

**Progress of  
the AGC Group  
Mid-term Management Plan**  
*"AGC plus-2020"*

The AGC logo is displayed in a white box on the right side of the slide. It consists of the letters 'AGC' in a bold, blue, sans-serif font. A small red square is positioned between the 'G' and 'C'.

**AGC Inc.**

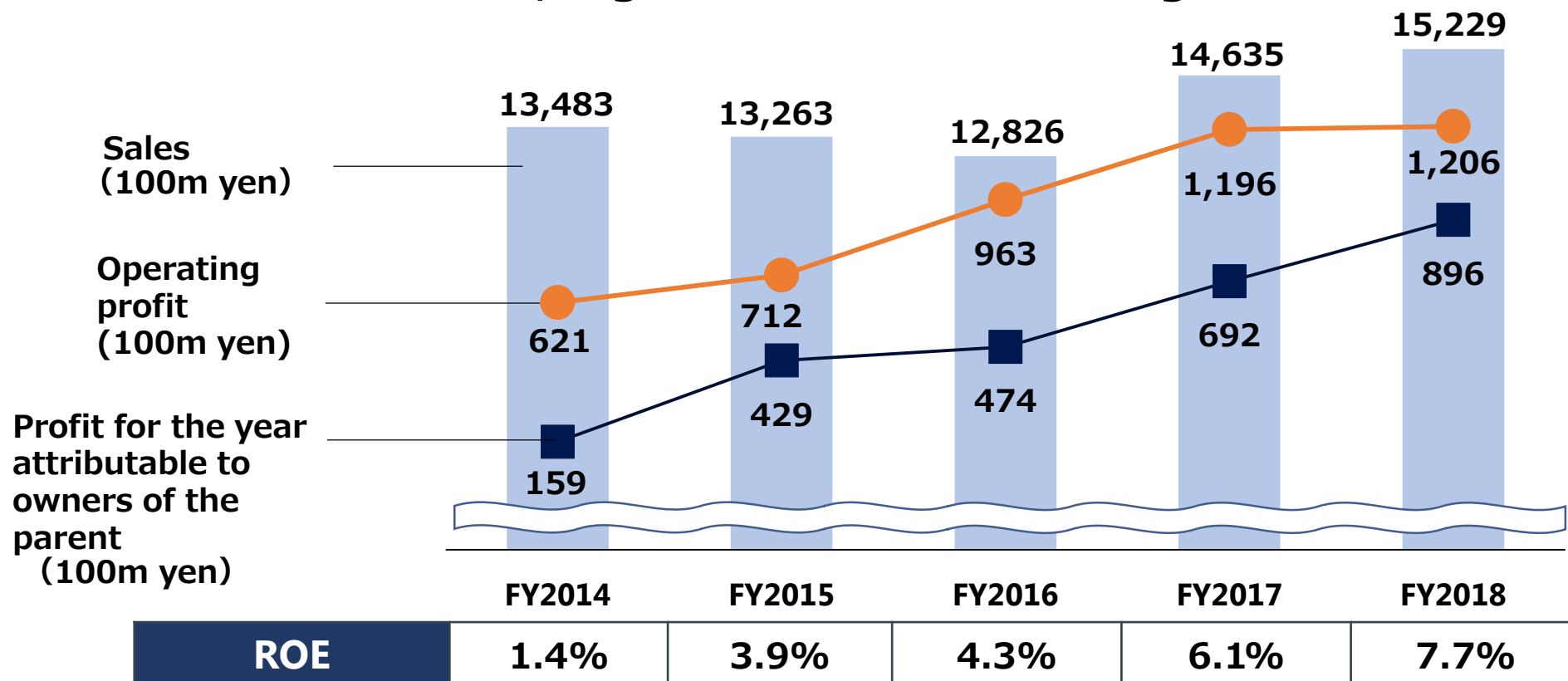
2019/02/06

Your Dreams, Our Challenge

# 1. Towards achievement of *AGC plus-2020*

# Review of FY2018

- Recorded increase of OP and “profit for the year attributable to owners of the parent” for 4 consecutive years.
- “Profit for the year attributable to owners of the parent” is the 3<sup>rd</sup> highest in record, due to increase in “Other income” etc.
- Achieved ROE 7.7%, higher than the initial target of 6.5%.



## “Vision 2025”

The AGC Group's Core Businesses will serve as solid sources of earnings, and Strategic Businesses will become growth drivers and lead further earnings growth. The AGC Group will continue being a highly profitable, leading global material and solution provider.

