

# AGC Review

Newsletter for  
Shareholders

Vol. 19

Issued in September 2011  
Code Number: 5201



**To Our Shareholders**

**Feature Article**

**Progress of the mid-term management plan**  
*"Grow Beyond-2012"*

**Serial**

**The ABCs of AGC**

**Fifth Portion AGC's chemicals business (Electrolysis)**

**AGC ASAHI GLASS CO., LTD.**

## To Our Shareholders



The AGC Group expresses its heartfelt sympathy to those who have suffered from the Great East Japan Earthquake, and sincerely hopes that the affected areas will achieve the earliest possible recovery.

This “AGC Review” includes a report on the status of the Group’s restoration activities from the earthquake, a summary of operating results for the first half of FY2011, the outlook for the full fiscal year, and dividend payments. The feature article introduces the progress of AGC’s full-fledged initiatives to build foundations for growth. *The ABCs of AGC*, a regular feature of the newsletter, introduces the Group’s chemicals business with a focus on electrolysis. We hope you enjoy reading these articles.

We thank you for your continued support.

Kazuhiko Ishimura, President & CEO

### Restoration from the Great East Japan Earthquake

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The Great East Japan Earthquake, which occurred on March 11, 2011, has caused unprecedented damage to Japan, particularly in the northeastern region. The AGC Group suffered no loss of human life, although some employees received slight injuries. Some buildings, plants and other facilities, however, suffered damage from the earthquake, which forced the Group to temporarily suspend production and shipments.

Damage was particularly serious at the Kashima Plant (Kamisu, Ibaraki Prefecture), which manufactures architectural glass and chemicals such as sodium bicarbonate used as an agent for artificial dialysis. Access to the Chiba Plant (Ichihara, Chiba Prefecture), which produces sodium hypochlorite used for sterilizing tap water and other products, was temporarily restricted due to a fire at a neighboring plant. A production base for electronic materials in the

northeastern region of Japan also suffered from the earthquake. Thanks to focused recovery efforts, the restoration of facilities was completed by the end of April at all locations, and production activities were normalized during the first half of the current fiscal year.

In addition, the AGC Group provided relief goods, including daily necessities and foodstuffs, and donated 300 million yen for recovery and restoration activities in the affected areas. The Group has also engaged in such support activities as donating its own products, including AGC’s CORELLE®\* glass tableware. The AGC Group will provide the necessary support by keeping an eye on the status of the affected areas and do its utmost to cooperate in the restoration.

CORELLE®: Whole-surface laminated tempered glass tableware

## Summary of operating results for the first half of FY2011

The global economy in the first half of FY2011 was characterized by gradual recovery in developed countries and economic expansion in fast-growing countries.

In this economic environment, demand in related markets returned to a recovery path and was back on an expansionary track. However, shipments of automotive glass, in particular, decreased sharply from the first half of the previous year due to the impact of the Great East Japan Earthquake. Shipments of chemicals in Japan also declined.

As a result, the Group's net sales decreased 28.1 billion yen from a year earlier to 613.7 billion yen, and operating income declined 15.6 billion yen to 99.3 billion yen year-on-year. An overview by business segment is described on page 9.

## Operating results outlook for FY2011

While the global economy is expected to continue a moderate expansion in the second half of 2011, the outlook remains uncertain due to factors including concerns about the adverse effects of fiscal problems in Europe and the U.S. and increasing resource prices.

