AsahiKASEI

Asahi Kasei Report 2019

ASAHI KASEI CORPORATION

Group Mission

We, the Asahi Kasei Group,
contribute to life and living
for people around the world.

Group Vision

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

Group Values

Sincerity—Being sincere with everyone.

Challenge—Boldly taking challenges, continuously seeking change.

Creativity—Creating new value through unity and synergy.

Group Slogan

Creating for Tomorrow

Contents

Financial Section

Corporate Information

Editorial policy

For greater ease of understanding among our stakeholders regarding the Asahi Kasei Group's operating climate and overall business activities, the *Asahi Kasei Report* focuses on areas of particular interest such as our management strategy, financial and non-financial highlights, business conditions, and management configuration, as well as our efforts toward sustainability in society. Details of our financial performance and CSR activities are disclosed on our website.

Period under review

The period under review is fiscal 2018 (April 2018 to March 2019). Some qualitative information pertaining to April to September 2019 has also been included.

Organizational scope

The scope of the report is Asahi Kasei Corp. and its consolidated subsidiaries, except with respect to Responsible Care (see p. 41) and non-financial highlights, in which case the scope is operations in Japan and overseas that perform the relevant activities.

Asahi Kasei's three operating segments are Material, Homes, and Health Care. The titles and positions of corporate officers and other personnel as shown in this report are current as of October 2019.

Guidelines consulted

The GRI Standards, ISO 26000, and other guidelines were consulted during the preparation of this report.

Disclaimer
The forecasts and estimates shown in this report are dependent on a variety of assumptions and economic conditions. Plans and figures depicting the future do not imply a guarantee of actual outcome.

Message from the President

Our new management initiative Cs+ for Tomorrow 2021 for the 3-year period from fiscal 2019 is focused on two mutually reinforcing aspects of sustainability—contributing to the sustainability of society through our business operations, and the sustainable increase in our corporate value.

Hideki Kobori
President

Review of Cs for Tomorrow 2018

During our previous management initiative from fiscal 2016 to 2018, we enjoyed relatively favorable operating conditions such as exchange rates and feedstock prices. With firm business performance overall, we achieved our financial targets. Net sales and operating income in fiscal 2018 each reached new record highs, and both profitability and capital efficiency exceeded our targets.

Regarding shareholder returns, we decided to perform our first share buyback in 17 years, and our total return ratio for fiscal 2018 reached 39%, above the 35% we had targeted.

Long-term investments for future growth were a particular focus, and we adopted decisions on some ¥670 billion over the 3-year period. We also worked to reinforce our operating foundations with thorough compliance, development of human resources, and digital transformation, and we will continue to expand and extend these efforts.

At the same time, we see new challenges ahead. We need to accelerate our efforts to provide solutions to the world's challenges. In the midst of dramatic changes in society and technological advancement, our pace of new business creation and portfolio transformation needs to rise commensurately.

Overview of Cs+ for Tomorrow 2021

Throughout the world, issues of sustainability are the subject of increasing concern, as evidenced by the SDGs[1] and ESG[2]. Under the new management initiative, Asahi Kasei expresses its stance for contribution to sustainability as "Care for People, Care for Earth." With this new "C" in addition to the four "Cs" from the previous initiative, we adopted "Cs+" in the name.

"Cs" in previous initiative

Compliance
Communication
Challenge
Connect

\+

New "C"

Care for People, **C**are for Earth

---

[1] The Sustainable Development Goals adopted by the United Nations in 2015.
[2] Environmental, social, and governance aspects of corporate management.

This initiative reaffirms Asahi Kasei's commitment to contribute to society by providing solutions to social issues through our businesses. This has always been our path of growth, stated by our founder Shitagau Noguchi, and enduring today in our Group Mission.

Our financial targets include operating income of ¥240 billion and an operating margin of 10% in fiscal 2021. While our previous outlook for operating income in fiscal 2025 was ¥280 billion, this was raised to ¥300 billion based on recent firm performance.

Other key performance indicators include ROIC[3] indicating investment efficiency, ROE indicating capital efficiency, and EBITDA[4] indicating cash-flow generation.

To maintain a proactive pace of investments for growth, we are planning a total of ¥800 billion in long-term investments over the 3-year period. While many businesses are very keen to invest, we are selecting new investments by carefully studying their potential returns to ensure that they will contribute to increased corporate value. The diversity of our businesses means that a single standard doesn't apply. Instead, we prioritize based on a comprehensive judgment of the risks, competitive environment, growth strategy, and growth stage of each business, and adopt investment decisions accordingly.

For shareholder returns, we intend to maintain stable dividends while aiming to continuously raise dividends through sustained earnings growth. Our basic standard is for a payout ratio of 30–40%.

In addition to our financial targets, we have declared a new target for reduction of GHG emissions relative to net sales. We aim to reduce this by 35% from the fiscal 2013 level by fiscal 2030. Aside from this target for the reduction of our own emissions, we will continue to proactively advance businesses which contribute to reduced emissions around the world.

Vision of our founder Shitagau Noguchi

> "As industrialists, we must always remember that our ultimate mission is to improve people's standard of living by supplying an abundance of the highest-quality daily necessities at the lowest prices."
>
> —1933

Providing solutions to society's challenges through our businesses in all three sectors

When we mapped our materiality in fiscal 2018, we identified the highest priority areas for contributing to solutions for society through our businesses. Under the new management initiative we specified 5 priority fields for provision of value, and are executing our growth strategies accordingly.

In the Material business sector we are flexibly allocating management resources to the priority fields of Environment & Energy to reduce environmental burdens, Mobility for safety and comfort,

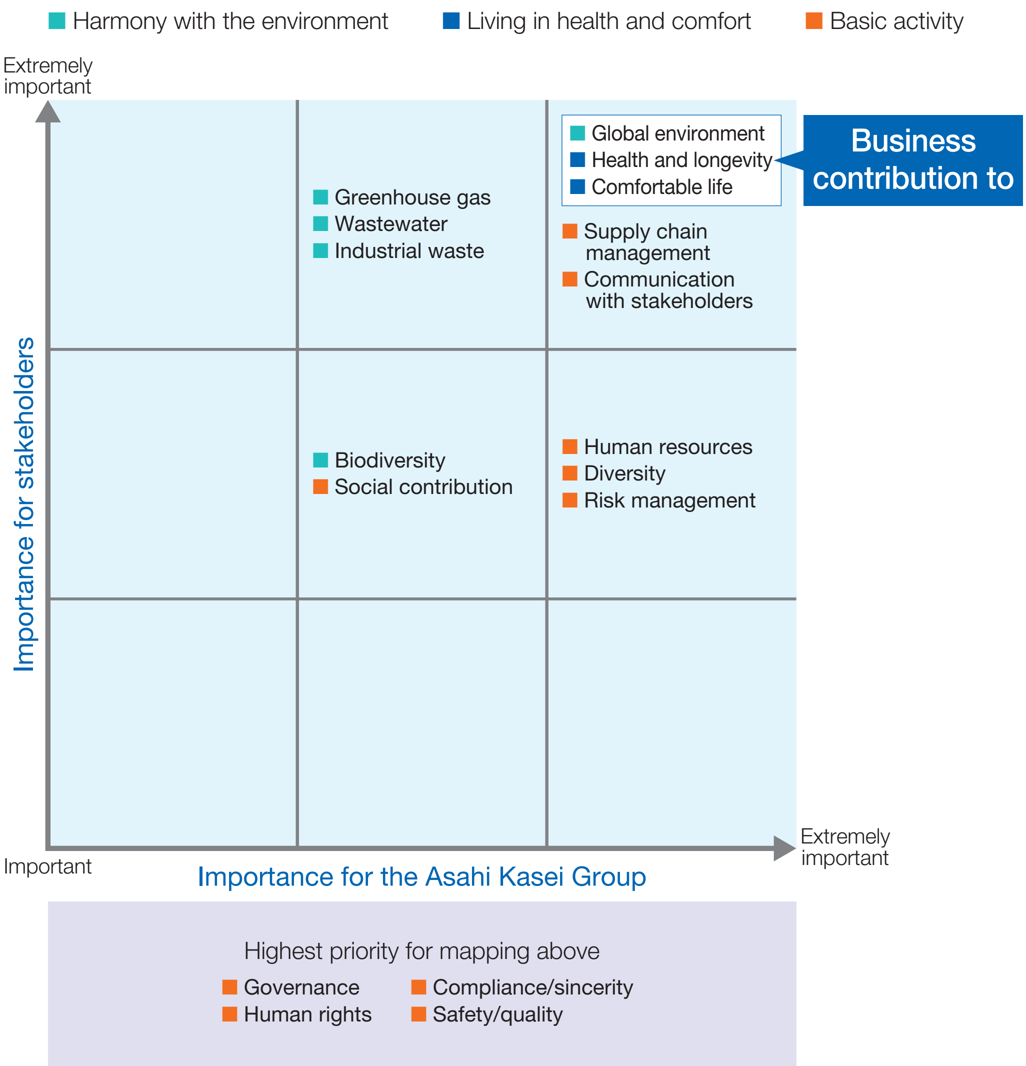
---

[3] (Operating income − income taxes) / average annual invested capital
[4] Operating income, depreciation, and amortization (tangible, intangible, and goodwill)

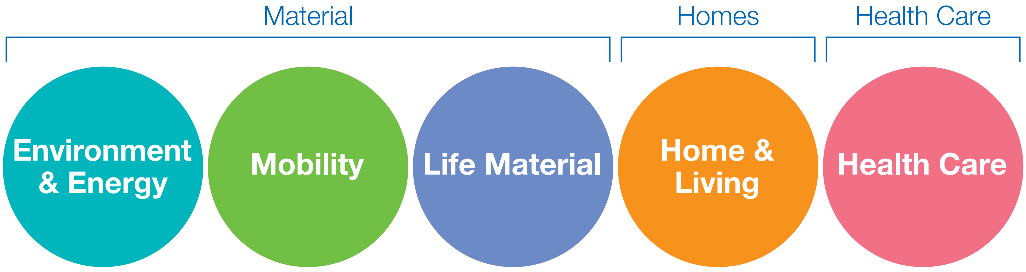
and Life Material for comfortable daily life. In the Homes business sector we are supporting fulfilment and contentment in the priority field of Home & Living. In the Health Care business sector we are contributing to healthy longevity in the eponymous priority field of Health Care.

By providing new value toward a sustainable society in all three sectors, we aim to achieve sustainable growth in corporate value.

Materiality of the Asahi Kasei Group



Asahi Kasei Group's priority fields for provision of value



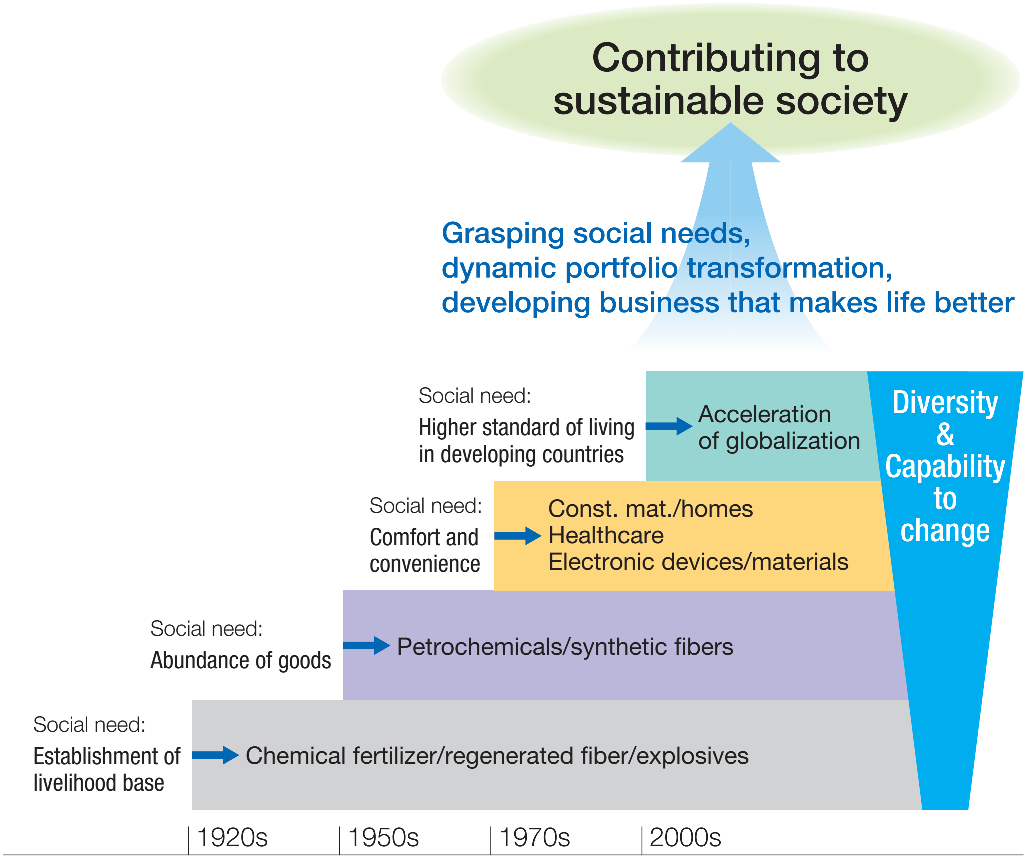
Creating new value through "diversity" and "capability to change"

Ever since our founding, we have always discerned the needs of society in each age, and continuously transformed our business portfolio focused on solutions that meet emerging changes. Asahi Kasei's strengths are our diversity and our capability to change. The diverse human resources, businesses, and technologies we have today are the result of decades of tackling the world's challenges.

Now, in today's fast-changing world, we need to pick up our pace and change more dynamically than before. Otherwise we risk being left behind. Digital technology is no longer simply a tool for performing tasks. The utilization of an ample amount of high-quality data can not only create new business models but also transform the industrial structure.

In such an age of uncertainty, our portfolio in three business sectors with diverse human resources and diverse technologies is a great strength as we execute our new growth strategy. It will be vital for us to leverage our wide range of business fields to gain information across a broad swath of industries and customer segments, and to combine our various technologies in new ways as we exert the combined strength of the Asahi Kasei Group.

Asahi Kasei has created many unique products and technologies by combining various know-how and technologies. We provide the venue for R&D personnel from throughout the group to gather together for open-minded discussions among specialists in a wide variety of fields. Such mutually stimulating exchanges lead to the creation of new value. In addition to information exchange and collaboration, we transfer personnel across different sectors to gain synergy in many different ways.



New business creation and business portfolio transformation

Several concrete measures under the new management initiative will accelerate our pace of change. We established Marketing & Innovation as a new organization to foster new business creation from new perspectives straddling across different fields, without limitation based on our existing technologies. At the same time, we reorganized our Material sector into fewer and larger units to facilitate prioritized allocation of management resources.

We are also advancing digital transformation to dramatically raise productivity and speed. In fiscal 2019 we established an Informatics Initiative within Corporate Research & Development, and by March 2022 we plan to increase digital professional personnel to over 150 people.

To strengthen overseas operations, we are promoting the employment and development of local management personnel while advancing business strategies in accordance with the characteristics of each region.

We adopted “high profitability,” “high market growth,” “priority fields,” and “sustainability” as four key perspectives to ensure that our ongoing business portfolio transformation generates higher added value. Allocation of human resources and capital will be prioritized based on these perspectives.

Taking stock of our core technologies and current R&D projects, we refined our focus. Efforts for new business development are not only in-house—we are expanding corporate venture capital (CVC) activities mainly on the US, while flexibly forming alliances with other companies, universities, and governmental bodies, to advance quickly with a broad outlook.

M&A is also a crucially effective means to achieve strategic growth and to exit struggling fields. We will continue to study and proactively execute opportunities.

By further leveraging connections both inside and outside the company, we will accelerate our portfolio transformation and new business creation to achieve a portfolio of high-profitability and high value-added businesses.

Demonstration facility for green hydrogen production in Herten, North Rhine-Westphalia, Germany

Corporate governance to tie diverse businesses together

We continue to enhance our corporate governance. Among the 9 members of our Board of Directors, 3 are Independent Outside Directors. The Outside Directors actively take part in management by offering their opinions and suggestions from an objective external perspective based on their experience and knowledge. They attend various briefings and events to deepen their understanding of Asahi Kasei, and are given detailed explanation of items in the Board of Directors agenda in advance.

Other than me, the Directors from inside the company include 2 with executive responsibility to oversee technology functions and business management functions, and 3 with executive responsibility to oversee each of the business sectors, respectively.

We have frank and unreserved discussions at Board of Directors meetings regarding each business, and determine where to concentrate resources for expansion in accordance with circumstances. Rather than the current optimum or even the overall optimum, we aim for the future optimum for the Asahi Kasei Group as a whole.

With regard to succession planning, we have delineated attributes required of future leaders. These include not only management ability and personal traits, but also the ability to make judgments about the whole Asahi Kasei Group, not only their own field of business, which is essential to a company like ours that has a wide variety of businesses. In order for such promising personnel to better understand different businesses, we give them experience in various fields.

We now have non-Japanese members among our Executive Officers, including those who joined the Asahi Kasei Group through acquisition. They offer opinions from a different perspective, yet profoundly understand our corporate philosophy and strategic outlook. The Chairman of ZOLL, for instance, is now also responsible for joint oversight of our whole Health Care sector.

Moving forward we will need to further leverage our global human resources, while promoting more women and younger personnel. Such efforts to build a management team that can guide our wide-ranging businesses through a period of dramatic change and pass the baton to the next group are an essential facet of sustainably raising corporate value.

Strengthening management foundations to swiftly respond to risks

In a rapidly changing world, we must be watchful of new risks emerging. We constantly review changes as they develop to identify any risks.

Climate change risks are the subject of particular attention around the world. In May 2019 we announced our support for the recommendations of the Task Force on Climate-related Financial Disclosures (TFCD). We are currently analyzing our climate-related risks, and studying future scenarios and what measures we should implement. Meanwhile we are intensifying our search for more opportunities to apply our products and technologies to reduce the impact of climate change.

We are also closely following changes in the situation of international commerce, such as trade friction between the US and China, and the British withdrawal from the EU. While our overseas operations have expanded through acquisitions and opening new sites, we are establishing a flexible configuration for global operations considering various aspects of trade policy, supply chain changes, and business continuity planning.

Digital transformation is a game changer. It's an extremely fast field, and we need to take appropriate steps to stay in front. Depending on how we handle information and build alliances with other companies, it has the potential to open vast business opportunities.

Risk Management & Compliance serves as our organization for unified management of individual business risks. Our strengths of quality and safety can also be risks. On-site compliance and communication are the surest ways to nip risks in the bud. We will continue to further reinforce our foundations for compliance and communication across the company.

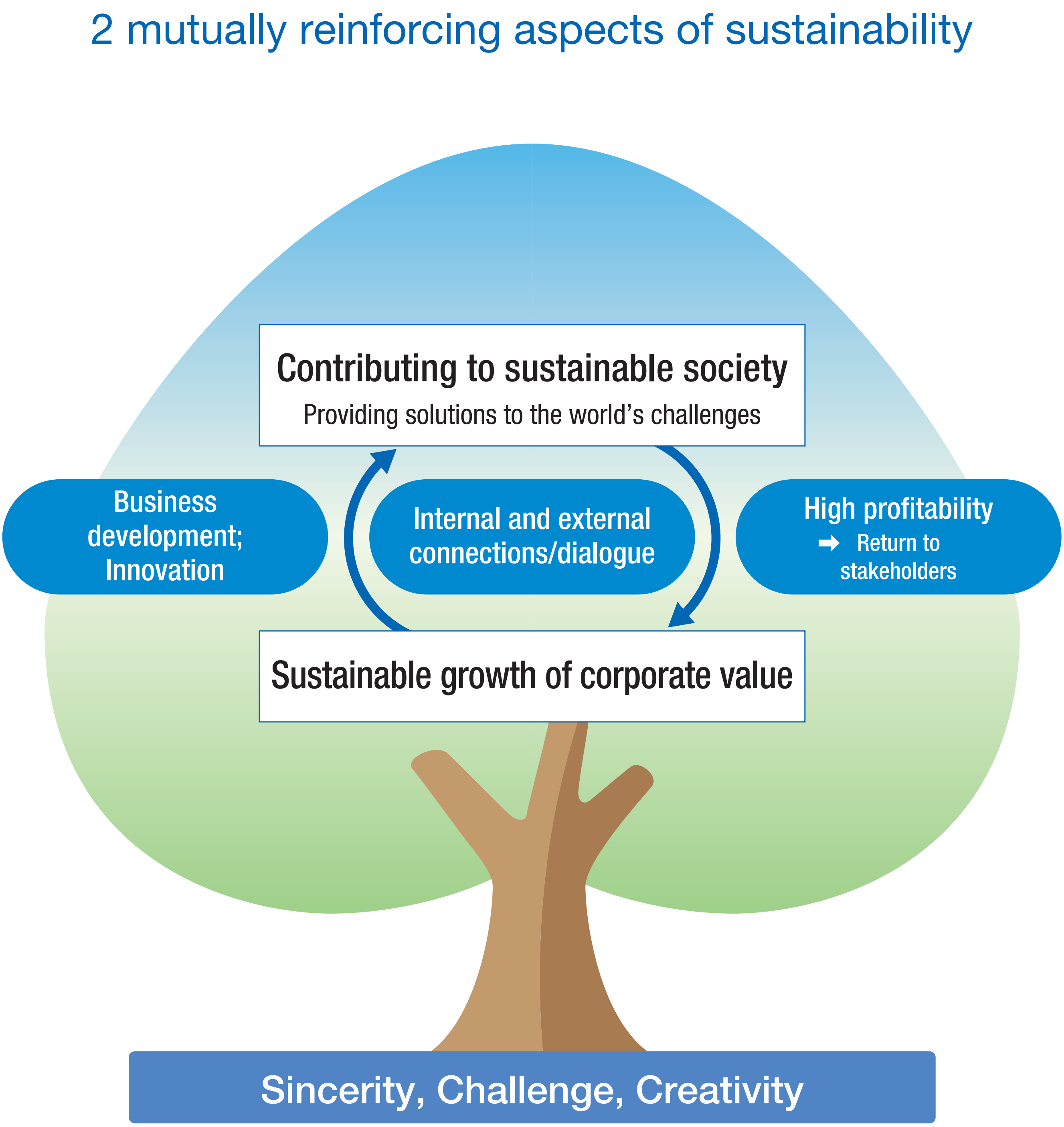
Human resources as the most important key

During the 3-year period of our current management initiative, we can expect that changes around the world will only accelerate. Asahi Kasei is changing as well, concentrating management resources on businesses that contribute to the sustainability of society, with a clear awareness of "Care for People, Care for Earth." We will continue to advance connections inside and outside the company as a vital source of strength through communication.

I truly believe that human resources are the most important key to success. No matter how good a strategy is, success depends on the people who execute it. What sets Asahi Kasei apart is our on-site strength based on our Group Values of Sincerity, Challenge, and Creativity. In each business, and at each site, our employees take the initiative. By continuously taking challenges to provide solutions to issues in society, by leveraging our diversity and our capability to change, our people are driving the transformation to a portfolio of high-profitability and high value-added businesses. This is how we will contribute to sustainable society for the benefit of all stakeholders.

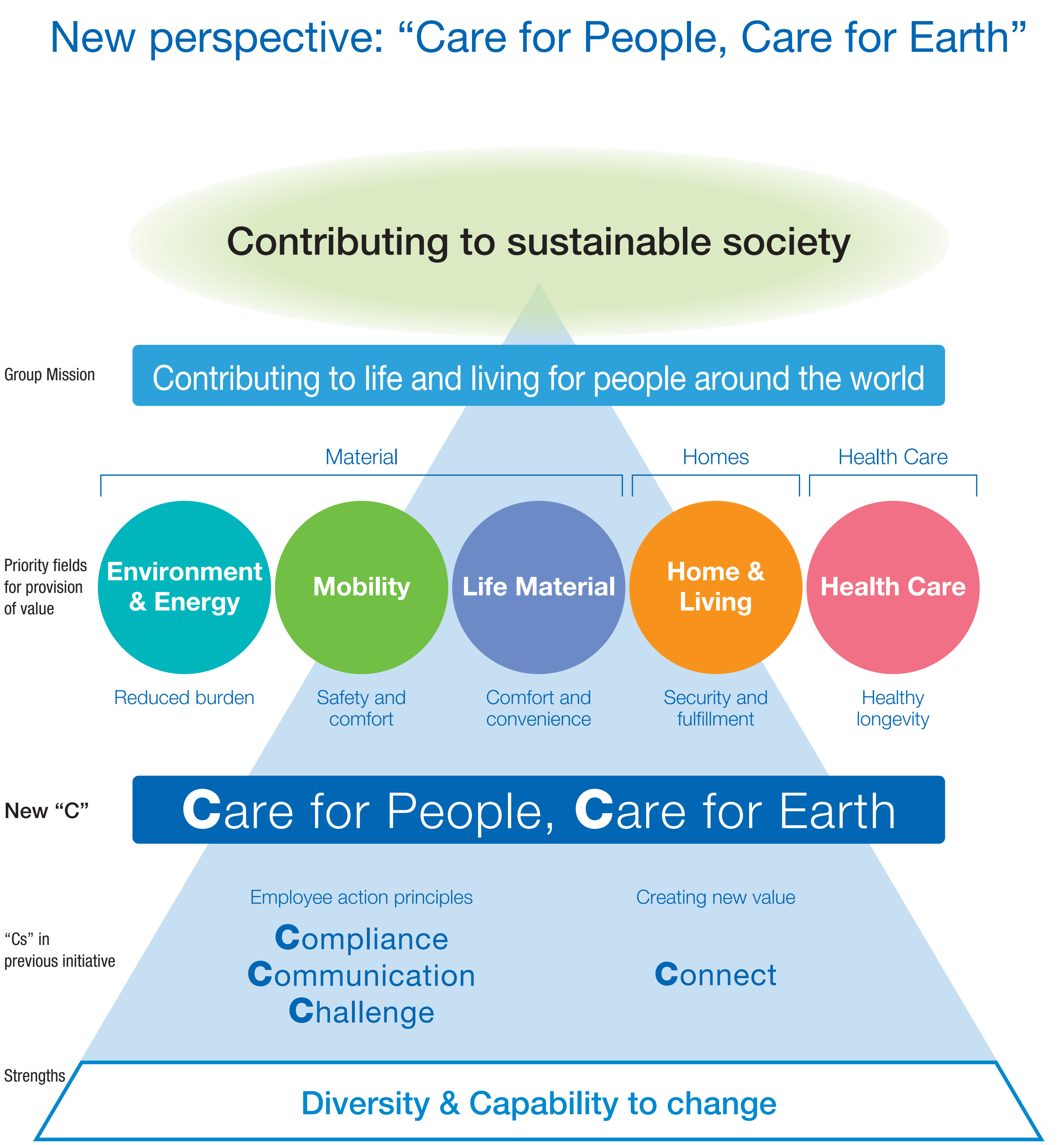
New medium-term management initiative "Cs+ for Tomorrow 2021"

Vision and goals



Asahi Kasei has advanced in accordance with its Group Mission of contributing to life and living for people around the world. As the world faces many challenges for a sustainable society, we will continue to provide new value by leveraging our strengths of “diversity” and “capability to change.”

