The Asahi Kasei Group’s products and technologies, ranging from Hebel Haus™ unit homes and Saran Wrap™ cling film, and electronic parts used in computers and smartphones, to performance materials for automotive parts and interiors, and pharmaceuticals and AEDs that support people’s lives, are used in various ways all around us.
We, the Asahi Kasei Group, contribute to life and living for people around the world.

Providing new value to society by enabling “living in health and comfort” and “harmony with the natural environment.”

Sincerity—Being sincere with everyone.
Challenge—Boldly taking challenges, continuously seeking change.
Creativity—Creating new value through unity and synergy.

Asahi Kasei History

History of diversification and taking challenges to meet the needs of the times

The Asahi Kasei Group has consistently grown through the proactive transformation of its business portfolio to meet the evolving needs of every age. We have consistently provided products and services that form solutions to various environmental and social challenges.

Material | Homes | Health Care | Administrative & Other

1922
Asahi Fabric Co., Ltd. established (founding of Asahi Kasei)

1933
Asahi Amemiya Fiber Co., Ltd. established (legal establishment of Asahi Kasei Corp.)

1931
Fabricated plastic product operations begin with introduction of Saran Wrap™ cling film to the Japanese market

1931
Production of Bemberg™ cupro fiber begins

1946
Name changed to Asahi Chemical Industry Co., Ltd.

1949
Shiono’s founded in Tokyo, Osaka, and Nagoya

1952
Establishment of Asahi-Dow Co., Ltd. as a joint venture with the Dow Chemical Company

1957
Synthetic resin operations begin with start of production of Cashmilon™ acrylic staple fiber

1959
Synthetic fiber operations begin with start of production of Cashmilon™ acrylic staple fiber

1960
Petroleum operations begin with establishment of Sanwa Petrochemical Co., Ltd.

1964
Manufacture of synthetic rubber begins

1968
Housing operations begin with launch of Hebel Haus™ unit homes

1971
Asahi Kasei America, Inc. established

1972
Housing operations begin with launch of Hebel Haus™ unit homes

1974
Asahi Medical Co., Ltd. established and medical device operations begin with start of artificial kidney production

1976
Asahi Kasei Construction Materials Corp. established

1978
Pharmaceutical operations begin with establishment of Asahi Microsystems Co., Ltd

1982
Synthetic resin operations reinforced with merger of Asahi-Dow with Asahi Chemical

1983
Semiconductor operations begin with establishment of Thermofill Inc. with facilities in the US and Europe

1985
Entry into pharmaceuticals business with acquisition of Fujisawa Pharmaceutical Co., Ltd., and The Nikka Whiskey Distilling Co., Ltd.

1988
Dow Chemical Company and Asahi Kasei enter into critical care operations with acquisition of ZOLL Medical Corporation of the US

1990
Foods operations transferred to Japan Tobacco Inc.

1991
Start of formation of Asahi Kasei Group

1994
Name changed to Asahi Kasei Pharma Corp.

1995
Pharmaceuticals and liquors maker Toyo Jozo Co., Ltd. merges with Asahi Chemicals and Europe

2000
Performance resin compounding operations reinforced with acquisition of Thermofill Inc. with facilities in the US and Europe

2001
Name changed to Asahi Kasei Corp.

2002
Shokuhin-kawarikeyori beverage operations transferred to Asahi Beverages, Ltd., and The Nikka Whiskey Distilling Co., Ltd.

2003
Transformation to an operating holding company configuration Asahi Kasei Europe GmbH established

2004
Polypore International, with acquisition of Techno Metallurgica S.A.

2005
Battery separator operations reinforced with acquisition of Polyure International, Inc. of the US

2007
Asahi Kasei Business Management (Shanghai) Co., Ltd., established

2008
Asahi Kasei Mitsubishi Chemical Ethylene Corp., a holding company and 7 core operating companies

2009
Transformation to an operating holding company configuration Asahi Kasei Europe GmbH established

2010
Transformation to an operating holding company configuration

2012
Entry into critical care operations with acquisition of ZOLL Medical Corporation of the US

2013
Synthetic rubber operations reinforced with acquisition of Weldco Welding Engineering Co., Ltd.

2016
Battery separator operations reinforced with acquisition of VORBOS Pharmaceuticals Inc. of the US

2017
Automotive interior material operations reinforced with acquisition of Sage Automotive Interiors, Inc. of the US

2018
Petrochemical Co., Ltd.

2019
Entry into biologics CDMO business with acquisition of Bionova Scientific, LLC

2020
Battery separator operations reinforced with acquisition of VORBOS Pharmaceuticals Inc. of the US

2021
Entry into biologics CDMO business with acquisition of Bionova Scientific, LLC

2022
Automotive interior material operations reinforced with acquisition of Sage Automotive Interiors, Inc. of the US

2023
Pharmaceuticals business transferred to Mitsui Chemicals, Inc.
with advanced technology and innovative concepts, we develop materials and products that are considerate of the environment with high added value to open new possibilities for the future.

