# Value Creation

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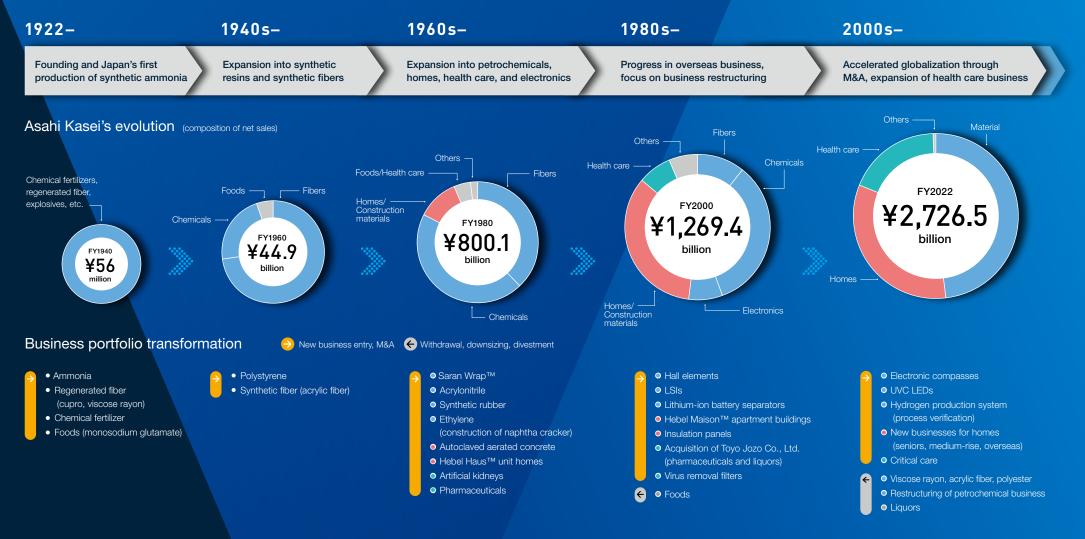
Name Company Country/region Gibran Sinoé Hernández Rocha Sage Automotive Interiors Juárez Plant Mexico

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# Addressing Social Issues and Transforming Our Business Portfolio

In every era, the Asahi Kasei Group has addressed social issues by dynamically transforming its business portfolio and supplying products and services that meet the changing needs of the times. We will continue to contribute to life and living for people around the world by Creating for Tomorrow.

# History of Business Portfolio Transformation and Growth



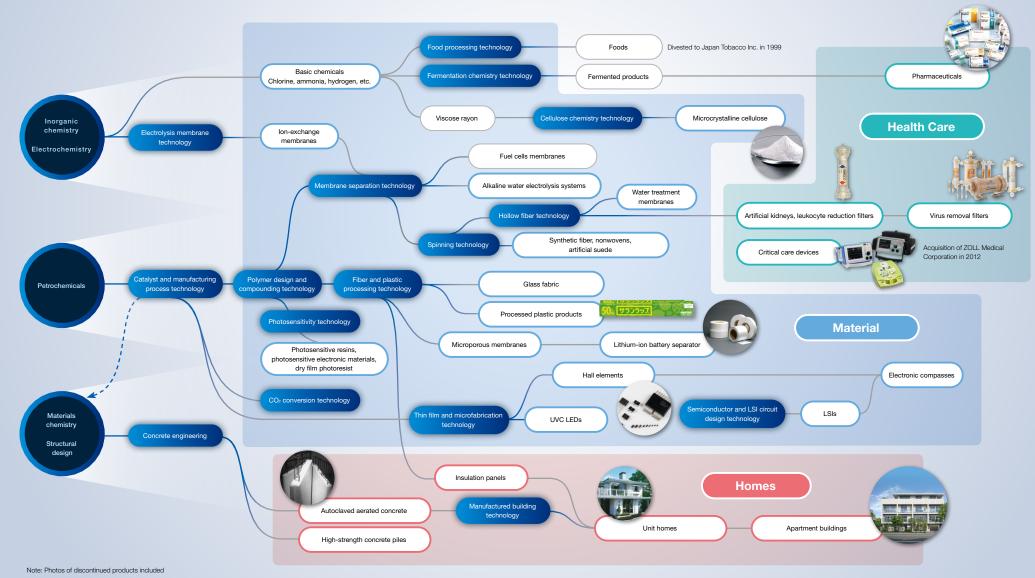
# History of Offering New Value that Addresses Social Issues

