provide the venue to enhance open communication between management and labor.

We have concluded a union shop agreement with the Asahi Kasei Labor Union (an agreement under which all employees, except managers and supervisors, are members of the union), and the union has 9,693 members (as of June 1, 2022).

Creating Regional Employment

In the regions where our Group's businesses operate, we will contribute to local communities through employment and procurement activities in those communities.

Human Resources

Approach to human resources and employment

Human resources development and active engagement

Diversity

Policy

Our human resources policies are focused on the maintenance and reinforcement of a corporate culture emphasizing our characteristics, the personal growth of each employee, and the creation and expansion of business through superior people and organizations, based on the understanding that the source of our competitive strength is the exceptional power of our people and organizations.

The Human Resources Principles established in March 2006 outlines the values and behavioral guidelines that should be shared by each employee. By ensuring that our employees act in accordance with these principles, we aim to establish it as part of our corporate culture and achieve both growth for each and every employee and development for our Group.

Human Resources Principles

Corporate Commitment

The basic commitment to human resources is to provide the venue for a dynamic and fulfilling career as a part of a lively and growing corporate group.

Basic Expectations

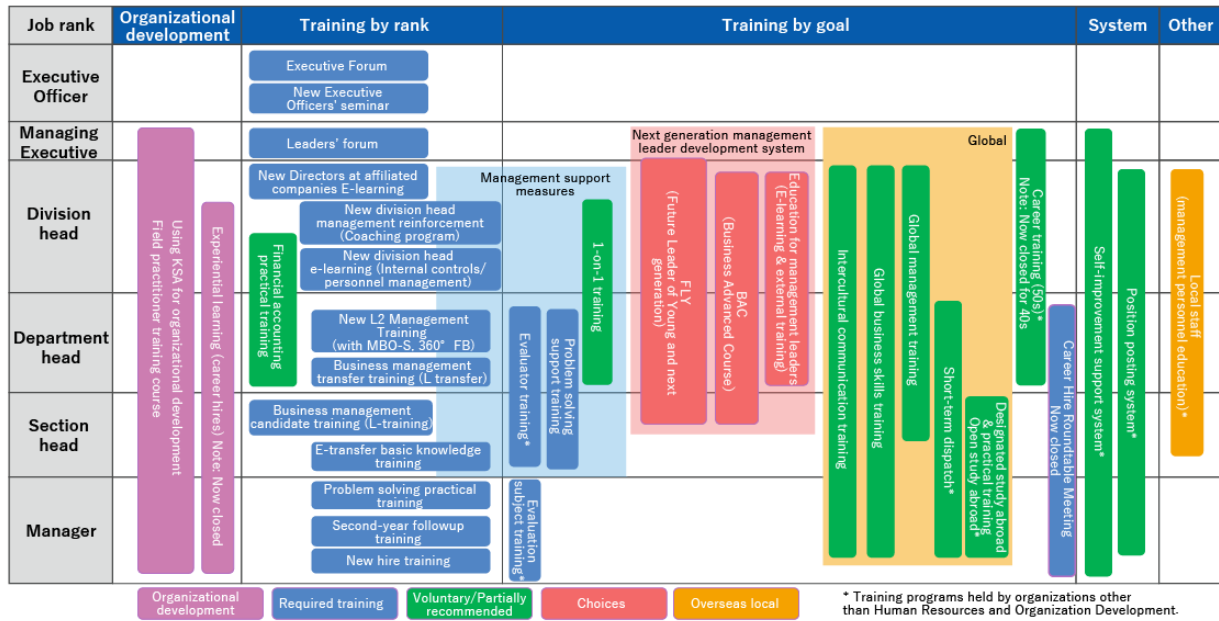
- Enterprise and growth through challenge and change
- Integrity and responsibility in action
- Respect for diversity

Expectations of Leaders

- Building the team, heightening performance and achievement
- Going beyond conventional boundaries, in thought and action
- Contributing to mutual development and growth

In accordance with these principles, our human resources development is focused on the mutual growth of individuals and organizations. As part of the medium-term plan beginning in fiscal 2019, efforts for human resources are focused on the growth of management and leaders, growth of professional groups and line managers who manage them, and growth of global personnel.

Diagram of human resources development system in fiscal 2021



➢ Human resource training-related data

Creating a foundation for a diverse array of individuals to play an active role

Based on the idea that everything starts with people, our Group has been working to develop our human resources infrastructure and implementing a variety of measures. In addition, we aim to improve the well-being and job satisfaction of our employees and the competitiveness of our Group by achieving independent career development and growth, improving management skills to help individuals and teams realize their strengths, and utilizing joint creativity that makes the most of diversity.

In this era of rapid change, it is important for employees from all generations, from the youngest to the most experienced, to continue to develop their expertise and grow. We will take concrete measures to achieve lifelong growth going forward.



Development of human resource infrastructure

Human resource development

A wide range of training programs

We utilize a combination of training based on job level and purpose to help employees develop their skills and perform their duties, improve their fundamental skills as they proceed with their work, develop personnel who can work globally, support line management, and develop next-generation management leaders.

Starting fiscal 2020, we are also taking a proactive approach to implementing digital learning, and we are working to develop an effective training system and curriculum that will allow employees to take advantage of high-quality learning opportunities on their own, regardless of their work location or work hours.

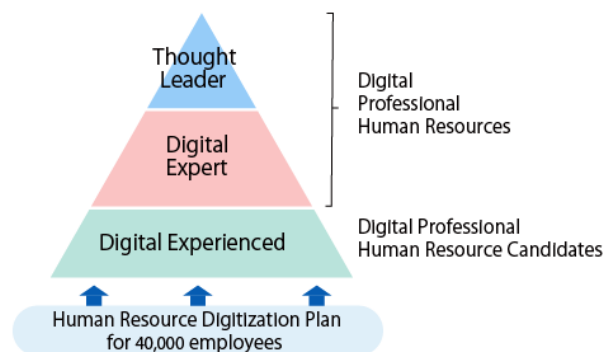
Reference: Our Group's investment in training per employee (actual)

	FY2019	FY2020	FY2021
Investment in training (total)	2,053,238 (thousand yen)	756,367 (thousand yen)	1,419,710 (thousand yen)
Investment in training (per employee)	116.0 (thousand yen)	42.5 (thousand yen)	80.0 (thousand yen)
Time invested in training (per employee)	—	21.5 (hours)	22.3 (hours)

Developing digital human resources to promote Digital Transformation (DX)

In 2021, the Group formulated DX Vision 2030 to promote the development of DX as a pillar of its growth strategy. We will strive to achieve a sustainable society a reality by maximizing the benefits of digital technology.

The most important factor in promoting DX is digital human resources. While enhancing DX training by employee level, we are working to increase the number of digital professionals who can promote advanced digitalization to 10 times as many as in fiscal 2021 by the end of fiscal 2024. As part of our DX training for all employees, in April 2021 we launched an internal "Open Badge System" to promote the acquisition of fundamental digital knowledge, and we are also developing a DX training program for business managers.



Group Masters

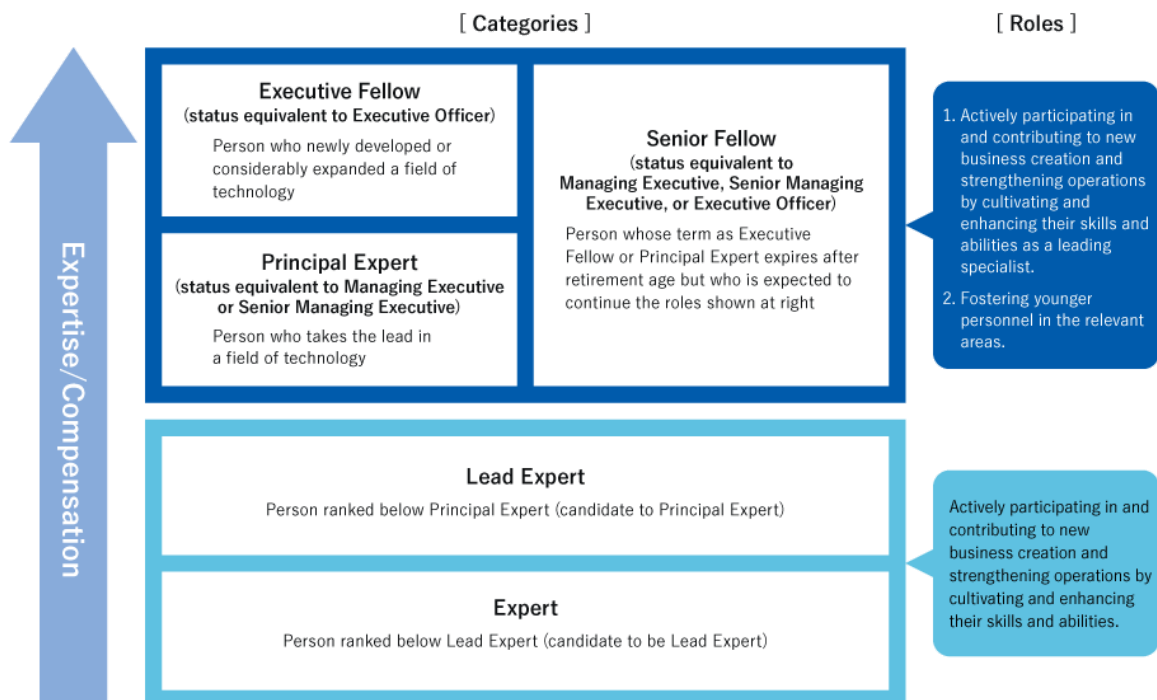
For the Asahi Kasei Group to achieve sustainable growth amid dramatic changes in the business environment, we must seek growth and win in the global market. Human resources hold the key for doing this.

In this situation, our Group employs a "Group Masters" program to broaden the segment of human resources with expertise that holds universal value through the appointment, training, and treatment of human resources expected to be actively involved and participating in creating new business and strengthening existing business as "Group Masters."

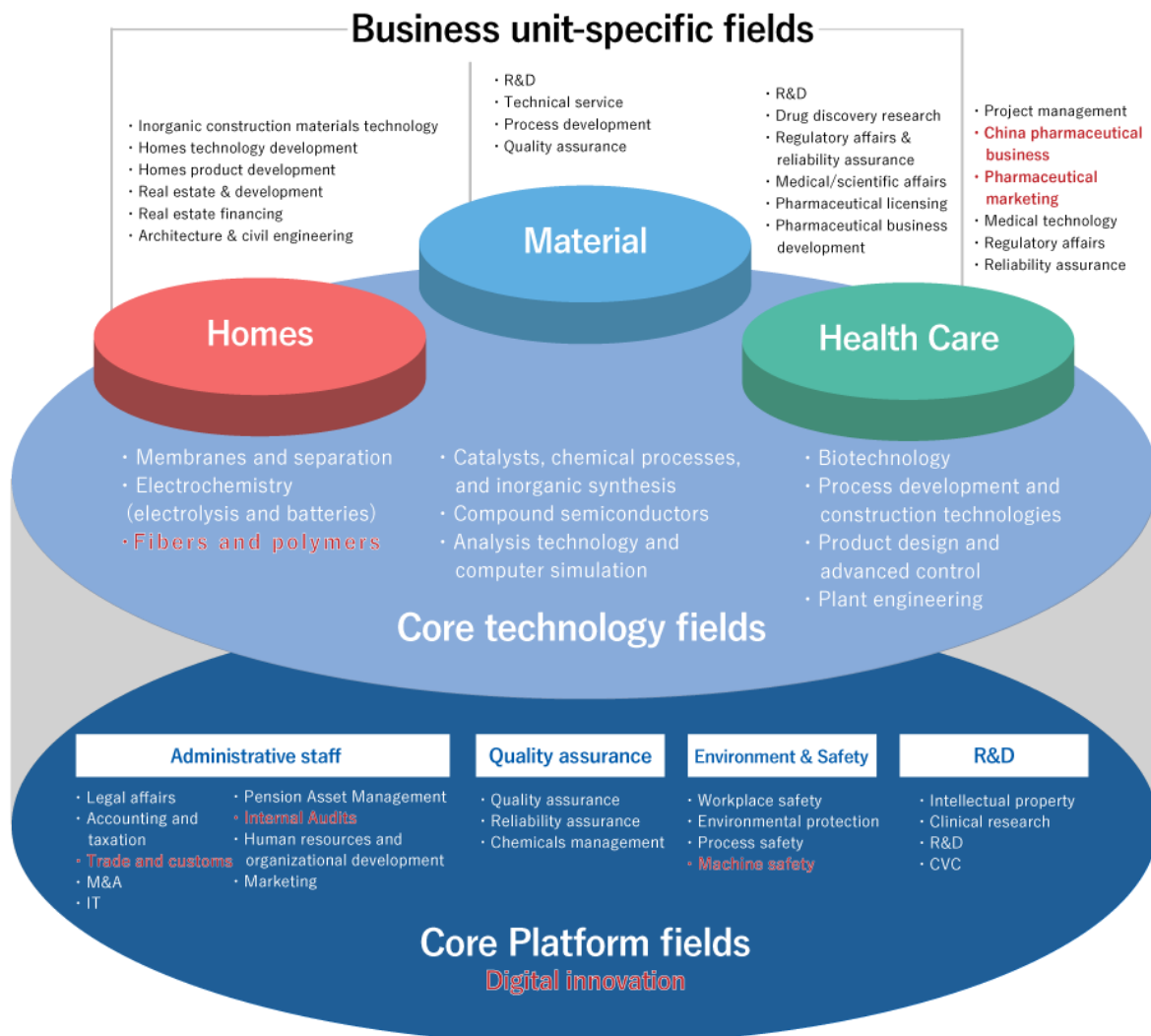
Under the program, we have defined five categories of Group Masters. We have clarified the respective roles of each Group Master category and enhanced treatment to create a mechanism that encourages the growth of human resources while securing outstanding external human resources at the same time.

We have also formulated a succession plan for Group Masters in each field, and have linked the succession plan to business reinforcement and human resource development, which will strengthen our competitive edge.

Categories and roles of Group Masters



Target areas



Changes to the Group Master Specialization Fields in FY2022

Business unit-specific fields

The following fields were newly established at Asahi Kasei Pharma:

1. Pharmaceutical marketing field
2. China pharmaceutical business field

Core technology fields

- Unified the Fibers and Polymers fields into the “Fibers/Polymers” field
- The Digital Innovation field was changed into a Core Platform field

Core Platform fields

The following was newly established in the ESH field:

- Machine safety field

In the administrative staff domain, the following appointments were reviewed:

- Internal audit field
- Trade and customs field

To achieve the objectives of creating new business and expanding our businesses through the Group Masters system, we have been reviewing and enhancing our specialization fields every year in line with our business policy.

In fiscal 2022, in addition to changes in appointment requirements, the following new fields were established, and a review of appointment requirements was conducted.

- To enhance our sustainability-related technologies, we are integrating the previously separate core technology fields of “Fibers” and “Polymers” and will advance our sustainability-related technologies through further connectivity.
- To innovate management in the Group’s digital creation phase, the digital innovation field will be changed from a core technology field to a core platform field, and the scope of digital Group Masters will be expanded to encompass all employees across all job areas, organizations, and regions by accelerating the development and securing of human resources to lead management innovation. This includes improving management, reforming business models, and creating intangible asset value by utilizing digital technology to the fullest.
- In the core platform field of ESH, we established a new "machinery safety" field and adopted requirements for appointment as a Group Master to raise awareness about the concept of machinery risk assessment within the company and eliminate serious accidents through equipment design and improvements.
- In business unit-specific areas, Asahi Kasei Pharma, in the Health Care sector, has actively utilized the Group Masters system to achieve its medium- to long-term strategy. Following the establishment of the Pharmaceutical Licensing field, Pharmaceutical Business Development field, and others in fiscal 2021, the Pharmaceutical Marketing field and China Pharmaceutical Business field were newly established in fiscal 2022.
- In addition to the establishment of these new specialization fields and domains, there were also major changes in appointment requirements in the Internal Audit and Trade & Customs fields.

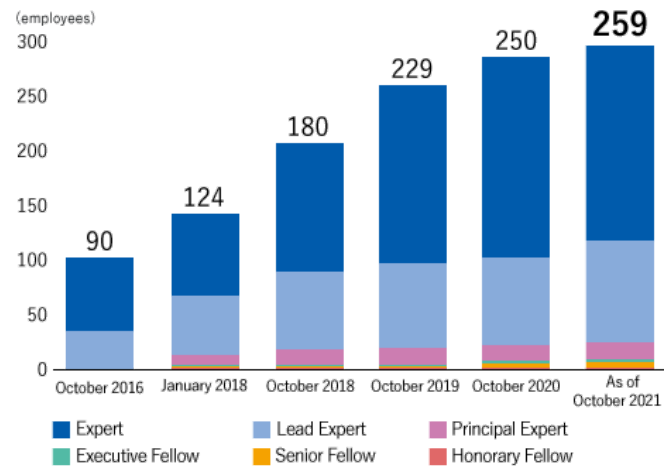
We define fields of technology to be strengthened business-wide as "core technologies" and appoint engineers to lead each core technology field as Group Masters.

As a result of organizing the core technologies, production technologies, know-how, business platforms, diverse market channels and business models, which have been cultivated as the source of the Asahi Kasei Group's competitiveness, we defined the 12 fields below as business-wide core technologies. We will also define the fields and occupational categories to be cultivated internally as experts for business-specific fields and key Group-wide functions (core platform fields) and will appoint human resources to lead those areas as Group Masters.

Core technology fields	Business-specific fields	Core Platform fields
<ol style="list-style-type: none"> 1. Fibers (polymerization, spinning, and cellulose) 2. Membranes and separation 3. Electrochemistry (electrolysis and batteries) 4. Polymers (design, polymerization, processing, and applications) 5. Catalysts, chemical processes, and inorganic synthesis 6. Compound semiconductors 7. Analysis and computer simulation 8. Process development and construction technologies 9. Product design and advanced control 10. Plant engineering 11. Digital innovation 12. Biotechnology <p>Note: Fields confirmed and reviewed as necessary every year</p>	<p>Target fields are defined and Group Masters are appointed for each business in the Material sector (Asahi Kasei Corp. and Asahi Kasei Microdevices Corp.) and Asahi Kasei Pharma Corp., Asahi Kasei Medical Co., Ltd., Asahi Kasei Homes Corp., and Asahi Kasei Construction Materials Corp.</p>	<p>Examples of Target Fields</p> <p>Administration-related: Legal affairs, accounting and tax, trade and customs, internal audits, HR, etc.</p> <p>Technology-related: Intellectual property, environment and safety, quality assurance, IT, etc.</p>

Number of Group Masters and Targets

In the new Medium-term Management Plan that began in 2022, the goal of increasing the number of Group Masters in our Group to 300 total in fiscal 2024 was set forth as a KPI.



Group Master Numbers and Targets

Development of global human resources

To advance the expansion of our global business set forth in the medium-term management plan focused on the theme “Be a Trailblazer” from the perspective of human resources, our Group is implementing an overseas open study program for young employees to challenge themselves to an overseas experience, with the aim of developing human resources with a global perspective. To strengthen our joint development capabilities that take advantage of diversity, we are also working on measures to nurture human resources at overseas subsidiaries. To that end, we are implementing and operating overseas transfers of local employees, a succession plan for overseas posts, measures for raising awareness about our philosophy, intercultural communication training, and management training.

For example, in China, Asahi Kasei (China) Co., Ltd. provides all local subsidiaries of Asahi Kasei in China with open lectures, as well as human resource development programs based on their job function and level.

In the past few years, we have placed particular emphasis on training local employees to become select section chiefs (from fiscal 2017 to 2019) and training executive management candidates for prospective general manager positions and above (from fiscal 2020 to the present). We have been closely monitoring the trends in the Chinese market on an ongoing basis, and we have been promoting measures based on an understanding that localization of management is essential for our company to be able to incorporate these trends.

Supporting independent study

In October 2003, the Asahi Kasei instituted a program to support independent study by employees. To encourage employees to acquire higher level specialized or technological ability, the company will pay part of the cost of attending courses or lectures. In fiscal 2021, a total of 1,109 employees utilized the program.

Human Resources

Approach to human resources and employment

Human resources development and active engagement

Diversity

Policy

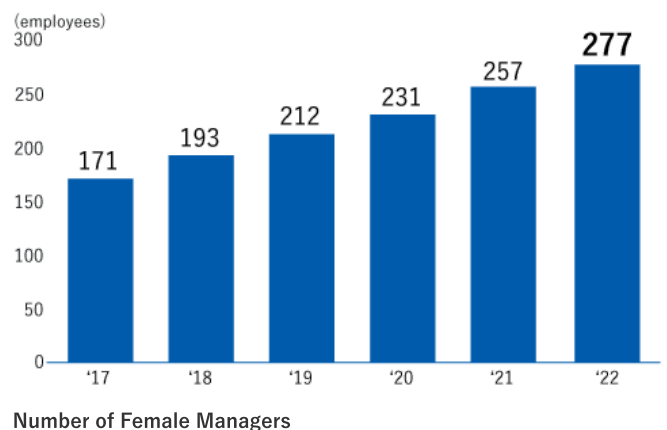
The Asahi Kasei Group Code of Conduct clearly stipulates that "we must respect individuals' basic human rights and diversity, not discriminate on the basis of nationality, ancestry, ethnicity, religion, gender, ideology, age, physical characteristics, sexual orientation and gender identity, employment status, form of contract, etc., nor condone such discrimination" as company policy. We promote the establishment of a lively workplace which ensures equal opportunity and enables all employees to perform at their best without suffering discrimination. We seek to instill our company policy to prevent any discrimination or harassment through training on corporate ethics for employees at each level – new hires, and newly appointed assistant managers and managers. In addition, we implement corporate ethics training by business unit and geographical area.

Management framework

To respond to the rapidly changing business environment and continue creating new value, we recognize that it is essential to enhance our co-creation ability to collaborate on business creation by leveraging the diversity of our human resources. The Diversity Promotion Office, a department dedicated to the promotion of diversity and inclusion (D&I), is playing a central role in these efforts.

Expansion of opportunities for women

Based on the belief that the expansion of opportunities for women is one of the key elements of D&I promotion and that advancing this initiative will ultimately lead to an environment in which a diverse array of human resources can play an active role regardless of gender and other attributes, our Group established a dedicated organization (currently the Diversity Promotion Office) in 1993 to foster an environment in which women can continue working through expanded job opportunities and support measures that help them to balance work and family life. Since the 2010s, we have also provided support for career development by distributing handbooks to supervisors that contain reference information on nurturing female employees who joined the company out of college, as well as held seminars before maternity leave and seminars on returning to work after delivery, parental leave, and other life events. We also instituted a mentor program to support the career development of female managers after they have passed through childbirth, child care,



and other life events. This has resulted in the number of female managers increasing from three in 1994 to 277 (as of July 1, 2022).

In addition, in the Medium-term Management Plan announced in April 2022, we announced that we will focus on the percentage of women in managerial positions in addition to those appointed as Group Masters as an indicator for measuring our success in diversifying our human resources (10% in 2030). Based on these developments, our Action Plan for the expansion of opportunities for women has been revised as follows.

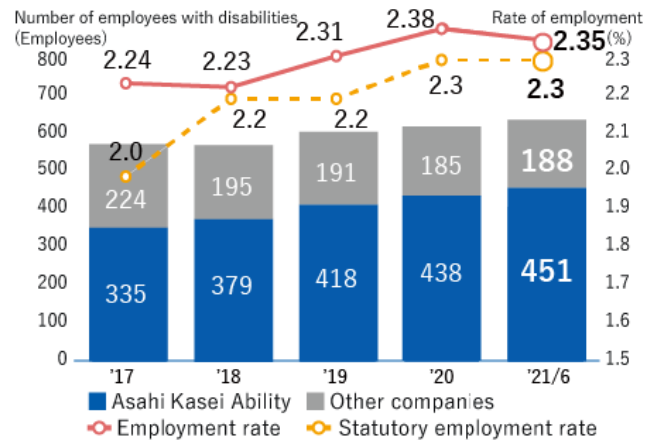
Asahi Kasei Group Action Plan*	We have developed an action plan to promote the active participation of women more than ever. As part of our efforts to create an environment in which diverse human resources with various values and backgrounds can play an active role together and contribute to the growth of our business and organization.
Term	Fiscal 2022 to Fiscal 2025
Content	<p>Objective 1</p> <p>Expand the human resources that can be candidates for senior management who play a leading role: Increase the number of female managers by 40% from the number as of March 31, 2021</p> <p>Objective 2</p> <p>Aim for a situation where women are active in positions where they play a leading role: Aim to increase the ratio of women in positions of Department Manager and above and in Group Master positions to at least 10% by the end of fiscal 2030, and implement the following during the term:</p> <p>(1) Formulate and implement action plans for promoting women's active involvement within business organizations</p> <p>(2) Spread understanding of the importance of diversity and inclusion initiatives, including the promotion of women's active involvement</p>

* Action Plan for Asahi Kasei Corp., Asahi Kasei Microdevices Corp., Asahi Kasei Pharma Corp., Asahi Kasei Medical Co., Ltd., Asahi Kasei Homes Corp., and Asahi Kasei Construction Materials Corp.

Employment of persons with disabilities

The Group supports all employees regardless of disability status so that they can fulfill their potential and work in comfort. Asahi Kasei Ability Corp. was established in 1985 as a special subsidiary for the employment of persons with disabilities, performing a wide range of services for the Asahi Kasei Group, including office automation services such as data entry, digitizing documents (conversion to PDF files), website design, printing of business cards, document printing and binding, dispatch of sample products, cleaning, copying, and planter box gardening. On March 1, 2021, the legal minimum proportion for employment of persons with disabilities was revised upward from 2.2% to 2.3%. The proportion for applicable companies of the Asahi Kasei Group was 2.38%* throughout the year, and as of June 1, 2021, stood at 2.35% (639 persons), exceeding the legal requirement.

* The rate of employment and the number of persons employed are the average figures for each fiscal year for applicable companies of the Asahi Kasei Group. Calculations are based on total employment of 27,191 persons at the 20 applicable companies as of June 1, 2021 (number of persons calculated in accordance with the Act on Employment Promotion, etc. of Persons with Disabilities).



Percentage of persons with disabilities·Number employed*

Initiatives at Asahi Kasei Ability

(1) Initiative for Hiring More People with Disabilities

Asahi Kasei Ability, which actively employs persons with disabilities, built a new office in the Fuji district (Fuji City, Shizuoka Prefecture) in October 2021 to expand its business in line with the increase in the statutory employment rate.



The New Fuji Office completed in October 2021

(2) Expanding Existing Operations

1. Supporting remote work for our Group's employees

After the COVID-19 pandemic began, Asahi Kasei Ability, which also has multiple regional offices, has been receiving invoices en masse and uploading them to a dedicated system on behalf of the Group companies. This makes it possible to handle administrative work without requiring employees to come to the office, thereby making it easier for Group employees to work remotely. Currently, we are continuing further expansion as remote work becomes more established.

2. Creating banana paper business cards

We use banana paper, which is made from banana fiber extracted from organic banana stems, as a material for making business cards, whereas previously it was disposed as waste. In terms of SDGs, these business cards have been attracting a lot of attention within our Group as well, and requests for their production have increased, leading to their expansion.

3. Agriculture, ceramics (handmade ceramics,) and coffee processing (drip pack production)

We have been developing job duties suitable for the unique natures of various disabilities, and we have continued conducting operations in the agriculture industry, ceramics industry, and coffee processing. This allows us to ensure a wide variety of work processes and provide manufacturing work experience by having employees use their hands and fingers.



Coffee processing work



Coffee products

(3) Abilympics (skills competition for people with disabilities)

Many employees from Asahi Kasei Ability participate in the Abilympics (a skills competition for people with disabilities) in various prefectures every year and win prizes. 13 employees represented their respective prefectures in the 2021 national competition (held in Tokyo Prefecture), with one employee winning a gold medal in the sewing category and another winning a bronze medal in the Machine CAD category, demonstrating the skills cultivated through daily work and practice.

System to Support the Activities of All Motivated Human Resources

In addition to promoting the active participation of women and people with disabilities, we have developed a wide range of supportive measures to create an environment that supports the individual circumstances of our employees and allows them to fully demonstrate their abilities.

For example, we have established a rehabilitation work system that allows employees to resume work in a phased manner in accordance with the instructions of an industrial physician to support a smooth return to work after a period of medical treatment. Going forward, we will continue to study ways to expand support for employees who work while undergoing treatment for illness. As globalization continues to advance, an increasing number of personnel have a spouse who is transferred to an overseas assignment. In fiscal 2013 we adopted a provision for such personnel to take a leave of absence to accompany their spouses living overseas. In fiscal 2021, this provision was utilized by 17 personnel (including 0 male employees).

In addition, in January 2021, we began treating same-sex partnerships as equivalent to marriage in our internal system.