A petrochemical business advancing toward sustainability with technology development for use of bio-based material, etc., energy storage related products and services focused on the future of energy for a society aiming for carbon neutrality, developing CO₂ recovery technology, and products and technologies for green hydrogen as clean energy. With responsibility for the overall energy policy of the Asahi Kasei Group, this business advances technology innovation for climate change including reduced CO₂ emissions.

**Environmental Solutions**

**Operating company** Asahi Kasei

A petrochemical business advancing toward sustainability with technology development for use of bio-based material, etc., energy storage related products and services focused on the future of energy for a society aiming for carbon neutrality, developing CO₂ recovery technology, and products and technologies for green hydrogen as clean energy. With responsibility for the overall energy policy of the Asahi Kasei Group, this business advances technology innovation for climate change including reduced CO₂ emissions.

**Alkaline water electrolysis system at FH2R**

Leveraging our chlor-alkali electrolysis technology, which is widely adopted around the world, we are working to commercialize hydrogen production technology, including our alkaline water electrolysis system having the world-leading scale of 10 MW at the Fukuoka Hydrogen Energy Research Field (FH2R), a NEDO* project. * Japan’s New Energy and Industrial Technology Development Organization.

**Major products**

- Caustic soda, AN, sodium cyanide, acetonitrile, methacrylonitrile, MMA, Delphatm PMMA, styrene, Surlyn™ and Sunflex™ polyethylene, polystyrene
- Synthetic rubber, elastomers
- Chlor-alkal electrolysis systems (ion-exchange membranes, electrolyzers, electrodes, etc.), Microza™ silicone fiber filtration membranes
- Hipore™ and Celgard™ Li-ion battery separators
- Daramic™ lead-acid battery separator

**Mobility & Industrial**

**Operating company** Asahi Kasei

Contributing to safe and comfortable next-generation mobility with an array of Asahi Kasei Group products and technologies centered on automotive applications. Providing innovative materials and solutions for various challenges in industries other than automotive.

**Dinamica™ artificial suede**

Featuring a soft touch and luxurious surface, this polyester-based artificial suede is used in automotive interiors and high-end furniture.

**Various engineering plastics and SunForce™ foamed beads**

Used in lithium-ion battery modules and many other applications for vehicles and home electronics.

**Major products**

- Dinamica™ artificial suede
- Laronatm rayon 6E filament
- Laronatm PA 66, Tenax™ POM, Pyron™ mPP, SunForce™ foamed beads, Asclean™ purging agent
- Side X resin, cydbond™
- Duranol™ HDI-based polyisocyanate

**Life Innovation**

**Operating company** Asahi Kasei

A wide range of competitive products offered globally in two domains: Digital Solutions to meet the needs of a digital society with electronic devices and electronic materials, and Comfort Life providing products and services that contribute to healthy and comfortable living.

**Major products**

- Panel™ photosensitive polyimide, Sunfort™ dry film, APF™, APF™ and AWP™ photosensitive polymers
- Klaron™ UVC LEDs
- Semiconductors: Audio/voice LSIs, industrial/machinery LSIs, high-frequency LSIs, automotive LSIs, electronic components
- Sensors: Hall elements, Hall ICs, electronic current sensors, gas sensors, range sensors, rotation angle sensors, infrared sensor, open/close sensors
- Bemberg™ cupro fiber, Roca™ premium stretch fiber, Ethax™ rubber
- Saran Wrap™ cling film, Ziploc™ storage bags
- Ceolus™ MDC
- Bactid™ explosion-bonded metal composites, All Chemical Setter™ bonded anchors

**LSIs for audio & voice**

With a track record of over 30 years in the audio market, we continue to pursue a wide range of technologies related to sound, and provide LSIs for various applications including automobiles and smartphones.

