


Publication for Communication with Shareholders

# AGC Review

Newsletter for Shareholders

Vol. **35**

Issued in  
September 2019

The AGC logo is displayed in a white box on the right side of the cover. It consists of the letters 'AGC' in a bold, blue, sans-serif font.A group of children wearing AGC-branded white, blue, and red uniforms and caps are interacting with a glass-making exhibit. One child is using a tool to shape a piece of glass. The exhibit is set against a brick wall background.

The "Glass Factory" pavilion opened at  
KidZania Koshien in July 2019

**AGC Inc.**

Code Number: 5201

Your Dreams, Our Challenge

# To Our Shareholders

In the first half of fiscal 2019, net sales declined 8.0 billion JPY, to 737.5 billion JPY, and operating profit fell 18.8 billion JPY, to 41.5 billion JPY. These results reflect the impact of a decline in sales prices for LCD glass substrates and caustic soda in Southeast Asia, a decrease in the shipment volume of automotive glass, and a euro weak against other currencies. In addition, we have revised down our operating profit for the fiscal year, to 105.0 billion JPY from 125.0 billion JPY, as we anticipate a decline in automotive glass shipments in Europe and the United States in the second half, a decline in production efficiency in automotive glass in Japan, and a fall in sales prices for caustic soda in Southeast Asia.

Our first-half earnings were as described above, but we maintained our interim dividend of 60 JPY per share, in line with our initial estimate. We also project the year-end dividend to remain at the initial estimate of 60 JPY per share.

AGC has delivered steady results on the earnings front by executing its growth strategies including M&A in its strategic businesses for achieving the **AGC plus-2020** medium-term

management plan. In our core businesses, we will build an earnings foundation that is stable over the long term by implementing thorough business portfolio management.

We look forward to your continued support in the future.



**Takuya Shimamura**  
President and CEO



# Highlights of the Group's Financial Results

Key Points for the First Half of Fiscal 2019

## Net sales

Net sales decreased due to a decline in sales prices for LCD glass substrates and caustic soda in Southeast Asia, a decrease in the shipment volume of automotive glass, and a euro weak against other currencies.

## Operating profit

Profits decreased due to a decline in sales prices for LCD glass substrates, the ramp-up of new facilities, and an increase in manufacturing costs for automotive glass and chemicals.

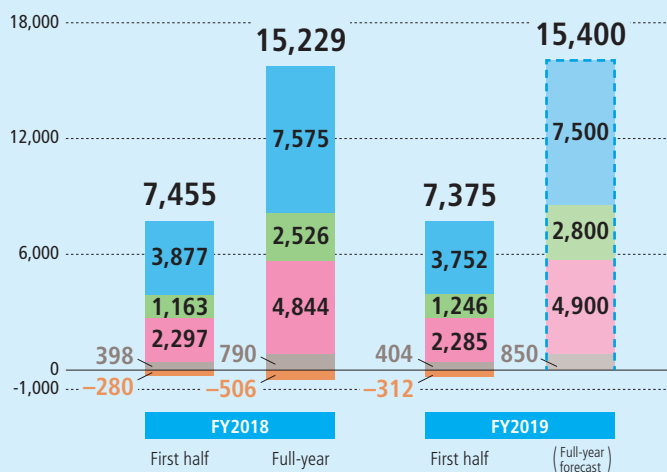
## Profit for the year attributable to owners of the parent

Decreased due to a decline in operating profit

## Net sales

**7,375** hundred million yen  
(down 1.1% year-on-year)

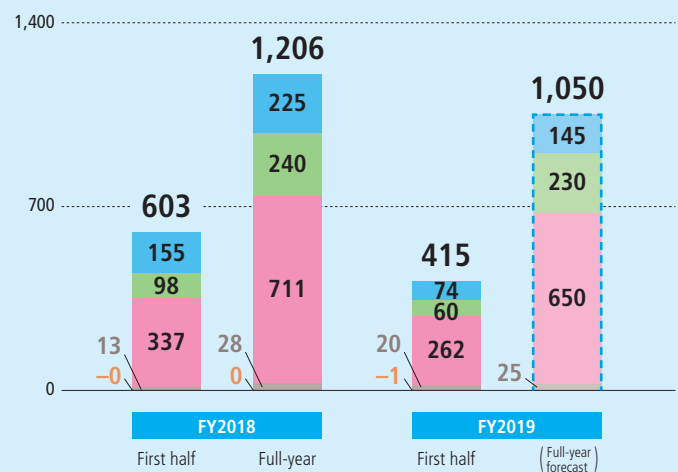
(Hundred million yen)