### Core businesses

Establishing long-term, stable sources of earnings through the portfolio management

- Architectural glass
- Automotive glass (existing)
- Essential chemicals
- Performance chemicals
- Display glass
- Ceramics

### Strategic businesses

Establishing highly profitable businesses through expansion of high value-added businesses

- Mobility
- Electronics
- Life science

## *AGC plus-2020* serves as the cornerstone toward 2025

- Develop high-value added businesses that do not get affected by market fluctuations
- Promote growth strategies for strategic businesses
- Concentrate management resources in growth regions/where we can win
- Achieve sustainable growth through strategic M&As

# Achievement towards the management target



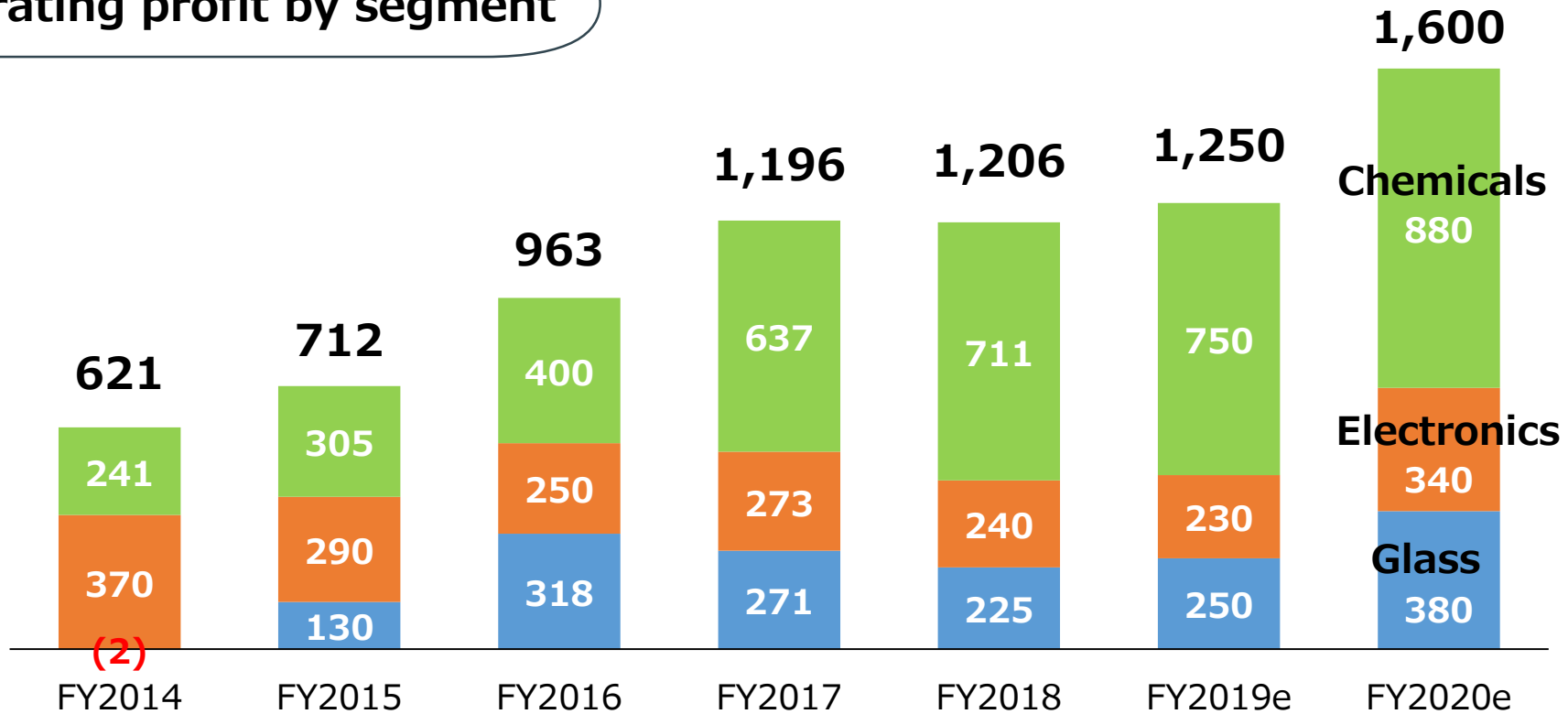
	<b>FY2018</b>	<b>FY2020 target</b>	<b>FY2025 target</b>
<b>Operating profit</b>	<b>120.6</b> billion yen	<b>160</b> billion yen or more	<b>229.2</b> billion yen or more (record high)
<b>R O E</b>	<b>7.7%</b>	<b>8.0% or more</b>	<b>10.0% or more</b>
<b>Strategic business contribution ratio</b>	<b>17%</b>	<b>25% or more</b>	<b>40% or more</b>
<b>D/E</b>	<b>0.43</b>	<b>0.5 or less</b>	<b>0.5 or less</b>

# Change in OP Structure by segment towards FY2020

- OP has doubled in 4 years, from FY2014 to FY2018.
- Expect significant increase in profit in FY2020 backed by greater momentum of the investment effect.