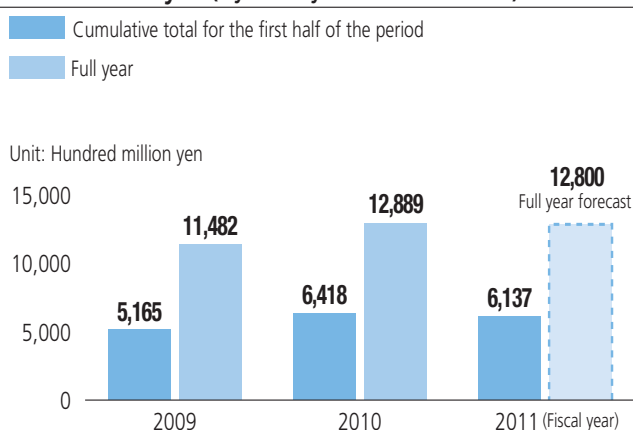
However, we expect worldwide shipments of automotive glass and shipments of chemicals in Japan, which were sluggish due to the earthquake, to recover smoothly. We also project a gradual increase in shipments of all products.

## Dividends

Setting stable and continuous dividend payments as a basic policy, the AGC Group is committed to delivering returns to its shareholders by comprehensively examining various elements such as consolidated operating results and investment plans. We made a downward revision to our forecast for FY2011 consolidated operating results in response to the impact of the Great East Japan Earthquake, when we announced the consolidated financial results for the three months ended March 31, 2011. However, we maintained the interim dividend at 13 yen per share, as forecast at the beginning of the fiscal year. We also plan to pay a year-end dividend of 13 yen per share, as forecast at the beginning of the fiscal year, which will bring the full-year dividend to 26 yen.

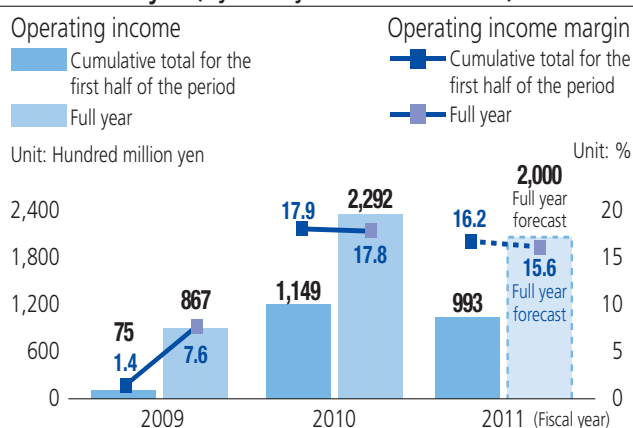
### Net sales

**613.7 billion yen (a year-on-year decrease of 4.4%)**



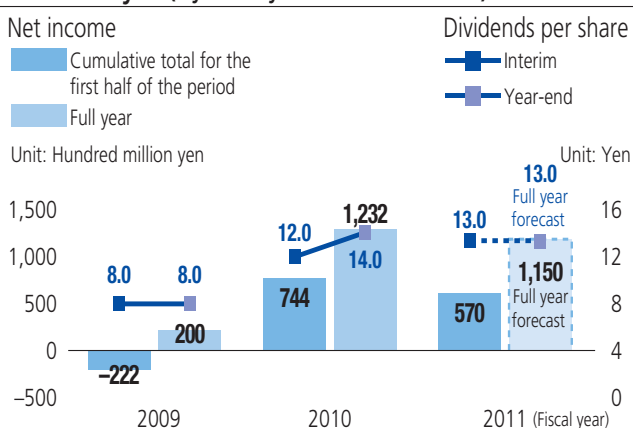
### Operating income and operating income margin

**99.3 billion yen (a year-on-year decrease of 13.6%)**



### Net income and dividends per share

**57 billion yen (a year-on-year decrease of 23.4%)**



## Building new foundations for growth

The AGC Group is pushing forward with the three-year mid-term management plan “*Grow Beyond-2012*”, which was launched in 2010. The challenges of “*Grow Beyond-2012*” are to achieve a full recovery in the Group’s business performance and accelerate the building of foundations for growth.

