

Review of Operations

Material



Hiroshi Yoshida

Executive Officer for Material Business Sector
Director,
Vice-Presidential Executive Officer,
Asahi Kasei Corp.

■ Standing Firm, Striding Forward

Operations in the Material sector got off to a tough start in fiscal 2020 due to the impacts of the COVID-19 pandemic. We advanced our business activities with a focus on the creation of value by capturing opportunities associated with new workstyles and social needs. In the first half of the fiscal year, we leveraged our robust supply systems to increase output of lithium-ion battery separators, electronic materials, consumables, textiles, and hygiene-related materials, demand for which was elevated by people increasingly staying at home. In the second half of the fiscal year we reaped the benefits of recovery in the markets for automotive and petrochemical products.

As we move toward the 100th anniversary of the founding of Asahi Kasei in 2022, we will reinforce our foundations for

growth through new business creation, accelerated portfolio transformation, and business model innovation utilizing digital technologies. These efforts will be focused on the Environment & Energy, Mobility, and Life Material among our priority fields for the provision of value. At the same time, amid rising demand for contributions to sustainability, we will pursue sustainable growth of corporate value through initiatives such as developing decarbonization technologies and engaging in co-creation with other companies toward the achievement of circular economies.

■ Main Products

Basic Materials

- Acrylonitrile
- Methyl methacrylate
- Polystyrene

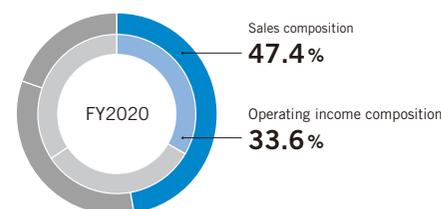
Performance Products

- Bemberg™ cupro fiber
- Lamous™ artificial suede
- Dinamica™ automotive interior material
- Engineering plastics
- Synthetic rubber/elastomer
- Saran Wrap™ cling film

Specialty Solutions

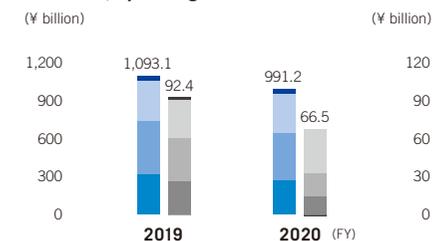
- Ion-exchange membranes
- Sunfort™ photosensitive dry film
- Battery separators (Li-ion and lead-acid)
- Mixed-signal LSIs
- Hall elements

Ratio of total consolidated net sales and operating income



Note: Not including "Others" category and corporate expenses and eliminations

Net sales, operating income



Net sales (left scale) Operating income (right scale)
 ■ Basic Materials ■ Performance Products
 ■ Specialty Solutions ■ Others in Material

■ Business Strengths

Diverse core technologies

With diverse core technologies that include catalysts, polymers, fibers, membranes, and compound semiconductors, we are creating new value by developing applications that anticipate the changing needs of society. We are also applying these technologies to products that benefit the global environment, such as lithium-ion battery (LIB) separators and acrylonitrile, which we produce using technology that reduces CO₂ emissions.

Wide-ranging marketing channels

By operating in a variety of businesses, we have built relationships with a wide range of customers in industries such as automobiles, electronics, telecommunications, clothing, food packaging, and healthcare, and we leverage these relationships to further develop businesses. In the automotive market, we are effectively expanding sales activities with our AKXY concept electric vehicle, which is equipped with a broad range of Asahi Kasei materials and products.

Stable supply of high-quality products

With a diverse range of production technologies and know-how honed over nearly a century, as well as an industry-leading commitment to Responsible Care, we are able to provide a stable supply of high-quality products, which earns the trust of customers.

