



Medium-term management initiative  
**Cs+ for Tomorrow 2021**

May 29, 2019  
Asahi Kasei Corporation  
**AsahiKASEI**

# Outline

1. Review of “Cs for Tomorrow 2018” and business environment
2. Vision and goals
3. Medium-term management initiative “Cs+ for Tomorrow 2021”

Disclaimer

The forecasts and estimates shown in this document are dependent on a variety of assumptions and economic conditions. Plans and figures depicting the future to not imply a guarantee of actual outcomes.

# 1. Review of “Cs for Tomorrow 2018” and business environment

## (1) Financial results

Profit growth achieved during previous initiative, with operating income at **new record high** exceeding the target

← Cs for Tomorrow 2018 →

		FY2015	FY2016	FY2017	FY2018	15–18 annual growth	FY2018 target announced Apr. 2016
	(¥ billion, unless otherwise specified)						
	<b>Net sales</b>	1,940.9	1,883.0	2,042.2	<b>2,170.4</b>		2,200.0
<b>Profitability</b>	<b>Operating income</b>	165.2	159.2	198.5	<b>209.6</b>	8.3%	180.0
	<b>Operating margin</b>	8.5%	8.5%	9.7%	<b>9.7%</b>		8.2%
	<b>EBITDA<sup>1</sup></b>	274.8	268.4	311.9	<b>313.7</b>	4.5%	300.0
	<b>EBITDA margin</b>	14.2%	14.3%	15.3%	<b>14.5%</b>		13.6%
	<b>Net income</b>	91.8	115.0	170.2	<b>147.5</b>		110.0
	<b>EPS (¥)</b>	66	82	122	<b>106</b>	17.2%	78
<b>Capital efficiency</b>	<b>ROIC<sup>2</sup></b>	7.9%	7.8%	9.7%	<b>8.8%</b>		7.0%
	<b>Net income per shareholders' equity (ROE)</b>	8.6%	10.5%	14.0%	<b>11.1%</b>		9.0%
<b>Shareholder returns</b>	<b>Dividends per share (¥)</b>	20	24	34	<b>34</b>		
	<b>Total return ratio</b>	30.4%	29.1%	27.9%	<b>39.0%</b>		35.0%
<b>Financial health</b>	<b>D/E ratio</b>	0.43	0.35	0.23	<b>0.31</b>		0.50
	Exchange rate (¥/\$)	120	108	111	111		110

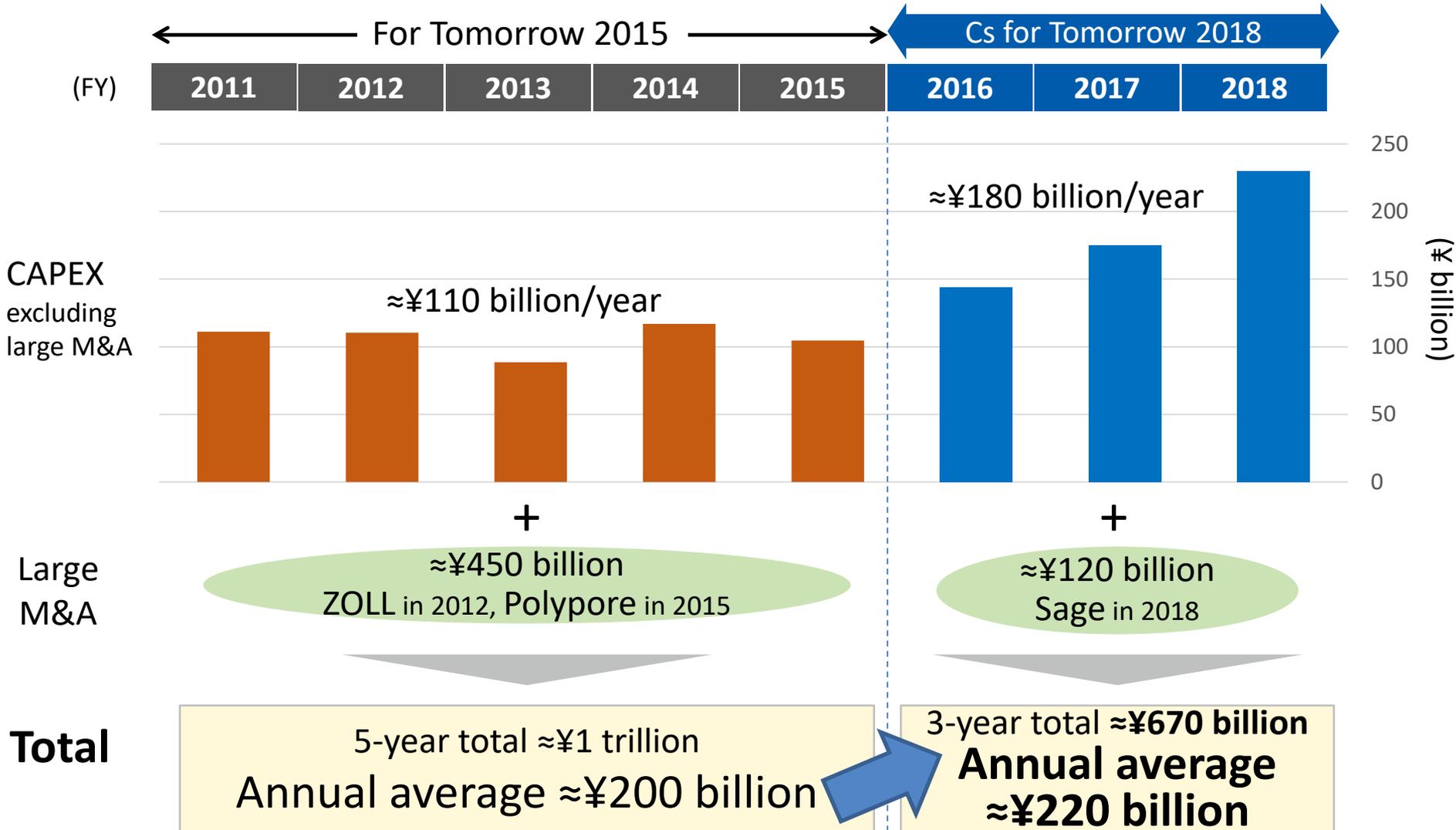
<sup>1</sup> Operating income, depreciation, and amortization (tangible, intangible, and goodwill)