Balancing work and family life

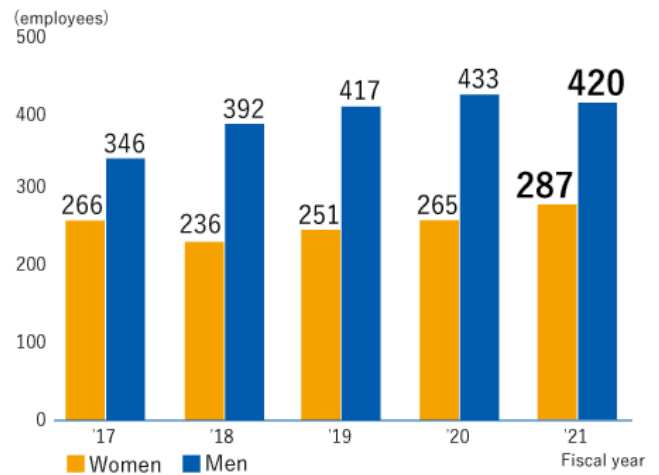
In order to improve the balance of work and family life, the Asahi Kasei Group complies with laws and regulations aimed at eliminating and reducing long working hours and provides various forms of support for employees to work with security and vitality in accordance with their individual circumstances and values from the perspective of balancing work and family life. At the same time, we also foster a workplace environment that facilitates utilization of the provisions by raising awareness of them through our corporate intranet and offering management support for superiors. Many of the provisions we offer are also available to non-regular employees with some changes to the details, and are actually utilized by them.

Parental leave

Our parental leave is available through the fiscal year in which the child turns 3 years old at Group companies in Japan*.

In fiscal 2021, parental leave was utilized by 707 personnel. This is included 420 men, with the rate of those who were qualified and actually utilized the leave exceeding 50% for the past two years in a row, and 287 women.

As an initiative to support male employees in taking parental leave, we launched the “Papa and Pre-parent Seminar” in April 2021. The program includes explanations of the parental leave system and other systems to support balancing work and child care, as well as case studies shared by those who have taken child care leave. A total of 111 individuals participated in fiscal 2021.



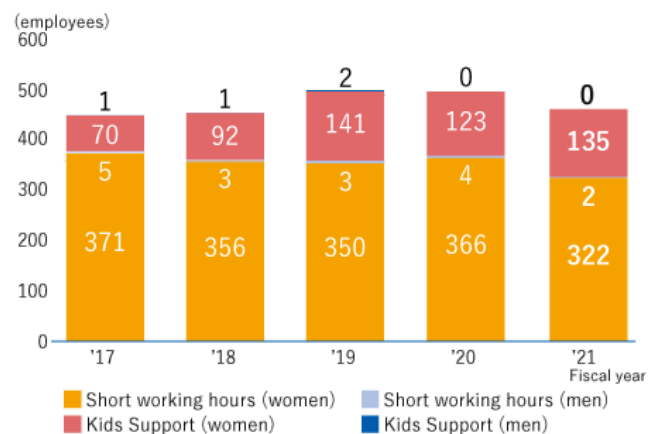
*Starting in fiscal 2021, excludes those taking parental leave that overlaps with the previous year's count

Employees using parental leave

Shortened working hours for child care

At Group companies in Japan*, employees are able to utilize shortened working hours to care for preschoolers, with the working day shortened by up to 2 hours until the child enters elementary school. In September 2007, a provision called “Kids Support” was added to enable employees with children until the end of the third grade of elementary school can work in a short time as well. These provisions may be used concurrently with a “flex-time” system for flexible working hours.

In fiscal 2021, 459 employees took advantage of shortened working hours for childcare and kids’ support, two of whom were male employees. In April 2020, we began to expand the applicable period of the shortened working hours system for childcare for contract employees (up to the start of elementary school) and the application of the kids support system.



Shortened working hours for child care·Utilization of “Kids Support” shortened working hours for child care

Platinum Kurumin certification mark

In 2016, Asahi Kasei Corp., Asahi Kasei Microdevices Corp., Asahi Kasei Pharma Corp., and Asahi Kasei Medical Co., Ltd. received Platinum Kurumin certification from the Ministry of Health, Labor and Welfare. Platinum Kurumin certification is awarded in recognition of proactive support for the development of the next generation which is particularly outstanding.



Support for family care

Group companies in Japan* have established systems to support caring for family members that go beyond legal stipulations to provide support for balancing work with care for family members.

- Leave of absence for family care:
A leave of absence of 245 days in total is available for each disease of each family member who requires care.
- Shortened working hours for family care:
A total of 1,225 days for each family member who requires care
- Flexible working hours for family care:
Flex-time system for working with short core times, etc.



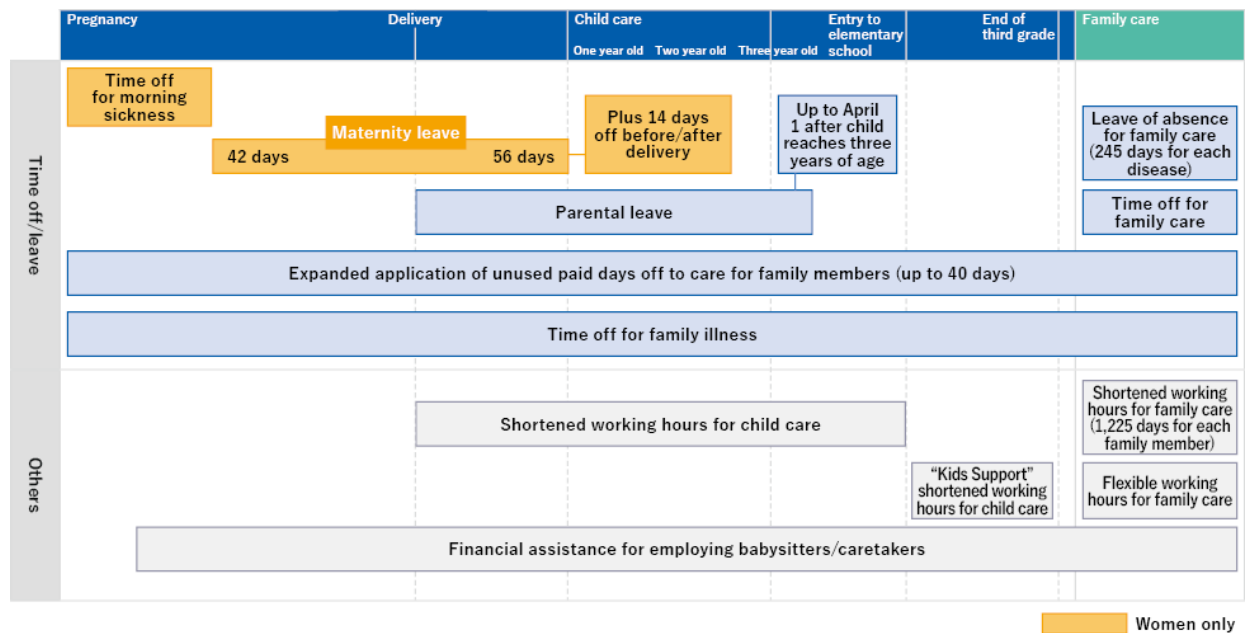
Booklet on balancing work with care for family members

Since 2011, our Group has held seminars on balancing work and family care at various locations throughout Japan. Since 2020, the seminars have been held online for our Group employees throughout Japan. We are working to meet a diverse array of needs, such as by offering a “Seminar for Supervisors with Subordinates Balancing Family Care and Work” from 2018 to 2020 and a “Seminar on Balancing Work and Family Care: Basic Knowledge” in 2021.

The free caregiving telephone consultation service (available 365 days a year and 24 hours a day to all Group employees and their family members), which was launched in April 2019, has been used for over 30 cases over the year. Furthermore, in April 2020, we expanded our short-time work program for caregivers as a measure in response to the increase in the number of at-home caregivers.

At the same time, in order to create an environment that facilitates utilization of these systems, we disseminate information on balancing work and family care and information about these provisions through our corporate intranet and distributed booklet on balancing work with care for family members (since January 2013).

* Regular employees of Asahi Kasei, Asahi Kasei Microdevices, Asahi Kasei Homes, Asahi Kasei Construction Materials, Asahi Kasei Pharma, Asahi Kasei Medical, and major affiliates in Japan are eligible.



Main provisions to support balance in work and family life

Re-employment of employees at mandatory retirement age

In fiscal 2001, we introduced a voluntary re-employment program for all domestic employees who have reached the retirement age of 60 to enable them to continue working and making use of their extensive experience and advanced skills. In fiscal 2013, we conducted a revision to increase the fixed amount of compensation by 1.5 times in order to maintain the same motivation and satisfaction as before retirement. In fiscal 2021, over 80% of employees who reached retirement age utilized the program to be actively engaged.

Human Rights

Policy

Respect for everyone's human rights is one of the most important parts of the Asahi Kasei Group's business activities. We respect human rights as stipulated in the International Bill of Human Rights and the International Labour Organization's (ILO) Declaration On Fundamental Principles and Rights at Work.

We will also support the UN Guiding Principles on Business and Human Rights and implement initiatives in accordance with these principles.

In addition, as a signatory of the UN Global Compact, we endorse the Global Compact principles relating to human rights as well as the UN Guiding Principles on Business and Human Rights and the Children's Rights and Business Principles. Based on this framework, we will strive to identify and appropriately deal with human rights issues in our business activities.

Asahi Kasei Group Human Rights Policy

Respect for human rights is the basis of all activities of the Asahi Kasei Group. We pursue our Group Mission to "contribute to life and living for people around the world" in accordance with the basic approach and efforts expressed in this human rights policy.

Even as times change, the Asahi Kasei Group's commitment to the people of the world never changes. We believe nothing is more important than for diverse people to enjoy vibrant lives while respecting each other's individuality and human rights.

We require all executives and employees of the Asahi Kasei Group, including those under non-regular employment, to respect human rights in accordance with this Policy. We expect all of our business partners, including our suppliers, to understand and support this Policy.

Our Approach

We are committed to respecting the human rights of all stakeholders throughout our activities and business value chain.

We respect human rights as stipulated in the International Bill of Human Rights and the International Labor Organization's Declaration on Fundamental Principles and Rights at Work. In addition, we support the United Nations Guiding Principles on Business and Human Rights. Our activities are based on these principles.

We comply with applicable laws and regulations in all countries and regions where our activities are conducted. Where national/regional laws fall short of or conflict with international human rights principles, we will seek ways to honor the principles of internationally recognized human rights to the extent possible while complying with the national/regional laws.

If we identify that we have caused or contributed to negative impacts on human rights in the business value chain, we endeavor to remediate them through appropriate processes with business partners.

Addressing Human Rights Issues

- We comply with all applicable laws and regulations related to working hours and wages.
- We comply with all applicable laws and regulations related to safety and hygiene. We also prevent accidents and disasters, create a safe and hygienic work environment, and strive to maintain the physical and mental health of our employees.
- We strictly prohibit forced labor, slave labor, human trafficking, and child labor.
- We strictly prohibit any discrimination based on race, ethnicity, birth, nationality, religion, gender, sexual orientation, disability, or thought, and any inhumane treatment including harassment.
- We comply with all applicable laws and regulations related to the protection of personal information and manage this information appropriately.
- We protect the safety and health of our stakeholders by ensuring the quality and safety of our products and services.
- We understand and respect the local culture and the human rights of local communities including their health and safety.

Promoting Respect for Human Rights

Education

We will continue to provide necessary education and awareness-raising opportunities for all executives and employees, including those under non-regular employment, to put this policy into practice.

Implementation of human rights due diligence

We will implement human rights due diligence based on the United Nations Guiding Principles on Business and Human Rights. Specifically, we will assess human rights risks in our activities and continuously work to prevent and mitigate the identified negative impacts. If we identify that we have caused or contributed to negative impacts on human rights, we endeavor to remediate them through appropriate processes.

Commitment to engage with affected stakeholders

We believe that the perspective of affected stakeholders is critical for us to recognize actual or potential human rights impacts on stakeholders by our activities, and to develop appropriate responses to address such impacts. We will engage with relevant stakeholders in a timely manner to understand and consider measures to address human rights issues.


Grievances Mechanisms

We will continuously work towards the optimization of our grievance mechanisms through a system to which our employees and the employees of our business partners can report and consult on human rights concerns. We ensure confidentiality regarding reported cases and the personal information of the persons submitting reports and have measures in place to protect those persons from unfair treatment caused by reporting issues.

Disclosure

We will monitor and regularly disclose the progress of our efforts to respect human rights through our website, the Asahi Kasei Report, and other relevant communication channels.

Approved by the Board of Directors of Asahi Kasei Corporation on March 8th, 2022

- > [Asahi Kasei Group Human Rights Policy](#)  (360.1KB)
- > [Participation in human rights initiatives \(signatory to UN Global Compact\)](#)

Human Rights Due Diligence

To fulfill our responsibility to respect human rights, we will establish a human rights due diligence system and will create a mechanism for implementing this system on an ongoing basis. The term “human rights due diligence” refers to the ongoing process implemented to proactively identify, avoid, and mitigate any negative human rights impact that the Group may have on society.

Consideration of human rights in procurement

The Asahi Kasei Group conducts CSR questionnaires of suppliers as part of our CSR Procurement in our efforts to identify the status of initiatives on human rights and labor issues as well as foster awareness of CSR in partnership with our suppliers. In addition, the Supplier Guidelines established in 2021 stipulate respect for human rights as a matter to be observed by all suppliers, and we ensure that all suppliers are fully aware of these guidelines.

➤ CSR Procurement

Human rights reporting and consultation hotline

The Asahi Kasei Group’s compliance hotline handles reports and consultation on all aspects of compliance, including human rights. The hotline is available to suppliers and their employees in addition to Group employees.

➤ Compliance > Whistleblower system (Compliance hotline)

Human rights education and awareness raising activities

The Asahi Kasei Group clearly stipulates a policy of zero tolerance for any kind of discrimination or harassment in the section of the Asahi Kasei Group Code of Conduct entitled "Respect for Human Rights and Diversity." Specific initiatives include study sessions focusing on power harassment, e-learning, articles on human rights and diversity awareness in the in-house magazine, and the provision of information via the intranet. Going forward, we will implement measures to deepen the understanding of employees of human rights issues for which companies have a social responsibility, in addition to human rights issues in the workplace.

Harassment Prevention and Training

The Asahi Kasei Group Code of Conduct clearly stipulates a policy of zero tolerance for any kind of discrimination or harassment. To this end, we explicitly prohibit sexual harassment, harassment related to pregnancy, childbirth, and use of parental leave, family care leave, or other leave, and power harassment and other forms of harassment in our employment regulations. We also seek to instill within our domestic Group companies our company policy of zero tolerance for any kind of discrimination or harassment through training on corporate ethics for employees at each level, including new hires, newly promoted assistant managers, and newly promoted managers. In addition, we implement corporate ethics training by business unit and geographical area.

Within our domestic Group companies and most of our overseas Group companies, we have established a central point of contact for consultation about harassment and a compliance hotline (internal reporting system) that ensure anonymity for responding to various inquiries and concerns on related issues in the Asahi Kasei Group.

Training and consultation are also provided for staff from placement agencies and employees of affiliated companies, as part of our group-wide effort to prevent the occurrence of harassment. In line with the amendment of the Act on Comprehensively Advancing Labor Measures, and Stabilizing the Employment of Workers, and Enriching Workers' Vocational Lives in June 2020, we used our internal magazine and intranet to share our company policy on harassment and inform a wide range of employees. From fiscal 2020 onward, we are promoting harassment prevention training that is tailored to workplace conditions, utilizing video training, and conducting training via videoconference, to prevent the spread of COVID-19.

Health & Productivity Management and Occupational Health & Safety

Occupational Health & Safety

Health & Productivity Management

Policy

While business is operated globally, the structure of society is changing dramatically. The population continues to age, and the way of hiring people as well as working styles are changing in various ways. In this time of change, it's necessary to ensure a comfortable and safe workplace environment for all employees and enable them to make the most of their capabilities and possibilities.

The Asahi Kasei Group regards all employees as precious assets. In terms of maintaining health and safety at our workplaces and work sites, our ESH & QA Principles state: "In all operations, we give the utmost consideration to health, operational safety, workplace safety and hygiene, quality assurance, and environmental protection throughout the product life cycle from R&D to disposal, as preeminent management tasks." Based on this, in cooperation with employees, we strive for a comfortable workplace environment throughout the company.

Preventive action for occupational accidents

In fiscal 2020, the Asahi Kasei Group established a Life Saving Actions (LSA) program to eradicate serious occupational accidents, and we began implementing it throughout the Group. We have established the following four behaviors as prohibited behaviors that could result in loss of life if not observed, and are promoting thorough adherence to these behaviors in all aspects of our business activities.



Do not touch moving parts



Do not go under suspended load



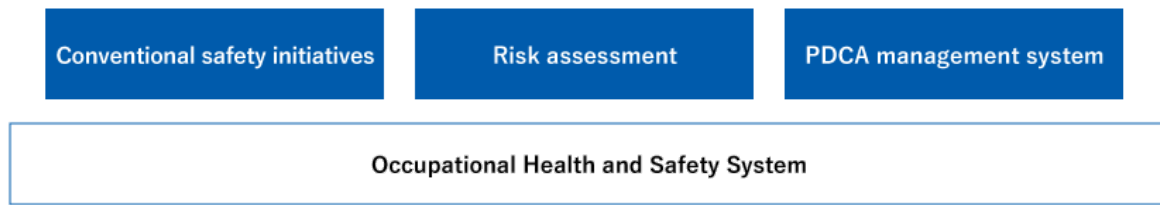
Do not work at height without a safety harness



Do not break the speed limit
Do not use the phone while driving
Do not ride without a seat belt

The four behaviors prohibited by LSA

In addition, our ongoing efforts to prevent workplace accidents is integrated into our comprehensive OHSMS¹ program that combines conventional safety and hygiene initiatives² with risk assessments and a prevention-oriented plan-do-check-act (PDCA) system.



Integration of workplace safety initiatives

- ¹ Occupational Health and Safety Management System: A standardized management system used to confirm that continuous improvement is being applied to measures to minimize the risks of workplace injuries and to prevent the emergence of future risks
- ² Tidiness/orderliness/cleanliness (3S), reporting of near-accidents and potential hazards, hazard prediction analysis, safety patrols, and case studies

Approach to prevent occupational accidents

1. Identification of potential hazards

Effective prevention of workplace accidents requires the identification of all potential hazards in a workplace. In addition to conventional safety and hygiene initiatives, it is important to think of potential issues and consider safety from the perspective of the problems which conceivably arise in a wide variety of situations—as a result of both potentially unsafe physical conditions (hazardous working environment due to equipment, materials, noise, etc.) and potentially unsafe work actions of personnel.

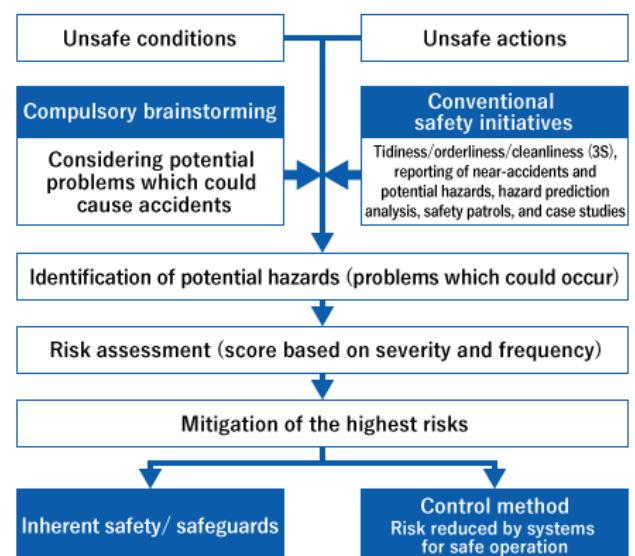
2. Risk assessment

Priority for mitigating the potential workplace hazards identified is assigned based on a scoring system that combines the severity of the impact of problems which could occur and the frequency with which such problems would be likely to occur.

3. Mitigation of the highest risks

Measures to achieve inherent safety by eliminating unsafe conditions (by eliminating dangerous procedures, automation, eliminating sources of problems, changeover to safe materials, etc.) and the application of safeguards are extremely effective in the effort to avoid risks. The table on the right illustrates the principles (excerpted from reference documents).

We focus on achieving inherent safety and applying safeguards (isolation and stoppage) to avoid risks associated with the use of machinery and equipment to prevent the “caught in/between machinery” category of accident, which can easily result in particularly severe injury.



Overview for prevention of workplace accidents

Safety measures		Degree of safety achieved	
1	Inherent safety	100%	
2	Safeguards	80%	
3	Control method	Indications, warnings, etc.	20%
		Manuals, approved systems, etc.	20%

Source: Japan Industrial Safety and Health Association, “Shokuba no Risk Assessment no Jissai” (Realities of Workplace Risk Assessment), 1999, p.26

Formulation of safety measures

Inherent safety and safeguards

Measures to achieve inherent safety and the application of safeguards to avoid risks are generally considered to provide the greatest level of safety, as shown in the following table. We incorporate such measures in the construction of new or replacement facilities, upon safety reviews of existing facilities, and to prevent the recurrence of accidents.

Systems for safe operation

Our group is striving to ensure safety in our activities to comply with safe operating standards*. Specifically, we are devising and implementing measures such as checking the status of compliance with safe operating standards in our daily operations. Operations for which the elimination of risk through equipment modification is impractical are classified as operations requiring special control and strictly managed, such as by ensuring worker competence and prior plan-based approval.

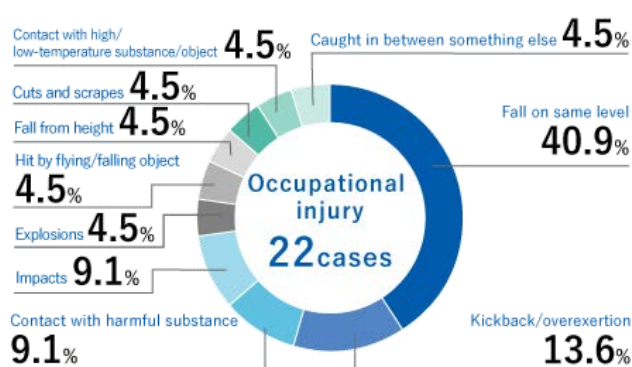
* Rather than individual rules for specific procedures, safe operating standards are a system of safety principles which define common safety practices that apply to categories of operation based on similarity of risk. For example, to prevent entanglement in machinery, our standard stipulates not to touch any exposed moving parts.

Sharing and utilizing information of occupational accidents

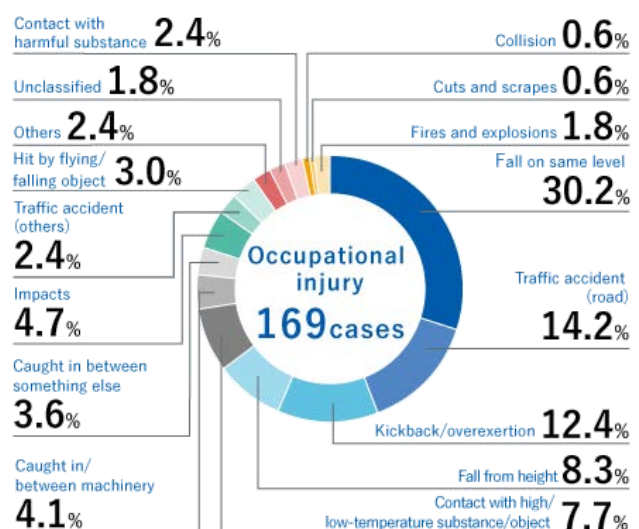
We investigate causes and take measures to prevent recurrence at sites where workplace accidents occur. We share a database of information on all workplace accidents within the Asahi Kasei Group for utilization in activities such as safety training, case study discussions, and prevention of similar accidents.

Occupational accident statistics

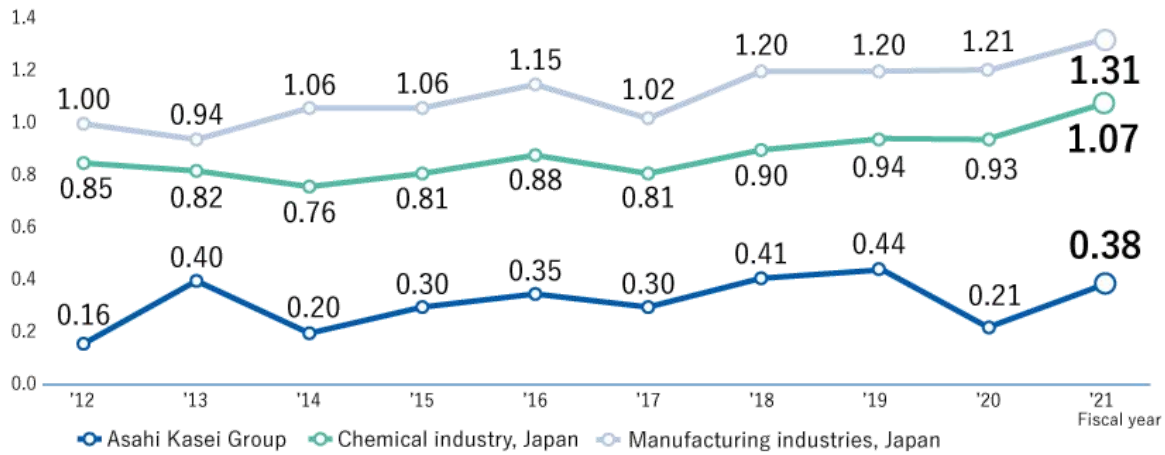
In fiscal 2021, 22 lost-worktime injuries occurred among Group employees in Japan. Classifying these accidents by type, there has been a decrease in recent years in the “fall from height,” “caught in/between something else,” and “traffic accident (road)” categories, which are the targets of the aforementioned Life Saving Actions program. We will also promote activities to prevent other types of occupational accidents that can easily lead to serious accidents.



Incidence of lost-workday injury by event category (FY2021 in Japan)



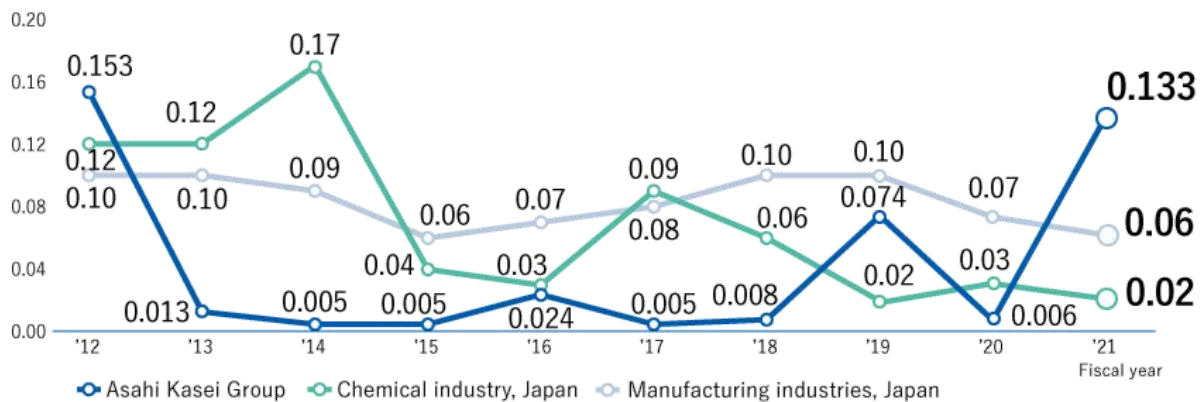
Incidence of lost-workday injury by event category (FY2012-2021 in Japan)



Notes:

- Fiscal years for Asahi Kasei Group calendar years for the chemical industry as well as manufacturing industries in Japan.
- 100% coverage

Frequency Rate¹



Notes:

- Fiscal years for Asahi Kasei Group calendar years for the chemical industry as well as manufacturing industries in Japan.
- The severity rate increased in fiscal 2012 because of one "fall on same level" accident that caused lasting injury, in fiscal 2019 because of one "caught in machinery" accident that caused lasting injury, and in fiscal 2021 because of a fatality caused by an explosion.
- 100% coverage

Severity Rate²

¹ Number of accidental deaths and injuries resulting in the loss of one or more workdays, per million man-hours worked.

Our goal of 0.1 or less is extremely ambitious. At a plant with 100 workers, it would mean only one worker in 50 years suffered from a workplace injury which resulted in a day off.

² Lost workdays, severity-weighted, per thousand man-hours worked.

Maintaining and improving comfortable workplaces

Workplaces where potential health hazards are present are subject to regular monitoring under the Working Environment Measurement Law. Additionally, we will manage risks for chemicals to identify and reduce risks resulting from chemical substances. Noise and heat exposure data are recorded and maintained for all relevant personnel to enable each individual's exposure to be managed and minimized. We are advancing plant modification and reviewing work procedures to create a more comfortable work environment.

Asahi Kasei Homes Safety Initiatives

1. Introduction

Asahi Kasei Homes aims to eliminate serious accidents and raise safety awareness through Life Saving Actions (LSA). To this end, it is implementing the following four initiatives to achieve safe and comfortable workplaces.