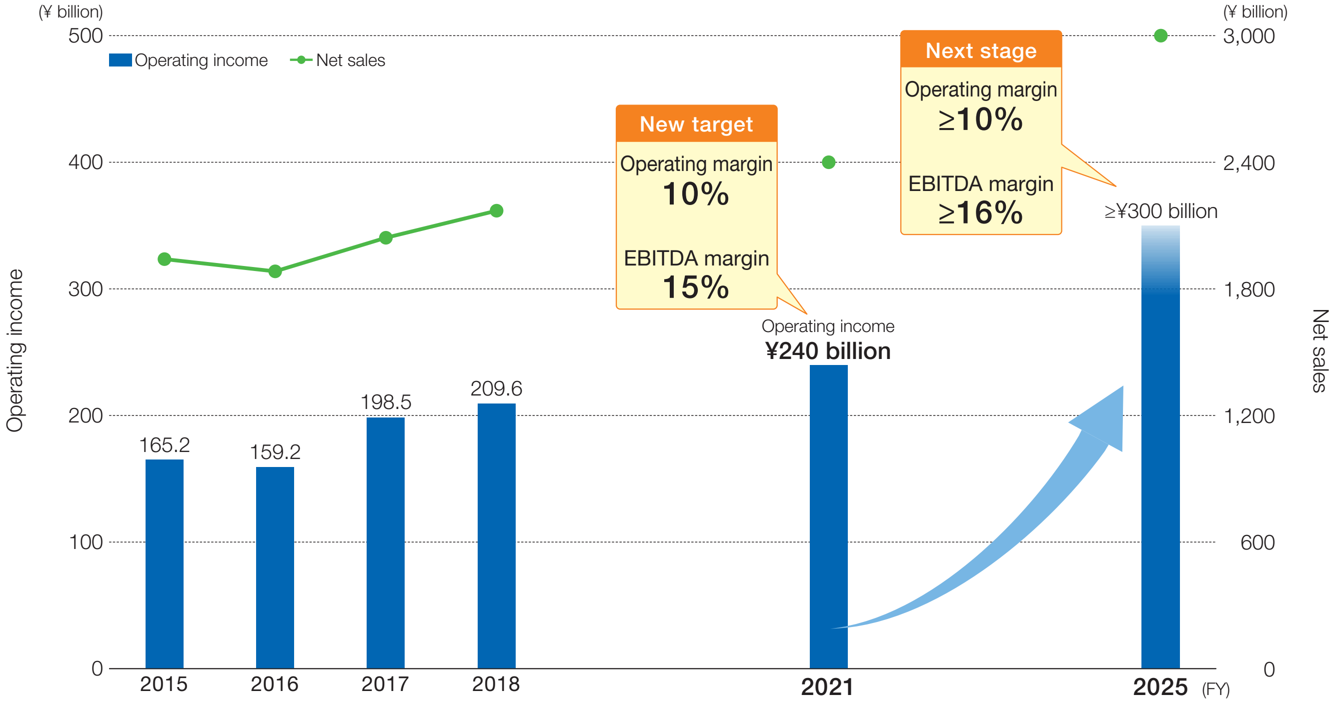
Value creation concept



Financial objectives

Sustainable profit growth exceeding global GDP growth

➡ **“Portfolio of high-profitability and high value-added businesses”**



Note: Exchange rate assumptions are ¥110/$ and ¥130/€

(¥ billion, unless otherwise specified)		FY2015	FY2018	FY2021 target	18–21 annual growth	FY2025 outlook
	Net sales	1,940.9	2,170.4	2,400.0		3,000.0
Profitability	Operating income	165.2	209.6	240.0	4.6%	≥300.0
	Operating margin	8.5%	9.7%	10.0%		≥10.0%
	EBITDA[1]	274.8	313.6	370.0	5.7%	≥480.0
	EBITDA margin	14.2%	14.5%	15.4%		≥16.0%
	Net income attributable to owners of the parent	91.8	147.5	180.0		
	EPS (¥)	66	106	130	7.2%	
Capital efficiency	ROIC[2]	7.9%	8.8%	9.0%		Aiming for FY2021 level or above
	Net income per shareholders’ equity (ROE)	8.6%	11.1%	11.1%		
Financial health	D/E ratio	0.43	0.31	≈0.5		
	Exchange rate (¥/$)	120	111	110		

[1] Operating income, depreciation, and amortization (tangible, intangible, and goodwill)
[2] (Operating income − income taxes) / average annual invested capital

Operating cash flow

3-year total

¥600 to ¥700 billion

Capital expenditure

3-year total

≈¥800 billion

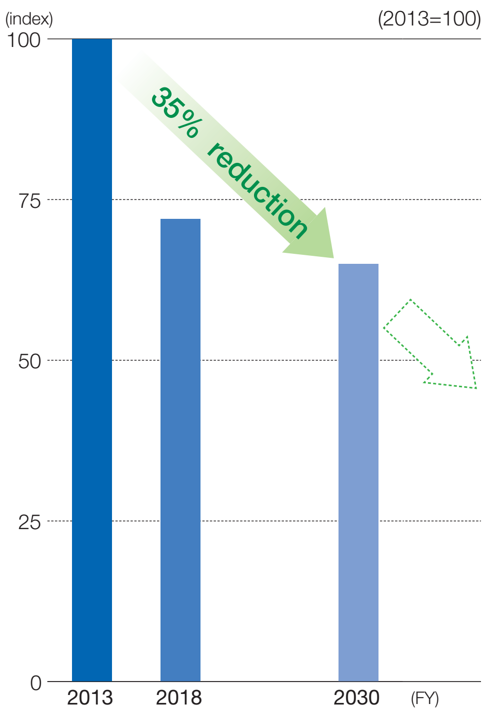
(decision-adopted basis, including M&A)

Shareholder returns

Grow dividends per share as earnings expand

payout ratio around 30 to 40%

GHG emissions/net sales



Reducing our own GHG emissions

- **Further reduction in GHG emissions**
  Installing lower-emission equipment, optimizing plant operation
- **Greater use of low-carbon energy**
  Increasing renewables and LNG
- **R&D for further GHG reduction**

Toward a sustainable society

Contributing to reduce the world's GHG emissions

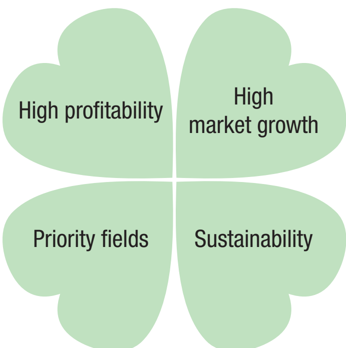
- **Businesses that contribute to energy conservation and reduced GHG emissions**
  Battery separators, lightweighting resins, net zero energy houses, CO_2 sensors, etc.
- **Technology development/commercialization for clean environmental energy**
  Green hydrogen production, CO_2 chemistry, etc.

Company-wide actions and building the base

Portfolio of high-profitability and high value-added businesses

Business portfolio transformation & new business creation

4 perspectives of judgement



Creating for Tomorrow

New medium-term management initiative “Cs+ for Tomorrow 2021”

Heightening by digital transformation

Digital Marketing
Establishing an effective and efficient strategy

Materials Informatics
Dramatically improving development speed

Production Technology Innovation
Enhancing productivity by IoT

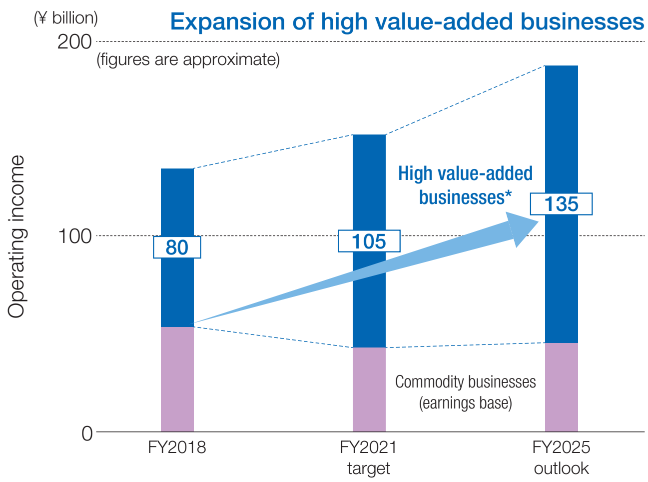
IP Landscape
Formulating strategies based on IP

Strengthen the IT infrastructure (data platform, tools, human resources)

Increase digital professional personnel to over 150 people by March 2022 to accelerate digital transformation

Strategy by sector

Material



* Fibers, synthetic rubber, engineering plastics, coating materials, ion-exchange membranes, electronic materials, consumables, battery separators, electronic devices, etc.

Environment & Energy

Care for **Earth**

Clean energy
- Battery separators
- Alkaline water electrolysis system to produce green hydrogen

Low-carbon society
- Next-generation CO_2 chemistry
- New CO_2 separation/recovery system

Energy conservation/environmental improvement
- CO_2 sensors
- Water filtration modules
- Ion-exchange membranes

Mobility

Care for **People**

Safety and security
- Airbag material
- Alcohol sensor
- Contactless pulse sensing

Comfortable space
- Lamous™ artificial suede
- Low-VOC* material
- A/C CO_2 sensors

* Volatile organic compounds

Care for **Earth**

Fuel economy
- S-SBR for tires
- Lightweighting materials
- Lead-acid battery separator

EV/HEV
- LIB separator
- LIB-related material

Life Material

Care for **People**

Comfort/convenience
- Disposable diaper material
- 5G-related (glass fabric, etc.)
- Regenerated cellulose fiber

Health
- Pharmaceutical/food additives
- UVC LEDs for disinfection

Care for **Earth**

Reducing food loss/ reduced environmental burden
- Saran Wrap™
- Ziploc™
- Water-washable printing plates

Strengthening global operations

EU
- Leading region of environmental and automotive trends

FY18→FY25 Average annual sales growth rate **+11%**

China
- Enormous market

FY18→FY25 Average annual sales growth rate **+6%**

US
- Source of new business models
- Leading region of health care

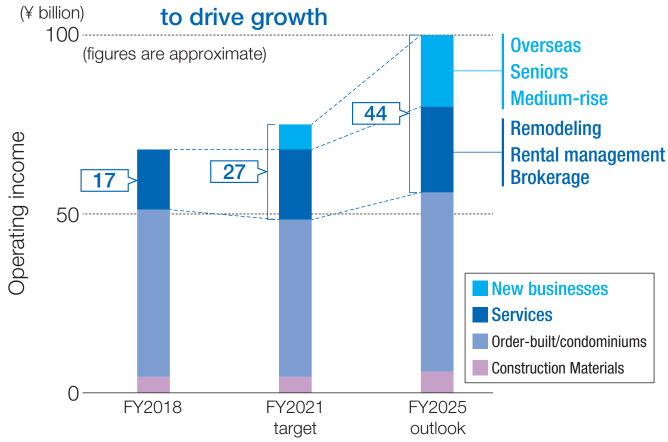
FY18→FY25 Average annual sales growth rate **+10%**

India
- Potential growth market

ASEAN
- Potential growth market
- Major production sites

Homes

New businesses and services to drive growth



Home & Living

Care for People

Safety/security
- 60-year long-life homes
- Disaster-resistance
- Long-term retention of asset value

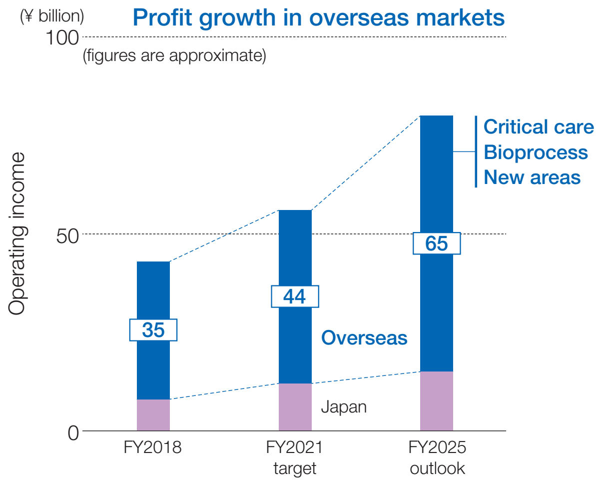
Comfort/health
- Living in a good thermal environment
- Diverse modes of residence

Care for Earth

Environment
- Net zero energy houses/ photovoltaic power
- High-performance insulation

Health Care

Profit growth in overseas markets



Health Care

Care for People

Treatment

Acute conditions (critical care, circulatory)
- Recomodulin™, Thermogard™, therapeutic apheresis, defibrillators, LifeVest™, acute myocardial infarction, stroke

Chronic conditions (orthopedics, dialysis)
- Teribone™, Reclast™, Kevzara™, dialysis, autoimmune disease, pain relief

Biosafety

Supporting the safety of biotherapeutics
- Virus removal filters
- Bioprocess equipment

Blue indicates under development

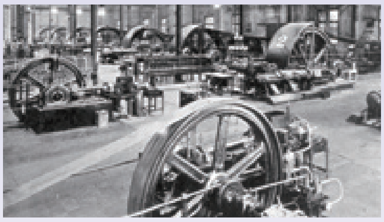
Business Portfolio Transformation Providing Solutions to Society

The Asahi Kasei Group has consistently grown through proactive transformation of its business portfolio to meet the evolving needs of every age. We have constantly provided products and services that form solutions to various environmental and social challenges. As society undergoes further changes, we will continue to contribute to life and living for people around the world by Creating for Tomorrow.

Founder:
Shitagau Noguchi

From 1922

Shitagau Noguchi, the founder of Asahi Kasei, succeeded in Japan's first industrial production of ammonia by chemical synthesis in Nobeoka, Miyazaki, in 1923 using technology licensed from Italy. The ammonia was used in the production of Bemberg™ cupro fiber, part of a diverse range of business operations that included chemical fertilizer and viscose rayon. As industry modernized and the economy of Japan achieved self-sustainable growth, our operations made important contributions to the stability of people's lives.



Part of the ammonia plant completed in 1923 (Nobeoka, Miyazaki, Japan)

The Bemberg™ plant which started operation in 1931 (Nobeoka, Miyazaki, Japan)

From 1950

In 1957 we began production of polystyrene, and in 1959 entered the synthetic fiber business. These were followed by the three new businesses of nylon fiber, synthetic rubber, and construction materials. In 1968 we began construction of a petrochemical complex in the Mizushima area of Kurashiki, Okayama, Japan, paving the way for our full-scale development of petrochemical operations. Our products during this period supported improvements in the quality of life during Japan's high-growth period.

Saran Wrap™ launched in Japan in 1960

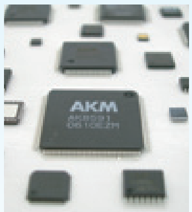
Naphtha cracker (Kurashiki, Okayama, Japan)

From 1970

In 1972 we entered the homes business with the launch of the Hebel Haus™, and in 1974 we entered the medical device business with hollow-fiber membrane artificial kidneys. Our entry into the electronics business began with our launch of Hall elements (magnetic sensors) in 1980 and start of LSI manufacture in 1987. Our products continued to help make life more comfortable and convenient as society's needs diversified.

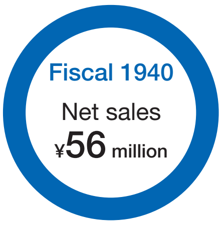
The first Hebel Haus™ (Kamata model home park)

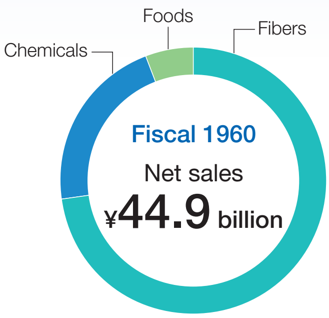
Hollow-fiber membrane artificial kidneys

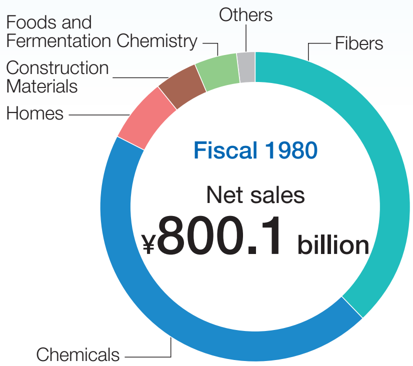


LSIs

Portfolio transformation







Establishing the basis for modern life

- Development of chemical industry and modern agriculture
- Interbellum economic downturn and World War II

Sufficiency of daily necessities, improvement in quality of homes, development of public infrastructure

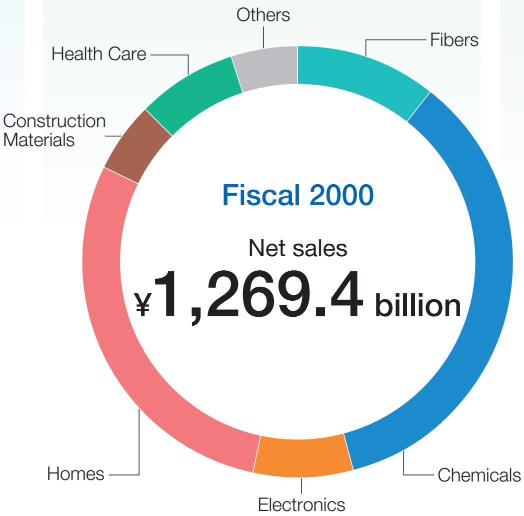
- Post-war recovery and modernization of industry
- Period of high economic growth
- Stable economic growth
- Economic bubble

From 1990

In 1992 we acquired Toyo Jozo Co., Ltd. to reinforce pharmaceutical operations. From 1999, we executed a program to heighten selectivity and focus in operations, divesting our food business and closing some fiber businesses, achieving selective diversification. From 2000 onward, we also established many overseas operations, mainly in Asia, laying the foundation for global management.

Pharmaceuticals just after the Toyo Jozo merger

Asahi Kasei Electronics Materials (Suzhou) Co., Ltd., a major manufacturing base for photosensitive dry film

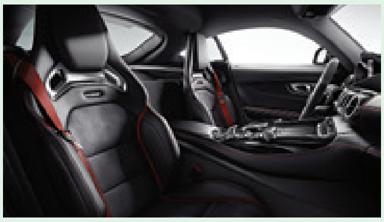


From 2010

Major overseas acquisitions drove the proactive expansion of our operations. We acquired ZOLL Medical Corporation, US manufacturer of medical devices for acute critical care, in 2012; Polypore International LP, US manufacturer of battery separators, in 2015; and Sage Automotive Interiors, Inc., US manufacturer of automotive interior materials, in 2018. Our Cs+ for Tomorrow 2021 medium-term management initiative launched in fiscal 2019 focuses on "sustainability" by contributing to sustainable society while achieving sustainable growth of corporate value.

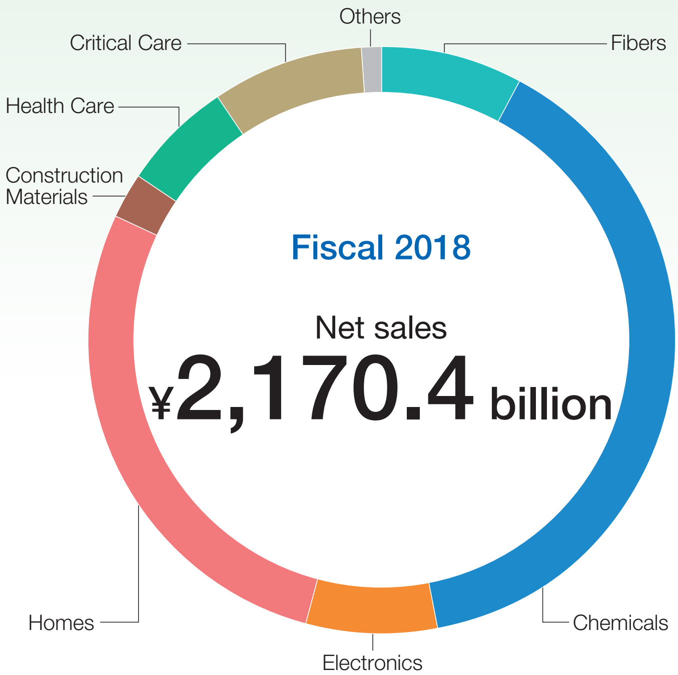
We are Creating for Tomorrow, providing new value to society by enabling *living in health and comfort* and *harmony with the natural environment*

The LifeVest™ wearable defibrillator of ZOLL



Dinamica™ automotive interior material of Sage (made with Lamous™ artificial suede)

Celgard™ Li-ion battery separator of Polypore



Increased comfort and convenience

- Two decades of meager growth after collapse of bubble
- Effect of global economic crisis

Heightened environmental consciousness, evolution of ICT

- Reduced dependence on fossil fuels, greater use of renewables
- The fourth industrial revolution by IoT, AI, Big Data, etc.

Competitive Products and Businesses

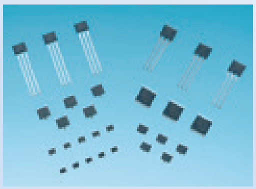
Advancing various businesses to meet the needs of the world, we have accumulated and acquired a wide range of competitive technologies, products, and businesses.

Material

Compound Semiconductors & LSIs

Electronic compass

Global No. 1



Magnetic sensor

Global No. 1

Catalysts & Processes

Acrylonitrile

Global No. 2

Polymers & Processing

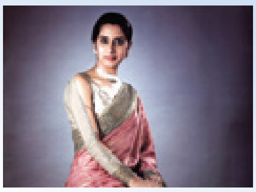
Synthetic rubber for fuel-efficient tires

Global No. 1

Accumulated and acquired technologies

- Compound semiconductors
- Software algorithms
- Foam insulation
- Anti-quake/ construction methods/ anti-fire/ durability
- Bio pharmaceuticals
- Biological information processing
- Virus removal/ blood purification
- Phase separation/ electrochemistry
- Polymerization/ spinning/ cellulose
- Functional polymer
- Polymer design/ polymerization/ processing
- Chemical process
- Catalysis/ inorganic synthesis

Fibers & Textiles



Bemberg™ cupro fiber

Global No. 1

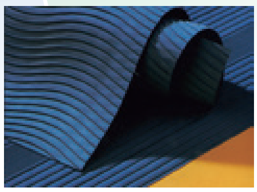
Membranes & Separation

Ion-exchange membranes

Global No. 1

Hipore™ & Celgard™ Li-ion battery separator

Global No. 1



Daramic™ lead-acid battery separator

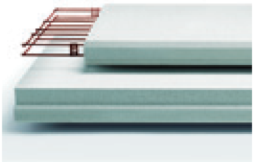
Global No. 1

Homes

Homes & Construction Materials

Condominiums

No. 1 for condominium redevelopment in Japan[1]



Hebel™ autoclaved aerated concrete (AAC)

No. 1 sales volume in Japan[2]

[1] As of April 11, 2018, based on number of reconstruction association permits issued in accordance with Japan's Act on Facilitation of Reconstruction of Condominiums, according to research by Industrial Marketing Consultants Co., Ltd.

[2] Thick panels and thin panels in total, according to internal research.

Health Care

Health Care

Planova™ virus removal filters

Wearable defibrillator

Global No. 1

Professional defibrillator

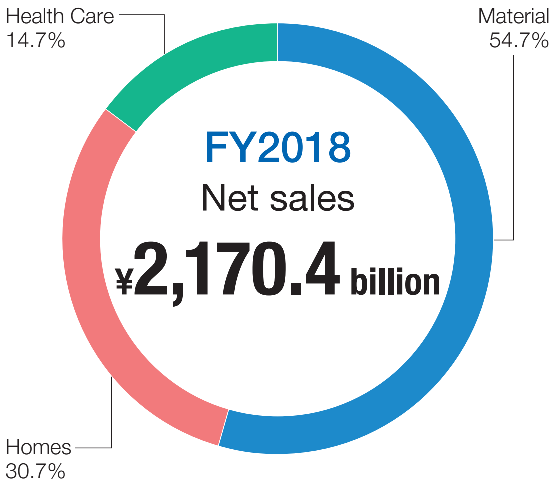
Global No. 1

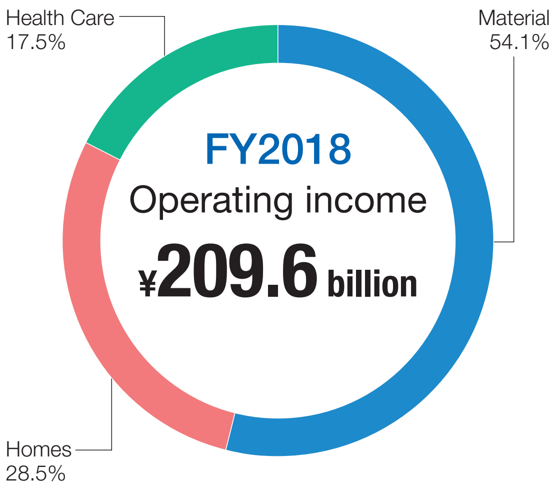
At a Glance

The Asahi Kasei Group operates business in the three sectors of Material, Homes, and Health Care. The "Cs for Tomorrow 2018" medium-term management initiative focused on raising corporate value through optimal allocation of management resources across the three sectors. The new initiative for the three-year period from April 2019, "Cs+ for Tomorrow 2021" focuses on contributing to a sustainable society while achieving sustainable growth of corporate value. (see p. 10 for more)

Fiscal 2018 net sales and operating income

New record highs in both net sales and operating income





Percentages shown exclude "Others" category and "corporate expenses and eliminations"

Global Executive Interview

John W. Moyer
Senior Executive Officer
Asahi Kasei Corp.
Chairman/CEO
Asahi Kasei Plastics North America, Inc.

John Moyer, Senior Executive Officer of Asahi Kasei Corp. and Chairman/CEO of Asahi Kasei Plastics North America, Inc., shares his view on the strengths of Asahi Kasei and describes group-wide initiatives in North America.

What do you see as Asahi Kasei's strengths, and where do you see further potential?

One of the many strengths of Asahi Kasei is how we develop our top people; we give them the opportunity to gain responsibilities in completely different areas than what they are used to. Talented personnel will experience various jobs within the company; for example, we have someone who worked in R&D for construction materials for a long time, and now he's doing a great job as the CEO of an overseas subsidiary in a totally different field.

Very few Western companies would do that. Asahi Kasei has the vision to say, "Hey! This person has a lot of capability, let's go see what they can do."

Sometimes the top leaders are able to expand their own boundaries. You couldn't do that in the US, where the job structure is like Tetris, with all the pieces fitting nicely together. At Asahi Kasei, it's more like an ameba, where the boundaries and responsibilities of your job can merge together.

For people who are top performers, I am happy to say we offer almost unlimited potential to grow. I myself spent 24 years in manufacturing at the Dow Chemical Company before joining Asahi Kasei Plastics as President in 2005. It was an extraordinary opportunity for me.

That said, Asahi Kasei has even more potential to grow if they continue to focus on the following: utilizing more of the talent we have in women, letting younger people have more authority to make decisions earlier in their careers, and giving local employees at overseas sites more responsibility—especially in Europe and Asia. I know Asahi Kasei's management is aware of this, and it's changing. I've seen it change a lot in my 14 years here, but we need to press further. That would make us a better global company.

What kind of group-wide initiatives are being implemented to generate synergies across Asahi Kasei operations in North America?

We've grown to about 7,000 employees and about $2 billion revenue in North America, so now we have a critical mass. This growth is mostly from M&A and the growth of the companies Asahi Kasei purchased. For example, ZOLL which has tripled in size since Asahi Kasei purchased it.

Asahi Kasei's style is to let each company align with the business unit in Japan—not by region. Each company is independent in North America so creating synergy among us is a big challenge. We, however, see great advantages in working together as a team under the Group, to integrate various functions, learn each other's excellent know-how, and so on.

Those initiatives have been bearing fruit in such areas as human resources, finance, insurance, IT systems, procurement, and logistics. We are now setting up teams for Maintenance and EHS (Environment, Health, and Safety). These synergies are voluntary, but I think we have shown a lot of value. These days we are also doing more and more to build positive growth, such as marketing activity in the automotive field combining Sage, Celgard, Daramic, Asahi Kasei Plastics North America, Crystal IS, and even some venture companies from CVC (Corporate Venture Capital).

We also want to give people the chance to gain experience by moving around different Asahi Kasei companies in North America.

All of these initiatives are only possible through a network of leaders who know one another and understand the different businesses. This year, we had a gathering with President Kobori and North American leaders in a larger, more diverse group than ever. We had a total of 95 people gather for a 1 ½ day summit from 14 different Asahi Kasei North American companies and executives coming from Japan. Each company made a presentation on its strategies, goals and challenges. We also had group discussions on several business themes. The meeting really helped to develop relationships that will drive further synergies as Team Asahi Kasei.

Team AK Meeting held in the US

What is your view of Asahi Kasei's management as an Executive Officer of the company and CEO of a US subsidiary?

Asahi Kasei takes a long-term perspective when it makes business decisions, which is a very good thing. When you make a decision, there are several discussions along with detailed examinations. It may take time, but when it comes to implementation, it goes fast because everybody understands its purpose and value. However, it sometimes seems to me that simpler decisions which could be made faster end up following the same process, too.

In the US, we deliberate on complicated issues but overall we make a decision faster than a traditional Japanese company. Sometimes the downside is when we move fast and the rest of the people in the company do not understand it nor are ready to change, so implementation can take longer.

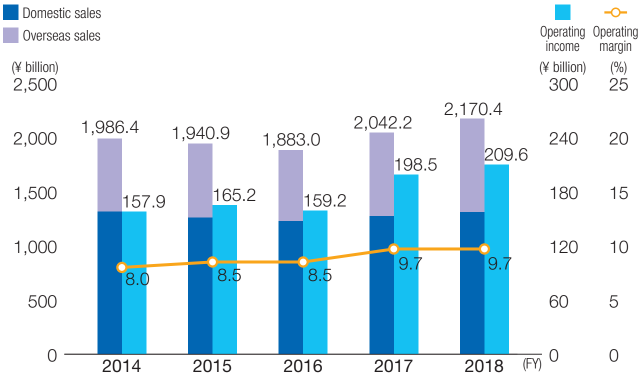
If we could design "hybrid" business culture in Asahi Kasei that takes the positive attributes of both Japanese and Western business styles, this would give us a great advantage. If some decisions could be pushed down to a lower level, you would be able to make simple decisions faster. It is not easy to make a good balance, but I believe we can find a way by understanding positive and negative sides of both styles and applying them according to the situation.

I've seen Asahi Kasei change tremendously compared to 14 years ago when I joined. We are much more focused on growth and aggressively advancing strategies through large M&A and capital expenditure. The company is aware of the need to further open up to different cultures and diversify its leadership. I look forward to seeing this happen.

Financial and Non-Financial Highlights

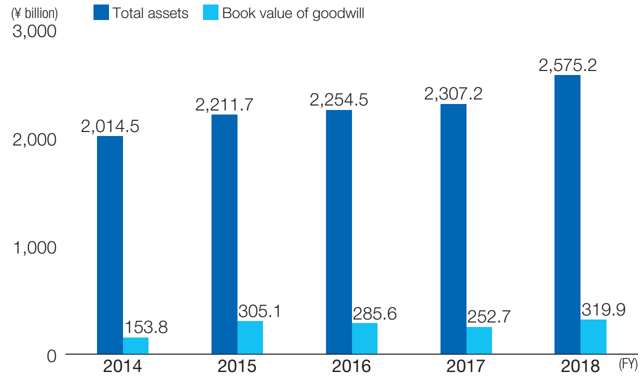
Financial Non-Financial

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



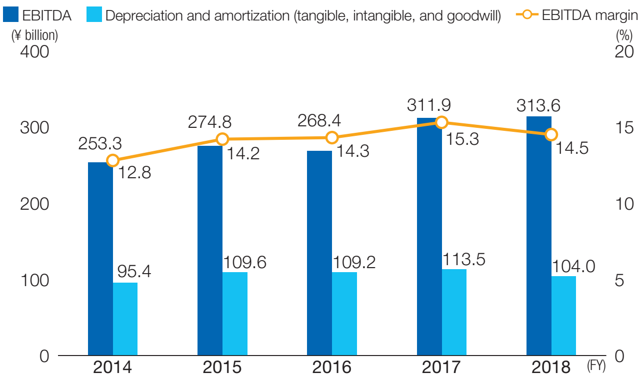
The highest ever net sales and operating income were recorded in fiscal 2018, with operating income growth mainly in the Material sector. The operating margin is gradually increasing. Overseas sales reached approximately 40% of total net sales in fiscal 2018 with expansion of overseas business, including through M&A.

Total assets, book value of goodwill



Both total assets and the book value of goodwill are increasing with large-scale acquisitions such as Polypore International, LP in fiscal 2015 and Sage Automotive Interiors, Inc. in fiscal 2018.