	Social needs and times	Asahi Kasei's evolution	
<b>1922</b> -	Growing as a modern nation, Japan required technologies to develop its agricultural and industrial chemical sectors.	<ul> <li>Helping bring stability to people's lives from our roots in businesses supporting food and clothing</li> <li>Successfully produced synthetic ammonia for fertilizer to raise agricultural productivity</li> <li>Began production of Bemberg<sup>™</sup> artificial fiber as a substitute for silk</li> </ul>	
<b>1940</b> <sub>s-</sub>	Sufficient supply of daily necessities was crucial to Japan's transi tion from post-war recovery to high economic growth.	Promoting new businesses for better quality of life • Expanded into various new businesses, including synthetic resins and Cashmilon™ synthetic fiber	
<b>1960</b> <sub>s-</sub>	In an era of high economic growth, developing public infrastructure— improving homes and expanding medical technology—became necessary.	<ul> <li>Offering convenient and comfortable lifestyles as a diversified manufacturer of products for food, clothing, and shelter</li> <li>Launched of homes business to meet homeownership demand</li> <li>Entered petrochemical business with operation of large-scale petrochemical complex</li> <li>Expanded into resins business following launch of sales of Saran Wrap™ cling film</li> <li>Launched medical devices business with artificial kidneys, etc.</li> </ul>	
<b>1980</b> <sub>s-</sub>	Cell phones, personal computers, audiovisual equipment, and other technologies gained popularity with the advent of the information age.	<ul> <li>Supplying key components for information devices integral to modern living</li> <li>Leveraged chemical industry expertise to enter the field of electronics, including large-scale integrated circuits (LSIs)</li> <li>Began sales of lithium-ion battery separators</li> </ul>	
<b>2000</b> s-	Global environmental issues such as global warming and the challenge of aging populations in developed countries come to the fore.	<ul> <li>Contributing to life and living for people around the world</li> <li>Promoted sustainability through technological developments to achieve carbon neutrality and initiatives to reduce CO<sub>2</sub> emissions</li> <li>Strengthened Health Care sector, including expansion into critical care business through M&amp;A</li> <li>Leveraged expertise with unit homes in Japan to enter homes business in North America and Australia</li> <li>Global expansion of pharmaceutical business with acquisition of U.S. pharmaceutical company</li> </ul>	

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# Asahi Kasei's Technological Heritage and Path to Three Sectors

Based on the chemical technology from the time of our founding with viscose rayon, Bemberg<sup>™</sup>, and ammonia synthesis, we have developed diversified businesses while transforming our portfolio with the technologies developed becoming the source of additional new technologies, resulting in the current three-sector configuration.



# The Asahi Kasei Group's Businesses and Leading Products

Fiscal 2022 Net Sales ¥2,726.5

billion

Fiscal 2022 Operating Income

¥128.4 billion

47.8%

33.1%

Note: Percentages exclusive of "Others" category and "corporate expenses and eliminations"

18.3%

26.4%

# **Health Care**

We contribute to progress in medical therapy by advancing specialized leading-edge technology in new combinations and addressing unmet medical needs, enabling patients to enjoy a better quality of life.

### **Health Care**





Teribone™ autoiniector osteoporosis drug

ZOLL AED 3<sup>™</sup> automated external defibrillator





Planova™ virus removal filters

LifeVest™ wearable defibrillator

# Homes

We enable secure and enriched living through the provision of high-quality, highly durable homes and construction materials, and various related services.

# Home & Living



Hebel Haus<sup>™</sup> unit homes Atlas™ condominiums Hebel Maison™ apartment buildings

48.5%

25.8%

North American and Australian homes

# **Material**

Leveraging leading-edge technology, we provide high value-added materials and products worldwide to open new possibilities for the future.