**Saran Wrap™ cling film**

Sold in Japan for more than 40 years featuring superior cling, barrier performance, and heat resistance, it is Japan’s best-selling food wrapping film*. *Cumulative sales value from January to December 2022 in SRF+ wrapping film market survey by INTAGE Inc.
Our construction materials business includes solution-oriented products and related services such as Hebel™ autoclaved aerated concrete (AAC) panels, Neoma Foam™ phenolic foam insulation panels, foundation systems, and steel-frame structural components that meet emerging needs. We continuously strive for improvements and innovations to create new value for the future of high-quality space.

### Hebel Haus™

Our unit homes feature exceptional disaster resistance, livability, and adaptability to enable residents to continue to live with security and comfort.

### Hebel Maison™

Built with high-performance materials and systems, featuring innovative and high-function designs, and backed by long-term services, our apartment-type structures enable superior asset-value retention over the long term.

### Atlas™ condominiums

These high-quality condominiums in good locations enable residents to enjoy an urban lifestyle with peace and comfort.

### Hebel Village™ rental homes for seniors

Apartments featuring various services for self-dependent seniors who do not require nursing care are focused on urban markets in Japan.

### Hebel™ panels

Featuring outstanding fire resistance, thermal insulation, curability, and ease of installation, these panels are especially suited to the climate and construction circumstances of Japan.

### Neoma Foam™ phenolic foam insulation panels

With high-level insulation performance, these panels contribute to the advance of energy-conserving homes.

### Eazett™ screw-tip piles

This piling system enables installation in confined spaces while generating little noise or vibration and no mud for disposal.

### BasePack™ column base attachment system

The innovative attachment system features exceptional earthquake resistance, contributing to the safety and security of steel-frame buildings.

### Construction Materials

**Operating company**
Asahi Kasei Construction Materials

Various products and services for living and residency are focused on “long life.” To enable residency to span across different generations, peripheral businesses including remodeling, real estate, and urban redevelopment offer a full range of services to help maintain home asset value over the long term, yielding a truly rich living environment.

**Major products**
- Order-built homes (unit homes and apartment buildings)
- Hebel Haus™ unit homes, Hebel Maison™ apartments, Hebel Village™ rental homes for seniors
- Hebel Subbox™ condominium buildings
- Real estate-related operations: Atlas™ condominiums, brokerage of used Hebel Haus™ homes
- Remodeling: Maintenance and remodeling of Hebel Haus™ homes

### Homes

**Operating company**
Asahi Kasei Homes

Centered on Hebel Haus™ unit homes and Hebel™ AAC panels, we enable a safe, healthy, and comfortable life with technologies and services that are friendly to people and considerate of the environment.

### 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.

### Pharmaceuticals

**Operating company**
Asahi Kasei Pharma Veloxis Pharmaceuticals

Our pharmaceuticals business is positioned as a specialized, R&D-centered operation, with the development of new drugs being advanced to offer innovative and unique therapeutic solutions in the fields of orthopaedics, critical/intensive care, urology, the immune system, and the central nervous system in Japan and immunosuppressant of Veloxis Pharmaceuticals overseas.

**Major products**
- Prescription drugs: Telbivon™, Veloxiv™, Eribavin™, Recombulin™, Driskin™, Kacura™, Pleastran™
- Biotechnologically produced recombinant human growth hormone
- Teribon™ osteoporosis drug
- Hemodialysis and hemodiafiltration
- Ventilators
- Plasma separator, ascites filter/ascites concentrator
- Bioprocess products: Flexpure™ virus removal filters
- Blood purification systems: Bioskys™ multicycle recycling filters
- Artificial kidneys
- Artificial kidneys (dialyzers and hemodialyzers) for hemodialysis are born of Asahi Kasei's core technology of hollow-fiber membrane separation.
- Planova™ virus removal filters
- Filters developed specifically for removing viruses during the manufacture of biotherapeutics such as biopharmaceuticals and plasma derivatives.

### Medical Care

**Operating company**
Asahi Kasei Medical

Our medical care business contributes to the advancement of medical treatment worldwide via continuous innovation in various fields such as medical device systems that respond to unmet needs (such as chronic and acute renal disease, neurologic diseases and other intractable conditions), filters that improve the quality of blood transfusion products, and products that enable safe and efficient production of biotherapeutics at the cutting edge of new drug development.