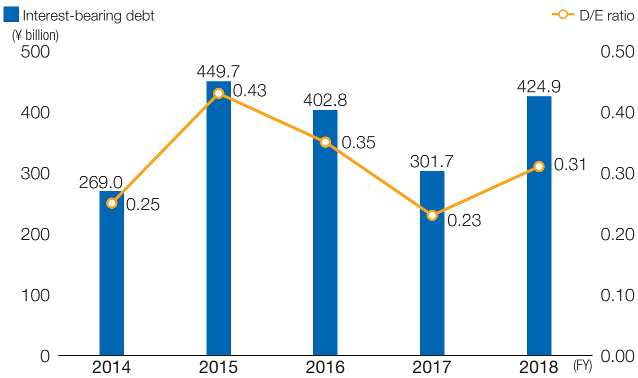
EBITDA*, depreciation and amortization (tangible, intangible, and goodwill), and EBITDA margin



* Operating income, depreciation, and amortization (tangible, intangible, and goodwill)

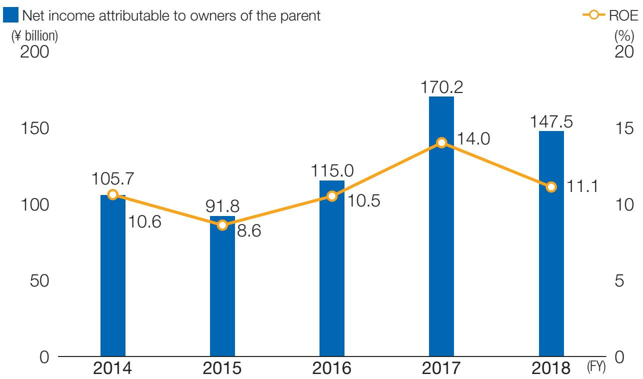
The amount of depreciation and amortization is increasing with proactive capital expenditures and M&A activity. EBITDA is regarded as a key performance indicator (KPI) signifying the generation of cash flow. The decrease in depreciation and amortization in fiscal 2018 resulted from a change in the method of depreciation of property, plant and equipment from the declining-balance method to the straight-line method.

Interest-bearing debt, D/E ratio



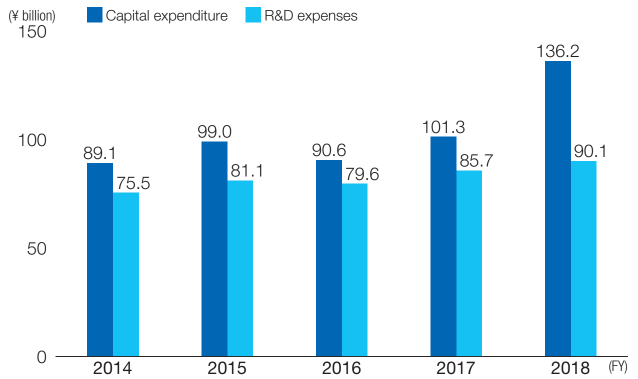
While interest-bearing debt increased in fiscal 2015 and fiscal 2018 to fund acquisitions, the D/E ratio of 0.31 at the end of fiscal 2018 is considered to indicate a sound financial condition.

Net income attributable to owners of the parent, ROE



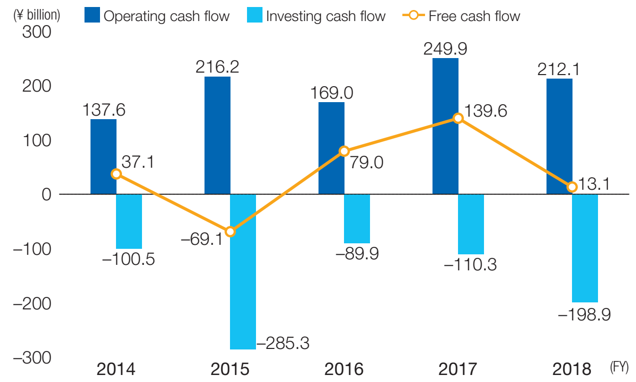
Although fiscal 2018 net income attributable to owners of the parent decreased from the record-high level of fiscal 2017, this was largely attributable to the US tax reform which temporarily reduced income tax expenses in fiscal 2017, and the fiscal 2018 result was maintained at a high level. Increased ROE is pursued by raising profitability.

Capital expenditure, R&D expenses



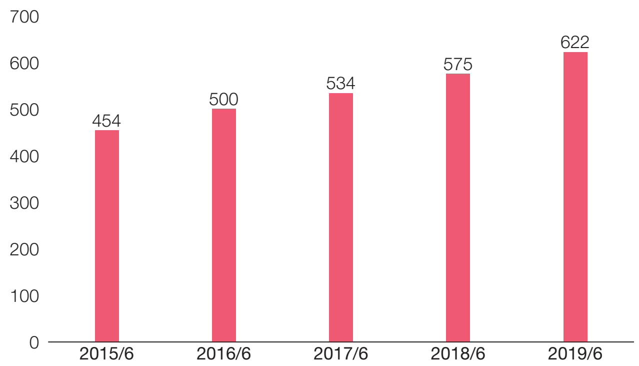
Proactive investments are focused on growth fields in each segment, such as capital expenditure to expand production capacity in Material and R&D in Health Care.

Operating cash flow, investing cash flow, free cash flow



Net cash flow provided by operating activities decreased in fiscal 2018 with higher income taxes paid and an increase in operating funds accompanying strong business performance. Net cash flow used in investing activities increased with greater capital expenditure and the acquisition of Sage Automotive Interiors, Inc.

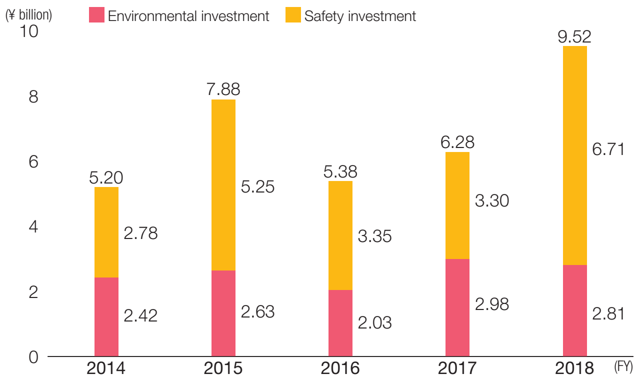
Number of women working as managers*



* Results as of June 30 each year 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. (Asahi Kasei Chemicals Corp., Asahi Kasei Fibers Corp., and Asahi Kasei E-materials Corp. included in FY2015).

A workplace environment that allows people from diverse backgrounds to work positively and energetically is considered to be essential for sustainable business growth. For this purpose, various measures are advanced to nurture and promote female personnel to positions of organizational management.

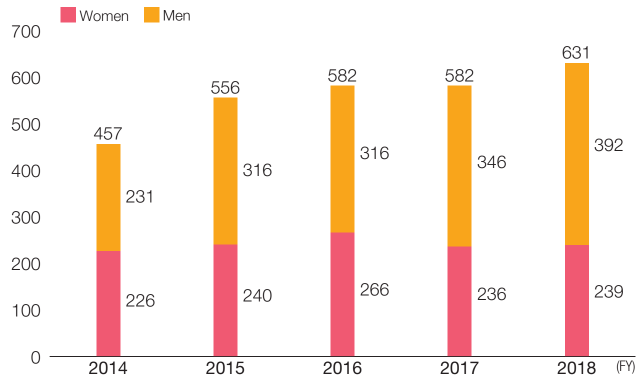
Environmental and safety investment*



* Data for Asahi Kasei Group companies in Japan and overseas performing the Responsible Care program (see page 41).

Management resources are proactively invested for the global environment, operational safety, workplace safety, hygiene, and health as preeminent management tasks.

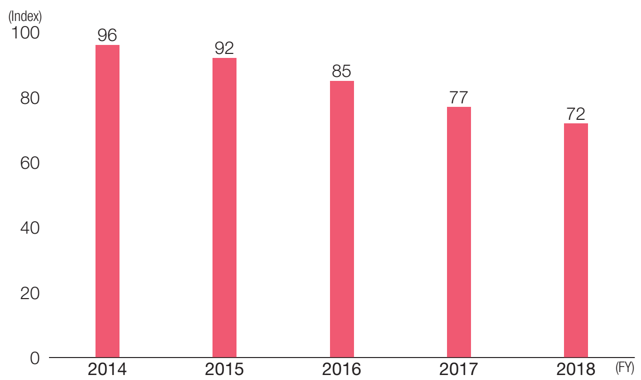
Employees using parental leave*



* 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. (Asahi Kasei Chemicals Corp., Asahi Kasei Fibers Corp., and Asahi Kasei E-materials Corp. included in FY2014 and FY2015).

Parental leave is made available through the fiscal year in which the child turns three years old. Over 40% of the qualified male employees have taken parental leave for four consecutive years since fiscal 2015.

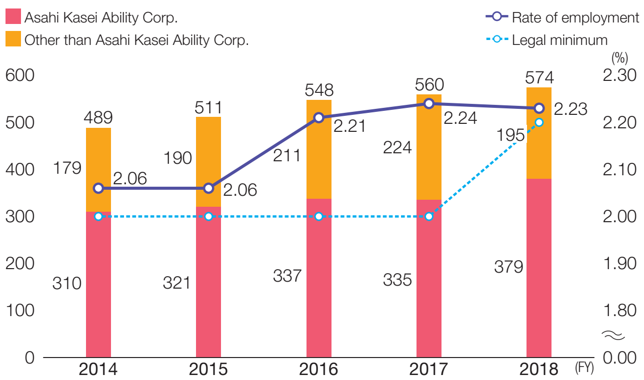
Greenhouse gas (GHG) emissions/net sales*



* Indexed to GHG emissions from production processes (tons-CO_2 equivalent)/net sales (¥ billion) in FY2013 as 100. Data for Asahi Kasei Group companies in Japan and overseas performing the Responsible Care program (see page 41).

Under the new medium-term management initiative, Asahi Kasei is targeting a 35% decrease in the index of GHG emissions/net sales from the fiscal 2013 level. Various efforts to further reduce emissions are being applied to achieve this target.

Employment of persons with disabilities*



* Average for applicable Group companies in each fiscal year.

Asahi Kasei Ability Corp. was established as a special subsidiary for the employment of persons with disabilities. Recruitment activities also continue to increase the employment of persons with disabilities at Group companies other than Asahi Kasei Ability.

Interview with the CFO

Leveraging our strengths of "diversity" and "capability to change" we are investing for growth to raise corporate value and increase dividends.

Yutaka Shibata

Director, Vice-Presidential Executive Officer

■ Asahi Kasei Group's source of growth

The Asahi Kasei Group has grown through dynamic expansion into peripheral businesses and creation of new businesses by identifying business opportunities presented by changes in society's issues and market needs. We will celebrate our centenary in 2022, and throughout our history we have continuously shifted financial and human resources from mature markets and businesses to markets with new needs. This proactive shifting of resources is the source of the Asahi Kasei Group's sustainable growth. When entering a new field, we don't only look at the market scale and rate of growth. We analyze the market and the competition to find our own unique ability to provide added value, focusing on fields where we can succeed. By repeating this process, we have continuously grown as a company having a unique portfolio of high value-added businesses. Our people and management know-how to effect such change, and the distinctive diversity of our operations, are the strengths that support our growth and the fount of our value.

■ Financial strategy for sustainable growth

During the 3-year period of our previous management initiative, we adopted decisions on a total of some ¥670 billion in long-term investments, mainly to expand competitive businesses and to enter new growth markets. Notable investments were to expand capacity for lithium-ion battery separators and to perform a large-scale acquisition of Sage Automotive Interiors of the US. This acquisition will enhance our ability to capture growth opportunities from the transformation of automotive markets referred to as CASE*.

In our new management initiative "Cs+ for Tomorrow

Framework for capital allocation (FY2019–FY2021 3-year period)

Operating cash flow
3-year total
¥600 to ¥700 billion

Pursuing returns above cost of capital

Capital expenditure
3-year total
≈¥800 billion
(Decision-adopted basis, including M&A)

Financing for growth
(while maintaining financial discipline)

Borrowing capacity
D/E ratio around 0.5
Increase in interest-bearing debt
¥200 to ¥400 billion

Shareholder returns
Grow dividends per share
as earnings expand
Payout ratio around 30 to 40%

Share buybacks performed flexibly
according to circumstances

2021” we will continue to proactively invest in selected fields. Many of our businesses continue to be eager to invest, and we will continue to study M&A opportunities for further growth. Although uncertainty in the global economic outlook due to US-China trade friction and the slowdown in Chinese economic growth pose investment risks, we still see many growth opportunities in our targeted markets and fields. We must continue to invest in order to securely capture these growth opportunities.

My responsibility as CFO is to ensure that our financial structure enables such long-term investments to support the Asahi Kasei Group’s sustainable growth. While reinforcing competitive businesses to increase our cash flow, we seek optimum allocation of resources. We expect operating cash flow over the 3-year period of the new management initiative to total ¥600 to ¥700 billion, providing resources to invest for growth. In addition, by borrowing within a range that maintains our healthy balance sheet, we are positioned to make some ¥800 billion of long-term investments over the 3-year period, including M&A. We strictly evaluate each potential investment in terms of ROIC and other measures, while judging whether they contribute to sustainable growth.

We also adopted a new target for EBITDA. Asahi Kasei follows Japanese accounting standards, so goodwill from acquisitions is amortized. Because we plan to continue to use M&A as a means of further growth, the EBITDA target was adopted to enable appropriate evaluation of our performance unaffected by amortization of goodwill.

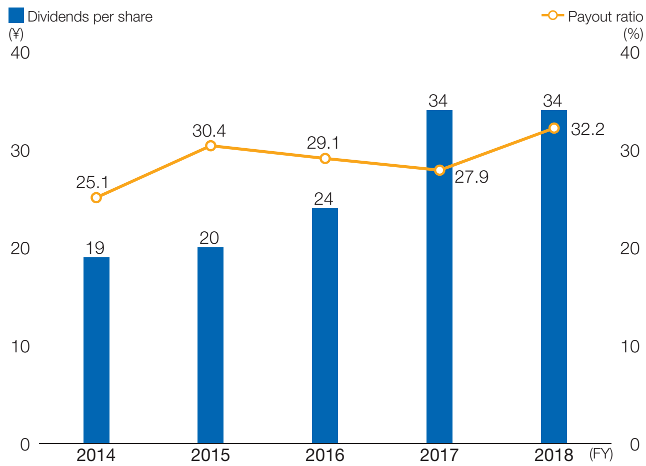
* Connected, Autonomous, Shared, Electric

Policy for shareholder returns

Our results in fiscal 2018 exceeded our May 2018 forecast, and considering the state of our cash flow we decided to perform our first share buyback in 17 years. Our total return ratio in fiscal 2018 was 39%, above the 35% targeted in the previous initiative.

For shareholder returns we will mainly focus on dividends, with our policy of aiming for stable dividends and continuous dividend increases unchanged. We will continue to consider share buybacks based on the state of our financial performance and cash flow. We intend to further enhance shareholder returns by achieving sustainable business growth, increased earnings, and continuous dividend increases.

Dividends per share and payout ratio



Primary financial metrics	FY2014	FY2015	FY2016	FY2017	FY2018
EBITDA[1] (¥ billion)	253.3	274.8	268.4	311.9	313.6
Net cash provided by operating activities (¥ billion)	137.6	216.2	169.0	249.9	212.1
Net cash used in investing activities (¥ billion)	(100.5)	(285.3)	(89.9)	(110.3)	(198.9)
Free cash flows (¥ billion)	37.1	(69.1)	79.0	139.6	13.1
Net income per share (EPS)	¥75.62	¥65.69	¥82.34	¥121.93	¥105.66
Net income per total assets (ROA)	5.4%	4.3%	5.1%	7.5%	6.0%
Net income per shareholders’ equity (ROE)	10.6%	8.6%	10.5%	14.0%	11.1%
Net income per net sales (ROS)	5.3%	4.7%	6.1%	8.3%	6.8%
Total asset turnover ratio	1.01	0.92	0.84	0.90	0.89
Financial leverage	2.0	2.0	2.0	1.9	1.8
Net income per shareholders’ equity and interest-bearing debt (ROIC)[2]	8.3%	7.9%	7.8%	9.7%	8.8%
D/E ratio	0.25	0.43	0.35	0.23	0.31

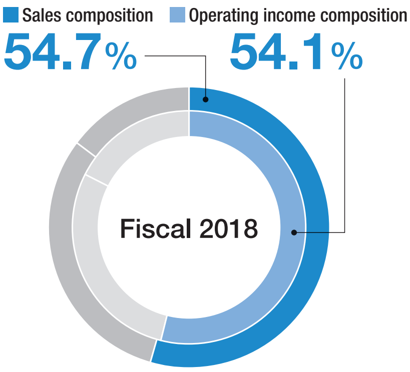
[1] Operating income, depreciation, and amortization (tangible, intangible, and goodwill)
[2] (Operating income – income taxes) / average annual invested capital

Operating Segments

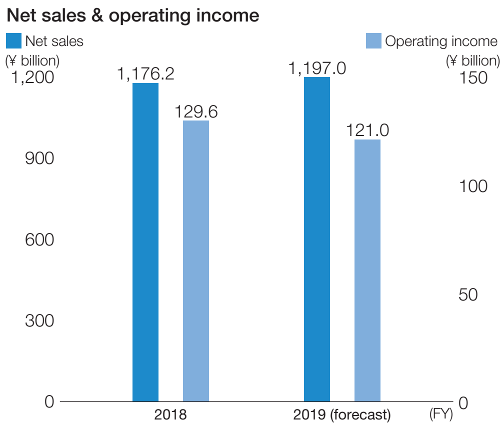
Material

Hiroshi Yoshida
Executive Officer for Material business sector
Director, Vice-Presidential Executive Officer, Asahi Kasei Corp.

With basic chemicals as feedstock for resins, etc., unique fiber materials, environmentally friendly performance materials, consumables such as Saran Wrap™ cling film, battery separators, and electronic devices such as LSIs and sensors, our high value-added product portfolio is expanding on a global scale, contributing to a better future through unrivaled technologies.



Not including "Others" category and corporate expenses and eliminations.



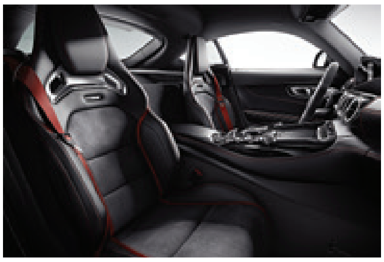
Main products

- Acrylonitrile (AN)
- Styrene
- Polyethylene (PE)
- Bemberg™ cupro fiber
- Roica™ premium stretch fiber
- Spunbond nonwovens
- Bemliese™ continuous-filament cellulose nonwoven
- Lamous™ artificial suede
- Leona™ nylon 66 filament
- Engineering plastics
- Synthetic rubber
- Saran Wrap™ cling film
- Ceolus™ microcrystalline cellulose
- Microza™ hollow-fiber filtration membranes
- Ion-exchange membranes
- Sunfort™ photosensitive dry film
- Hipore™ and Celgard™ Li-ion battery separators
- Daramic™ lead-acid battery separator
- Mixed-signal LSIs
- Hall elements

Highlights

Acquisition of Sage Automotive Interiors

In September 2018, we acquired Sage Automotive Interiors, Inc., South Carolina–based manufacturer of automotive interior material, for a cash transaction price of approximately $700 million[1]. Various innovations such as CASE[2] are emerging in the automotive industry. We will expand our business in the field of mobility leveraging Sage's brand and ability to provide proposals to vehicle manufacturers and parts suppliers.



Sage has been supplying car interior material made with Asahi Kasei's Lamous™ artificial suede

[1] Total acquisition price of $1.06 billion including Sage's net interest-bearing debt.
[2] Connected, Autonomous, Shared, and Electric

Recent major investments for growth in the Material segment
(decisions adopted FY2017–2018)

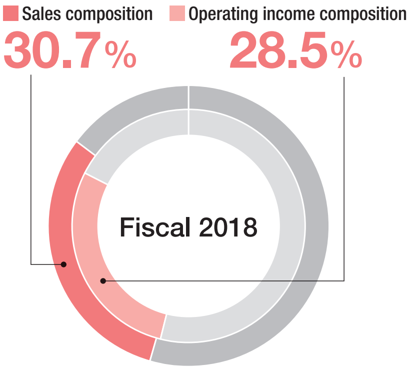
Fiscal 2017	Capacity expansion for S-SBR (solution-polymerized styrene-butadiene rubber) for fuel-efficient tires in Singapore New plant to manufacture plastic compounds in China Capacity expansion for Lamous™ artificial suede in Japan Capacity expansion for Leona™ nylon 66 filament in Japan Capacity expansion for Hipore™ LIB separator in Japan Capacity expansion for Celgard™ LIB separator in the US Acquisition of Senseair AB, Swedish manufacturer of gas sensor modules
Fiscal 2018	Acquisition of Sage Automotive Interiors, Inc., US manufacturer of automotive interior material Capacity expansion for spunbond nonwovens in Thailand Capacity expansion for Hipore™ LIB separator in Japan Capacity expansion for Celgard™ LIB separator in the US

Homes

Fumitoshi Kawabata

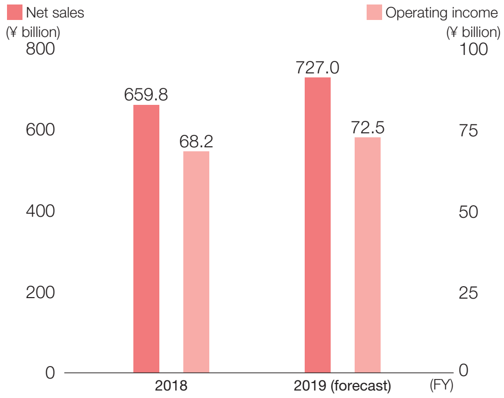
Executive Officer for Homes business sector
Director, Primary Executive Officer, Asahi Kasei Corp.
President & Representative Director, Asahi Kasei Homes Corp.
Director, Asahi Kasei Construction Materials Corp.

We set the stage for a rich and fulfilling lifestyle with our homes business that provides high-quality products and services for Long Life Homes which earn high customer satisfaction that lasts for more than half a century, and with our construction materials business that provides innovative and original high value-added products and services.



Not including "Others" category and corporate expenses and eliminations.

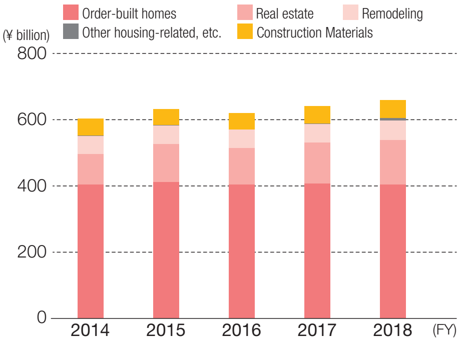
Net sales & operating income



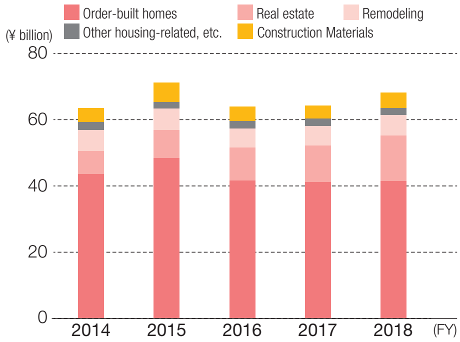
Highlights

Net sales & operating income breakdown

Net sales



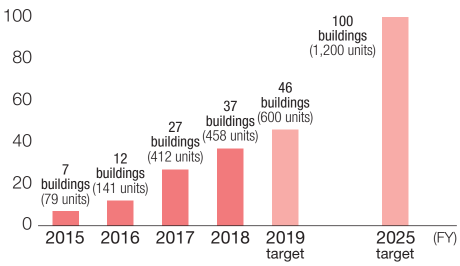
Operating income



Hebel Village™ apartments for seniors

Our homes business is focusing on homes for seniors as a new area of growth. Hebel Village™ apartments for seniors are designed for residents who are self-dependent whether healthy or frail. The apartments feature various senior-friendly services such as regular visits by social workers, health monitoring, on-call health services, and cooperative arrangements with nearby medical facilities.

Hebel Village™ orders received



Cumulative orders received as of March 31, 2019

Main products

- Hebel Haus™ unit homes
- Hebel Maison™ apartment buildings
- Atlas™ condominiums
- Hebel Maison™ apartment rental network
- Remodeling
- Hebel™ AAC panels
- Neoma Foam™ and Neoma Zeus™ phenolic foam insulation panels
- Foundation systems
- Structural systems and components

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.

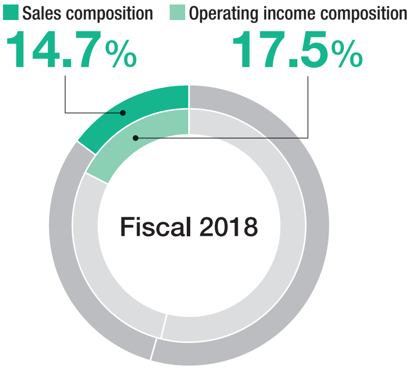
Richard A. Packer

Executive Officer for Health Care business sector (joint)
Primary Executive Officer, Asahi Kasei Corp.
Chairman & Board Director, ZOLL Medical Corporation

Main products

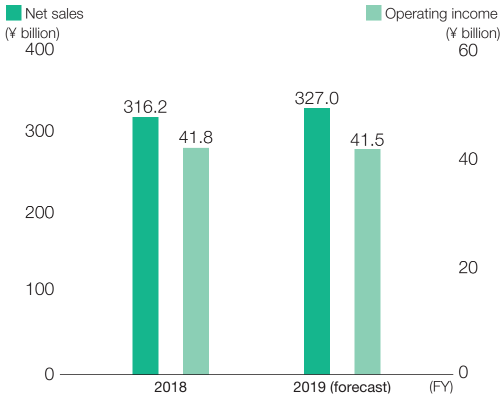
- Teribone™ osteoporosis drug
- Recomodulin™ anticoagulant
- Kevzara™ rheumatoid arthritis drug
- APS™ polysulfone-membrane dialyzers
- Therapeutic apheresis devices
- Planova™ virus removal filters
- Defibrillators for professional use
- LifeVest™ wearable defibrillator
- AED Plus™ automated external defibrillator
- Thermogard System™ temperature management system

We contribute to advanced medical care around the world with world-class drugs in the fields of orthopedics, critical/intensive care, and the immune system; blood purification devices for chronic and acute renal failure, and various intractable diseases; and products for the manufacturing process of biopharmaceuticals and other new drugs. Our products in the field of acute critical care including AEDs, defibrillators for professional use, and intravascular temperature management systems help to save people's lives.



Not including "Others" category and corporate expenses and eliminations.

Net sales & operating income



Highlights

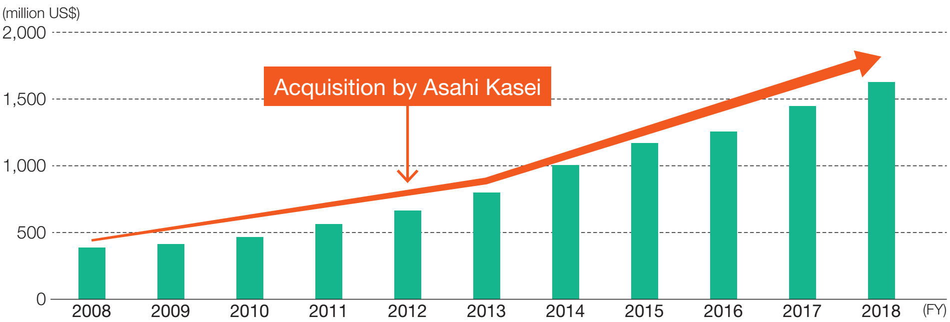
Kevzara™ subcutaneous autoinjector for treatment of rheumatoid arthritis

New subcutaneous autoinjector formulations of Kevzara™ [generic name: sarilumab (rDNA origin)] were launched in December 2018, in addition to the conventional syringe formulation launched in February 2018. Featuring an easy-to-handle ergonomic shape, the new 150 mg and 200 mg subcutaneous autoinjector formulations of Kevzara™ were developed based on user-centered design for form and function to meet the needs of rheumatoid arthritis patients. Kevzara™ is indicated for rheumatoid arthritis not responding well to conventional treatments. Both the conventional syringe and the new autoinjector formulations of Kevzara™ are subject to a guidance and management fee for self-injection at home.

Growth of acute critical care business

Our acute critical care business is operated by ZOLL Medical Corporation, which we acquired in 2012. It continues to achieve remarkable growth with revenue increasing by an average annual rate of 15% from fiscal 2008 to 2018.

ZOLL revenue growth



Shigeki Takayama

Representative Director
Vice-Presidential Executive Officer
Executive Officer for Technology Functions

Our R&D Efforts

We are creating new businesses and advancing business activities by leveraging various core technologies, enhanced marketing functions, and both internal and external connections while utilizing digital technologies.

■ Our R&D objectives

"Creating for Tomorrow" is the commitment of the Asahi Kasei Group. R&D plays a key role in meeting unsolved global needs. Innovation would be stifled if we just carry on with the conventional ways. We are working to take maximum advantage of the diversity of our operations while building connections as we further hone our core technologies. Our R&D is not only to create new businesses, but also to heighten the earnings, advance the development, and strengthen the foundations of established businesses.

■ Concept of new business creation

In the past, there was reluctance to launch a business in so-called "white space" because of the absence of any direct link to existing businesses. Today, however, as the boundaries between businesses are in flux, it is essential to commercialize white space. We have two criteria for discerning what white space to target. One is consistency with the Asahi Kasei Group Mission. The other is certainty of future growth. Evaluating these two criteria requires comprehensive judgement including objective assessment of business conditions, attributes needed for human resources, and the surrounding environment. This judgement cannot be made from a short-term perspective. Consider our development of the alkaline water electrolysis system for hydrogen production. We are still in the technology demonstration stage, and commercialization will take more time considering the cost aspects. But we have high expectations for this business because of the appeal of hydrogen energy, its future potential, and ecological performance.

In the case of moving into white space through M&A, the business platform of the acquired company, as well as its technology, is a vital consideration. The acquired business platform would form the core for launching a new business, so strict criteria are applied to M&A in a white space. If the targeted company's business platform is below our expected level, we wait until the company develops its platform sufficiently before conducting M&A.