## Operating profit

**415** hundred million yen  
(down 31.2% year-on-year)

(Hundred million yen)



### Segment

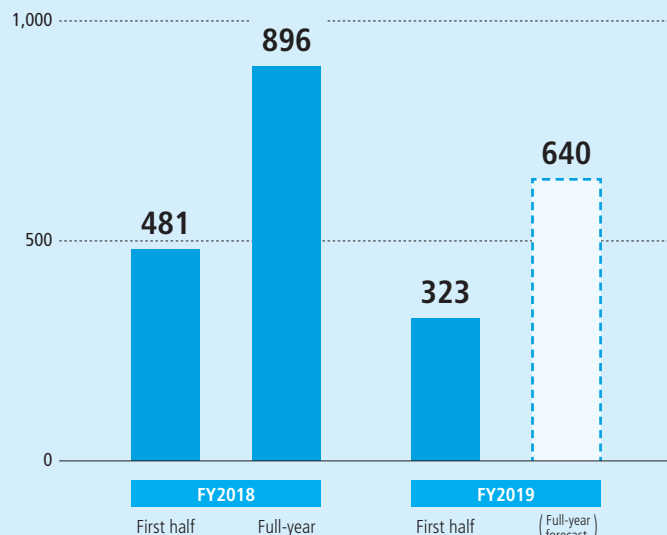
■ Glass 
 ■ Electronics 
 ■ Chemicals 
 ■ Ceramics/Other 
 ■ Corporate or elimination

Note: Due to an organizational change, cover glass for car-mounted displays previously included in the Electronics segment has been included in the Glass segment from FY2019. Data for 1H FY2018 has been created with the FY2019 segment classifications.

## Profit for the year attributable to owners of the parent

**323** hundred million yen  
(down 32.9% year-on-year)

(Hundred million yen)



### Glass

#### Net sales: Decreased

Although shipments of architectural glass were firm in Japan, Europe, and the United States, sales in this segment declined due to a slump in shipments of automotive glass in regions other than Japan and Russia and the impact of a euro weak against other currencies.

#### Operating profit: Decreased

Profits declined in this segment as costs increased due to lower production efficiency in automotive glass in Japan.

### Electronics

#### Net sales: Increased

Sales increased in this segment as we posted higher shipments of specialty glass for displays and semiconductor-related products and also saw a contribution to earnings from a newly consolidated copper clad laminate business that was acquired last year.

#### Operating profit: Decreased

Profits decreased in this segment owing to a decline in sales prices for LCD glass substrates and higher depreciation charges associated with the ramp-up of new facilities.

### Chemicals

#### Net sales: Decreased

Sales decreased in this segment due to a decline in sales prices for caustic soda in Southeast Asia, which outweighed the impact of an increase in contracts for manufacturing biopharmaceutical ingredients.

#### Operating profit: Decreased

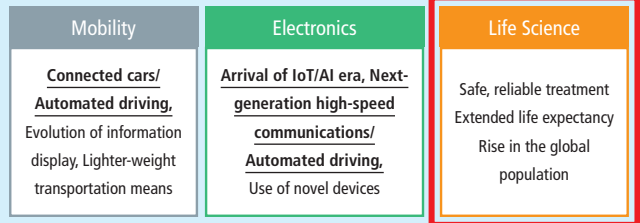
Profits decreased in this segment owing to a decline in sales prices for caustic soda in Southeast Asia, higher manufacturing costs in Japan from major periodic repairs, and higher electricity costs.

# Enhancing the Growth of Our Strategic Businesses

—CDMO business of Life Science—

## Strategic Businesses

We have designated the three areas of **Mobility, Electronics and Life Science** our strategic businesses and are working to grow these businesses to realize our long-term management strategy, **Vision 2025**.



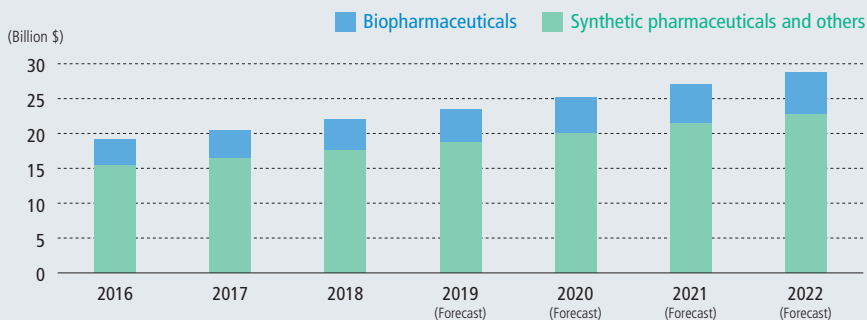
In this edition of *AGC Review*, we introduce the CDMO business of Life Science, one of our strategic businesses. The global pharmaceutical market is expanding every year against the backdrop of extended life expectancies in developed countries, global population growth, and other factors.

