

—The AGC Group— Toward Further Growth



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AGC Group CEO

AGC Asahi Glass

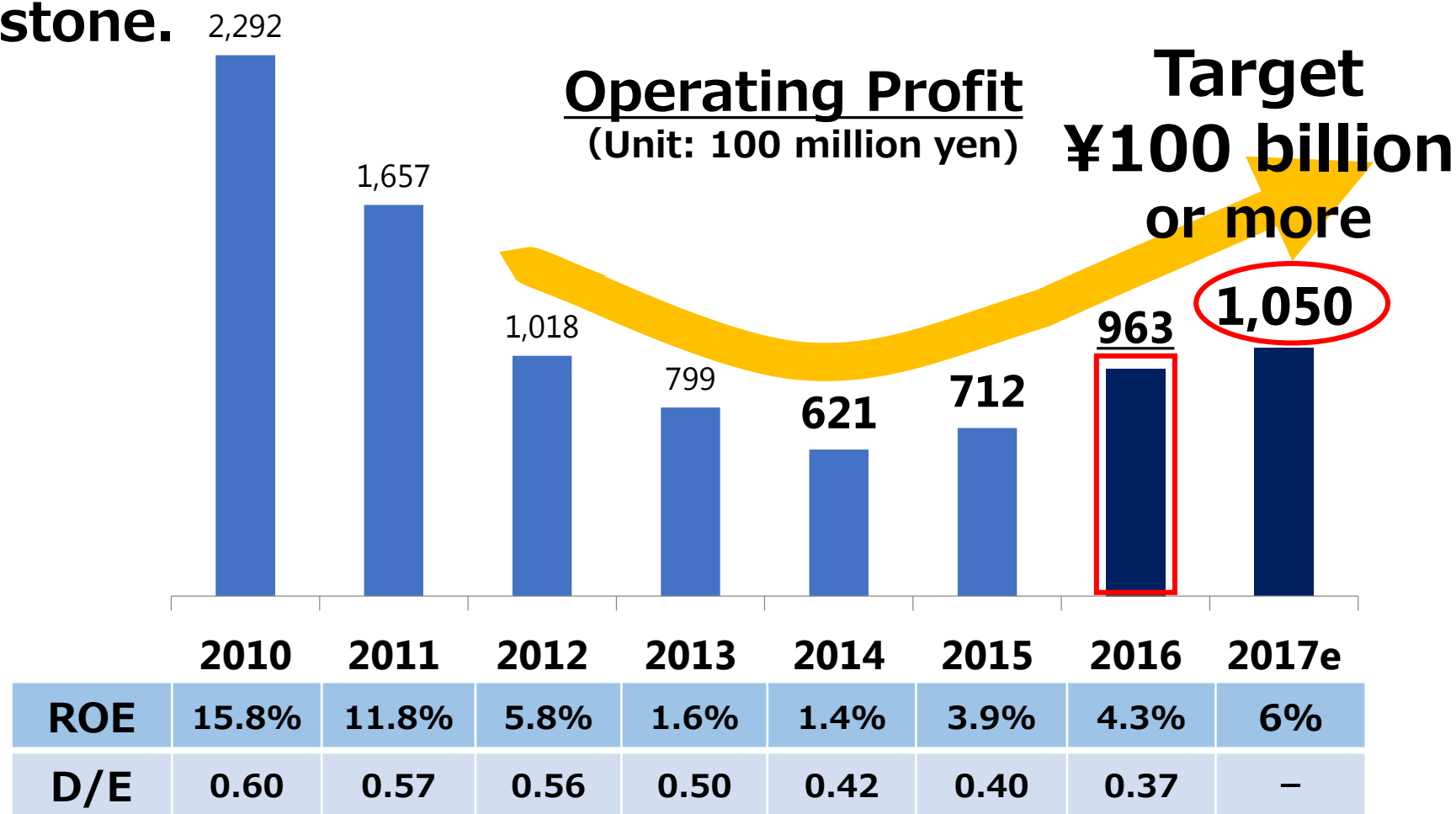
- 1. In 2016, we made a significant progress toward the management targets set for 2017.**
- 2. We are confident about achieving the 2017 management targets (except for the sales figure).**

Sales	¥1.6 trillion
Operating profit	¥100 billion or above
ROE	5% or above
D/E	0.5 or less
- 3. We will continue to steadily implement measures for the realization of the Group's Vision 2025.**
- 4. We will make efforts under the shareholder return policy revised last year.**

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1. Review on FY2016 & FY2017

◆ The 2017 management targets are just a stepping-stone.



(※) Japanese GAAP in 2010-2011, IFRS in 2012 onward

(2017: estimate)

(※) ROE of FY2017 Forecast is calculated by using the Total equity attributable to owners of the parent as of Dec.31, 2016.

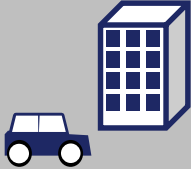
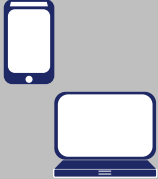

◆ Getting close to the 2017 management targets

		2014	2015	2016	Result	2017 Target
Increase sales	Sales (¥100 m)	13,483	13,263	12,826		16,000
Increase operating profit	Operating profit (¥100 m)	621	712	<u>963</u>		1,000 or above
Increase asset efficiency	ROE	1.4%	3.9%	<u>4.3%</u>		5% or above

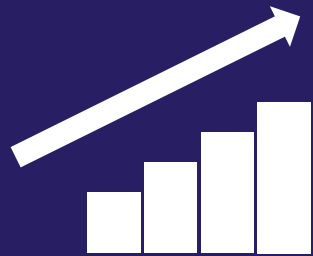
While sales didn't exceed the previous year's figure partly due to the influence of exchange rates, operating profit & asset efficiency improved owing to the significant improvement in the glass business in Europe & Americas, and the strong Chemicals business

Portfolio management set in 2015

◆Aiming to achieve the 2017 management targets by increasing both sales and asset efficiency

	Growth	Cash generator	Strength-building
Glass 	- Automotive glass	-Architectural glass (fast growing countries)	-Architectural glass (developed countries)
Electronics 	-Electronic materials -Glass for chemical strengthening -Ultra thin glass	-LCD glass	-Specialty glass
Chemicals 	-Chlor-Alkali (Outside Japan) -Fluorochemicals -Life science		-Chlor-Alkali (Japan)

Growth area



Actions taken in 2015 onward

Chlor-Alkali outside Japan:

- Increased Chlor-Alkali production capacity in Indonesia & Vietnam
- Decided to acquire Vinythai in Thailand

Fluorochemicals:

- Started operation of a new HFO-1234yf production facility in Japan

Life Science:

- Completed product facility expansion for pharmaceutical & agrochemical intermediate and active agents in Japan
- Acquired Biomeva in Germany
- Acquired CMC Biologics which has bases in Denmark & USA

Automotive glass:

- Started operation of the third automotive glass plant in China
- Acquired NordGlass in Poland
- Started operation of a new automotive glass plant in Mexico
- Started operation of an automotive float glass plant in Indonesia
- Decided to set up an automotive glass production base in Morocco

Glass for chemical strengthening :

- Increased capacity for cover glass for car-mounted displays in Japan

Actions taken in 2015 onward

Cash generator



Architectural glass:

- Increased Low-E glass production capacity in Thailand
- Started operation of the coating glass plant (JV) in Saudi Arabia
- Decided to build new architectural glass coating facility in Indonesia
- Decided to build the second float glass plant in Brazil

LCD glass substrates:

- Transferred a LCD glass production facility in China
- Decided to build a production base (JV) for G11 TFT-LCD glass substrates in China

Strength-building area



Positive impacts started to emerge through the structural reform of the architectural glass business in Europe and Americas

Changes in operating profit by regional

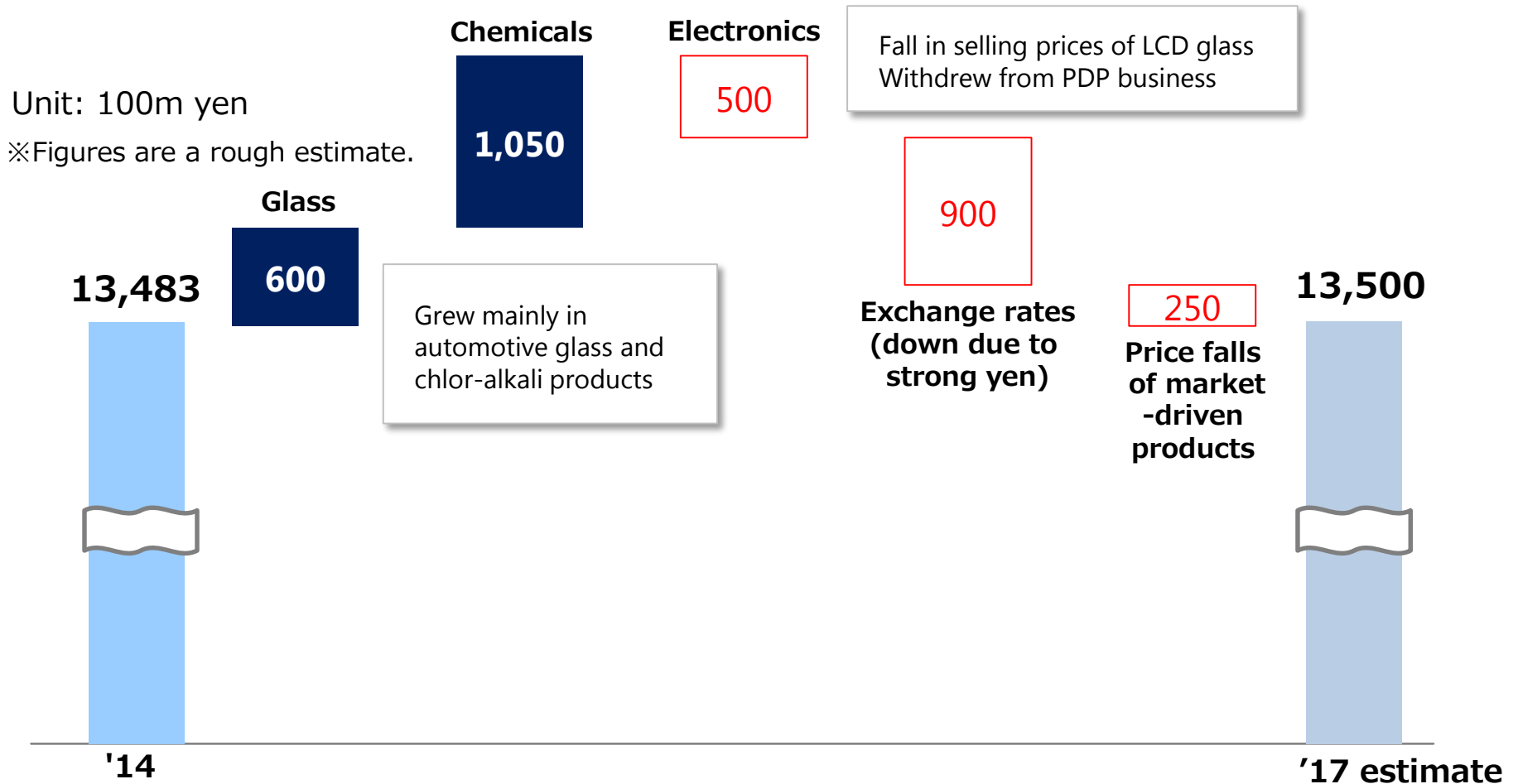
※Before excluding Cross-regional common expenses



Improvement in Chlor-Alkali business in Japan

Withdrawal from unprofitable businesses: HDD glass business in Japan and China

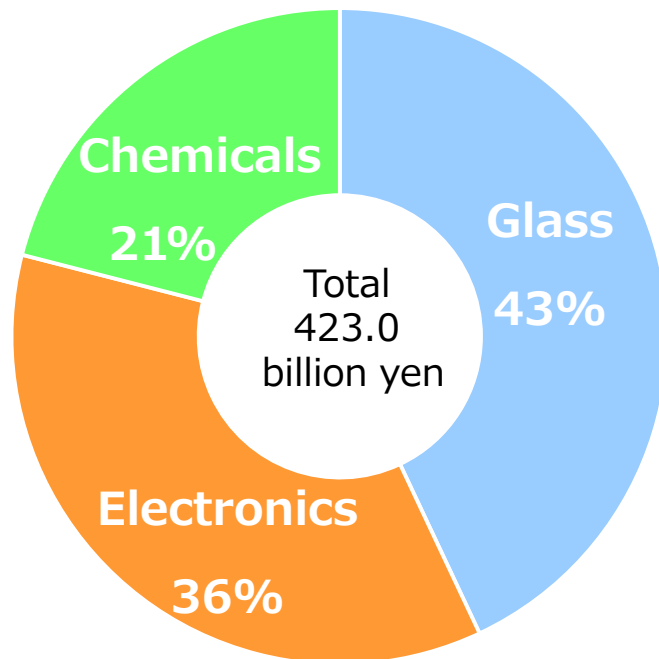
◆ While the overall sales won't achieve the target, the sales in glass and chemicals are expected to increase.