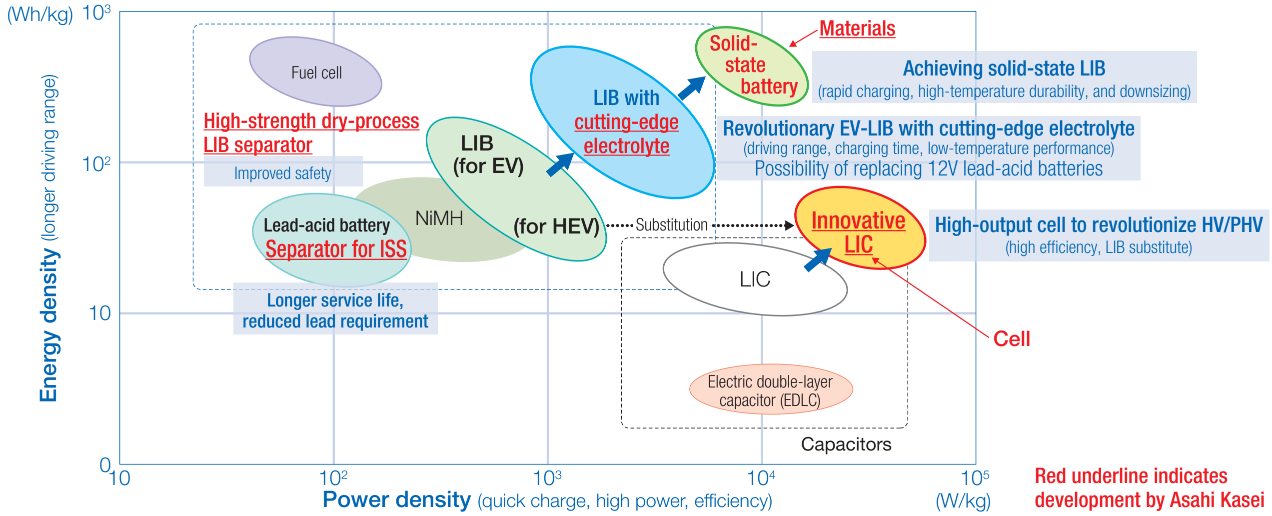
There are always various difficulties when entering a new field, but we understand that it's necessary to take challenges when tackling issues for the world.

■ Notable R&D efforts

Developing materials for cells and batteries

We are the world's leading manufacturer, developer, and supplier of separators for lithium-ion batteries (LIB) and lead-acid batteries, and Asahi Kasei Honorary Fellow Dr. Akira Yoshino is the inventor of the LIB. Leveraging our know-how and core technologies, we continue to develop various materials for cells and batteries.

Technology strategy for automotive cells and batteries



Development of separators for lead-acid batteries used with ISS

We are the world's No. 1 supplier of separators for lead-acid batteries, and currently we have next-generation separators for lead-acid batteries used with idling stop systems (ISS), which require frequent charging and discharging that tends to degrade the electrolyte. In order to increase battery life and to decrease the amount of lead required, we developed new separator rib configurations and coating techniques.

Development of high-strength dry-process LIB separators

Although dry-process LIB separators have some advantages over wet-process LIB separators, their low mechanical strength needs to be raised to obtain higher performance for automotive LIBs.

Development of cutting-edge electrolytes

With better ion conductivity and durability of the LIB electrolyte, we aim to increase driving range, shorten charging time, and improve low-temperature performance. Selecting the best additives is a key factor, and by leveraging materials informatics (MI) we hope LIBs can replace lead-acid batteries over the long term.

Development of cutting-edge materials for solid-state batteries

We are developing solid electrolyte material to enable rapid charging, high-temperature durability, and downsizing of solid-state LIBs. By using a thin film of solid electrolyte supported on a carrier, we aim to achieve high battery capacity.

Development of innovative lithium ion capacitors

The lithium ion capacitor (LIC) features better cycle life and power output characteristics than the LIB. We are developing pre-doping technology to intercalate lithium ions in the anode material in advance for lower cost. While working to raise LIC performance, we are studying various applications that can make the most of the LIC.

When developing these materials, we also need to have cell assembly and evaluation technology. We believe it is important to actually assemble cells and evaluate their performance in addition to evaluating materials, in order to deepen our understanding of our clients' needs and their final products.

Utilizing materials informatics (MI)

Developing resin compounds

Developing resins with various characteristics that meet clients' needs

Resin compounds

- Polyamide
- Polyacetal
- Polyolefin
- Polyphenylene ether
- Polystyrene

etc.

Molding/ processing →

Applications

- Home electronics
- Office equipment
- Automotive components
- Daily goods
- Packaging material

etc.

Polymer + other polymer + glass fiber + flame retardant + other additives

Processing →

Demand characteristics: market needs
Impact strength, flame retardancy, stiffness, flowability, dimensional precision, etc.

Adjusting composition to add functions and obtain required properties

Accelerating product development

MI is utilized to formulate compounds of engineering resins, which are used in various fields such as automotive parts, household electrical appliances, and office equipment. Thus, our clients have diverse needs for properties such as impact strength, flame retardancy, and stiffness. To meet their needs, we compound glass fibers and flame retardants into engineering polymers to obtain the needed performance characteristics. In the past, we relied on the skill of experienced engineers to find the best composition. Currently with the help of MI, the best composition can be found more quickly and with lower cost. Development time can be shortened to one-third of the previously required time. MI also enables us to share in-house know-how and skills, preserving technology for the next generation. We also use MI in the development of catalysts for petrochemicals, which has shortened development times by 80–90%. Currently we are applying MI to R&D projects for new businesses such as battery materials.

Prompt response to various clients' needs

In the mobility field, clients' needs are changing dramatically with the emergence of trends such as CASE (connected, autonomous, shared, electric) and MaaS (Mobility as a Service). Even more dynamic and complex changes are expected as service providers and IT companies enter the field of mobility in addition to automobile manufacturers. In order to swiftly meet changing needs in these circumstances, product development utilizing MI is essential. We have begun using MI tools in sales departments as well as R&D to enable quick and precise grade proposals on the spot by leveraging our accumulated information on clients' needs.

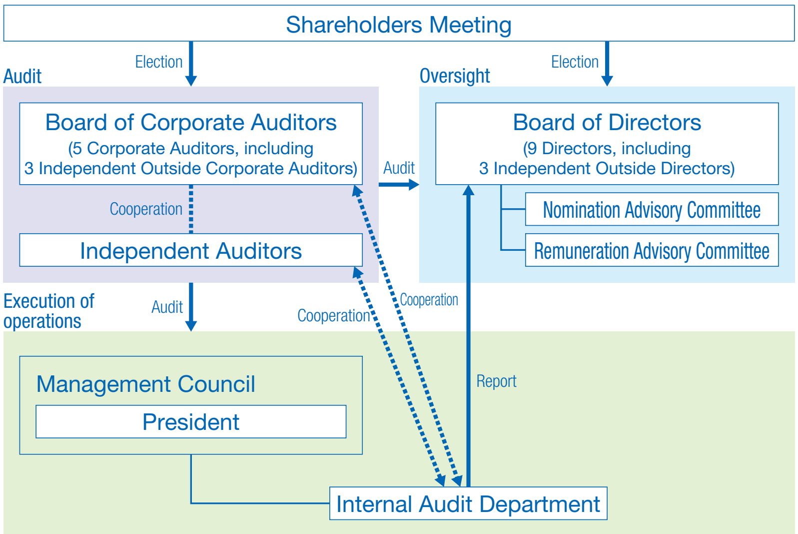
MI originates from informatics, which has the potential to transform industrial structures and create completely new businesses by breaking down barriers between different fields and facilitating collaboration among them. Informatics can also be effective for the creation and nurturing of a new business, for example when scaling up the business of a small-sized venture company which is acquired. While we currently focus on strengthening our existing businesses, we are also looking for ways to leverage informatics in new businesses, and have begun discussions with Asahi Kasei Homes regarding a data business with the house as a platform.

Corporate Governance

Basic Views on Corporate Governance

The Group Vision of Asahi Kasei 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, we aim to contribute to society, achieve sustainable growth, and enhance corporate value over the longer term by promoting innovation and creating synergy through integration of various businesses. We continue to pursue the optimal corporate governance as a framework to make transparent, fair, timely, and resolute decisions in accordance with changes in the business environment.

Corporate Governance Configuration



Key points

- 1/3 of Directors are independent
- 1 female Director
- Directors have diverse backgrounds
- 3/5 of Corporate Auditors are independent
- Corporate Auditors Office to support Corporate Auditors
- Internal Audit Department reports to both the President and the Board of Directors

Incentives for Directors (fiscal 2018)

Fixed base remuneration	Performance-linked remuneration	Stock-based remuneration
50%	39%	11%

(percentages shown for Directors who have executive responsibilities)

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

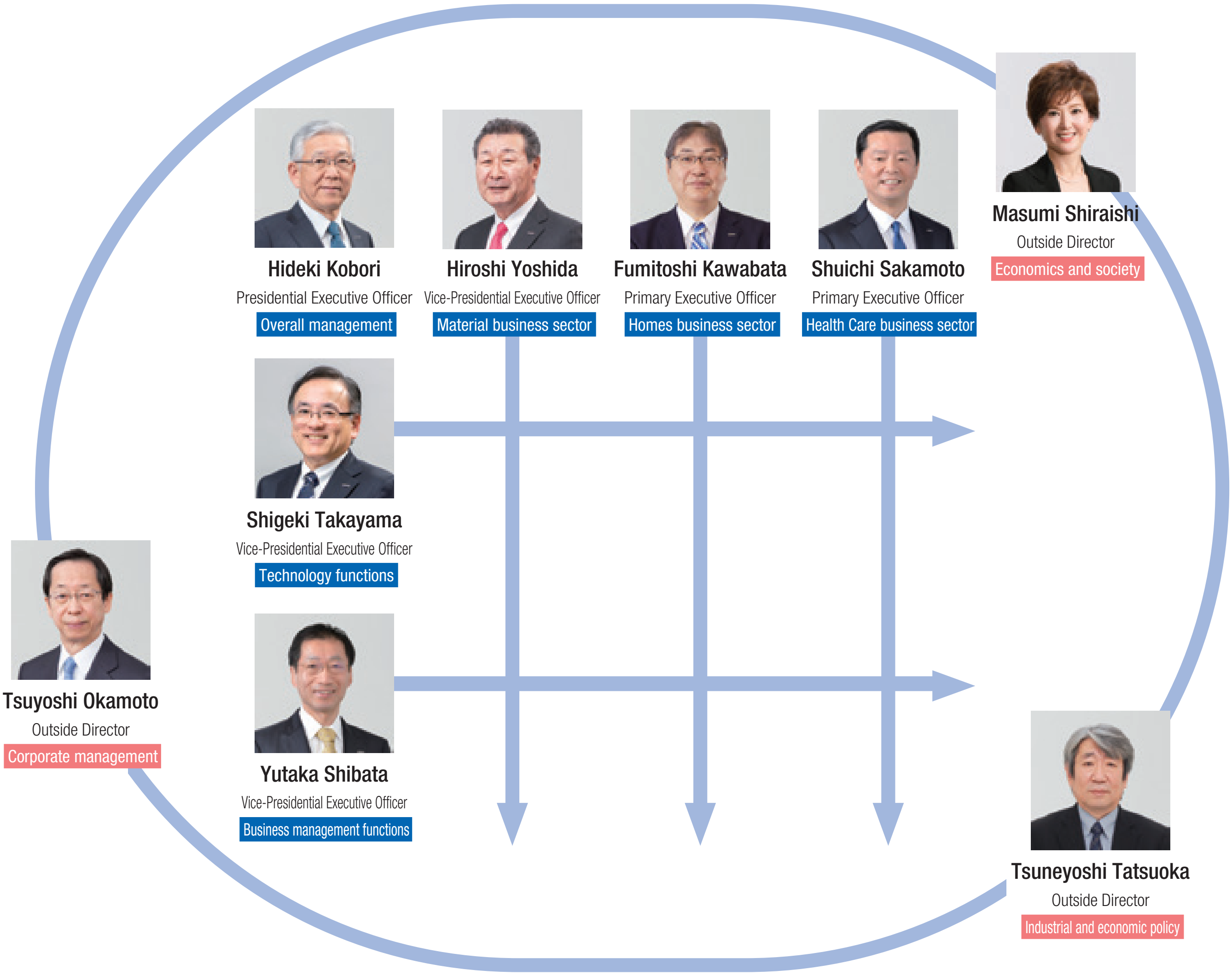
(Outside Directors receive fixed base remuneration only)

Meetings of Board of Directors, Advisory Committees, and Board of Corporate Auditors (fiscal 2018)

	No. of meetings held	Average attendance	Main subjects of agenda
Board of Directors	15	98.6% (Directors and Corporate Auditors)	• Business investment • Medium-term management initiative • Risk management and compliance
Nomination Advisory Committee*	3	100% (all members)	• Optimum composition and size of Board of Directors • Policy for nomination of candidates to be Directors and Corporate Auditors • Standards for judging independence of Outside Directors and Corporate Auditors
Remuneration Advisory Committee*	2	100% (all members)	• Policy and system for remuneration of Directors • Studying remuneration of Directors based on individual performance evaluation
Board of Corporate Auditors	17	97.7% (Corporate Auditors)	• Auditing state of performance of Directors' duties • Auditing state of operations and financial affairs • Evaluation of Independent Auditors

* Beginning in June 2019, the Nomination Advisory Committee and Remuneration Advisory Committee are comprised of the 3 Outside Directors and Representative Directors Hideki Kobori and Shigeki Takayama as members, with the Nomination Advisory Committee chaired by Hideki Kobori and the Remuneration Advisory Committee chaired by Outside Director Tsuyoshi Okamoto.

Composition of Board of Directors (beginning in June 2019)



The 6 Directors within the company respectively have responsibility for overall management, technology functions, business management functions, and the Material, Homes, and Health Care business sectors, while the 3 Outside Directors have a diverse range of backgrounds.

Evaluation of Effectiveness of Board of Directors

The effectiveness of our Board of Directors is regularly evaluated after each fiscal year, and results of evaluation are disclosed.

Measures implemented in fiscal 2018

The Board of Directors implemented the following measures in fiscal 2018 based on evaluation of the previous fiscal year.

1. Enhanced provision of information to Outside Directors and Outside Corporate Auditors
2. Sharing information on IR activities and opinions of investors
3. Preparations for the new medium-term management initiative

Moving forward

Based on deliberations of the effectiveness of the Board of Directors during fiscal 2018, we will continue and expand the aforementioned efforts in the future. Further, for enriched deliberation by the Board of Directors, we will work to further improve the operation of Board of Directors meetings by reviewing standards for agenda items, improving the format of materials, and securing ample deliberation time. In addition, we will continue to study the further enrichment of the effective operation of the Nomination and Remuneration Advisory Committees, and the optimum size and composition of the Board of Directors, on an ongoing basis.

Directors

1. President & Representative Director Presidential Executive Officer

Hideki Kobori

1978 Joined Asahi Kasei
2008 Asahi Kasei Microdevices Director, Senior Executive Officer
2009 Asahi Kasei Microdevices Director, Primary Executive Officer
2010 Asahi Kasei Microdevices President & Representative Director, Presidential Executive Officer
2012 Asahi Kasei Senior Executive Officer, Director*
2014 Asahi Kasei Representative Director*, Primary Executive Officer
2016 Asahi Kasei President and Director*, Presidential Executive Officer*

2. Representative Director Vice-Presidential Executive Officer

Shigeki Takayama

1980 Joined Asahi Kasei
2009 Asahi Kasei E-materials Executive Officer
2010 Asahi Kasei E-materials Director
2012 Asahi Kasei E-materials Senior Executive Officer
2013 Asahi Kasei E-materials President & Representative Director, Presidential Executive Officer
2015 Polypore International President & CEO
2016 Asahi Kasei Senior Executive Officer, President of Separators SBU
2018 Asahi Kasei Primary Executive Officer
2019 Asahi Kasei Vice-Presidential Executive Officer*, Director*, Representative Director*

3. Director Vice-Presidential Executive Officer

Yutaka Shibata

1979 Joined Asahi Kasei
2008 Asahi Kasei Executive Officer
2009 Asahi Kasei Lead Executive Officer
2011 Asahi Kasei Kuraray Medical President & Representative Director, Presidential Executive Officer
Asahi Kasei Medical President & Representative Director, Presidential Executive Officer
Asahi Kasei Pharma Director
2016 Asahi Kasei Primary Executive Officer
2017 Asahi Kasei Pharma President & Representative Director, Presidential Executive Officer
Asahi Kasei Medical Director
2018 Asahi Kasei Director*
2019 Asahi Kasei Vice-Presidential Executive Officer*

4. Director Vice-Presidential Executive Officer

Hiroshi Yoshida

1979 Joined Asahi Kasei
2012 Asahi Kasei Chemicals Executive Officer
2014 Asahi Kasei Chemicals Director, Senior Executive Officer
2016 Asahi Kasei Lead Executive Officer, President of Performance Polymers SBU
2017 Asahi Kasei Senior Executive Officer
2018 Asahi Kasei Primary Executive Officer
2019 Asahi Kasei Vice-Presidential Executive Officer*, Director*

5. Director
Primary Executive Officer

Shuichi Sakamoto

1981 Joined Asahi Kasei
2011 Asahi Kasei Chemicals Executive Officer
2014 Asahi Kasei Chemicals Director, Senior Executive Officer
Asahi Kasei Lead Executive Officer,
Corporate Strategy General Manager
2016 Asahi Kasei Senior Executive Officer, Director*
2018 Asahi Kasei Pharma Director and Chairman*
Asahi Kasei Medical Director and Chairman*
2019 Asahi Kasei Primary Executive Officer*

6. Director
Primary Executive Officer

Fumitoshi Kawabata

1982 Joined Asahi Kasei
2012 Asahi Kasei Homes Executive Officer
2013 Asahi Kasei Homes Director*, Senior Executive Officer
2014 Asahi Kasei Homes Marketing Division General Manager
2016 Asahi Kasei Homes Chubu Sales Division General Manager
2017 Asahi Kasei Senior Executive Officer
Asahi Kasei Homes President & Representative Director*,
Presidential Executive Officer*
Asahi Kasei Construction Materials Director*
2019 Asahi Kasei Primary Executive Officer*, Director*

7. Outside Director

Masumi Shiraishi

1989 Joined NLI Research Institute
2001 Head Researcher, NLI Research Institute
2002 Assistant Professor, Department of Economics,
Toyo University
2006 Professor, Department of Economics,
Toyo University
2007 Professor, Faculty of Policy Studies,
Kansai University*
2013 Asahi Kasei Director*

8. Outside Director

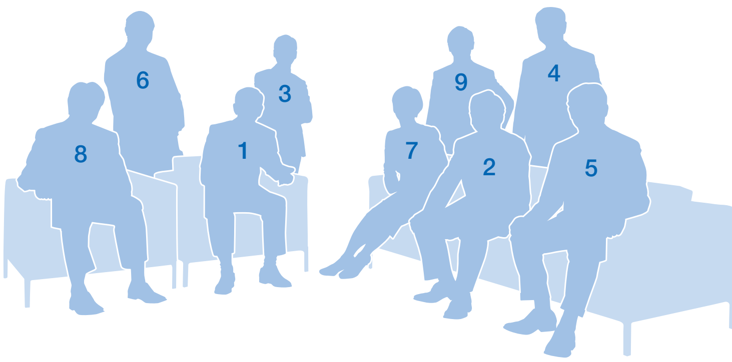
Tsuneyoshi Tatsuoka

1980 Joined Ministry of International Trade and Industry
2010 Councilor, Cabinet Secretariat
2011 Deputy Vice-Minister of Economy, Trade and Industry
2013 Vice-Minister of Economy, Trade and Industry
2015 Retired from Ministry of Economy, Trade and Industry
2016 Asahi Kasei Director*

9. Outside Director

Tsuyoshi Okamoto

1970 Joined Tokyo Gas Co., Ltd.
2002 Tokyo Gas Co., Ltd. Executive Officer
2004 Tokyo Gas Co., Ltd. Senior Executive Officer, Director
2007 Tokyo Gas Co., Ltd. Representative Director,
Executive Vice President
2010 Tokyo Gas Co., Ltd. Representative Director, President
2014 Tokyo Gas Co., Ltd. Director, Chairman
2018 Tokyo Gas Co., Ltd. Director, Senior Corporate Advisor
Asahi Kasei Director*
Tokyo Gas Co., Ltd. Senior Corporate Advisor*



* Position held at present.

Outside Director Interview

Asahi Kasei's governance system to heighten management effectiveness

Tsuyoshi Okamoto, Outside Director since June 2018, shares his view on the effectiveness of Asahi Kasei's corporate governance system.

Tsuyoshi Okamoto

Outside Director

Profile

April 1970	Joined Tokyo Gas Co., Ltd.
June 2002	Tokyo Gas Co., Ltd. Executive Officer
April 2004	Tokyo Gas Co., Ltd. Senior Executive Officer
June 2004	Tokyo Gas Co., Ltd. Director
April 2007	Tokyo Gas Co., Ltd. Representative Director, Executive Vice President
April 2010	Tokyo Gas Co., Ltd. Representative Director, President
April 2014	Tokyo Gas Co., Ltd. Director, Chairman
April 2018	Tokyo Gas Co., Ltd. Director, Senior Corporate Advisor
June 2018	Asahi Kasei Corp. Outside Director*
June 2018	Tokyo Gas Co., Ltd. Senior Corporate Advisor*

* Position held at present

Responsibility as Outside Director

The most important thing expected of an Outside Director is objectivity. At Board of Directors meetings, I objectively evaluate the operation of the company, raise questions as necessary, and offer my opinions. I feel that my responsibility is to convey my thoughts based on objective assessment of whether an appropriate overall balance is being achieved among Asahi Kasei's 3 sectors, and whether the objectives of the strategic management initiative are being met.

Evaluating the corporate governance system

I judge Asahi Kasei's governance system to be appropriate as a company having a Board of Corporate Auditors. I also find the composition of the Board of Directors to be appropriate, including the number of Outside Directors, and I think it is particularly outstanding that people with responsibility for each of the 3 business sectors have been installed as Directors. The voluntarily established Nomination and Remuneration Advisory Committees are functioning suitably.

The concept of "diversity" is critical for corporate governance. For the Board of Directors as well, it's essential to maintain a diversity of perspectives and opinions. To me, that's more important than having numerical targets for diversity by gender, nationality, or age, for instance. Asahi Kasei is conscious of the need for diverse perspectives in the management team and the Board of Directors to ensure appropriate response to changes in the external environment. The company strives to ensure that its governance system reflects this.

An effective Board of Directors supports effective management

Frank and lively discussions are held at Board of Directors meetings. The opinions and advice of Outside Directors are given sincere consideration, and incorporated into decisions and policy formulations. Through tours of operating sites and detailed explanations by business managers, ample information is provided to Outside Directors.

The agenda of the Board of Directors includes more and more large-scale investment and acquisition proposals in recent years. I always ask for explanations about the risks. While there is no such thing as a risk-free business, the key is to clearly foresee the potential risks and understand how they can be mitigated if they materialize. The most important part of risk management is to be able to explain how the company will cope in the case of risks emerging.

Asahi Kasei's strengths and potential for growth

Asahi Kasei's 3 business sectors are each highly autonomous, and there isn't necessarily firm mutual linkage among them. I see this as a strength. Having highly independent businesses means that even if an individual business slips into a low-growth phase, the company's overall foundations remain unshaken. This is not only a risk hedge for management, it's also a huge structural strength.

I also sense that the corporate philosophy is effectively leveraged as a source of strength. With a Group Mission of "contributing to life and living for people around the world," the company has set forth "Care for People, Care for Earth" as the key message of its new medium-term initiative. This enables employees to perform their duties with pride, in the knowledge that their work provides value to the world.

I think this is particularly meaningful for personnel working behind the scenes. In contrast to the front-line people in sales or new business development, those working in fields like accounting, maintenance, and call centers are required to swiftly execute their tasks without garnering attention. But the company would not function without them—they are the

unsung heroes. Awareness of the company's mission and strategic concepts can greatly reinforce the engagement of such employees performing such essential but often thankless tasks. To me, one of the most important tasks for management is to disseminate corporate philosophy and management concepts throughout the company's ranks. I have long felt that the heart and soul of a company lie in its on-site people. It's vital to keep them motivated.

Fostering leaders for the future

Discussions at Board of Directors meetings are always premised on the importance of succession planning and fostering leadership personnel. I think the best way to foster future leaders is to let people make decisions. If the supervisor says, "I'll take the responsibility, you go ahead and make the decision," good results are sure to follow. At the same time, those being groomed to be leaders must consider their supervisor's position. They should ask themselves, "If I were the supervisor, what would I do in this case?"

The way of evaluating people is another key issue. In my experience, I've found it best to perform evaluation based on 4 different perspectives: The person's supervisor, the person's subordinates, the human resources department, and finally an outsider such as a lecturer or specialist enlisted for training sessions. Having evaluation based on multiple perspectives is the best way to ensure unbiased objectivity.

My expectations

I've seen that Asahi Kasei's employees go about their work with pride, confidence, and a sense of responsibility. They can feel proud to work at a company with an admirable corporate philosophy, they are confident in their ability to accomplish their goals, and they are committed to fulfilling their responsibilities to the end. With employees like these, I expect that a bright future awaits for the Asahi Kasei Group.

Global Environment

With "Care for Earth" emphasized under our new management initiative, we consider contributing to improving the global environment through our business operations as well as efforts to improve our own environmental performance to be important tasks.

Our major focuses are on measures for climate change, preservation of biodiversity, and promotion of a recycling-oriented society.

Overview of Environmental Measures

Regarding measures for climate change, we set a new target for reducing our own GHG emissions in fiscal 2030 which was announced together with the new initiative in May 2019.

As part of our effort to reduce the impact of our business activities on biodiversity, we launched a new group-wide program called "Town Woods." To contribute to the establishment of a recycling-oriented society, we continue to reduce final disposal of industrial waste as well as to increase the rate of resource recycling.

As a chemical company, we are also working to promote the safe handling of chemical substances and actively provide the related information.

New target for GHG emissions reduction

We adopted a new target of 35% reduction in GHG emissions as a ratio of net sales by fiscal 2030 compared with that of fiscal 2013. Our previous reduction target was based on the amount of emissions at our major domestic Japanese production sites, and we are on track to achieving this target. Now, to reduce our global environmental burden, the amount of emissions included in our reduction target has been changed to include our overseas production sites, all consolidated subsidiaries, and generation of power sold to outside companies as well as our major domestic production sites. To meet this new goal, we are advancing the conversion of fuel used in our thermoelectric power plants and raising the efficiency of our hydroelectric power plants.

Climate-change effort ranked "A–" by CDP

Our effort with respect to climate change was given an evaluation of "A–" by the CDP* for 3 consecutive years.

* Formerly the Carbon Disclosure Project, CDP is an NPO based in the UK which researches and evaluates how companies and cities are working to address environmental issues related to climate change, water, forests, etc., and provides the information and results to investors. It began as a project to disclose companies' environmental strategy and performance in response to demand from institutional investors. The CDP is now one of the most trusted evaluation organizations among investors. It issues evaluations on an 8-rank scale of A, A–, B, B–, C, C–, D, and D–.

"Town Woods" program

Planting modules called "Town Woods Pots" are used to enhance green spaces at Asahi Kasei Group operating sites. This program contributes to biodiversity preservation while deepening understanding and increasing awareness of the value of biodiversity among personnel.

About "Town Woods Pots"

"Town Woods Pots" provide eco-friendly green spaces and enhance their value. A combination of greenery in 4 different heights are planted: tall, medium, short, and groundcover. The phytosociological method is used to classify green spaces for the selection of the most suitable combination of plants to improve a monotonous biological environment.

"Town Woods" program targets for fiscal 2019–2021

Target 1: Installing "Town Woods Pots" at 42 operating sites

Target 2: Accumulating 1,200 Town Woods Points during the period

Renovating hydroelectric power plants in the Nobeoka area to raise supply of clean energy

Ever since our founding, we have supplied our business operations in the Nobeoka area with power from hydroelectric plants on the Gokase River system in the surrounding parts of Miyazaki and Kumamoto. We now have 9 hydroelectric power plants with a maximum total output of 56,840 kW. As part of our management policy of "contributing to sustainable society," we decided to perform a large-scale renovation of the Gokase River Hydroelectric Plant to increase the reliability of equipment for stable long-term supply of clean energy. The work is scheduled for completion in October 2021. We are currently studying plans to renovate our other hydroelectric plants as well.


The Gokase River Hydroelectric Plant

Society: Quality & Procurement

With "Care for People" as an important focus of our new management initiative, we prioritize contributing to solutions to social issues through our businesses while emphasizing responsibility to our stakeholders.

Quality & Procurement

Quality Assurance

Corporate Quality Ensurance was established as an independent organization with a Quality Ensurance Group and Chemicals Management Group as subordinate organizations in July 2018 in a reorganization from the prior Corporate ESH & QA. In April 2019, an Executive Officer of Quality Assurance was assigned while the prior Regulatory Affairs & Reliability Assurance Dept. in Corporate Research & Development was moved to Corporate Quality Ensurance.

The reorganization is to strengthen and maintain a higher level of quality assurance to coordinate the reinforcement of quality assurance activities throughout the Asahi Kasei Group, ensuring the provision of safe and reliable products to our customers. In addition to its role as the central hub for the provision and sharing of QA-related information throughout all operations, the Quality Assurance Group holds QA Forums with lectures by eminent professors in the field of quality control to augment the training of QA personnel.

In fiscal 2018, we once again met our target of no serious product safety incidents.

Asahi Kasei Group Quality Policy

The Asahi Kasei Group creates and provides products and services with the quality to meet the needs of customers and society and ensure safety and security.

Effort to maintain zero serious product safety incidents

As part of the effort to prevent serious product safety incidents and to secure and strengthen product safety, we established new quality assurance bylaws that stipulate quality assurance activities for RC Administrators of strategic business units and core operating companies to perform. Quality Assurance Managers of each organization, whose central role in activities to enhance quality assurance is defined in the bylaws, are appointed and perform their activities accordingly.

Our product safety guidelines are applied in concert with the bylaws by all business units of the Asahi Kasei Group to assure the quality of products and services.

CSR Procurement Effort with Suppliers

Purchasing departments throughout the Asahi Kasei Group regard suppliers as important partners and work to build relationships with them based on sincerity in accordance with our Group Philosophy, revised in 2011. To this end, we are placing greater emphasis on CSR in accordance with our Procurement Policy.

Accordingly, we consider suppliers from environmental aspects including energy use, climate change, biodiversity, pollution, waste management, and resource use, and social aspects including discrimination, equal opportunity, freedom of association, and compliance with local laws concerning working hours, wages, health, and safety. 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.

Our purchasing departments conduct a CSR survey every year in order to better understand our suppliers' efforts to promote CSR, and identify any areas where improvement may be requested.

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.

Society

Human Resources

Human Resources Development

Group Masters

The Asahi Kasei Group employs a "Group Masters" program to recognize employees who have developed and exercised extraordinary expertise and skills that hold universal value, and to facilitate their application throughout the Group. As of October 2018, 180 Group Masters are designated, those whose rank and remuneration are commensurate with Senior General Manager, General Manager, and Section Manager, respectively number 15, 62, and 103. The program is focused on reinforcing the specialized technical abilities of such personnel who will drive the creation of new businesses and the enhancement of established businesses.