Material

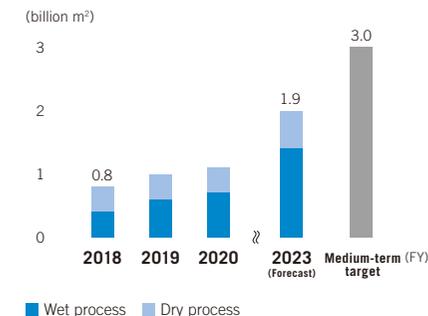
Basic Strategy Flexible allocation of management resources to priority fields

Responding to Operating Environment Changes Raising profitability/capital efficiency with new value provision models based on changed operating environment

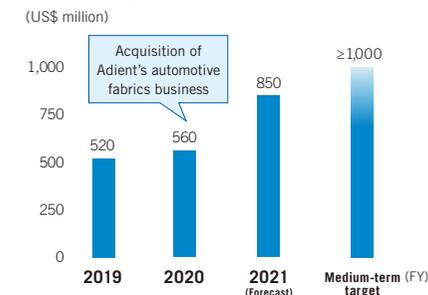
Business Strategy

Priority Fields for Provision of Value	Perceived Change	Business Strategy / Way to Provide Value	FY2020 Highlights
<p>Environment & Energy</p> <ul style="list-style-type: none"> Carbon neutral movement accelerates worldwide Rapidly growing need for technologies and solutions that contribute to decarbonization 		<p>System/Solution Provider</p> <ul style="list-style-type: none"> Provide systems/solutions that combine core technologies, processes, and operational know-how of materials Accelerate development of technologies and products that contribute to the environment 	<p>Increased Production Capacity for Hipore™ LIB Separator</p> <p>Proactively expanding businesses focused on lithium-ion batteries for electric drive vehicles.</p> <p>▶ Click here for details.</p> 
<p>Mobility</p> <ul style="list-style-type: none"> Temporary market slow-down, but changes related to CASE continue to present opportunities to provide value with materials 		<p>Material with Proposal of Usage</p> <ul style="list-style-type: none"> Propose lightweighting, modularization, and environmentally friendly materials to meet sustainability requirements for EDVs Strengthen marketing to key customers 	<p>Completion of Acquisition of Adient's Automotive Fabrics Business</p> <p>U.S. subsidiary Sage Automotive Interiors acquired the automotive fabrics business of Adient plc to strengthen its business foundation in Europe, the largest market.</p> <p>▶ Click here for details.</p> 
<p>Life Material</p> <ul style="list-style-type: none"> Firm demand for electronic materials and healthcare materials even amid the COVID-19 pandemic New needs arising from advances in next-generation communications, changes in hygiene awareness, and new lifestyles 		<p>Materials Differentiated by High Performance/Function</p> <ul style="list-style-type: none"> Provide differentiated materials required by advancing digital society Provide value to meet new needs in healthcare and other fields with distinctive materials and devices 	<p>Decision to Construct Second Plant for Ceolus™ Microcrystalline Cellulose</p> <p>The second plant will raise production capacity for Ceolus™ microcrystalline cellulose, which is primarily used as an excipient for pharmaceutical tablets, in response to growing demand.</p> <p>▶ Click here for details.</p> 

Production capacity for Asahi Kasei LIB separator



Sales at Sage Automotive Interiors



Homes



Fumitoshi Kawabata

Executive Officer for Homes Business Sector
Director, Primary Executive Officer, Asahi Kasei Corp.
President & Representative Director, Asahi Kasei Homes Corp.
Director, Asahi Kasei Construction Materials Corp.

Adapting and Evolving

Our ability to attract customers in order-built homes operations was greatly limited in fiscal 2020 as the COVID-19 pandemic forced us to close or restrict entry to model homes.

This provided an opportunity for us to transform our business model, which allowed us to enhance customer engagement through various digital channels, leading to significant recovery in orders. At the same time, we moved forward with industry-leading initiatives related to sustainability and resilience, taking part in Japan's first project in this area and winning several awards. As the domestic housing market contracts over the medium to long term, the changes in social structures and values brought about by the COVID-19 pandemic will make it more important than ever for us to flexibly adapt to changes in our operating environment. In our core business of order-built homes, we will seek to promote digital

transformation to enhance our home-building process and transform our business model to earn greater appreciation from customers.

In addition, we will proactively develop new businesses with growth potential, such as homes for seniors and medium-rise homes. Overseas, we will leverage the consolidation of Australia's McDonald Jones Homes to continue growing our business.