2-1. Not going under suspended loads

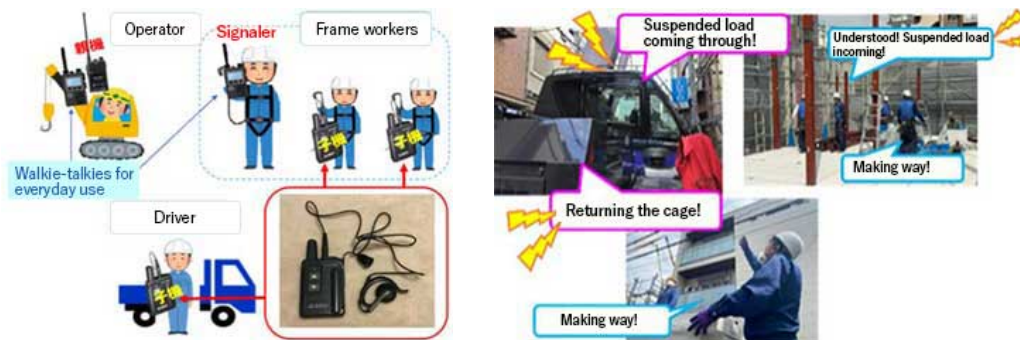
For Hebel Haus™ homes, we use cranes during the steel frame construction work. This activity is meant to keep workers from going underneath suspended loads when steel frame members and Hebel™ panels are lifted from trucks and delivered to construction sites or erected within the scaffolding, just in case the load falls.

● Communication between workers using walkie-talkies

Normally, only crane operators and signalers (frame workers) use walkie-talkies, but we have improved the system so that frame workers other than drivers and signalers can also have walkie-talkies (extension units) for smooth communication and improved awareness about the position of suspended loads.

● Shouting “Suspended load coming through!” so workers can get out of the way

When a suspended load is brought within the scaffolding, the operator instructs the frame work signaler (foreman) to call out, "Suspended load coming through!" At that time, all workers and drivers stop to check the path of the suspended load and make sure to get out of the way.

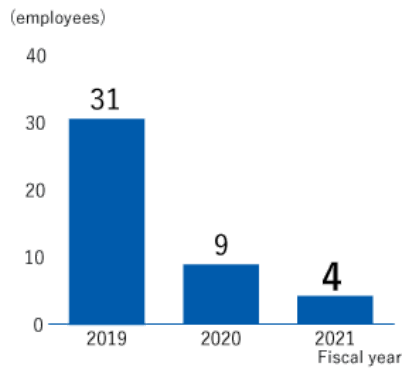


2-2. Initiative to eliminating heatstroke

In recent years, heatstroke countermeasures have grown in importance year by year due to the intense summer heat. Since severe cases of heatstroke can be very dangerous, for the past three years Asahi Kasei Homes has been instructing its employees to call an ambulance immediately if they show any symptoms.

As a result of significant investment in specific measures, such as providing air-conditioned clothing to outside workers and installing air conditioners at all worksites, the number of heatstroke incidents has been greatly reduced, as shown in the graph below.

In addition, since there have been many cases of heatstroke among senior security guards, Asahi Kasei Homes has improved the system to ensure that they take breaks every 30 minutes by adding another guard to the required number as a preventive measure.



Heat Stroke Cases (new construction)



On-site air conditioners

- Work environment improvement for interior workers
- Rest areas for outside workers



◆Distribution of air-conditioned clothing

- Work environment improvement for outside workers
- Enforcing dress code

2-3. Strengthening hazard prediction: Eliminating falls from height

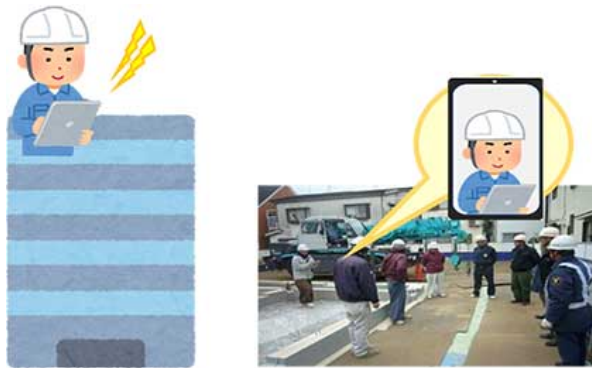
To prevent recurrence, Asahi Kasei Homes analyzed past accidents involving falls from stepladders, and documented and shared the most effective movement practices based on the idea of “supporting your body with your hands when climbing up and down stepladders,” thus raising awareness and providing confirmation and instruction. As a result, there have been no falls from stepladders since the second half of last year. Asahi Kasei Homes also initiated similar activities for other issues, and provided confirmation and instruction.



2-4. Remote hazard prediction: Utilizing IT

One of the innovations in on-site management during the COVID-19 pandemic is the use of tablets and other devices to predict hazards at work sites. Construction supervisors can now interact directly with workers from off-site locations and give them instructions based on the situation on-site.

In the activities to prevent going under suspended loads and activities for reinforcing hazard prediction mentioned earlier, Asahi Kasei Homes made full use of this remote hazard prediction system to effectively disseminate information within a limited timeframe.



Remote Hazard Prediction

Dealing with the asbestos issue

We have dealt with the asbestos issue as explained below.

	Specific Measures
Measures for buildings owned by our Group, including its plants	Conducted asbestos surveys and systematically removed, contained, or enclosed it in accordance with the Ordinance on Prevention of Health Impairment Due to Asbestos.
Replacement of asbestos in plant joint sheets	Asbestos in joint sheets is replaced with non-asbestos materials sequentially when joints are opened for inspection or maintenance.
Responding to health issues of our Group retirees	The Group does not engage in the production or handling of asbestos as specified in the Ordinance on Prevention of Health Impairment Due to Asbestos. However, if a retiree who had handled asbestos on a temporary basis during his or her tenure with the Group (for maintenance purposes for example) requests it, he or she can receive a medical examination and a follow-up will be conducted.

Health & Productivity Management and Occupational Health & Safety

Occupational Health & Safety

Health & Productivity Management

Policy and Promotion System

The employee health landscape has altered dramatically in recent years with an ageing workforce and increased stress from changes in the business and social environment. At the same time, for the Asahi Kasei Group to provide value to society through its business, we need employees to be more productive and creative than ever.

In response, we have been developing health & productivity management*, which positions health-related initiatives as a company-wide management issue, and expand on the health management of past ESH & QA activities. We announced our Health & Productivity Management Policy as “promoting and supporting initiatives for maintaining and advancing the physical and mental health of employees based on health management activities, and improving the organizational environment by enhancing both individual and organizational vitality.”

We established Corporate Health & Productivity Management in January 2020, appointed Executive Officers with responsibility and deputy responsibility for health & productivity management in April 2020, and issued a Statement on Management for Health in October 2020. In terms of continuously raising corporate value, it is becoming increasingly important for companies to provide an environment in which employees can maintain their physical and mental health as they play an active role. We will work to further promote health & productivity management based on the Group Health & Productivity Management Vision described in the Statement.

In April 2021, the health management centers that our occupational health staff belong to at our nine major sites in Japan, including our Tokyo Head Office and our branches in Nobeoka City, Miyazaki Prefecture, and Fuji City, Shizuoka Prefecture, were placed under the authority of Corporate Health & Productivity Management. The system was changed to enable standardization and overall optimization of health-related operations, strengthen cooperation among sites, and enable a prompt response to issues shared within the Group, and we have begun health & productivity management at these locations. Furthermore, starting April 2022, we have instituted health & productivity management at our smaller offices and affiliated companies in Japan.

In addition, we are preparing to expand our health & productivity management around the world by 2024. We will also strengthen our efforts to maintain and promote the health of women and “well-being management,” which aims not only for physical and mental health by achieving the effects of our health & productivity management measures and performance improvements, but also, as the next step, by having employees achieve sound physical, mental, and social well-being.

* In Japanese “Kenkokeyei” is a registered trademark of Nonprofit Organization Kenkokeyei.

Statement on Management for Health

The Asahi Kasei Group pursues sustainable growth of corporate value while contributing to the achievement of a sustainable society by leveraging its strengths of diversity and the capability to change. We believe that human resources are the key to achieving this goal.

In the future, it will become ever more important for the company to create an environment where employees can both physically and mentally healthy and where everyone can play an active role. We hereby declare that we will work to promote health & productivity management, which further refines the initiatives for promoting and maintaining health we have developed to date, under our Group Health & Productivity Management Vision.

October 2020, President & Representative Director, Asahi Kasei Corporation

The Asahi Kasei Group Health & Productivity Management Vision

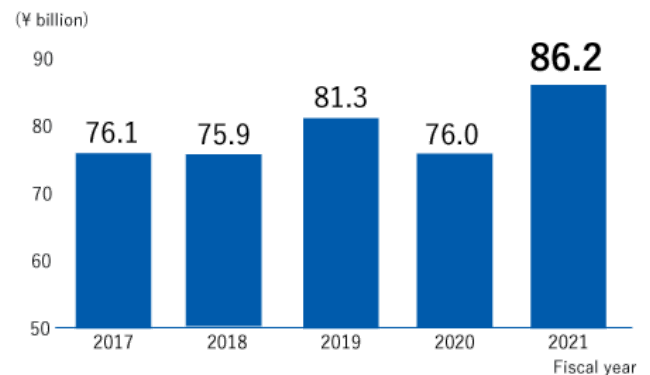
The Asahi Kasei Group will contribute to the achievement of a sustainable society by encouraging the active participation and growth of each individual and the improvement and development of Group productivity. To this end, the company will ensure that its employees and their families are both physically and mentally healthy, and strive to enhance their job and life satisfaction.

Overview of health & productivity management

In recent years, the Asahi Kasei Group has seen an increase in medical expenses and labor losses due to factors such as a trend toward more employees taking days off. Insurance costs for the Asahi Kasei Health Insurance Society increased slightly from ¥7.6 billion in fiscal 2017 to ¥8.6 billion in fiscal 2021. In addition, the total number of days employees were absent from work due to injury or illness increased by 18% in fiscal 2021 compared to fiscal 2017.

The Group considers the maintenance and promotion of the physical and mental health of its employees and their families to be the foundation of health & productivity management. As such, it is taking measures against mental health issues, cancer, and lifestyle-related diseases, which have caused an increasing number of employees to take days off.

By promoting measures and activities to achieve the objectives of health & productivity management, which are to encourage the active participation and growth of each individual, improve job and life satisfaction, and create a strong and vibrant organizational culture, we will improve and develop the Group's productivity. We will also strive to achieve the two mutually reinforcing aspects of sustainability: contributing to a sustainable society and sustainable growth of corporate value.



Asahi Kasei Health Insurance Society insurance costs



Overview of health & productivity management

Health & Productivity Management Objectives

To achieve our health & productivity management objectives, we believe it is important both to create opportunities for employees to be active and grow, and to revitalize individuals and organizations.

To create opportunities for employees to be active and grow, we will reduce the number of days employees take off work. We also believe that reducing the number of days employees take off work is not enough to promote health & productivity management, so we will work to make individuals and their workplaces more active.

From the perspective of improving productivity, we will also strive to help employees get more and better-quality sleep, a lack of which is said to be a major contributing factor behind "presenteeism¹."

For this reason, the Group has set its primary health & productivity management goals as follows: (1) creation of opportunities for employees to play an active role and grow, etc. (improving the absence rate through countermeasures for mental health issues, people with serious lifestyle-related diseases, people with metabolic syndrome, cancer, and smoking), (2) revitalizing individuals and organizations (improving work engagement²), and (3) improving the quality and quantity of sleep.

¹ A state in which employees go to work but are unable to perform due to physical and mental health issues. In a study conducted by the Ministry of Economy, Trade and Industry (METI) that used the WHO-HPQ to measure employee productivity, it was reported that presenteeism accounts for 60-80% of total health-related costs.

² A positive and fulfilling psychological mindset toward one's work that consists of three components: enthusiasm, immersion, and vitality.

(1) Creating opportunities for employees to play an active role and grow, etc. (improving the absence rate)

	FY2019 Results	FY2020 Results	FY2021 Results	FY2022 Target	FY2024 Target (compared to FY2019 results)
Percentage of employees absent from work due to mental health issues ¹	0.91%	0.98%	1.00%	0.80%	0.64% (30% reduction)
Percentage of employees seriously ill with lifestyle-related diseases ²	11.0%	11.0%	10.7%	9.9%	7.7% (30% reduction)
Percentage of employees suffering from metabolic syndrome	11.1%	11.4%	11.0%	9.9%	7.8% (30% reduction)
Number of days off per cancer case	79.2 Days	68.1 Days	87.5 days	67.3 Days	67.3 Days (15% reduction)
Smoking rate	25.8%	24.7%	23.5%	20.7%	15.5% (40% reduction)
Percentage of employees who do not get enough rest from sleep	32.4%	28.5%	27.2%	27.4%	22.7% (30% reduction)

¹ Percentage of employees who are absent from work for 30 or more consecutive days during the fiscal year

² Selected based on in-house criteria

(2) Revitalizing individuals and organizations (improving work engagement)

Each July, the Group conducts a mental health checkup using the simple mental health support system “Organizational Stress Assessment e-Diagnosis” (Fujitsu Software Technologies Limited). This initiative is aimed at primary prevention and encourages employees to become aware of their own stress levels and reduce the risk of mental health issues. Moreover, the results of the e-diagnosis are analyzed by workplace, allowing us to identify situations that cause stress for each workplace as well as the factors thereof, and thus promote activities to improve the workplace environment. The objective of these efforts is to reduce stress factors originating from the workplace itself.

In fiscal 2020, we introduced KSA (Vitality and Growth Assessment), which enables us to analyze and visualize work engagement (enthusiasm, immersion, and vitality) in workplaces in more detail than the employee awareness survey, which had a broader range of questions. We will use the results of the KSA analysis to have employees engage in dialogue with each other at their workplaces, with the aim of further improving work engagement.

In the future, we will also build a system to utilize the results of the e-Diagnosis and KSA surveys in a comprehensive manner as a support tool to further revitalize individuals and organizations at each workplace.

➤ Overview of KSA (Vitality and Growth Assessment)

(3) Improving the quality and quantity of sleep

Presenteeism generally accounts for 60-80% of total health-related costs, and this is said to be several times higher than medical costs. Next to mental health issues, the quality and quantity of sleep is considered to be a major cause of presenteeism, so we will promote countermeasures to address this problem.

Specifically, we will (1) establish a method for evaluating sleep, (2) investigate ways to handle employees who are not getting enough sleep, and (3) promote education and training to improve sleep literacy.

In addition, starting in fiscal 2022, reducing the percentage of employees who do not get enough rest from sleep has been newly established as a KPI for sleep as part of our Health & Productivity Management Objectives.

Specific initiatives

Mental health and care

The Asahi Kasei Group is working to reduce the rate of employees missing work due to mental health issues by enhancing its four complimentary approaches to care in accordance with its mental health care guidelines.

(1) Self-care

Many kinds of factors may cause absence from work due to mental health issues, and the cause often cannot be attributed to a single factor, so addressing the issue is not easy. In this situation, as a primary preventive measure, we believe that it is important for employees, no matter what the causes of their absences may be, to identify and recognize the stress they are under, and we must support measures for preventing and reducing stress.

To promote understanding of stress and how to approach mental health, we will implement and improve training on mental health, beginning with new employees and career hires. We believe it is essential to provide training to a wide range of employees, so in fiscal 2022 we began a nationwide e-learning program, with approximately 10,000 employees taking the course.

(2) Care provided by occupational health staff and others

We use the mental health support system e-Diagnosis, and in addition to individual stress surveys, we also conduct workplace stress analysis using “Health and Vitality Criteria.”

Moreover, at the Tokyo Head Office and our sales offices in Tokyo and Osaka, we have begun administering the Health Questionnaire for Transferred Employees to check the status of employees who have been transferred to other locations for various reasons and see how they are adapting to life and work in their new environment. This allows us to take early action for employees who show signs of poor health to prevent serious conditions. Going forward, we will work to prevent mental health issues associated with transfers by creating the necessary manuals, tools, and other materials to implement this initiative broadly at our major manufacturing sites in Japan and throughout the company.

(3) Line care

As part of our “Line Care” initiative, we are working to improve the workplace environment in each area by using measures such as the Health and Vitality Criteria (Nobeoka region) and MIRROR* (Fuji region). In fiscal 2021, we once again held a workshop in the Mizushima region that made comprehensive utilization of e-Diagnosis and KSA in collaboration with the human resources department, occupational health staff, and labor unions.

* MIRROR: A tool for improving the work environment. Learning about and discussing the most desirable workplace.

(4) Care provided by specialized organizations

A provision for shortened working days is available for personnel returning from leave of absence for psychiatric convalescence as well as for any other injury or illness, enabling a gradual recovery of a full work load. At each plant site and office location, we provide care by specialists, including training sessions by external lecturers and referral of counseling services.

(5) Analysis of direct factors and circumstances resulting in leave of absence for mental health

To reduce the number of employees who are absent from work due to mental health issues, we use the “Stress Classification Tool for Absent Employees.” To identify the causes of their absences, occupational health staff use interview results to input the contribution ratio of direct factors and background information into the tool, then analyze the trends and characteristics by region and visualize the results in graph form. Results from each site are also aggregated, with company-wide data analyzed according to various aspects such as job category and position, which are then shared throughout the company, and for which countermeasures are created.

Initiatives for employees with severe lifestyle-related diseases and metabolic syndrome

In order to maintain and improve the health of our employees, the Asahi Kasei Group is working to prevent and address lifestyle-related diseases. In addition to running the Asahi Health Up Program, a program that provides specific health guidance and has been implemented in the past, the Slim Up Challenge project was launched in fiscal 2021 with the aim of intervening at a younger age and curbing the onset of lifestyle-related diseases to keep them from worsening and complications from developing. By expanding the target groups beyond those of the specific health guidance, we are working to help prevent lifestyle-related diseases by getting involved early on with groups that were not previously reached.

Efforts to Reduce the Smoking Rate

In addition to the Non-smoking Challenge, an optional non-smoking program planned and implemented thus far by the Asahi Kasei Health Insurance Society, we hold non-smoking seminars and other events for smokers at each of our sites. Also, to address the problem of secondhand smoke, we are working to reduce the number of smoking areas, convert them into outside smoking areas, and ban smoking during work hours.

Health & Productivity Management Strategy Map

We approach health & productivity management by first fully grasping the hoped-for results from our investments and measures, and how our initiatives lead to concrete actions that can resolve the issues that we hope to address. We have charted these relationships on a diagram.

➤ Strategy Map  (436.8KB)

Highlights

Establishing an exercise routine using the “&well*” walking app

To reduce the number of people with severe lifestyle-related diseases and metabolic syndrome, we introduced the walking app “&well” at the Group’s Tokyo Head Office and sales offices in the Tokyo and Osaka areas on a trial basis in fiscal 2020, with the official launch taking place in fiscal 2021. The number of participants in fiscal 2020 was 639, but by fiscal 2021, this number had increased approximately 2.7 times to 1,725. In a post-team competition survey conducted in October 2021, we found that (1) 92% of respondents increased their average number of steps per day, and 39% of those respondents increased their average number of steps by 5,000 or more per day. Also, (2) 38% of respondents responded that they were communicating with coworkers/family members more and had gotten into the habit of exercising. Thus, even in today’s telecommuting environment, we confirmed that participants changed their behavior, became more aware of their health, and communicated in a more active manner, and many of them had a positive impression of the program. Based on these results, starting in fiscal 2022, the system was also introduced in the Fuji, Moriyama, and Mizushima regions, the major manufacturing sites where trials were conducted in fiscal 2021.

* Planned and operated by Mitsui Fudosan

&well Walkチーム対抗戦 3rd Round 2021

ウォーキングで心も体も健康に!

2.8(90)~2.21(前)

各リーグ上位入賞チームに豪華賞品贈呈!

Walkチーム対抗戦の概要

年々増加する2021年最新ウォーキングの習慣化を推進

企業ごとのチーム育成

コミュニケーション促進

2021年10月に開催したWalkチーム対抗戦 3rd Round 2021にて、20日間で4,800名が参加しました。

Occupational health staff visualize the physical and mental state of employees at each workplace as a group and report to the department heads

In the Nobeoka and Fuji regions, which are major manufacturing sites of the Asahi Kasei Group, the results of health checkups, lifestyle data, and sickness and injury leave data are analyzed by workplace, and the occupational health staff report the results of the group analysis to the head of each workplace. This allows those overseeing each workplace to gain an objective understanding of the physical and mental state of their employees as a group, identify issues, and take measures to improve the situation.



Initiatives prior to the COVID-19 pandemic

Sleep Program Trial

The Group's Tokyo Head Office and sales offices in the Tokyo and Osaka areas conducted a sleep program trial to improve sleep quality and enhance both work and daily life. First, a sleep questionnaire was administered to approximately 5,000 employees at the Tokyo Head Office and sales offices in the Tokyo and Osaka areas. Among these, those with severe insomnia were identified, and after interviews, approximately 80 people took part in the sleep improvement program. The effectiveness of the program is currently being verified, and we are considering developing an action plan for the Tokyo Head Office and sales offices in the Tokyo and Osaka areas for fiscal 2022, as well as conducting trials at major manufacturing sites and analyzing the sleep conditions of shift workers. In addition, we held online seminars to provide information on sleep.

Education on Health & Productivity Management

To support employees in acquiring knowledge and skills for health & productivity management, the Group provides a number of training programs based on the job roles for the various employee ranks.

Name	Method of Training	Purpose	FY2021 Number of Attendees
New hire training	Online Training	Gain an understanding of the basic concept of health as a member of society and learn about essential company rules	283
Basic Training for New Section Heads	e-learning	Gain an understanding of the overview, action framework, and responsibilities of the basic approach to health management as a section head	305
Training for New Technology-related Section Heads	Online Training	Gain an understanding of the current safety situation within the Group, review on-site safety, and receive lessons learned from accidents that occurred within the Group	224
Safety Training for Managers	Online Training	Gain an understanding of the current safety situation within the Group, review on-site safety, and receive lessons learned from accidents that occurred within the Group	128
Business Management Training	e-learning	Gain an overview of the Group's health & productivity management and the importance of health & productivity management as a member of the management team	329

Addressing Global Health Challenges

Increase in Ventilator Production Due to Global COVID-19 Pandemic

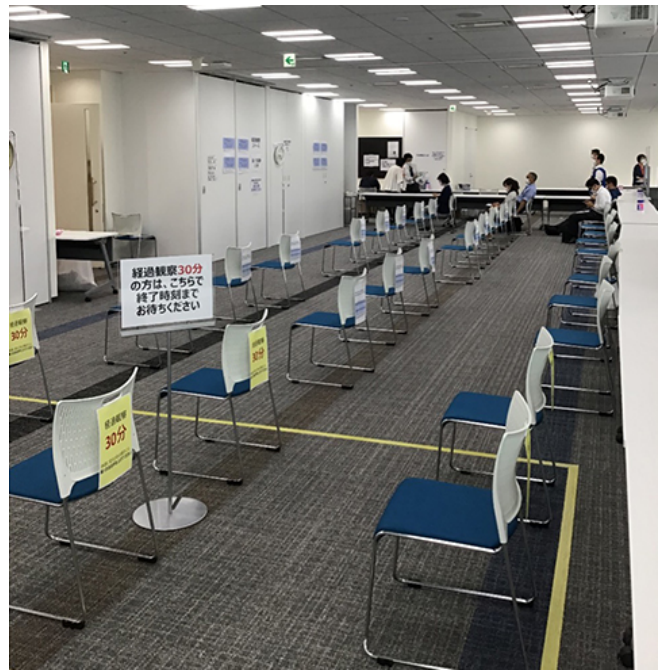
ZOLL Medical Corporation (hereafter "ZOLL"), a member of our Group, determined that it was imperative to increase production and promptly deliver ventilators to hospitals due to the growing concern about ventilator shortages in the United States as a result of the global COVID-19 pandemic and requests by the U.S. government. ZOLL thus began increasing production in March 2020 by converting some of its automated external defibrillator (AED) production lines for use in producing ventilators to increase production to 10,000 units/month, which was approximately 25 times the normal production volume.

ZOLL's ventilators are portable and used in intensive care units (ICUs) and emergency vehicles. Special filters with top-class performance prevent the spread of viruses, thereby reducing the risk of infection not only for patients, but also for healthcare workers and others providing treatment.

COVID-19 Workplace Vaccination Initiatives

To provide vaccination opportunities and help end the pandemic as early as possible, the Group launched a workplace vaccination program and provided first and second vaccinations to a total of approximately 7,000 employees, temporary employees, and family members who wished to be vaccinated, free of charge, from August 2021 to October 2021.

In addition, we contracted an outside vendor to administer first, second, and third vaccinations to a total of approximately 19,000 Group employees, temporary employees, and family members who wished to be vaccinated between July 2021 and May 2022, free of charge.



Workplace vaccination site

Health Management Support for Overseas Employees

In response to the increasing number of employees working overseas as a result of our global expansion, we are enhancing our health management.

While the health care situation varies slightly depending on the length of the assignment, we provide pre-transfer medical checkups, vaccinations, advance Tamiflu prescriptions (anti-influenza medication) in case of a new influenza pandemic, and pre-transfer health education, as well as annual medical checkups throughout employees' assignments and a post-transfer medical checkup upon their return.

During an assignment, a web interview with an industrial physician is conducted six months after the assignment. In addition to conducting e-diagnoses (stress checks) as in Japan, we also conduct questionnaires on employees' subjective symptoms, local lifestyles, mental and physical health, and, continuing from 2020, COVID-19 and vaccination status via the Health Survey form for employees and their family members who wish to participate. We then conduct online interviews with industrial physicians and public health nurses as required based on the survey and health examination results.

Moreover, for employees working overseas who are suspected of working long hours based on their total computer access time, online interviews with industrial physicians are conducted based on the questionnaire results.

"Health Letter from Tokyo" is regularly distributed to expatriates as well, providing information such as health checkup results and lifestyle questionnaires, health information, and interviews with expatriates, all compiled by region. Also, in collaboration with a medical assistance company, we provide support for medical examinations at local medical institutions and health consultations to address health concerns and issues.

Process Safety

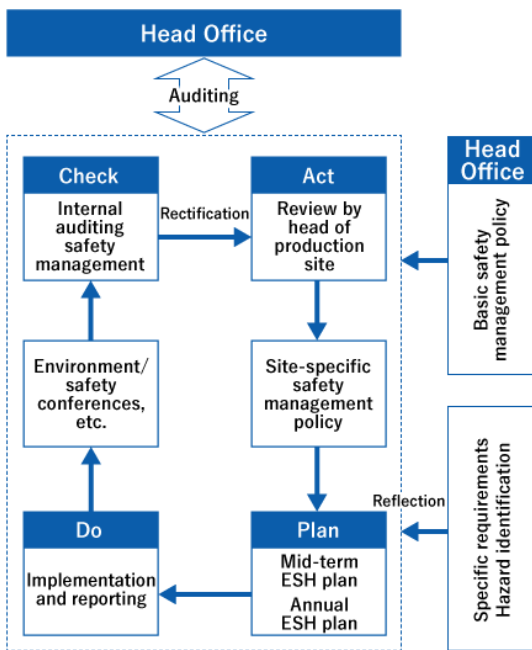
Policy

Measures for process safety in the Asahi Kasei Group are performed in accordance with our Basic Policy for Safe Operation, which states, "We maintain the safety of employees and local communities through stable and safe operation while working to prevent workplace injuries." An ongoing and autonomous program to ensure process safety includes safety assessment and hazard identification in accordance with our Basic Policy for Safe Operation, with specific plans implemented on both annual and multi-year cycles.

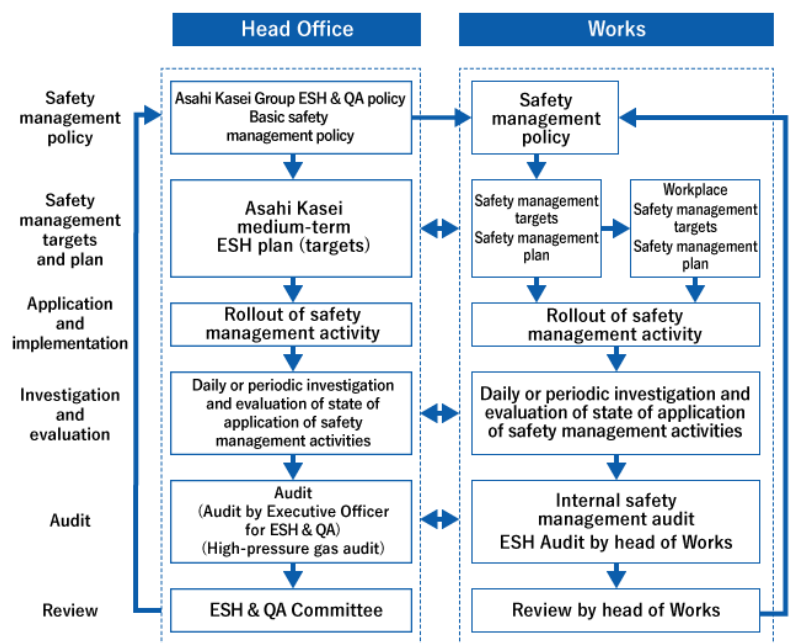
Also, as of July 11, 2022, the "Asahi Kasei Group ESH & QA Policy" has been revised into the "Asahi Kasei Group ESH & QA and Health & Productivity Management Policy."