<sup>2</sup> (Operating income – income taxes) / average annual invested capital

1. Review of “Cs for Tomorrow 2018” and business environment

(2)-1 Capital expenditure

Continuous proactive investment including M&A, accelerating growth

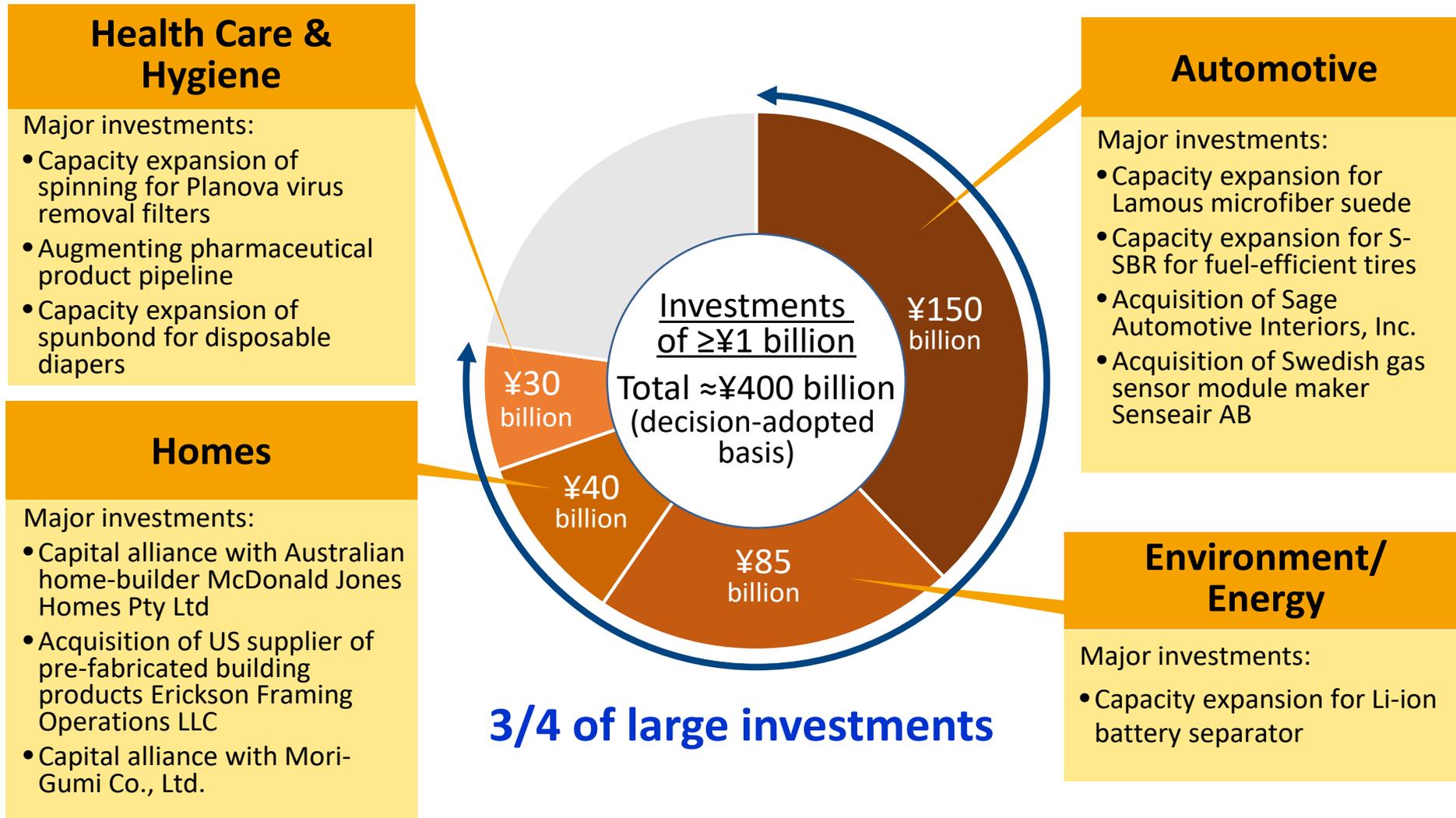


Note: Figures on decision-adopted basis

## 1. Review of “Cs for Tomorrow 2018” and business environment

## (2)-2 Capital expenditure: target markets

Investments centered on key fields such as Automotive and Environment/Energy



Note: Figures by field are approximate

### (3) Business Environment

## Expectations for sustainability; changing industrial structure



Greenhouse gas



Marine plastic



100-year life



Diversity



Explosive population growth



Industry 4.0



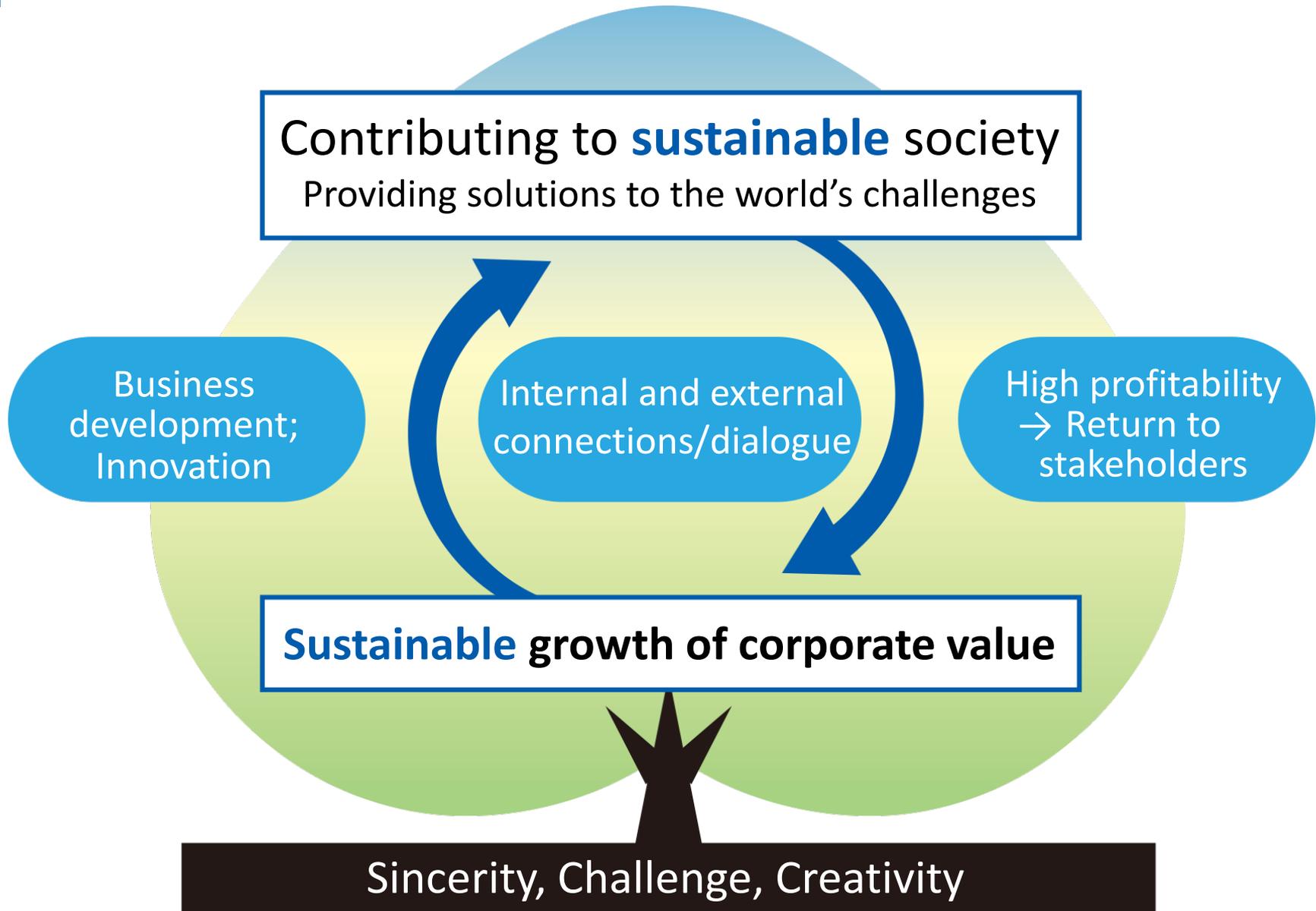
Mobility-as-a-Service



Changing trade environment

## 2. Vision and goals

# (1) Sustainability for Asahi Kasei



2. Vision and goals

(2) Portfolio transformation

**Vision of founder  
Shitagau Noguchi**

“As industrialists, we must be cognizant that, to improve the living standard, our ultimate mission is to contribute to people by supplying abundant highest-quality daily necessities at the lowest prices.”

—1933



**Contributing to  
sustainable society**

**Grasping social needs,  
dynamic portfolio transformation,  
developing business that makes life better**

*Social need:*

Higher standard of living  
in developing countries



Acceleration  
of globalization

*Social need:*

Comfort and  
convenience



Const. mat./homes  
Healthcare  
Electronic devices/materials

*Social need:*

Abundance  
of goods



Petrochemicals/synthetic fibers

*Social need:*

Establishment of  
livelihood base



Chemical fertilizer/regenerated fiber/explosives

**Diversity  
&  
Capability  
to  
change**

1920s

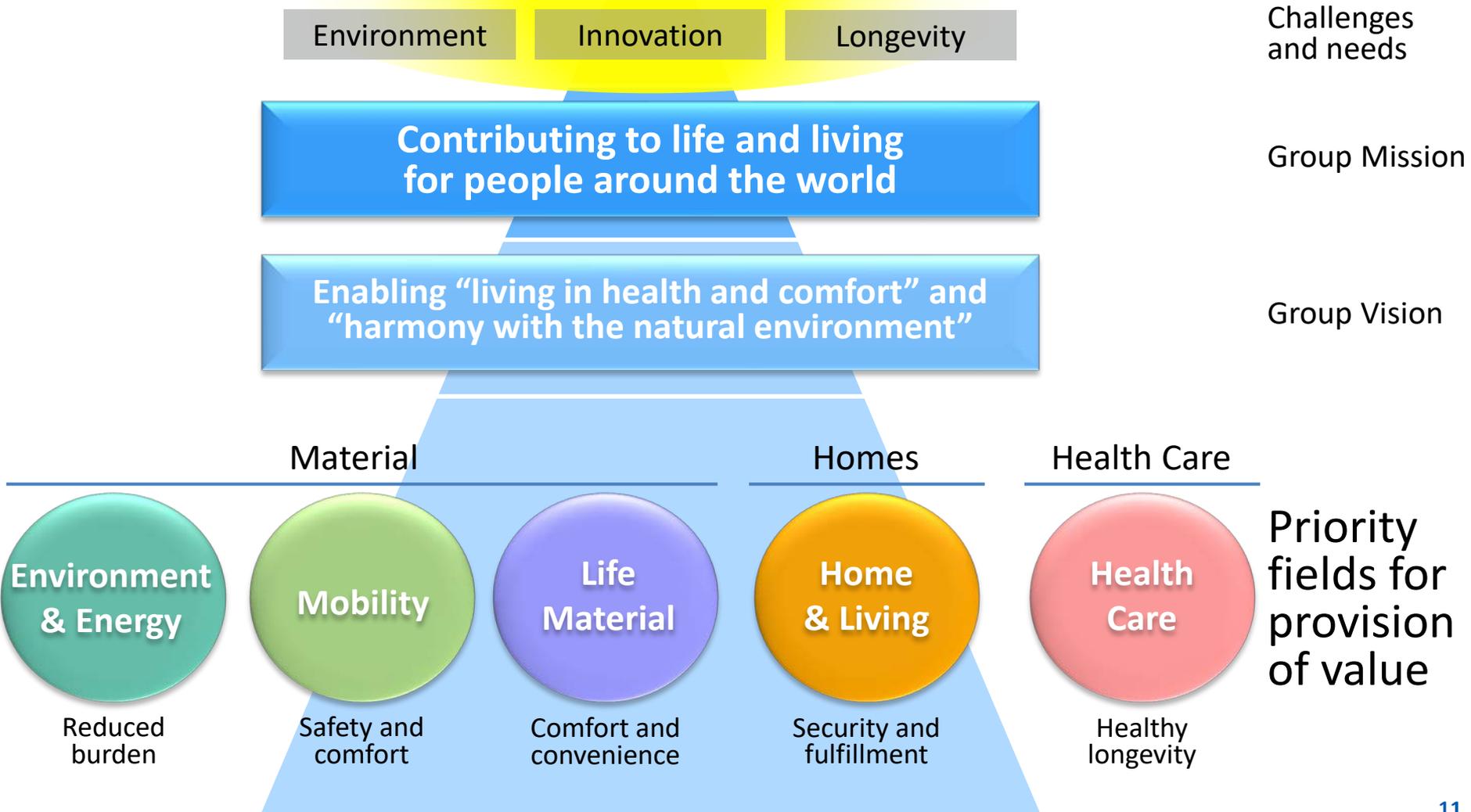
1950s

1970s

2000s

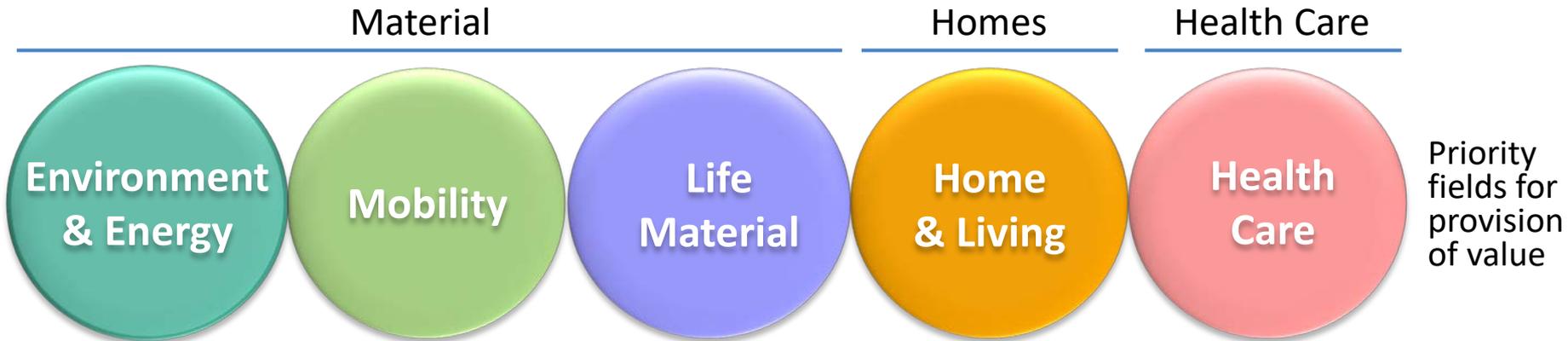
### (3) Priority fields for provision of value