### **Environment & Energy**





Hipore<sup>™</sup> and Celgard<sup>™</sup> lithium-ion battery separators

Ion-exchange membrane chlor-alkali electrolysis process

### **Mobility**





Engineering plastics

### Life Material



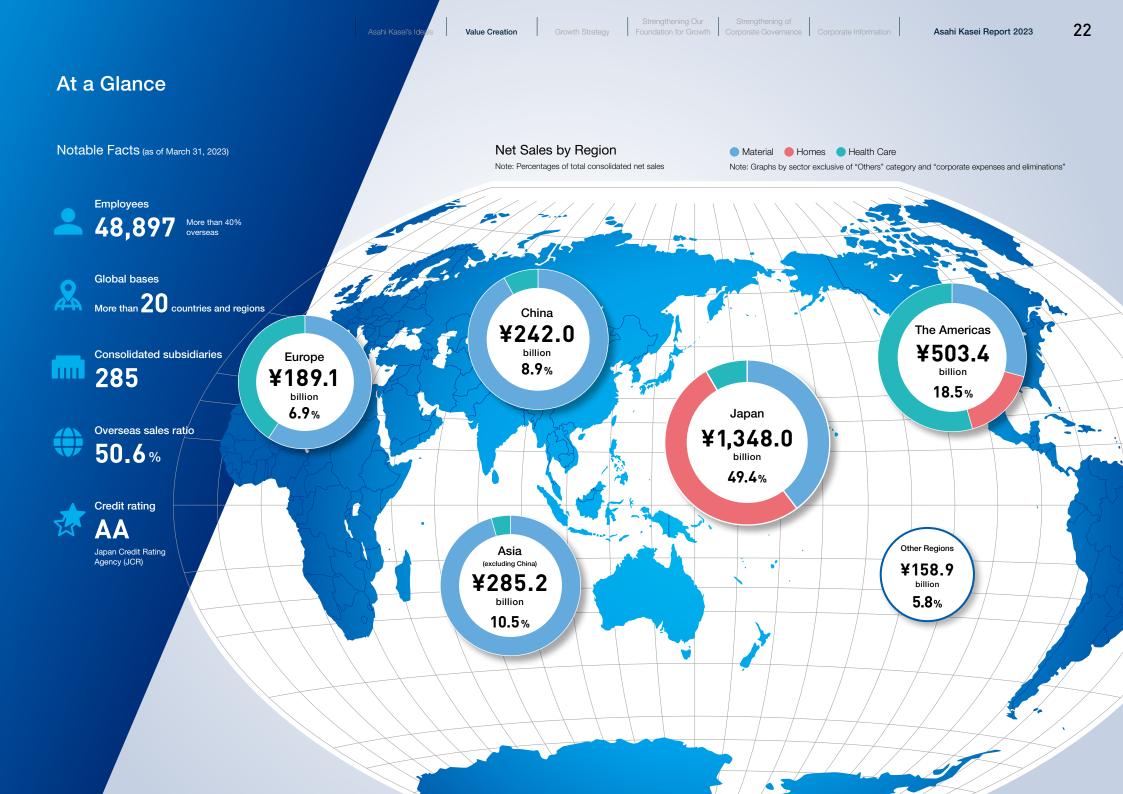


Pimel<sup>™</sup> photosensitive polyimide

Household products

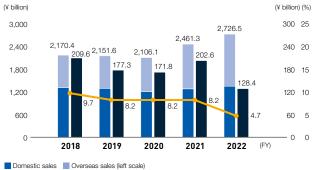


Dinamica™ artificial suede



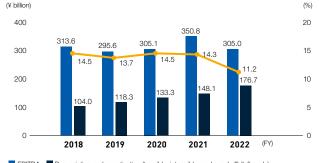
# **Financial Highlights**

#### Net sales (domestic & overseas), operating income, operating margin



Operating income (right scale) - Operating margin (%)

Net sales increased significantly in fiscal 2022 due to expansion of existing businesses, the weakening ven, increased prices for petrochemical products, and the effect of acquisitions. Operating income decreased with deteriorating performance of the Material and Health Care sectors, mainly due to a worsened operating environment and temporary factors. Overseas sales increased to over half of total net sales in fiscal 2022 due to expansion of overseas businesses, including by M&A, and the weakening yen.