**Major products**
- Hemodialysis/dialyzer/dialysate and hemodialyzers
- Therapeutic apheresis: Plasma separator, acute kidney filter/ascites concentrator
- Bioprocess products: Flexpure™ virus removal filters
- Blood purification systems: Bioskys™ multicycle recycling filters
- Artificial kidneys
- Artificial kidneys (dialyzers and hemodialyzers) for hemodialysis are born of Asahi Kasei’s core technology of hollow-fiber membrane separation.
- Planova™ virus removal filters
- Filters developed specifically for removing viruses during the manufacture of biotherapeutics such as biopharmaceuticals and plasma derivatives.

### Acute Critical Care

**Operating company**
ZOLL Medical

Our acute care business is based on advanced resuscitation technology. Through our ZOLL family of products, we offer a comprehensive product portfolio that includes professional defibrillators and automated external defibrillators (AEDs), as well as a wearable defibrillator, portable ventilators, a highly efficient intravascular system for managing the core temperature of critically ill patients, and data management systems for care providers. We continue to expand operations in the field of acute critical care to enable better outcomes for patients around the world.

**Major products**
- IR Series™, X Series™, and other defibrillators, AED 3™
- AED Pak™, and AED Pro™ automated external defibrillators (AEDs), as well as a wearable defibrillator
- LifeVest™ wearable defibrillator
- AutoAir™ automated CPR
- Thermogyra™ temperature management system
- Institutes software and data solutions
- Ventilators
- In-hospital test devices, therapeutic device for sleep apnea
- AED 3™
- LifeVest™
- An AED featuring support for appropriate chest compressions.
Asahi Kasei R&D

**Fostering innovation through diversity**

Depending on the degree of novelty and the market growth potential, R&D in the Asahi Kasei Group is divided into medium- to long-term corporate R&D to create new businesses that span across different fields and R&D to enhance established businesses. To leverage the diversity of our operating configuration, external resources such as corporate venture capital (CVC) are proactively utilized for strategic investment in startups in the creation of new businesses.

01 Basic concept for creating new businesses

- **Enhancing various core technologies**: High-level experts system to deepen and expand core technologies; strengthening diverse core technologies through promotion of digital transformation by nurturing experts.

- **Dynamic marketing functions**: Based on high-level experts system for personnel training, enhanced marketing functions using digital tools to discern issues in society that lead to new markets.

- **Open innovation**: Advancing co-creation with academia and other companies to accelerate open innovation.

02 R&D expenditure

**Annual R&D expenses**

<table>
<thead>
<tr>
<th>Year</th>
<th>¥ billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>90.1</td>
</tr>
<tr>
<td>2019</td>
<td>91.8</td>
</tr>
<tr>
<td>2020</td>
<td>89.7</td>
</tr>
<tr>
<td>2021</td>
<td>98.7</td>
</tr>
<tr>
<td>2022</td>
<td>105.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Breakdown of R&amp;D expenses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate expenses</td>
<td>12%</td>
</tr>
<tr>
<td>Material</td>
<td>40%</td>
</tr>
<tr>
<td>Health Care</td>
<td>44%</td>
</tr>
<tr>
<td>Homes</td>
<td>4%</td>
</tr>
</tbody>
</table>

Asahi Kasei Sustainability

**Contributing to life and living for people around the world**

**Sustainability for Asahi Kasei**

To contribute to life and living for people around the world, the Asahi Kasei Group pursues two mutually reinforcing aspects of sustainability: contributing to sustainable society and sustainable growth of corporate value. Contribution of value to society for sustainability is enabled by high profitability that sustainably increases our corporate value, which in turn allows us to take new challenges for further contributions.

**Environmental Contribution Products**

We internally certify our products and services that contribute to reduced environmental burden in society across their entire life cycle as “Environmental Contribution Products” based on various guidelines and the advice of outside experts.