## Operating profit by segment

(100m yen)



\* This chart does not include the figures of Ceramics/Other and Elimination, therefore it will not be equal to the sum of each segment.

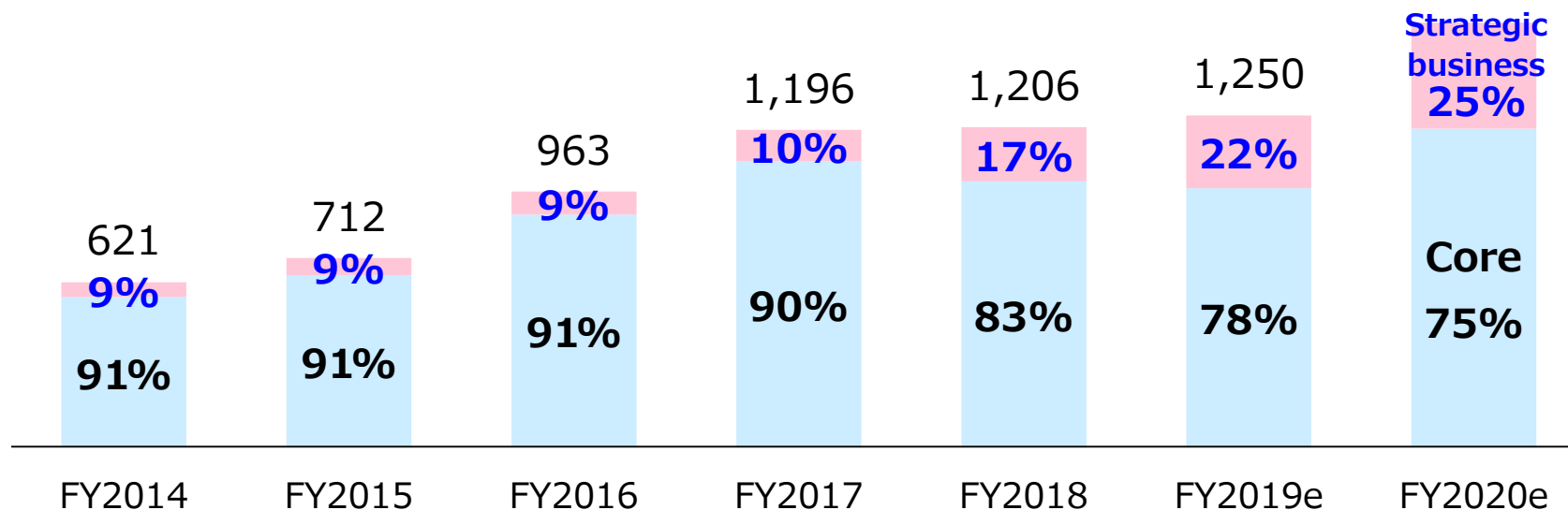
# Contribution ratio of Strategic business to OP and M&As, up to FY2020

- Strategic business contribution ratio is expected to reach 25%.
- M&A contribution ratio is also expected to grow gradually.

(100m yen)

## Core/Strategic business contribution ratio

Operating profit  
1,600



M&As Contribution		4%	8%	9%	10%
Major M&As		<ul style="list-style-type: none"> <li>■ Biomeva</li> </ul>	<ul style="list-style-type: none"> <li>■ CMC Biologics</li> <li>■ Vinithai</li> </ul>	<ul style="list-style-type: none"> <li>■ Park Electrochemical (Electronics Business)</li> </ul>	<ul style="list-style-type: none"> <li>■ Malgrat Pharma Chemicals</li> </ul>

\* CMC Biologics has changed its corporate name (legal entity name) to AGC Biologics in 2018.