Although earnings temporarily declined in 2009 due to the financial crisis that occurred in the autumn of 2008, we posted all-time highs for

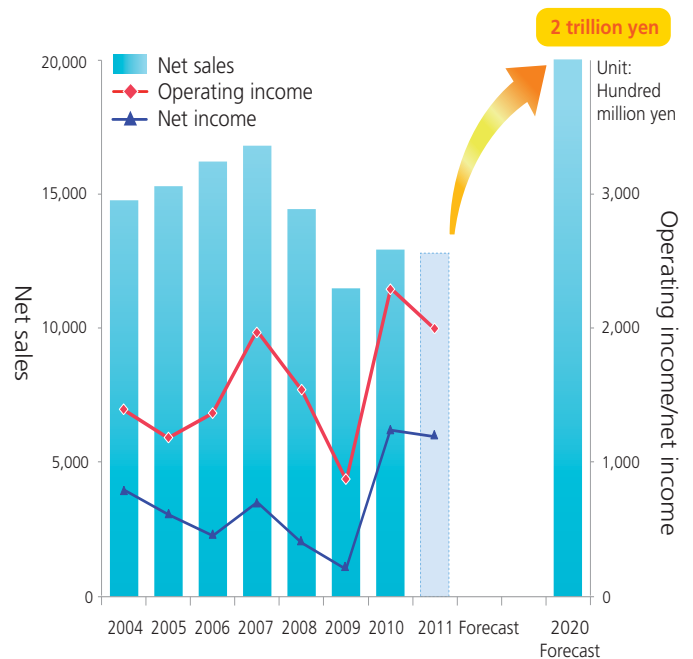
operating income, ordinary income, and net income in 2010, as a result of our group-wide efforts on structural reforms and productivity and yield improvement. To achieve further growth, we are pressing forward with initiatives from three viewpoints: a “Glass-technology-driven company,” the “Second round of globalization,” and “Delivering technology solutions for climate change.”

This feature article introduces the Group’s initiatives to build foundations for growth.

### Concept of the management policy “Grow Beyond”



### Aiming for net sales of 2 trillion yen or more in 2020



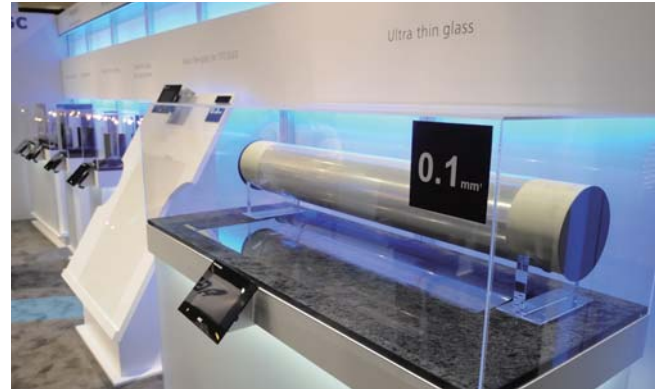
## Glass-Technology-Driven Company

### AGC develops the world's thinnest float glass at just 0.1 mm

AGC successfully developed ultra-thin glass with a thickness of just 0.1 mm, which is the world's thinnest sheet glass manufactured using the float process. This glass has the same composition as TFT-LCD glass substrates used in LCD TVs, and is expected to be used in next-generation flexible displays, lighting, touch-screens, and cutting-edge electronic equipment such as mobile equipment.

There is a growing demand for thinner glass to respond to the trend for more flexible shapes and lighter weight. AGC will contribute to the creation of comfortable and affluent lifestyles as it expands the potential of glass with the expertise and technologies that the Group has developed over decades.

\*The float process is a glass-manufacturing method in which glass is floated over molten metal.



Ultra-thin glass 0.1 mm thick rolled into a coil

### AGC accelerates sales of "Dragontrail™," a specialty glass designed for chemical strengthening

With the expansion of the smartphone and tablet PC markets, demand is surging for cover materials that protect the surfaces of touch-screen panels used in such devices.

AGC has commenced full-fledged sales of "Dragontrail™," a specialty glass for chemical strengthening that is shock and scratch resistant once undergoing chemical processing for further strengthening, and the Group is pushing ahead to expand sales and explore new applications to achieve its target market share of 30%.