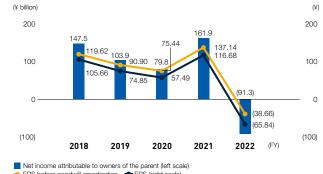


EBITDA Depreciation and amortization (tangible, intangible, and goodwill) (left scale) EBITDA margin (%) (right scale) 1 Operating income, depreciation, and amortization

EBITDA<sup>1</sup>, depreciation and amortization, EBITDA margin

Given the upward trend in depreciation and amortization due to proactive capital expenditure and M&A, the Asahi Kasei Group positions EBITDA as a major KPI signifying its ability to generate cash. Depreciation and amortization increased significantly in fiscal 2022 with acquisitions in the Health Care sector and capital expenditures in the Material sector.

#### Net income attributable to owners of the parent, EPS, EPS before goodwill amortization



- EPS before goodwill amortization - EPS (right scale)

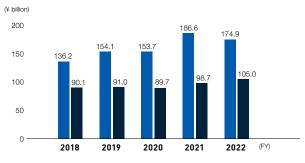
Asahi Kasei incurred a net loss in fiscal 2022 due to the recording of an impairment loss of ¥186.4 billion related to Polypore. As goodwill is amortized in accordance with Japanese accounting standards, EPS before amortization of goodwill is shown for reference.

#### ROE<sup>2</sup>, ROIC<sup>3</sup> (%) 20 10.3 10 4.0 6.6 4.9 0 (5.5)(10) 2022 (FY) 2018 2019 2020 2021 - ROF - ROIC

2 Net income per shareholders' equity <sup>3</sup> (Operating income – income taxes) / average annual invested capital

Asahi Kasei positions ROE and ROIC as major KPIs to indicate its efficiency in generating profits. In fiscal 2022, ROE was negative as a result of recording a net loss, and ROIC declined due to the decrease in operating income.

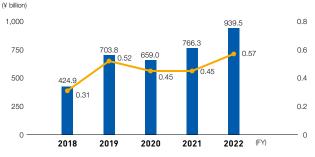
#### Capital expenditures, R&D expenses



#### Capital expenditures R&D expenses

Asahi Kasei proactively carries out capital expenditures geared toward achieving growth over the medium to long term-including for expansion of growth businesses, and in relation to decarbonization, digital transformation, and other areas to fortify its foundation-and R&D focused on the Health Care and Material sectors. Capital expenditures declined in fiscal 2022 due to strict selection of investments considering deterioration in the operating environment.

### Interest-bearing debt4, D/E ratio



Interest-bearing debt (left scale) - D/E ratio (right scale) <sup>4</sup> Amounts stated from fiscal 2019 exclude lease obligations.

Interest-bearing debt increased in fiscal 2022 as working capital such as accounts receivable and inventories increased with higher market prices, and demand for funds increased in conjunction with M&A centered on the Homes and Health Care sectors. As a result, the D/E ratio also increased.

# **Non-Financial Highlights**

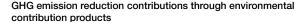
#### Greenhouse gas (GHG) emissions (Scopes 1 and 2)



Applicable range: Production sites of consolidated companies

Note: Fiscal 2022 figures are preliminary and may change after undergoing third-party verification.

The Asahi Kasei Group is targeting a GHG emission reduction of 30% or more by fiscal 2030 compared with fiscal 2013 to clarify its path toward carbon neutrality. Ongoing endeavors to reduce emissions are advancing in order to achieve this target.