Development of global human resources

To accelerate the expansion of world-leading businesses in accordance with the medium-term management initiative "Cs+ for Tomorrow 2021" from the perspective of human resources, we are implementing measures such as internship programs for young personnel, and holding training sessions for personnel at overseas subsidiaries on subjects such as dissemination of corporate philosophy, intercultural communication, and management training.

Valuing Human Rights and Diversity

Basic policy

The Asahi Kasei Group strives to ensure that there will be no discrimination and to maintain a lively workplace culture which enables personnel to perform at their best. To prevent any harassment or discrimination, we implement training on corporate ethics to employees at each level—new hires, assistant managers, and managers. Ethics training is also implemented by business unit and by geographical area, and we disseminate a corporate policy of not condoning harassment in any form. In fiscal 2018 and 2019 we held workshops across the Asahi Kasei Group focused on fostering a workplace culture free of power harassment.

Hiring

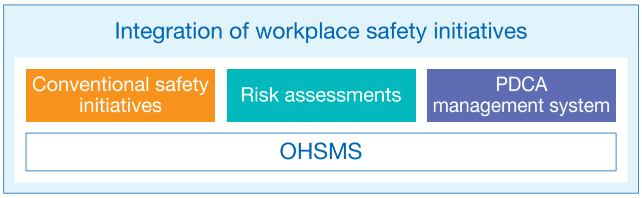
The Asahi Kasei Group is working to create new value for society by enabling *living in health and comfort* and *harmony with the natural environment*. We strive to hire motivated and capable personnel who will successfully execute our strategy on a global scale.

We continue to hire university graduates of foreign nationality every year, and the overall makeup of our personnel is becoming more global. We are also strengthening our ties to universities both in Japan and overseas, through career briefing sessions and student internships, as part of an ongoing effort to attract talent. In April 2019, 471 new graduates were hired: 373 men and 98 women. In addition, 253 persons were hired in mid-career between April 2018 and March 2019.

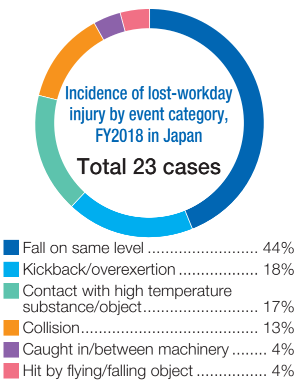
Workplace Safety and Hygiene

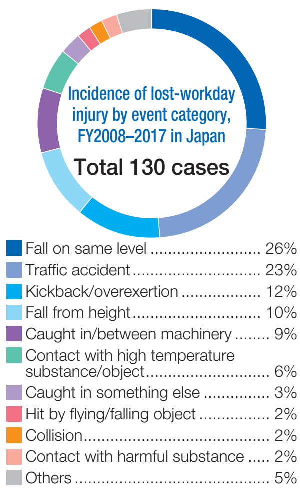
The effort to prevent workplace accidents is integrated in a comprehensive OHSMS* program that combines conventional safety initiatives—such as tidiness/orderliness/cleanliness, reporting of near-accidents and potential hazards, hazard prediction analysis, safety patrols, and case studies—with risk assessments and a prevention-oriented plan-do-check-act (PDCA) system.

* Occupational Health and Safety Management System. A standardized 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.



Occurrence of workplace injuries





Responsible Care

Safety is a fundamental prerequisite for the continuation of operations as a corporate member of society. To ensure that every aspect of safety is maintained, the Asahi Kasei Group implements a Responsible Care (RC) program comprising the six pillars of environmental preservation, quality assurance (including product safety), operational safety, workplace safety and hygiene, health maintenance, and community outreach.

Message from the Executive for RC

Shigeki Takayama
Representative Director, Vice-Presidential Executive Officer, Asahi Kasei Corp.

Asahi Kasei started the three-year medium-term management initiative “Cs+ for Tomorrow 2021” emphasizing sustainability in FY2019. We aim to raise our corporate value by implementing various measures to achieve our business targets as well as by contributing to a sustainable society as indicated by the SDGs. The current operating climate is changing greatly with growing awareness for global environmental issues and corporate responsibility as a social entity. At the Asahi Kasei Group, in accordance with our Group Mission of *contributing to life and living for people around the world*, we ensure the stable provision of solutions that our customers can rely on while focusing on the three fundamental “actuals” of the actual place, actual thing, and actual fact, with active connections inside and outside the company to further heighten RC. We regard RC as a most crucial management issue, and to raise our corporate value for our various stakeholders we work to achieve our annual RC objectives while advancing RC activities from a broader perspective, reinforcing R&D to provide solutions to global warming and other environmental issues.

Responsible Care at Asahi Kasei

RC 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.

RC was conceived in Canada in 1985, and was strengthened on a global scale with the establishment of the International Council of Chemical Associations (ICCA) in 1990.

In 1995, the chemical industry in Japan began implementing RC with the establishment of the Japan Responsible Care Council (JRCC*). Asahi Kasei was among the founding members of the JRCC, and played a leading role in the expansion and development of RC in Japan.

RC at the Asahi Kasei Group is not limited to chemicals-related operations but encompasses operations in all fields, including homes, health care, electronics, and construction materials.

* JRCC: Operated as the Japan Chemical Industry Association’s RC Committee since April 2011.

Asahi Kasei Group RC Principles

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, 2016*

* A statement regarding quality assurance was added, and the six elements were condensed into four.

RC Management System

The management system of Asahi Kasei Group RC is maintained in accordance with our Group RC Management Guidelines and other internal standards. The RC Committee, a corporate organ under the direct authority of the President of Asahi Kasei, deliberates RC plans and results and ensures that continuous reevaluation and improvement are systematically pursued with “plan-do-check-act” (PDCA) cycles—for the Asahi Kasei Group as a whole, within each core operating company and strategic business unit, and within each Region and Works*.

Certified compliance with internationally standardized management systems is obtained for the RC Management System of the Asahi Kasei Group. We have obtained ISO 14001 environmental management system certification for environmental protection and ISO 9001 quality management system certification for product safety. An Occupational Health and Safety Management System (OHSMS) is adopted for workplace safety, hygiene, and health.

* A site or group of sites consisting of several plants and facilities of various business units. The Senor General Manager of each Region and Works is responsible for the unified implementation of RC in the respective Region or Works.

Feature Profiles of Employees Pursuing Sustainability

Under the new medium-term management initiative "Cs+ for Tomorrow 2021," Asahi Kasei expresses its commitment to sustainability as "Care for People, Care for Earth." Here we profile three employees who are deeply involved in various aspects of sustainability through their work.

Gas sensor business

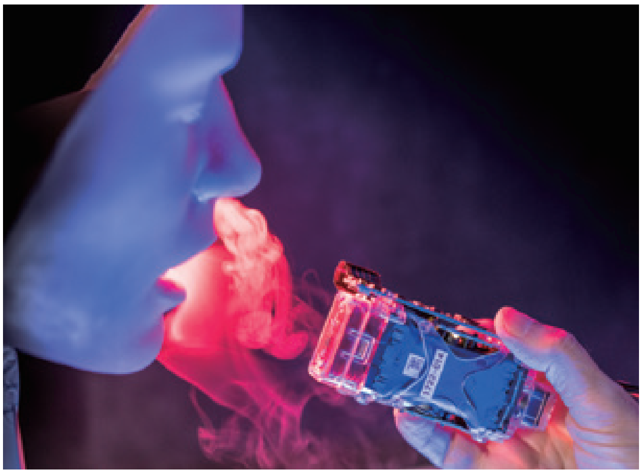
Solving energy problems and eliminating drunken driving

A physics major in college, Nishida was recommended to work for Asahi Kasei during a visit to the SPring-8 synchrotron radiation facility. He was attracted by the simple phrase, "People at Asahi Kasei are so bright and cheerful." Having also admired Ichiro Shibasaki, a developer of Hall elements and former Asahi Kasei Fellow, Nishida decided to join Asahi Kasei.

After entering the company, he was engaged in product planning for compound semiconductor devices such as magnetic sensors and infrared sensors at Asahi Kasei Microdevices (AKM). Nishida is currently involved in marketing gas sensor modules made with AKM's infrared sensors, together with Senseair AB, a Swedish manufacturer of NDIR[1] gas sensor modules acquired by AKM in 2018.

He has two targets in sight. One is CO_2 sensors for air conditioning systems and the other is automotive alcohol detection sensors. Energy is a serious subject of concern these days, and CO_2 sensors can raise the efficiency of air conditioning systems. When heating or cooling homes and automobiles, efficiency is drastically improved by controlling the intake of air from outside. By measuring the CO_2 concentration of the inside air, the sensors enable optimum ventilation to minimize the amount of energy needed to maintain a comfortable environment.

Sosuke Nishida
Solution Development Dept. 4
Marketing & Sales Center
Asahi Kasei Microdevices
Hired in 2004



Alcohol sensor

The market for automotive alcohol detection may be even bigger. Drunk driving claims thousands of lives every year in the US alone. A public-private partnership called the DADSS[2] program is evaluating Senseair's alcohol sensor as a promising technology to prevent vehicles from being operated by drunk drivers. Nishida is determined to make this a reality.

"Since the cost is high, we can only target high-end models in both applications for now," notes Nishida. But what if we could develop high value-added and low-cost products with mass-production by combining the technology of Senseair and AKM? That's Nishida's dream, and the object of his passion. "AKM's compound semiconductor technology and Senseair's gas sensor technology are the best in the world." His voice sounds bright and cheerful—he belongs to Asahi Kasei now.

[1] Nondispersive Infrared (NDIR) sensors use nondispersive emission to irradiate specimen samples and measure the change of infrared intensity for a certain wavelength.
[2] Driver Alcohol Detection System for Safety

Housing business for seniors

Housing for seniors that seamlessly meets changing needs

Am I sincere to my customers? Masaki asks himself as he recollects the sales representative when his parents rebuilt their house. He admired the sincerity of that sales rep who earned the trust of his parents, and decided to enter the housing industry himself. Something as consequential as a house cannot be sold without trust. Working in sales at Asahi Kasei Homes (AKH), Masaki strives to keep learning every day.

Currently Masaki is working to expand the rental housing business for seniors, a strategic area of growth for AKH. As people get older, they tend to become more frail. Many will go on to need a living environment where care services are provided. AKH provides homes that seamlessly meet these changing needs. While constructing more Hebel Village apartments for frail seniors, it is launching its first Village Riche serviced housing complex for residents requiring care.

AKH began its housing business for seniors by focusing on healthy active seniors who do not require care. There is currently a short supply of housing designed for active seniors who can enjoy living at their own pace. Hebel Village apartments for seniors are a solution to meet this social need. As the population of Japan continues to age, the number of active seniors is increasing. This means more good tenants for this type of housing. While other companies focused on apartments with care services and nursing homes, AKH discerned an unmet need ahead of the competition. Now that other companies have begun to imitate this successful model, Masaki spends his days working to maintain AKH's lead.

His dream is to establish a brand for housing that enables people to stay healthy for longer. He constantly tries to learn more, meeting people in the nursing care industry and reading specialist publications. Masaki feels a deep responsibility, knowing that the knowledge he gains will become the knowledge of AKH.

October 2019 marks the launch of AKH's first Village Riche residential development providing care services. Over the past few years, Masaki was busy negotiating with care service contractors regarding the location and contract conditions. At times it seemed that there was no hope of reaching agreement. But he persistently explained his position, taking pains to earn his counterparties' trust. Masaki's sincere attitude eventually won them over. "If you say so, Masaki-san, we accept." He continues to pursue the ideal of the sales rep that inspired him.

You Masaki
Homes for Seniors & Medium-Rise Buildings Business Division
Asahi Kasei Homes
Hired in 1995

Bioprocess business

Heightening biotherapeutics safety and contributing to the dissemination of high-quality drugs

Shang learned of Asahi Kasei at graduate school in Japan. She was studying hollow-fiber membranes, and her professor was doing joint research with the company. Intrigued by Asahi Kasei's history of fiber and membrane technology, she felt that it would allow her to apply her specialist knowledge, and joined the company in 2004.

Her first assignment was as a technical sales representative for Microza™ hollow-fiber membranes used in water purification and wastewater treatment. She was pleased to be involved in the water treatment business in China, as her work contributed to improving the environment of her mother country.

In 2012 Shang was transferred to Asahi Kasei Medical. Though it still involved hollow-fiber membranes, the product was totally different. Planova™ is a virus removal filter used during the manufacturing process of biotherapeutics such as plasma derivatives and biopharmaceuticals. She has served as a technical sales representative in this field since then.

Mengxian Shang, Ph.D.
Global Sales & Customer Services Dept.
Bioprocess Division
Asahi Kasei Medical
Hired in 2004, specialist of hollow-fiber membrane

Planova™ virus removal filters

For Shang, the important thing is not which field of business to work in. She simply finds it rewarding to be able to contribute to society by utilizing her knowledge of cutting-edge hollow-fiber membrane technology. "Our job is more than just supplying products." She has thorough discussions with customers in order to fully understand their concerns and propose solutions. For example, when a customer needs to conduct a virus validation test* for regulatory approval, there can be no mistakes. To ensure a successful test, she joins consultations with the authorities, and organizes seminars on Planova™ technology. Shang's huge contribution to improving the reliability of blood products with Planova™ in China was recognized with an Asahi Kasei Medical President's Award.

Planova™ still has potential for sales growth in other Asian markets. Now Shang is working to get Planova™ adopted by biotherapeutic manufacturers in Asia, for the provision of safe biotherapeutics to more patients. "We're fortunate to have you as our contact." Such words of appreciation from a customer inspire Shang to keep pressing forward every day, helping improve people's lives around the world.

* Viruses are intentionally added in a laboratory replicating actual manufacturing conditions, and the rate of decrease after the virus removal process is measured.

Financial Section

Contents

Consolidated Financial Statements

Consolidated Balance Sheets

Asahi Kasei Corporation and Consolidated Subsidiaries
March 31, 2019 and 2018

	Millions of yen		Thousands of U.S. dollars (Note 1)
ASSETS	2019	2018	2019
Current assets:			
Cash and deposits (Notes 8 and 10)	¥ 193,893	¥ 156,318	$ 1,746,784
Notes and accounts receivable—trade (Note 4 (e))	350,716	341,396	3,159,604
Merchandise and finished goods	201,699	169,948	1,817,108
Work in process	131,686	109,486	1,186,360
Raw materials and supplies	93,961	80,253	846,495
Other	82,900	83,956	746,847
Allowance for doubtful accounts	(3,461)	(2,411)	(31,180)
Total current assets	1,051,393	938,947	9,472,009
Noncurrent assets:			
Property, plant and equipment:			
Buildings and structures (Note 4 (d))	547,422	517,562	4,931,730
Accumulated depreciation	(294,536)	(285,760)	(2,653,477)
Buildings and structures, net	252,886	231,802	2,278,252
Machinery, equipment and vehicles (Note 4 (d))	1,439,166	1,399,081	12,965,459
Accumulated depreciation	(1,222,201)	(1,200,504)	(11,010,820)
Machinery, equipment and vehicles, net	216,966	198,577	1,954,649
Land (Note 4 (d))	63,889	62,938	575,577
Lease assets (Note 9)	10,159	11,698	91,523
Accumulated depreciation	(9,423)	(10,901)	(84,892)
Lease assets, net	736	798	6,631
Construction in progress	64,188	50,502	578,270
Other (Note 4 (d))	160,631	153,002	1,447,126
Accumulated depreciation	(137,930)	(135,571)	(1,242,613)
Other, net	22,701	17,431	204,514
Subtotal	621,366	562,048	5,597,892
Intangible assets:			
Goodwill	319,898	252,724	2,881,964
Other	210,080	161,898	1,892,613
Subtotal	529,978	414,621	4,774,577
Investments and other assets:			
Investment securities (Notes 4 (a), (b), 10 and 11)	296,330	314,830	2,669,640
Long-term loans receivable (Note 10)	19,993	27,793	180,117
Deferred tax assets (Note 14)	27,508	17,775	247,820
Other	29,052	31,406	261,730
Allowance for doubtful accounts	(418)	(266)	(3,766)
Subtotal	372,465	391,538	3,355,541
Total noncurrent assets	1,523,810	1,368,207	13,728,018
Total assets	¥ 2,575,203	¥ 2,307,154	$ 23,200,027

The accompanying notes are an integral part of these statements.

LIABILITIES AND NET ASSETS	Millions of yen 2019	2018	Thousands of U.S. dollars (Note 1) 2019
Liabilities:			
Current liabilities:			
Notes and accounts payable—trade (Notes 4 (e) and 10)	¥ 180,429	¥ 171,413	$ 1,625,486
Short-term loans payable (Notes 10 and 20)	97,579	118,018	879,090
Commercial paper (Notes 10 and 20)	77,000	20,000	693,694
Current portion of bonds payable (Notes 10 and 20)	20,000	—	180,180
Lease obligations (Notes 9, 10 and 20)	164	199	1,477
Accrued expenses	113,221	105,787	1,020,009
Income taxes payable (Note 10)	24,971	29,714	224,964
Advances received	75,836	70,142	683,207
Provision for grant of shares	82	28	739
Provision for periodic repairs	5,342	3,185	48,126
Provision for product warranties	3,102	2,730	27,946
Provision for removal cost of property, plant and equipment	2,251	2,425	20,279
Other	81,877	65,505	737,631
Total current liabilities	681,853	589,146	6,142,820
Noncurrent liabilities:			
Bonds payable (Notes 10 and 20)	20,000	20,000	180,180
Long-term loans payable (Notes 10 and 20)	209,878	143,176	1,890,793
Lease obligations (Notes 9, 10 and 20)	253	352	2,279
Deferred tax liabilities (Note 14)	48,299	36,639	435,126
Provision for grant of shares	289	172	2,604
Provision for periodic repairs	2,929	3,263	26,387
Provision for removal cost of property, plant and equipment	3,018	2,699	27,189
Net defined benefit liability (Note 13)	168,685	170,634	1,519,685
Long-term guarantee deposits (Note 10)	21,143	20,658	190,477
Other	16,145	15,198	145,450
Total noncurrent liabilities	490,639	412,793	4,420,171
Total liabilities	1,172,493	1,001,939	10,563,000
Net assets:			
Shareholders' equity:			
Capital stock			
Authorized—4,000,000,000 shares			
Issued and outstanding—1,402,616,332 shares	103,389	103,389	931,432
Capital surplus	79,708	79,440	718,090
Retained earnings (Note 7 (b) (ii))	1,077,586	981,934	9,707,982
Treasury stock	(3,936)	(3,930)	(35,459)
(2019—6,491,383 shares, 2018—6,491,617 shares)			
Total shareholders' equity	1,256,747	1,160,833	11,322,045
Accumulated other comprehensive income:			
Net unrealized gain on other securities	101,971	121,128	918,658
Deferred gains or losses on hedges	(40)	92	(360)
Foreign currency translation adjustment	42,020	28,676	378,559
Remeasurements of defined benefit plans	(19,213)	(23,343)	(173,090)
Total accumulated other comprehensive income	124,738	126,553	1,123,766
Non-controlling interests	21,225	17,827	191,216
Total net assets	1,402,710	1,305,214	12,637,027
Commitments and contingent liabilities (Notes 4 (c) and 9)			
Total liabilities and net assets	¥2,575,203	¥2,307,154	$23,200,027

The accompanying notes are an integral part of these statements.

Consolidated Statements of Income

Asahi Kasei Corporation and Consolidated Subsidiaries
Years Ended March 31, 2019 and 2018

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2019	2018	2019
Net sales (Note 16)	¥2,170,403	¥2,042,216	$19,553,180
Cost of sales (Note 5 (b))	1,481,855	1,393,111	13,350,045
Gross profit	688,548	649,105	6,203,135
Selling, general and administrative expenses (Note 5 (a))	478,960	450,630	4,314,955
Operating income (Note 16)	209,587	198,475	1,888,171
Non-operating income:			
Interest income	3,094	2,078	27,874
Dividends income	6,060	6,626	54,595
Equity in earnings of affiliates	12,112	13,137	109,117
Other	4,238	5,961	38,180
Total non-operating income	25,504	27,802	229,766
Non-operating expenses:			
Interest expense	4,371	4,594	39,378
Foreign exchange loss	2,686	2,971	24,198
Other	8,058	6,169	72,595
Total non-operating expenses	15,115	13,733	136,171
Ordinary income	219,976	212,544	1,981,766
Extraordinary income:			
Gain on sales of investment securities	11,580	15,164	104,324
Gain on sales of noncurrent assets (Note 5 (c))	655	534	5,901
Total extraordinary income	12,235	15,698	110,225
Extraordinary loss:			
Loss on valuation of investment securities	173	31	1,559
Loss on disposal of noncurrent assets (Note 5 (d))	6,630	6,261	59,730
Impairment loss (Note 5 (e))	11,090	2,158	99,910
Business structure improvement expenses (Notes 5 (e), (f))	3,921	1,460	35,324
Total extraordinary loss	21,814	9,908	196,523
Income before income taxes	210,397	218,333	1,895,468
Income taxes (Note 14) — current	63,730	63,239	574,144
— deferred	(3,148)	(17,095)	(28,360)
Total income taxes	60,582	46,143	545,784
Net income	149,815	172,190	1,349,685
Net income attributable to non-controlling interests	2,303	1,941	20,748
Net income attributable to owners of the parent	¥ 147,512	¥ 170,248	$ 1,328,937

The accompanying notes are an integral part of these statements.

Consolidated Statements of Comprehensive Income

Asahi Kasei Corporation and Consolidated Subsidiaries
Years Ended March 31, 2019 and 2018

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2019	2018	2019
Net income	¥149,815	¥172,190	$1,349,685
Other comprehensive income:			
Net (decrease) increase in unrealized gain on other securities	(19,058)	7,651	(171,694)
Deferred gains or losses on hedges	(132)	37	(1,189)
Foreign currency translation adjustment	12,464	(12,252)	112,288
Remeasurements of defined benefit plans	4,311	9,735	38,838
Share of other comprehensive income of affiliates accounted for using equity method	1,297	356	11,685
Total other comprehensive income (Note 6)	(1,119)	5,528	(10,081)
Comprehensive income	¥148,696	¥177,717	$1,339,604
Comprehensive income attributable to:			
Owners of the parent	¥146,339	¥175,557	$1,318,369
Non-controlling interests	2,357	2,160	21,234

The accompanying notes are an integral part of these statements.

Consolidated Statements of Changes in Net Assets

Asahi Kasei Corporation and Consolidated Subsidiaries

Years Ended March 31, 2019 and 2018

	Millions of yen											
	Shareholders' equity					Accumulated other comprehensive income						
	Capital stock	Capital surplus	Retained earnings (Note 7 (b))	Treasury stock	Total shareholders' equity	Net unrealized gain on other securities	Deferred gains or losses on hedges	Foreign currency translation adjustment	Remeasure-ments of defined benefit plans	Total accumulated other comprehensive income	Non-controlling interests	Total net assets
Balance at March 31, 2018	¥103,389	¥79,440	¥ 981,934	¥(3,930)	¥1,160,833	¥121,128	¥ 92	¥28,676	¥(23,343)	¥126,553	¥17,827	¥1,305,214
Changes during the fiscal year:												
Dividends from surplus			(51,674)		(51,674)							(51,674)
Net income attributable to owners of the parent			147,512		147,512							147,512
Purchase of treasury stock				(40)	(40)							(40)
Disposal of treasury stock		6		34	40							40
Change of scope of consolidation			(187)		(187)							(187)
Capital increase of consolidated subsidiaries		262			262							262
Net changes of items other than shareholders' equity						(19,157)	(132)	13,344	4,130	(1,815)	3,398	1,582
Total changes of items during the period	–	268	95,652	(6)	95,914	(19,157)	(132)	13,344	4,130	(1,815)	3,398	97,496
Balance at March 31, 2019	¥103,389	¥79,708	¥1,077,586	¥(3,936)	¥1,256,747	¥101,971	¥ (40)	¥42,020	¥(19,213)	¥124,738	¥21,225	¥1,402,710

	Millions of yen											
	Shareholders' equity					Accumulated other comprehensive income						
	Capital stock	Capital surplus	Retained earnings (Note 7 (b))	Treasury stock	Total shareholders' equity	Net unrealized gain on other securities	Deferred gains or losses on hedges	Foreign currency translation adjustment	Remeasure-ments of defined benefit plans	Total accumulated other comprehensive income	Non-controlling interests	Total net assets
Balance at March 31, 2017	¥103,389	¥79,443	¥850,532	¥(3,242)	¥1,030,122	¥113,475	¥55	¥ 40,831	¥(33,140)	¥121,222	¥16,771	¥1,168,115
Changes during the fiscal year:												
Dividends from surplus			(39,106)		(39,106)							(39,106)
Net income attributable to owners of the parent			170,248		170,248							170,248
Purchase of treasury stock				(688)	(688)							(688)
Disposal of treasury stock		1		1	2							2
Change of scope of consolidation			259		259							259
Capital increase of consolidated subsidiaries		(4)			(4)							(4)
Net changes of items other than shareholders' equity						7,653	37	(12,155)	9,797	5,331	1,057	6,388
Total changes of items during the period	–	(3)	131,402	(687)	130,712	7,653	37	(12,155)	9,797	5,331	1,057	137,100
Balance at March 31, 2018	¥103,389	¥79,440	¥981,934	¥(3,930)	¥1,160,833	¥121,128	¥92	¥ 28,676	¥(23,343)	¥126,553	¥17,827	¥1,305,214

	Thousands of U.S. dollars (Note 1)											
	Shareholders' equity					Accumulated other comprehensive income						
	Capital stock	Capital surplus	Retained earnings (Note 7 (b))	Treasury stock	Total shareholders' equity	Net unrealized gain on other securities	Deferred gains or losses on hedges	Foreign currency translation adjustment	Remeasure-ments of defined benefit plans	Total accumulated other comprehensive income	Non-controlling interests	Total net assets
Balance at March 31, 2018	$931,432	$715,676	$8,846,252	$(35,405)	$10,457,955	$1,091,243	$ 829	$258,342	$(210,297)	$1,140,117	$160,604	$11,758,685
Changes during the fiscal year:												
Dividends from surplus			(465,532)		(465,532)							(465,532)
Net income attributable to owners of the parent			1,328,937		1,328,937							1,328,937
Purchase of treasury stock				(360)	(360)							(360)
Disposal of treasury stock		54		306	360							360
Change of scope of consolidation			(1,685)		(1,685)							(1,685)
Capital increase of consolidated subsidiaries		2,360			2,360							2,360
Net changes of items other than shareholders' equity						(172,586)	(1,189)	120,216	37,207	(16,351)	30,613	14,252
Total changes of items during the period	–	2,414	861,730	(54)	864,090	(172,586)	(1,189)	120,216	37,207	(16,351)	30,613	878,342
Balance at March 31, 2019	$931,432	$718,090	$9,707,982	$(35,459)	$11,322,045	$ 918,658	$ (360)	$378,559	$(173,090)	$1,123,766	$191,216	$12,637,027

The accompanying notes are an integral part of these statements.

Consolidated Statements of Cash Flows

Asahi Kasei Corporation and Consolidated Subsidiaries
Years Ended March 31, 2019 and 2018

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2019	2018	2019
Cash flows from operating activities:			
Income before income taxes	¥ 210,397	¥ 218,333	$ 1,895,468
Depreciation and amortization	84,556	95,415	761,766
Impairment loss	11,090	2,158	99,910
Amortization of goodwill	19,490	18,048	175,586
Amortization of negative goodwill	(159)	(159)	(1,432)
Increase in provision for grant of shares	170	200	1,532
Increase in provision for periodic repairs	1,823	1,280	16,423
Increase in provision for product warranties	364	280	3,279
Increase (decrease) in provision for removal cost of property, plant and equipment	145	(1,066)	1,306
Decrease in provision for loss on litigation	—	(2,137)	—
Decrease in net defined benefit liability	(4,287)	(4,875)	(38,622)
Interest and dividend income	(9,154)	(8,704)	(82,468)
Interest expense	4,371	4,594	39,378
Equity in earnings of affiliates	(12,112)	(13,137)	(109,117)
Gain on sales of investment securities	(11,580)	(15,164)	(104,324)
Loss on valuation of investment securities	173	31	1,559
Gain on sale of property, plant and equipment	(655)	(534)	(5,901)
Loss on disposal of noncurrent assets	6,630	6,261	59,730
Decrease (increase) in notes and accounts receivable—trade	3,942	(38,986)	35,514
Increase in inventories	(57,968)	(11,815)	(522,234)
(Decrease) increase in notes and accounts payable—trade	(776)	23,020	(6,991)
Increase in accrued expenses	5,859	6,014	52,784
Increase (decrease) in advances received	5,266	(2,463)	47,441
Other, net	15,328	17,259	138,090
Subtotal	272,914	293,851	2,458,685
Interest and dividend income received	11,247	10,267	101,324
Interest expense paid	(4,412)	(4,736)	(39,748)
Income taxes paid	(67,687)	(49,492)	(609,793)
Net cash provided by operating activities	212,062	249,891	1,910,468
Cash flows from investing activities:			
Payments into time deposits	(13,812)	(9,508)	(124,432)
Proceeds from withdrawal of time deposits	7,880	3,012	70,991
Purchase of property, plant and equipment	(114,718)	(82,909)	(1,033,495)
Proceeds from sales of property, plant and equipment	652	1,601	5,874
Purchase of intangible assets	(10,136)	(13,363)	(91,315)
Purchase of investment securities	(2,624)	(11,564)	(23,640)
Proceeds from sales of investment securities	17,030	17,774	153,423
Purchase of shares in subsidiaries resulting in change in scope of consolidation	(93,487)	—	(842,225)
Payments for transfer of business	(2,764)	—	(24,901)
Payments of loans receivable	(5,092)	(45,261)	(45,874)
Collection of loans receivable	18,813	30,568	169,486
Other, net	(659)	(645)	(5,937)
Net cash used in investing activities	(198,917)	(110,294)	(1,792,045)
Cash flows from financing activities:			
Net decrease in short-term loans payable	(36,840)	(28,935)	(331,892)
Increase (decrease) in commercial paper	57,000	(36,000)	513,514
Proceeds from long-term loans payable	85,492	15,395	770,198
Repayment of long-term loans payable	(53,833)	(23,532)	(484,982)
Proceeds from issuance of bonds payable	20,000	—	180,180
Redemption of bonds	—	(20,000)	—
Repayments of lease obligations	(237)	(389)	(2,135)
Purchase of treasury stock	(40)	(688)	(360)
Proceeds from disposal of treasury stock	40	2	360
Cash dividends paid	(51,674)	(39,106)	(465,532)
Cash dividends paid to non-controlling interests	(1,155)	(1,141)	(10,405)
Payments from changes in ownership interests in subsidiaries that do not result in change in scope of consolidation	(1,148)	—	(10,342)
Other, net	(217)	(18)	(1,955)
Net cash provided by (used in) financing activities	17,388	(134,412)	156,649
Effect of exchange rate change on cash and cash equivalents	543	(937)	4,892
Net increase in cash and cash equivalents	31,077	4,247	279,973
Cash and cash equivalents at beginning of year	148,596	144,077	1,338,703
Increase in cash and cash equivalents resulting from changes in scope of consolidation	846	272	7,622
Cash and cash equivalents at end of year (Note 8)	¥ 180,520	¥ 148,596	$ 1,626,306

The accompanying notes are an integral part of these statements.