# Contributing to sustainable society



2. Vision and goals

(4) How we create value

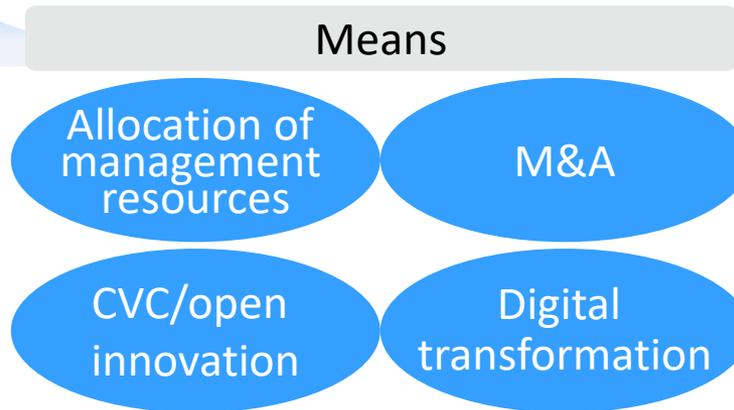
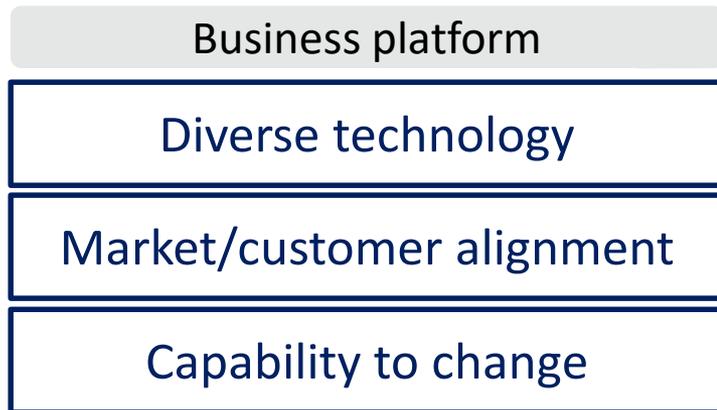


**Portfolio of high-profitability and high value-added businesses**

Global No. 1 — One-of-a-kind — High earnings

**Business portfolio transformation**

**New business creation**



## 2. Vision and goals

## (5) Approach to realize sustainable society

## Reducing greenhouse gas (GHG) emissions

- Expanding businesses that help reduce GHG emissions
- Reduced emissions from our own production processes



## Solutions to plastic issues

- Reduce, Reuse, Recycle
- Elucidating the mechanism of microplastic formation
- Sharing issues



Proactive measures, not only alone but also in concert with other companies and associations

### 3. Medium-term management initiative “Cs+ for Tomorrow 2021”

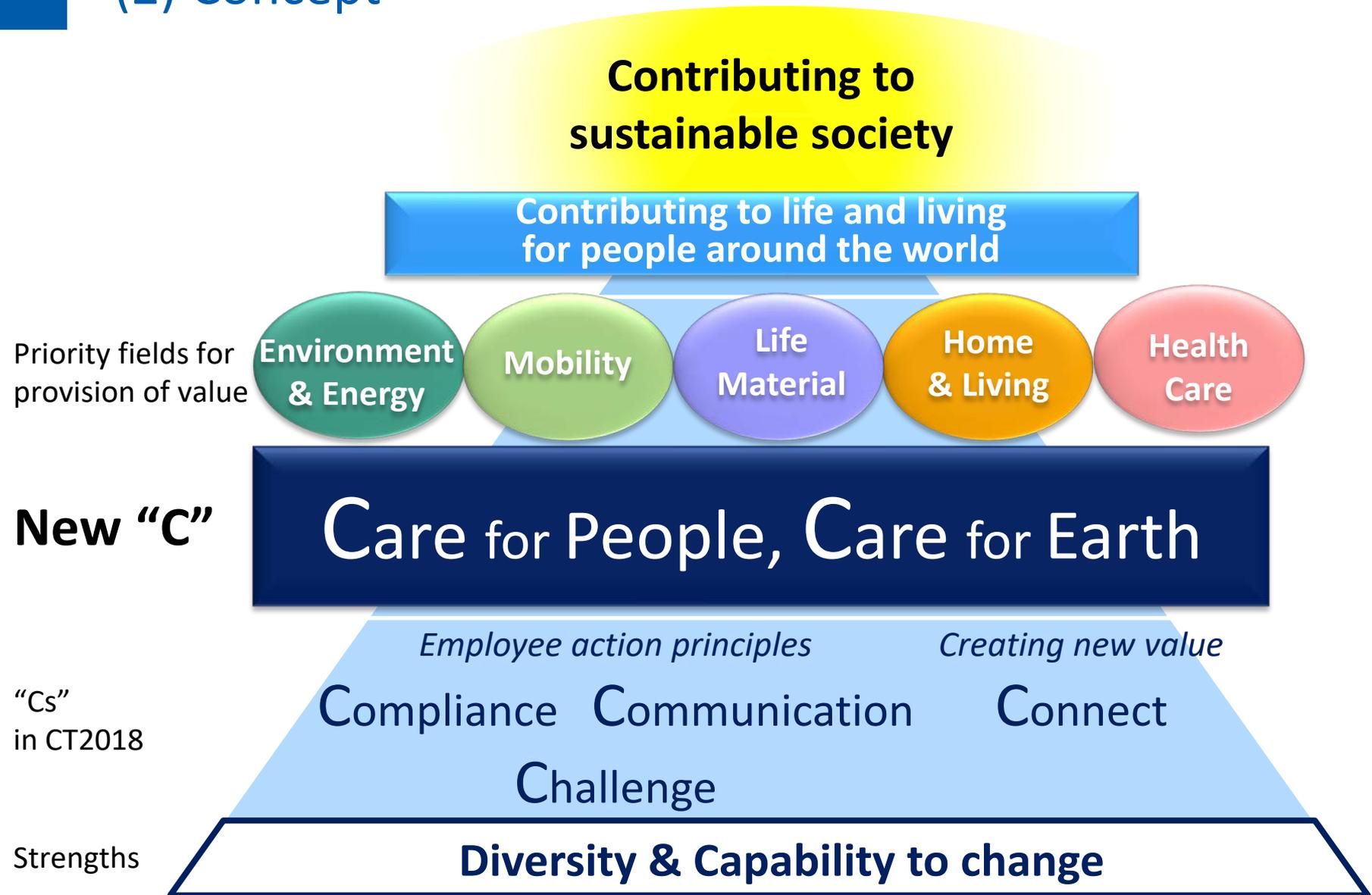
(1) Stance for “Cs+ for Tomorrow 2021”

**Care for People**

**Care for Earth**



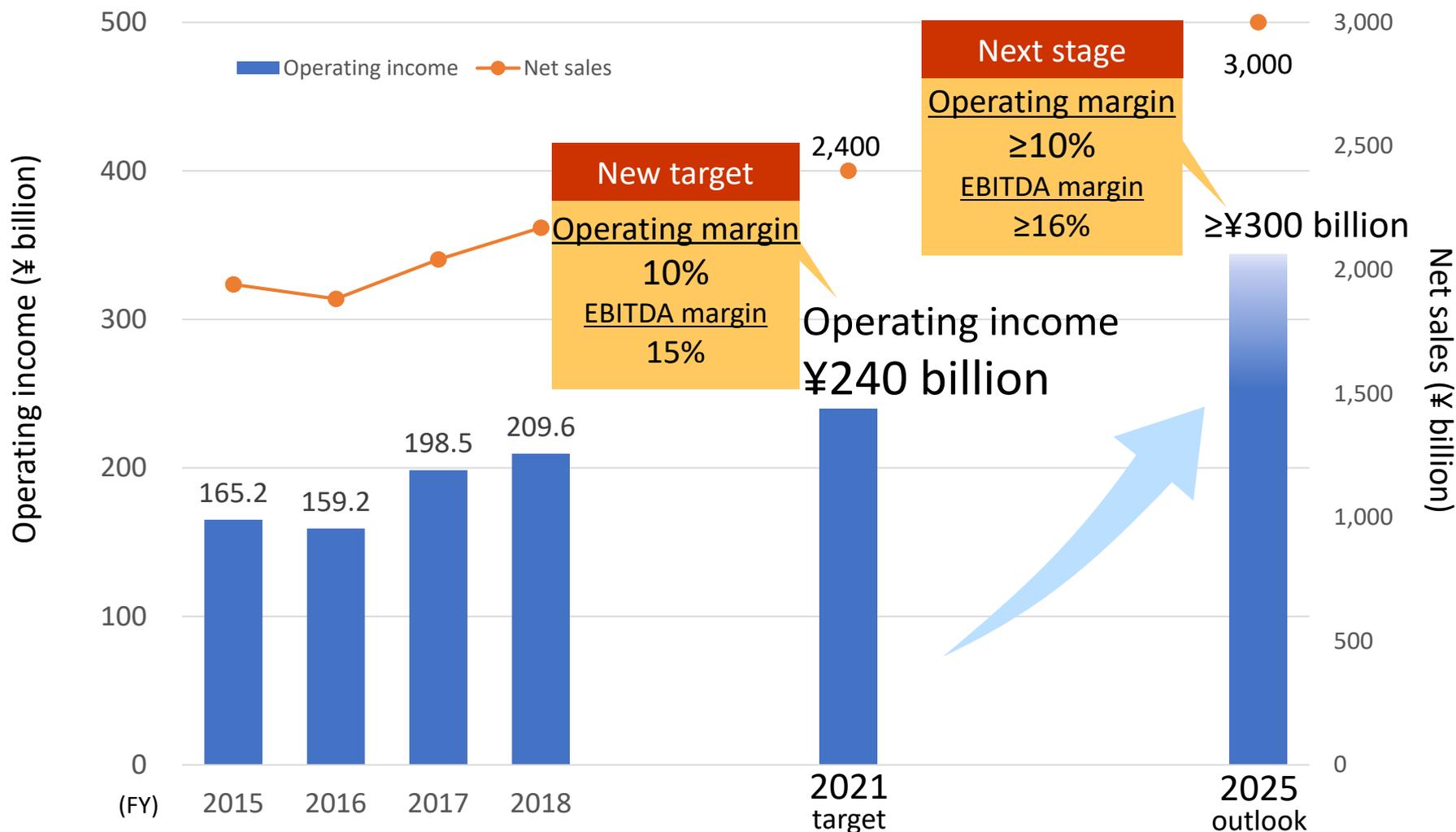
## (2) Concept



### (3) 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/€

### 3. Medium-term management initiative “Cs+ for Tomorrow 2021”

## (3) Financial objectives: performance metrics



	FY2015	FY2018	FY2021 target	18–21 annual growth	FY2025 outlook
(¥ billion, unless otherwise specified)					
<b>Net sales</b>	1,940.9	2,170.4	<b>2,400.0</b>		<b>3,000.0</b>
<b>Operating income</b>	165.2	209.6	<b>240.0</b>	<b>4.6%</b>	<b>≥300.0</b>
<b>Operating margin</b>	8.5%	9.7%	<b>10.0%</b>		<b>≥10.0%</b>
<b>EBITDA<sup>1</sup></b>	274.8	313.7	<b>370.0</b>	<b>5.7%</b>	<b>≥480.0</b>
<b>EBITDA margin</b>	14.2%	14.5%	<b>15.4%</b>		<b>≥16.0%</b>
<b>Net income</b>	91.8	147.5	<b>180.0</b>		
<b>EPS (¥)</b>	66	106	<b>130</b>	<b>7.2%</b>	
<b>ROIC<sup>2</sup></b>	7.9%	8.8%	<b>9.0%</b>		Aiming for FY2021 level or above
<b>Net income per shareholders' equity (ROE)</b>	8.6%	11.1%	<b>11.1%</b>		
<b>D/E ratio</b>	0.43	0.31	<b>≈0.5</b>		
Exchange rate (¥/\$)	120	111	110		