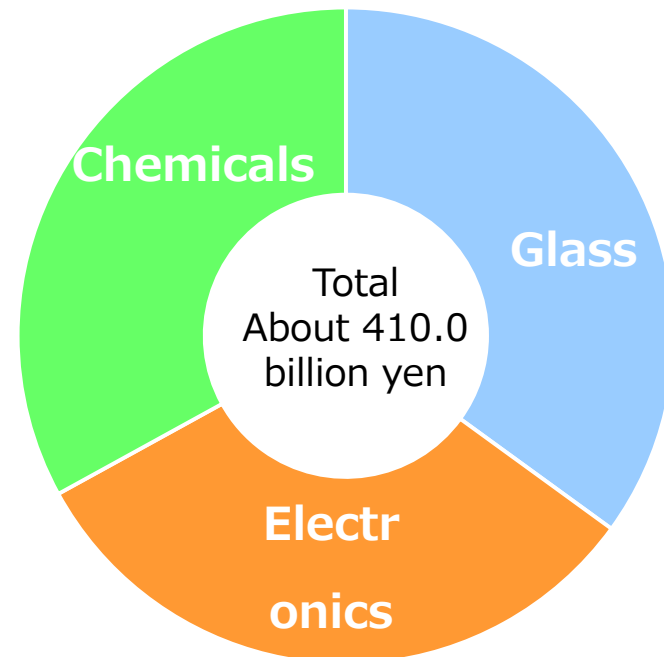
- ◆ Concentrate on the growth areas with a focus on asset efficiency

CAPEX by segment

【2012-2014】



【2015-2017e】

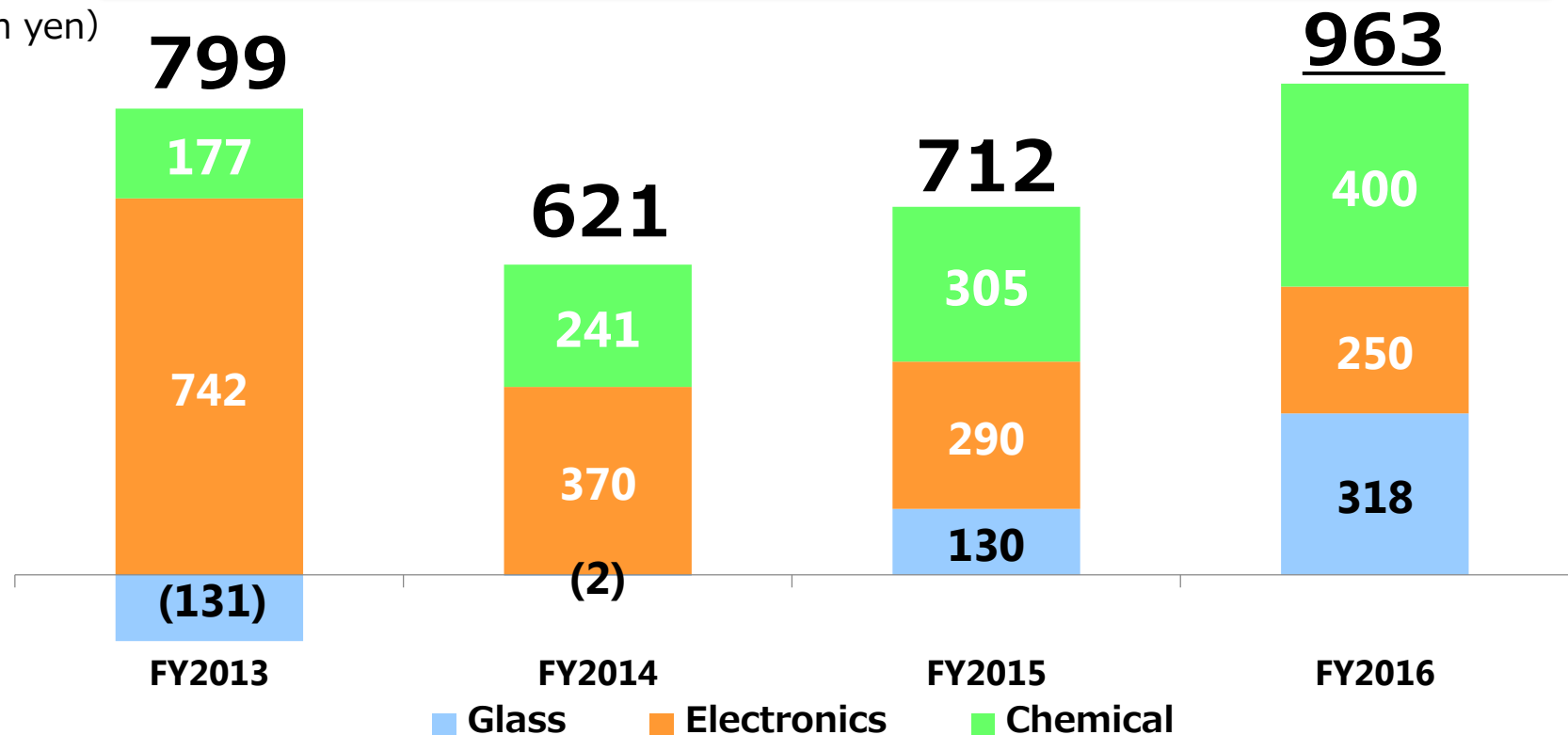


(※) Excluding share acquisition through M&As

◆ Making progress toward well-balanced business portfolio

Operating Profit by segment

(Unit: 100m yen)



※The sum of the segment amounts may not equal the amount of operating profit total, because this graph excludes the amount of Ceramics/Other Segment and elimination.