# Towards achievement of OP target in FY2020

-2019 vs 2020-

## Glass Segment

**Expand “earning power” in regions where we can win backed by stable market conditions.**



### Architectural glass

- Improve productivity and fuel efficiency by renovating facilities in Europe.
- New furnace in Brazil starting up in 2019 will contribute to OP in full scale.



### Automotive glass

- New facility in Morocco starting up in 2019 will contribute to OP in full scale.
- Installation of new technologies and equipment will improve productivity and enhance the supply of high value-added product.

## Electronic Segment

**Electronic materials will grow significantly.**



### Display

- Price reduction expected to be milder, and new G11 facility starting in 2019 will contribute to OP in full scale.



### Electronic materials

- Semiconductor-related products such as EUV mask blanks will grow, and optoelectronics business will expand sales by launching new products.

## Chemicals Segment

**Life science business will grow significantly.**



### Chlor-alkali & Urethane

- Market will continue to be steady. Facility expansion in Southeast Asia will generate positive impacts in the next mid-term management plan.



### Fluorochemicals & Specialty

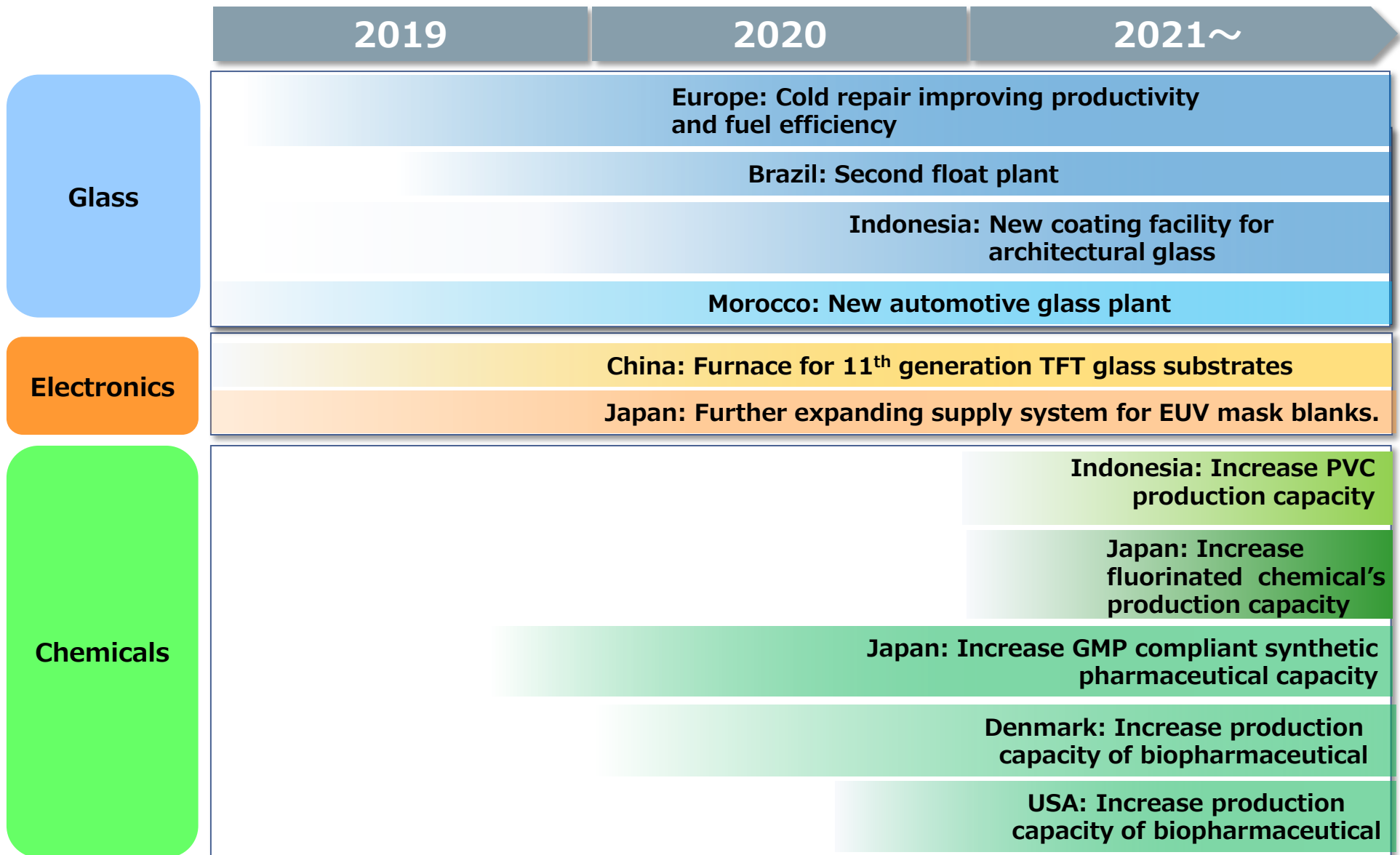
- Stable growth expected in products used for transport equipment, semiconductor related applications, display, and refrigerant.