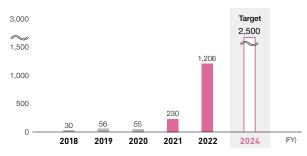




Volume of GHG emission reduction contributions of environmental contribution products' (left scale)
 Portion of sales of environmental contribution products' (right scale)
 Note: Internal calculation of the volume of GHG emission reduction contributions from a life cycle assessment perspective based on the views of outside experts.
 <sup>1</sup> Using fiscal 2020 as the baseline year (100)
 Portion of total net sales excluding the Health Care sector

Products and services of the Asahi Kasei Group that contribute to improving the environment across their entire life cycle are designated as environmental contribution products. We will work to develop environmental contribution products with the goal of reducing society's overall GHG emissions.

#### Number of digital professional human resources

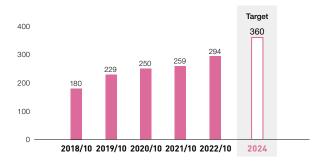


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Note: Total figures up to fiscal 2020 include only human resources specializing in data analysis. Applicable range: Total employees worldwide

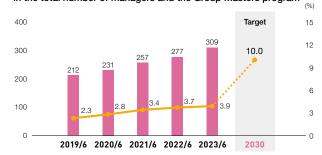
The Asahi Kasei Group promotes bottom-up human resource development to enable all employees to engage in their work duties with a mindset conducive to utilizing digital technology. In particular, we proactively promote the development and recruitment of digital professionals who use advanced digital technology and data to resolve business issues and create business models. These efforts have led to the emergence of such professionals in a wide range of fields, including through the Asahi Kasei DX Open Badge Program.

Number of Group Masters



The Asahi Kasei Group appoints, nurtures, and rewards as Group Masters human resources with the potential to proactively engage in and contribute to the creation of new businesses and the enhancement of established businesses. Our corporate value is enhanced by the development and recruitment of specialists in various fields. For effective utilization, fields of technology and specialization for the appointment of human resources as Group Masters are reviewed annually in accordance with business strategy.

#### Number of women working as managers and percentage of women in the total number of managers and the Group Masters program



Number of women working as managers (left scale)

Percentage of women in the total number of managers and the Group Masters program (right scale) Applicable range: Results for personnel employed by Asahi Kasei Corp., Asahi Kasei Microdevices Corp., Asahi Kasei Homes Corp., Asahi Kasei Construction Materials Corp., Asahi Kasei Pharma Corp., and Asahi Kasei Medical Co., Ltd.

Amid rapid change in the operating environment, the Asahi Kasei Group must utilize the capabilities of its diverse human resources to boost co-creativity if it is to create value continuously. With the promotion of women as a KPI, we will realize conditions that enable diverse human resources, including women, to thrive in a variety of settings within the organization through the creation of an environment and requirements for achieving the KPI.

# Number of valid patents and percentage of which accounted for by GG10-related patents



Total number of valid patents (of which, and GG10-related patents) (left scale)
 Percentage of valid patents accounted for by GG10-related patents (right scale)
 Note: Valid patents are those for which the patent right or patent application has not expired. The number

Note: Valid patents are those for which the patent right or patent application has not expired. The number of patents in the graph represents the number of patent families (number of inventions).

The Asahi Kasei Group focuses efforts on maximizing intellectual property value in order to establish a patent portfolic that contributes to its businesses. We will aim to further enhance our competitiveness by increasing the percentage of valid patents accounted for by 10 of our businesses (GG10) that will drive our growth going forward.

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Outcome

Contributing to

sustainable society

FY2030 Target Scope 1 and Scope 2 GHG emissions

(compared with FY2020)

Vision

Two Mutually

**Reinforcing Aspects of** 

Sustainability

10%

# Value Creation Model

Know-How

A vital key to value creation at the Asahi Kasei Group is to continuously transform our business portfolio while maximizing the use of our abundant intangible assets. In these efforts, we make full use of our ability to precisely connect wide-ranging management resources, unite businesses, and appropriately control resource allocation for value creation that is unique to the Asahi Kasei Group.