2. Toward further growth

◆ In 2017, the AGC Group will

- ✓ Aggressively implement strategic initiatives, and
- ✓ Accelerate its re-growth

toward the realization of the AGC Group's Vision 2025

formulated in Feb 2016

"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

Basic policy to achieve our goals under the “Vision 2025”

1

Always look from market perspective, respond to customers' needs, and continue building trust with them

2

Achieve sustainable growth in both Core and Strategic Businesses by boldly pursuing strategic M&A opportunities along with the organic growth approach

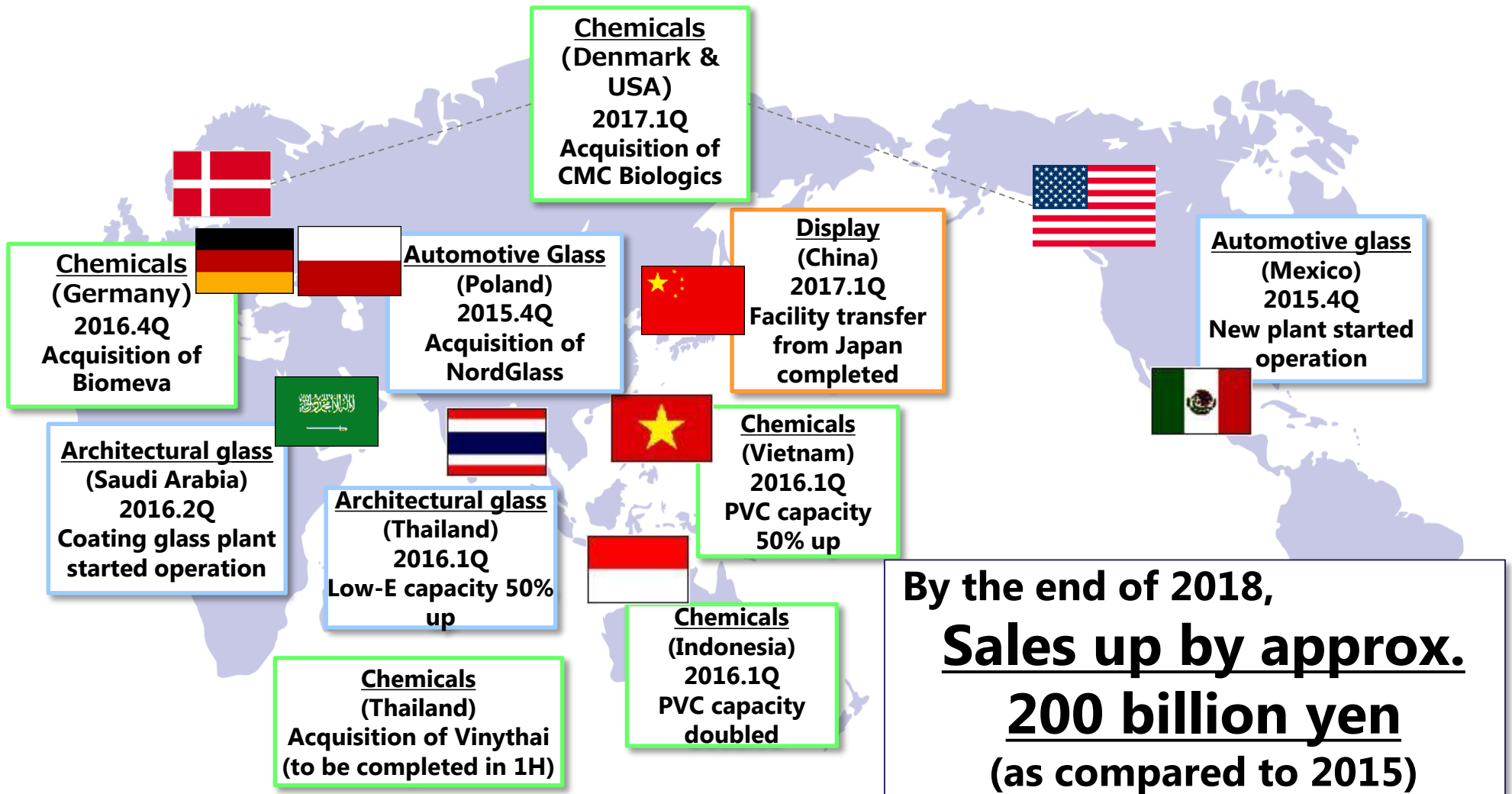
3

Take advantage of high growth in Asia by leveraging regional operations and strategic actions in the geographical area covering from Southeast Asia through the Middle East

4

Concentrate the Group's management resources into the business fields that have high earnings/growth potential and achieve the business structure with improved asset efficiency.

◆ Proactive investments are showing results



Core business: Vinythai (Chlor-Alkali)

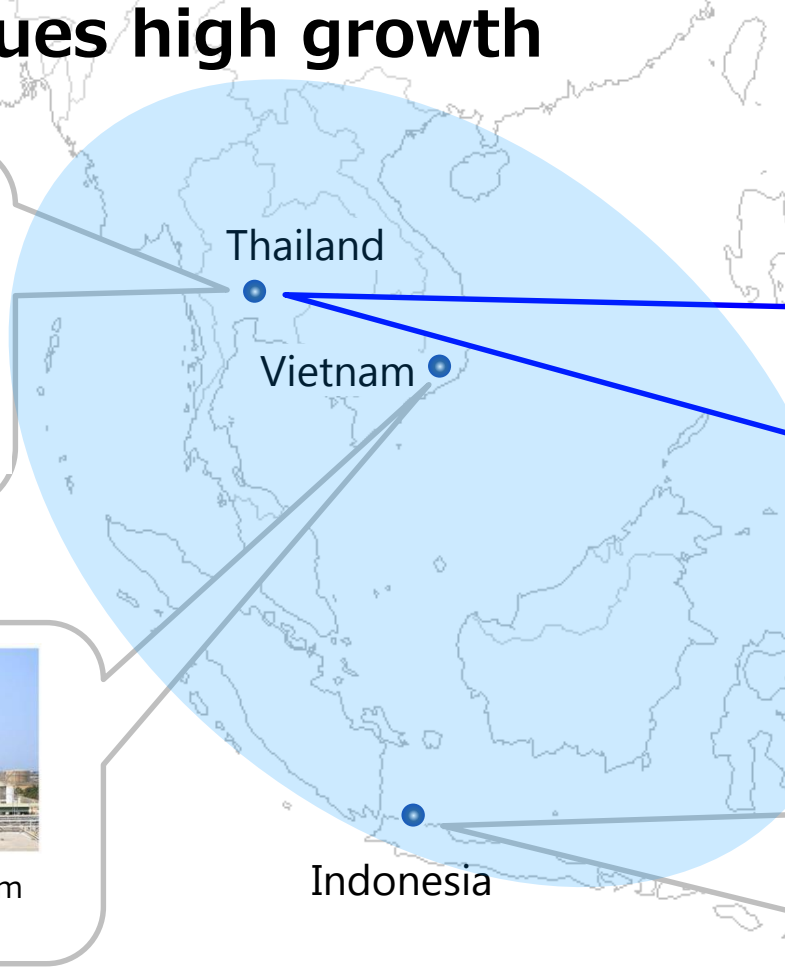
◆ Shifting from company-level to region-level strategies in the Southeast Asian market that continues high growth