### Life science

- Expanding CDMO business by aggressive investments.

# Major investments and generation timing of positive impacts to OP



# 2. Progress of strategic business

### 【Changes in the macroscopic environment】

Arrival of IoT era

Longer life expectancy

Evolution of transportation infrastructure

Increase of global population

Building new eco-system

Greater safety, security, comfort



#### Mobility

Connected cars/  
Automated driving,  
Evolution of information  
display, Lighter-weight  
transportation means

#### Electronics

Arrival of IoT/AI era,  
Next-generation high-  
speed communications/  
Automated driving, Use of  
novel devices

#### Life Science

Safe & secure medical  
care, Longer life  
expectancy, Increase of  
global population

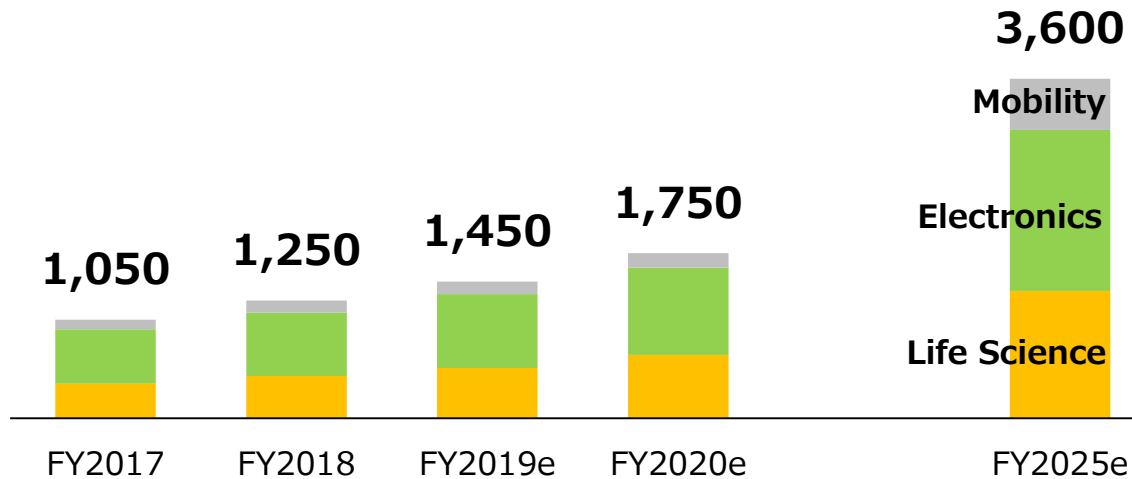
### Strategic Businesses

# Future Growth by Strategic Businesses category

- Electronics and Life science will start generating profit first.
- Mobility will gradually produce results after FY2021.

Sales (Strategic business)

(100 m yen)



## Major products & business

### Mobility

- Cover glass for car-mounted displays
- New materials for mobility, including 5G communications.

### Electronics

- Semiconductor-related products
- Optoelectronics materials
- Next-generation high-speed communication related products
- Fluorinated products for electronics

### Life Science

- Synthetic pharmaceutical and agrochemical
- Bio CDMO

Life Science

Electronics

Mobility

3,600

FY2017

FY2018

FY2019e

FY2020e

FY2025e

(100 m yen)

OP  
(Strategic business)

120

210

280

400

900

Contribution ratio

10%

17%

22%

25%

40%

# Electronics Semiconductor-related products

## Market trend

- Market will continue to grow, pushed by technology trend such as “low energy consumption”, “downsizing”, “high-efficiency”, and “high durability”.