Main Products

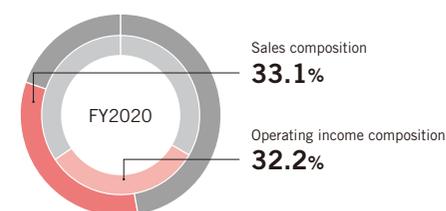
Homes

- Hebel Haus™ unit homes
- Hebel Maison™ apartment buildings
- Atlas™ condominiums
- Hebel Maison™ apartment rental network
- Remodeling

Construction Materials

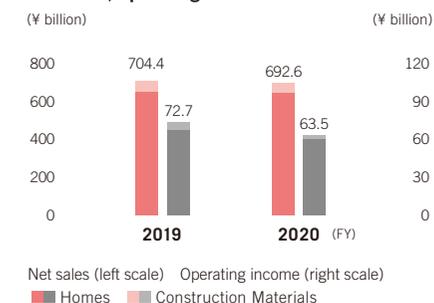
- Hebel™ AAC panels
- Neoma Foam™ and Neoma Zeus™ phenolic foam insulation panels

Ratio of total consolidated net sales and operating income



Note: Not including "Others" category and corporate expenses and eliminations

Net sales, operating income



Business Strengths

Technology for robust homes

Hebel Haus™ has earned a reputation for resilience against disasters, achieved through a combination of high-performance earthquake resistance technology, Hebel™ autoclaved aerated concrete (AAC), and Neoma Foam™ insulation with world-leading performance.

Comprehensive system to support people's lives

One of our strengths is having a comprehensive system based on our "Long Life Home" concept to address the era of 100-year lifespans. We value our relationships with customers and endeavor to stay close to them at various stages of their lives. We provide long-term warranties and inspection systems, and offer renovation and remodeling services according to changes in customers' lifestyles.

Knowledge, expertise, and assets related to urban housing

By focusing on urban areas, we have gained the ability to propose sites and spaces based on "optimal urban living" and provide consulting services accordingly. We are also expanding rental management and other businesses related to previously built homes and using our expertise to develop new businesses such as homes for seniors, medium-rise homes, and overseas business.

Homes

Basic Strategy Reinforcing and extending value chain management

Responding to Operating Environment Changes Maintaining existing growth strategy while using digital technology to meet changing lifestyle needs; strengthening resilience to disasters and adapting to carbon-free by leveraging our know-how for sustainable urban living

Business Strategy

Priority Fields for Provision of Value	Perceived Change	Business Strategy / Way to Provide Value	FY2020 Highlights
<p>Home & Living</p> <ul style="list-style-type: none"> Decrease in new housing starts in Japan Rising need for energy-efficient housing that contributes to carbon-free society and highly resilient housing in response to increasing severity of natural disasters Diversification of lifestyle and housing needs in era of 100-year lifespans Restrictions on sales activities amid COVID-19 pandemic 		<p>Superior Social Infrastructure</p> <ul style="list-style-type: none"> Promote sustainability and strengthen resilience Improve customer satisfaction and provide value through value chain reinforcement across the sector 	<p>Increase in Hebel Haus™ Ratio of Net Zero-Energy Houses Net zero-energy houses using Neoma Foam™ high-performance insulation reached 66% of Hebel Haus™ unit homes delivered in fiscal 2020.</p> <p>Use of Non-Fossil Fuel Power Excluded from Feed-In Tariff Environmental value from solar power systems installed on Hebel Maison™ apartment buildings utilized at Asahi Kasei's Kawasaki Works.</p> <p>Support for Swift Recovery from Disasters Atlas™ Kamikumamoto was completed, replacing a condominium that was damaged during the 2016 Kumamoto earthquakes. A system was developed to estimate earthquake damage using seismometers installed in Hebel Haus™ unit homes.</p>
		<p>Leveraging Know-how to Develop New Businesses</p> <ul style="list-style-type: none"> Accelerate development of overseas, homes for seniors, and medium-rise buildings businesses 	<p>Acquisition of the Austin Companies The Austin Companies, a premier Arizona residential electrical, concrete, and HVAC group, were acquired in the U.S., joining Erickson Framing Operations LLC, a prefabricated building component supplier acquired in 2018. ▶ Click here for details.</p>
		<p>Management Foundation Reinforcement</p> <ul style="list-style-type: none"> Reform workstyles and improve productivity 	<p>IT Investments for Utilizing Digital Technologies Adoption of tools for non-face-to-face meetings with customers and other steps to reform work processes.</p>