Based on our Group philosophy of contributing to life and living for people around the world, we give the utmost consideration to health, process safety, occupational health and safety, quality assurance, and environmental protection throughout the product life cycle, in all of our business activities from R&D to disposal, as preeminent management tasks.

Specifically, we prioritize stable and safe operation while preventing workplace accidents and securing the safety of personnel and members of the community. In addition to maintaining legal compliance, we set self-imposed targets for continuous improvement, while performing proactive information disclosure and communication to gain public understanding and trust.



PDCA cycle for safety management



Process safety management system

Safety management for high pressure gas

At the Mizushima Works and Kawasaki Works, we have received certification for self-inspection for high-pressure gas safety from Japan's Ministry of Economy, Trade and Industry. Accordingly, we perform our own "certified safety" and "conformity inspections" for equipment as part of the ongoing effort to maintain stable and safe operation, and we ensure the safety of the applicable facilities.

High Pressure Gas Safety Controller	Asahi Kasei Corp. President
High Pressure Gas Process Safety Division General Manager	Asahi Kasei Corp. Director
High Pressure Gas Process Safety Management Department General Manager	Asahi Kasei Corp. Corporate ESH Senior General Manager

We held the High Pressure Gas Process Safety Measures Promotion Conference, chaired by the General Manager of the High Pressure Gas Process Safety Department, four times (July and October 2021 and January and April 2022) with the relevant parties from head office and the two Works in an effort to exchange information in a timely manner and develop a PDCA (plan-do-check-act) cycle. The High Pressure Gas Process Safety Measures Meeting, chaired by the General Manager of the High Pressure Gas Process Safety Division, was held once (July 2021) to check on the status of process safety at the two works. In addition, the annual on-site patrol by the High Pressure Gas Process Safety Division General Manager was conducted in December 2021 at the Kawasaki Works. Both Works recognize that continuing operations is a top priority and are taking thorough measures to prevent COVID-19 infections and secure the availability of personnel to ensure that operations do not have to be suspended due to an increase in infections.

In addition, when its high-pressure gas safety certification was renewed in September 2021, Mizushima Works applied for super certification (Specified Certified Operator), which necessitates a higher level of high-pressure gas safety management. We continued our considerations through the preparatory project we launched in fiscal 2018, and we have discussed how to address the main issues as we look to apply. The official kick-off was in fiscal 2020, and the Head Office and the Works successfully acquired super certification as a result of their collaboration.

Meanwhile, the Kawasaki Works applied for an ordinary certification renewal audit to take place in August 2022 and is currently under review. Along with other sites that have not yet acquired the certification for self-inspection, we will strive for more advanced high-pressure gas safety management.

Basic Policy for High Pressure Gas Safety

- Safety is an important fundamental of management, and all of our business activities depend on safety.
- Each one of our employees is responsible for safety, and safety is ensured by all employees together.
- We apply a PDCA (plan-do-check-act) cycle to continuously improve the level of safety.
- Measures to assess risks, and to eliminate and mitigate them, are persistent and ongoing.

Process safety management

The following safety-related accidents occurred in fiscal 2021, including Group subsidiaries and affiliates in Japan and overseas.

[Number of safety-related accidents in fiscal 2021]

- Number of serious industrial accidents: 1 (accident intensity of 18 points or more, or accident resulting in death)
- Number of industrial accidents: 0 (accident intensity of 3 points or more but less than 18 points)
- Number of minor industrial accidents: 21 (accident intensity of less than 3 points)

Note: Classification by accident intensity is based on the standards of the Japan Petrochemical Industry Association (CCPS).

In fiscal 2021, as described below, a serious safety accident occurred that resulted in the death of a Production Department operator.

March 1, 2022 Explosion (1 fatality) during production activities at the Kayaku Japan Co., Ltd. Tohmi Plant

Kayaku Japan Co., Ltd. is a 50-50 joint venture between Nippon Kayaku Co., Ltd. and Asahi Kasei Corp. The explosion occurred at 1:51 p.m. on March 1 in the No. 1 cleaning room at Kayaku Japan's Tohmi Plant. On the morning of the accident (before work), there was a total of 2,810 kg of explosives in three storage tanks, and three people were working to dispense diethylene glycol dinitrate from the No. 3 storage tank to the next process. Two people were transferring the diethylene glycol dinitrate in two aluminum containers on a transport vehicle, and one person was staying behind to do the work, when the explosion occurred. Unfortunately, the individual who went missing after the accident was declared dead by the Nobeoka Police Station on March 15.

With regard to injuries, a total of five people were injured, three outside the plant and two inside the plant, though the injuries were minor. In terms of physical damage, windows, glass, doors, storm shutters, etc. were damaged at residences outside the plant, causing a great deal of inconvenience. Kayaku Japan and Asahi Kasei's Nobeoka Office are responding to local residents with sincerity. Our adjacent plants were damaged as well, but production has resumed, with the exception of Kayaku Japan.

Kayaku Japan has established an accident investigation committee that includes the participation of academic experts and other third parties to analyze the causes of the accident. Also, at this time, the fire department, police, and relevant government agencies are conducting investigations. As soon as these results are made public, the Group will take all necessary measures to prevent a recurrence.

While there were no security incidents, 21 minor security incidents involving small fires, scorching, and the leakage of small amounts of hazardous materials and other substances on the premises occurred. Precise primary measures at the site prevented the damage from spreading. We will continue to strengthen our efforts to reduce the severity and number of industrial accidents going forward.

Activities to pass on operational safety technology

To achieve safe operations, it is essential to perform sound plant maintenance, and to operate facilities in a safe and stable manner. The Asahi Kasei Group avoids operational accidents through risk assessments prior to the construction of new plants, periodic inspections of existing plants performed by auditors specialized in fire and explosion prevention, facility and process reviews from the perspective of preventing abnormal reactions and ensuring interlock functions, and process reviews corresponding to the age of facilities.

Maintaining the activities to transmit process safety and disaster prevention techniques commenced in fiscal 2013, we identify hazards at each plant and specify the risks. When doing this, we examine risks that include abnormal reactions, suspension of services, and contamination assuming the worst-case scenario (hazard) for when safety equipment, such as interlocks, fails to function., and study the effectiveness of polymerization inhibitors and other measures to deal with abnormalities.

Details of initiatives under activities to pass on process safety technology

- Step 1: Identification of hazard sources
- Step 2: Passing on through technology communication materials (summaries)
- Step 3: Analysis of factors leading to high level hazards (equipment damage, fire and explosion) and checking on appropriateness of countermeasures
- Step 4: Training of operators with ability to apply knowledge to work through troubleshooting drills

In particular, Step 4 involves training to ensure that all operators working in shifts can correctly respond to expected abnormalities (training to determine the cause of abnormalities, respond, and prevent them from spreading). In this training, time constraints are set for preventing the spread of abnormalities, and a third party, such as a section head or staff member with a daytime weekday shift, is present during the training. The individual skills of the trainees are then assessed to ensure that they are acting in the correct manner, and retraining is conducted until their skills reach the level required for their role.



Troubleshooting drills at Kawasaki Works



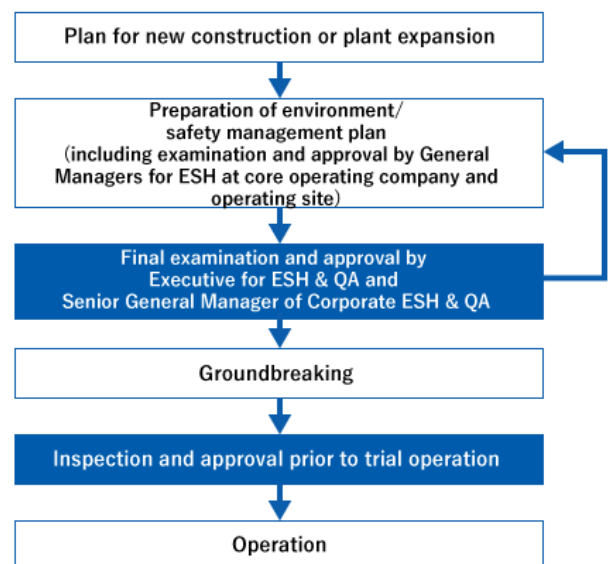
Troubleshooting drills at Kawasaki Works

Safety review system for investment plans

We perform process hazard assessment before plant construction to ensure a high level of safety, not only when establishing new plants or expanding plants but also when modifying or dismantling plants. Internal regulations require a pre-investment inspection to verify plant safety when there are plans to invest in a new plant or plant modification, etc. of a certain scale or larger. Inspection and approval prior to trial operation provides an additional confirmation of plant safety before actual operation begins. The inspection system is applied not only in Japan, but also outside of Japan. Safety assessment is performed as part of the pre-investment inspection. Ranks are assigned based on the degree of hazard, with methods such as HAZOP* utilized in the risk assessment of high risk facilities.

* Abbreviation of "hazard and operability study," a method of identifying and dealing with potential problems in industrial processes by assuming deviations from design intentions.

This highly exhaustive method is widely utilized throughout the process industries.



System for inspection prior to capital investment

Measures for safe and stable operation

Given our diverse range of operations that include the Material, Homes, and Health Care business sectors, the Asahi Kasei Group has plants with a wide variety of different characteristics. No single approach to safety would be appropriate for all plants. We employ a systematic process to tailor the safety effort to each plant's specific requirements, including the use of the PDCA cycle. One characteristic of this process is the formulation of separate maintenance standards for each individual unit of equipment to ensure the appropriateness of the method and period of maintenance.

In addition, measures that span across the Asahi Kasei Group include a Maintenance Personnel Committee and group-wide plant engineering council with 4 specialist panels: Formulation of optimum systematic maintenance programs, establishment of standards and criteria, formulation of training systems for maintenance engineers, and sharing engineering information. We will ensure safe and stable production at our plants through these maintenance activities.

Training for maintenance

We believe that maintenance means creating the condition of equipment necessary to accomplish production objectives. Although we use a PDCA cycle for the planned maintenance system, people are the most fundamental element. It is vital for each individual to gain the essential technical knowledge and contribute to the strength of the team.

The Group's maintenance technicians should have the ability to carry out planned maintenance, to predict hazards, and to make improvements rather than being purely repair personnel who fix malfunctioning machinery and return it to its original state. To develop such maintenance technicians, we clarified the training principles for maintenance technicians, formulated a training curriculum for each individual based on these principles from fiscal 2009, and applied the PDCA cycle for education and training based on the curriculum for all maintenance technicians.

Training for process safety

At our petrochemical sites in Mizushima and Kawasaki, the Asahi Operation Academy (AOA) serves as the training center to cultivate the skills necessary to conduct production activities at petrochemical plants. AOA teaches the principles and structures of equipment, heightening the ability to identify the cause of equipment failure and to respond appropriately. Miniature plants and simulators are used at AOA to provide hands-on experience with controls and instrumentation. Operators thereby gain the technical skills and practical understanding of chemical engineering necessary for safe and reliable plant operation, with the ability to respond appropriately in the event of any abnormality.

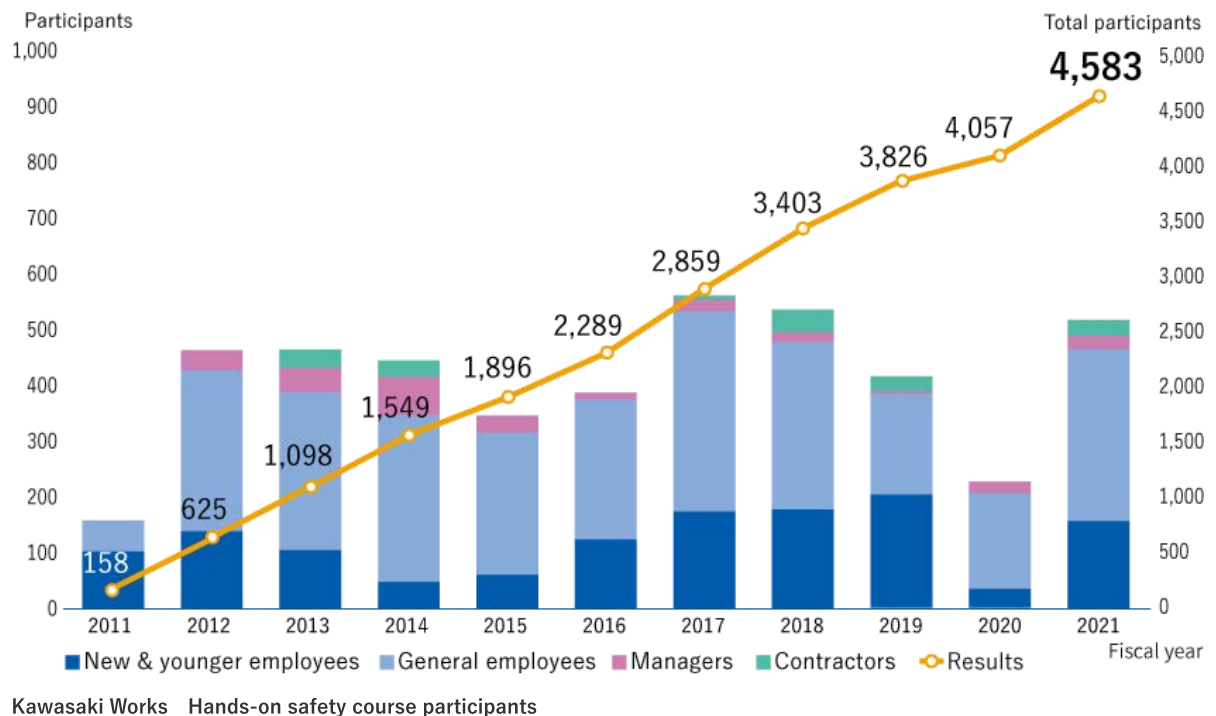
In conjunction, we provide education on human behavioral characteristics and accident case studies in order to instill greater sensitivity for safety among employees and obtain strict compliance to safety rules to avoid dangers. We carry out safety training exercises in which employees are given simulated experience of workplace dangers including being caught in/between machinery, contacting hazardous liquids, tripping and falling on the same level, suffering a burn, falling from height, etc.

From fiscal 2019, we began incorporating VR experiences into our basic engineering education and safety training curriculum, and we are working to enhance training to improve risk sensitivity in equipment handling and operation.

Regularly conducted training	Basic technology courses (machinery, instruments, electricity, and chemical engineering) Safety experience courses (being caught in/between machinery, contacting hazardous liquids, suffering a burn, stumbling, tumbling or falling, getting scalded, etc.) Job level-based courses (problem-solving training, etc.)
Training target	Manufacturing operators and facility management personnel

We are also focusing on environmental and safety education at our branch offices and Works.

Since 2011, Kawasaki Works has been offering a wide range of hands-on safety courses, including the “Caught in/between something else hands-on experience” course, to educate both new and experienced workers. In recent years, we have been making efforts that include establishing courses that use VR to simulate the experience of tripping and falling on the same level. In fiscal 2021, the number of participants temporarily declined due to the impact of the COVID-19 pandemic, but we were able to restore participant numbers by thoroughly implementing infection prevention measures.



Emergency response

A comprehensive set of internal regulations guides the proper response to any industrial accidents or natural disasters which may occur.

The smooth operation of the emergency response system ensures that personal safety is secured, that effects of the situation are prevented from spreading to surrounding areas, and that damage is held to a minimum, through close communication between the plants, regional management, and the head office. The plants prepare annual plans for periodic training drills, and perform drills in coordination with the head office.

At the Suzuka Plant, different production departments conducted a joint disaster drill with only three-shift personnel to simulate holiday and nighttime hours. Premised on the scenario of a fire caused by a leak of flammable gas due to a large-scale earthquake, the production department where the disaster occurs sets up a local disaster prevention headquarters to conduct disaster prevention activities, while nearby production departments are responsible for ensuring evacuation and safety. We will identify issues and feedback from the training and work to improve them before the next training session.



Suzuka Plant Disaster prevention training and disaster prevention headquarters (performed in four groups on Saturdays in fiscal 2021)



Suzuka Plant Providing information to employees playing role as fire department officers during a disaster drill (performed in four groups on Saturdays in fiscal 2021)

Transportation and Distribution Safety

To prevent accidents in physical distribution, Asahi Kasei works closely with logistics providers contracted for storage, loading, unloading, and transportation to implement safety activities, which include logistics safety symposiums, safety liaison conferences, safety inspection, training, and many other safety measures. Specifically, in addition to annual logistics safety symposiums, which brings together all logistics providers to raise safety awareness with the participation of top management of Asahi Kasei, we also hold safety meetings to share information on accidents and other incidents in different transportation modes. In fiscal 2021, all drills were held remotely to prevent COVID-19 infections, but many participated.

[Fiscal 2021 logistics safety symposiums, joint safety meeting for hazardous products, and safety inspection for hazardous products]

- Logistics safety symposiums: 50 companies
- Joint safety meetings for hazardous products: 33 companies
- Safety inspection for hazardous products: 21 companies

Furthermore, individual production sites hold joint training drills together with logistics providers to prepare for accidents that may occur and to ensure that damage from such accidents is minimized. In January 2017, we signed an agreement with the Maritime Disaster Prevention Center and introduced HAZMATers (Hazardous Materials Emergency Response Service) to further strengthen the response capability in the case of an emergency. The engagement of HAZMATers makes a highly specialized emergency response available 24 hours a day, 365 days a year, ensuring swift action to prevent the spread of damage if an accident occurs.



HAZMAT emergency dispatch vehicles

[Number of logistics accidents in fiscal 2021]

	Target	Results
Serious logistics accidents*	0 cases	0 cases
Logistics accidents**	0 cases	0 cases

(Excluding some affiliates such as Asahi Kasei Homes)

Definition of accidents:

* Serious logistics accident: (1) One or more dead or seriously injured, (2) 100 million yen or more in damages, or (3) Significant social impact (resident evacuation notice, etc.)

** Logistics accident: (1) Personal injury (other than a serious logistics accident), (2) Public response (firefighting, leak prevention, etc.), (3) Explosion, spread of fire, poisoning, or risk of such accidents, or (4) 5 million yen or more in damages

Social Activities

Local communities

Community fellowship

Policy

At the Asahi Kasei Group, we believe that it is our social responsibility to contribute to the development of local communities in which we operate by building a good relationship with them. We work to honor and respect the local culture of each community where our operations are based, and to maintain effective dialog and communication with community members.

It is the policy of the Group as a whole to contribute to the vitality of communities, while at the same time engaging in activities that help to solve local issues through the creation of local employment and procurement based on the Group's businesses. In addition, through community exchange events, plant tours, and community contribution activities, we strive to gain the understanding of local communities about our business and initiatives, and utilize the feedback we receive in our management.

Management framework

Administrative departments at the Group's manufacturing sites lead communication with the communities around our plants, holding periodic networking events, plant tours, and other activities.

Plant tours

We offer plant tours to provide better understanding of our operations and the measures we implement for the environment and safety (tours are not available at all plants).

Note: Plant tours were suspended in fiscal 2021 due to the COVID-19 pandemic (photos from fiscal 2019 shown).



Factory tour (Suzuka Works)



Laboratory tour (Fuji Branch)

Dialog and interaction

At each of the Group's main production sites, we engage in dialog and interaction that includes discussion with local residents through bodies such as local governments, providing public access to our facilities such as sports halls and grounds and parking lots, and holding events.



Information session on the environment for nearby local governments (Moriyama Works)



Eco-volunteers planting flowers (Suzuka Plant)



Participating in a class on gender equality (Fuji Branch)



Briefing to local fire departments about disaster prevention equipment (Oita area)



Participating in the "Work Experience Fair" (Ohito area)



Clean-up activities around the plant (Fuji Branch)

NPO supporting education of the next generation

In 2009, some interested members from the Asahi Kasei retirees association formed "Hagemashitai" (Encouragers), a volunteer group for providing support with schoolwork, and began providing help with math and science schoolwork to junior high school students in Nobeoka, Miyazaki Prefecture. In 2012, Hagemashitai was incorporated as an NPO and is expanding in size and continuing its activities still today. We support the NPO.



Asahi Kasei retirees volunteer to help students as an NPO activity

Social Activities

Local communities

Community fellowship

Policy

The Asahi Kasei Group is involved in a wide range of community-focused activities under the following Community Fellowship Policy to fulfill our responsibilities as a corporate citizen. We strive for mutual prosperity with the local communities and stakeholders focused on the three themes of Nurturing the Next Generation, Coexistence with the Environment, and Promotion of Culture, Art, and Sports.

1. Effective utilization of our human resources and technologies to advance community fellowship based on the unique characteristics of the Asahi Kasei Group.
2. Striving for meaningful community fellowship actions with a constant awareness of our objectives and effectiveness.
3. Supporting and nurturing participation in community fellowship by employees, encouraging volunteerism and individual initiative.

Asahi Kasei Group Community Fellowship Activity Themes

Nurturing
the Next Generation

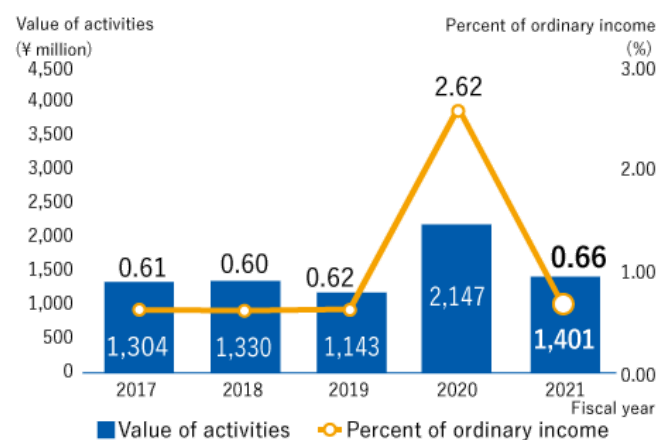
Coexistence with
the Environment

Promotion of Culture,
Art, and Sports

Value of community fellowship activities

The Asahi Kasei Group supports the active participation of employees in community fellowship activities. In addition, we participate in the One-Percent Club of the Keidanren (Japan Business Federation), and convert our social contribution activities into monetary value by a method set forth in its annual Survey of Expenditure for Corporate Philanthropic Activities. The total value of our donations in fiscal 2021 (including community investments) was ¥1,401 million.*

* The results of the activities of the entire Group were converted into monetary values based on the methodology of the Japan Business Federation (Keidanren) "1% Club" Value of Community Fellowship Activities Survey.



Value of community fellowship activities

Nurturing the Next Generation

School visits and science lab for students

To promote understanding and heighten interest in science and technology among elementary, junior high, and high school students, we visit schools and host visits by students at our plants to give explanations and demonstrations of science and technology and on environmental issues. We also support career development with occupational lectures and problem-solving training, and host visits by students to our offices.

In fiscal 2021, a total of 4,231 students from 44 schools participated.

Note: This activity was restricted considerably in fiscal 2020 due to the COVID-19 pandemic (photos from fiscal 2019 shown).



Fuji City, Shizuoka Prefecture



Izunokuni City, Shizuoka Prefecture



Moriyama City, Shiga Prefecture



Nobeoka City, Miyazaki Prefecture



Nobeoka City, Miyazaki Prefecture



Nobeoka City, Miyazaki Prefecture

Miraikan corporate partnership

Since fiscal 2008, the Asahi Kasei Group has been a corporate partner of the National Museum of Emerging Science and Innovation (Miraikan) led by scientist and former astronaut Dr. Mamoru Mohri. As a corporate partner, we work together with Miraikan to help cultivate interest in science and technology among children and other visitors.

Under this partnership, we have exhibited at exhibitions held by the Miraikan, provided products for use in demonstrations, and participated in various events.



The National Museum of Emerging Science and Innovation (Miraikan)

Sponsoring educational programs on science and the environment by newspaper companies

The Asahi Kasei Group sponsors educational events organized by newspaper companies that provide children with an opportunity to learn about science and the environment.

Supporting the Japan Student Science Awards

The Asahi Kasei Group was again the sole sponsor of The Yomiuri Shimbun newspaper's Japan Student Science Awards for fiscal 2021, including the Asahi Kasei Award, which are given in recognition of outstanding study of science at junior high schools and high schools.

The award ceremony was held online due to the COVID-19 pandemic.



Hideki Kobori, former President & Representative Director of Asahi Kasei Corporation, presenting the Asahi Kasei Prize to the winning school for the Junior High division

Planet Earth Classroom

We again provided sponsorship in fiscal 2021 for "Planet Earth Classroom," a series of environmentally themed events for elementary school students planned and managed by the Asahi Shimbun newspaper. We supported the events by editing an environmental study textbook for distribution to elementary schools nationwide, giving lectures focused on energy conservation at elementary schools, and dispatching personnel as instructors for environmental study events for families.



Online lecture at an environmental event (photo provided by Asahi Shimbun)



Online lecture at Planet Earth Classroom (photo provided by Asahi Shimbun)

Supporting young women in science and technology careers

In support of a national campaign to encourage young women to pursue careers in science and technology, we held an event for female high school students who are interested in such careers. The campaign led by Japanese government agencies and supported by the Keidanren aims to inform young women of career options in science and technology and support them in pursuing careers in these fields. Asahi Kasei endorses the objectives of this campaign, and participated from the beginning.

Note: This event was held online in fiscal 2021 due to the COVID-19 pandemic (photos from fiscal 2019 shown).



Studying diffraction with a transmission electron microscope



Discussion with female researchers

Scholarship program

We established a scholarship program to help foster talent that will contribute to the advancement of science and technology in new fields.

Applications are taken from students in masters courses, doctoral courses, and 6-year university courses specializing in chemistry, chemical engineering, mechanical engineering, civil engineering, architecture, control engineering, electrical engineering, electronics, high-current electricity, physics, IT, biology, pharmacology, agricultural science, medical science, and veterinary science.

Coexistence with the Environment

Tree-planting at Asahi Forest in Miyazaki Prefecture

We had been conducting tree-planting activities every year at the Asahi Forest at Hayahi Ridge in Nobeoka City, Miyazaki Prefecture, but in fiscal 2021 this was suspended due to the COVID-19 pandemic (photo from fiscal 2019 shown).



Promotion of Culture, Art, and Sports

Corporate sports activities

Asahi Kasei has long supported athletic activity and maintains top-tier distance running and judo teams, with employees having competed in the Olympics nearly 50 times over the years. Our support for sports and athletics also includes sponsorship of the Golden Games in Nobeoka, a notable long-distance track competition in Japan, and provision of running and judo lessons for local students by members of our corporate distance running and judo teams.

On February 19, 2020, we held a judo workshop in Düsseldorf, Germany. Four members of our judo team served as instructors for local elementary school students and experienced judo enthusiasts. The time spent in contact with children through these kinds of community fellowship activities was a valuable opportunity for our athletes to recharge and deepen interaction with the community. In fiscal 2021, the Golden Games in Nobeoka at the Asahi Kasei Judo Workshop were suspended due to the COVID-19 pandemic (photos from fiscal 2019 shown).



The Golden Games in Nobeoka



Judo Workshop in Düsseldorf, Germany

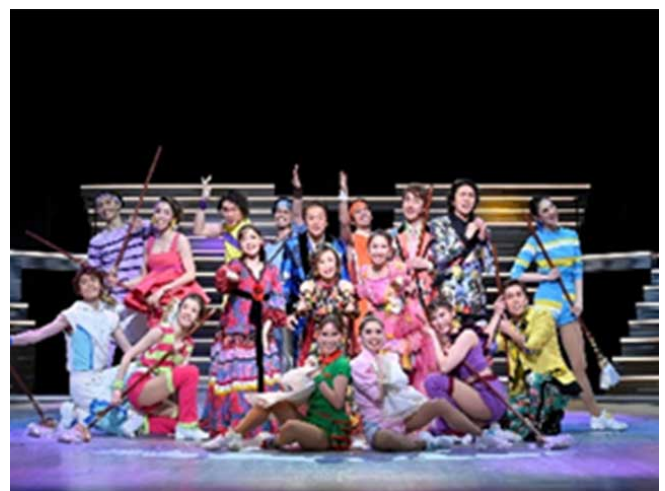


Asahi Kasei Himuka Cultural Foundation

The Asahi Kasei Himuka Cultural Foundation was established in 1985 to enrich the environment of day-to-day life and culture in Miyazaki Prefecture, the cradle of Asahi Kasei. A wide range of cultural activities include musical and dramatic events, support for local cultural promotion, and fostering familiarity with and understanding of folk culture.

Art Appreciation Bus Tour

Art appreciation bus tours are held twice a year for viewing performances held within the prefecture and neighboring prefectures. For those who do not have access to transportation to the venue, we offer a discounted bus and ticket package, which has always been very popular with the tour participants on each occasion.