AGC Chemicals Thailand
Established in 1964



AGC Chemicals Vietnam
Established in 2014



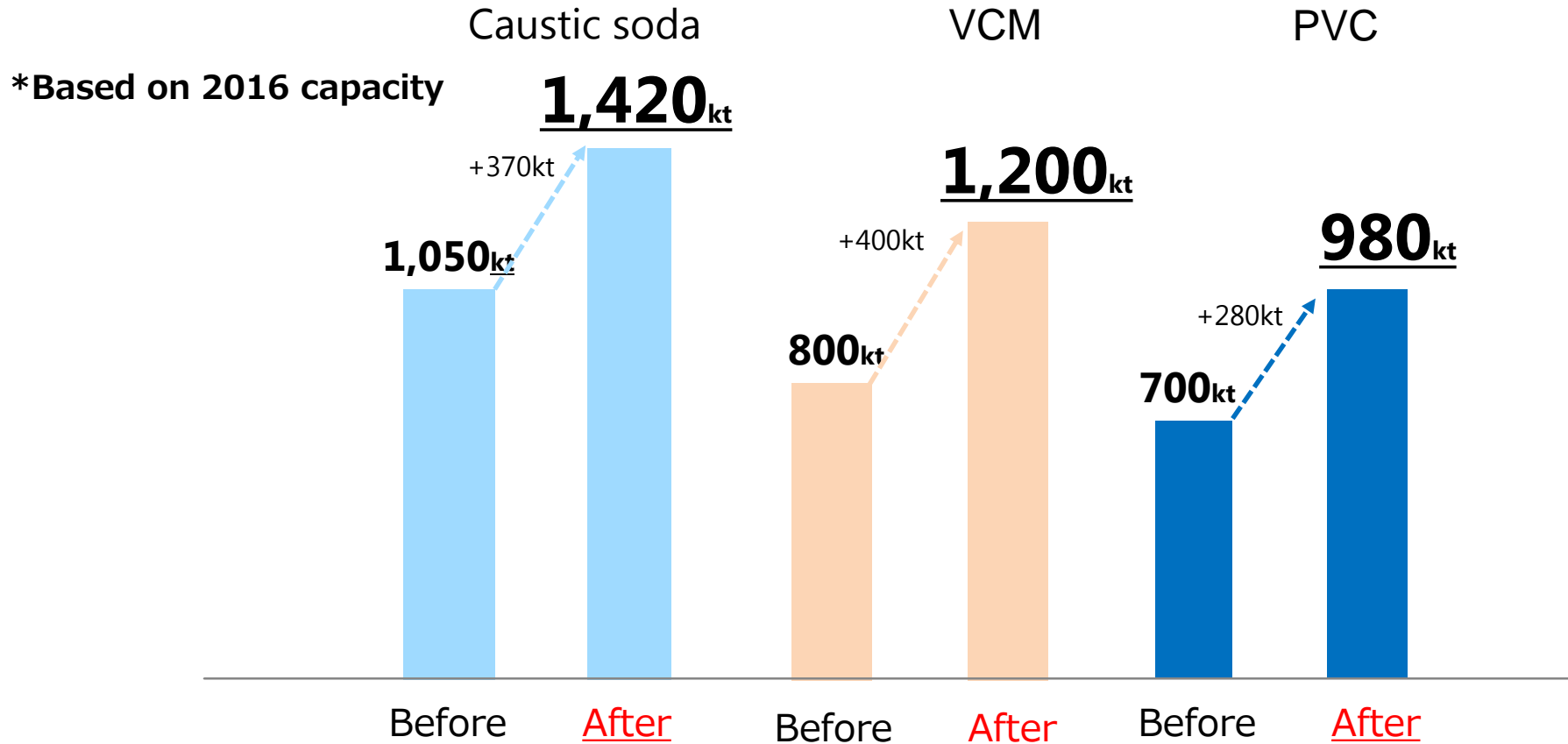
Vinythai
Decided M&A in 2016
(Acquisition will be completed in 1H 2017)

Caustic soda	VCM	PVC	ECH
370k tons/year	400k tons/year	280k tons/year	100k tons/year



Asahimas Chemical
Established in 1986

◆ AGC Group's manufacturing capacity in Southeast Asia



⇒ Leveraging No.1 capacity in the region, we will take advantage of high growth in Asia

◆ Seize changes in the environment and infrastructure surrounding the automotive business for proactive product development

- ✓ Advancement in drive assist systems, and innovation in automatic driving + transportation infrastructure
- ✓ Connecting moving vehicles and society + safety/ security/comfort

Using spaces as displays

Cover glass for car-mounted displays was commercialized in 2016 and its usage is rapidly expanding.

Next-generation communication antenna

Advanced glass antenna design technology responds to next generation communication environment

Supply parts and materials for eco-friendly vehicles

Development of key materials for fuel-cells



◆ Seize changes in the electronics industry to expand business for next-generation products

- ✓ Everything connects with each other + safety/ security/ comfort
- ✓ Advancement of data entry devices (cameras, sensors)
- ✓ Higher-speed communications, higher-density data storage

Camera produces clearer and more beautiful colors
CMOS/CCD blue filters

Advanced security sensors
Parts and materials for fingerprint authentication systems and sensors

Finer, more advanced semiconductor
Development of EUV mask blanks

Sales of consumer materials used for semiconductor manufacturing processes
CMP slurry, EUV mask blanks



- ◆ We acquired the basic technologies for mammalian cell technologies through M&A, in addition to the existing organic synthesis and microbial CDMO for pharmaceutical and agrochemical areas.

- ✓ Longevity + World's population increase
- ✓ Pursuing safety and security

Dividing operations into development, sales and manufacturing and use outsources CDMO based on advanced know-hows and extensive experiences

Synthetic pharmaceutical & agrochemical business

Strong in organic synthesis as cultivated through AGC's long-established fluorochemical businesses
Collaborating with world's major pharmaceutical/ agrochemical companies

Biopharmaceutical

Targeting new drug CDMO at the development-phase
Acquired overseas bases & mammalian CDMO through M&As



Biopharmaceutical CDMO business

- **No.1 bio CMO in Japan**
 - 1985 Launched bio business (R&D)
 - early 2000 Started microbial CMO services
- **Extensive experiences from development to commercial production**