In this environment, pharmaceutical companies are increasingly outsourcing their manufacturing process development and manufacturing to external parties to focus their resources on new drug development. The AGC Group has positioned the development of manufacturing processes and contracted manufacturing of pharmaceuticals as a strategic business and is working to expand it.

Note: CDMO is the acronym for of Contract Development & Manufacturing Organization, an organization that not only performs manufacturing on a contracted business but also handles the subcontracting and outsourcing to develop manufacturing methods.

## Growth potential in the global CDMO market

### Worldwide pharmaceutical CDMO market



The global CDMO market for pharmaceutical ingredients is expected to continue posting strong average annual growth of 7% through 2022.

Source: Chart made by AGC with projections based on data from EvaluatePharma® World Preview 2017, Outlook to 2022

## AGC's CDMO business

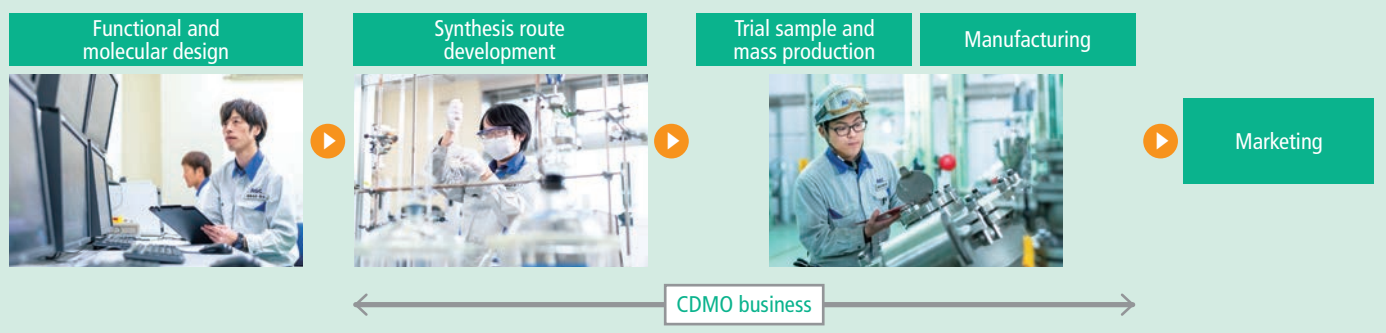
### Overview of CDMO services for synthetic pharmaceuticals/agrochemicals

—Integrated production of raw materials, intermediates, and APIs using fine organic synthesis technology—

#### Synthetic pharmaceuticals: Flow of new drug development and marketing



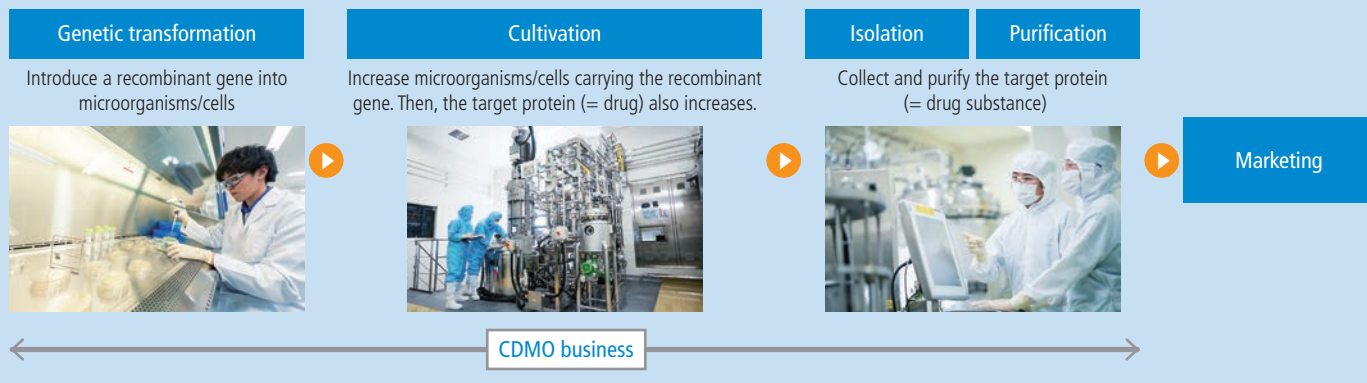
#### Synthetic agrochemicals: Flow of new drug development and marketing



● **Overview of CDMO services for biopharmaceuticals**

—AGC receives the “target gene” from the client and performs the “cultivation,” “isolation,” and “purification” processes on a contract basis.—

**Biopharmaceuticals: Flow of new drug development and marketing**



**AGC's strengths in this business**

**1 A strong track record in supplying commercial-grade pharmaceutical ingredients**

Since pharmaceuticals require supply systems that are high quality and stable, there is a trend toward selecting CDMOs with strong track records. In this regard, the AGC Group has earned an excellent reputation from clients as one of a few companies with a track record for delivering commercial-grade pharmaceutical ingredients.