As a part of sales expansion efforts, AGC actively participates in major exhibitions around the world and introduces its products to customers in various industries.

Note: Chemical strengthening is a technology that submerges raw glass in chemicals to strengthen its surface.



Shock and scratch resistant "Dragontrail™," a specialty glass designed for chemical strengthening

## Second Round of Globalization

### AGC to enter into Brazil’s architectural and automotive glass markets

Brazil’s economy is booming as it marked GDP growth of 7.5% in 2010, and its growth is expected to continue into the future. Against this backdrop, AGC has decided to enter both architectural glass and automotive glass markets in the country.

In Brazil, the construction market is expected to expand as global sporting events are planned to be held over the next several years. Numerous carmakers have also announced plans to expand their capacities in Brazil.

AGC plans to start up production facilities in phases starting in 2013 within this growing market.



Signing ceremony held in Brazil  
Left: Akio Endo, President of Glass Company  
Center: Geraldo Alckmin, Governor of the State of São Paulo

### AGC to boost electrolysis capacity by 30% in Indonesia

In Indonesia, demand for caustic soda is growing every year, driven by the country’s robust economy, and is expected to continue to expand. Under such circumstances, AGC decided to invest 5 billion yen to expand its electrolysis capacity by 30% at P.T. Asahimas Chemical of the AGC Group, which is engaged in the electrolysis business in Indonesia. The reinforced facility will start production in the first quarter of 2013 to meet brisk demand for basic chemical products in Indonesia.



Aerial view of P.T. Asahimas Chemical

## AGC to build the second production base in China for large TFT-LCD glass substrates

AGC has decided to set up a second production base for TFT-LCD glass substrates in Shenzhen, Guangdong Province, China, following one in Kunshan, Jiangsu Province, with its plan to install a processing line for 8th generation glass substrates and start volume production in the summer of 2012.

The worldwide market for flat panel displays is expected to continue to grow at a rate of about 10% annually. In particular, production bases for large LCD panels are scheduled to be set up consecutively in China. AGC will enhance its production system in the Chinese market by setting up a processing base for large glass substrates that are needed for the production of large LCD panels.



Building a second production base in China for large TFT-LCD glass substrates

## Delivering Technology Solutions for Climate Change

### AGC is accelerating development and sales of solar products

AGC is working on the development and production of various solar components, including cover glass and substrate glass for photovoltaic and solar thermal power generation, mirrors, and peripheral components such as back sheet films, by bringing together glass, chemicals, and ceramics technologies that it has developed over decades.

In an effort to expand sales of highly efficient and highly resistant solar products, AGC actively takes part in major exhibitions of solar technologies and products around the world.



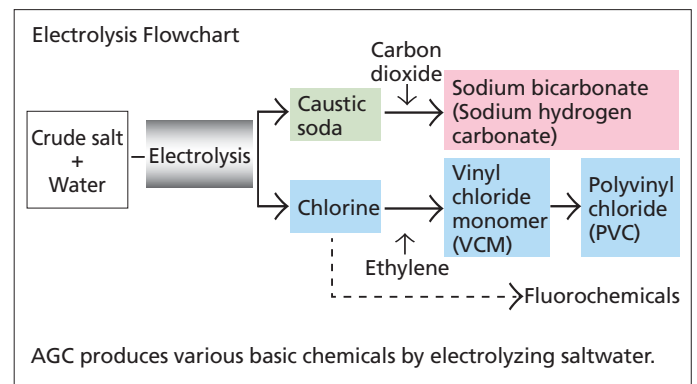
"Intersolar Europe," held in Munich, Germany, in June

## AGC manufactures a variety of basic chemicals by electrolyzing salt water

Chemicals business in general handles petrochemicals made from crude oil, but AGC's chemicals business uses salt as a starting material. Its history dates back to World War I. In those days, AGC had been dependent on imports for the procurement of soda ash, which is an ingredient of glass. However, the procurement became difficult due to the war, and the company decided to produce soda ash by itself. This was the beginning of AGC's chemicals business.