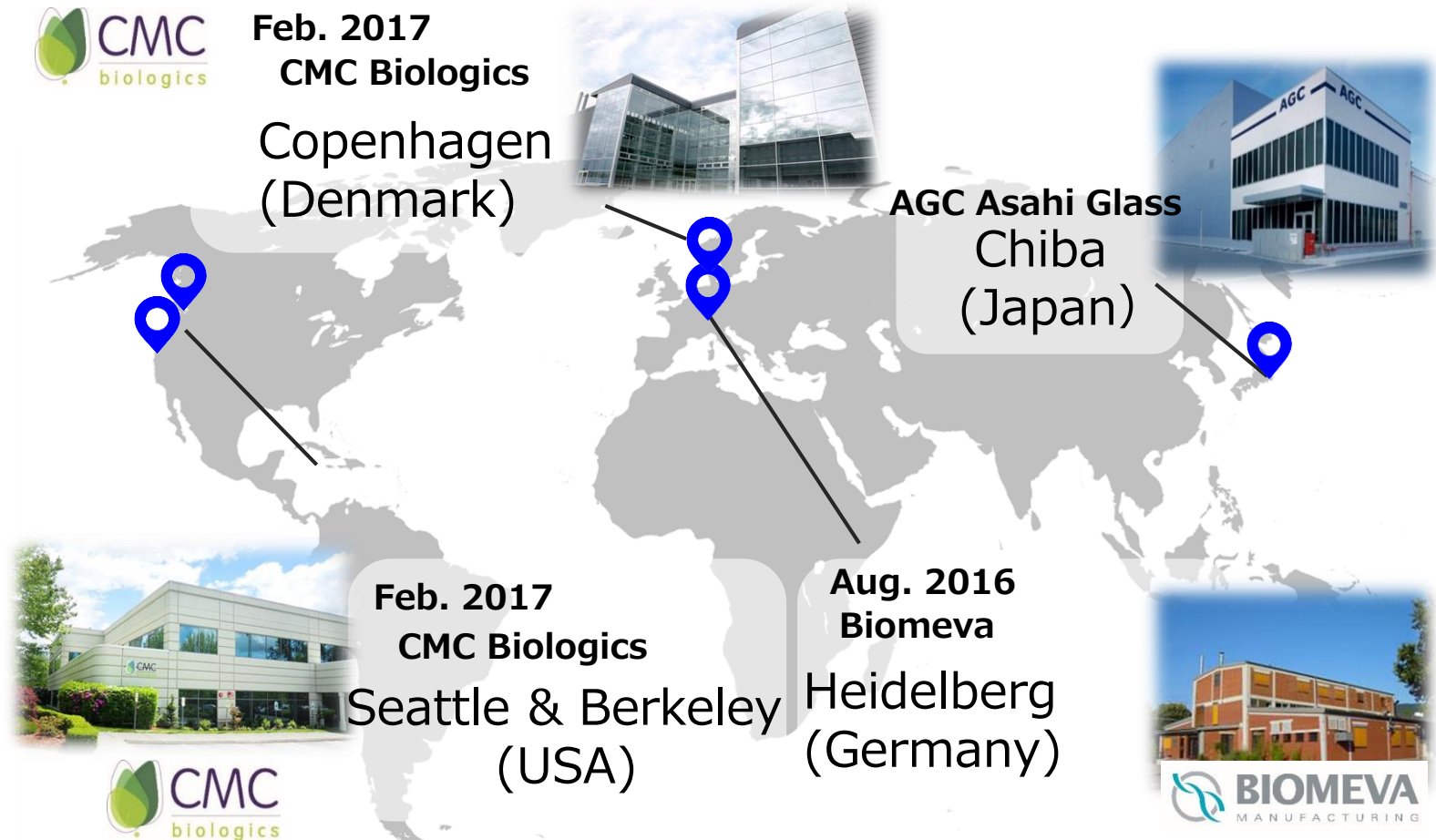
Acquisition of Biomeva and CMC Biologics

- ✓ **Build a global framework with newly acquired bases in Europe and USA**
- ✓ **Engage in CDMO businesses**
- ✓ **Acquired basic technologies for mammalian biopharmaceutical services**



Note) CMO: Contract Manufacturing Organization
CDMO: Contract Development & Manufacturing Organization

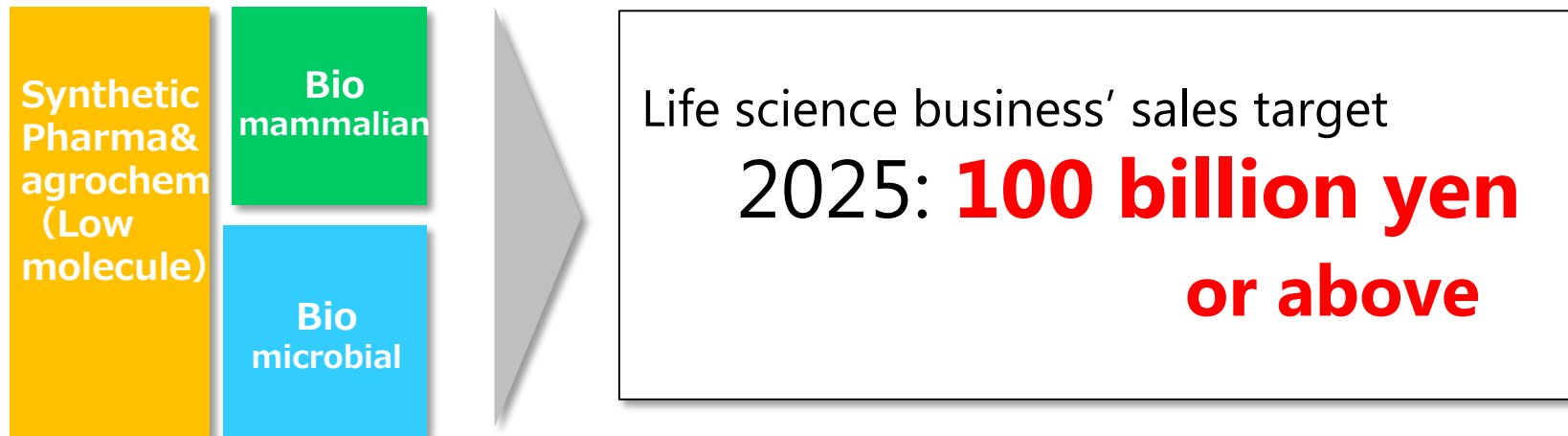
Building a global framework for bio CDMO services