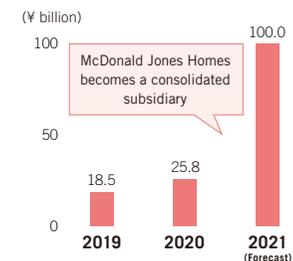


Hebel Maison™



Atlas™ Kamikumamoto

Net sales of overseas business



Health Care



Shuichi Sakamoto

Executive Officer for Health Care Business Sector (joint)
Director, Primary Executive Officer, Asahi Kasei Corp.
Chairman & Director, Asahi Kasei Pharma Corp.
Chairman & Director, Asahi Kasei Medical Co., Ltd.
Board Director, ZOLL Medical Corporation
Board Director, Veloxis Pharmaceuticals, Inc.



Richard A. Packer

Executive Officer for Health Care Business Sector (joint)
Primary Executive Officer, Asahi Kasei Corp.
Chairman & Board Director, ZOLL Medical Corporation
Board Director, Veloxis Pharmaceuticals, Inc.

■ Growing Globally

In fiscal 2020, we implemented measures to advance our evolution into a global health care enterprise, while the COVID-19 pandemic reminded us of the importance of health care. Notable steps for the pharmaceutical business in Japan included the growth of an osteoporosis treatment and the advancement of a disease awareness campaign. We strengthened our pharmaceutical business foundations in the United States through the post-merger integration of Veloxis, which we acquired in March 2020. In medical care, we expanded our virus removal filter business serving manufacturers of biotherapeutics, including COVID-19 treatments. Growth in our acute critical care business centered on ventilators, other resuscitation products, and wearable defibrillators. Our mission is to deploy our unique technological innovations to deliver the best products, services, and solutions to health care professionals around the world, with the aim of saving the lives of patients and improving their quality of life (QOL). We will accurately address the needs of the medical community with both pharmaceuticals and medical devices in order to make the Health Care sector a major growth-driving pillar of the Asahi Kasei Group.

■ Main Products

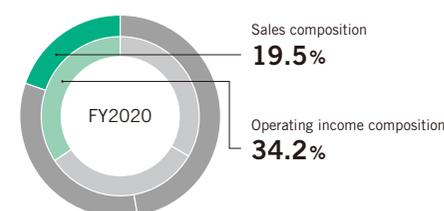
Pharmaceuticals/Medical Care

- Teribone™ osteoporosis drug
- Recomodulin™ anticoagulant
- Kevzara™ rheumatoid arthritis drug
- Envarsus XR™ immunosuppressive drug
- APS™ polysulfone-membrane dialyzers
- Therapeutic apheresis devices
- Planova™ virus removal filters

Acute Critical Care

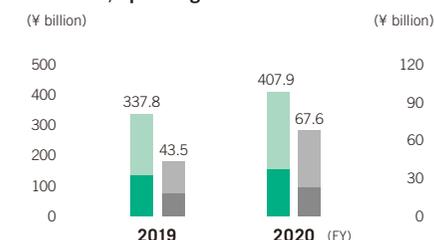
- Defibrillators for professional use
- LifeVest™ wearable defibrillator
- Automated external defibrillators (AEDs)
- Thermogard System™ temperature management system

Ratio of total consolidated net sales and operating income



Note: Not including "Others" category and corporate expenses and eliminations

Net sales, operating income



Net sales (left scale) Operating income (right scale)
■ Pharmaceuticals/Medical Care
■ Acute Critical Care

■ Business Strengths

Providing optimal treatments with both pharmaceuticals and medical devices

Being engaged in both pharmaceutical and medical device businesses, we are able to provide a wide range of treatments for patients. By increasing opportunities for innovation in both businesses, especially in the United States, we are able to provide even more value to support a society of healthy longevity.