Fiscal 2021 Performances
Shiki Theatre Company, "The Bridge"

Projects we Co-sponsor, Sponsor, and Support

Throughout the year, Corporate Communications co-sponsors, sponsors, and supports performances, primarily those held in northern Miyazaki Prefecture, as well as informs locals about cultural events held in the region.



“Nijiuro Family Concert” held in fiscal 2021

Disaster relief, local disaster prevention, and other activities

COVID-19 Support Activities

The Asahi Kasei Group contributed donations to community chests and medical institutions around the world and donated masks and other items to help prevent and respond to the spread of coronavirus infections.

Support for research and educational activities for resuscitation and acute critical care

In December 2020, ZOLL Medical Corporation (Headquarters: Massachusetts, USA), a group of Asahi Kasei, made a donation of \$10 million to The ZOLL Foundation to support research and educational activities related to resuscitation and acute critical care. Established in 2013, The ZOLL Foundation is a non-profit charitable organization that operates independently of ZOLL Medical. The Foundation supports innovative new research as well as research, education, and awareness-raising activities for young researchers to improve life expectancy through improved CPR techniques, preventing patient deterioration due to myocardial infarction, and improving care to reduce mortality and morbidity among emergency care patients. Grant applications are accepted twice a year through The ZOLL Foundation website. For more information, please visit the following website.

➤ [The ZOLL Foundation website](#) □

Construction of evacuation towers

In fiscal 2013 we constructed two evacuation towers within our plant grounds in Nobeoka and Hyuga, Miyazaki Prefecture, to enable people to quickly reach a safe height in the event of a tsunami. The evacuation towers are available for use not only by our personnel, but also by nearby community members.



Evacuation tower in Nobeoka, Miyazaki Prefecture

Installation of independent drinking water supply systems

We have installed independent drinking water supply systems at our plant sites in Moriyama, Suzuka, and Nobeoka. The systems utilize our microfiltration membranes to purify deep well water. While serving to supply drinking water to personnel working at these sites on a daily basis, these systems also provide a vital independent backup as a secure source of safe drinking water for local communities in the event of a disaster.



Independent drinking water supply system in Moriyama, Shiga Prefecture

Disaster volunteer organization

In Nobeoka, we have a disaster volunteer organization consisting of our personnel and retirees to perform disaster drills and emergency response support for the local community.



Training to use an automated external defibrillator (AED)

Blood donation

To support "Contributing to life and living around the world," our Group Mission, the Asahi Kasei Group cooperates with the Japanese Red Cross Society to run blood donation drives as an easily accessible community fellowship activity.

We aim to hold the blood donation drive at our Head Office in Tokyo between February and March, when donated blood tends to be in short supply. We hope to gain the cooperation of even more employees to take part in donating blood as an easily accessible community fellowship activity.



Blood donation at the Tokyo Head Office

We received the “Certificate of Appreciation for Outstanding Blood Drive Activities, Ginwaku Branch Manager” from the Japanese Red Cross Society for our longstanding cooperation with blood drives in the Head Office area and the blood drives we held during the COVID-19 pandemic last year.

On January 19, 2022, Tsuneo Kato, Director of the Tokyo Red Cross Blood Center, presented a certificate of commendation to our Senior Executive Officer Toshiyasu Horie.

To alleviate future blood shortages, which are a concern due to the declining birthrate and aging population, our Group actively fulfills requests for corporate cooperation with blood drives to supplement those done in public, and we conduct blood drives for employees in each region.



Sponsoring the Kanazawa Marathon

Together with Asahi Kasei Corp., our affiliate Asahi Kasei ZOLL Medical Corp. sponsored the Kanazawa Marathon 2021 held on October 31, 2021. The Kanazawa Marathon is a full marathon event that encourages participation by the public and features a course that allows participants to fully enjoy the attractions of Kanazawa, as well as famous athletes serving as guest pacers and the hospitality of volunteers.



Since 2016, Asahi Kasei ZOLL Medical has been a special Gold Sponsor of the Kanazawa Marathon, providing automated external defibrillators (AEDs) throughout the course and conducting AED life-saving training in advance for first aid volunteers for the event.

On October 29 and 30 that same year, prior to the event, a booth was set up at the Kanazawa Station East Motenashi Dome Underground Plaza where visitors could get hands-on experience doing chest compressions using an AED training machine.

At the booth, visitors could learn the procedure for providing primary life-saving care in the event of a person collapsing in front of them, as well as experience performing chest compressions (cardiac massage/CPR) at the appropriate speed and depth using the AED training machine and mannequins. An exhibition area for ZOLL Medical’s AEDs and AED trainer units was set up as well.

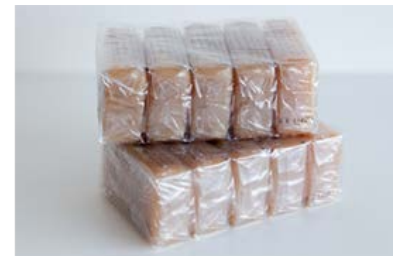


Donations to UNICEF

In support of UNICEF's activities to protect the lives and health of the world's children for future generations, we delivered 51,000 bars of hand soap to children around the world in September 2021 through the UNICEF Inspired Gifts program conducted by the Japan Committee for UNICEF.

The UNICEF Inspired Gifts program is a way to support UNICEF by designating UNICEF supplies to be given to children in developing countries. We selected hand soap as our gift because it can help prevent the spread of COVID-19.

This support was determined based on the number of entrants and the feedback they provided in the Sustainability Photo Contest* held in 2021 for Group employees.



© UNICEF Source: Japan Committee for UNICEF

- * Sustainability Photo Contest: We invited submissions based on the theme of "Care for People, Care for Earth" to inspire people to think about and act on sustainability from a familiar viewpoint. Care for People, Care for Earth expresses the Group's commitment to a sustainable society. We received over 2,300 wonderful photograph submissions from our Group locations around the world.



Social Contribution Activities by Overseas Group Companies

Activities tailored to the characteristics of the community

Many offices and production sites of the Asahi Kasei Group in the United States, Europe, China, Korea, Taiwan, and Southeast Asia, engage in a variety of community fellowship activities as suited to their individual circumstances and locations. These include neighborhood clean-up, support for welfare and education, and donation to local organizations and schools. In addition, we proactively advance industrial-academic alliances (with Aachen University of Germany, etc.) where we have strategic business sites in Europe, pursuing mutual prosperity with the local communities of our operations. We also employ many talented personnel at Asahi Kasei Europe which was established in 2016 and our Europe R&D Center which was established in 2017.

Americas

Zoll Medical (emergency medical equipment manufacturer)

Employees participate in an annual charity event called the Heart Walk (sponsored by the American Heart Association) to save people from heart disease and stroke.



Veloxis (pharmaceutical manufacturer)

Employees participated in a meal package program run by Rise Against Hunger, an international non-profit hunger relief organization. The program packages meals for those in need around the world.



Sage Automotive Interiors

In South Carolina, people participated in the “TreesUpstate” tree planting event.



In addition, to contribute to local communities, the company supports classes for young people to learn about technology and advance their careers at the Career Center (a vocational school).



Asahi Kasei Plastics North America

Each year, the company hosts high school students from Livingston County, Michigan, for a tour of its offices and to introduce them to the potential of the manufacturing industry. Giving students tours of our facilities allows us to nurture their interest in the manufacturing industry and contribute to excellent human resource development for the future.



In addition, the Fowlerville Family Impact Center in Michigan provides a list of families in need of gifts, and each year we welcome four to five of those families during the holiday season to provide them with Christmas gifts and necessities. Employees use the list to donate toys, art supplies, electronics, clothing, and other items. We also donate food to the children for their New Year meals.



Asahi Kasei Bioprocess America

The company has a program that allows employees to donate to various non-profit organizations. In 2021, employees donated a total of \$19,618.79. The company matched the donation amount, bringing the total donation to \$39,237.58.

Thailand

Asahi Kasei Plastics Thailand

The company participated in a charity marathon organized by a hospital and other organizations in Ayutthaya Province.



Thai Asahi Kasei Spandex

The company performed charity work that involved installing artificial turf at a nearby school for children.



China

Asahi Kasei Electronics Materials (Suzhou)

The company has conducted cleanup activities in its surrounding areas.



Europe

Asahi Kasei Europe

A total of €10,000 was donated in July 2021 to areas in North Rhine-Westphalia in western Germany, that were severely affected by torrential rains.

From 2019 onward, the physical Christmas cards that used to be sent were exchanged for digital cards, and the approximately €2,500 in savings (card purchase costs, transport costs, etc.) were donated to an organization that provides books, stationery, and other items to underprivileged children.



Governance

The Asahi Kasei Group constantly endeavors to strengthen corporate governance in an effort to increase sustainable growth and enhance medium- to long-term corporate value.



> Corporate Governance

We continue to pursue the best approaches to corporate governance using a system for making decisions transparently, fairly, swiftly and boldly, based on changes in the business climate.



> Compliance

We aim for a higher level of corporate ethics in all of our business activities. This includes not only compliance with laws and regulations, but also social norms.



> Risk Management

We have established and are strengthening basic rules for risk management in our business operations and addressing contingencies.



> Tax Policy

We have established a tax policy to ensure the Group's compliance with tax related laws and regulations as well as improved tax transparency.

Corporate Governance

▶ Translation of the Corporate Governance Report  (775.1KB)

As of June 24, 2022

Basic Approach

The Asahi Kasei Group Vision is to provide new value to society and solve social issues by enabling "living in health and comfort" and "harmony with the natural environment" under the Group Mission of "contributing to life and living for people around the world." With this as a base, the Company aims to contribute to society, achieve sustainable growth, and enhance corporate value over the medium to long term by promoting innovation and creating synergy through integration of various businesses. The Company continues to pursue optimal corporate governance as a framework to make transparent, fair, timely, decisive, and appropriate decision-making in accordance with changes in the business environment.

Basic Policies

1. Securing the Rights and Equal Treatment of Shareholders

While taking proper measures to secure shareholders' rights, the Company develops a proper environment for exercise of shareholders' rights including paying attention to foreign shareholders and minority shareholders and providing information necessary for the exercise of rights accurately and in a timely manner.

2. Proper Cooperation with Stakeholders other than Shareholders

The Group Vision of the Company is to provide new value to society and solve social issues by enabling "living in health and comfort" and "harmony with the natural environment" for people around the world, and the Company works to facilitate cooperation with its stakeholders.

3. Proper Information Disclosure and Securing of Transparency

The Company, in addition to disclosure required by laws and regulations, actively provides information to various stakeholders including financial information such as financial position and operating results, management strategy/issues, and non-financial information concerning risks and governance, etc.

4. Responsibilities of the Board of Directors

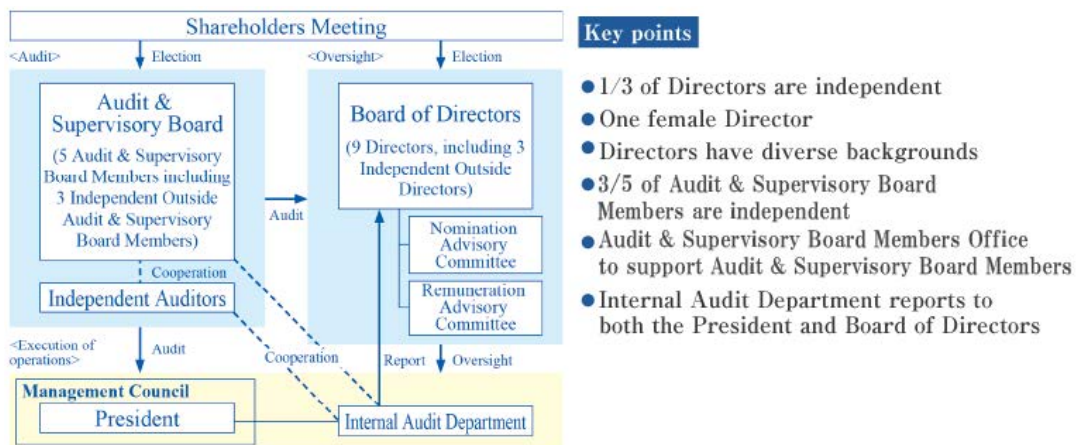
In order to achieve sustainable growth, enhance medium to long term corporate value, and increase earnings ability and capital efficiency, the Board of Directors of the Company presents the overall direction of its management strategy, develops an environment to support risk-taking by the management, and effectively oversees the business management of the Company from an independent and objective standpoint, based on the fiduciary responsibility and accountability to shareholders.

5. Dialog with Shareholders

The Company develops a system to have a constructive dialog with shareholders/investors and actively promotes such dialog.

Corporate Governance Framework

Corporate governance configuration



Meetings of Board of Directors, Advisory Committees, and Audit & Supervisory Board (fiscal 2021)

	No. of meetings held	Average attendance	Main subjects of agenda
Board of Directors	15	99% (Directors and Audit & Supervisory Board Members)	<ul style="list-style-type: none"> • Business investment • Medium-term Management Initiative • Risk management and compliance • Sustainability
Nomination Advisory Committee*	3	100% (all members)	<ul style="list-style-type: none"> • Optimum composition and size of Board of Directors • Policy for nomination of candidates to be Directors and Audit & Supervisory Board Members • Standards for judging independence of Outside Directors and Audit & Supervisory Board Members
Remuneration Advisory Committee*	6	100% (all members)	<ul style="list-style-type: none"> • Policy and system for remuneration of Directors • Deciding on performance-linked remuneration of individual Directors
Audit & Supervisory Board	18	99% (Audit & Supervisory Board Members)	<ul style="list-style-type: none"> • Auditing state of performance of Directors' duties • Auditing state of operations and financial affairs • Evaluation of Independent Auditors

* The Nomination Advisory Committee and Remuneration Advisory Committee are comprised of the 3 Outside Directors and Representative Directors Hideki Kobori and Koshiro Kudo as members, with the Nomination Advisory Committee and the Remuneration Advisory Committee chaired by Outside Director Tsuyoshi Okamoto.

➤ Compliance

➤ Risk Management

Policy and Procedures to Nominate Candidates for Directors

In selecting candidates for Directors, the Company chooses persons with deep insight and excellent skills suitable for Directors. For inside Directors, the Company chooses those with expertise, experience and skills in the required field as candidates. Meanwhile, for Outside Directors, the Company chooses as candidates corporate executives, academic experts, and former civil servants with abundant experience, expecting objective oversight of management based on their deep insight.

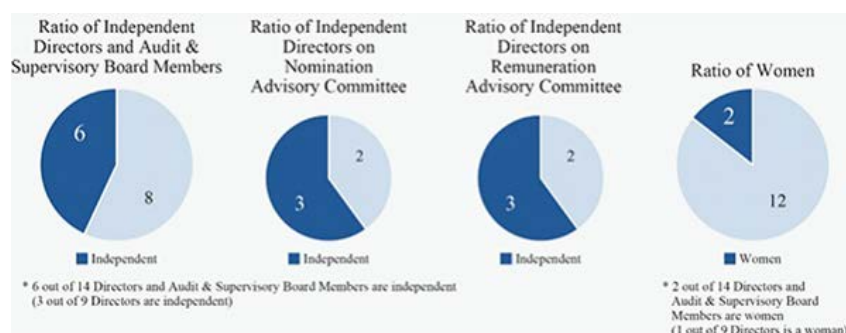
To further increase the objectivity and transparency of the nomination of candidates for Directors, the Company has established the Nomination Advisory Committee whose members mainly comprise outside Directors. This committee is involved in the examination of the composition and size of the Board of Directors and the nomination policy for officers and provides advice.

- Supplementary Explanation on the Reason for Selecting Outside Directors and Their Independence (NOTICE OF THE 131st ORDINARY GENERAL MEETING OF SHAREHOLDERS)  (2.8MB)

Diversity of Expertise and Experience of Directors/Audit & Supervisory Board Members (Skills Matrix)

In order to “contribute to life and living for people around the world,” the Company pursues two aspects of sustainability: “contributing to a sustainable society” and “sustainable increase in corporate value.” To this end, we have identified the knowledge, experience, and capabilities required to advance Group management and its supervision and auditing at a higher level in a discontinuous and uncertain business environment, and have considered the composition of the Board of Directors with consideration to the balance of its diversity and independence.

Specifically, in addition to “corporate management and strategy,” “finance and accounting,” “legal affairs, intellectual property, and risk management,” and “R&D, manufacturing, and technology,” which are indispensable for pursuing opportunities and reducing risks, we also emphasize “global” to align with the internationalization of markets and businesses, “digital” to advance digital transformation, “environment and society” to respond to changes in the social environment and the status of stakeholders with agility, and “human resource management” to utilize people as the foundation of business management.



			Corporate Management & Strategy	Finance & Accounting	Legal Affairs, Intellectual Property, & Risk Management	R&D, Manufacturing & Technology	Global	Digital	Environment & Society	Human Resource Management
Directors	Hideki Kobori		★		★				★	
	Koshiro Kudo		★				★		★	★
	Shuichi Sakamoto		★				★		★	★
	Fumitoshi Kawabata		★						★	★
	Kazushi Kuse					★		★	★	
	Toshiyasu Horie		★	★					★	
	Tsuneyoshi Tatsuoka	I*			★		★		★	
	Tsuyoshi Okamoto	I	★	★					★	
	Yuko Maeda	I			★	★			★	
Audit & Supervisory Board Members	Masafumi Nakao				★	★		★	★	
	Yutaka Shibata			★	★				★	
	Tetsuo Ito	I			★				★	
	Akemi Mochizuki	I		★					★	
	Haruyuki Urata	I	★	★					★	

* Independent

Evaluation of the Effectiveness of the Board of Directors

The Board of Directors of the Company conducts regular evaluations of its own effectiveness through deliberations by the Board of Directors after the end of each fiscal year. The main measures implemented in fiscal 2021 and issues recognized for the future are as follows:

Main measures implemented in fiscal 2021

The Board of Directors of the Company implemented the following measures in fiscal 2021 based on evaluation of the previous fiscal year.

- (1) Considered the role of the Board of Directors throughout the year, including enhanced agenda items relating to medium- to long-term management issues and holding meetings of independent officers
The Board of Directors actively took up and deliberated agenda items relating to sustainability, business portfolio management, risk management promotion, and the new MTP that starts in fiscal 2022. Furthermore, in addition to the regular meeting opportunities between Outside Directors and Audit & Supervisory Board Members that were held in the past, in October 2021, an opportunity was created for only Outside Directors and Outside Audit & Supervisory Board Members to hold a discussion on the role of the Board of Directors, the nature of explanations and deliberations at meetings of the Board of Directors, and how to evaluate the effectiveness of the Board of Directors, from an independent and objective standpoint, as an interim review of effectiveness evaluations of the Board of Directors. Based on this meeting, multiple deliberations at meetings of the Board of Directors led to the 2) Introduction of “matters to be discussed” and narrowing down agenda items, and 3) Improvements to enhance deliberations at meetings of the Board of Directors, below.
- (2) Introduction of “matters to be discussed” and narrowing down agenda items
In addition to “matters for resolution” and “matters for reporting,” “matters to be discussed” was established as an agenda item to further deepen deliberations on important management matters, such as, for example, financial and capital policies, establishment of optimum governance, MTP and other management plans, business portfolio strategies, and large-scale M&A and investments. At the same time, the Board of Directors expanded the scope of sustainability and diversity-related matters to be discussed by the Board of Directors, while promoting the entrustment of decision-making authority for certain business operations, such as capital investment and personnel affairs, to ensure prompt management decision-making and effective deliberations by the Board of Directors.
- (3) Improvements to enhance deliberations at meetings of the Board of Directors
The Board of Directors further enhanced deliberations at meetings of the Board of Directors by increasing the time for questions and answers on the day of meetings of the Board of Directors based on prior explanations to Outside Directors and by clarifying issues and improving executive summaries for large-scale M&A and investment projects, etc.

Issues recognized for the future

Based on measures implemented in fiscal 2021, the Board of Directors has confirmed a common awareness of the following issues for the future.

- (1) Review and improve results of efforts during the current fiscal year
Based on the improvement efforts made during the current fiscal year, conduct an interim review and make improvements in a timely and appropriate manner.
- (2) Deepen deliberations on the makeup of the Board of Directors
Continuously scrutinize the size and makeup of the Board of Directors, including its independence and diversity.

Remuneration of Directors

Note: Percentages shown for Directors who have executive responsibilities (FY2021)

Fixed base remuneration	Performance-linked remuneration	Stock-based remuneration
58.9%	30.2%	10.8%

- Performance-linked remuneration → commitment to results
- Stock-based remuneration → perspective of shareholders

Note: Outside Directors receive fixed base remuneration only

The amount of remuneration, etc. of Directors and Audit & Supervisory Board Members in fiscal 2021

Classification	Amount Paid (¥ million)	Breakdown by remuneration type (¥ million)			Number of Directors and Audit & Supervisory Board Members Paid
		Basic remuneration	Performance-linked remuneration	Stock-based remuneration	
Directors	470	297	127	46	11
(of which Outside Directors)	49	49	–	–	4
Audit & Supervisory Board Members	140	140	–	–	6
(of which Outside Audit & Supervisory Board Members)	45	45	–	–	3
Total	609	436	127	46	17

Policy on Determining Remuneration Amounts and Calculation Methods

As one of the corporate governance mechanisms to ensure that the Group can achieve sustainable growth and enhance corporate value over the medium to long term, the Company has sought advice of the Remuneration Advisory Committee on the decision-making policy pertaining to the contents of remuneration, etc. for individual Directors (hereinafter, the "Decision-making Policy"). Respecting the contents of the reports thereof, the Board of Directors has made a resolution on the Decision-making Policy as follows.

The remuneration for Audit & Supervisory Board Members consists of fixed remuneration, since the performance-linked remuneration system is not applied in the remuneration for them. Individual remuneration amounts are determined through discussions with Audit & Supervisory Board Members.

Policy for Determining Director Remuneration

1. Basic policy

The Directors' remuneration of the Company is one of the important components of corporate governance. The Company designs this system to provide appropriate incentives to both executives and supervisors for achieving sustainable growth and improving medium- to long-term corporate value.

Remuneration for Non-executive Directors* including Outside Directors, who supervise the management of the Company, is comprised solely of fixed basic remuneration at a level determined in consideration of third-party survey data, in order to secure a high degree of independence unaffected by short-term earnings fluctuations. The remuneration for Executive Directors combines performance-linked remuneration with stock-based remuneration as nonmonetary remuneration, in addition to fixed basic remuneration which serves a basic livelihood, in order to provide incentives tied to earnings and management strategy as senior management, with levels of remuneration amounts and proportions of types of remuneration adjusted as appropriate for each role according to management strategy and tasks, in consideration of third-party survey data.

To ensure the optimal way of remunerating Directors and design of the remuneration system, the Board of Directors and the Remuneration Advisory Committee regularly deliberate and continually confirm their appropriateness and make improvements.

2. Policy for determining the timing for payment and conditions of remuneration

Considering the purpose of each type of remuneration, fixed basic remuneration is paid monthly as it serves as a basic livelihood, performance-linked remuneration is paid monthly as it serves as a constant incentive, and for stock-based remuneration, points described below are granted to eligible Directors on a certain date each fiscal year set forth in the Share Grant Regulations determined by the Board of Directors, and shares of the Company are provided to eligible Directors at the time they retire both as Director and as officer of the Group in light of the purpose of the stock-based remuneration to share the medium- to long-term perspectives of shareholders.

3. Policy for determining each individual's basic remuneration (monetary remuneration)

Amounts of basic remuneration for Directors are determined through comprehensive consideration in accordance with rank and responsibility taking account of other companies' levels of remuneration and the Company's earnings.

4. Policy for determining content of performance-linked remuneration and nonmonetary remuneration as well as method of calculating amounts and numbers thereof

Performance-linked remuneration, which comprises a part of remuneration for Executive Directors, combines both achievement of financial targets including invested capital efficiency with achievement of non-financial targets including individual targets such as progress on sustainability, so as to provide incentives tied to earnings and management strategy as senior management.

Performance-linked remuneration is calculated based on a comprehensive judgment on the basis of achievement of financial targets such as consolidated net sales, operating income, ROIC, etc., together with achievement of individually set targets including progress on sustainability. Standards for financial incentives are selected as appropriate for clear and objective evaluation based on earnings results together with the perspective of awareness for improving invested capital efficiency.

The formula required to calculate individual performance-linked remuneration is outlined as follows.

[Formula required to calculate individual performance-linked remuneration]

$$\boxed{\text{Index calculated by evaluation}^*} \times \boxed{\text{basic amount by rank}} = \boxed{\text{individual performance-linked remuneration amount}}$$

* Coefficient comprehensively considering achievement of financial targets and nonfinancial targets

A portion of remuneration for Executive Directors is the provision of stock-based remuneration as non-monetary remuneration. To share with shareholders not only the benefits of share price increases but also the risk associated with share price decreases, a stock-based remuneration system was adopted, whereby a trust established by the Company acquires shares of the Company and grants them to eligible Directors. Based on the Share Grant Regulations adopted by the Board of Directors, eligible Directors are granted points linked to achievement of targets

set by the medium-term management plan in accordance with their rank, etc. (maximum of 150,000 points per fiscal year) and the Company's shares are granted to eligible Directors corresponding to the accumulated number of points at the time of their retirement as Director and as officer of the Group (the number of shares to be granted is the number of points granted multiplied by 1.).

5. Policy for determining the proportion of basic remuneration, performance-linked remuneration, and nonmonetary remuneration for individual Executive Directors

The proportion of basic remuneration, performance-linked remuneration, and stock-based remuneration for each Executive Director is determined to provide an appropriate incentive in accordance with management strategy and management tasks, with consideration given to the level obtained from third-party survey data.

The proportion of basic remuneration, performance-linked remuneration, and stock-based remuneration for each Executive Director is generally 6:3:1, with performance-linked remuneration ranging between 0% to 200% of the base amount based on rank, according to evaluation. However, the Board of Directors and the Remuneration Advisory Committee regularly deliberate on its appropriateness, and improvement is made based on continual confirmation of appropriateness.

6. Policy for determining items to be entrusted regarding determination of content of remuneration of individual Directors and for determining content of remuneration of individual Directors

Among remuneration of each individual Director, determination of the amount of performance-linked remuneration is entrusted to the Remuneration Advisory Committee based on a resolution of the Board of Directors, with the Remuneration Advisory Committee being authorized to confirm the reasonableness and appropriateness of the evaluation of the achievement of targets by each Executive Director as proposed by the President and Director, and to determine remuneration amounts for individual Directors by applying this evaluation to the formula determined by the Board of Directors.

To ensure that such authority is properly exercised, the Remuneration Advisory Committee is comprised of a majority of Outside Directors, and it regularly reports to the Board of Directors on the process of the above confirmation and determination.

Regarding determination of basic remuneration and stock-based remuneration for individual Directors, the Board of Directors requests deliberation by the Remuneration Advisory Committee and makes a determination based on ample consideration of the result of deliberation by the Remuneration Advisory Committee.

Fixed basic remuneration by rank is paid upon determination of the amount by the Board of the Directors. Stock-based remuneration is granted to eligible Directors when certain conditions are met, corresponding to points granted to each Director based on the Share Grant Regulations adopted by the Board of Directors.

7. Important matters for determining the content of individual remuneration, etc. for Directors

In the event that a Director who is eligible for payment of stock-based remuneration, which is nonmonetary remuneration, as part of the above-stated remuneration for Executive Directors, retires due to personal reasons (except in cases where it is determined that the resignation is due to unavoidable circumstances), and in the event that a Director is dismissed or resigns due to causing loss or damage to the Company's group companies as defined in the Share Grant Regulations, etc., all or some of the points granted up to that point shall be forfeited and no shares of the Company corresponding to the forfeited points shall be granted, or no further points shall be granted, based on a resolution of the Board of Directors.

* Non-executive Directors include Director and Chairman.

> Officer Remuneration, etc. (NOTICE OF THE 131st ORDINARY GENERAL MEETING OF SHAREHOLDERS)  (2.8MB)


Independence Standards and Qualification for Outside Directors/Audit & Supervisory Board Members

In determining that Outside Directors and Outside Audit & Supervisory Board Members are independent, the Company ensures that they do not correspond to any of the following and that they are capable of performing their duties from a fair and neutral standpoint.