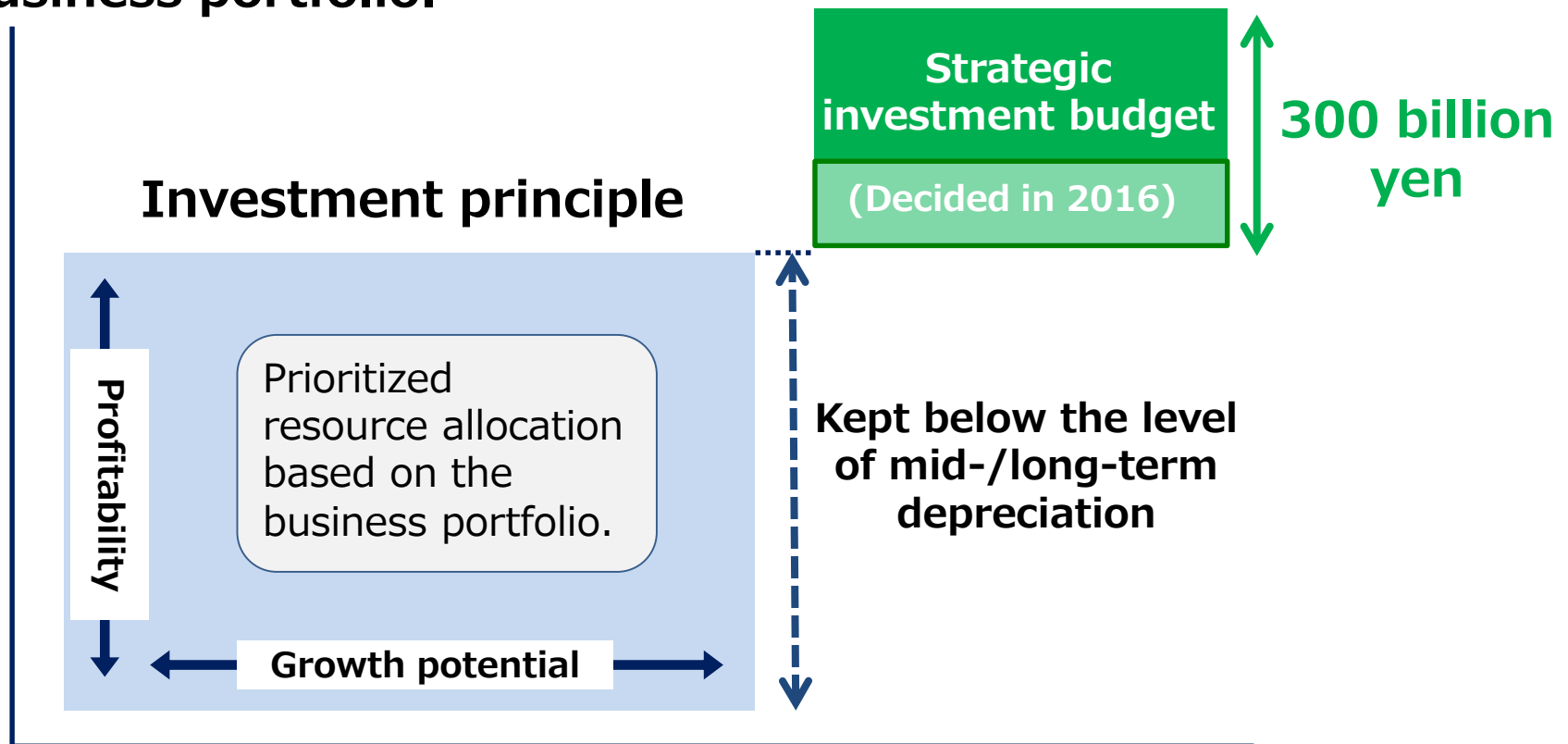
Growth strategy

We will expand our CDMO capabilities into biopharmaceutical services in addition to the synthetic pharmaceutical/ agrochemical CDMO businesses cultivated to date.

The Chemicals Company's life science business



- ◆ Taking measures based on the 300-billion-yen budget set for strategic investments targeting both core & strategic businesses (up to 2020).
- ◆ Investment targets are selected based on the Group's business portfolio.

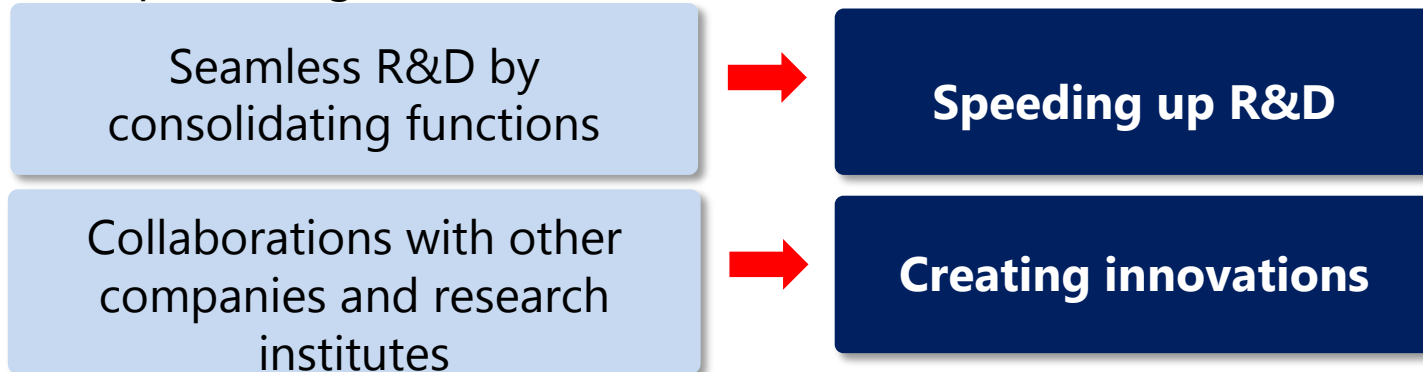


Building new R&D system

- ◆ Build a new R&D facility at the Keihin Plant to make a drastic speed up in R&D activities
- ◆ Consolidate R&D functions as an “urban hub for value creation”