Notes to Consolidated Financial Statements

Asahi Kasei Corporation and Consolidated Subsidiaries

1. Major policies for preparing the consolidated financial statements

The consolidated financial statements, which are filed with the prime minister of Japan as required by the Financial Instruments and Exchange Act in Japan, are prepared in accordance with accounting principles generally accepted in Japan, which are different in certain respects from the application and disclosure requirements of International Financial Reporting Standards. The accompanying consolidated financial statements are a translation of those filed with the prime minister of Japan and incorporate certain modifications to enhance foreign readers' understanding of the consolidated financial statements. In addition, the notes to the consolidated financial statements include certain financial information which is not required under the disclosure regulations in Japan, but is presented herein as additional information.

The U.S. dollar amounts presented in the consolidated financial statements are included solely for the convenience of readers. These translations should not be construed as representations that the Japanese yen amounts actually represent, have been, or could be converted into U.S. dollars. As the amounts shown in U.S. dollars are for convenience only, and are not intended to be computed in accordance with generally accepted translation procedures, the approximate current exchange rate of ¥111.00 = US$1 prevailing on March 31, 2019, has been used.

Consolidation and investments in affiliated companies

The consolidated financial statements consist of the accounts of the parent company and 203 subsidiaries (171 subsidiaries at March 31, 2018, hereinafter collectively referred to as the "Company") which, with minor exceptions due to immateriality, are all majority or wholly owned companies, including 6 core operating companies (Asahi Kasei Homes Corp., Asahi Kasei Construction Materials Corp., Asahi Kasei Microdevices Corp., Asahi Kasei Pharma Corp., Asahi Kasei Medical Co., Ltd., and ZOLL Medical Corporation). Material inter-company transactions and accounts have been eliminated.

Investments in unconsolidated subsidiaries and 20% to 50% owned companies in which the Company exercises significant influence are accounted for, with minor exceptions due to immateriality, using the equity method of accounting. There were 53 such unconsolidated subsidiaries and 20% to 50% owned companies to which the equity method is applied at March 31, 2019 (54 at March 31, 2018), including Asahi Kasei EIC Solutions Corp. and Asahi Yukizai Corporation.

Certain subsidiaries' results are reported in the consolidated financial statements using a fiscal year ending December 31. Material differences in inter-company transactions and accounts arising from the use of different fiscal year-ends are appropriately adjusted for through consolidation procedures.

All assets and liabilities of acquired companies are measured at their fair value and any difference between the net assets and the cost of investment is recognized as goodwill or negative goodwill. Goodwill, and negative goodwill incurred through business combinations which took place before April 1, 2010, are amortized using the straight-line method over a reasonable period during which their effects would last, with the exception of minor amounts which are charged to income as incurred.

2. Significant accounting policies

(a) Cash and cash equivalents

For cash flow statement purposes, cash and cash equivalents include all highly liquid investments, generally with original maturities of three months or less, which are readily convertible to known amounts of cash, and therefore present an insignificant risk of changes in value due to changes in interest rates.

(b) Inventories

Inventories held for sale in the ordinary course of business are stated at the lower of cost or net realizable value. Residential lots and dwellings for sale are stated at specifically identified costs.

(c) Noncurrent assets and depreciation/amortization

Property, plant and equipment (except for lease assets) are stated at cost. Significant renewals and improvements are capitalized at cost, while maintenance and repairs are charged to income as incurred. Depreciation is provided for under the straight-line method, at rates based on estimated useful lives of the assets, principally ranging from 7 to 60 years for buildings and from 2 to 22 years for machinery and equipment and vehicles.

Intangible fixed assets (except for lease assets), including software for internal use, are mainly amortized using the straight-line method over the estimated useful lives of the assets. The estimated useful life of software for internal use is mainly 5 years.

Lease assets (financing lease transactions without title transfer) are depreciated/amortized on a straight-line basis over the period of the lease with no residual value.

(d) Significant allowances

i) Allowance for doubtful accounts

Estimates of the unrecoverable portion of receivables, generally based on historical rates and for specific receivables of particular concern based on individual estimates of recoverability, are recognized as allowance for doubtful accounts.

ii) Provision for periodic repairs

The portion of foreseeable periodic repair expenses deemed to correspond to normal wear and tear of plant and equipment as of the closing date of the fiscal year is recognized as provision for periodic repairs.

iii) Provision for product warranties

Estimates of product warranty expenses based on historical rates are recognized as provision for product warranties.

iv) Provision for removal cost of property, plant and equipment

Provision for removal cost of property, plant and equipment is recorded based on estimated future removal cost of property, plant and equipment at the end of each fiscal year.

v) Provision for grant of shares

To record the grant of shares to Directors, etc., in accordance with Share Grant Regulations, the provision for grant of shares is recorded based on an estimate of grant of shares liabilities as of the closing date of the fiscal year.

(e) Accounting for retirement benefits

i) Method of attributing expected retirement benefits to each period

In calculating retirement benefit obligations, the Company applies a method of attributing expected retirement benefits to each period based on a benefit formula basis.

ii) Accounting for actuarial gains/losses and prior service costs

Actuarial gains/losses are amortized using the straight-line method from the fiscal year following their accrual over a certain period (mainly 10 years) within the average remaining service period of employees at the time of accrual. Prior service costs are amortized using the straight-line method over a certain period (mainly 10 years) within the average remaining service period of employees at the time of accrual.

iii) Adoption of the simplified method

In calculating expected defined benefit liability and periodic retirement benefit expenses, certain consolidated subsidiaries have adopted the simplified method. Under this method, the expected defined benefit liability is recorded at the severance payment amount to be required should all employees retire voluntarily at fiscal year end.

(f) Significant revenue and expense recognition

i) Construction activities that are realizable as of fiscal year end

The percentage-of-completion method (progress of work is estimated using the percentage of costs incurred to the total projected costs) is applied.

ii) Other construction activities

The completed-contract method is used.

(g) Financial instruments

i) Securities

Securities are classified into four categories: trading securities, held-to-maturity debt securities, equity securities of unconsolidated subsidiaries and affiliates, and other securities. At March 31, 2019 and 2018, the Company did not have trading securities or held-to-maturity debt securities.

Equity securities of unconsolidated subsidiaries and affiliates are accounted for, with minor exceptions due to immateriality, using the equity method of accounting.

Other securities whose fair values are readily determinable are carried at fair value with net unrealized gains or losses, net of income taxes, being included as a component of net assets. Other securities whose fair values are not readily determinable are stated at cost. In cases where any significant decline in the realizable value is assessed to be other than temporary, the cost of other securities is devalued by the impaired amount and is charged to income. Realized gains and losses are determined using the average cost method and are reflected in the consolidated income statements.

ii) Derivative financial instruments

All derivatives are stated at fair value. Gains or losses arising from changes in fair value are recognized in the period in which they arise, except for derivatives that are designated as hedging instruments. Gains or losses arising from changes in fair value of these qualifying hedges are deferred as "Deferred gains or losses on hedges" until being offset against gains or losses of the underlying hedged assets and liabilities.

(h) Taxes

Accrued income taxes are stated at the estimated amount of payables for corporation, enterprise, and inhabitant taxes. The asset and liability approach is used to recognize deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amounts and the tax bases of assets and liabilities.

The Company has elected to file its return under the consolidated tax filing system in Japan. Transactions subject to consumption taxes are recorded at amounts net of consumption taxes.

(i) Translation of foreign currencies

Foreign currency receivables and payables are translated into Japanese yen at the exchange rates prevailing at the balance sheet date. Resulting gains and losses are charged to income for the period.

Assets and liabilities of foreign subsidiaries are translated into Japanese yen at fiscal year-end exchange rates, and income and expenses of same are translated into Japanese yen at the average exchange rate for the fiscal year. Shareholders' equity of foreign subsidiaries is translated into Japanese yen at the historical exchange rates. The translation differences in Japanese yen amounts arising from the use of different rates are recognized as foreign currency translation adjustments in the consolidated balance sheets. A portion of the foreign currency translation adjustment is allocated to non-controlling interests and the Company's portion is presented as a separate component of net assets in the consolidated balance sheets.

3. Changes in significant accounting policies

(a) Accounting Standards issued but not yet applied

i) Accounting Standard for Business Combinations and Guidance on Accounting Standard for Business Combinations and Accounting Standard for Business Divestitures

The Accounting Standards Board of Japan (ASBJ) issued ASBJ Guidance No. 21 "Accounting Standard for Business Combinations" and ASBJ Guidance No. 10 "Guidance on Accounting Standard for Business Combinations and Accounting Standard for Business Divestitures." The accounting treatment of contingent returnable considerations was clarified. The Company will apply the standard and guidance for business combinations performed after the beginning of the fiscal year ending March 31, 2020. The effects on the consolidated financial statements are currently being assessed.

ii) Accounting Standard for Revenue Recognition and Implementation Guidance on Accounting Standard for Revenue Recognition

The ASBJ issued ASBJ Statement No. 29 "Accounting Standard for Revenue Recognition" and ASBJ Guidance No. 30 "Implementation Guidance on Accounting Standard for Revenue Recognition." This is a comprehensive standard related to revenue recognition, with the following five steps to be applied for recognition of revenue:

Step 1: Identify the contract with customers
Step 2: Identify the separate performance obligations
Step 3: Determine the transaction price of the contract
Step 4: Allocate the transaction price to each of the separate performance obligations
Step 5: Recognize the revenue as each performance obligation is satisfied

The Company will apply the standard and guidance from the beginning of the fiscal year ending March 31, 2022. At the time of the preparation of the consolidated financial statements, the effects are being assessed.

(b) Changes in accounting policy difficult to distinguish from changes in accounting estimates

Change in method of depreciation of property, plant and equipment

Where Asahi Kasei and its subsidiaries in Japan previously had primarily applied the declining-balance method for depreciation of property, plant and equipment (except for lease assets), this was changed to the straight-line method from the fiscal year ended March 31, 2019.

The Asahi Kasei Group has continued to acquire overseas companies in recent years, and since overseas subsidiaries apply the straight-line method for depreciation of property, plant and equipment, there is an increase in the proportion of property, plant and equipment depreciated by the straight-line method.

Furthermore, the Asahi Kasei Group is currently advancing investments to expand businesses with competitive superiority, as well as investments for modification and rationalization, based on the "Cs for Tomorrow 2018" three-year strategic management initiative. Large-scale investments in domestic manufacturing plants were implemented, especially in the Material sector, during the fiscal year ended March 31, 2019, the final fiscal year of the three-year period. As such expansions of manufacturing plants are successively starting operations beginning from the fiscal year ended March 31, 2019, the situation of domestic capital expenditure is changing.

This changing situation surrounding property, plant and equipment presented an opportunity to reconsider the method of depreciation.

Long-term and stable operation of the property, plant and equipment of Asahi Kasei and its subsidiaries in Japan is expected to contribute to the achievement of stable earnings for Asahi Kasei and its subsidiaries in Japan. Therefore, it was determined that adoption of the straight-line method of depreciation of property, plant and equipment in Japan as well would not only be a cost allocation method more accurately reflecting the state of use of property, plant and equipment, but also more appropriate for performance management of the Asahi Kasei Group.

As a result, operating income increased by ¥9,727 million (US$87,631 thousand), and ordinary income and income before income taxes increased respectively by ¥9,760 million (US$87,928 thousand) in the fiscal year ended March 31, 2019.

(c) Changes in presentation

i) Application of Partial Amendments to Accounting Standard for Tax Effect Accounting

"Partial Amendments to Accounting Standard for Tax Effect Accounting" (ASBJ Statement No. 28) issued by the Accounting Standards Board of Japan is applied from the fiscal year ended March 31, 2019. Accordingly, all deferred tax assets are shown under investments and other assets, and all deferred tax liabilities are shown under noncurrent liabilities.

For the consolidated balance sheets for the fiscal year ended March 31, 2018, deferred tax assets of ¥20,032 million under current assets and deferred tax liabilities of ¥8,983 million under noncurrent liabilities are included in the ¥17,775 million shown as deferred tax assets under investments and other assets, while deferred tax liabilities are shown as ¥36,639 million.

ii) Consolidated balance sheets

Asset retirement obligations, which were reported separately under current liabilities and noncurrent liabilities for the fiscal year ended March 31, 2018, are included in other from the fiscal year ended March 31, 2019, due to diminished materiality. Consolidated balance sheets for the fiscal year ended March 31, 2018, are restated to reflect this change. The consolidated balance sheets for the fiscal year ended March 31, 2018 have been reclassified accordingly, resulting in asset retirement obligations of ¥557 million under current liabilities being included in other under current liabilities, and asset retirement obligations of ¥3,282 million under noncurrent liabilities being included in other under noncurrent liabilities.

4. Notes to Consolidated Balance Sheets

(a) Investment securities

Among investment securities, shares of unconsolidated subsidiaries and affiliates as of March 31, 2019 and 2018, amounted to ¥98,357 million (US$886,099 thousand) and ¥83,487 million, respectively. Included in those amounts are investments in joint ventures of ¥52,095 million (US$469,324 thousand) and ¥43,168 million, respectively.

(b) Pledged assets and secured debt

Investment securities pledged to suppliers as transaction guarantees at March 31, 2019 and 2018, were ¥65 million (US$586 thousand) and ¥72 million, respectively.

(c) Contingent liabilities

Contingent liabilities at March 31, 2019 and 2018, arising in the ordinary course of business were as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Loans guaranteed	¥38,736	¥39,457	$348,973
Total	¥38,736	¥39,457	$348,973

(d) Deferred gain on property, plant and equipment deducted for tax purposes

The accumulated reduced-value entries, which are directly deducted from property, plant and equipment, as of March 31, 2019 and 2018, were ¥9,792 million (US$88,216 thousand) and ¥9,999 million, respectively. The breakdown of reduced-value entries as of March 31, 2019 and 2018, was as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Buildings and structures	¥3,324	¥3,320	$29,946
Machinery, equipment and vehicles	6,156	6,366	55,459
Land	167	167	1,505
Other	145	146	1,306
Total	¥9,792	¥9,999	$88,216

(e) Notes maturing on March 31, 2019

Although financial institutions in Japan were closed on March 31, 2019, and notes maturing on that date were actually settled on the following business day, April 1, 2019, those were accounted for as if settled on March 31, 2019.

The breakdown of those notes at March 31, 2019 was as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Notes and accounts receivable—trade	¥2,799	¥2,501	$25,216
Notes and accounts payable—trade	1,273	1,301	11,468

5. Notes to Consolidated Statements of Income

(a) Selling, general and administrative expenses

Major components of selling, general and administrative expenses for the years ended March 31, 2019 and 2018, were as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Salaries and benefits	¥186,552	¥174,659	$1,680,649
Research and development*	62,924	61,998	566,883
Freight and storage	41,353	38,568	372,550

* The aggregate amounts of research and development expenses included in manufacturing costs and selling, general and administrative expenses for the years ended March 31, 2019 and 2018, were ¥90,124 million (US$811,928 thousand) and ¥85,695 million, respectively.

(b) Gain or loss on valuation of inventories

Inventories held for sale in the ordinary course of business are stated at the lower of cost or net realizable value. (Gain) loss on valuation of inventories for the years ended March 31, 2019 and 2018, were as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
	¥535	¥(224)	$4,820

(c) Gain on sales of noncurrent assets

Major components of gain on sales of noncurrent assets for the years ended March 31, 2019 and 2018, were as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Land	¥497	¥466	$4,477
Machinery	8	48	72
Other	150	20	1,351

(d) Loss on disposal of noncurrent assets

Loss on disposal of noncurrent assets for the years ended March 31, 2019 and 2018, was primarily loss on abandonment and sale of buildings, machinery and equipment, etc. The abandonment and sale of buildings, machinery and equipment, etc. were performed under a single, all-inclusive contract for each facility.

(e) Impairment loss

Major components of impairment losses for the years ended March 31, 2019 and 2018, were as follows:

			Millions of yen		Thousands of U.S. dollars	
Use	Asset class	Location	2019	2018	2019	Item on the Consolidated Statements of Income
Goodwill related to new electronic device business	Goodwill	—	¥ —	¥997	$ —	Impairment loss
Facility for storage of waste	Buildings, etc.	Kawasaki Ward Kawasaki, Kanagawa, etc.	—	557	—	Impairment loss
Equipment for dry-heat treatment of nonwovens	Buildings, etc.	Nobeoka, Miyazaki, etc.	—	284	—	Impairment loss
Others	Buildings, etc.	Moriyama, Shiga, etc.	—	381	—	Impairment loss and business structure improvement expenses
Production facility for pharmaceuticals business	Goodwill and Other Intangible assets	—	6,657	—	59,973	Impairment loss
Production facility for battery materials	Machinery and equipment, etc.	Cheongju, Korea	2,966	—	26,721	Impairment loss
Production facility for synthetic fibers	Machinery and equipment, etc.	Nordrhein-Westfalen, Federal Republic of Germany	947	—	8,532	Impairment loss
Production facility for synthetic resin	Buildings, etc.	Kawasaki Ward Kawasaki, Kanagawa	468	—	4,216	Business structure improvement expenses
Production facility for artificial kidneys and therapeutic apheresis devices	Machinery and equipment, etc.	Nobeoka, Miyazaki	170	—	1,532	Impairment loss
Others	Construction in progress, etc.	Fuji, Shizuoka, etc.	381	—	3,432	Impairment loss and business structure improvement expenses

Grouping of operating assets is based on managerial accounting categories, with consideration given to production process, geographic location, and domain of authority for making investment decisions. Idle assets are recorded separately in each fixed assets class.

The book value of goodwill and other intangible assets related to production facility for pharmaceuticals business was reduced to the recoverable amount due to a delay in development. The book value of production facility for synthetic fibers and production facility for synthetic resin was reduced to the recoverable amount due to diminished profitability. The recoverable amount is stated as the value for future usage, which is calculated based on discounted future cash flows within the applicable discount rate of 6% as of March 31, 2019 and 2018.

The book value of production facility for battery materials was reduced to zero due to a decision to dispose of certain facilities for productivity improvement. The book value of production facility for artificial kidneys and therapeutic apheresis devices was also reduced to zero due to the disappearance of prospects for future use.

Among the extraordinary losses under Others, ¥31 million (US$279 thousand) and ¥62 million were recorded under business structure improvement expenses for the years ended March 2019 and 2018, respectively.

(f) Business structure improvement expenses

Major components of business structure improvement expenses for the years ended March 31, 2019 and 2018, were as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Impairment of fixed assets	¥ 499	¥ 62	$ 4,495
Additional payment of retirement benefits due to application of early retirement, etc.	692	—	6,234
Loss on disposal and devaluation of inventory and others	2,730	1,398	24,595
Total	¥3,921	¥1,460	$35,324

6. Notes to Consolidated Statements of Comprehensive Income

Recycling adjustment and tax effects on other comprehensive income for the years ended March 31, 2019 and 2018, were as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Net unrealized gain on other securities:			
Changes during the fiscal year	¥(15,870)	¥ 26,084	$(142,973)
Recycling adjustment	(11,554)	(15,068)	(104,090)
Pre-tax effect	(27,423)	11,016	(247,054)
Tax effect	8,365	(3,364)	75,360
Net unrealized gain on other securities	(19,058)	7,651	(171,694)
Deferred gains or losses on hedges:			
Changes during the fiscal year	(343)	71	(3,090)
Recycling adjustment	218	(74)	1,964
Pre-tax effect	(125)	(3)	(1,126)
Tax effect	(7)	40	(63)
Deferred gains or losses on hedges	(132)	37	(1,189)
Foreign currency translation adjustment:			
Changes during the fiscal year	12,464	(12,088)	112,288
Pre-tax effect	12,464	(12,088)	112,288
Tax effect	—	(164)	—
Foreign currency translation adjustment	12,464	(12,252)	112,288
Remeasurements of defined benefit plans:			
Changes during the fiscal year	(2,214)	2,844	(19,946)
Recycling adjustment	8,453	11,302	76,153
Pre-tax effect	6,238	14,145	56,198
Tax effect	(1,927)	(4,410)	(17,360)
Remeasurements of defined benefit plans	4,311	9,735	38,838
Share of other comprehensive income of affiliates accounted for using equity method:			
Changes during the fiscal year	1,297	356	11,685
Recycling adjustment	0	—	0
Share of other comprehensive income of affiliates accounted for using equity method	1,297	356	11,685
Total other comprehensive income	¥ (1,119)	¥ 5,528	$ (10,081)

7. Notes to Consolidated Statements of Changes in Net Assets

For the year ended March 31, 2019

(a) Class and total number of issued and outstanding shares and treasury stock

Thousands of shares

	Number of shares as of March 31, 2018	Increase in number of shares during the fiscal year	Decrease in number of shares during the fiscal year	Number of shares as of March 31, 2019
Issued and outstanding shares				
Common stock	1,402,616	—	—	1,402,616
Total	1,402,616	—	—	1,402,616
Treasury stock				
Common stock (Notes 1, 2 and 3)	6,492	31	32	6,491
Total	6,492	31	32	6,491

Notes: 1. The increase of 31 thousand shares in common stock of treasury stock was due to the purchase of shares in quantities of less than one share unit.
2. The decrease of 32 thousand shares in common stock of treasury stock was primarily attributable to the disposal of 22 thousand shares by the trust for granting shares to Directors, etc., and the sale of 10 thousand shares in quantities of less than one share unit.
3. The number of shares of treasury stock as of March 31, 2019, includes 442 thousand shares held by the trust for granting shares to Directors, etc.

(b) Dividends

i) Cash dividends paid

1) The following was resolved by the Board of Directors on May 11, 2018.

Dividends for common stock

Total dividends	¥27,932 million (US$251,640 thousand)
Dividend per share	¥20.00 (US$0.18)
Date of record	March 31, 2018
Payment date	June 5, 2018

Note: Total dividends includes ¥9 million (US$81 thousand) for shares held by the trust for granting shares to Directors, etc.

2) The following was resolved by the Board of Directors on November 2, 2018.

Dividends for common stock

Total dividends	¥23,742 million (US$213,892 thousand)
Dividend per share	¥17.00 (US$0.15)
Date of record	September 30, 2018
Payment date	December 3, 2018

Note: Total dividends includes ¥8 million (US$72 thousand) for shares held by the trust for granting shares to Directors, etc.

ii) Dividends for which the date of record falls within the fiscal year under review but the payment date occurs in the following fiscal year

The following was resolved by the Board of Directors on May 10, 2019.

Dividends for common stock

Total dividends	¥23,742 million (US$213,892 thousand)
Source of dividends	Retained earnings
Dividend per share	¥17.00 (US$0.15)
Date of record	March 31, 2019
Payment date	June 4, 2019

Note: Total dividends includes ¥8 million (US$72 thousand) for shares held by the trust for granting shares to Directors, etc.

For the year ended March 31, 2018

(a) Class and total number of issued and outstanding shares and treasury stock

	Thousands of shares			
	Number of shares as of March 31, 2017	Increase in number of shares during the fiscal year	Decrease in number of shares during the fiscal year	Number of shares as of March 31, 2018
Issued and outstanding shares				
Common stock	1,402,616	—	—	1,402,616
Total	1,402,616	—	—	1,402,616
Treasury stock				
Common stock (Notes 1, 2 and 3)	5,959	534	1	6,492
Total	5,959	534	1	6,492

Notes: 1. The increase of 534 thousand shares in common stock of treasury stock was primarily attributable to the purchase of 464 thousand shares by the trust for granting shares to Directors, etc., and the purchase of 70 thousand shares in quantities of less than one share unit.
2. The decrease of 1 thousand shares in common stock of treasury stock was due to the sale of shares in quantities of less than one share unit.
3. The number of shares of treasury stock as of March 31, 2018, includes 464 thousand shares held by the trust for granting shares to Directors, etc.

(b) Dividends

i) Cash dividends paid

1) The following was resolved by the Board of Directors on May 11, 2017.

Dividends for common stock

Total dividends	¥19,553 million
Dividend per share	¥14.00
Date of record	March 31, 2017
Payment date	June 6, 2017

2) The following was resolved by the Board of Directors on November 7, 2017.

Dividends for common stock

Total dividends	¥19,552 million
Dividend per share	¥14.00
Date of record	September 30, 2017
Payment date	December 1, 2017

Note: Total dividends includes ¥6 million for shares held by the trust for granting shares to Directors, etc.

ii) Dividends for which the date of record falls within the fiscal year under review but the payment date occurs in the following fiscal year

The following was resolved by the Board of Directors on May 11, 2018.

Dividends for common stock

Total dividends	¥27,932 million
Source of dividends	Retained earnings
Dividend per share	¥20.00
Date of record	March 31, 2018
Payment date	June 5, 2018

Note: Total dividends includes ¥9 million for shares held by the trust for granting shares to Directors, etc.

8. Notes to Consolidated Statements of Cash Flows

(a) Cash and cash equivalents

Reconciliation of cash and cash equivalents on the consolidated statements of cash flows to the amounts disclosed on the consolidated balance sheets at March 31, 2019 and 2018, was as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Cash and deposits	¥193,893	¥156,318	$1,746,784
Time deposits with deposit term of over 3 months	(13,374)	(7,722)	(120,486)
Cash and cash equivalents	¥180,520	¥148,596	$1,626,306

(b) Assets and liabilities of newly consolidated subsidiaries through acquisition of shares

Assets and liabilities of acquired companies (Senseair AB and 4 consolidated subsidiaries) and net cash outflow for such acquisition is as follows:

	Millions of yen	Thousands of U.S. dollars
Current assets	¥1,296	$11,676
Noncurrent assets	1,544	13,910
Goodwill	4,171	37,577
Current liabilities	(580)	(5,225)
Noncurrent liabilities	(352)	(3,171)
Acquisition cost of shares	6,079	54,766
Gain on step acquisitions	(173)	(1,559)
Carrying value of previously held equity interest	(322)	(2,901)
Cash and cash equivalents	(351)	(3,162)
Net cash used for acquisition	5,233	47,144

Assets and liabilities of acquired companies (Sage Automotive Interiors, Inc. and 13 consolidated subsidiaries) and net cash outflow for such acquisition is as follows:

	Millions of yen	Thousands of U.S. dollars
Current assets	¥23,467	$211,414
Noncurrent assets	59,076	532,216
Goodwill	68,171	614,153
Current liabilities	(55,254)	(497,784)
Noncurrent liabilities	(11,193)	(100,838)
Non-controlling interests	(4,363)	(39,306)
Acquisition cost of shares	79,904	719,856
Cash and cash equivalents	(6,916)	(62,306)
Net cash used for acquisition	72,988	657,550

Assets and liabilities of acquired companies (Erickson Framing Operations LLC and 4 consolidated subsidiaries) and net cash outflow for such acquisition is as follows:

	Millions of yen	Thousands of U.S. dollars
Current assets	¥ 3,728	$ 33,586
Noncurrent assets	9,137	82,315
Goodwill	1,230	11,081
Current liabilities	(4,240)	(38,198)
Noncurrent liabilities	(38)	(342)
Foreign currency translation adjustment	233	2,099
Acquisition cost of shares	10,050	90,541
Cash and cash equivalents	(90)	(811)
Net cash used for acquisition	9,959	89,721

9. Leases

(a) Financing lease transactions

Financing lease transactions without title transfer

i) Components of lease assets are as follows:

1) Property, plant and equipment: Mainly model homes (buildings and structures) for housing business
2) Intangible fixed assets: Software

ii) Depreciation of lease assets:

As stated in Note 2 "Significant accounting policies (c) Noncurrent assets and depreciation/amortization."

(b) Operating lease transactions

Future lease payments for the non-cancelable portion of the Company's operating leases at March 31, 2019 and 2018, were as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Due within one year	¥ 9,442	¥ 8,677	$ 85,063
Due after one year	38,949	25,987	350,892
Total	¥48,391	¥34,664	$435,955

10. Financial instruments

(a) Overview of financial instruments

i) Policy related to financial instruments

The Company raises long-term funds as required mainly for its planned capital expenditures by borrowing from banks, borrowing from life insurance companies, issuing bonds, etc. A portion of the surplus funds is invested only in highly stable financial assets. Short-term working funds are raised by bank borrowings, issuance of commercial paper, etc. Derivative transactions are mainly entered into for the purpose of reducing risks related to assets and liabilities which are exposed to risks of fluctuations of exchange rate and interest rate. Derivatives are not traded for speculative purposes.

ii) Components of financial instruments, their risks and risk management structure

As operating receivables, notes and accounts receivable—trade are exposed to credit risk of customers. As the business of the Company spans a wide range of fields, operating receivables are not excessively concentrated on specific customers, but the parent company and each consolidated subsidiary monitor and manage the credit condition of each customer.

Investment securities are exposed to the risk of fluctuations in market price, but they are mainly equity securities of companies with which the Company has business relationships. These securities are held for the purpose of maintaining the business relationships. Fair value is periodically evaluated, and the financial condition of the issuing company is monitored.

As operating liabilities, notes and accounts payable—trade generally have a payment term of 1 year or less.

Variable interest-rate borrowings are exposed to the risk of interest-rate fluctuations, but derivatives (interest-rate and currency swaps, interest-rate swaps) are used as hedges to fix interest expenses for a portion of long-term variable interest-rate borrowings.

Operating receivables and operating liabilities include those denominated in currencies other than Japanese yen, and are thus exposed to the risk of exchange-rate fluctuations. In order to minimize the effects of short-term exchange-rate fluctuations, the Company hedges with derivative transactions (forward exchange contracts), in principle, within the range of the underlying receivables and liabilities amount.

Derivative transactions are exposed to the credit risk of transacting financial institutions, but the credit condition of those financial institutions is reviewed through periodical monitoring. Such transactions are performed and managed in accordance with the Company’s internal regulations which stipulate the related authority, procedures, limits, etc.