Business platforms in orthopedics, immunology, and acute critical and cardiac care

We have business platforms focused on three fields: orthopedics, where demand for osteoporosis treatments is increasing as the population ages; immunology, including immunosuppressive drugs; and acute critical and cardiac care, including our market-leading defibrillators. Accordingly, we are able to create unique products that contribute to a society of healthy longevity.

World-leading position in virus removal filters

Planova™ is the world's first virus removal filter to be developed for use during the manufacture of biotherapeutics such as biopharmaceuticals and plasma derivatives. The reliable high performance and consistent quality of these filters are trusted by pharmaceutical manufacturers around the world, earning us the top share of the global market.

Health Care

Basic Strategy Further accelerating transformation to a global health care enterprise

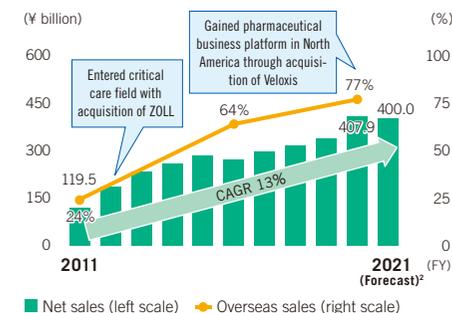
Responding to Operating Environment Changes Continue priority allocation of management resources; global expansion of both pharmaceuticals and medical devices, to be the third major pillar and driver of growth

Business Strategy

Priority Fields for Provision of Value	Perceived Change	Business Strategy / Way to Provide Value	FY2020 Highlights
<p>Health Care</p> <ul style="list-style-type: none"> Need for COVID-19 response measures Rising demand for high-quality medical care and improved QOL centered on developed countries Population aging and government policies to streamline healthcare expenditure Technological innovations for next-generation therapies 		<p>Acute Critical Care</p> <ul style="list-style-type: none"> Continue growing resuscitation products and other existing businesses and expand into peripheral fields 	<p>Increased Ventilator Production in Response to COVID-19</p> <p>Production of ventilators was increased substantially to meet rapid growth in demand due to the COVID-19 pandemic.</p> <p>Click here for details.</p> 
		<p>Pharmaceuticals</p> <ul style="list-style-type: none"> Business growth in areas of strength—orthopedics, immunology, and neurology—in Japan and overseas 	<p>Post-Merger Integration of Veloxis</p> <p>Progress advanced in post-merger integration of Veloxis, acquired in March 2020; sales of Envarsus XR™ immunosuppressive drug expanded.</p> <p>Out-Licensing Agreement for AK1780 Chronic Pain Drug Candidate</p> <p>AK1780, a drug candidate for chronic pain caused by neuroinflammation developed by Asahi Kasei Pharma, was licensed to Eli Lilly and Company.</p> <p>Click here for details.</p>
		<p>Medical Care</p> <ul style="list-style-type: none"> Reinforce bioprocess business in line with growth of biotherapeutics market 	<p>Expansion of Sales for Planova™ Virus Removal Filters</p> <p>While needs for viral safety in biotherapeutics continue to rise, inquiries for Planova™ virus removal filters increased in relation to development of COVID-19 treatments and vaccines.</p> <p>Click here for details.</p> 

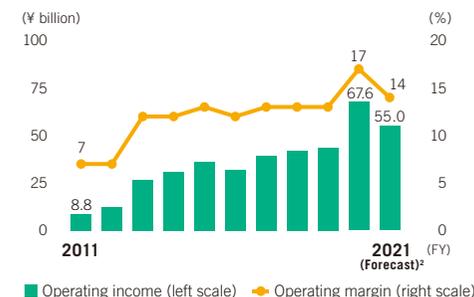
Net sales, overseas sales

- 13% CAGR¹ over past 10 years
- Driven by overseas business (reaching nearly 80%)



Operating income, operating margin

- More than six-fold growth over past 10 years
- Both amount and margin rising



¹ Compound Annual Growth Rate

² Forecast in May 2021