Today, AGC produces basic chemicals including caustic soda and chlorine which are obtained by electrolyzing salt water, and their derivatives. The Group has acquired large market shares in eastern Japan, Thailand, and Indonesia, where it operates chemicals

businesses by developing the strategy to become the number one supplier in each region. These basic chemicals are the foundations for producing fluorochemicals, and form the base of AGC's chemicals business.



Salt is the starting material for a variety of basic chemicals.

# Basic chemicals in everyday use

## Caustic soda

Caustic soda (sodium hydroxide) is highly alkaline and it reacts with and neutralizes various acids. In the case of wastewater treatment, for example, wastewater becomes acidified when chemicals are used for water purification. Caustic soda neutralizes the acidic wastewater so that the water can be discharged with less environmental impact.

Caustic soda is also used in the production of aluminum, synthetic fibers, soap, and detergents, as well as in the dissolution and the bleaching process of wood pulp.



## Sodium bicarbonate

Sodium bicarbonate (sodium hydrogen carbonate) is used as a cleanser for home-cleaning and baking powder to increase the volume of baked goods. In addition, it is also used as a transfusion agent for artificial dialysis, a stomach medicine, and a raw material of animal feeds.

AGC, the largest domestic manufacturer of sodium bicarbonate, offers various kinds of high-quality sodium bicarbonate and focuses research and development on new products.



## Vinyl chloride monomer and polyvinyl chloride

Vinyl chloride products are used in a variety of fields, notably for water pipes, hoses, and resin sashes. AGC produces vinyl chloride monomer (VCM) and polyvinyl chloride (PVC), which are the raw materials of these vinyl chloride products. They are derivatives of chlorine and are produced by adding ethylene to chlorine.



## Chlorine

Chlorine is generated along with caustic soda when saltwater is electrolyzed. It is used as a raw material of chemical products as a reagent because it combines easily with other elements. It is also used in the production of vinyl chloride resins and various solvents.

AGC delivers stable supplies of chlorine to each company in chemical complexes.

## Sodium hypochlorite

Sodium hypochlorite is used to disinfect and sterilize tap water, and is an indispensable product in our daily lives. When the Great East Japan Earthquake struck Japan, operations at the Chiba Plant were temporarily suspended due to the earthquake, but AGC promptly resumed operations and ensured stable supplies of sodium hypochlorite.

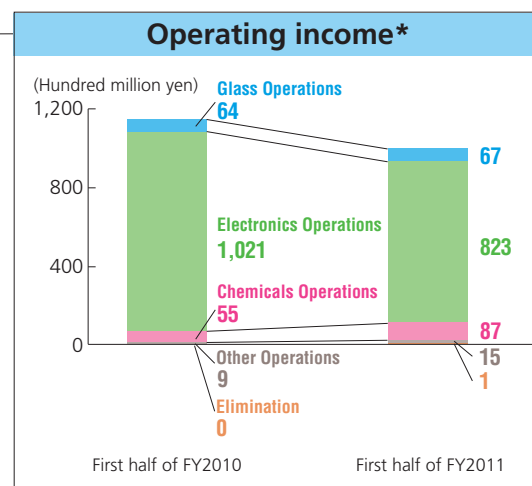
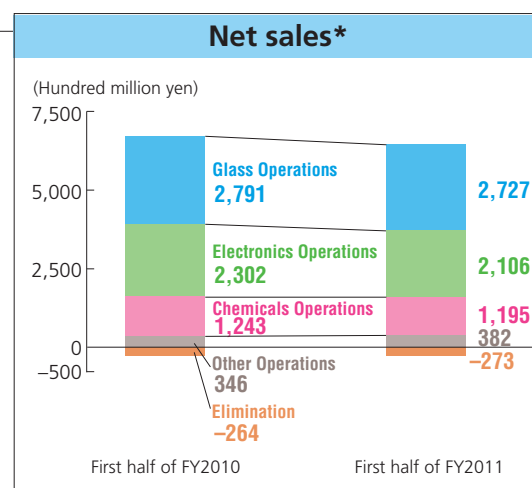