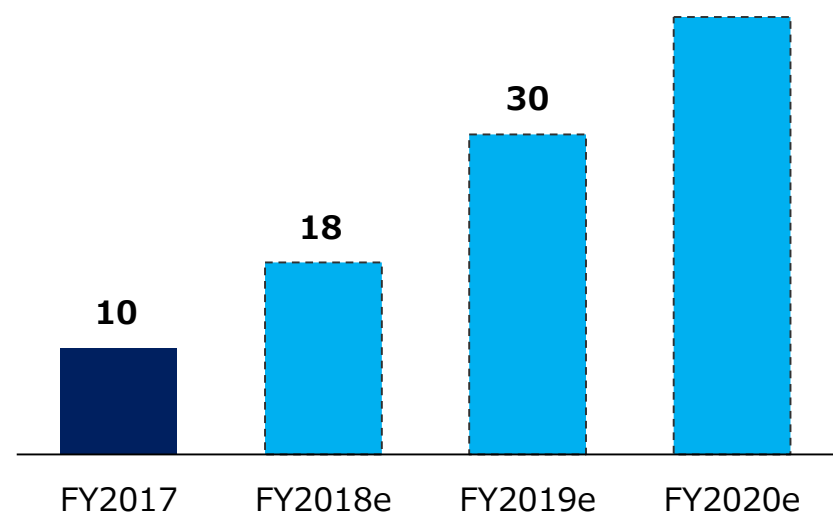
## AGC’s outlook

- Fourfold sales in FY2020 from FY2018, and to have 50% market share for EUV mask blanks.
- Increase sales mainly in high-end consumables for other electronic materials such as CMP slurry.

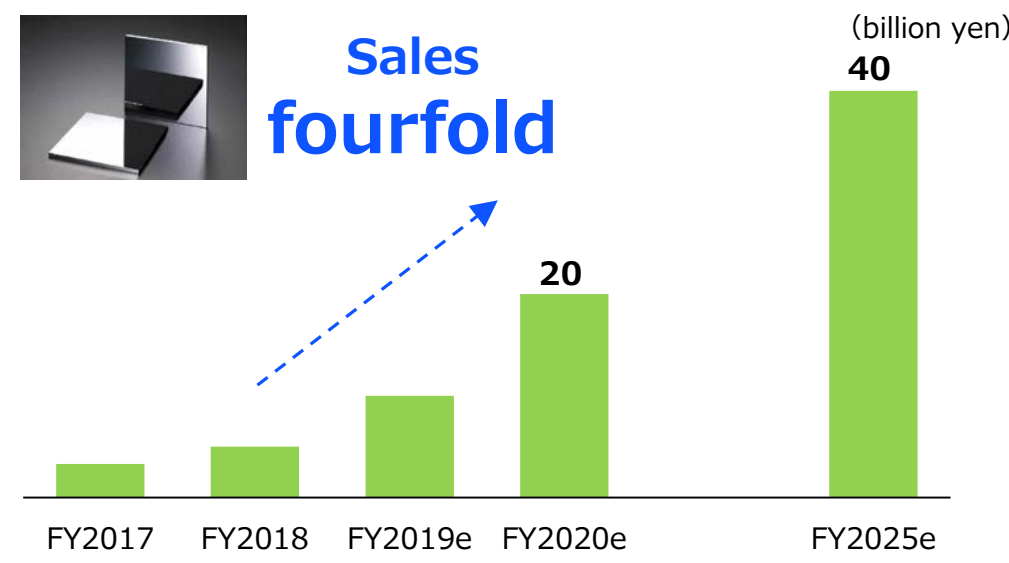
## Sales target of EUV mask blanks

**FY2020**      **20 billion yen or more**      **FY2025**      **40 billion yen or more**

**EUVL device shipments**



**EUVL mask blanks sales of AGC**



Source : Created by AGC, based on ASML’s report from SEMICON Japan 2018.

### Market trend

Communication technologies continues to advance, such as 5G, “super high-speed / higher capacity”, and “ultra-high-capacity connection”.

### AGC's strength

- AGC can satisfy the needs for “low loss CCL/ highly efficient” inorganic and organic materials”.
- AGC can offer its technology from base materials to finished products.
- AGC has technology, human resources, and networks of business partners for application development.