#### Reduction of $\geq$ **30**% (compared with FY2013) Output 2050: Goal to achieve carbon neutrality (net-zero emissions) Volume of GHG emission reduc-tion contributions of environ-Fields for provision of value mental contribution products Percentage of women among managers and Group Masters Environment Material & Energy New business Input creation **Business** evaluation Mobility Business enhancement Financial Homes Foundation Life Material

Sustainable growth of Resource Human Resources corporate value allocation Customer Contact Restructuring Points Long-term Outlook for Around FY2030 **Business Portfolio** Home & Living Operating ¥400 billion Management income Health ≥15% Data ROE Care Intellectual ≥**10**% ROIC A-Spirit Health Care Property Structural transformation Trust, Brand Core Technologies, Digital Technology Monitoring Manufacturing

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# Value Creation Mechanism

# Diverse intangible assets are the source of the Asahi Kasei Group's growth

The source of the Asahi Kasei Group's growth is our abundant intangible assets, such as human resources, core technologies, intellectual property, expertise, data, and other such assets that we have accumulated in the process of growing through the creation of diverse businesses. At the core of these intangible assets lies our A-Spirit, which epitomizes our heritage. This is the origin of our ability to transform by leveraging intangible assets in the creation of diverse businesses, and it comprises ambitious motivation, a healthy sense of urgency, quick decisions, and a spirit of advancement. We achieve growth by utilizing these abundant intangible assets along with our ability to transform in business operations.

The ability to adapt to changes in the operating environment is crucial amid a business landscape characterized by dramatic change and an unpredictable future. By accumulating and maximizing diverse intangible assets, the Asahi Kasei Group is able to seize business opportunities that arise from changes in the operating environment and create new value. We treat all of the intangible assets we accumulate as assets to be shared throughout the entire Asahi Kasei Group, and we leverage them to their maximum potential by deploying and linking them across different sectors. Our accumulation and maximum utilization of intangible assets are firmly bolstered by the transfer of human resources across different sectors, the provision of opportunities for human resources within the Asahi Kasei Group to connect, and the fostering of a free and open organizational culture that accepts diverse ideas and takes on new challenges.

### Maximizing the Value of Intangible Assets through **DX and Intellectual Property Strategies**

Barriers between industries have become lower and activities transcending industry frameworks are accelerating. In order to create new value, naturally we must expand our accumulated intangible assets to other fields and explore and utilize unprecedented combinations, but amid an unpredictable operating environment, it is also vital to enhance the precision of strategy planning and decision-making by utilizing intangible assets in an integrated manner. Accordingly, the Asahi Kasei Group is promoting DX and intellectual property strategies. We have established Digital Value Co-Creation to spread DX throughout the Asahi

Kasei Group as a whole, and the Intellectual Property Intelligence Department to utilize intellectual property in our management. In addition, to methodically track, manage, and analyze our accumulated intangible assets, we have accelerated the development of mechanisms such as a group-wide data management infrastructure, a "seeds and needs" matching system that links our core technologies with so-called emerging technologies, and employee (expert) recommendation system.

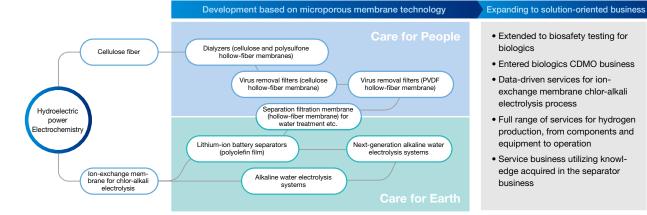
### Leveraging Core Technologies to Extend Business

Based on chemical technology, we have created several core technologies through unique developments and combinations of technologies. The production of synthetic ammonia using hydroelectric power in Nobeoka, Miyazaki Prefecture, Japan, was one of our earliest businesses. Following this, microporous membrane technology was continually developed resulting in cellulose fibers and ion-exchange membranes for chlor-alkali electrolysis. Technologies for these have then been applied in several other businesses. Cellulose fiber technology is used as part of the Health Care sector, in dialyzers for blood purification and in virus removal filters. From virus removal filters we continued to create new products for the manufacture of next-generation pharmaceuticals. From ion-exchange membrane technology we developed businesses



that are currently central to our growth strategy, such as lithium-ion battery separators, water treatment filtration membranes, and membranes for alkaline water electrolysis systems. The accumulation of the Asahi Kasei Group's unbroken succession of expertise and technology creates products that will provide solutions to future social issues.