# Operating Results for First Half of FY2011

## Consolidated Statements of Income (Summary)

Unit: Hundred million yen

	For the six months ended June 30, 2011 (January 1, 2011 through June 30, 2011)	For the six months ended June 30, 2010 (January 1, 2010 through June 30, 2010)	Amount of increase/decrease	Rate of increase/decrease
<b>Net sales</b>	6,137	6,418	-281	-4.4%
<b>Operating income</b>	993	1,149	-156	-13.6%
Non-operating income (losses)	37	(25)		
Interest & dividends	(6)	(13)		
Equity in earnings of unconsolidated companies	11	15		
Others	32	(26)		
<b>Ordinary income</b>	1,029	1,124	-95	-8.5%
Extraordinary gains (losses)	(202)	(8)		
<b>Income before income taxes</b>	828	1,116	-289	-25.9%
Income taxes	238	346		
Minority interests in earnings of consolidated subsidiaries	20	27		
<b>Net income</b>	570	744	-174	-23.4%



\* Effective from the fiscal year under review, AGC's segment-related information has been revised based on the management approach. The previous year's data shown above have also been revised to reflect the new segmentation.

### Glass Operations

Shipments of architectural glass increased moderately in Europe and Asia, and the AGC Group raised product prices in Europe. Shipments decreased in Japan due to the impact of the Great East Japan Earthquake, while shipments remained sluggish in North America.

Shipments of automotive glass decreased because automobile production declined sharply, mainly in Japan, due to the disruption of supply chains by the earthquake.

Shipments of glass for solar power systems continued to increase in all regions.

### Electronics Operations

Shipments of glass substrates for display devices increased from a year earlier, but the pace of growth slowed, affected temporarily by production adjustments at panel manufacturers.

Shipments of electronic materials continued to be strong, driven mainly by shipments of semiconductor and optoelectronics materials.

### Chemicals Operations

While shipments of chlor-alkali products decreased in Japan due to the aftermath of the Great East Japan Earthquake, they remained strong in the Asian region. Shipments for semiconductor/electronic applications remained brisk although production of fluorochemicals had been restricted due to the earthquake.

# Information about Shares

## Consolidated Balance Sheets (Summary)

Unit: Hundred million yen

	End of the first half of the fiscal year under review (June 30, 2011)	End of fiscal year 2010 (December 31, 2010)	Amount of increase/ decrease
Current assets	6,477	6,269	208
Fixed assets	11,640	11,371	269
<b>Total assets</b>	<b>18,117</b>	<b>17,640</b>	<b>477</b>
Liabilities	9,054	9,142	-88
<b>Total net assets</b>	<b>9,064</b>	<b>8,498</b>	<b>565</b>
<b>Liabilities &amp; net assets</b>	<b>18,117</b>	<b>17,640</b>	<b>477</b>

## Consolidated Statements of Cash Flows

(Summary)

Unit: Hundred million yen

	For the six months ended June 30, 2011 (January 1, 2011 through June 30, 2011)	For the six months ended June 30, 2010 (January 1, 2010 through June 30, 2010)
Cash flows from operating activities	913	1,387
Cash flows from investing activities	(639)	(515)
Free cash flows	274	871
Cash flows from financing activities	(262)	(712)
<b>Balance of cash and cash equivalents at end of period</b>	<b>1,559</b>	<b>1,094</b>