Borrowings are exposed to liquidity risk, but the parent company specifies standards for required on-hand funds based on the Company’s funding plans, prepares and revises plans for cash receipts and disbursements as appropriate, and enters into commitment-line agreements with transacting financial institutions to manage such risk.

Loan securitization in the housing business is exposed to the risk of interest-rate fluctuations between the time of origination of housing loans and the time of execution of their securitization, but derivative transactions (interest-rate swaps) are entered into in order to reduce such risk.

iii) Supplementary explanation of fair value of financial instruments

The fair value of financial instruments is based on their quoted market price, if available. In the case where no quoted market price is available, a reasonably estimated fair value is used. As variable factors are incorporated in its estimation, fair value may change due to the adoption of different assumptions, conditions, etc. The stated amount of contracts regarding derivative transactions included in Note 12 “Derivative financial instruments” is not itself an indication of the market risk of the derivative transactions.

(b) Fair value of financial instruments

Amounts carried on the consolidated balance sheets, their fair values, and the differences between them as of March 31, 2019 and 2018, were as shown below.

Financial instruments whose fair values are deemed extremely difficult to determine are not included in this table (See Notes 2), 3) and 4) below).

Millions of yen

	2019		
	Carrying amount	Fair value	Difference
Cash and deposits	¥193,893	¥193,893	¥ —
Notes and accounts receivable—trade	350,716	350,716	—
Short-term investment securities and investment securities:			
Investments in affiliates	15,373	14,015	(1,358)
Other securities	188,070	188,070	—
Long-term loans receivable	20,650	20,658	8
Total assets	768,702	767,353	(1,349)
Notes and accounts payable—trade	180,429	180,429	—
Short-term loans payable	75,484	75,484	—
Commercial paper	77,000	77,000	—
Income taxes payable	24,971	24,971	—
Bonds payable	40,000	40,198	(198)
Long-term loans payable	231,973	230,677	1,296
Lease obligations	417	417	1
Long-term guarantee deposits	9,246	9,300	(54)
Total liabilities	639,520	638,475	1,045
Derivative financial instruments (*)	¥ 162	¥ 162	¥ —

	Millions of yen		
	2018		
	Carrying amount	Fair value	Difference
Cash and deposits	¥156,318	¥156,318	¥ —
Notes and accounts receivable—trade	341,396	341,396	—
Short-term investment securities and investment securities:			
Investments in affiliates	15,353	16,471	1,118
Other securities	221,708	221,708	—
Long-term loans receivable	28,442	28,445	3
Total assets	763,217	764,338	1,121
Notes and accounts payable—trade	171,413	171,413	—
Short-term loans payable	58,898	58,898	—
Commercial paper	20,000	20,000	—
Income taxes payable	29,714	29,714	—
Bonds payable	20,000	20,420	(420)
Long-term loans payable	202,296	199,485	2,811
Lease obligations	551	551	(0)
Long-term guarantee deposits	8,696	8,726	(30)
Total liabilities	511,568	509,207	2,361
Derivative financial instruments (*)	¥ 1,257	¥ 1,257	¥ —

	Thousands of U.S. dollars		
	2019		
	Carrying amount	Fair value	Difference
Cash and deposits	$1,746,784	$1,746,784	$ —
Notes and accounts receivable—trade	3,159,604	3,159,604	—
Short-term investment securities and investment securities:			
Investment in affiliates	138,495	126,261	(12,234)
Other securities	1,694,324	1,694,324	—
Long-term loans receivable	186,036	186,108	72
Total assets	6,925,243	6,913,090	(12,153)
Notes and accounts payable—trade	1,625,486	1,625,486	—
Short-term loans payable	680,036	680,036	—
Commercial paper	693,694	693,694	—
Income taxes payable	224,964	224,964	—
Bonds payable	360,360	362,144	(1,784)
Long-term loans payable	2,089,847	2,078,171	11,676
Lease obligations	3,757	3,757	0
Long-term guarantee deposits	83,297	83,784	(486)
Total liabilities	5,761,441	5,752,027	9,414
Derivative financial instruments (*)	$ 1,459	$ 1,459	$ —

(*) The amounts represent net amount of assets and liabilities resulting from derivative transactions. In the case of a net liability, the amount is shown in parentheses.

Note 1) Method to determine the estimated fair value of financial instruments; securities and derivative financial instruments

i) Assets

1) Cash and deposits, notes and accounts receivable—trade
As their fair value approximates book value due to their short maturity, the corresponding book value amount is used as fair value.

2) Short-term investment securities and investment securities
The stock exchange prices are used to determine fair value of traded stocks. Refer to Note 11 "Marketable securities and investment securities" for information on securities classified by holding purpose.

3) Long-term loans receivable
The carrying amounts shown include long-term loans receivable scheduled for repayment within one year. Their fair values are determined based on the present value of principal and interest, discounted using current assumed rates for similar long-term loans receivable. For long-term loans receivable bearing variable interest rates, as they are deemed to reflect market interest rates within a short term, book values are used as fair value.

ii) Liabilities

1) Notes and accounts payable—trade; short-term loans payable; commercial paper; income taxes payable
As their fair values approximate book value due to their short maturity, the corresponding book value amounts are used as fair value.

2) Bonds payable
Fair value of the bonds payable issued by the parent company is based on the quoted market price if available. For those without a quoted market price that are subject to special treatment for interest-rate swaps, fair value is based on the present value by totaling the amount of principal and interest, together with related interest-rate swaps, discounted by the interest rate that would apply if equivalent bonds were newly issued.

3) Long-term loans payable
The carrying amounts shown include long-term loans payable that are scheduled for repayment within one year of March 31, 2019 and 2018, amounting to ¥22,095 million (US$199,054 thousand) and ¥59,120 million, respectively. Their fair values are based on present value of principal and interest discounted using the current assumed rates for similar long-term loans payable. For long-term loans payable bearing variable interest rates, fair value of those subject to special treatment of interest rate-swaps is based on present value by totaling the amount of principal and interest, together with related interest-rate swaps, discounted by the interest rate that would apply if equivalent long-term loans were newly entered. For other long-term loans payable, book value is used as fair value as they are deemed to reflect market interest rates within a short term.

4) Lease obligations
The carrying amounts shown are the total amount of lease obligations under current liabilities and lease obligations under noncurrent liabilities. Present value, calculated by discounting the total amount of principal and interest using the presumed interest rate that would apply if lease transactions were newly made, is used as the fair value.

5) Long-term guarantee deposits
In cases where the deposit period can be estimated, the fair value of long-term guarantee deposits is determined using a discounted cash flow over that period.

iii) Derivative transactions
Refer to Note 12 "Derivative financial instruments."

Note 2) For equity investments in nonpublic companies, with a carrying amount as of March 31, 2019 and 2018, amounting to ¥89,661 million (US$807,757 thousand) and ¥74,668 million, respectively, fair value is not included in short-term investment securities and investment securities, as no quoted market price is available and it is deemed extremely difficult to determine fair value due to the impossibility of estimating future cash flows.

Note 3) For investment securities, with a carrying amount as of March 31, 2019 and 2018, amounting to ¥3,226 million (US$29,063 thousand) and ¥3,101 million, respectively, fair value is not included in short-term investment securities and investment securities, as no quoted market price is available and it is deemed extremely difficult to determine fair value due to the impossibility of estimating future cash flows.

Note 4) For long-term guarantee deposits, the fair value of a portion having a carrying amount as of March 31, 2019 and 2018, amounting to ¥11,897 million (US$107,180 thousand) and ¥11,962 million, respectively, is not included as no quoted market price is available and it is deemed extremely difficult to determine fair value due to the impossibility of estimating future cash flows.

Note 5) For monetary credits and securities with maturity, the amounts scheduled for redemption subsequent to the closing date are as follows:

Millions of yen

	2019			
	Due within one year	Due after one year, within five years	Due after five years, within ten years	Due after more than ten years
Cash and deposits	¥193,893	¥ —	¥ —	¥—
Notes and accounts receivable—trade	350,716	—	—	—
Long-term loans receivable	4,542	15,848	260	—
Total	¥549,151	¥15,848	¥260	¥—

Millions of yen

	2018			
	Due within one year	Due after one year, within five years	Due after five years, within ten years	Due after more than ten years
Cash and deposits	¥156,318	¥ —	¥ —	¥—
Notes and accounts receivable—trade	341,396	—	—	—
Long-term loans receivable	5,431	22,676	335	—
Total	¥503,145	¥22,676	¥335	¥—

Thousands of U.S. dollars

	2019			
	Due within one year	Due after one year, within five years	Due after five years, within ten years	Due after more than ten years
Cash and deposits	$1,746,784	$ —	$ —	$—
Notes and accounts receivable—trade	3,159,604	—	—	—
Long-term loans receivable	40,919	142,775	2,342	—
Total	$4,947,306	$142,775	$2,342	$—

Note 6) For bonds payable, long-term loans payable, lease obligations, and other interest-bearing debt, the amounts scheduled for repayment subsequent to the closing date are as follows:

Millions of yen

	2019					
Year ending March 31	Short-term loans payable	Commercial paper	Bonds payable	Long-term loans payable	Lease obligations	Total
2020	¥75,484	¥77,000	¥20,000	¥22,095	¥164	¥194,743
2021	—	—	—	24,951	141	25,092
2022	—	—	—	55,334	71	55,405
2023	—	—	—	70,668	30	70,698
2024	—	—	20,000	25,785	10	45,795
2025 and thereafter	—	—	—	33,140	—	33,140

Millions of yen

	2018					
Year ending March 31	Short-term loans payable	Commercial paper	Bonds payable	Long-term loans payable	Lease obligations	Total
2019	¥58,898	¥20,000	¥ —	¥59,120	¥199	¥138,217
2020	—	—	20,000	21,794	162	41,956
2021	—	—	—	23,371	128	23,499
2022	—	—	—	28,981	54	29,034
2023	—	—	—	28,043	8	28,051
2024 and thereafter	—	—	—	40,988	—	40,988

Year ending March 31	Short-term loans payable	Commercial paper	Bonds payable	Long-term loans payable	Lease obligations	Total
	Thousands of U.S. dollars					
	2019					
2020	$680,036	$693,694	$180,180	$199,054	$1,477	$1,754,441
2021	—	—	—	224,784	1,270	226,054
2022	—	—	—	498,505	640	499,144
2023	—	—	—	636,649	270	636,919
2024	—	—	180,180	232,297	90	412,568
2025 and thereafter	—	—	—	298,559	—	298,559

11. Marketable securities and investment securities

(a) Other securities with available fair value

The aggregate cost, carrying amount which was identical to fair value, and gross unrealized gains and losses of debt and equity securities classified as other securities for which fair values were available at March 31, 2019 and 2018, were as follows:

	Millions of yen		
	2019		
	Carrying amount	Cost	Unrealized gains (losses)
Securities with unrealized gains:			
Equity securities	¥177,464	¥29,367	¥148,097
Subtotal	177,464	29,367	148,097
Securities with unrealized losses:			
Equity securities	10,607	12,563	(1,956)
Subtotal	10,607	12,563	(1,956)
Total	¥188,070	¥41,930	¥146,140

	Millions of yen		
	2018		
	Carrying amount	Cost	Unrealized gains (losses)
Securities with unrealized gains:			
Equity securities	¥209,576	¥35,703	¥173,872
Subtotal	209,576	35,703	173,872
Securities with unrealized losses:			
Equity securities	12,133	13,240	(1,108)
Subtotal	12,133	13,240	(1,108)
Total	¥221,708	¥48,943	¥172,765

	Thousands of U.S. dollars		
	2019		
	Carrying amount	Cost	Unrealized gains (losses)
Securities with unrealized gains:			
Equity securities	$1,598,775	$264,568	$1,334,207
Subtotal	1,598,775	264,568	1,334,207
Securities with unrealized losses:			
Equity securities	95,559	113,180	(17,622)
Subtotal	95,559	113,180	(17,622)
Total	$1,694,324	$377,748	$1,316,577

(b) Realized gains and losses on the sale of other securities

The realized gains and losses on the sale of other securities during the years ended March 31, 2019 and 2018, were as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Selling amount	¥16,176	¥18,088	$145,730
Gain on sales of securities	11,580	15,164	104,324
Loss on sales of securities	—	—	—

(c) Loss on other devaluation of investment securities whose fair values are readily determinable

Loss on other devaluation of investment securities whose fair values are readily determinable for the year ended March 31, 2019, was ¥173 million (US$1,559 thousand), which is for other securities, and for the year ended March 31, 2018, ¥31 million, which is the sum of ¥28 million for equity securities of unconsolidated subsidiaries and affiliates and ¥3 million for other securities.

12. Derivative financial instruments

(a) Derivative financial instruments for which hedge accounting is not applied

i) Foreign exchange forward contracts

		Millions of yen			
		2019			
Classification	Items	Amount of contract	Amount of contract over 1 year	Fair value (*)	Profit (loss) from valuation
Off-market transactions	Foreign exchange forward contracts:				
	Selling:				
	U.S. dollar	¥40,157	¥—	¥ (9)	¥ (9)
	Euro	11,379	—	88	88
	Thai baht	2,306	—	39	39
	British pound	45	—	0	0
	Chinese yuan	5	—	(0)	(0)
	Australian dollar	8	—	0	0
	Buying:				
	U.S. dollar	4,373	—	(20)	(20)
	Euro	14	—	(0)	(0)
	Thai baht	4	—	0	0
	Total	¥58,291	¥—	¥ 98	¥ 98

		Millions of yen			
		2018			
Classification	Items	Amount of contract	Amount of contract over 1 year	Fair value (*)	Profit (loss) from valuation
Off-market transactions	Foreign exchange forward contracts:				
	Selling:				
	U.S. dollar	¥ 52,155	¥—	¥1,514	¥1,514
	Euro	9,720	—	158	158
	Thai baht	1,867	—	4	4
	British pound	27	—	0	0
	Chinese yuan	—	—	—	—
	Australian dollar	—	—	—	—
	Buying:				
	U.S. dollar	5,438	—	(84)	(84)
	Euro	50,269	—	(335)	(335)
	Thai baht	5	—	(0)	(0)
	Total	¥119,481	¥—	¥1,257	¥1,257

Classification	Items	Thousands of U.S. dollars 2019 Amount of contract	Amount of contract over 1 year	Fair value (*)	Profit (loss) from valuation
Off-market transactions	Foreign exchange forward contracts:				
	Selling:				
	U.S. dollar	$361,775	$—	$ (81)	$ (81)
	Euro	102,514	—	793	793
	Thai baht	20,775	—	351	351
	British pound	405	—	0	0
	Chinese yuan	45	—	(0)	(0)
	Australian dollar	72	—	0	0
	Buying:				
	U.S. dollar	39,396	—	(180)	(180)
	Euro	126	—	(0)	(0)
	Thai baht	36	—	0	0
	Total	$525,144	$—	$ 883	$ 883

(*) The fair value is provided by counterparty financial institutions.

(b) Derivative financial instruments for which hedge accounting is applied

i) Foreign exchange forward contracts

Classification	Items	Hedged assets/liabilities	Millions of yen 2019 Amount of contract	Amount of contract over 1 year	Fair value (*)
Principle-based accounting	Foreign exchange forward contracts:				
	Selling:				
	U.S. dollar	Accounts receivable—trade	¥4,601	¥44	¥56
	Euro	Accounts receivable—trade	687	—	10
	Buying:				
	U.S. dollar	Accounts payable—trade	382	—	(1)
	Euro	Accounts payable—trade	23	—	(1)
	Thai baht	Accounts payable—trade	—	—	—
	Swedish krona	Investment securities	—	—	—
	Total		¥5,694	¥44	¥64

Classification	Items	Hedged assets/liabilities	Millions of yen 2018 Amount of contract	Amount of contract over 1 year	Fair value (*)
Principle-based accounting	Foreign exchange forward contracts:				
	Selling:				
	U.S. dollar	Accounts receivable—trade	¥ 5,966	¥—	¥ 180
	Euro	Accounts receivable—trade	721	—	17
	Buying:				
	U.S. dollar	Accounts payable—trade	359	—	(10)
	Euro	Accounts payable—trade	—	—	—
	Thai baht	Accounts payable—trade	3	—	0
	Swedish krona	Investment securities	5,198	—	(186)
	Total		¥12,246	¥—	¥ 0

Classification	Items	Hedged assets/liabilities	Thousands of U.S. dollars 2019 Amount of contract	Amount of contract over 1 year	Fair value (*)
Principle-based accounting	Foreign exchange forward contracts:				
	Selling:				
	U.S. dollar	Accounts receivable—trade	$41,450	$396	$505
	Euro	Accounts receivable—trade	6,189	—	90
	Buying:				
	U.S. dollar	Accounts payable—trade	3,441	—	(9)
	Euro	Accounts payable—trade	207	—	(9)
	Thai baht	Accounts payable—trade	—	—	—
	Swedish krona	Investment securities	—	—	—
	Total		$51,297	$396	$577

(*) The fair value is provided by counterparty financial institutions.

ii) Interest-rate swaps, and interest-rate and currency swaps

Classification	Items	Hedged assets/liabilities	Millions of yen 2019 Amount of contract	Amount of contract over 1 year	Fair value
Special treatment for interest-rate swaps	Interest-rate swaps Pay fixed/receive floating	Long-term loans payable	¥98,712	¥78,605	(*)
Special treatment for interest-rate and currency swaps	Interest-rate and currency swaps U.S. dollar receive floating/ Thai baht pay fixed	Long-term loans payable	—	—	(*)
	Total		¥98,712	¥78,605	¥—

Classification	Items	Hedged assets/liabilities	Millions of yen 2018 Amount of contract	Amount of contract over 1 year	Fair value
Special treatment for interest-rate swaps	Interest-rate swaps Pay fixed/receive floating	Long-term loans payable	¥139,261	¥93,633	(*)
Special treatment for interest-rate and currency swaps	Interest-rate and currency swaps U.S. dollar receive floating/ Thai baht pay fixed	Long-term loans payable	170	—	(*)
	Total		¥139,431	¥93,633	¥—

Classification	Items	Hedged assets/liabilities	Thousands of U.S. dollars 2019 Amount of contract	Amount of contract over 1 year	Fair value
Special treatment for interest-rate swaps	Interest-rate swaps Pay fixed/receive floating	Long-term loans payable	$889,297	$708,153	(*)
Special treatment for interest-rate and currency swaps	Interest-rate and currency swaps U.S. dollar receive floating/ Thai baht pay fixed	Long-term loans payable	—	—	(*)
	Total		$889,297	$708,153	$—

(*) Fair value of interest-rate swaps and interest-rate and currency swaps, for which special treatment is applied, is included in fair value of the corresponding long-term loans payable for which hedge accounting is applied.

13. Provision for retirement benefits

Upon terminating employment, employees of the parent company and its subsidiaries are entitled, under most circumstances, to lump-sum severance indemnities and/or pension payments determined by reference mainly to their current basic rate of pay and length of service and/or defined contribution plans. Additional benefits may be granted to employees depending on the conditions under which termination of employment occurs. Certain consolidated subsidiaries adopt the simplified method in calculating expected defined benefit liability.

Reconciliations of beginning and ending balances of projected benefit obligations for the fiscal years ended March 31, 2019 and 2018, were as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Beginning balance of the projected benefit obligations	¥400,855	¥398,132	$3,611,306
Service cost	15,466	14,922	139,333
Interest cost	728	695	6,559
Actuarial gains/losses	2,061	1,213	18,568
Payment of retirement benefits	(16,451)	(14,620)	(148,207)
Other	(198)	513	(1,784)
Ending balance of the projected benefit obligations	¥402,461	¥400,855	$3,625,775

Reconciliations of beginning and ending balances of plan assets for the fiscal years ended March 31, 2019 and 2018, were as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Beginning balance of plan assets	¥230,220	¥219,765	$2,074,054
Expected return	5,737	5,461	51,685
Actuarial gains/losses	(387)	4,064	(3,486)
Contributions	7,408	9,513	66,739
Payment of retirement benefits	(9,206)	(8,571)	(82,937)
Other	4	(11)	36
Ending balance of plan assets	¥233,776	¥230,220	$2,106,090

Reconciliations of ending balance of projected benefit obligations and the plan assets, and of net defined benefit liability and net defined benefit asset, as recorded in the consolidated balance sheet at March 31, 2019 and 2018, were as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Projected benefit obligations of funded plans	¥ 258,381	¥ 257,710	$ 2,327,757
Plan assets	(233,776)	(230,220)	(2,106,090)
Subtotal	24,605	27,489	221,667
Projected benefit obligations of unfunded plans	144,080	143,145	1,298,018
Net of liability and asset that have been recorded in the consolidated balance sheets	¥ 168,685	¥ 170,634	$ 1,519,685
Net defined benefit liability	¥ 168,685	¥ 170,634	$ 1,519,685
Net of liability and asset that have been recorded in the consolidated balance sheets	¥ 168,685	¥ 170,634	$ 1,519,685

Periodic retirement benefit expenses for employees and the breakdown of items for the years ended March 31, 2019 and 2018, were as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Service cost (net of employee contributions)	¥13,829	¥13,301	$124,586
Interest cost	728	695	6,559
Expected return on plan assets	(5,737)	(5,461)	(51,685)
Amortization of actuarial gains/losses	8,407	11,196	75,739
Amortization of prior service costs	82	141	739
Additional retirement benefits and other	1,327	636	11,955
Retirement benefit expenses of defined benefit plans	¥18,636	¥20,509	$167,892

The components of other comprehensive income on defined benefit plans for the fiscal years ended March 31, 2019 and 2018, were as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Prior service costs	¥ 82	¥ 141	$ 739
Actuarial gains/losses	6,156	14,004	55,459
Total	¥6,238	¥14,145	$56,198

Accumulated other comprehensive income on defined benefit plans at March 31, 2019 and 2018, was as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Unrecognized prior service costs	¥ (4)	¥ 78	$ (36)
Unrecognized actuarial gains/losses	27,623	33,779	248,856
Total	¥27,619	¥33,857	$248,820

Share by major classifications for plan assets at March 31, 2019 and 2018, was as follows:

	2019	2018
Bonds	38%	37%
Stock	25	25
Alternative investments	17	16
Life insurance	13	13
Cash and deposits	5	8
Other	2	2
Total	100%	100%

Note: Alternative investments include mainly investments in real estate, private equity and hedge funds.

The current and future allocation of plan assets, and the current and future long-term rate of expected return from the variety of assets that make up the plan assets, are considered in determining the long-term rate of expected return on plan assets.

Major actuarial assumptions at March 31, 2019 and 2018, were as follows:

	2019	2018
Discount rate	Mainly 0.1%	Mainly 0.1%
The long-term rate of expected return on plan assets	Mainly 2.5%	Mainly 2.5%
Expected rate of increase in salary	2.0–6.5%	2.0–6.5%

Required payments to defined contribution plans at March 31, 2019, amounted to ¥2,738 million (US$24,667 thousand), and at March 31, 2018, amounted to ¥1,807 million.

14. Taxes

Income taxes applicable to the parent company and subsidiaries in Japan include (1) corporation tax, (2) enterprise tax, and (3) inhabitants tax.

Significant components of deferred tax assets and liabilities at March 31, 2019 and 2018, were as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Deferred tax assets:			
Net defined benefit liability	¥ 51,489	¥ 52,147	$ 463,865
Accrued bonuses	7,857	7,734	70,784
Foreign tax credit carry forwards	6,990	6,069	62,973
Unrealized gain on noncurrent assets and others	4,368	3,931	39,351
Impairment losses	3,171	3,414	28,568
Loss on disposal of noncurrent assets	3,143	3,268	28,315
Other	25,371	22,951	228,568
Subtotal deferred tax assets	102,390	99,515	922,432
Less: Valuation allowance	(13,218)	(10,865)	(119,081)
Total deferred tax assets	89,172	88,651	803,351
Deferred tax liabilities:			
Unrealized gain on other securities	(44,241)	(54,229)	(398,568)
Identified intangible assets during business combination	(37,071)	(29,925)	(333,973)
Deferred gain on property, plant and equipment	(8,305)	(8,383)	(74,820)
Depreciation—overseas subsidiaries	(8,958)	(8,077)	(80,703)
Other	(11,387)	(6,899)	(102,586)
Total deferred tax liabilities	(109,963)	(107,514)	(990,658)
Net deferred tax assets (liabilities)	¥ (20,791)	¥ (18,864)	$(187,306)

Reconciliation of the differences between the statutory tax rate and the effective income tax rate for the years ended March 31, 2019 and 2018, was as follows:

	2019	2018
Statutory tax rate	30.6%	30.9%
Increase (reduction) in taxes resulting from:		
Non-deductible expenses and non-taxable income	1.0	0.3
R&D expenses deductible from income taxes	(2.8)	(2.9)
Amortization of goodwill and negative goodwill	2.8	2.5
Equity in (losses) earnings of unconsolidated subsidiaries and affiliates	(1.8)	(1.9)
Undistributed earnings (losses) of foreign subsidiaries	0.6	0.4
Difference of tax rates for foreign subsidiaries	(1.7)	(0.4)
Items related to U.S. tax reform	—	(7.9)
Other	(0.0)	0.1
Effective income tax rate	28.8%	21.1%

15. Business combinations

Business combinations accounted for by the purchase method were as follows:

(a) Acquisition of Senseair AB

i) Outline of business combination

1) Name and nature of the businesses of counterparty

Name of counterparty: Senseair AB

Nature of the businesses: Manufacture and sale of NDIR gas sensor modules

2) Main reasons for the acquisition

In addition to joint development through which Senseair's optical path design technology and manufacturing know-how for gas sensors is combined with the small, high-quality IR light emitting elements and detectors based on the core technology for compound semiconductors of consolidated subsidiary Asahi Kasei Microdevices Corp., the acquisition will make it possible for the two companies to more deeply integrate their technological knowledge and market networks, enabling an expansion of business activities in the market for air, gas, and alcohol sensors, where rapid growth is forecasted.

3) The acquisition date

April 4, 2018

4) Statutory form of business combination

Stock purchase for cash as consideration

5) Name of company after transaction

Senseair AB

6) Acquired voting right
Voting right before the acquisition: 8.1%
Additional voting right acquired as of the acquisition date: 91.9%
Voting right after the acquisition: 100%
7) Basic means of materializing the acquisition
Stock purchase for cash as consideration by a consolidated subsidiary

ii) The period of acquiree's results included in the consolidated financial statements
From April 4, 2018, to March 31, 2019

iii) Cost of acquisition and details

	Millions of yen	Thousands of U.S. dollars
Stock purchase price	¥6,079	$54,766
Purchase price	¥6,079	$54,766

All stocks held as of the acquisition date are remeasured to their fair value at acquisition date.

iv) Major acquisition related costs
Advisory fees and others: ¥295 million (US$2,658 thousand)

v) Difference between cost of acquisition and total of individual transactions leading to the acquisition
¥173 million (US$1,559 thousand)

vi) Amount of goodwill, measurement principle, amortization method, and useful life
1) Amount of goodwill
¥4,171 million (US$37,577 thousand)
2) Measurement principle
Goodwill is measured as the excess of the purchase price over the fair value of identifiable assets acquired and liabilities assumed.
3) Amortization method and useful life
Straight-line method over 20 years

vii) Details of assets acquired and liabilities assumed as of the acquisition date

	Millions of yen	Thousands of U.S. dollars
Current assets	¥1,296	$11,676
Noncurrent assets	1,544	13,910
Total assets	¥2,840	$25,586
Current liabilities	¥ 580	$ 5,225
Noncurrent liabilities	352	3,171
Total liabilities	¥ 932	$ 8,396

viii) Amount of identifiable intangible assets other than goodwill, its details and major weighted average useful life
1) Purchase price allocated to intangible assets and its major items

	Millions of yen	Thousands of U.S. dollars
Customer-related assets	¥693	$6,243
Technology-related assets	681	6,135

2) Major weighted average useful life

Customer-related assets	20 years
Technology-related assets	10 years
Total	15 years

ix) Pro forma effects on the consolidated statements of income assuming the business combination had occurred at the beginning of the fiscal year, and its measurement
Information is omitted due to immateriality. This note is not audited.

(b) Acquisition of Sage Automotive Interiors, Inc.

i) Outline of business combination
1) Name and nature of the businesses of counterparty
Name of counterparty: Sage Automotive Interiors, Inc.
Nature of the businesses: Development, manufacture, and sale of fabrics as automotive interior material
2) Main reasons for the acquisition
• Enhanced access to vehicle manufacturers and Tier-1 suppliers in order to swiftly and accurately ascertain trends and needs in the automotive industry
• Proposal and provision of comprehensive vehicle interior designs and solutions leveraging Sage's design and marketing capabilities in combination with various Asahi Kasei products and technologies such as fibers, plastics, and sensors
• Utilizing Sage's sales, manufacturing, and marketing bases as management infrastructure and resources for the global expansion of Asahi Kasei's operations
3) The acquisition date
September 27, 2018
4) Statutory form of business combination
Stock purchase for cash as consideration

5) Name of company after transaction
Sage Automotive Interiors, Inc.
6) Acquired voting right
Voting right before the acquisition: 0%
Voting right after the acquisition: 100%
7) Basic means of materializing the acquisition
Stock purchase for cash as consideration by a special purpose subsidiary of the Company

ii) The period of acquiree's results included in the consolidated financial statements
From October 1, 2018, to March 31, 2019

iii) Cost of acquisition and details

	Millions of yen	Thousands of U.S. dollars
Stock purchase price	¥79,904	$719,856
Purchase price	¥79,904	$719,856

iv) Major acquisition related costs
Advisory fees and others: ¥1,430 million (US$12,883 thousand)

v) Amount of goodwill, measurement principle, amortization method, and useful life
1) Amount of goodwill
¥68,171 million (US$614,153 thousand)
2) Measurement principle
Goodwill is measured as the excess of the purchase price over the fair value of identifiable assets acquired and liabilities assumed.
3) Amortization method and useful life
Straight-line method over 20 years

vi) Details of assets acquired and liabilities assumed as of the acquisition date

	Millions of yen	Thousands of U.S. dollars
Current assets	¥23,467	$211,414
Noncurrent assets	59,076	532,216
Total assets	¥82,543	$743,631
Current liabilities	¥55,254	$497,784
Noncurrent liabilities	11,193	100,838
Total liabilities	¥66,447	$598,622

vii) Amount of identifiable intangible assets other than goodwill, its details and major weighted average useful life
1) Purchase price allocated to intangible assets and its major items

	Millions of yen	Thousands of U.S. dollars
Customer-related assets	¥45,886	$413,387
Trademarks	2,953	26,604

2) Major weighted average useful life

Customer-related assets	19 years
Trademarks	20 years
Total	19 years

viii) Pro forma effects on the consolidated statements of income assuming the business combination had occurred at the beginning of the fiscal year, and its measurement
Information is omitted due to immateriality. This note is not audited.