**2 A supply system that matches client needs**

Recent years have seen rising individualized needs related to illnesses with few patients that nonetheless strongly demand drug therapy. The AGC Group is a pioneer in supplying manufacturing methods suitable for producing a wide variety of products in small lots without the need for cleansing and sanitizing processes. These manufacturing methods have the benefit of accelerating development speed and therefore have been adopted in biopharmaceuticals.

**3 A global supply system in Japan, the United States, and Europe**

We have operating bases for synthetic pharmaceuticals and agricultural chemicals in Japan and Spain and for biopharmaceuticals in Japan, the United States, Germany, and Denmark. AGC's strength is its ability to offer production globally using reaction and culture tanks optimal for the client.

**AGC Integrated Report 2019 published**

This report features the AGC Group's financial data, such as its earnings, growth strategy, and strategy and current conditions in each of its businesses, as well as non-financial data, such as issues and initiatives in the areas of ESG (Environment, Society, and Governance).

This year's Integrated Report introduces AGC's initiatives to resolve social issues through its products and highlights the values they provide.



This report can be downloaded at the following AGC Group website:

[https://www.agc.com/en/csr/pdf/agc\\_report\\_en\\_2019.pdf](https://www.agc.com/en/csr/pdf/agc_report_en_2019.pdf)



**AGC around You**

AGC's technologies help create designs that make an impact.

**AGC's glass is used in new trains on the Marunouchi Line**

From February 2019, new trains began operating on the Tokyo Metro Marunouchi Line. AGC's glass was used in the rounded, three-dimensional look of the front window on the driver's carriage and in the round windows at the end of each car, which are symbolic of the new trains.

Curved glass used in a front window and train information signage, which characterizes the new trains, can easily wrinkle or warp when the curvature is deep. However, AGC successfully created high-quality glass by controlling the temperature distribution and temperature profile at the molding facility.





## Introducing the Kansai Plant (Amagasaki Factory, Takasago Factory)



### Amagasaki Factory

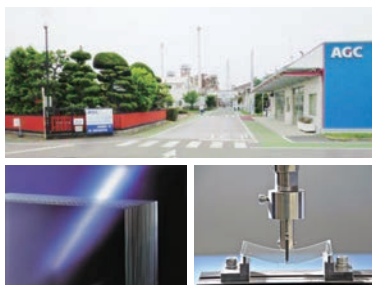
**Location:** Nishimukojima 2, Amagasaki City, Hyogo, Japan

**Start of operation:** 1907

**Employees:** 150 (as of December 2018)

**Main business activities:**

Production of glass substrates for displays and development of glass-integrated digital signage



### Takasago Factory

**Location:** Umei 5-6-1, Takasago City, Hyogo, Japan

**Start of operation:** 1939

**Employees:** 520 (as of December 2018)

**Main business activities:**

Production of glass substrates for displays, specialty glass for chemical strengthening, and materials for semi-conductor manufacturing equipment

### Introducing the Kansai Plant

The Amagasaki Factory (formerly the Kansai Factory) started operations as the site of AGC's foundation, whereas the Takasago Factory (previously known as the Iho Factory) started as a manufacturing base for heat-resistant materials for glass melting furnaces. In line with an organizational integration in 2013, both factories continue to advance as key manufacturing bases for display glass and for chemically strengthened specialty glass for use in cover glass. They will also grow development bases for glass-integrated digital signage, which is expected to be installed in a wide variety of locations in the future.



An example of a glass-integrated digital signage installation



### A message from the Kansai Plant Manager

Both factories have very long histories within AGC but embarked on a new path as the new Kansai Plant following an organizational integration in 2013. Amagasaki and Takasago are managed in unison under the motto "One Team Kansai Plant" as we work to address a variety of subjects. We make and develop a range of products while doing our best every day as the main factory for domestic and overseas bases in the display business.

**Takashi Mitani**, Manager, Kansai Plant

### Topics

## Opening the "Glass Factory" pavilion in KidZania Koshien

To mark the first anniversary of our name change, we opened the "Glass Factory" pavilion in KidZania Koshien (Nishinomiya City, Hyogo Prefecture), an amusement facility that lets children experience various occupations and roles in society.