Sales target for next-generation high-speed communication related products

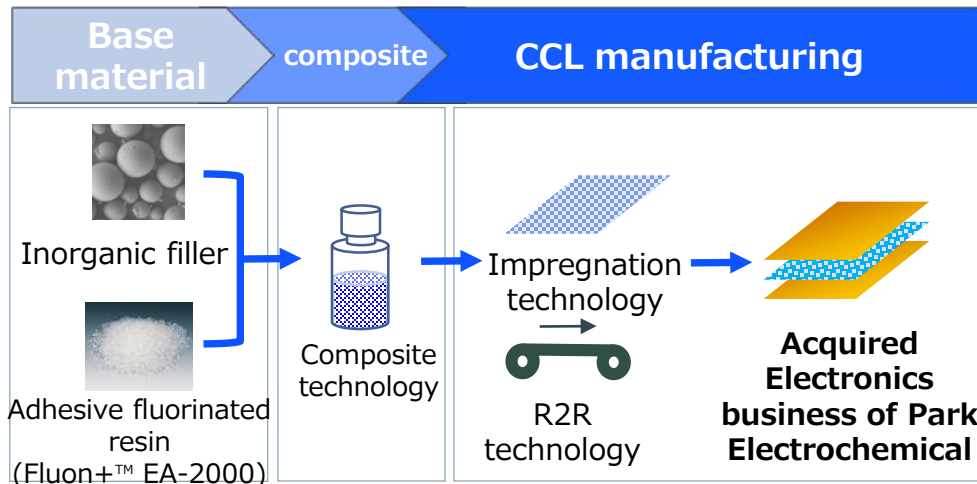
**FY2025**

**60 billion or more**

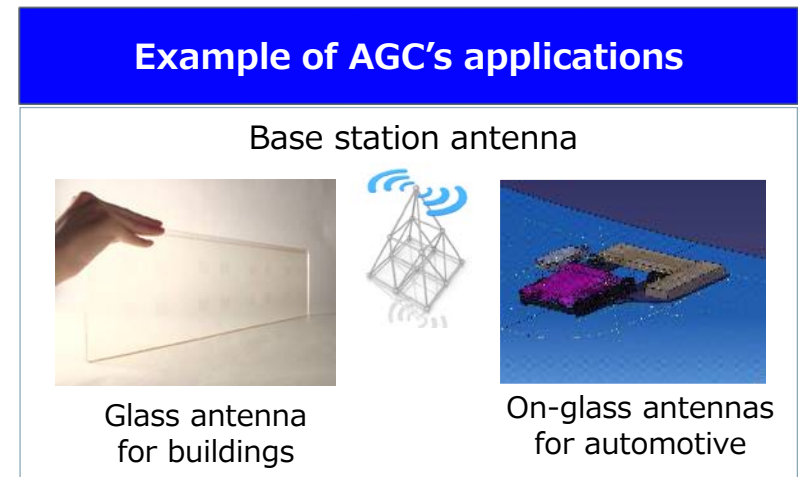
**CCL** » can supply in any form (base materials/technology/CCL)

**Antenna** » AGC's technology + partners = new value

AGC's business solutions



**Already contributing to OP**



**Will contribute to OP**

## Market trend

- Market of prescribed drug will be 1,070B USD (approx.120 trillion yen) in 2022, and biopharmaceutical will account for 30% of the market.
- CAGR in 2018-2024 is estimated to be 5% for synthetic pharmaceutical, and 9% for biopharmaceutical.

## AGC's business expansion

- Continue to expand business globally by capacity increase and M&As.