Going forward, we are also looking to leverage our core technologies in solution-oriented businesses. For example, in relation to virus removal filters, we have expanded into the business of contract biosafety testing services for pharmaceutical companies, and entered the biopharmaceutical contract development and manufacturing organization (CDMO) business. In addition, we are studying the creation of service-oriented businesses that utilize the knowledge and business foundations that we have cultivated in the separator business.



- · Extended to biosafety testing for biologics
- Entered biologics CDMO business
- · Data-driven services for ionexchange membrane chlor-alkali electrolysis process
- Full range of services for hydrogen production, from components and equipment to operation
- Service business utilizing knowledge acquired in the separator business

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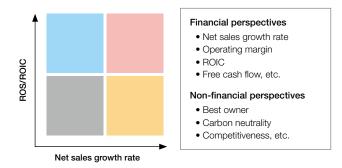
# **Business Portfolio Management**

The Asahi Kasei Group has transformed its business portfolio and grown by capturing the changing needs of society in every era and providing products and services that bring new value to society. Business Portfolio Management is an important management cycle for efficiently allocating the Asahi Kasei Group's cash and diverse intangible assets among its businesses, and leveraging business growth to achieve two mutually reinforcing aspects of sustainability: "contributing to a sustainable society" and "sustainable growth of corporate value."

### Business Evaluation

Efficient allocation of resources depends on the results of proper business evaluations. The Asahi Kasei Group conducts annual evaluations of dozens of businesses from both financial and non-financial perspectives. From the financial perspective, we evaluate net sales, operating margin, ROIC, sales growth rate, and free cash flow within a given time span. On the non-financial side, we conduct evaluations from the perspectives of competitiveness, achievement of carbon neutrality targets such as GHG emission reduction, relationships with other businesses in the value chain, and whether or not we are the best owner. Rather than simply

#### Business Evaluation Framework



evaluating mechanically, we perform comprehensive evaluation of whether a business contributes to corporate value enhancement by discussing the formulation and revision of the MTP based on such quantitative data and qualitative information.

### Resource Allocation

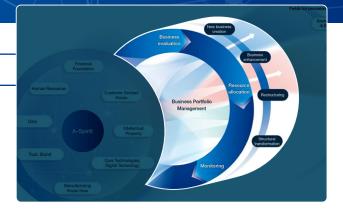
We perform efficient investment of resources based on the results of business evaluations. Ongoing investment for growth is realized by allocating stable cash flow generated by businesses with high cash-generating ability, such as the Homes sector, to businesses with future growth potential, such as the Health Care and Material sectors.

We also allocate necessary resources as circumstances require. New business creation is pursued by commercializing seeds of technology gained through R&D and corporate venture capital (CVC) investment, and by obtaining businesses through M&A. Business enhancement is performed by expanding production capacity and developing new products in established businesses. When a business experiences a temporary decline in performance, strategic restructuring is conducted. When it becomes challenging for the Asahi Kasei Group to create value in a business on our own, we study structural transformation including the use of other companies' capital, downsizing, or withdrawal to control resources, in order to achieve efficient resource management across the entire business portfolio. Based on these criteria, under our MTP we have designated 10 businesses as "10 Growth Gears" (GG10) with the potential for further investment-driven earnings growth, and prioritize them for resource allocation. For more information on GG10, please see

### page 34 🕑.

### Monitoring

For businesses categorized for strategic restructuring as a result of business evaluation, we conduct frequent monitoring and follow up on the evaluation and progress of possible strategic options in a timely manner. For GG10, we monitor whether the market is growing as expected and



whether returns on investment are forthcoming. For M&A and largescale capital investments that require resolutions by the Management Council and the Board of Directors, management and corporate departments conduct annual monitoring of each business for a certain period of time following those resolutions. We have assembled a framework that allows us to study necessary countermeasures in a timely manner by conducting post-resolution regular monitoring of such businesses for changes in the business environment, the status of profitability, the status of risk manifestation, and other factors, and sharing status reports with management and members of those businesses. Knowledge gained from the results of such monitoring is also used when considering points to check when considering future M&A and large-scale capital investments.