#### Profitability

#### Capital efficiency

#### Financial health

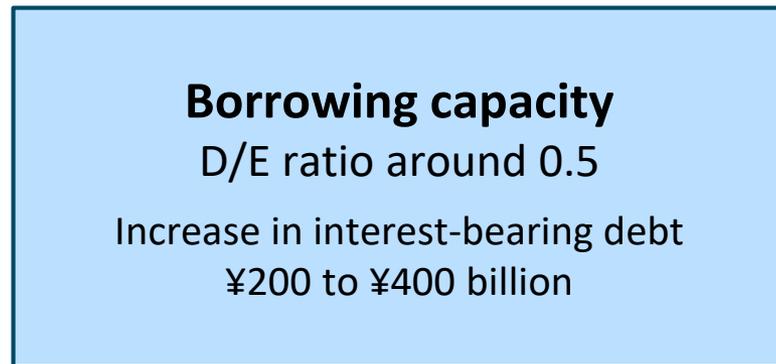
<sup>1</sup> Operating income, depreciation, and amortization (tangible, intangible, and goodwill)

<sup>2</sup> (Operating income – income taxes) / average annual invested capital

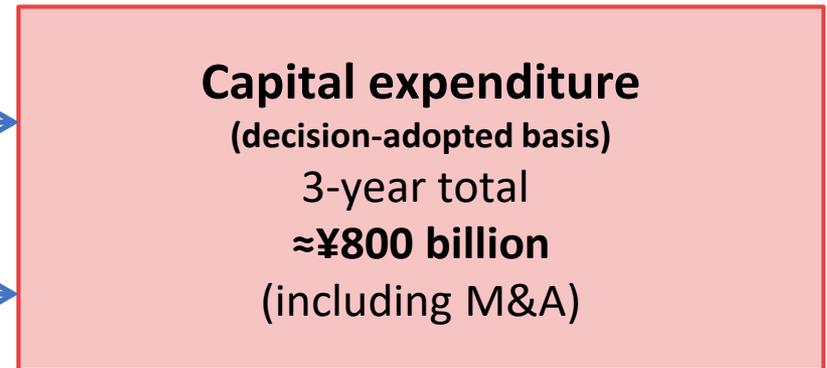
## (3) Financial objectives: Capital allocation

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

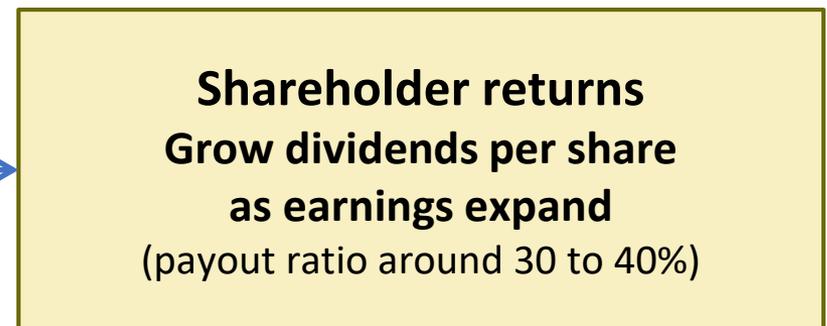
Financing for growth  
(while maintaining financial discipline)



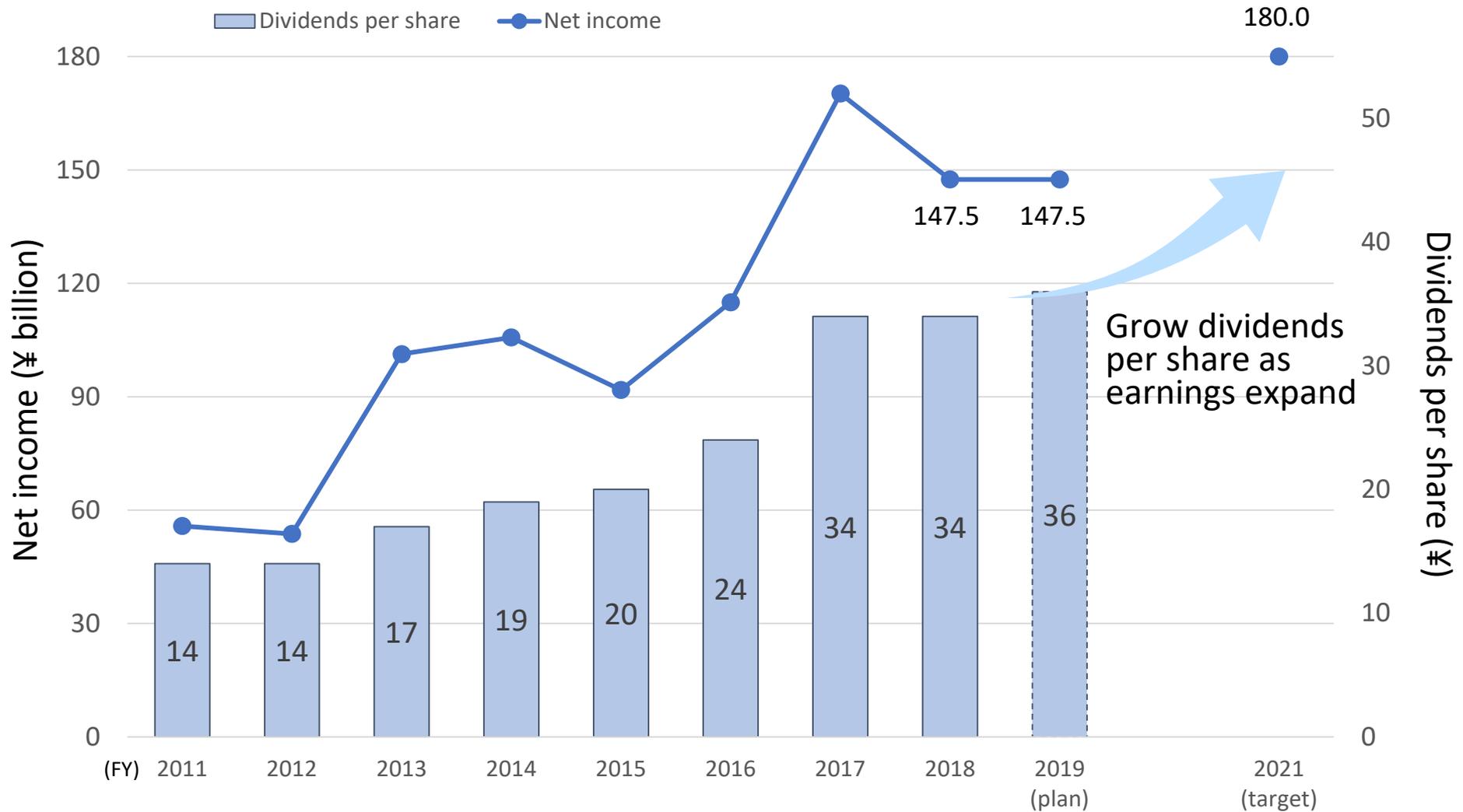
Pursuing returns above cost of capital



Share buybacks performed flexibly  
according to circumstances

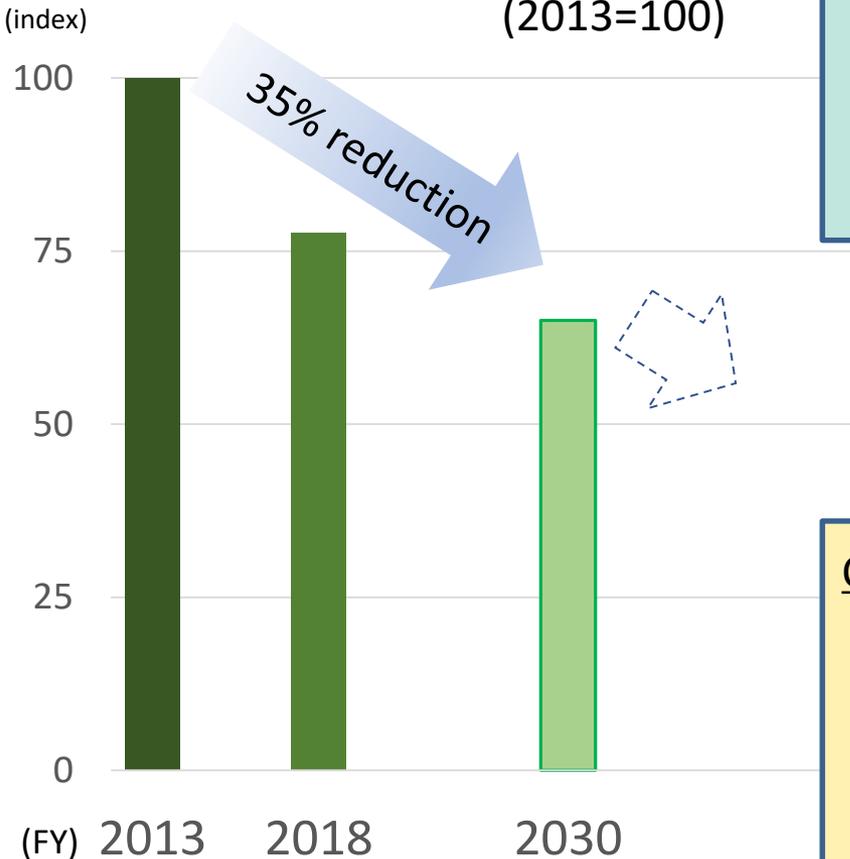


### (3) Financial objectives: dividend policy



## (3) Objectives for sustainability

GHG emissions/net sales  
(2013=100)