1. A person who conducts business on behalf of the Group (Executive Directors, Executive Officers, Operating Officers, employees, etc.) or a person who has done so over the last 10 years
2. A company or a person who executes the businesses thereof whose major business partner is the Group (an entity with more than 2% of its annual consolidated net sales coming from the Group)
3. A major business partner of the Group (when payments by this partner to the Group account for more than 2% of the Company's annual consolidated net sales or when the Company borrows money from such partner amounting to more than 2% of the Company's consolidated total assets) or a person who executes the businesses thereof
4. A person who receives a large amount of money or other financial gain (¥10 million or more in one year) from the Group as an individual other than remuneration for being a Director/Audit & Supervisory Board Member of the Company
5. A company which receives a large amount of donations or aid (¥10 million or more in one year) from the Group or a person who executes the businesses thereof
6. A main shareholder of the Group (a person/company who directly or indirectly owns 10% or more of all voting rights of the Company) or a person who executes the businesses thereof
7. A person who executes the businesses of a company which elects Directors/Audit & Supervisory Board Members/employees of the Group as Directors/Audit & Supervisory Board Members
8. An Independent Auditor of the Group or any staff thereof
9. A person who has fallen into any of the categories 2 through 8 above over the last three years
10. A person who has a close relative (spouse, relative within the second degree of kinship, or those with whom they share living expenses) who falls under any of the categories 1 through 8 above, provided that "a person who executes businesses thereof" in 1, 2, 3, 5, 6, and 7 above shall be replaced with "an important person who executes the businesses thereof (Executive Directors and Executive Officer, etc.)"
11. A person who has served as Outside Director or Outside Audit & Supervisory Board Member of the Company for more than eight years in total.

Status of Audits by Audit & Supervisory Board Members, Financial Audits and Internal Audits

- For internal audits of business execution, the company has established an Internal Audit Department, reporting directly to the President. The Internal Audit Department formulates an annual audit plan according to the Company's Basic Regulation for Internal Audits, and conducts an audit of the Group under the approval of the President.
- As for audits by Audit & Supervisory Board Members, each Audit & Supervisory Board Member audits the execution of duties of Directors by attending meetings of the Board of Directors and examining the status of execution of operations based on the audit policy stipulated by Audit & Supervisory Board. To support the function of the Audit & Supervisory Board, the Company has established an Audit & Supervisory Board Members Office.
- PricewaterhouseCoopers Arata LLC is contracted as the Independent Auditors to perform financial audits according to the Companies Act and Financial Instruments and Exchange Act.

- Mutual cooperation between the Internal Audit Department, Audit & Supervisory Board, and Independent Auditors is reinforced through periodic liaison meetings of the Internal Audit Department, Audit & Supervisory Board, and Corporate Auditors of core operating companies, etc. During these meetings, the effectiveness of the Group's internal control system for legal compliance and risk management is reviewed. In addition, the Audit & Supervisory Board confirms the audit plan with the Independent Auditors and receives reports of the results of audits on the Group at the end of the quarterly consolidated accounting period and at the end of the annual consolidated accounting period.
- Details of Independent Auditors Remuneration (NOTICE OF THE 131st ORDINARY GENERAL MEETING OF SHAREHOLDERS)  (2.8MB)
- Asahi Kasei Report

Strategic Shareholdings

The Company is continuing to reduce its holdings of shares held for purposes other than pure investment (strategic shareholdings), taking into consideration factors such as the risk of share price fluctuations, costs associated with such holdings, and capital efficiency.

The purpose, effectiveness and economic rationale of individual strategic shareholdings are regularly evaluated from qualitative and quantitative aspects each year, and are reviewed by the Board of Directors. As a result of the verification, the Company reduces, through sales or other means, holdings of shares judged to be no longer compatible with the purpose of holding them or deemed to have costs and risks that outweigh the benefits of holding them, taking into consideration the conditions of the company concerned.



Compliance

Policy

The Asahi Kasei Group takes compliance seriously, and fully adheres to laws and regulations that are applicable to each business and function, as well as internal company rules.

Each employee is also expected to uphold high ethical standards and respect social norms throughout the course of business activities, acting with sincerity in accordance with our Group Values based on our Group Mission.

Asahi Kasei Group Code of Conduct

The Asahi Kasei Group Code of Conduct serves as a set of standards that include matters of compliance and applies to each and every member of the Asahi Kasei Group. The code serves as a foundation for the actions of all members of the Asahi Kasei Group to follow during the course of their day-to-day work activities to fulfill our Group Mission in accordance with our Group Values.

We will continue to review this Code of Conduct based on the expectations of society and changes in circumstances in order to maintain its effectiveness.

The Asahi Kasei Group Code of Conduct can be downloaded from the link below:

➤ [Asahi Kasei Group Code of Conduct](#) (441.0KB)



Asahi Kasei Group Code of Conduct

Awareness of Code of Conduct

After the establishment of the Code of Conduct in fiscal 2017, we created booklets containing this Code and distributed them to the executives as well as all domestic employees of our Group. We also spread awareness about the Code of Conduct by reading through the Code at each workplace and establishing an e-learning course for reviewing the Code.

Moreover, to further improve awareness of the Code of Conduct, we began using specific examples of compliance violations and holding discussions about them at each workplace in Japan, and we also integrated a review of the Code of Conduct into the rank-specific company training curriculum. Further, in fiscal 2021, to confirm the degree of awareness with regard to the Code of Conduct, we issued a Compliance Survey to our 31,131 domestic employees (including contract employees, temporary employees, and part-time employees) and received 29,116 responses (a response rate of 93.5%). Of these, approximately 80% said that they understood the Code of Conduct, confirming that the Code has firmly taken hold.

Overseas, in addition to distributing booklets of the Code of Conduct in various languages, we are steadily working to expand awareness through e-learning, training, and other means, and we are promoting actions that are based on a strong sense of ethics.

Management framework

We have established the Risk Management & Compliance Committee, with the President of Asahi Kasei Corp. as the chair, in order to reinforce the entire Group's risk management and compliance framework. The committee monitors the state of compliance and management of risks throughout the Asahi Kasei Group. Results of the committee's deliberations, etc., are reported to the Board of Directors.

Handling Serious Compliance Violations

If a significant compliance violation occurs within our Group, a system is in place whereby the Executive Officer for Compliance reports the incident to the Risk Management & Compliance Committee.

Whistleblower System (Compliance Hotline)

The Asahi Kasei Group began employing a Whistleblower System (compliance hotline) in 2005 to ensure that any possible ethical lapses which employees may encounter or observe are dealt with swiftly and appropriately. In fiscal 2015, the system was expanded to enable suppliers and their employees to report or consult. Reported matters will be investigated by an office consisting of those designated by the Executive Officer for Compliance as well as an organized investigation and response team if required. The Executive Officer for Compliance reports the status of operations to the Risk Management & Compliance Committee. For serious compliance violations and incidents involving officers, the Executive Officer reports to the Audit & Supervisory Board.

■ Strict observance of confidentiality

- The Asahi Kasei Group has measures in place to prevent the persons submitting reports to be treated unfairly as a result of their report.
- In addition, we strive to protect the confidentiality of the report as well as the personal information of persons submitting reports.

■ Applies to

- Executives and employees of our Group, business partners and their employees. (Other than Executives, those who have been retired for less than one year are eligible as well.)

■ Matters addressed

- There are no restrictions on what can be reported. The hotline receives reports on a broad range of matters, including human rights violations such as discrimination and harassment, and corruption, such as bribery.

■ Response method

- Reports can be both made either anonymously and using one's real name over the Internet or in writing (addressed to a designated law office).


Reports and responses

During fiscal 2021 there were 66 reports and consultations made through the hotline system. None of them regarded significant matters which would affect the performance of operations. Of these, three were reports or consultations related to human rights issues such as discrimination and harassment.

Prevention of bribery

The Asahi Kasei Group endorses the UN Global Compact and has proclaimed that it will "strive to prevent all forms of corruption including coercion and bribery." Corruption including bribery is clearly prohibited within the Asahi Kasei Group Code of Conduct as well. The Asahi Kasei Group considers bribery to be a particularly important risk factor which could seriously jeopardize our corporate reputation.

The Asahi Kasei Group Policies for Prevention of Bribery clarify basic policies to prohibit bribery and procedures to follow to prevent bribery. These policies are made known to the entire Group based on a clear internal framework.

➤ [Asahi Kasei Group Basic Policies for Prevention of Bribery](#)  (92.5KB)

1. Procedures

Transactions subject to procedures under these regulations directly or indirectly involve counterparties in (1) the public sector (regardless of country) and (2) the private sector in certain countries with commercial bribery regulations. Specifically, receiving or providing a meal or gift or providing donations is only permitted after obtaining the advanced screening and approval of the prescribed person in charge of each organization. Due diligence is conducted to check the suitability of business partners from the standpoint of bribery prevention in terms of transactions that fulfill certain formats of concern in terms of bribery prevention, such as contracts with agents and distributors. In addition, business partners are informed of our basic policy on bribery prevention and they are required to sign a pledge or include contractual provisions on the declaration of compliance with anti-bribery related laws.

2. Education

We provide educational opportunities to employees, including those outside of Japan, in the form of e-learning and in-house training on overall prevention of corruption (bribery, money laundering, fraud, etc.)

3. Monitoring

We carry out internal audits periodically as well as evaluate and review the management framework for bribery prevention in order to maintain a continuous and effective framework for bribery prevention.

4. Consulting and Reporting

We have put into place a framework by which employees can consult with a legal department in Japan or at overseas offices in case uncertainties or doubts arise regarding bribery during the course of their daily work.

In case an employee discovers a violation of or act that could violate bribery laws, they are required to report the matter immediately to the prescribed person in charge.

Our whistleblowing system also enables suppliers and their employees to report or consult regarding bribery and other aspects of corruption.

5. Legal Violations related to Corruption

In fiscal 2021, there were no cases where an employee was dismissed or subjected to legal proceedings due to corruption.

Responding to Suppliers

We have also included questions related to anti-corruption for suppliers in our CSR Procurement Questionnaire to ensure that the entire Group is involved in the prevention of bribery.

Political contributions

In terms of political contributions, we have established a system of checks and balances based on company rules to ensure compliance with the Political Funds Control Act. Political contributions are made only after the required pre-approvals are obtained. Our political contributions in fiscal 2021 were ¥15,980,000 (Asahi Kasei Group total).

Compliance with antimonopoly and competition laws

The Asahi Kasei Group Regulation for Management of Compliance with Antimonopoly Law prohibits acts which violate the competition laws of each country. To prevent acts which would constitute or arouse suspicion of participation in a cartel, standards are set for attendance at industry gatherings, and inappropriate contact and information exchange with competitors are prohibited. Furthermore, across-the-board price revisions for products sold in Japan require submission to our Market Compliance Committee which includes the Executive Officer for Compliance among its members, confirmation of the reason for the price revision, and confirmation that there is no violation of antimonopoly law prior to implementation.

Compliance with export-related laws

The Asahi Kasei Group thoroughly complies with foreign exchange and other export-related laws and regulations in accordance with our Export Control Regulation. All exported products are subject to screening for applicability of export restrictions and examination of customers. In the case that a permit is required, application to the Ministry of Economy, Trade, and Industry is made after obtaining internal company approval. To ensure awareness and understanding of the requirements of relevant laws, regulations, and internal company rules, periodic training sessions are held and the related departments undergo paper and onsite audits annually.

Ethical Considerations in Pharmaceutical and Medical Device Development

Asahi Kasei Pharma, which engages in the research and development of pharmaceuticals, and Asahi Kasei Medical, which engages in the development of medical devices, ensure ethical considerations and full compliance with laws and guidelines on animal testing. See below for further details.

- Asahi Kasei Pharma
- Asahi Kasei Medical

Risk management

Policy

The Asahi Kasei Group has established and is working to reinforce basic guidelines for risk management and emergency response in the Group's business operations in accordance with the Asahi Kasei Group Basic Regulation for Risk Management & Compliance.

Management framework

Each division, strategic business unit, and subsidiary clarifies who bears responsibility for promoting risk management; acknowledges, evaluates, and analyzes the risks of each business; and plans and manages countermeasures for significant risks present in management plans. Through the Risk Management & Compliance Committee, chaired by the President, we confirm and follow-up on the progress being made. Significant risks are reported to the Board of Directors, which thoroughly considers and decides on policies to handle these risks.

Risk management system based on external standards

To ensure transparency in its risk management system and reporting, the Group references external standards that include frameworks and standards such as the GRI, the Ministry of the Environment "Environmental Reporting Guidelines (2018)," SASB Standards, ISO 26000, and others.

- Guidelines consulted

Handling ESG risks

In light of environmental issues such as climate change as well as changes in industrial structure, decreases in the working population, and so on, it is possible that new ESG-related risks will become apparent from social changes related to sustainability. We address these ESG risks as a vital management issue. In particular, given that our businesses rely heavily on energy, addressing climate change is essential, and we consider it to present both risks and opportunities in terms of management.

Based on this mindset, we conducted an analysis of the risks and opportunities present in the various scenarios that could result from climate change based on their level of severity in keeping with the recommendations of the TCFD (Task Force on Climate-related Financial Disclosures) and devised countermeasures.

We are working to make management as well as our business and environmental divisions aware of these results and take appropriate action.

- Disclosure based on TCFD Recommendations

Information Security

Recognizing the importance of countermeasures to protect against information security risks, we established the Asahi Kasei Group Information Security Policy and aim to ensure and further improve information security.

Asahi Kasei Group Information Security Policy

As ensuring information security is an important management responsibility, the Asahi Kasei Group declares that it faithfully applies its established information security policy.

1. Legal Compliance

We comply with laws and internal regulations concerning information security.

2. System Establishment

We have an established system to safeguard information security throughout the organization.

3. Implementation of Countermeasures

We implement appropriate information security countermeasures corresponding to our information assets to prevent information security incidents. In the event that an incident occurs, we respond swiftly and appropriately, strive to minimize any damage, and endeavor to prevent any recurrence.

4. Education of Employees

We provide information security training to all employees to ensure full awareness of the importance of information security and the proper use of information assets.

5. Continuous Improvement

We continuously assess our efforts for information security, and apply improvements as necessary.

Established December 1, 2016

Protection of personal information

The Asahi Kasei Group is committed to the proper handling of personal information we obtain and use, in accordance with the Asahi Kasei Group Regulation for Management of Personal Information. An information security handbook which describes our rules for handling information is distributed to all employees, and education is performed via e-learning. Furthermore, we made necessary changes to the Asahi Kasei Group Regulation for Management of Personal Information to comply with Japan's revised Personal Information Protection Act that took effect in May 2017.

▶ [Privacy Policy](#)

Response to the EU GDPR

To comply with the General Data Protection Regulations (GDPR) that took effect in the EU in May 2018, we have newly formulated the Asahi Kasei Group Regulation for Management of Personal Information and established the necessary standards and systems.

Protection of intellectual property

The Asahi Kasei Group implements strict measures to prevent unauthorized or unintentional outflow of technological information and know-how in accordance with its basic policy and management standards for prevention of technology outflow. The Asahi Kasei Group also applies internal guidelines summarizing related precautions to take when entering business overseas as well as procedures to ensure the preservation of prior-use rights overseas. The company's internal magazine is used to raise further awareness among employees, and workshops are held for training and education regarding protection of intellectual property.

For more information about our intellectual property, please refer to the Asahi Kasei Group Intellectual Property Report.

➤ [Asahi Kasei Group Intellectual Property Report](#)

Crisis response system

Due to accidents, incidents, or problems, if Asahi Kasei Group operations are significantly damaged or would cause serious adverse effects on the general public, we have a system to establish a group emergency response headquarters which works with the relevant divisions and departments to ensure that the proper response is taken.

In fiscal 2017, we established the Asahi Kasei Group Emergency Response Regulation which stipulates basic policy when an emergency occurs, standards to institute an Emergency Response Headquarters, and the functions thereof.

Tax Policy



Asahi Kasei Group Tax Policy

The Asahi Kasei Group endeavors to thoroughly comply with the laws and regulations of each country, and to prepare and appropriately apply internal company rules, based on the Asahi Kasei Group Code of Conduct.

In terms of tax, the Asahi Kasei Group also complies with the tax laws of each country in which it operates and makes appropriate tax payments in accordance with the laws by performing tax treatment based on internal company rules.

In addition, in order to maximize free cash flow, the Asahi Kasei Group makes its best effort to minimize tax risks, implement appropriate tax planning strategies, and make use of any available tax incentives. As a result, the Asahi Kasei Group aims at the maximization of shareholders' value.

1. Tax Compliance

The Asahi Kasei Group complies with the tax laws and regulations of each country in which it operates, as well as taxes guidelines published by the OECD. In addition, the Asahi Kasei Group ensures that each group company files tax returns and pays taxes within the due dates stipulated in each country.

2. Tax Governance

In the Asahi Kasei Group Code of Conduct that is obligatory for all officers and employees, the Asahi Kasei Group establishes that each group company understands the tax laws and performs proper and lawful tax treatment based on such laws, regulations, and internal company rules. Moreover, based on the Asahi Kasei Group Accounting Regulations, each group company is required to develop practical management of tax governance and appropriately report on their tax situation.

3. Managing Tax Risk

The Asahi Kasei Group performs tax treatment based on the tax laws, regulations, and internal company rules. However, the Asahi Kasei Group realizes that, in some cases, a difference of opinion with a tax authority may arise. If this is the case, the Asahi Kasei Group endeavors to mitigate tax risks by seeking the advice of qualified external tax advisors and consulting with the tax authorities in advance as appropriate.

4. Tax Planning

The Asahi Kasei Group realizes that it is important to undertake effective tax planning for commercial purposes. The Asahi Kasei Group implements tax planning conducive to cash flow in accordance with the legislative intent underlying the tax laws and regulations, and does not use tax havens for the purpose of tax avoidance. In case that any income is subject to CFC rules in accordance with the tax laws and regulations of each country as a result of carrying out plans for commercial purposes, the Asahi Kasei Group files a tax return and pays tax appropriately.

5. Transfer Pricing

The Asahi Kasei Group realizes that prices in executing international related party transactions are easily arbitrarily determined and it likely results in a tax risk in each country. In order to mitigate any risk associated with arbitrary transfer pricing methodologies, the Asahi Kasei Group establishes prices for international transactions among our companies that are in accordance with the arm's length principle. Also, the Asahi Kasei Group prepares transfer pricing documentation in each country in which it operates based on the transfer pricing documentation requirements.

6. Tax Incentives

In each country in which the Asahi Kasei Group operates, various kinds of tax incentives have been introduced based on government policy. The Asahi Kasei Group continually studies the applicable laws and endeavors to enhance tax efficiency by making use of any available tax incentives to the extent that they fall within the scope of commercial purposes.

7. Relationship with Tax Authorities

The Asahi Kasei Group endeavors to build and sustain mutually respectful relationships with the tax authorities by responding to inquiries in good faith. The Asahi Kasei Group endeavors to address items suggested in tax audits appropriately. However, in the event that a dispute or difference of opinion arises with a tax authority, the Asahi Kasei Group requests for system of remedy for taxpayer rights only if the Asahi Kasei Group determines that tax reassessment by the tax authorities is likely not in accordance with the tax laws and that the system of remedy is appropriate in addressing the issues.

ESG Data

Environment

Society

Governance

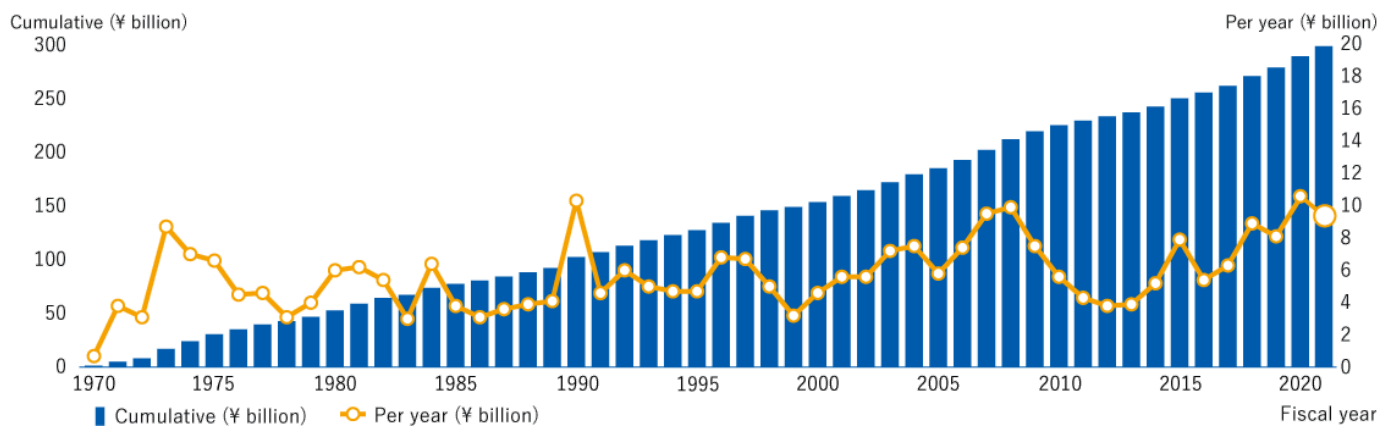
The Asahi Kasei Group publishes cost and performance data concerning its environmental activities.

Investment for Environmental Protection and Safety

The Asahi Kasei Group has invested the necessary management resources in ESH & QA activities.

Investments in environmental protection and safety-related facilities up to fiscal 2021 and in fiscal 2021 are shown below.

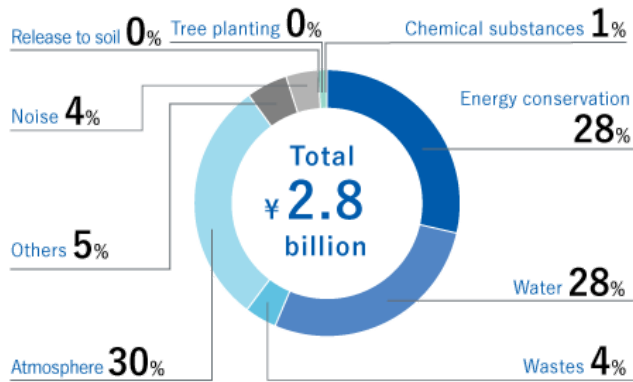
Investment in environmental preservation and safety modification



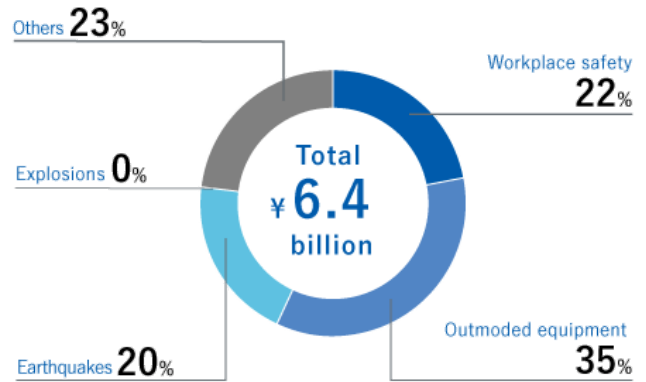
(¥ billion)

	2017	2018	2019	2020	2021
Environmental protection	2.98	2.18	4.14	3.88	2.8
Safety	3.30	6.71	3.95	6.63	6.43
Total	6.28	8.89	8.09	10.52	9.23

Investments in environmental protection-related facilities (fiscal 2021)



Investments in safety-related facilities (fiscal 2021)



Environmental Accounting

We classify the cost of our measures for environmental protection in accordance with cost classification standards promulgated by the Ministry of the Environment.

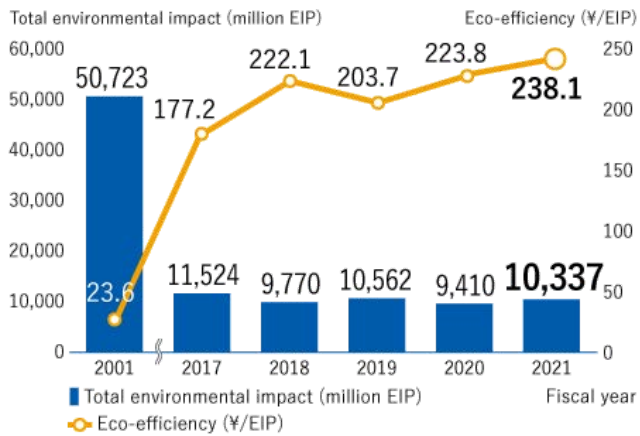
Environmental accounting by fiscal year

(¥ million)

Cost classification	2017		2018		2019		2020		2021		
	Investment	Expense	Investment	Expense	Investment	Expense	Investment	Expense	Investment	Expense	
1	Combined operation area	3,780	9,303	1,942	11,183	3,905	10,089	3,628	7,666	2,755	9,914
	Pollution prevention	1,881	6,187	944	7,705	2,198	6,874	2,241	5,186	1,399	6,923
	Global environmental protection	929	841	807	1,230	1,221	773	1,246	689	1,069	955
	Resource circulation	970	2,276	190	2,248	485	2,442	142	1,792	287	2,036
2	Upstream and downstream	0	117	0	140	0	115	0	102	0	104
3	Management activities	39	1,124	62	636	43	2,394	25	654	19	1,294
4	R&D	114	1,274	119	2,787	192	8,431	228	2,185	198	1,793
5	Community outreach	2	29	0	27	0	24	0	18	0	17
6	Environmental damage	1	203	45	1,128	0	206	3	196	4	199
	Total	3,936	12,050	2,169	15,901	4,139	21,259	3,883	10,821	2,977	13,320

Climate change

Eco-efficiency (JEPIX) performance*



* JEPIX is an abbreviation for the "Japan Environmental Policy Index", and it was developed by teams under the leadership of Professor Nobuyuki Miyazaki of the International Christian University at the Japan Science and Technology Agency and Sustainable Management Forum Japan. Environmental performance data are converted to an environmental impact point (EIP) scale and aggregated to determine total environmental impact. Eco-efficiency is calculated as follows.

$$\text{Eco-efficiency} = \text{value added (economic index)} / \text{JEPIX Eco-Points}$$

Eight aspects of environmental impact (including chemical releases, greenhouse gas emissions, landfill wastes, and COD load) are evaluated, and net sales are used for value added. A new accounting policy is applied to net sales from fiscal 2011.

JEPIX-method eco-efficiency

	2001	2017	2018	2019	2020	2021
Total environmental impact (million EIP)	50,723	11,524	9,770	10,562	9,410	10,337
Net sales (¥ million)	1,195,393	2,042,216	2,170,403	2,151,646	2,106,051	2,461,317
Eco-efficiency (¥/EIP)	23.6	177.2	222.1	203.7	223.8	238.1

Greenhouse gas emissions in Japan by fiscal year

(million tons CO₂ equivalent)

Item	Index set at Kyoto Protocol (1990)	Baseline year (2005)	2017	2018	2019	2020	2021
Carbon dioxide	5.06	4.96	2.93	2.89	2.61	2.51	2.75
Nitrous oxide	6.82	0.76	0.07	0.09	0.13	0.29	0.09
Methane	0.00	0.01	0.00	0.00	0.00	0.00	0.00
HFCs	0.16	0.02	0.04	0.04	0.04	0.03	0.03
PFCs	0.01	0.14	0.13	0.11	0.12	0.06	0.01
Sulfur hexafluoride	0.00	0.04	0.01	0.01	0.01	0.01	0.00
Nitrogen trifluoride	-	-	0.00	0.00	0.00	0.00	0.00
Total	12.06	5.92	3.18	3.13	2.91	2.91	2.87

Notes

- Calculation standards for greenhouse gas emissions:
For greenhouse gases covered by the Act on Rationalizing Energy Use and the Act on Promotion of Global Warming Countermeasures, calculations are in accordance with the methods stipulated by these laws. For gases not covered by either law, calculation methods are based on considerations such as chemical reactions.
- CO₂ emissions from generation of electricity and steam sold to other companies are excluded from data for the baseline year but included in annual data from fiscal 2013.
- We have used 'basic' CO₂ emission factors for electricity purchased in Japan until FY2019, but we have opted to use 'adjusted' CO₂ emission factors from FY2020 onwards. The impact of this change on CO₂ emissions is immaterial.

Overseas greenhouse gas emissions by fiscal year(million tons CO₂ equivalent)

	2017	2018	2019	2020	2021
CO₂ emissions	1.03	1.03	1.08	1.00	1.16

Note

- Calculation standards for overseas greenhouse gas emissions:
Overseas greenhouse gas emissions are calculated, in principle, based on the provisions given by the Act on the Rational Use of Energy and the Act on Promotion of Global Warming Countermeasures. Until FY2020, CO₂ emissions from the burning of by-product gases are mainly calculated by material balance. CO₂ emissions associated with purchased electricity are calculated with the latest available coefficients given in International Energy Agency's Emissions Factors, but in order to calculate GHG emissions that more reflect factual circumstances, we applied emission factors with the following priority order: 1) emission factors of individual power companies, 2) values set by national governments, and 3) International Energy Agency's Emissions Factors from FY2021.