By having children learn about different types of glass, how glass is made, and the role of glass, we hope they will gain an interest in the glass around them and also enjoy making things.

### Overview of activity

**Occupation title:** Glass factory staff

**Capacity:** 6 children per session

**Time required:** Approximately 30 minutes

**Salary:** 8 KidZos, the currency used in KidZania

### Overview of experience:

After gaining knowledge about glass products, participants confirm the manufacturing processes for glass and mirrors and make a sample mirror. Participants take home the sample mirrors they have made in an original case.

**Information on KidZania Koshien can be found at the following:**

(<http://www.kidzania.jp/koshien/en/>)





## 2019 Blue Planet Winners Have Been Selected

The Asahi Glass Foundation awards the Blue Planet Prize to individuals and organizations that have made particularly impressive contributions to resolving global environmental issues. This year's prizewinners are Professor Eric Lambin and Professor Jared Diamond.



### ■ Professor Eric Lambin (Belgium)

Professor, Université catholique de Louvain; Professor and Dean, Stanford University

Using his original remote sensing technologies, from early on he has pointed out that changes in land use are adversely affecting natural systems globally. He has made major contributions to promoting changes in human behavior as well as to governance of land usage to improve the sustainability of global economic activities.



### ■ Professor Jared Diamond (United States)

Professor, Department of Geography, University of California, Los Angeles; Historian; Author

Through the trilogy he is best known for, *Guns, Germs, and Steel*, *Collapse*, and *The World Until Yesterday*, he provides deep insights into the roots of today's environmental issues from a very broad viewpoint. He explains the significance of environmental issues in the history of human civilization from a unique perspective.

Please visit the following website for more details on the Blue Planet Prize

<https://www.af-info.or.jp/en/index.html>

### Corporate Outline

(as of June 30, 2019)

**Company name:** AGC Inc.

**Founded:** September 8, 1907

**Incorporated:** June 1, 1950

**Capital:** ¥90,873,373,264

**Head office:**

Shin-Marunouchi Building, 1-5-1 Marunouchi,  
Chiyoda-ku, Tokyo 100-8405

**Phone:** +81-3-3218-5096

**Number of consolidated subsidiaries:**

216 (including 179 companies overseas)

### State of Shares

(as of June 30, 2019)

**Number of shares outstanding:** 227,441,381

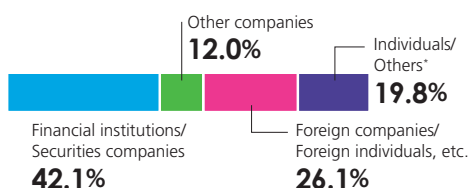
**Number of shareholders:** 63,959

**Shareholders who own shares of one unit or more:**  
56,452

### Shareholder Composition

(as of June 30, 2019)

(Shareholders who own one unit or more)



\*Including 2.6% treasury shares

### Information about Shares

**Fiscal year:** January 1 to December 31

**Ordinary general shareholders' meeting:** March

**Shareholder registration date for entitlement to exercise:**

Voting rights at ordinary general shareholders' meeting: December 31

Rights to receive annual dividend payment: December 31

Rights to receive interim dividend payment: June 30

**Public notice:** Electronic public notices

<https://www.agc.com>

### Shareholder Registrar/Special Account Administrator:

Securities Agency Division, Mitsubishi UFJ Trust and Banking Corporation

Contact:

Phone: 0120-232-711 (toll free within Japan)

Mailing address:

P.O. Box 29, Shin Tokyo Post Office,  
Tokyo 137-8081

Securities Agency Division, Mitsubishi UFJ Trust and Banking Corporation

### Payment of dividends:

We maintained our interim dividend of 60 JPY per share, in line with our initial estimate. We also project the year-end dividend to remain at the initial estimate of 60 JPY per share.

As stated in the Articles of Incorporation, dividends not claimed within five years from the starting date of payment are no longer payable. We therefore urge shareholders to claim all payable dividends at the earliest convenient date.

Dividends that the shareholder has not received will be paid at the Mitsubishi UFJ Trust and Banking Corporation.

### Contact Information for Inquiries Regarding Shares

| Shareholders who have an account with securities companies, etc.      | Shareholders who have a special account  |
|---|--|
| Securities companies or other entities with which you have an account | Mitsubishi UFJ Trust and Banking Corporation (our Special Account Administrator)<br>Phone: 0120-232-711 (toll free within Japan) |

### Note concerning information about the future

Please note that statements made in this document concerning projected figures, future measures, and other information about the future involve uncertainties.