### 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**

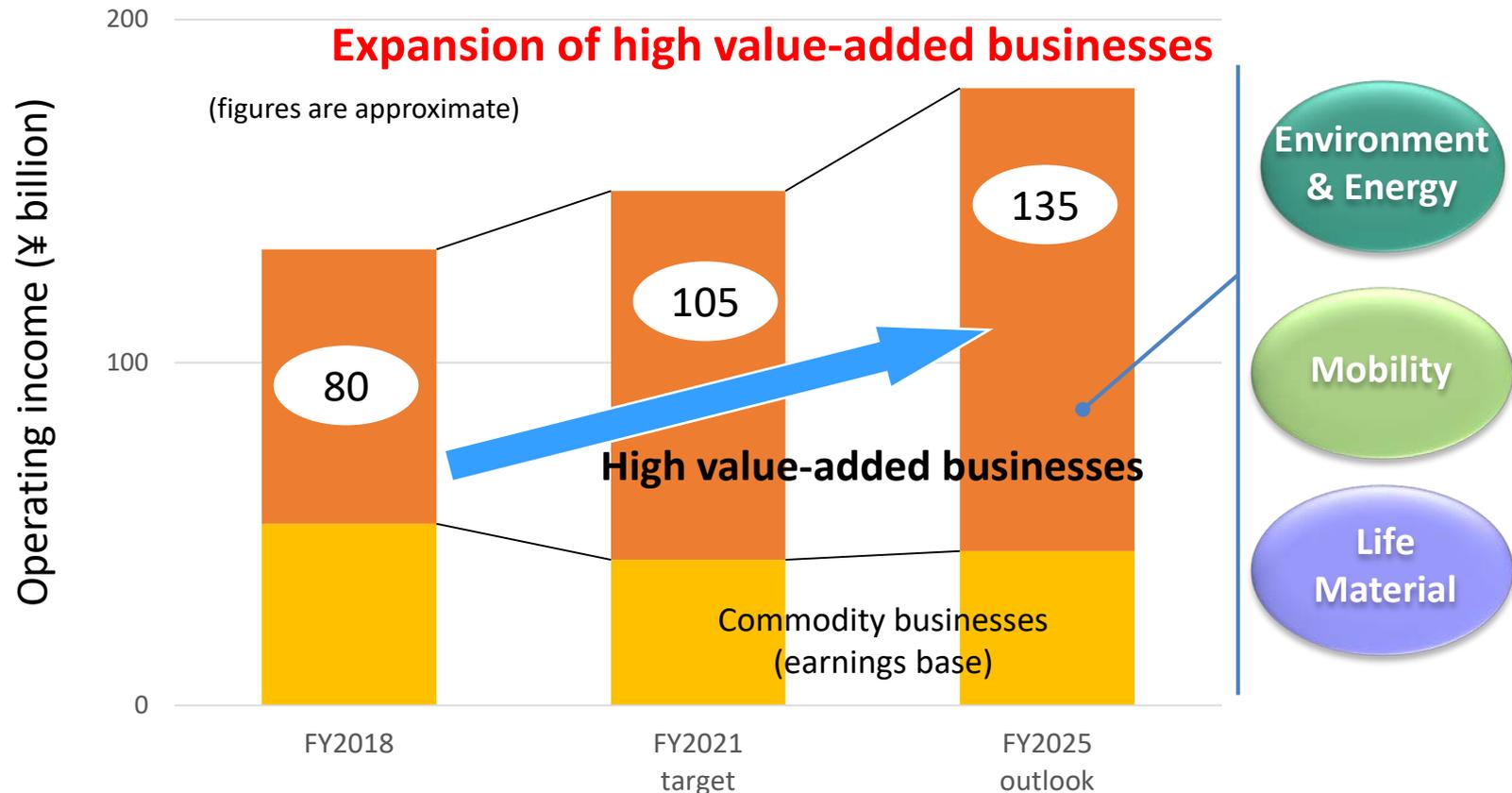
### Contributing to reduce the world's GHG emissions

- **Businesses that contribute to energy conservation and reduced GHG emissions**  
Battery separators, lightweighting resins, net zero energy houses, CO<sub>2</sub> sensors, etc.
- **Technology development/commercialization for clean environmental energy**  
Green hydrogen production, CO<sub>2</sub> chemistry, etc.

## (4)-1 Growth Strategy: Material

### Basic strategy

# Flexible allocation of management resources to priority fields



High value-added businesses: Fibers, synthetic rubber, engineering plastics, coating materials, ion-exchange membranes, electronic materials, consumables, battery separators, electronic devices, etc.

## (4)-1 Growth Strategy: Material -Environment & Energy

**Contributing to the environment with various technology (CO<sub>2</sub> chemistry, semiconductors, etc.)**



### Global challenges/trends



Greater adoption of clean energy



Transition to low-carbon society

### Care for Earth

#### Clean energy

Battery separators

Alkaline water electrolysis system to produce green hydrogen

#### Energy conservation/ environmental improvement

CO<sub>2</sub> sensors

Water filtration modules

Ion-exchange membranes

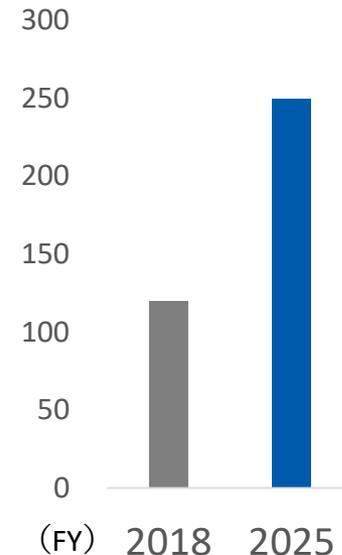
#### Low-carbon society

Next-generation CO<sub>2</sub> chemistry

New CO<sub>2</sub> separation/recovery system



(¥ billion) Net sales



Green indicates under development

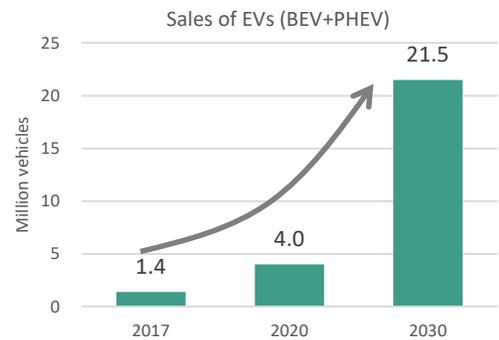
Note: Some overlap with other fields

## (4)-1 Growth Strategy: Material -Mobility

**Contributing to the future of mobility with technology for safety, comfort, and environment**

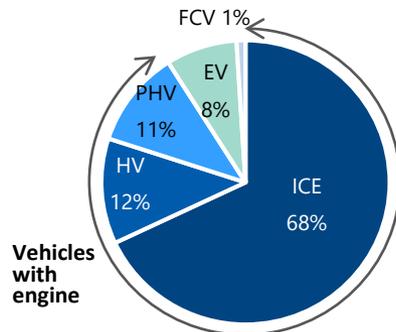


### Global challenges/trends



### Growth of electric vehicles

### 2030 Vehicle sales by powertrain



90% have engines in 2030

Sources: IEA Global EV Outlook 2018 and METI material from 1st Vehicle New Strategy Meeting

## Care for People

### Safety and security

- Airbag material
- Alcohol sensor
- Contactless pulse sensing

### Comfortable space

- Lamous microfiber suede
- Low-VOC\* material
- A/C CO<sub>2</sub> sensors \* Volatile organic compounds

## Care for Earth

### Fuel economy

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

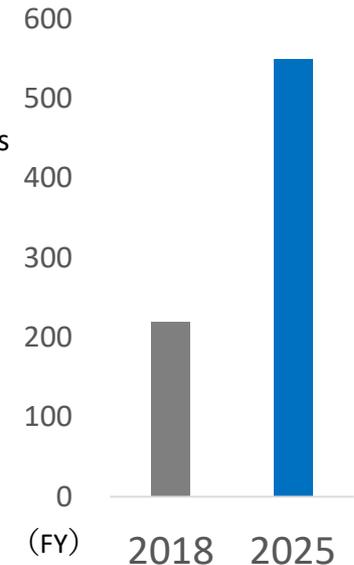
### EV/HEV

- LIB separator/related material
- Green indicates under development

### AKXY POD vehicle interior concept



### (¥ billion) Net sales



Note: Some overlap with other fields

## (4)-1 Growth Strategy: Material -Life Material

**Contributing to healthy and comfortable daily life with distinctive products and technological strength**



### Global challenges/trends



Global population growth



5G Communications revolution

### Care for People

#### Comfort/convenience

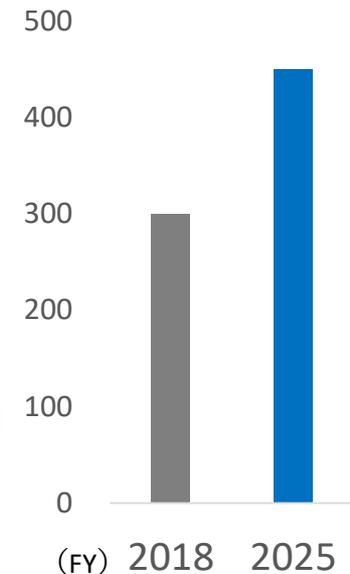
- Disposable diaper material
- 5G-related (glass fabric, etc.)
- Regenerated cellulose fiber

#### Health

- Pharmaceutical/food additives
- UVC LEDs for disinfection



(¥ billion) Net sales



### Care for Earth

#### Reducing food loss/ Reduced environmental burden

- Saran Wrap
- Ziploc
- Water-washable printing plates

## (4)-1 Growth Strategy: Material -unit strategy

Priority fields for provision of value

Environment & Energy

Mobility

Life Material



### Basic Materials SBU

Strengthening as the base of earnings for the Asahi Kasei Group

→ Advancing Sustainable Chemistry



### Performance Products SBU

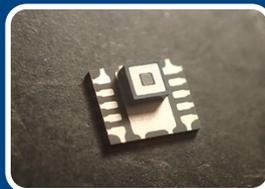
Expansion centered on fields of Mobility and Life Material  
→ Strengthening business infrastructure for Mobility in Europe, North America, China