(c) Acquisition of Erickson Framing Operations LLC

i) Outline of business combination
1) Name and nature of the businesses of counterparty
Name of counterparty: Erickson Framing Operations LLC
Nature of the businesses: Manufacture, sales, and installation of panelized walls and trusses, along with doors and trim in Arizona, California, and Nevada
2) Main reasons for the acquisition
A leading US provider of building components including panelized walls and roof trusses for wooden houses, Erickson serves homebuilders by supplying and installing the building components for more than 3,000 houses per year. Whereas houses in the US are generally built by fabricating and assembling at the construction site, Erickson's panelized framing systems streamline the construction process by pre-fabricating components at a factory to be shipped and erected at the building site. As construction costs in the US continue to climb due to a persistent manpower shortage and rising material prices, there is growing demand for pre-fabricated building systems which enable cost reduction with less labor and shorter construction time. Consolidated subsidiary Asahi Kasei Homes believes that this presents an opportunity to leverage the systemization know-how gained through its business of providing high quality and high value-added Hebel Haus™ order-built unit homes in Japan, leading to further enhancement of Erickson's pre-fabricated building system in order to create new value for the US housing market.
3) The acquisition date
November 30, 2018
4) Statutory form of business combination
Membership interests purchase for cash as consideration

5) Name of company after transaction
Erickson Framing Operations LLC
6) Acquired voting right
Voting right before the acquisition: 0%
Voting right after the acquisition: 100%
7) Basic means of materializing the acquisition
Membership interests purchase for cash as consideration by a consolidated subsidiary

ii) The period of acquiree's results included in the consolidated financial statements
From January 1, 2019, to March 31, 2019

iii) Cost of acquisition and details

	Millions of yen	Thousands of U.S. dollars
Membership interests purchase price	¥10,050	$90,541
Purchase price	¥10,050	$90,541

iv) Major acquisition related costs
Advisory fees and others: ¥281 million (US$2,532 thousand)

v) Amount of goodwill, measurement principle, amortization method, and useful life
1) Amount of goodwill
¥1,230 million (US$11,081 thousand)
2) Measurement principle
Goodwill is measured as the excess of the purchase price over the fair value of identifiable assets acquired and liabilities assumed.
3) Amortization method and useful life
Straight-line method over 20 years

vi) Details of assets acquired and liabilities assumed as of the acquisition date

	Millions of yen	Thousands of U.S. dollars
Current assets	¥ 3,728	$ 33,586
Noncurrent assets	9,137	82,315
Total assets	¥12,864	$115,892
Current liabilities	¥ 4,240	$ 38,198
Noncurrent liabilities	38	342
Total liabilities	¥ 4,278	$ 38,541

vii) Amount of identifiable intangible assets other than goodwill, its details and major weighted average useful life
1) Purchase price allocated to intangible assets and its major items

	Millions of yen	Thousands of U.S. dollars
Customer-related assets	¥6,779	$61,072
Order backlog	1,138	10,252

2) Major weighted average useful life

Customer-related assets	19 years
Order backlog	4 years
Total	17 years

viii) Pro forma effects on the consolidated statements of income assuming the business combination had occurred at the beginning of the fiscal year, and its measurement
Information is omitted due to immateriality. This note is not audited.

16. Business segment information

(a) Overview of reportable segments

The Company's business segments are based on organizational units for which separate financial information is available, and the Board of Directors carries out periodic review to allocate management resources and evaluate business performance.

The Company is organized under an operating holding company configuration with the operating holding company and core operating companies performing operations in three business sectors. The operating holding company and each core operating company lays out strategy and develops business activities in Japan and abroad.

Main products of the three reportable segments are as follows:

Material segment

Fibers business
The Company manufactures, processes, and sells elastic polyurethane filament, cupro fiber, nonwoven fabrics, and nylon 66 filament.

Chemicals business
The Company manufactures, processes, and sells petrochemical products (such as styrene, acrylonitrile, polyethylene, and polystyrene), performance polymer products (such as synthetic rubber and engineering plastics), and performance material and consumable products (such as coating materials, microcrystalline cellulose, explosives, explosion-bonded metal clad, hollow-fiber filtration membranes, ion-exchange membranes, electronic materials, food wrapping film, and plastic films, sheets, and foams).

Electronics business
The Company manufactures, processes, and sells battery separator products (such as lithium-ion battery separator and lead-acid battery separator) and electronic devices (such as mixed-signal LSIs and Hall elements).

Homes segment

Homes business

The Company constructs unit homes and apartment buildings, and operates real estate businesses, remodeling businesses, and financial and other services.

Construction Materials business

The Company manufactures and sells autoclaved aerated concrete (AAC) panels, insulation panels, foundation systems, and structural components.

Health Care segment

Pharmaceuticals business

The Company manufactures and sells pharmaceuticals and diagnostic reagents.

Medical Care business

The Company manufactures and sells artificial kidneys, therapeutic apheresis devices, and virus removal filters.

Critical Care business

The Company manufactures and sells defibrillators and temperature management systems.

Others

The Company performs plant and environmental engineering, research and analysis, employment agency/staffing operations, etc.

(b) Methods to determine net sales, income or loss, assets, and other items by reportable business segment

Profit by reportable business segment is stated on an operating income basis. Intersegment net sales and transfers are based on the values of transactions undertaken between third parties.

(c) Information concerning net sales, income or loss, assets, and other items for each reportable segment

Millions of yen

	2019					
	Material	Homes	Health Care	Subtotal	Others (Note 1)	Total
Sales:						
External customers	¥1,176,217	¥659,754	¥316,166	¥2,152,138	¥18,265	¥2,170,403
Intersegment	5,066	207	34	5,307	31,359	36,666
Total	1,181,283	659,961	316,201	2,157,445	49,624	2,207,069
Operating income (Note 2)	129,565	68,161	41,825	239,551	2,411	241,962
Assets	1,492,277	523,692	472,846	2,488,815	84,873	2,573,688
Other items:						
Depreciation and amortization (Note 3)	50,471	9,069	18,042	77,582	1,375	78,957
Amortization of goodwill	10,700	15	8,774	19,490	—	19,490
Investments in affiliates accounted for using equity method	55,424	11,671	226	67,321	19,424	86,745
Increase in property, plant and equipment, and intangible assets	86,640	17,613	17,306	121,558	1,624	123,182

Notes: 1. The “Others” category includes plant engineering and environmental engineering, research and analysis, and employment agency/staffing operations.

2. As stated in Note 3. (b) “Changes in accounting policy difficult to distinguish from changes in accounting estimates” where Asahi Kasei and its subsidiaries in Japan had previously primarily applied the declining-balance method for depreciation of property, plant and equipment (except for lease assets), this was changed to the straight-line method from the year ended March 31, 2019.

Due to this change, operating income was ¥7,111 million (US$64,063 thousand) higher in Material, ¥1,005 million (US$9,054 thousand) higher in Homes, ¥674 million (US$6,072 thousand) higher in Health Care and ¥937 million (US$8,441 thousand) higher in Others segment.

3. Amortization of goodwill is not included.

Millions of yen

	2018					
	Material	Homes	Health Care	Subtotal	Others (Note 1)	Total
Sales:						
External customers	¥1,087,720	¥640,988	¥296,258	¥2,024,966	¥17,251	¥2,042,216
Intersegment	5,014	39	34	5,086	27,557	32,643
Total	1,092,734	641,026	296,292	2,030,052	44,807	2,074,860
Operating income	121,925	64,357	39,464	225,746	1,870	227,616
Assets	1,332,202	483,342	450,846	2,266,390	78,427	2,344,817
Other items:						
Depreciation and amortization (Note 2)	56,002	9,506	19,340	84,848	1,665	86,513
Amortization of goodwill	8,961	—	8,821	17,782	266	18,048
Investments in affiliates accounted for using equity method	45,020	12,318	450	57,788	17,172	74,961
Increase in property, plant and equipment, and intangible assets	59,814	18,431	12,186	90,431	1,226	91,657

Notes: 1. The “Others” category includes plant engineering and environmental engineering, research and analysis, and employment agency/staffing operations.

2. Amortization of goodwill is not included.

	Thousands of U.S. dollars					
	2019					
	Material	Homes	Health Care	Subtotal	Others (Note 1)	Total
Sales:						
External customers	$10,596,550	$5,943,730	$2,848,342	$19,388,631	$164,550	$19,553,180
Intersegment	45,640	1,865	306	47,811	282,514	330,324
Total	10,642,189	5,945,595	2,848,658	19,436,441	447,063	19,883,505
Operating income (Note 2)	1,167,252	614,063	376,802	2,158,117	21,721	2,179,838
Assets	13,443,937	4,717,946	4,259,874	22,421,757	764,622	23,186,378
Other items:						
Depreciation and amortization (Note 3)	454,694	81,703	162,541	698,937	12,387	711,324
Amortization of goodwill	96,396	135	79,045	175,586	—	175,586
Investments in affiliates accounted for using equity method	499,315	105,144	2,036	606,495	174,991	781,486
Increase in property, plant and equipment, and intangible assets	780,541	158,676	155,910	1,095,117	14,631	1,109,748

Notes: 1. The “Others” category includes plant engineering and environmental engineering, research and analysis, and employment agency/staffing operations.
2. As stated in Note 3. (b) “Changes in accounting policy difficult to distinguish from changes in accounting estimates” where Asahi Kasei and its subsidiaries in Japan had previously primarily applied the declining-balance method for depreciation of property, plant and equipment (except for lease assets), this was changed to the straight-line method from the year ended March 31, 2019.
Due to this change, operating income was ¥7,111 million (US$64,063 thousand) higher in Material, ¥1,005 million (US$9,054 thousand) higher in Homes, ¥674 million (US$6,072 thousand) higher in Health Care and ¥937 million (US$8,441 thousand) higher in Others segment.
3. Amortization of goodwill is not included.

(d) Reconciliation of differences between total amounts of reportable segments and amounts appearing in the consolidated financial statements (adjustment of difference)

	Millions of yen		Thousands of U.S. dollars
Sales	2019	2018	2019
Total of reporting segments	¥2,157,445	¥2,030,052	$19,436,441
Net sales in “Others” category	49,624	44,807	447,063
Elimination of intersegment transactions	(36,666)	(32,643)	(330,324)
Net sales on consolidated statements of income	¥2,170,403	¥2,042,216	$19,553,180

	Millions of yen		Thousands of U.S. dollars
Operating income	2019	2018	2019
Total of reporting segments	¥239,551	¥225,746	$2,158,117
Operating income in “Others” category	2,411	1,870	21,721
Elimination of intersegment transactions	(133)	381	(1,198)
Corporate expenses, etc.*	(32,241)	(29,522)	(290,459)
Operating income on consolidated statements of income	¥209,587	¥198,475	$1,888,171

* Corporate expenses, etc. include corporate revenue, basic research expense, and group management expense, etc. which are not allocated to reporting segments.

	Millions of yen		Thousands of U.S. dollars
Assets	2019	2018	2019
Total of reporting segments	¥2,488,815	¥2,266,390	$22,421,757
Assets in “Others” category	84,873	78,427	764,622
Elimination of intersegment transactions	(425,141)	(512,163)	(3,830,099)
Corporate assets*	426,656	474,499	3,843,748
Total assets on consolidated balance sheets	¥2,575,203	¥2,307,154	$23,200,027

* Corporate assets include assets of the parent company—surplus operating funds (cash and deposits), long-term investment capital (investment securities, etc.), and land, etc.

	Total of reportable segments			Others			Adjustments (Note 1)			Amounts from consolidated financial statements		
	Millions of yen		Thousands of U.S. dollars	Millions of yen		Thousands of U.S. dollars	Millions of yen		Thousands of U.S. dollars	Millions of yen		Thousands of U.S. dollars
Other items	2019	2018	2019	2019	2018	2019	2019	2018	2019	2019	2018	2019
Depreciation and amortization (Note 2)	¥ 77,582	¥84,848	$ 698,937	¥ 1,375	¥ 1,665	$ 12,387	¥ 5,599	¥8,901	$ 50,441	¥ 84,556	¥ 95,415	$ 761,766
Amortization of goodwill	19,490	17,782	175,586	–	266	–	–	–	–	19,490	18,048	175,586
Investments in affiliates accounted for using equity method	67,321	57,788	606,495	19,424	17,172	174,991	–	–	–	86,745	74,961	781,486
Increase in property, plant and equipment, and intangible assets	121,558	90,431	1,095,117	1,624	1,226	14,631	13,024	9,673	117,333	136,206	101,331	1,227,081

Notes: 1. Adjustments include elimination of intersegment transactions and corporate expenses, etc.
2. Amortization of goodwill is not included.

(e) Related Information

i) Information on products and services

Please refer to (c) Information concerning net sales, income or loss, assets, and other items for each reportable segment.

ii) Geographic information

1) Net sales

Millions of yen										Thousands of U.S. dollars				
2019					2018					2019				
Japan	United States	China	Other regions	Total	Japan	United States	China	Other regions	Total	Japan	United States	China	Other regions	Total
¥1,311,136	¥227,993	¥211,504	¥419,770	¥2,170,403	¥1,274,548	¥191,765	¥183,425	¥392,477	¥2,042,216	$11,812,036	$2,053,991	$1,905,441	$3,781,712	$19,553,180

2) Property, plant and equipment

Millions of yen								Thousands of U.S. dollars			
2019				2018				2019			
Japan	United States	Other regions	Total	Japan	United States	Other regions	Total	Japan	United States	Other regions	Total
¥428,900	¥104,413	¥88,053	¥621,366	¥384,076	¥85,003	¥92,969	¥562,048	$3,863,964	$940,658	$793,270	$5,597,892

3) Information by major customer

Information by major customer is not shown because no customer accounts for 10% or more of net sales on the consolidated statements of income.

17. Information on related parties

For the year ended March 31, 2019: None
For the year ended March 31, 2018: None

18. Per share information

Basic and diluted net assets per share and net income per share for the years ended March 31, 2019 and 2018, were as follows:

	Yen		U.S. dollars
	2019	2018	2019
Basic net assets per share	¥989.51	¥922.11	$8.91
Basic net income per share	105.66	121.93	0.95

Note: As the Company had no dilutive securities at March 31, 2019 and 2018, the Company does not disclose diluted net income per share for the years ended March 31, 2019 and 2018.

(a) Basis for calculation of net assets per share

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Total net assets	¥1,402,710	¥1,305,214	$12,637,027
Amount deducted from total net assets	21,225	17,827	191,216
of which, non-controlling interests	*(21,225)*	*(17,827)*	*(191,216)*
Net assets allocated to capital stock	¥1,381,485	¥1,287,387	$12,445,811
Number of shares of capital stock outstanding at fiscal year end used in calculation of net assets per share (thousand)	1,396,125	1,396,125	1,396,125

Note: Shares held by the trust for granting shares to Directors, etc., numbering 442 thousand at March 31, 2019, and 464 thousand at March 31, 2018, are excluded from the number of shares of capital stock outstanding at fiscal year end used in calculation of net assets per share.

(b) Basis for calculation of net income per share

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Net income attributable to owners of the parent	¥ 147,512	¥ 170,248	$1,328,937
Amount not attributable to common stock shareholders	—	—	—
Net income attributable to common stock owners of the parent	¥ 147,512	¥ 170,248	$1,328,937
Weighted-average number of shares of capital stock (thousand)	1,396,130	1,396,322	1,396,130

Note: Shares held by the trust for granting shares to Directors, etc., numbering 450 thousand during the year ended March 31, 2019, and 290 thousand during the year ended March 31, 2018, are excluded from the weighted-average number of shares of capital stock used in calculation of net income per share.

19. Subsequent events

(a) Repurchase of shares

On May 10, 2019, the Board of Directors of Asahi Kasei adopted a resolution for a repurchase of the company's shares pursuant to Article 459, Paragraph 1, of the Companies Act of Japan as well as Article 37 of the company's Articles of Incorporation.

i) Reason for repurchasing shares

To enhance shareholder returns and improve capital efficiency

ii) Details of the repurchase

1) Type of shares to be repurchased:
Common stock of Asahi Kasei Corporation

2) Number of shares to be repurchased: 12 million shares (maximum) (0.86% of the number of issued shares excluding treasury stock)

3) Total value of shares to be repurchased: ¥10.0 billion (maximum)

4) Repurchase period: From May 30, 2019 to September 30, 2019

5) Methods of repurchase:
- Purchase through the Tokyo Stock Exchange Trading Network System ToSTNeT-3
- Purchase on the Tokyo Stock Exchange based on discretionary trading contracts

6) Other: In accordance with the above resolution of the Board of Directors, Asahi Kasei implemented and completed the repurchase of 8,684,300 shares of common stock for ¥10.0 billion on May 31, 2019.

(b) Cancellation of shares of treasury stock

On May 10, 2019, the Board of Directors of Asahi Kasei adopted a resolution for the cancellation of shares of treasury stock pursuant to Article 178 of the Companies Act, to be implemented as follows. On October 11, 2019, the company implemented and completed the cancellation in accordance with the resolution.

i) Reason for cancellation

To enhance shareholder returns and improve capital efficiency

ii) Details of the cancellation

1) Type of shares to be cancelled:
Common stock of Asahi Kasei Corporation

2) Number of shares to be canceled:
8,684,300 shares (0.62% of issued shares prior to cancellation)

3) Date of cancellation:
October 11, 2019

(c) Acquisition of Cardiac Science Corporation

i) Outline of business combination

1) Name and nature of businesses of counterparty
Name of counterparty: Cardiac Science Corporation
Nature of businesses: Manufacturing, sale, and development of automated external defibrillators (AEDs)

2) Main reasons for the acquisition
This acquisition would allow ZOLL Medical Corporation to broaden its lineup of AED products offering customers more choices and a stronger AED program management infrastructure.

3) The acquisition date
August 26, 2019

4) Statutory form of business combination
Stock purchase for cash as consideration

5) Name of company after transaction
Cardiac Science Corporation

6) Acquired voting right
Voting right before the acquisition: 0%
Voting right after the acquisition: 100%

7) Basic means of materializing the acquisition
Stock purchase for cash as consideration by a consolidated subsidiary

ii) Cost of acquisition and details

	Millions of yen	Thousands of U.S. dollars
Stock purchase price	¥29,063	$261,829
Purchase price	¥29,063	$261,829

iii) Amount of goodwill, measurement principle, amortization method, and useful life

1) Amount of goodwill
¥17,366 million (US$156,450 thousand)*
* Based on provisional calculation

2) Measurement principle
Goodwill is measured as the excess of the purchase price over the fair value of identifiable assets acquired and liabilities assumed.

3) Amortization method and useful life
Not determined at present

(d) Issuance of unsecured straight bonds

i) On August 30, 2019, Asahi Kasei determined the terms of the eleventh series unsecured straight bonds (with inter-bond *pari passu* clause) as follows.

1. Total amount of issue: ¥20 billion
2. Interest rate: 0.070% per annum
3. Issue price: ¥100 per face value of ¥100
4. Redemption price: ¥100 per face value of ¥100
5. Maturity date: September 6, 2024
6. Redemption: Bullet
7. Retirement by purchase: The bonds may be repurchased at any time from the day following the payment date except as otherwise specified by the book-entry transfer institution.
8. Interest payment dates: March 6 and September 6 of each year
9. Offering period: August 30, 2019
10. Payment date: September 6, 2019
11. Collateral and guarantee: The bonds are not secured by any collateral or guarantee, and there are no particular assets reserved for the payment of these bonds.
12. Fiscal covenants: Negative pledge clause is attached.

ii) On August 30, 2019, Asahi Kasei determined the terms of the twelfth series unsecured straight bonds (with inter-bond *pari passu* clause) as follows.

1. Total amount of issue: ¥20 billion
2. Interest rate: 0.210% per annum
3. Issue price: ¥100 per face value of ¥100
4. Redemption price: ¥100 per face value of ¥100
5. Maturity date: September 6, 2029
6. Redemption: Bullet
7. Retirement by purchase: The bonds may be repurchased at any time from the day following the payment date except as otherwise specified by the book-entry transfer institution.
8. Interest payment dates: March 6 and September 6 of each year
9. Offering period: August 30, 2019
10. Payment date: September 6, 2019
11. Collateral and guarantee: The bonds are not secured by any collateral or guarantee, and there are no particular assets reserved for the payment of these bonds.
12. Fiscal covenants: Negative pledge clause is attached.

20. Borrowings

(a) Bonds payable at March 31, 2019 and 2018, comprised the following:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Unsecured 1.46% yen bonds due in 2019	¥20,000	¥20,000	$180,180
Unsecured 0.10% yen bonds due in 2023	20,000	—	180,180
Total	¥40,000	¥20,000	$360,360

Notes: 1. The current portion of bonds payable is recorded under current liabilities on the consolidated balance sheets.
2. The aggregate annual maturities of long-term debt after March 31, 2019, are as follows:

Year ending March 31	Millions of yen	Thousands of U.S. dollars
2020	¥20,000	$180,180
2021	—	—
2022	—	—
2023	—	—
2024	20,000	180,180
2025 and thereafter	—	—
Total	¥40,000	$360,360

(b) Loans payable at March 31, 2019 and 2018, comprised the following:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Short-term loans payable with an interest rate of 0.32%	¥ 75,484	¥ 58,898	$ 680,036
Current portion of long-term loans payable with an interest rate of 2.06%	22,095	59,120	199,054
Current portion of lease obligations with an interest rate of 1.36%	164	199	1,477
Long-term loans payable (except portion due within one year) with an interest rate of 1.41%	209,878	143,176	1,890,793
Lease obligations (except portion due within one year) with an interest rate of 0.98%	253	352	2,279
Commercial paper (portion due within one year) with an interest rate of (0.00)%	77,000	20,000	693,694
Total	¥384,874	¥281,746	$3,467,333

Notes: 1. Interest rates shown are weighted average interest rates for the balance outstanding at March 31, 2019.
2. The aggregate annual maturities of long-term loans payable and lease obligations (except portion due within one year) after March 31, 2019, are as follows:

	Long-term loans payable		Lease obligations	
Year ending March 31	Millions of yen	Thousands of U.S. dollars	Millions of yen	Thousands of U.S. dollars
2021	¥24,951	$224,784	¥141	$1,270
2022	55,334	498,505	71	640
2023	70,668	636,649	30	270
2024	25,785	232,297	10	90
2025 and thereafter	33,140	298,559	—	—

21. Supplementary schedule of asset retirement obligations

Because the amounts of asset retirement obligations on April 1, 2018, and March 31, 2019, were not more than 1% of the combined totals of liabilities and net assets on the respective dates, preparation of a supplementary schedule of asset retirement obligations is omitted in accordance with Article 92-2 of the Ordinance on Terminology, Forms, and Preparation Methods of Consolidated Financial Statements.

22. Others

Litigation

Litigation related to pile installation

On November 28, 2017, Mitsui Fudosan Residential Co., Ltd. filed suit (hereinafter “First Lawsuit”) in the Tokyo District Court against the three companies of Sumitomo Mitsui Construction Co., Ltd., Hitachi High-Technologies Corporation, and Asahi Kasei Construction Materials Corporation, a subsidiary of the Company, seeking compensation for damages of approximately ¥45.9 billion (subsequently changed to approximately ¥51.0 billion) related to the cost of rebuilding a condominium complex in Yokohama City due to concerns of unsound installation of a portion of foundation piles; Sumitomo Mitsui Construction being the prime contractor for construction of said condominium complex, Hitachi High-Technologies the primary subcontractor for pile installation, and Asahi Kasei Construction Materials the secondary subcontractor for pile installation. Asahi Kasei Construction Materials holds that there is no basis for Mitsui Fudosan Residential’s claim, and will make this argument during the proceedings of the First Lawsuit.

Related to the First Lawsuit, on April 27, 2018, Sumitomo Mitsui Construction filed suit (hereinafter “Second Lawsuit”) against Hitachi High-Technologies and Asahi Kasei Construction Materials seeking compensation for any damages it may incur in the First Lawsuit. Regarding this Second Lawsuit, the date of service of complaint to Asahi Kasei Construction Materials was May 14, 2018. Asahi Kasei Construction Materials holds that there is no basis for Sumitomo Mitsui Construction’s claim, and will make this argument during the proceedings of the Second Lawsuit.

Related to the First Lawsuit and Second Lawsuit, on May 25, 2018, Hitachi High-Technologies filed suit (hereinafter “Third Lawsuit”) against Asahi Kasei Construction Materials seeking compensation for any damages it may incur in the First Lawsuit or Second Lawsuit. Asahi Kasei Construction Materials holds that there is no basis for Hitachi High-Technologies’s claim, and will make this argument during the proceedings of the Third Lawsuit.

pwc

Independent Auditor's Report

To the Board of Directors of Asahi Kasei Corporation

We have audited the accompanying consolidated financial statements of Asahi Kasei Corporation ("the Company") and its consolidated subsidiaries, which comprise the consolidatedbalance sheet as at March 31, 2019, and the consolidated statement of income, consolidated statement of comprehensive income, consolidated statement of changes in net assets and consolidated statement of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in Japan, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in Japan. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, while the purpose of the financial statement audit is not to express an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company and its consolidated subsidiaries as at March 31, 2019, and their financial performance and cash flows for the year then ended in accordance with accounting principles generally accepted in Japan.

Convenience translation

The U.S. dollar amounts in the accompanying consolidated financial statements with respect to the year ended March 31, 2019 are presented solely for convenience. Our audit also included the translation of Japanese yen amounts into U.S. dollar amounts and, in our opinion, such translation has been made on the basis described in Note 1 to the consolidated financial statements.

PricewaterhouseCoopers Aarata LLC

November 13, 2019

PricewaterhouseCoopers Aarata LLC
Otemachi Park Building, 1-1-1 Otemachi, Chiyoda-ku, Tokyo 100-0004, Japan
T: +81 (3) 6212 6800, F: +81 (3) 6212 6801, www.pwc.com/jp/assurance

Company Information/Investors Information

(as of March 31, 2019)

Corporate Profile

Company Name	Asahi Kasei Corporation
Date of Establishment	May 21, 1931
Paid-in Capital	¥103,389 million
Employees	39,283 (consolidated)
	7,864 (non-consolidated)

Asahi Kasei IR Website

Asahi Kasei's financial results and other materials for investors are available in our IR website.
www.asahi-kasei.co.jp/asahi/en/ir

Asahi Kasei Group Offices (as of March 31, 2019)

Asahi Kasei Corporation

Tokyo Head Office

Hibiya Mitsui Tower
1-1-2 Yurakucho, Chiyoda-ku, Tokyo 100-0006 Japan
Phone: +81-(0)3-6699-3000 Fax: +81-(0)3-6699-3161

Asahi Kasei (China) Co., Ltd.

8/F, One ICC, Shanghai International Commerce Centre
No. 999 Huai Hai Zhong Road, Shanghai 200031 China
Phone: +86-21-6391-6111 Fax: +86-21-6391-6686

Beijing Office

Room 1407 New China Insurance Tower
No. 12 Jian Guo Men Wai Avenue
Chao Yang District, Beijing 100022 China
Phone: +86-10-6569-3939 Fax: +86-10-6569-3938

Asahi Kasei America, Inc.

800 Third Avenue, 30th Floor, New York, NY 10022 USA
Phone: +1-212-371-9900 Fax: +1-212-371-9050

Asahi Kasei Europe GmbH

Am Seestern 4, 40547 Düsseldorf, Germany
Phone: +49-211-8822-030 Fax: +49-211-8822-0333

Asahi Kasei India Pvt. Ltd.

The Capital 1502B, Plot C-70, G-Block,
Bandra Kurla Complex, Bandra (East), Mumbai 400051 India
Phone: +91-22-6710-3962

Core Operating Companies

Asahi Kasei Microdevices

Hibiya Mitsui Tower
1-1-2 Yurakucho, Chiyoda-ku, Tokyo 100-0006 Japan
Phone: +81-(0)3-6699-3933

Asahi Kasei Homes

1-105 Kanda Jinbocho, Chiyoda-ku, Tokyo 101-8101 Japan
Phone: +81-(0)3-6899-3000

Asahi Kasei Construction Materials

1-105 Kanda Jinbocho, Chiyoda-ku, Tokyo 101-8101 Japan
Phone: +81-(0)3-3296-3500

Asahi Kasei Pharma

Hibiya Mitsui Tower
1-1-2 Yurakucho, Chiyoda-ku, Tokyo 100-0006 Japan
Phone: +81-(0)3-6699-3600

Asahi Kasei Medical

Hibiya Mitsui Tower
1-1-2 Yurakucho, Chiyoda-ku, Tokyo 100-0006 Japan
Phone: +81-(0)3-6699-3750

ZOLL Medical Corporation

269 Mill Rd., Chelmsford, MA 01824-4105 USA
Phone: +1-978-421-9655

Investors Information

Stock Listing	Tokyo
Stock Code	3407
Authorized Shares	4,000,000,000
Outstanding Shares	1,402,616,332
Transfer Agent	Sumitomo Mitsui Trust Bank, Ltd.
Independent Auditors	PricewaterhouseCoopers Aarata LLC
Number of Shareholders	88,768

Largest Shareholders	% of equity*
JP Morgan Chase Bank 380055	10.32
The Master Trust Bank of Japan, Ltd. (trust account)	6.88
Japan Trustee Services Bank, Ltd. (trust account)	4.81
Nippon Life Insurance Company	4.18
Sumitomo Mitsui Banking Corp.	2.54
Asahi Kasei Group Employee Stockholding Assn.	2.32
SSBTC Client Omnibus Account	2.07
Japan Trustee Services Bank, Ltd. (trust account 5)	1.96
Japan Trustee Services Bank, Ltd. (trust account 7)	1.62
State Street Bank West Client – Treaty 505234	1.50

* Percentage of equity ownership after exclusion of treasury stock.

ASAHI KASEI CORPORATION

Hibiya Mitsui Tower
1-1-2 Yurakucho, Chiyoda-ku, Tokyo 100-0006 Japan
www.asahi-kasei.co.jp/asahi/en/

Corporate Communications
Tel: +81-(0)3-6699-3008, Fax: +81-(0)3-6699-3187

FSC
www.fsc.org
MIX
Paper from responsible sources
FSC® C133146

VEGETABLE OIL INK

Printed in Japan
2019.11