## State of Stock (as of June 30, 2011)

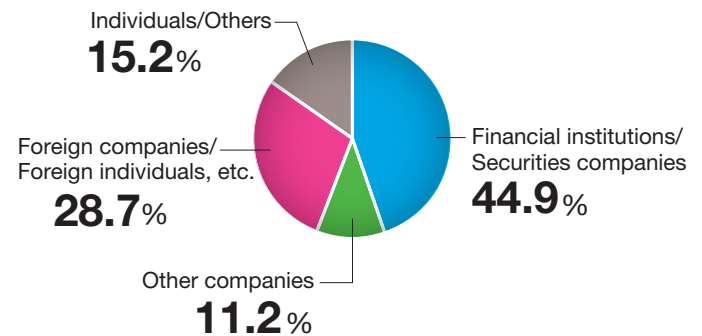
Number of shares outstanding: 1,186,705,905

Number of shareholders: 61,644

Shareholders who own shares of one unit or more: 47,706

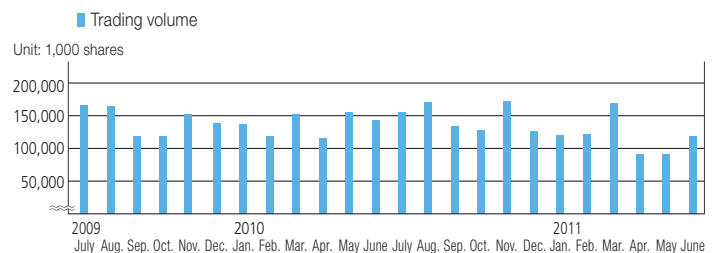
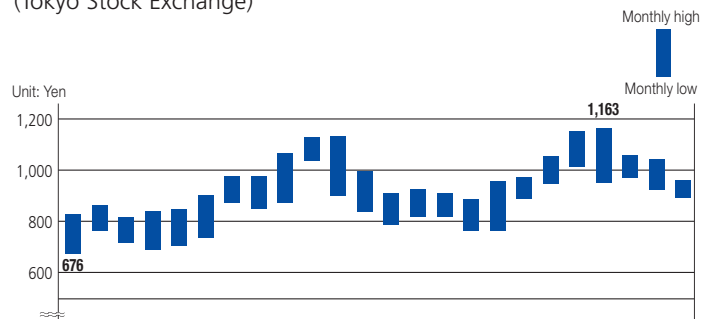
## Shareholders' Composition

(Shareholders who own shares of one unit or more)



## Trends in Stock Price and Trading Volume

(Tokyo Stock Exchange)



## Corporate Outline

(as of June 30, 2011)

### Trade name:

Asahi Glass Company, Limited

### 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  
Tel: +81-3-3218-5096

The head office was relocated to the  
aforementioned location as of August 16, 2011.

### Number of consolidated subsidiaries:

180 (including 143 companies overseas)

### Number of employees of consolidated companies:

50,523

## 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

<http://www.agc.com>

### Shareholder Registrar/Special Account Administrator:

Mitsubishi UFJ Trust and Banking Corporation

Inquiries/Mailing address:

Securities Agency Division,

Mitsubishi UFJ Trust and Banking Corporation

7-10-11 Higashisuna, Koto-ku, Tokyo 137-8081

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

### Payment of Dividends:

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.

### To shareholders owning shares constituting less than one unit:

Shareholders owning shares constituting less than one unit (1-999 shares) of the Company may request the Company to purchase such shares/sell additional shares. For the details of such procedures, including requests for necessary forms, please notify the following place of contact.

### Contact information for inquiries regarding shares

- Contact information for inquiries regarding shares registered with a trading account at Account Management Institutions

Please contact **the Account Management Institutions**.

- Contact information for inquiries regarding shares registered in the Special Account

Please contact **Mitsubishi UFJ Trust and Banking Corporation (our Special Account Administrator)**.

**Contact: Securities Agency Division,  
Mitsubishi UFJ Trust and Banking Corporation**

Telephone: 0120-232-711  
(Toll free within Japan)

\* When shareholders holding shares in the Special Account wish to register their change of address, designate or change the bank account for receiving dividends, purchase shares constituting less than one unit, or process account transfer, please contact the Special Account Administrator toll-free number, at 0120-244-479 (there is an automated voice answering service 24 hours a day) and ask for the relevant application forms.