### Specialty Solutions SBU

Expansion centered on fields of Environment & Energy and Life Material

→ Expansion of core businesses



### Asahi Kasei Microdevices Corp.

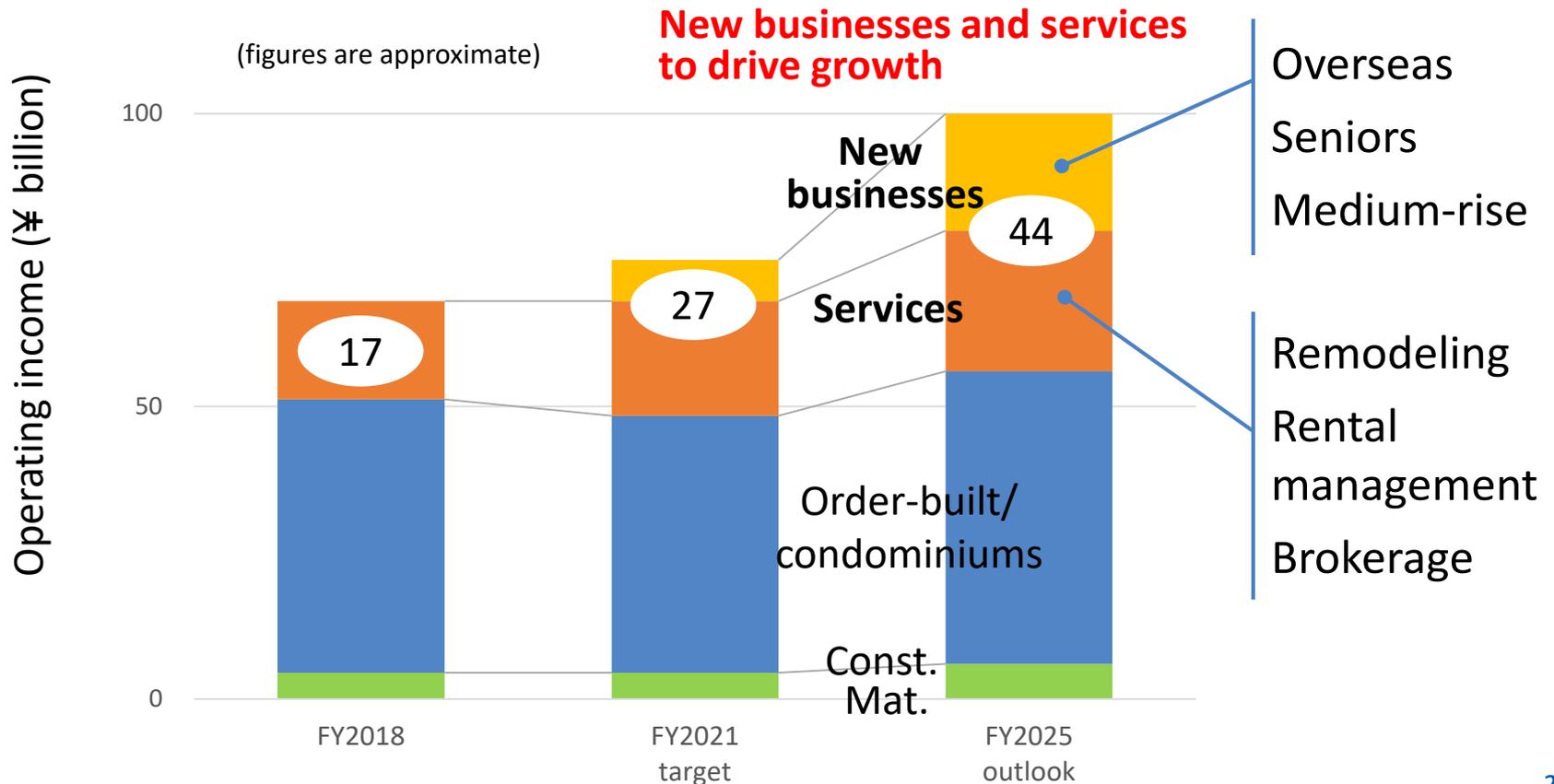
Advanced technology innovation; providing value that meets needs (discerning market trends for the Asahi Kasei Group)

→ Expansion in automotive, industrial applications

## (4)-2 Growth Strategy: Homes

### Basic strategy

## Reinforcing and extending value chain management



## (4)-2 Growth Strategy: Homes

Contributing to superior social infrastructure and comfortable living through our know-how gained in urban markets



### Challenges/trends in Japan



More frequent natural disasters



Diversification of lifestyles

### Care for People

#### Safety/security

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

#### Comfort/health

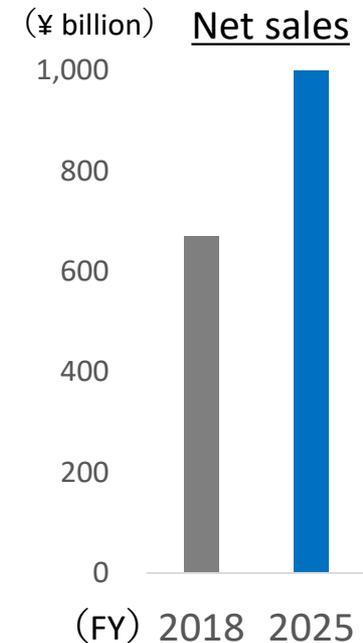
- Living in a good thermal environment
- Diverse modes of residence



### Care for Earth

#### Environment

- Net zero energy houses
- Photovoltaic power
- High-performance insulation



## (4)-2 Growth Strategy: Homes



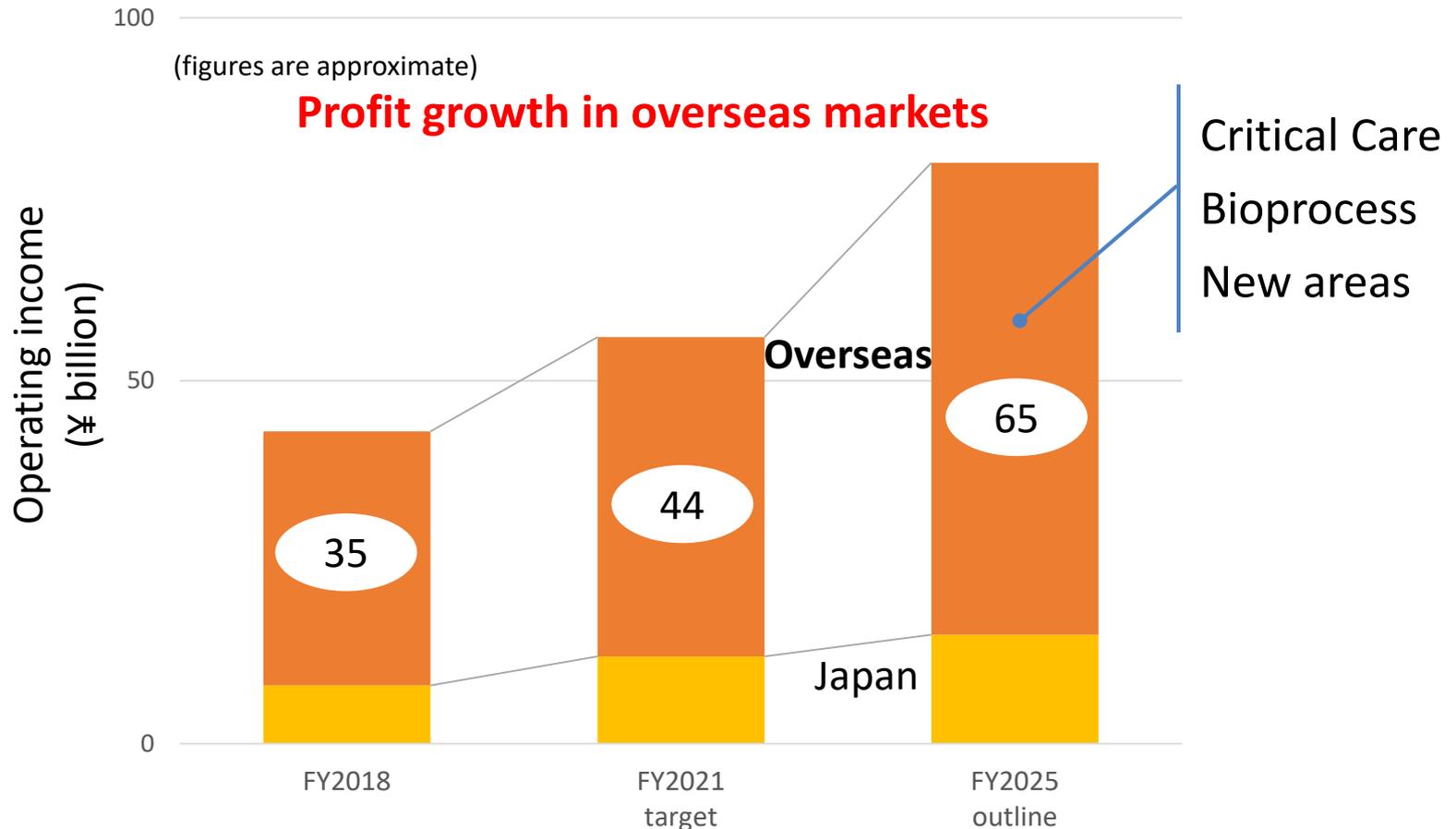
Developing related/growth markets by leveraging our strengths



## (4)-3 Growth Strategy: Health Care

### Basic strategy

**Further accelerating transformation  
to a global health care company**



## (4)-3 Growth Strategy: Health Care

**Contributing to healthy longevity with pharmaceuticals and medical devices discerning the needs of the aging society**



### Global challenges/trends



Rapid aging of society

1	Ischemic heart disease (angina, acute myocardial infarction, cardiac arrest)
2	Stroke (hemorrhagic and ischemic)
3	Chronic obstructive pulmonary disease
4	Lower respiratory infections
5	Alzheimer disease and other dementias

Top 5 global causes of death

Source: WHO fact sheet

## Care for People

### Treatment

#### Acute conditions (critical care, circulatory)

Recomodulin, Thermogard, therapeutic apheresis, defibrillators, LifeVest, **acute myocardial infarction, stroke**

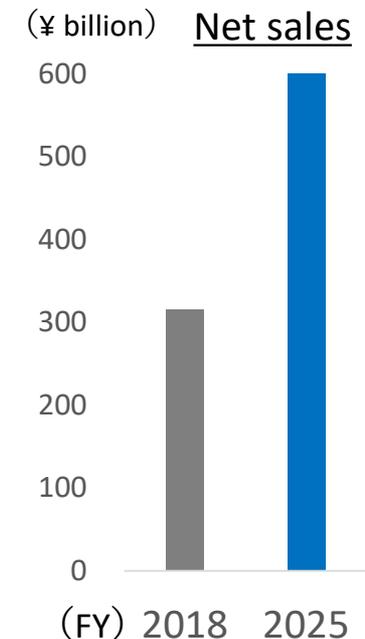
#### Chronic conditions (orthopedics, dialysis)

Teribone, Reclast, Kevzara, dialysis, **autoimmune disease, pain relief**

### Biosafety

#### Supporting the safety of biotherapeutics

Virus removal filters, bioprocess equipment  
Green indicates under development



## (4)-3 Growth Strategy: Health Care

### Global operations

Accelerating transformation to be a global health care company by optimizing business infrastructures to develop world-wide business