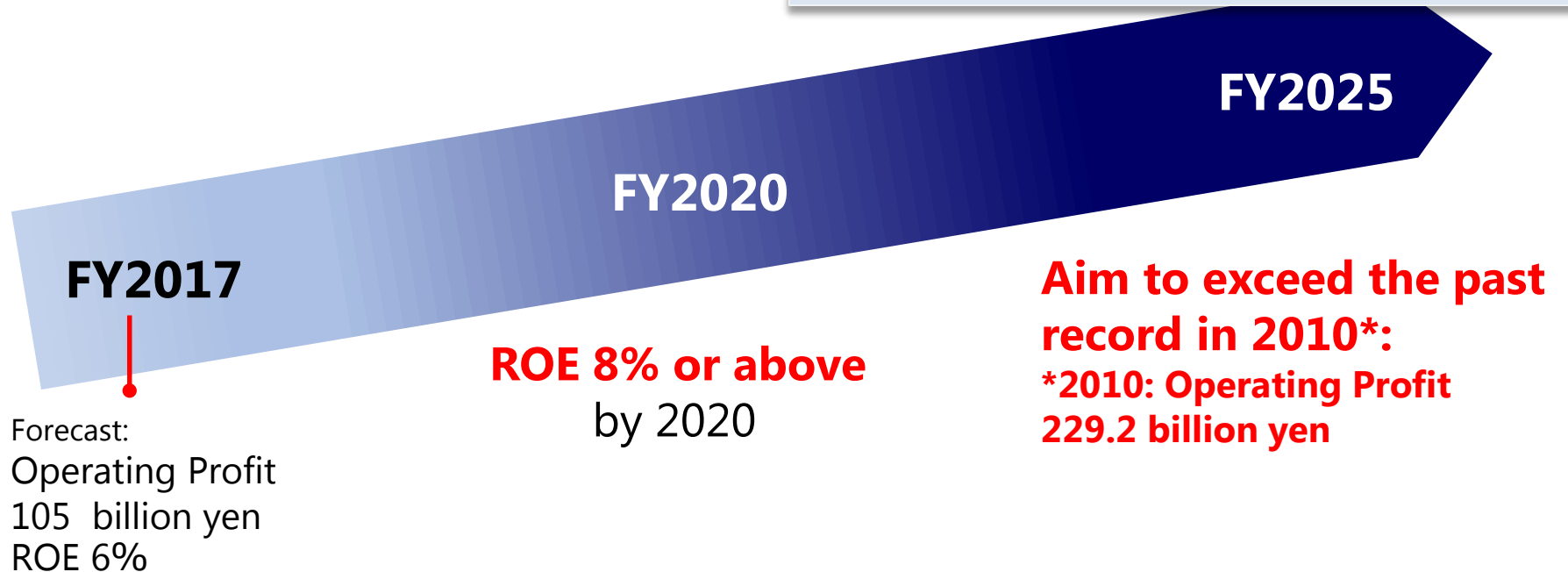


Concept: Aiming to drive fusion, reaction and collaborative creation



◆ AGC will realize the Group's Vision 2025 by steadily taking measures.

Becoming a highly profitable,
leading global material and
solution provider



3. Shareholder return policy

Policy

Aiming at the consolidated total shareholder return of 50% or more including the annual dividend payment per share maintained at the current levels or more and the purchase of treasury stock, the AGC Group strives to proactively return profits to shareholders while giving comprehensive consideration to the Group's consolidated business results and future investment plans, among others.

Dividend

Maintain the current level of the annual dividend payment per share or more

+

Share buyback

Buyback the share by utilizing retained earnings and proceeds from unwinding of cross shareholdings

=

**Consolidated
Total shareholder return
50% or more**

① **Share buyback** (implemented as shareholder return for the financial results for the year ending December 31, 2016)

Total amount: 10 billion yen (Upper limit)

(Or upper limit set at total 15 million shares)

Period: February – March 2017

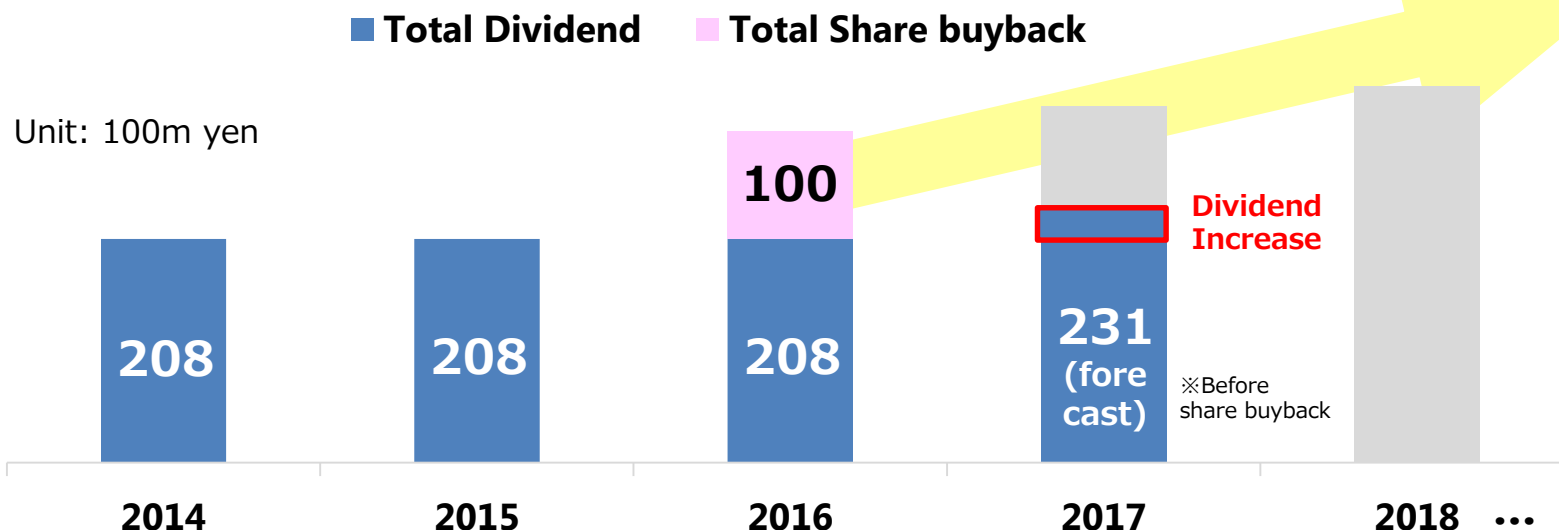
※All of the shares acquired under this program are planned to be canceled.

② **Dividend increase(FY2017)**

Interim: 10 yen/share, Year-end: 10 yen/share (※)
through increase of 1 yen/share each for interim and year-end

*The year-end dividend amount is without the impact of the consolidation of shares scheduled on July 1, 2017. The amount is 50 yen/share if the impact is included.

“To-be” image of shareholder return



Dividend per share	18 yen	18 yen	18yen	20 yen (※1) (Forecast)	TBD (illustration)
Share buyback	—	—	10 billion yen (Upper limit)	TBD (illustration)	
Consolidated total return ratio	130.7%	48.5%	65.0% (※2)	<u>50% or above (policy)</u>	

(※1) 2017 figure excluding the impact of the consolidation of shares scheduled on July 1, 2017

(※2) If calculated by the upper limit of total share buyback (10 billion yen)

Based on the Group’s shareholders return policy, we will constantly review our strategic shareholdings, and strive to maintain the consolidated total return ratio at 50% or above.

Disclaimer

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