<table>
<thead>
<tr>
<th>Environmental Contribution Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO2 sensors</td>
</tr>
<tr>
<td>UVC LEDs for water disinfection</td>
</tr>
<tr>
<td>S-SBR for fuel-efficient tires</td>
</tr>
</tbody>
</table>

**Process technology**

- Ion-exchange membranes process for chlor-alkali electrolysis
- Acrylonitrile production process

**Urban infrastructure**

- Glass Haak™ unit homes
- CO2 sensors
- UVC LEDs for water disinfection

**Residentially, etc.**

- Hebel Haus™ unit homes
- Li-ion battery separator
- Xyron™ lightweight resin
- S-SBR for fuel-efficient tires

**Automotive**

- Elastomer for modified asphalt pavement
- Acrylonitrile production process
- Ion-exchange membrane process for chlor-alkali electrolysis
- Acrylonitrile production process

**R&D and Innovation**

- Energetic battery separator
- Xyron™ lightweight resin
- S-SBR for fuel-efficient tires

**Corporate sports activities**

Our judo team and distance running team have produced many Olympic athletes. The teams also actively participate in various community fellowship activities.

**Community fellowship**

- **Nurturing the Next Generation**
  - Raising interest in science among youth
    - We held an event in support of a government program to raise interest in careers in science and engineering among the young generation.
  - Mentorship program
    - Contributing to the public benefit by planting and restoring forests that protect local communities from natural disasters such as flooding.

- **Coexistence with the Environment**
  - Tree-planting and reforestation activities
    - We contribute to the public benefit by planting and restoring forests that protect local communities from natural disasters such as flooding.
Asahi Kasei Network

New value is created at various locations in Japan

We are advancing the development of our business together with local communities in many locations throughout Japan, including Nobeoka, the birthplace of our operations, Fuji, our core base for R&D, and Mizushima, the center of our petrochemical operations.

01 R&D and production sites in Japan

- Material
- Homes
- Health Care
- Administrative & Other

02 Main subsidiaries and affiliates in Japan

- Asahi Kasei Advance Corp.
- Asahi Kasei Ambea Co., Ltd.
- Asahi Kasei Engineering Corp.
- Asahi Research Center Co., Ltd.
- Asahi Kasei Microdevices Corp.
- Asahi Kasei Color Tech Co., Ltd.
- Asahi Kasei Electronics Co., Ltd.
- Asahi Kasei Elvax Co., Ltd.
- Asahi Kasei Fuma Products Corp.
- Asahi Kasei Flexible Co., Ltd.
- Asahi Kasei Flexit Co., Ltd.
- Asahi Kasei Mosca Chemical Co., Ltd.
- Asahi Kasei Mitsubishi Chemical Elfinphane Corp.
- Asahi Kasei Paro Corp.
- Asahi Kasei Technophya Co., Ltd.
- Asahi-SKB Co., Ltd.
- DuPont-Asahi Tech Spin Products Co., Ltd.
- Japan Elvax Co., Ltd.
- PFK Japan Corp.
- Pufbore K.A.
- Sape Adavative Interiors Co., Ltd./Japan
- Sato Inc.
- Warakin Asahi Kasei Silicone Co. Ltd.
- Asahi Kasei Homes Corp.
- Asahi Kasei Construction Materials Corp.
- Asahi Kasei Foundation Systems Corp.
- Asahi Kasei Home Construction Corp.
- Asahi Kasei Homes Financial Corp.
- Asahi Kasei Janus Co., Ltd.
- Asahi Kasei Lifespace Corp.
- Asahi Kasei Reform Co., Ltd.
- Asahi Kasei Realty & Residences Corp.
- ASRI Corp.
- Asahi Kasei Pharma Corp.
- Asahi Kasei Medical Co., Ltd.
- Asahi Kasei Medical IT Corp.
- Asahi Kasei ZLFL Medical Corp.
- NeoTech Inc.

Corporate Profile

As of March 31, 2023

- Company name: Asahi Kasei Corporation
- Founding: May 31, 1922
- Establishment: May 21, 1937
- Paid-in capital: ¥103,389 mln
- Outstanding shares: 1,593,200,263
- Total assets: ¥3,405,583m
- Fiscal year end: March 31
- Employees: 49,857

Operating income

1 ¥2,276.5 billion

Ordinary income

1 ¥128.4 billion

Net income attributable to owners of the parent

1 ¥161.9 billion

Results by sector

- Health Care: 18%
- Health Care: 26%
- Homes: 33%
- Material: 49%
- Homes: 48%

Corporate configuration

Centered on the operating holding company Asahi Kasei Corp. and seven core operating companies, the Asahi Kasei Group does business in the three sectors of Material, Homes, and Health Care.

Financial highlights (¥ billion)

Fiscal year beginning April 1

Net sales

1 Excluding “Others” category and “corporate expenses and eliminations.”