#### **New innovation**

Creating new products and services by promoting connections within the Group and by incorporating innovation globally

### Strengthening existing business

Strengthening profitability of existing pharmaceuticals and medical devices, building a stable business platform able to withstand changes in the market environment

#### **Stronger organization**

Ensure steady implementation of each measure to strengthen sales of existing products and reinforce the product pipeline

#### **Promotion of strategic business development**

Seeking M&A opportunities not only in existing areas but also in new areas, and acquiring businesses that contribute to sustainable growth

## (4)-4 Growth Strategy: Key financial objectives by sector

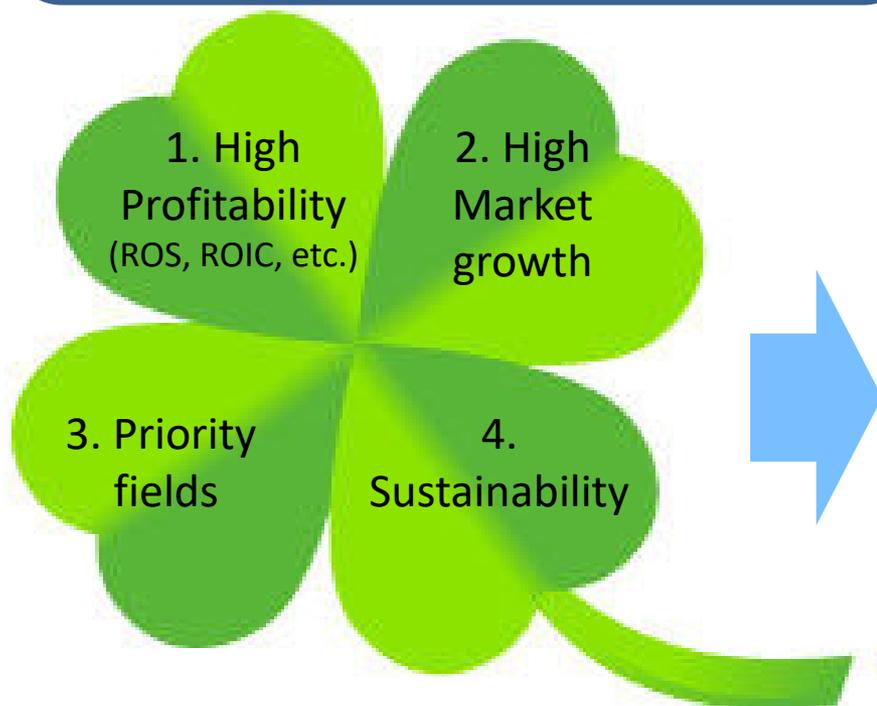
(¥ billion)		FY2015	FY2018	15–18 annual growth	FY2021 target	18–21 annual growth	FY2025 outlook
<b>Material</b>	Net sales	1,004.4	1,176.2	17.8%	<b>1,350.0</b>	5.0%	<b>1,600.0</b>
	Operating income	79.2	129.6		<b>150.0</b>		<b>180.0</b>
	Operating margin	7.9%	11.0%		<b>11.1%</b>		<b>11.3%</b>
	EBITDA	139.8	189.5		<b>240.0</b>		<b>280.0</b>
	EBITDA margin	13.9%	16.1%		<b>17.8%</b>		<b>17.5%</b>
<b>Homes</b>	Net sales	632.4	659.8	-1.3%	<b>750.0</b>	3.2%	<b>1,000.0</b>
	Operating income	71.0	68.2		<b>75.0</b>		<b>100.0</b>
	Operating margin	11.2%	10.3%		<b>10.0%</b>		<b>10.0%</b>
	EBITDA	80.5	77.3		<b>89.0</b>		<b>120.0</b>
	EBITDA margin	12.7%	11.7%		<b>11.9%</b>		<b>12.0%</b>
<b>Health Care</b>	Net sales	285.4	316.2	4.9%	<b>370.0</b>	10.2%	<b>600.0</b>
	Operating income	36.2	41.8		<b>56.0</b>		<b>80.0</b>
	Operating margin	12.7%	13.2%		<b>15.1%</b>		<b>13.3%</b>
	EBITDA	67.4	68.4		<b>83.0</b>		<b>135.0</b>
	EBITDA margin	23.6%	21.6%		<b>22.4%</b>		<b>22.5%</b>

Note: Sums of sector net sales and operating income target and outlook differ from consolidated amounts shown on previous pages.

## (5)-1 Action plan: Business portfolio transformation

**Profitable structure with sustainable and high value-added businesses through business portfolio transformation**

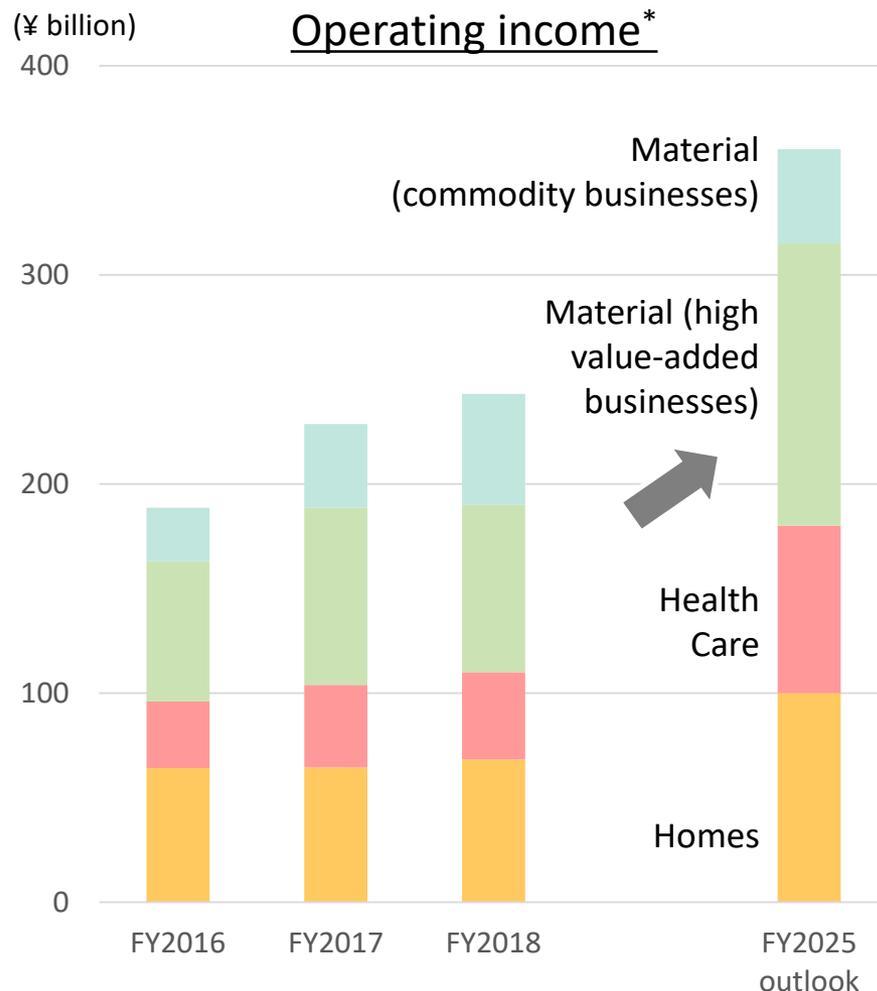
4 perspectives of business portfolio transformation



### Decision-making based on the 4 perspectives

- Allocation/reallocation of human resources and capital
- Continuously seeking non-linear and immediate opportunities including M&A

High value-added businesses: Fibers, synthetic rubber, engineering plastics, coating materials, ion-exchange membranes, electronic materials, consumables, battery separators, electronic devices, etc.



\*Sum of outlook for each sector differs from consolidated total

## (5)-2 Action plan: Strengthening global operations

Businesses expansion in accordance with market characteristics; promoting growth and creating synergies through regional coordination among different businesses



### Functions provided by each of the regional headquarters

- Disseminating the Group Mission
- Strengthening executive management
- Recruiting/training local personnel
- Sharing information
- Group-wide marketing
- Promoting R&D

## (5)-3 Action plan: Creating new businesses

Basic concept for creating new businesses

**Various core technologies x Marketing functions x Connections**

### Group-wide marketing functions

Newly established  
Marketing & Innovation



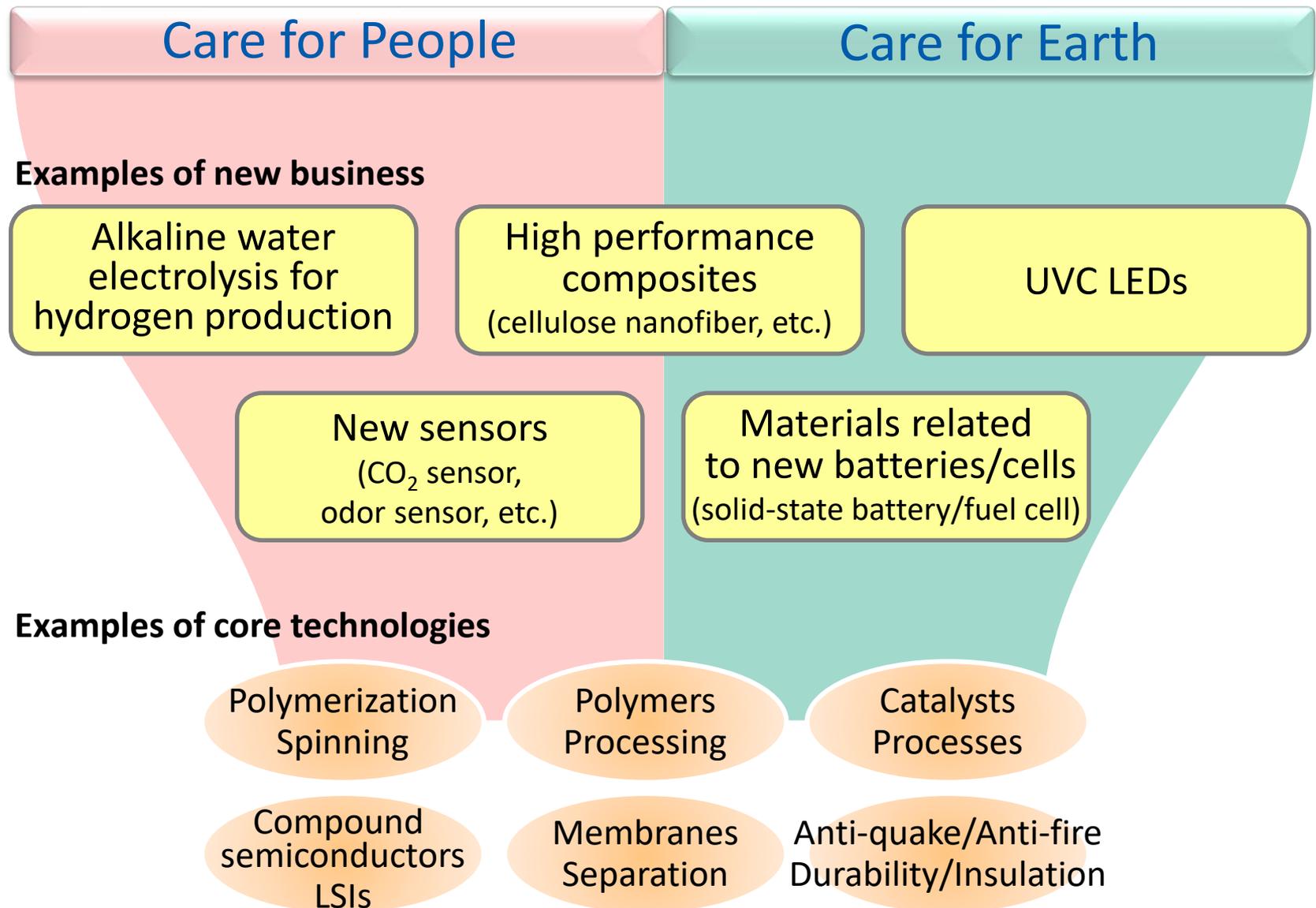
### Enhancing various core technologies as basis for R&D