FY2021 global greenhouse gas emissions by segment(million tons CO₂ equivalent)

	Material	Homes	Health Care	Other	Total
Total	3.77	0.10	0.16	0.00	4.03

Scope 3 emissions by fiscal year

(million tons CO₂ equivalent)

		2017	2018	2019	2020	2021
1	Purchased goods and services	4.54	4.74	4.43	4.62	4.72
2	Capital goods	0.19	0.29	0.32	0.39	0.45
3	Fuel and energy-related activities (not included in Scope 1 or Scope 2)	0.21	0.21	0.24	0.78	0.77
4	Upstream transportation and distribution	0.28	0.30	0.27	0.25	0.24
5	Waste generated in operations	0.00	0.00	0.00	0.00	0.07
6	Business travel	0.03	0.03	0.03	0.00	0.00
7	Employee commuting	0.02	0.03	0.03	0.03	0.03
8	Upstream leased assets	0.00	0.00	0.00	0.00	0.00
9	Downstream transportation and distribution	-	-	-	-	-
10	Processing of sold products	-	-	-	-	-
11	Use of sold products	1.00	0.92	0.96	1.34	1.92
12	End-of-life treatment of sold products	4.84	4.98	4.70	5.87	5.95
13	Downstream leased assets	-	-	-	-	-
14	Franchise	-	-	-	-	-
15	Investment	-	-	-	-	-
	Total	11.11	11.5	10.98	13.28	14.15

Notes

- Calculation method for Scope 3:
Our Scope 3 GHG emissions are calculated using the Corporate Value Chain (Scope 3) Accounting and Reporting Standard and its technical guidance issued by the Greenhouse Gas Protocol. For the greenhouse gas emission factors, we used data available in the Carbon Footprint Communication Program database prepared by the Japan Environmental Management Association for Industry and the Embodied Energy and Emission Intensity Data for Japan Using Input-Output Tables (3EID): Inventory Data for LCA prepared by the National Institute for Environmental Studies, Japan until FY2019.
Since FY2020, we have referred to the Embodied Energy and Emission Intensity Data for Japan Using Input-Output Tables (3EID) (2015): Inventory Data for LCA prepared by the National Institute for Environmental Studies, Japan, IDEA v2.3 by the National Institute of Advanced Industrial Science and Technology, and the Emissions Unit Value Database Ver3.2 for Accounting of Greenhouse Gas Emissions, etc., by Organizations Throughout the Supply Chain issued by the Ministry of the Environment, etc.
- Calculation method for purchased goods and services:
Items with emissions equal to or greater than 4,000 tons of CO₂-equivalent were included. The emissions were calculated by multiplying the amounts, either in physical or monetary units, of raw materials and services purchased from outside the Asahi Kasei Group by Asahi Kasei Corp., Asahi Kasei Homes, Asahi Kasei Construction Materials, Asahi Kasei Microdevices, and Asahi Kasei Medical by the respective emission factor for each type of raw material or service.
- Calculation method for waste generated in operations:
From FY2021, the activity volume was changed from final disposal volume to effluent volume.
- Calculation method for use of sold products:
Until FY2020, the calculation was based on the calculation standards set by Asahi Kasei Homes and using the emissions intensity of Housing Tech. R&D Labs. report, the period covered by the calculation was calculated based on the number of Hebel houses (detached houses and apartment buildings) delivered in each fiscal year (before FY2020, based on the number of houses delivered; in FY2020, based on the total floor area of Hebel houses delivered). The calculation period was set to 60 years of useful life, and the CO₂ emissions reduction effect based on the actual installation of energy-saving equipment, which differs in each case, was deducted from the calculation.

In FY2021, the following calculations were made using Building Research Institute's "Energy Consumption Performance Calculation Program (Residential Version)" for house for which a certificate of confirmation was issued during the fiscal year.

Σ (annual energy use by energy type per household x emission factor by energy type) x useful life (60 years)

Emission factor by energy type

*Emission factor: Electricity 0.453 (t-CO₂/thousand kWh), City gas 0.05 (t-CO₂/GJ), Kerosene 0.068 (t-CO₂/GJ)

If calculated using the conventional method, Category 11 emissions in FY2021 would be 1.37 million tons CO₂-eq.

- Calculation method for disposal of sold products:
For Asahi Kasei, Asahi Kasei Construction Materials, and Asahi Kasei Medical, emissions are calculated by multiplying the weight of products shipped each fiscal year by the CO₂ emission factor at the time of disposal for each product.
For Asahi Kasei Homes, emissions are calculated by multiplying the number of Hebel Haus units delivered each fiscal year by the CO₂ emission factor per building.

Note: In fiscal 2018, we revised some of the calculation methods for upstream transportation/distribution and disposal of sold products so that they are based on the actual situation. Past results have been adjusted retroactively.

Past results have been revised due to an error in the quantity of purchased goods and services in FY2020. Emissions before correction are as follows.

(Category 1 : 4.53 million tons CO₂-eq, Category 4 : 0.24 million tons CO₂-eq, Category 12 : 5.68 million tons CO₂-eq, Total : 12.99 million tons CO₂-eq)

CO₂ emissions from product shipment (FY2021)

	Material	Homes	Health Care	Other	Total
Shipment volume (million ton-km)	775.39	289.25	2.89	0.00	1,067.53
CO ₂ emissions (tons CO ₂)	48,782	35,370	708	0	84,860

Low-pollution vehicles

(Number of vehicles)

		2017	2018	2019	2020	2021
Used on public roads	Low-pollution vehicles	1,270	1,252	1,295	1,415	1,506
	Other vehicles	93	74	86	40	44
	Subtotal	1,363	1,326	1,381	1,455	1,550
Used within plant grounds	Low-pollution vehicles	534	492	451	726	764
	Other vehicles	250	227	208	66	73
	Subtotal	784	719	659	792	837
Total	Low-pollution vehicles	1,804	1,744	1,746	2,141	2,270
	Other vehicles	343	301	294	106	117
	Total vehicles	2,147	2,045	2,040	2,247	2,387
Proportion of low-pollution vehicles (%)	Used on public roads	93	94	94	97	97
	Used within plant grounds	68	68	68	92	91
	Total	84	85	86	95	95

Note: Hybrid-electric vehicles, low-emission vehicles, fuel-efficient vehicles, and all-electric vehicles

Pollution and Natural Resources / Water Resource Preservation

Treatment and disposal of industrial waste by company

(Thousand tons)

Company	Waste generated	Recycling	Volume reduction	Landfill	Effluent	Recycling	Volume reduction	Final disposal	Coverage (%)
Asahi Kasei Corp.	242.5	48.0	0.7	0.0	193.7	191.8	1.7	0.3	-
Asahi Kasei Microdevices	7.9	0.0	0.0	0.0	7.9	7.9	0.1	0.0	-
Asahi Kasei Homes	4.8	0.0	0.0	0.0	4.8	4.8	0.0	0.0	-
Asahi Kasei Construction Materials	64.1	39.9	0.0	0.0	24.3	24.3	0.0	0.0	-
Asahi Kasei Pharma	1.5	0.0	0.0	0.0	1.5	1.5	0.0	0.0	-
Asahi Kasei Medical	5.5	0.0	0.0	0.0	5.5	5.5	0.0	0.0	-
FY2021 total	326.3	87.9	0.7	0.0	237.7	235.6	1.8	0.3	81.4
FY2020 total	334.1	85.2	0.6	0.0	248.3	246.4	1.6	0.3	-
FY2019 total	378.2	97.8	0.7	0.0	279.8	277.1	1.6	1.1	-
FY2018 total	334.2	67.4	0.6	0.0	226.1	263.5	1.9	0.7	-
FY2017 total	330.6	108.1	0.6	0.0	221.9	219.3	1.9	0.8	-
FY2016 total	339.2	104.4	0.7	0.0	233.5	229.2	3.7	1.1	-
FY2015 total	356.5	123.7	3.3	0.0	229.6	225.3	3.4	0.8	-
FY2014 total	388.5	114.6	36.4	0.0	237.3	231.7	4.1	1.5	-
FY2013 total	386.3	112.4	29.0	0.0	244.7	240.3	3.1	1.3	-
FY2012 total	387.9	99.0	27.2	0.0	261.6	255.4	4.4	1.8	-
FY2011 total	441.8	105.1	73.5	0.0	263.1	254.1	7.8	1.3	-
FY2000 total	316.9	3.5	187.5	0.1	170.8	122.0	21.9	26.8	-

Notes:

- Not including waste generated from non-recurring events such as dismantling closed plants or waste generated from dismantling old homes when constructing new homes.
- Sums of figures may differ totals shown due to rounding(also in other tables hereinafter).

Final disposal by category of waste**(Excluding waste generated at the construction sites of Asahi Kasei Homes)**

Category	Disposal volume (thousand tons)	Percentage (%)
Debris	0.073	24.2
Cinders	0.060	20.1
Industrial waste containing asbestos	0.057	19.1
Inert mixed wastes	0.040	13.3
Glass & ceramic fragments	0.029	9.6
Others	0.041	13.8
Total	0.301	100.0

Asahi Kasei Group treatment and disposal of industrial waste

(Thousand tons)

		2019	2020	2021
Waste generated		654.6	571.0	577.5
Disposal breakdown	Material recycling	426.0	406.6	402.4
	Chemical recycling	2.4	9.1	9.0
	Heat recovery	183.1	123.6	124.8
	Volume reduction	11.0	6.3	7.3
	Final disposal	32.0	25.4	33.9

Final disposal of industrial waste generated at construction sites of Asahi Kasei Homes

(Thousand tons)

	2000	2017	2018	2019	2020	2021
New construction	16.6	0	0	0	0	0
Dismantling	39.1	11.7	14.1	14.1	10.2	9.2
Total	55.7	11.7	14.1	14.1	10.2	9.2

AAC trimmings recycled by Asahi Kasei Construction Materials

(Tons)

	2017	2018	2019	2020	2021
Hebel™ panels	260	360	354	350	217
Cement materials	1,400	970	368	259	194
Lightweight artificial soil	0	0	0	0	0
Total	1,700	1,330	722	609	411

Release and transfer of PRTR-specified substances by fiscal year

(Tons)

	2000	2017	2018	2019	2020	2021
Release to air	4,720	330	520	290	250	230
Release to water	170	60	50	60	50	60
Release to soil	0	0	0	0	0	0
Total release	4,890	390	570	350	300	290
Reduction rate (%)	—	92	88	93	94	94
Transfer	2,100	2,800	2,500	2,400	2,700	2,500

VOC* air emissions

	2000 (Baseline year)	2017	2018	2019	2020	2021
Volume (tons)	10,400	1,350	1,400	1,100	920	1,000
Reduction rate (%)	—	87	87	89	91	90

* VOC: Volatile organic compound. Although the term generally applies to any organic compound which is in gaseous state at the time of release, regulations for the control of their release exclude methane and some fluorocarbons which do not form oxidants.

FY2021 release and transfer of PRTR-specified substances

(Tons)

Company	Sites	Substance	Release to air	Release to water	Release to soil	Total release	Transfer	
Asahi Kasei Corp.	Others	Toluene	10	0	0	10	0	
	Nobeoka	1,1-Dichloroethylene (vinylidene chloride)	23	0	0	23	156	
		Dichloromethane (methylene chloride)	14	0	0	14	0	
		Chloroethylene (vinyl chloride)	6	0	0	6	39	
		Boron compounds	0	6	0	6	0	
		Water-soluble copper salts (except complex salts)	0	20	0	20	0	
	Moriyama	Dichloromethane (methylene chloride)	17	0	0	17	0	
		N,N-dimethylacetamide	6	0	0	6	221	
	Mizushima	n-Hexane	28	0	0	28	10	
		Molybdenum and its compounds	0	14	0	14	0	
		Vinyl acetate	7	0	0	7	10	
	Kawasaki	n-Hexane	64	0	0	64	11	
	Asahi Kasei Medical	Nobeoka	N,N-dimethylacetamide	2	8	0	10	197

Notes

- Substances whose total emissions into the air, water, and soil at a given site are at least five tons/year are listed along with their emission amounts, etc.
- Rounded to the nearest ton.

Release of air and water pollutants by fiscal year

Item	Unit	2017	2018	2019	2020	2021
SOx ¹	Tons	6,600	6,000	6,300	5,200	6,800
NOx ²	Tons	3,300	3,300	3,400	3,600	3,500
Soot and dust ³	Tons	110	140	90	110	140
Waste water effluence	Million m ³	212	221	216	204	202
COD ⁴	Tons	820	880	890	850	850
N	Tons	6,200	7,000	6,500	4,900	5,900
P	Tons	20	20	20	20	20
Coverage	%	-	-	-	-	75.7

Air emissions by site

(t/y)

Site	2019			2020			2021		
	SOx	NOx	Soot and dust	SOx	NOx	Soot and dust	SOx	NOx	Soot and dust
Nobeoka	5,800	2,200	30	4,800	2,300	30	6,300	2,200	80
Mizushima	190	960	50	180	1,100	70	270	960	50
Moriyama	0	30	1	0	40	2	0	130	4
Fuji	0	3	0	0	3	0	0	2	0
Ohito	2	10	0	2	20	0	2	6	0
Kawasaki	2	90	6	1	70	4	3	100	6
Suzuka	0	20	0	0	20	0	0	30	0
Others	310	90	6	220	50	5	200	50	5
Total	6,300	3,400	90	5,200	3,600	110	6,800	3,500	140

¹ Sulfur oxides (SOx) are formed when crude oil, fuel oil, or coal containing sulfur are used as fuel. Sulfur dioxide (SO₂) is most common, but some sulfur trioxide (SO₃) also forms. The term SOx is inclusive of both of these.

² Nitrogen oxides (NOx) are formed in nature and during combustion at thermal power plants, factory boilers, internal combustion engines, and incinerators. The term NOx is inclusive of both nitric oxide (NO) and nitrogen dioxide (NO₂).

³ Soot and dust are fine particles formed in the combustion of fuel and other materials.

⁴ Chemical oxygen demand is an indicator of water pollution by organic substances. COD is expressed in terms of the amount of oxygen that can be consumed by an oxidizer to chemically oxidize the organic substances contained in the water.

Water usage and effluence

(Million m³)

Item		2017	2018	2019	2020	2021
Japan	Usage	266	294	253	242	253
	Effluence	212	221	216	204	202
Overseas	Usage	16	13	15	13	14
	Effluence	11	8	10	8	9
Japan and overseas	Usage	282	307	268	255	267
	Effluence	223	229	226	212	212

Water usage and sources by fiscal year in Japan

(Million m³)

	2017	2018	2019	2020	2021
Total	266	294	253	242	253
Municipal water	10	9	9	10	10
Ground water	23	22	21	20	20
Industrial water	234	263	223	213	223

Water emissions in Japan by site

(Tons, except effluence: million m³)

Site	2019				2020				2021			
	COD	N	P	Effluence	COD	N	P	Effluence	COD	N	P	Effluence
Nobeoka	680	6,200	9	143	650	4,600	5	132	670	5,600	6	133
Mizushima	60	210	3	34	50	190	3	34	50	190	3	30
Moriyama	6	8	2	10	7	8	1	9	8	9	2	10
Fuji	20	60	8	11	20	80	6	12	20	80	6	11
Ohito	1	1	0	0	0	1	0	0	0	1	0	0
Kawasaki	100	60	1	11	90	30	1	10	70	20	1	11
Suzuka	6	2	0	1	5	2	0	1	5	1	0	2
Others	30	3	0	6	30	3	0	5	30	3	0	5
Total	890	6,500	20	216	850	4,900	20	204	850	5,900	20	202



ESG Data

Environment

Society

Governance

Number of Group Employees

		Scope	FY2017	FY2018	FY2019	FY2020	FY2021
Number of Group Employees	Total	Asahi Group (consolidated) (Global)	34,670	39,283	40,689	44,497	46,751
	Male		—	—	—	—	33,265
	Female		—	—	—	—	13,443
	Gender unspecified		—	—	—	—	43

Note: According to individuals' self-identification.

Number of Employees by Status

		Scope	FY2017	FY2018	FY2019	FY2020	FY2021
Permanent	Total	Note 1	16,274	16,966	17,293	17,417	17,413
	Male		13,738	14,275	14,511	14,593	14,555
Female	2,536		2,691	2,782	2,824	2,858	
Non-permanent	Total	Note 1	2,861	2,548	2,576	3,360	2,875
Non-permanent	Male		1,907	1,870	1,967	2,382	1,966
	Female		954	678	609	978	909

Persons with disabilities

	Scope	FY2017	FY2018	FY2019	FY2020	FY2021
Number of employees with disabilities [Scope Note 2]	All Group companies applicable as Special Subsidiaries	579	574	609	623	639
Employment rate (%) [Scope Note 2]		2.24	2.23	2.31	2.38	2.35
Statutory employment rate (%) [Scope Note 2]		2	2.2	2.2	2.3	2.3

Employment/Retention

Employment/Retention		Scope	FY2017	FY2018	FY2019	FY2020	FY2021
Number of new hires	New graduate total	Note 1	516	565	614	586	460
	(male)		387	427	486	466	369
	(female)		129	138	128	120	91
	Mid-career total		232	487	410	298	345
	(male)		210	468	349	276	297
	(female)		22	19	61	22	48
Proportion of mid-career recruitment* (%)			31.0	46.3	40.0	33.7	42.9
Number of resignations			216	232	292	283	328

* As of Sep. 30, 2022

Working Hours / Salary

	Scope	FY2017	FY2018	FY2019	FY2020	FY2021
Total hours worked		1999	2008.1	1948.7	1973.9	1992.2
Overtime hours worked		283.4	292.5	247.3	260.9	286.6
Average paid vacation days taken		15.07	14.48	15.66	14.29	14.76
Average rate of paid vacation		77.8%	75.1%	82.3%	75.3%	77.6%
Average annual salary (¥)	Asahi Kasei Corp.	7,645,207	7,871,666	7,691,021	7,691,021	7,810,513

Education/Training

	Scope	FY2017	FY2018	FY2019	FY2020	FY2021
Total training hours		—	—	—	382,632	290,931
Average time per employee		—	—	—	21.5	22.3
Annual education and training costs (¥)	Note 1	82,000	129,000	116,000	42,500	80,000

Diversity / Work-life Balance

		Scope	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
Number of female managers and supervisors		Note 1	534	574	622	660	701	752
Number of female managers			171	193	212	231	257	277
Total number of managers			5,783	5,786	5,767	5,780	5,760	5,778
Ratio of female managers (%)			3.0	3.3	3.7	4.0	4.5	4.8
Number of employees taking child care leave	Male		346	392	417	433	420	—
	Female		266	236	251	265	287	—
Number of employees using shortened working hours system for child care	Male		5	3	3	4	2	—
	Female		371	356	350	366	322	—
Number of employees using "Kids Support" shortened working hours system	Male		1	1	2	0	0	—
	Female		70	92	141	123	135	—
Number of employees taking family care leave	Male	1	4	3	6	2	—	
	Female	4	5	8	4	2	—	
Number of employees using shortened working hours system for family care	Male	0	0	3	4	2	—	
	Female	1	1	2	2	0	—	

Occupational Health and Safety

Occupational health and safety		Scope	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Group lost time frequency rate (%)		Note 3	0.35	0.3	0.41	0.44	0.21	0.38
Group severity rate (%)			0.024	0.005	0.008	0.074	0.006	0.133
Number of lost-worktime injuries	Group employees		—	—	—	25	12	22
Of which, number of fatalities	Group employees		—	—	—	0	0	1
Average age		Note 4	43.6	43.8	43.8	43.8	43.7	43.7
Percentage finding problems during health examinations (%)			63.4	62.5	62.6	62.3	62.7	62.5
BMI			25.2	26	26.3	26.8	26.7	26.7
Smoking rate (%)			26.6	26.9	26.3	25.8	24.7	23.5
Number of days absent due to injury or illness (days per person; calculated based on reports of absence from work)			3.2	3.1	3.2	3.5	3.1	3.4
Specific health guidance rate (%)			—	5.3	25.4	34.1	35.5	—
Stress check rate (%)			96.6	96.9	96.2	98.0	96.3	95.7
Self-care education participation rate (%; implemented in 2022)			—	—	—	—	—	98.0
Employee satisfaction with the seminar (% who responded "very satisfied" or "satisfied" among 5 choices)			—	—	—	—	—	87.3

Social Contribution

	Scope	FY2016	FY2017	FY2018	FY2019	FY2020
Social contribution activity expenses (¥ million)	Asahi Group (consolidated) (Global)	3,953	1,304	1,330	1,143	2,147
Ratio of ordinary income (%)		2.46	0.61	0.6	0.62	2.62

Scope Notes

- 1 Asahi Kasei, Asahi Kasei Microdevices, Asahi Kasei Homes, Asahi Kasei Construction Materials, Asahi Kasei Pharma, and Asahi Kasei Medical
- 2 The rate of employment and the number of persons employed are the average figures for each fiscal year for applicable companies of the Asahi Kasei Group. Calculations are based on total employment of 26,990 persons at the 20 applicable companies as of June 1, 2020. (number of persons calculated in accordance with the Act on Employment Promotion, etc. of Persons with Disabilities)
- 3 Asahi Kasei Group companies in Japan as defined in the Asahi Kasei Group ESH & QA Regulations (a list of departments implementing Asahi Kasei's ESH & QA Program can be downloaded from the following page)
<https://www.asahi-kasei.com/sustainability/rc/#anc-09>
- 4 Employees of major Japanese subsidiaries in addition to companies listed in Note 1



ESG Data

Environment

Society

Governance

Corporate Governance

			Scope	FY2017	FY2018	FY2019	FY2020	FY2021	
Number of Directors	Inside Directors	Male	Asahi Kasei Corp.	6	6	6	6	6	
		Female		0	0	0	0	0	
		Total		6	6	6	6	6	
	Independent Outside Directors	Male		2	2	2	2	2	
		Female		1	1	1	1	1	
		Total		3	3	3	3	3	
	Total			9	9	9	9	9	
	Ratio of Female Members of the Board of Directors (%)			11.1	11.1	11.1	11.1	11.1	

Note: The number of Board of Directors meetings and committee meetings and their attendance rates are reported on the following page.

➤ Corporate Governance

External evaluation

Inclusion in socially responsible investment indexes

Continuing from the previous year, in 2022 Asahi Kasei was selected as a component stock for the FTSE4Good Index Series and FTSE Blossom Japan Index, which are stock indexes used by the Government Pension Investment Fund (GPIF) for investments related to ESG. In addition, we were also selected as a component stock in the MSCI Japan ESG Select Leaders Index, the MSCI Japan Empowering Women Index (WIN), and the S&P/JPX Carbon Efficient Index, which are also used by the GPIF as ESG investment indexes.

- FTSE4Good Index Series
- FTSE Blossom Japan Index
- MSCI ESG Leaders Indexes
- MSCI Japan ESG Select Leaders Index
- MSCI Japan Empowering Women Index (WIN)
- S&P/JPX Carbon Efficient Index
- SOMPO Sustainability Index



**FTSE Blossom
Japan Sector
Relative Index**



2022 CONSTITUENT MSCI JAPAN
ESG SELECT LEADERS INDEX

2022 CONSTITUENT MSCI JAPAN
EMPOWERING WOMEN INDEX (WIN)



Acquisition of the Highest Rank from Development Bank of Japan, Inc. (DBJ) under its DBJ Environmentally Rated Loan Program

In August 2022, Asahi Kasei received a Development Bank of Japan loan under the DBJ Environmentally Rated Loan Program, having obtained the system's highest rating as a "company with particularly advanced environmental programs."



Selected as a DX Stock 2022

Asahi Kasei has been selected as a Digital Transformation Stock (DX Stock 2022), an initiative conducted jointly by the Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange.



The Minister of Economy, Trade and Industry "Intellectual Property Achievement Awards"

In April 2021, Asahi Kasei received the Minister of Economy, Trade and Industry's "Intellectual Property Achievement Award," which is sponsored by the Japan Patent Office in the Ministry of Economy, Trade and Industry. The Intellectual Property Achievement Award is presented annually to companies and other organizations that have made effective use of the intellectual property system and contributed to its smooth operation and development.

Encouragement Award at the 17th LCA Japan Forum Awards

Asahi Kasei received the Encouragement Award at the 17th LCA Japan Forum Awards in recognition of our environmental contribution product initiatives from the perspective of LCA (Life Cycle Assessment).

- ▶ The Asahi Kasei Group's Environmental Contribution Products

Kawasaki Works' Synthetic Rubber Production Department receives Gold Medal in EcoVadis Sustainability Assessment

Asahi Kasei's Synthetic Rubber Production Department at the Kawasaki Works (Kawasaki City, Kanagawa Prefecture) has received a Gold Medal, which corresponds to the top 5% of all evaluations, in a sustainability assessment conducted by EcoVadis (Headquarters: France) in December 2020. The survey evaluates companies' sustainability efforts in the four areas of the environment, labor & human rights, ethics, and sustainable procurement. We received an especially high assessment in the environment and labor & human rights.



- ▶ Notice

Asahi Kasei Finechem receives Gold Medal in EcoVadis Sustainability Assessment

Subsidiary Asahi Kasei Finechem has received a Gold Medal, which corresponds to the top 5% of all evaluated companies, in a sustainability assessment conducted by EcoVadis (Headquarters: France)* in June 2022. The survey evaluates companies' sustainability efforts in the four areas of the environment, labor & human rights, ethics, and sustainable procurement. Asahi Kasei Finechem received an especially high assessment in the environment category.



Asahi Kasei wins Excellence Award at the 4th Infrastructure Maintenance Awards

Asahi Kasei has won the Ministry of Economy, Trade and Industry's Excellence Award at the 4th Infrastructure Maintenance Awards for a project of sharing facility data among chemical companies and developing a model for predicting corrosion under insulation based on this data. Since 2016, the Ministry of Land, Infrastructure, Transport and Tourism, the Ministry of Internal Affairs and Communications, the Ministry of Education, Culture, Sports, Science and Technology, the Ministry of Health, Labour and Welfare, the Ministry of Agriculture, Forestry and Fisheries, and the Ministry of Defense have been awarding Infrastructure Maintenance Awards to recognize outstanding efforts and technological developments related to infrastructure maintenance in Japan.

Asahi Kasei Realty & Residence receives Grand Prize and Asahi Kasei Homes receives Excellence Award at the 2022 Japan Resilience Awards

At the Japan Resilience Awards 2022 hosted by the Association for Resilience Japan, Asahi Kasei Realty & Residence's "Kurashiki City 3 Achi East Urban Area Redevelopment Category 1 Project" won the Grand Prize, the highest award, and Asahi Kasei and Asahi Kasei Homes won the Excellence Award for their "Initiatives to Reduce CO₂ Emissions and Enhance Disaster Prevention Capabilities through the Creation and Maximum Usage of Energy from the Asahi Kasei Group's Own Power Grid."



▶ [Press release \(Asahi Kasei Homes\)](#) □

Received the Fujisankei Group Prize at the 30th Global Environment Award

Asahi Kasei was awarded the Fujisankei Group Prize in March 2022. The company was recognized for its efforts to reduce food loss and GHG emissions, solve logistics issues, and make traceability more visible by developing and providing the Fresh Logi™ system, a cloud-based fresh produce logistics solution that lowers energy consumption and GHG emissions during transportation while keeping produce fresh.

The Biodiversity Biwako Network receives the Grand Prize at the 2021 Nature Conservation Society of Japan Award

The Biodiversity Biwako Network , which consists of eight companies, including Asahi Kasei and Asahi Kasei Homes, won the Grand Prize in the Education and Promotion Category of the 2021 Japan Nature Conservation Awards sponsored by The Nature Conservation Society of Japan.



Platinum Kurumin certification mark

In 2016, Asahi Kasei Corp., Asahi Kasei Microdevices Corp., Asahi Kasei Pharma Corp., Asahi Kasei Medical Co., Ltd., and Asahi Kasei Ability Corp. received Platinum Kurumin certification from the Ministry of Health, Labor and Welfare. Platinum Kurumin certification is awarded in recognition of proactive support for the development of the next generation which is particularly outstanding.



Received the 22nd Logistics Environment Award Special Award


Asahi Kasei was awarded the Special Award along with Mitsui Chemicals, Inc. and Sankyu Inc. The three companies' collaborative efforts to reduce CO₂ emissions during transportation, address the shortage of long-distance truck drivers, and implement other "white logistics" initiatives received high evaluation.



Related information

- ▶ Technology awards

View the past awards we have received related to research and development.

Policy Statements

	Policy
CSR-orientated Management	<ul style="list-style-type: none"> ➤ Group Philosophy
	<ul style="list-style-type: none"> ➤ Corporate Governance
	<ul style="list-style-type: none"> ➤ Asahi Kasei Group Sustainability Policy
	<ul style="list-style-type: none"> ➤ Medium-term Management Plan
ESH & QA	<ul style="list-style-type: none"> ➤ ESH & QA Policy
Environmental	<ul style="list-style-type: none"> ➤ Asahi Kasei Group Code of Conduct
	<ul style="list-style-type: none"> ➤ The Asahi Kasei Group's Global Environmental Policy
	<ul style="list-style-type: none"> ➤ Quantitative indicators and targets of global environmental measures
	<ul style="list-style-type: none"> ➤ Biodiversity Policy
Social	<ul style="list-style-type: none"> ➤ Asahi Kasei Group Code of Conduct
	<ul style="list-style-type: none"> ➤ Human Rights Policy
	<ul style="list-style-type: none"> ➤ Asahi Kasei Group Quality Policy
	<ul style="list-style-type: none"> ➤ The Asahi Kasei Group Purchasing and Procurement Principles and Policy
	<ul style="list-style-type: none"> ➤ Supplier Guidelines  (92.2KB)
	<ul style="list-style-type: none"> ➤ Human Resources Principles
	<ul style="list-style-type: none"> ➤ Expansion of opportunities for women: Asahi Kasei Group Action Plan
	<ul style="list-style-type: none"> ➤ Statement on Management for Health
	<ul style="list-style-type: none"> ➤ Group Health and Productivity Management Vision
	<ul style="list-style-type: none"> ➤ Basic Policy for Safe Operation
	<ul style="list-style-type: none"> ➤ Basic Policy for High Pressure Gas Safety
	<ul style="list-style-type: none"> ➤ Community Fellowship Policy

	Policy
Governance	> Principles of Corporate Governance
	> Asahi Kasei Group Code of Conduct
	> Asahi Kasei Group Basic Policies for Prevention of Bribery  (92.5KB)
	> Ethical Considerations in Pharmaceutical and Medical Device Development
	> Asahi Kasei Group Information Security Policy
	> Privacy Policy
	> Tax Policy
	> Basic Guidelines on Animal Care and Use (Asahi Kasei Pharma) 

GRI Standards Content Index

The Asahi Kasei Group's report on sustainability activities references the "GRI Sustainability Reporting Standards."