In addition, for major businesses, including those that do not fall into the above categories, on a quarterly basis, the President and the responsible Executive Officers have direct discussions with members of those businesses on the status of earnings performance and KPIs, as well as on emerging challenges and countermeasures.

# Materiality

### Asahi Kasei's Vision

The Asahi Kasei Group carries out business activities to provide new value to society by enabling "living in health and comfort" and "harmony with the natural environment," as set forth in its Group Vision. We aim to achieve two mutually reinforcing aspects of sustainability by contributing to the creation of a sustainable society while leading to improved corporate value. We believe that providing value that contributes to ensuring the sustainability of society will bring about sustainable improvements in our corporate value along with a high level of profitability, which will in turn enable us to take on further challenges. Guided by this belief, we endeavor to provide products and services that correspond to changes in the social climate. We will continue to offer such products and services, contributing to a sustainable society through the pursuit of innovation while taking into account the lifestyles of people around the world.

In 2021, we established our Sustainability Policy to clarify the Asahi Kasei Group's stance on sustainability and to heighten a mutual internal understanding for accelerated action toward creating a sustainable society. The policy sets forth specific and essential elements to approach matters of sustainability in addition to basic concepts.

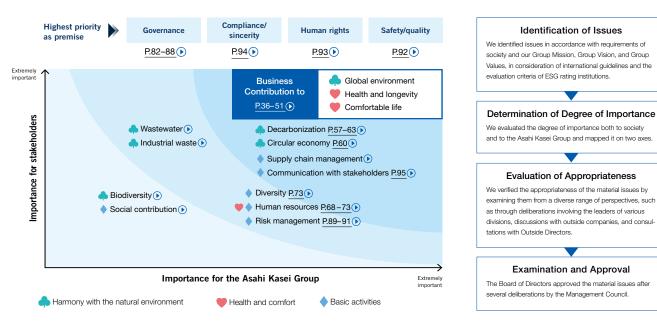
# Key Points

### of the Asahi Kasei Group Sustainability Policy 🕟

- Realize the two mutually reinforcing aspects of sustainability of "contributing to sustainable society" and "the sustainable growth of corporate value"
- Pursue the optimal form of governance for realizing Asahi Kasei's sustainability vision
- Create value by contributing to sustainable society
- Carry out responsible business activities
- Facilitate the empowerment of personnel

# Process for Identifying Materiality

In fiscal 2017, the Asahi Kasei Group identified important issues and subjects that it should prioritize as materiality through the process outlined below. We review these subjects and issues in accordance with changes in the operating environment.



## Integration into Management Strategies

Material issues are meaningful only when they are integrated into management strategies to realize our vision. In the MTP we have therefore established non-financial key performance indicators (KPIs) pertaining to materiality and identified issues to be addressed in the five fields for provision of value that will contribute to Asahi Kasei's value creation over the long term.

Materiality	Non-Financial KPIs(Benchmarks)	Vision (Targets)
<b></b>	Contributions to GHG emission reduction	At least double by fiscal 2030 (compared with fiscal 2020)
Contribution through businesses	GG10-related patents	Account for over 50% of total patents by fiscal 2030
Cecarbonization	GHG emissions	Reduction of 30% or more by fiscal 2030 (compared with fiscal 2013)
Human resources	Number of digital professional human resources	Tenfold increase by fiscal 2030 (compared with fiscal 2021)
Human resources	Number of Group Masters	360 by fiscal 2024
♦ Diversity	Percentage of women in the total number of managers and the Group Masters program	10% by fiscal 2030

For more information regarding KPIs and initiatives on material issues, please access the links in the materiality diagram. The following page clarifies the process leading up to identifying opportunities and creating value in each of the fields for provision of value. 28

### Process Leading Up to Value Creation in Each Field for Provision of Value