- High-level experts system to deepen and expand core technologies
- Promoting digital transformation by nurturing experts

### Promoting Connections

- Strengthening cooperation with other companies, government/academia and internal cooperation among sectors

## (5)-3 Action plan: Creating new businesses



## (5)-4 Action plan: Strengthening the platform -heightening businesses

### 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

Trends and issues to consider

Game changing

Productivity revolution

Technology handover

IP strategy

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

## (5)-4 Action plan: Strengthening the platform -HR

Creating new value  
by diversity and capability to change

### Human resources

Leadership development program  
Growth of experts and line managers  
Leveraging local personnel



**Liveliness  
Creativity**



**Expertise**

Sincerity Challenge Creativity

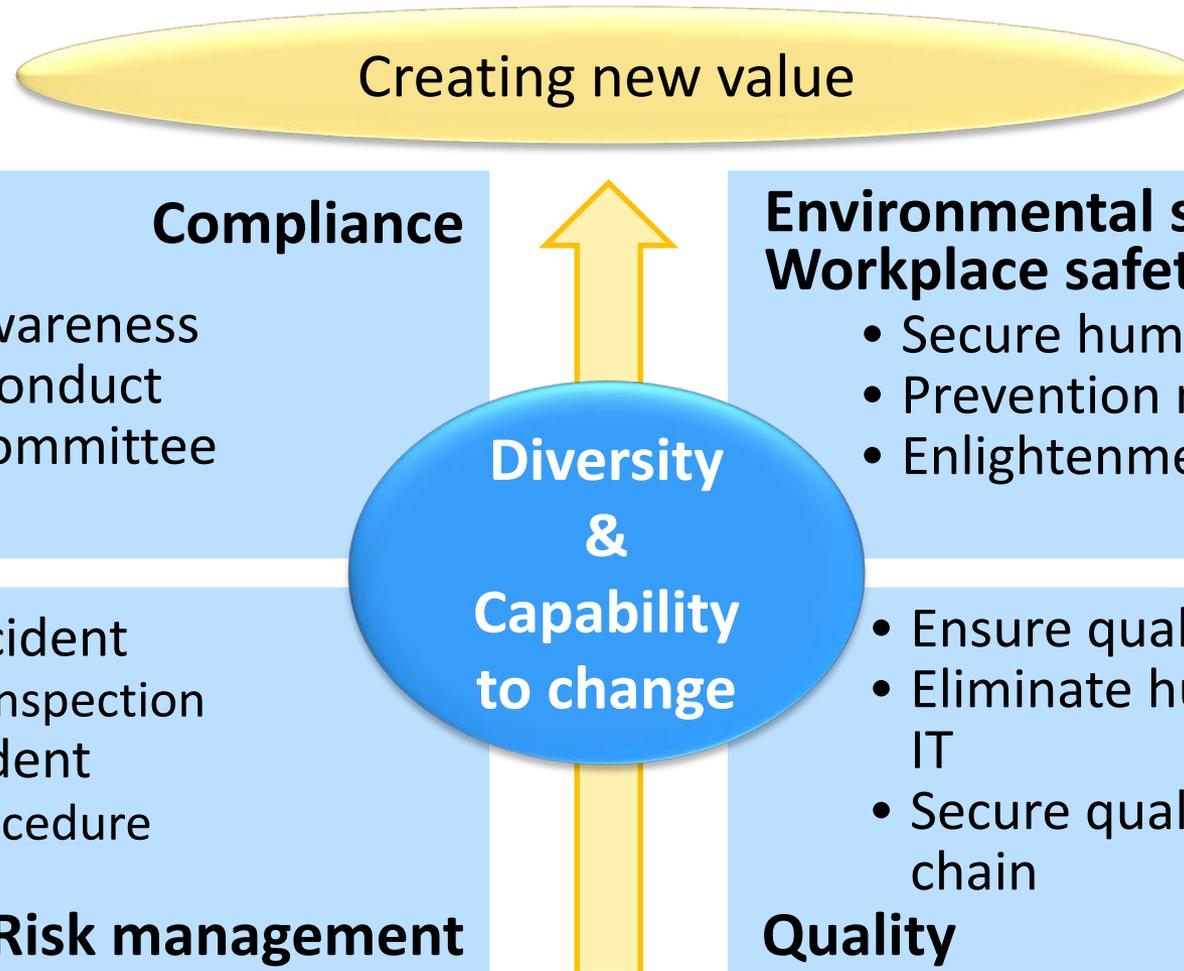
### Working environment

Continuous human resource development (engagement)  
Support for life events  
Increased options for working styles

Linkage with business strategy & business portfolio transformation

## (5)-4 Action plan: Strengthening the platform

-safety, quality, risk management, compliance



Strengthening the platform for the Asahi Kasei Group

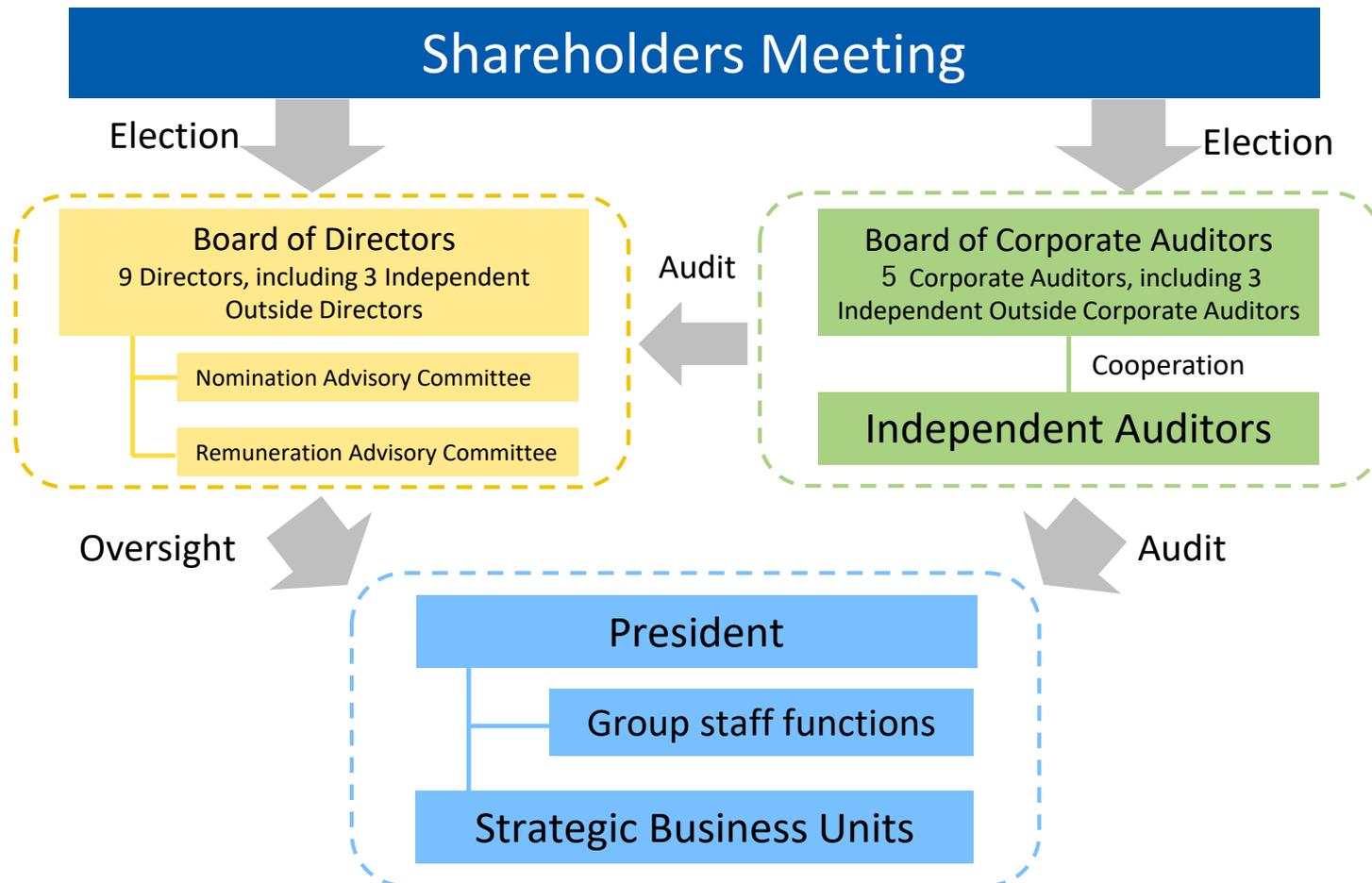
Positioned as key management issue to raise the overall level

## (5)-4 Action plan: Strengthening the platform

-corporate governance

### Continuously developing sound corporate governance to ensure “diversity” and “capability to change”

Providing information to, and sharing IR activities with, Outside Directors and Outside Corporate Auditors; stock-based remuneration system; optimizing the composition of officers, etc.



# Creating for Tomorrow

The commitment of the Asahi Kasei Group:

To do all that we can in every era to help the people of the world make the most of life and attain fulfillment in living.

Since our founding, we have always been deeply committed to contributing to the development of society, boldly anticipating the emergence of new needs.

This is what we mean by “Creating for Tomorrow.”

**AsahiKASEI**