Universal Standards

Disclosure Number	Disclosure	Page number(s) and/or URL(s)
GRI102: General Disclosures 2016		
Organizational profile		
102-1	Name of the organization	<ul style="list-style-type: none"> ➤ Corporate Profile ➤ Group Companies
102-2	Activities, brands, products, and services	<ul style="list-style-type: none"> ➤ Asahi Kasei all around ➤ Products
102-3	Location of headquarters	<ul style="list-style-type: none"> ➤ Corporate Profile
102-4	Location of operations	<ul style="list-style-type: none"> ➤ Asahi Kasei Worldwide
102-5	Ownership and legal form	<ul style="list-style-type: none"> ➤ Corporate Profile
102-6	Markets served	<ul style="list-style-type: none"> ➤ Asahi Kasei Worldwide ➤ Products
102-7	Scale of the organization	<ul style="list-style-type: none"> ➤ Corporate Profile ➤ Financial Information
102-8	Information on employees and other workers	<ul style="list-style-type: none"> ➤ ESG Data > Society ➤ Securities Report
102-9	Supply chain	<ul style="list-style-type: none"> ➤ CSR Procurement
102-10	Significant changes to the organization and its supply chain	<ul style="list-style-type: none"> ➤ Editorial Policy

Disclosure Number	Disclosure	Page number(s) and/or URL(s)
102-11	Precautionary Principle or approach	<ul style="list-style-type: none"> ➤ Risk Management ➤ Sustainability Management ➤ Compliance ➤ Asahi Kasei Group's ESH & QA Program
102-12	External initiatives	<ul style="list-style-type: none"> ➤ Sustainability Management>Participation in Initiatives/Affiliated Organizations ➤ Climate Change>Disclosure Based on TCFD Recommendations ➤ Quality Assurance ➤ Biodiversity
102-13	Membership of associations	<ul style="list-style-type: none"> ➤ Sustainability Management>Participation in Initiatives/Affiliated Organizations ➤ Asahi Kasei Group's ESH & QA Program ➤ Quality Assurance
Strategy		
102-14	Statement from senior decision-maker	<ul style="list-style-type: none"> ➤ Management Message ➤ Asahi Kasei Report
102-15	Key impacts, risks, and opportunities	<ul style="list-style-type: none"> ➤ Securities Report ➤ Climate Change>Disclosure Based on TCFD Recommendations
Ethics and integrity		
102-16	Values, principles, standards, and norms of behavior	<ul style="list-style-type: none"> ➤ Group Philosophy ➤ Sustainability Vision ➤ Compliance ➤ Asahi Kasei Group's ESH & QA Program ➤ CSR Procurement ➤ Human Resources>Human Resources Development and Active Engagement ➤ Human Rights ➤ Community fellowship ➤ Policy Statements
102-17	Mechanisms for advice and concerns about ethics	<ul style="list-style-type: none"> ➤ Compliance

Disclosure Number	Disclosure	Page number(s) and/or URL(s)
Governance		
102-18	Governance structure	<ul style="list-style-type: none"> ➤ Corporate Governance
102-19	Delegating authority	<ul style="list-style-type: none"> ➤ Corporate Governance ➤ Sustainability Management > Policies and Framework
102-20	Executive-level responsibility for economic, environmental, and social topics	<ul style="list-style-type: none"> ➤ Sustainability Management > Policies and Framework
102-21	Consulting stakeholders on economic, environmental, and social topics	<ul style="list-style-type: none"> ➤ Corporate Governance ➤ Sustainability Management>Relationships with Stakeholders
102-22	Composition of the highest governance body and its committees	<ul style="list-style-type: none"> ➤ Corporate Governance ➤ Corporate Officers ➤ Asahi Kasei Report
102-23	Chair of the highest governance body	<ul style="list-style-type: none"> ➤ Corporate Governance
102-24	Nominating and selecting the highest governance body	<ul style="list-style-type: none"> ➤ Corporate Governance
102-25	Conflicts of interest	<ul style="list-style-type: none"> ➤ Corporate Governance
102-26	Role of highest governance body in setting purpose, values, and strategy	<ul style="list-style-type: none"> ➤ Corporate Governance
102-27	Collective knowledge of highest governance body	<ul style="list-style-type: none"> ➤ Sustainability Management > Policies and Framework
102-28	Evaluating the highest governance body's performance	<ul style="list-style-type: none"> ➤ Corporate Governance
102-29	Identifying and managing economic, environmental, and social impacts	<ul style="list-style-type: none"> ➤ Sustainability Management>Materiality and SDGs ➤ Climate Change>Disclosure Based on TCFD Recommendations
102-30	Effectiveness of risk management processes	<ul style="list-style-type: none"> ➤ Corporate Governance ➤ Risk Management
102-31	Review of economic, environmental, and social topics	<ul style="list-style-type: none"> ➤ Sustainability Management > Policies and Framework

Disclosure Number	Disclosure	Page number(s) and/or URL(s)
102-32	Highest governance body's role in sustainability reporting	<ul style="list-style-type: none"> ➤ Sustainability Management > Policies and Framework
102-33	Communicating critical concerns	<ul style="list-style-type: none"> ➤ Risk Management ➤ Compliance
102-34	Nature and total number of critical concerns	<ul style="list-style-type: none"> ➤ Compliance ➤ Process Safety
102-35	Remuneration policies	<ul style="list-style-type: none"> ➤ Corporate Governance
102-36	Process for determining remuneration	<ul style="list-style-type: none"> ➤ Corporate Governance
102-37	Stakeholders' involvement in remuneration	<ul style="list-style-type: none"> ➤ Securities Report
102-38	Annual total compensation ratio	
102-39	Percentage increase in annual total compensation ratio	
Stakeholder engagement		
102-40	List of stakeholder groups	<ul style="list-style-type: none"> ➤ Sustainability Management>Relationships with Stakeholders
102-41	Collective bargaining agreements	<ul style="list-style-type: none"> ➤ Approach to human resources and employment
102-42	Identifying and selecting stakeholders	<ul style="list-style-type: none"> ➤ Sustainability Management>Relationships with Stakeholders
102-43	Approach to stakeholder engagement	<ul style="list-style-type: none"> ➤ Sustainability Management>Relationships with Stakeholders
102-44	Key topics and concerns raised	<ul style="list-style-type: none"> ➤ Compliance
Reporting practice		
102-45	Entities included in the consolidated financial statements	<ul style="list-style-type: none"> ➤ Group Companies ➤ Asahi Kasei Worldwide ➤ Securities Report
102-46	Defining report content and topic Boundaries	<ul style="list-style-type: none"> ➤ Editorial Policy ➤ ESG Data > Environment ➤ ESG Data > Society ➤ ESG Data > Governance

Disclosure Number	Disclosure	Page number(s) and/or URL(s)
102-47	List of material topics	➤ Sustainability Management>Materiality and SDGs
102-48	Restatements of information	➤ Editorial Policy
102-49	Changes in reporting	As noted on the relevant pages
102-50	Reporting period	➤ Editorial Policy
102-51	Date of most recent report	➤ Editorial Policy
102-52	Reporting cycle	➤ Editorial Policy
102-53	Contact point for questions regarding the report	➤ Editorial Policy>Inquiries
102-54	Claims of reporting in accordance with the GRI Standards	
102-55	GRI content index	➤ GRI Standards Content Index (this page)
102-56	External assurance	➤ Independent Review and Independent Assurance Report
GRI103: Management Approach 2016		
103-1	Explanation of the material topic and its Boundary	➤ Sustainability Management>Materiality and SDGs
103-2	The management approach and its components	➤ Sustainability Management>Materiality and SDGs and the policy and management framework shown on relevant pages
103-3	Evaluation of the management approach	<ul style="list-style-type: none"> ➤ Sustainability Management>Materiality and SDGs ➤ Corporate Governance ➤ Compliance ➤ External evaluation ➤ Independent Review and Independent Assurance Report

Topic-specific Standards

Disclosure Number	Disclosure	Page number(s) and/or URL(s)
Economic topics		
GRI201: Economic Performance 2016		
201-1	Direct economic value generated and distributed	<ul style="list-style-type: none"> ➤ Securities Report
201-2	Financial implications and other risks and opportunities due to climate change	<ul style="list-style-type: none"> ➤ Environmental Management ➤ Disclosure based on TCFD Recommendations
201-3	Defined benefit plan obligations and other retirement plans	<ul style="list-style-type: none"> ➤ Securities Report
201-4	Financial assistance received from government	Not applicable
GRI202: Market Presence 2016		
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	
202-2	Proportion of senior management hired from the local community	
GRI203: Indirect Economic Impacts 2016		
203-1	Infrastructure investments and services supported	<ul style="list-style-type: none"> ➤ Local communities ➤ Community fellowship
203-2	Significant indirect economic impacts	
GRI204: Procurement Practices 2016		
204-1	Proportion of spending on local suppliers	
GRI205: Anti-corruption 2016		
205-1	Operations assessed for risks related to corruption	

Disclosure Number	Disclosure	Page number(s) and/or URL(s)
205-2	Communication and training about anti-corruption policies and procedures	➤ Compliance
205-3	Confirmed incidents of corruption and actions taken	➤ Compliance
GRI206: Anti-competitive Behavior 2016		
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	➤ Compliance
GRI207: Tax 2019		
207-1	Approach to tax	➤ Tax Policy
207-2	Tax governance, control, and risk management	➤ Tax Policy
207-3	Stakeholder engagement and management of concerns related to tax	
207-4	Country-by-country reporting	
Environmental Topics		
GRI301: Materials 2016		
301-1	Materials used by weight or volume	➤ Environmental Management
301-2	Recycled input materials used	➤ Pollution and Natural Resources
301-3	Reclaimed products and their packaging materials	➤ Pollution and Natural Resources
GRI302: Energy 2016		
302-1	Energy consumption within the organization	➤ Environmental Management
302-2	Energy consumption outside of the organization	
302-3	Energy intensity	
302-4	Reduction of energy consumption	

Disclosure Number	Disclosure	Page number(s) and/or URL(s)
302-5	Reductions in energy requirements of products and services	<ul style="list-style-type: none"> ➤ Climate Change
GRI303: Water and Effluents 2018		
303-1	Interactions with water as a shared resource	<ul style="list-style-type: none"> ➤ Environmental Management ➤ Water Resource Preservation ➤ ESG Data
303-2	Management of water discharge-related impacts	<ul style="list-style-type: none"> ➤ Water Resource Preservation
303-3	Water withdrawal	<ul style="list-style-type: none"> ➤ Environmental Management ➤ Water Resource Preservation ➤ ESG Data
303-4	Water discharge	<ul style="list-style-type: none"> ➤ Environmental Management ➤ Water Resource Preservation ➤ ESG Data
303-5	Water consumption	<ul style="list-style-type: none"> ➤ Water Resource Preservation ➤ ESG Data
GRI304: Biodiversity 2016		
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	<ul style="list-style-type: none"> ➤ Biodiversity
304-2	Significant impacts of activities, products, and services on biodiversity	<ul style="list-style-type: none"> ➤ Biodiversity
304-3	Habitats protected or restored	<ul style="list-style-type: none"> ➤ Biodiversity
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	Not applicable
GRI305: Emissions 2016		
305-1	Direct (Scope 1) GHG emissions	<ul style="list-style-type: none"> ➤ Climate Change ➤ ESG Data

Disclosure Number	Disclosure	Page number(s) and/or URL(s)
305-2	Energy indirect (Scope 2) GHG emissions	<ul style="list-style-type: none"> ➤ Climate Change ➤ ESG Data
305-3	Other indirect (Scope 3) GHG emissions	<ul style="list-style-type: none"> ➤ Climate Change ➤ ESG Data
305-4	GHG emissions intensity	
305-5	Reduction of GHG emissions	<ul style="list-style-type: none"> ➤ Climate Change ➤ ESG Data
305-6	Emissions of ozone-depleting substances (ODS)	Not applicable
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	<ul style="list-style-type: none"> ➤ Pollution and Natural Resources ➤ ESG Data
GRI306: Waste 2020		
306-1	Waste generation and significant waste-related impacts	<ul style="list-style-type: none"> ➤ Pollution and Natural Resources
306-2	Management of significant waste-related impacts	<ul style="list-style-type: none"> ➤ Pollution and Natural Resources
306-3	Waste generated	<ul style="list-style-type: none"> ➤ Pollution and Natural Resources ➤ ESG Data
306-4	Waste diverted from disposal	Not applicable
306-5	Waste directed to disposal	<ul style="list-style-type: none"> ➤ Pollution and Natural Resources ➤ ESG Data
GRI307: Environmental Compliance 2016		
307-1	Non-compliance with environmental laws and regulations	Not applicable
GRI308: Supplier Environmental Assessment 2016		
308-1	New suppliers that were screened using environmental criteria	<ul style="list-style-type: none"> ➤ CSR Procurement
308-2	Negative environmental impacts in the supply chain and actions taken	<ul style="list-style-type: none"> ➤ CSR Procurement

Disclosure Number	Disclosure	Page number(s) and/or URL(s)
Social Topics		
GRI401: Employment 2016		
401-1	New employee hires and employee turnover	➤ Approach to human resources and employment
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	➤ Human resources development and active engagement ➤ Diversity
401-3	Parental leave	➤ Diversity
GRI402: Labor/Management Relations 2016		
402-1	Minimum notice periods regarding operational changes	
GRI403: Occupational Health and Safety 2018		
403-1	Occupational health and safety management system	➤ Occupational Health and Safety
403-2	Hazard identification, risk assessment, and incident investigation	➤ Occupational Health and Safety
403-3	Occupational health services	➤ Occupational Health and Safety
403-4	Worker participation, consultation, and communication on occupational health and safety	➤ Occupational Health and Safety
403-5	Worker training on occupational health and safety	➤ Occupational Health and Safety
403-6	Promotion of worker health	➤ Health Management
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	➤ Occupational Health and Safety
403-8	Workers covered by an occupational health and safety management system	➤ Editorial Policy
403-9	Work-related injuries	➤ Occupational Health and Safety ➤ ESG Data

Disclosure Number	Disclosure	Page number(s) and/or URL(s)
403-10	Work-related ill health	<ul style="list-style-type: none"> ➤ Occupational Health and Safety ➤ ESG Data
GRI404: Training and Education 2016		
404-1	Average hours of training per year per employee	<ul style="list-style-type: none"> ➤ Human resources development and active engagement ➤ ESG Data
404-2	Programs for upgrading employee skills and transition assistance programs	<ul style="list-style-type: none"> ➤ Approach to Human Resources and Employment ➤ Human resources development and active engagement
404-3	Percentage of employees receiving regular performance and career development reviews	
GRI405: Diversity and Equal Opportunity 2016		
405-1	Diversity of governance bodies and employees	<ul style="list-style-type: none"> ➤ Corporate Governance ➤ Diversity
405-2	Ratio of basic salary and remuneration of women to men	
GRI406: Non-discrimination 2016		
406-1	Incidents of discrimination and corrective actions taken	
GRI407: Freedom of Association and Collective Bargaining 2016		
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	<ul style="list-style-type: none"> ➤ CSR Procurement
GRI408: Child Labor 2016		
408-1	Operations and suppliers at significant risk for incidents of child labor	<ul style="list-style-type: none"> ➤ Human Rights
GRI409: Forced or Compulsory Labor 2016		
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	<ul style="list-style-type: none"> ➤ Human Rights

Disclosure Number	Disclosure	Page number(s) and/or URL(s)
GRI410: Security Practices 2016		
410-1	Security personnel trained in human rights policies or procedures	
GRI411: Rights of Indigenous Peoples 2016		
411-1	Incidents of violations involving rights of indigenous peoples	
GRI412: Human Rights Assessment 2016		
412-1	Operations that have been subject to human rights reviews or impact assessments	
412-2	Employee training on human rights policies or procedures	➤ Human Rights
412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	
GRI413: Local Communities 2016		
413-1	Operations with local community engagement, impact assessments, and development programs	➤ Local communities ➤ Community fellowship
413-2	Operations with significant actual and potential negative impacts on local communities	
GRI414: Supplier Social Assessment 2016		
414-1	New suppliers that were screened using social criteria	➤ CSR Procurement
414-2	Negative social impacts in the supply chain and actions taken	➤ CSR Procurement
GRI415: Public Policy 2016		
415-1	Political contributions	➤ Compliance

Disclosure Number	Disclosure	Page number(s) and/or URL(s)
GRI416: Customer Health and Safety 2016		
416-1	Assessment of the health and safety impacts of product and service categories	➤ Quality Assurance
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	Not applicable
GRI417: Marketing and Labeling 2016		
417-1	Requirements for product and service information and labeling	➤ Quality Assurance
417-2	Incidents of non-compliance concerning product and service information and labeling	Not applicable
417-3	Incidents of non-compliance concerning marketing communications	Not applicable
GRI418: Customer Privacy 2016		
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Not applicable
GRI419: Socioeconomic Compliance 2016		
419-1	Non-compliance with laws and regulations in the social and economic area	Not applicable

SASB Content Index

This is an index of disclosed information in accordance with the ESG information disclosure framework “SASB Standards” issued by the U.S. Sustainability Accounting Standards Board (SASB).

The table below refers to the criteria for the Chemicals industry in the Resource Transformation sector, and shows the location of the relevant information.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE	Disclosability and disclosure website
Greenhouse Gas Emissions	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Quantitative	Metric tons (t) CO ₂ -e, Percentage (%)	RT-CH-110a.1	<ul style="list-style-type: none"> ➤ Climate Change > Reducing GHG Emissions > Scope 1 and 2 GHG emissions (Japan and Overseas) ➤ ESG Data (Environment)
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	n/a	RT-CH-110a.2	<ul style="list-style-type: none"> ➤ Climate Change > Asahi Kasei Group Policy for Achieving Carbon Neutrality
Air Quality	Air emissions of the following pollutants: (1) NO _x (excluding N ₂ O), (2) SO _x , (3) volatile organic compounds (VOCs), and (4) hazardous air pollutants (HAPs)	Quantitative	Metric tons (t)	RT-CH-120a.1	<ul style="list-style-type: none"> ➤ (1), (2) Pollution and Natural Resources > Air pollution, Environmental Management, ESG Data (Environment) ➤ (3) Pollution and Natural Resources > Reducing emissions of chemical substances, Environmental Management, ESG Data (Environment) • (4) -

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE	Disclosability and disclosure website
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable, (4) total self-generated energy	Quantitative	Gigajoules (GJ), Percentage (%)	RT-CH-130a.1	<ul style="list-style-type: none"> ➤ (1) Environmental Management • (2) - ➤ (3)Climate Change > Efforts to Reduce CO₂ Emissions > Renewable energy • (4) -
Water Management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m ³), Percentage (%)	RT-CH-140a.1	<ul style="list-style-type: none"> ➤ (1) Water Resource Preservation > Reducing water use, ESG Data (Environment) • (2) -
	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Quantitative	Number	RT-CH-140a.2	<ul style="list-style-type: none"> ➤ Water Resource Preservation > Prevention of water pollution
	Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion and Analysis	n/a	RT-CH-140a.3	-
Hazardous Waste Management	Amount of hazardous waste generated, percentage recycled	Quantitative	Metric tons (t), Percentage (%)	RT-CH-150a.1	<ul style="list-style-type: none"> ➤ Pollution and Natural Resources > Reducing industrial waste
Community Relations	Discussion of engagement processes to manage risks and opportunities associated with community interests	Discussion and Analysis	n/a	RT-CH-210a.1	-

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE	Disclosability and disclosure website
Workforce Health & Safety	(1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees	Quantitative	Rate	RT-CH-320a.1	<ul style="list-style-type: none"> ➤ Health Management and Occupational Health and Safety > Occupational Health and Safety > Workplace Accidents
	Description of efforts to assess, monitor, and reduce exposure of employees and contract workers to long-term (chronic) health risks	Discussion and Analysis	n/a	RT-CH-320a.2	<ul style="list-style-type: none"> ➤ Health Management and Occupational Health and Safety > Health Management > Health Management Goals
Product Design for Use phase Efficiency	Revenue from products designed for use-phase resource efficiency	Quantitative	Reporting currency	RT-CH-410a.1	-
Safety & Environmental Stewardship of Chemicals	(1) Percentage of products that contain Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Category 1 and 2 Health and Environmental Hazardous Substances, (2) percentage of such products that have undergone a hazard assessment	Quantitative	Percentage (%) by revenue, Percentage (%)	RT-CH-410b.1	<ul style="list-style-type: none"> ➤ (1) Quality Assurance • (2) -
	Discussion of strategy to (1) manage chemicals of concern and (2) develop alternatives with reduced human and/or environmental impact	Discussion and Analysis	n/a	RT-CH-410b.2	<ul style="list-style-type: none"> ➤ (1), (2) Quality Assurance > Product safety initiatives, Chemical substance management ➤ Pollution and Natural Resources > Reducing emissions of chemical substances

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE	Disclosability and disclosure website
Genetically Modified Organisms	Percentage of products by revenue that contain genetically modified organisms (GMOs)	Quantitative	Percentage (%) by revenue	RT-CH-410c.1	-
Management of the Legal & Regulatory Environment	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	Discussion and Analysis	n/a	RT-CH-530a.1	<ul style="list-style-type: none"> ➤ Environmental Management > Policy ➤ Climate Change > Asahi Kasei Group Policy for Achieving Carbon Neutrality
	Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR), and Process Safety Incident Severity Rate (PSISR)	Discussion and Analysis	n/a	RT-CH-540a.1	<ul style="list-style-type: none"> ➤ Process Safety > Process safety management
	Number of transport incidents	Quantitative	Number	RT-CH-540a.2	<ul style="list-style-type: none"> ➤ Process Safety > Transportation and Distribution Safety

Independent Review and Independent Assurance Report

We obtain Independent Review and Independent Assurance Report of the Asahi Kasei Group Sustainability Report as shown below.

Independent review

[translation from Japanese]

Asahi Kasei Group Sustainability Report 2022 Internet Edition Independent Review

October 3, 2022

Koshiro Kudo
President & Representative Director,
Presidential Executive Officer
Asahi Kasei Corporation

Ozaki Satoshi
Chief Director
Responsible Care Verification Center
Japan Chemical Industry Association

Objectives of Verification

Responsible Care Report Verification was performed by the Responsible Care Verification Center with respect to *the Asahi Kasei Group Sustainability Report 2022 Internet Edition* (the "Report") prepared by Asahi Kasei Corporation, with the objective of expressing an opinion as a chemical industry specialist on the matters as stated below.

- 1) Reasonableness of methods of calculation and aggregation of performance metrics (numerical values), and the accuracy of numerical values.
- 2) Accuracy of reported information other than numerical values.
- 3) Evaluation of Responsible Care (RC) and sustainability activities.
- 4) Characteristics of the Report.

Verification Procedure

- At the head office: Examination of the reasonableness and accuracy of methods to aggregate numerical values reported from each site (branch, production site, etc.), and examination of the accuracy of reported information other than numerical values were performed through interviews of responsible parties and compilers of the Report as well as receipt of internal documents and explanations thereof from each of the responsible parties and compilers, with both in-person meetings and online meetings.
- Verification for Mizushima Works was conducted via web conference between the Asahi Kasei head office and Mizushima Works, and accuracy of the numerical values and information other than numerical values, reported to the head office, were examined. The survey was performed at the site through interviews of responsible parties and compilers of the Report, receipt of internal documents and explanations thereof from each of the responsible parties and compilers, a cross-check of reported information with supporting materials, and confirmation of on-site photos.
- Numerical values and reported information were verified by sampling.

Opinion

- 1) Reasonableness of methods of calculation and aggregation of performance metrics (numerical values); accuracy of numerical values
 - Calculation and aggregation of numerical values at the head office and Mizushima Works are performed using a reasonable method, and an RC Performance Data Collection System is used throughout the company for accurate and efficient aggregation of data.
 - Numerical values within the scope of our examination have been calculated and aggregated accurately.

- 2) Accuracy of reported information other than numerical values
 - Information contained in the Report was confirmed to be accurate. Some minor issues related to appropriateness of expression and ease of understanding were identified in the draft stages, but these have been revised in the present Report.


- 3) Evaluation of RC and Sustainability Activities
 - In May 2022, as Asahi Kasei celebrated the 100th anniversary of its founding and took the first steps into its next 100 years, the Company's new President set out the Be a Trailblazer theme under which Asahi Kasei aims to carve out paths not yet taken and show the world the way. He is also making efforts toward the Company's resolution to contribute to a sustainable society through its business and to pursue sustainability geared toward sustainable increase of corporate value. I commend these actions.
 - I highly commend the Company for creating the frameworks for "Group Masters," "Digital Human Resources," "Global Human Resources," and other development systems and similar programs, and putting strong efforts into human resource development, both in order to win in the global market.
 - I commend the Company for establishing in fiscal 2020 the Asahi Kasei Life Saving Actions (LSA) program (comprising four prohibited behaviors) to eliminate serious workplace injuries, and rolling out this program, to be adhered to in all aspects of the Group's business, across the entire Group, attaining some positive results. I also commend the Company's identification of issues by means of a survey of safety culture given to all employees, and its efforts to cultivate a stronger safety culture.
 - At Mizushima Works, Group companies using the premises and permanent subcontractors work together as a team to reliably put RC activities into practice, and summarize the status of these activities annually in its RC Report, which is a site report utilized for the Company's own control and management. In addition, they make strong efforts to communicate with local communities by distributing this information to local residents, relevant administrative bodies, and similar parties. I commend these actions.

- 4) Characteristics of the Report
 - The Report looks ahead to 2050, clearly indicating the Group's chosen course of contributing to the creation of a carbon neutral sustainable world as a form of "Care for Earth" and to achieving active life in the new normal as a means of "Care for People," and gives a detailed report of the long-term challenges the Group is taking on.



Independent Assurance Report

To the President and Representative Director of Asahi Kasei Corp.

We were engaged by Asahi Kasei Corp. (the “Company”) to undertake a limited assurance engagement of the environmental performance indicators marked with  (the “Indicators”) for the period from April 1, 2021 to March 31, 2022 included in its website found under: www.asahi-kasei.com/sustainability/ (the “Website”) for the fiscal year ended March 31, 2022.

The Company’s Responsibility

The Company is responsible for the preparation of the Indicators in accordance with its own reporting criteria (the “Company’s reporting criteria”), as described in the Website.

Our Responsibility

Our responsibility is to express a limited assurance conclusion on the Indicators based on the procedures we have performed. We conducted our engagement in accordance with the ‘International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information’ and the ‘ISAE 3410, Assurance Engagements on Greenhouse Gas Statements’ issued by the International Auditing and Assurance Standards Board. The limited assurance engagement consisted of making inquiries, primarily of persons responsible for the preparation of information presented in the Website, and applying analytical and other procedures, and the procedures performed vary in nature from, and are less in extent than for, a reasonable assurance engagement. The level of assurance provided is thus not as high as that provided by a reasonable assurance engagement. Our assurance procedures included:

- Interviewing the Company’s responsible personnel to obtain an understanding of its policy for preparing the Website and reviewing the Company’s reporting criteria.
- Inquiring about the design of the systems and methods used to collect and process the Indicators.
- Performing analytical procedures on the Indicators.
- Examining, on a test basis, evidence supporting the generation, aggregation and reporting of the Indicators in conformity with the Company’s reporting criteria, and recalculating the Indicators.
- Visiting the Company’s Suzuka Plant and making inquiries and reviewing materials including documented evidence as alternative procedures to a site visit to Asahi Kasei Spunbond (Thailand) Co., Ltd. selected on the basis of a risk analysis.
- Evaluating the overall presentation of the Indicators.

Conclusion

Based on the procedures performed, as described above, nothing has come to our attention that causes us to believe that the Indicators in the Website are not prepared, in all material respects, in accordance with the Company’s reporting criteria as described in the Website.

Our Independence and Quality Control

We have complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. In accordance with International Standard on Quality Control 1, we maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Kazuhiko Saito, Partner, Representative Director
KPMG AZSA Sustainability Co., Ltd.
Tokyo, Japan
March 8, 2023