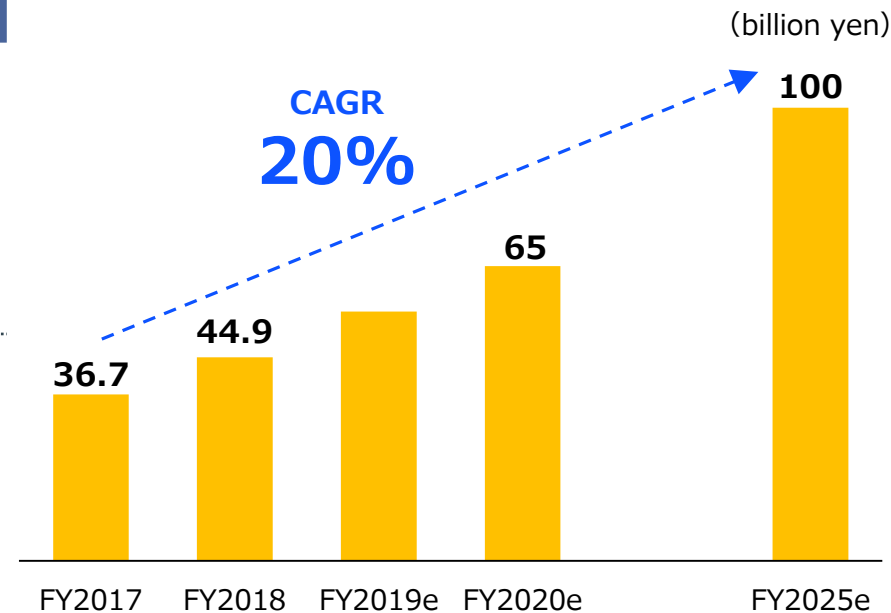
## Sales target for Life science

**FY2020 65 billion or more** (previous: 60 billion) **FY2025 100 billion or more**

### AGC's expansion for global operation

	Japan	Europe/USA
<b>Synthetic pharmaceutical</b> 	<b>Capacity increase</b> Chiba: Expand GMP compliant synthetic pharmaceutical capacity tenfold (from Oct 2019)	<b>M&amp;A</b> Spain: Acquired Malgrat Pharma Chemicals (2019)
<b>Bio pharmaceutical</b> 	<b>Capacity increase</b> Chiba: New cGMP compatible facilities for mammalian cell production (from July 2019)	<b>Capacity increase</b> USA: Triples biopharmaceutical production capacity (from July 2020)

### Sales of Life science business





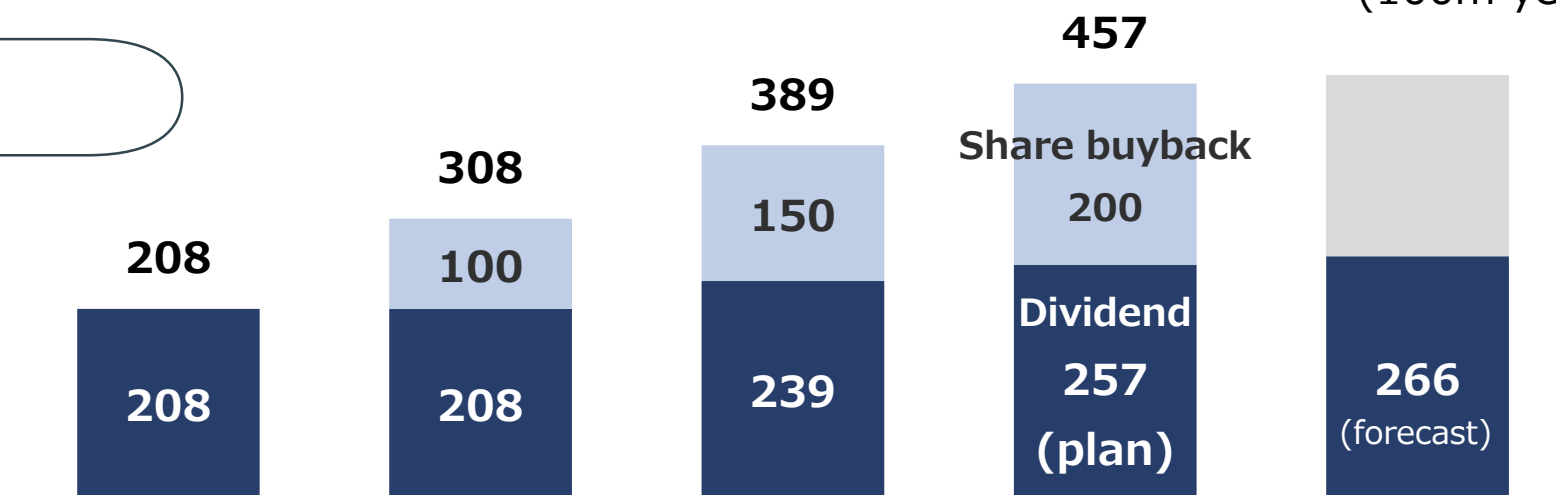
# 3 . Shareholder return policy

# Shareholder return

- We plan to increase the year-end dividend for FY2018 by 5 yen from the initial forecast. (Full-year amount of dividend is planned to be 115 yen per share.)
- Will continue the policy of “consolidated total shareholder return 50% or more” in FY2019. Full-year dividend forecast increased by 5 yen compared to the previous fiscal year.
- All of the shares repurchased in the past 3 years have been canceled.

(100m yen)

Total Shareholder Return



FY2015

FY2016

FY2017

FY2018

FY2019e

Dividend per share/year

90yen

90yen

105yen

115yen (plan\*)

120yen (plan)

Consolidated total return ratio

49%

65%

56%

51% (plan)

50% or more (policy)

\* Initial forecast: 110 yen

## **AGC plus**

The AGC Group adds a “plus” by:

- Providing safety, security and comfort to society;
- Creating new value and functions for customers and business partners and building trust with them;
- Enhancing job satisfaction among employees; and
- Increasing the Group’s corporate value for investors.

## Disclaimer

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**END**