

AGC Report 2012



Reporting and Editorial Policy

In this report, the AGC Group clearly communicates its growth strategy to stakeholders, in accordance with its corporate mission to “Look Beyond” to make the world a brighter place.

From this fiscal year onward, the AGC Group will combine its AGC Report (company and business information) and CSR Report. In this report, the Group aims to clearly communicate to stakeholders its growth strategy of effectively advancing its business initiatives and CSR goals as an integrated whole under the corporate mission to “Look Beyond” to make the world a brighter place, as outlined in the Group Vision.

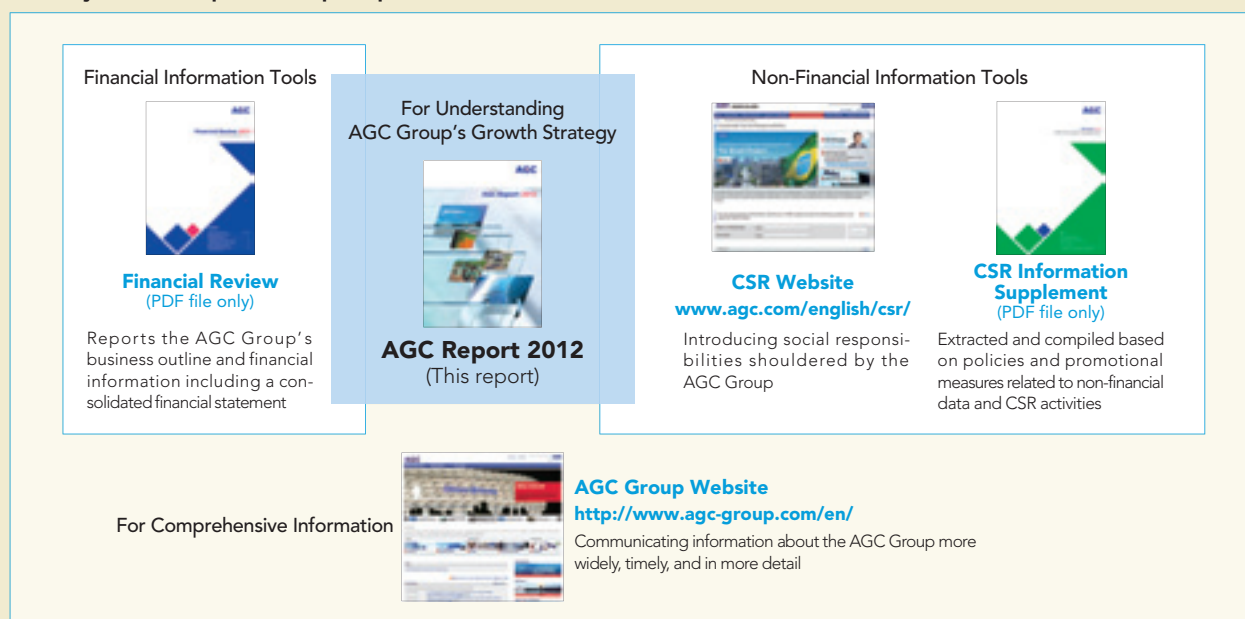
The AGC Group hopes to give its stakeholders a comprehensive understanding of the various initiatives it promotes as a business that contributes to sustainable society.

This report has been compiled in two chapters.

In Chapter 1 “Business Overview,” the report presents business summaries and strategies, as well as key achievements in the Group’s three major businesses—glass, electronics and chemicals.

In Chapter 2 “Responsibilities to Our Stakeholders,” the report discusses the social responsibilities fulfilled by the AGC Group, based on the core themes cited in ISO 26000.

An Array of Tools Helps the Group Deepen its Communication with Stakeholders



Scope of Report

Reporting Period

Fiscal 2011 (Jan.–Dec. 2011)

Some information includes content from both fiscal 2010 and 2012.

Organizations Covered in the Report

Asahi Glass and its 179 consolidated subsidiaries (Group companies) in and outside Japan

Primary Notation and Report Targets Used in the Report

The AGC Group	Same as “Organizations Covered in the Report” mentioned above
The AGC Group (Japan)	Group companies in Japan including Asahi Glass Co. Ltd.
Asahi Glass/the Company	AGC Asahi Glass Co. Ltd. (on an unconsolidated basis)
The AGC Group (Asia)	Group companies in Asia excluding the AGC Group (Japan)

Non-Financial Information Guidelines

- ISO 26000: 2010 Guidance on social responsibility
- Sustainable Reporting Guidelines Version 3.1 (G3.1), Global Reporting Initiative (GRI)
- Environmental Reporting Guidelines (2012), Japanese Ministry of the Environment

Date of Publication

June 2012

Last date of publication: AGC Report: June 2011 CSR Report: July 2011

Regarding Future Assumptions, Forecasts and Plans

Future perspectives described in this report are based on the latest information available to the AGC Group at the time of editing this report. Nevertheless, please note that results and consequences may vary with fluctuations in the business environment.

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Overview of the AGC Group

The AGC Group, with Asahi Glass Co., Ltd. at its core, is a global solution provider for architectural, automotive and display glass, chemicals and other high-function materials and components. Drawing on more than a century of technological innovation, the Group has developed world-class core technologies in fields including glass, chemicals and ceramics. Under the **AGC** brand, approximately 50,000 group employees share the group vision **“Look Beyond”** and work together to create new value.

Corporate Data

As of the end of December 2011

Name	Asahi Glass Co., Ltd. (Global brand: AGC)
Head office	1-5-1, Marunouchi, Chiyoda-ku, Tokyo 100-8405, Japan
Founded	September 8, 1907
Incorporated	June 1, 1950
Capital	90,873 million yen
Outstanding stock	1,186,705,905 shares
Employees	50,957 (consolidated), 6,367 (non-consolidated)
Consolidated Group companies	179 (142 overseas)

Sales and Sales Ratio by Business Segment

Ceramics/Other

2%
83.9 billion yen

Chemicals

20%
248.6 billion yen

Electronics

32%
386.5 billion yen

Glass

46%
554.4 billion yen

Net sales
1,214.7
billion yen

Sales and Sales Ratio by Geographic Segment

North America

6%
81 billion yen

Japan/Asia

74%
923 billion yen

Europe

20%
243.2 billion yen

Net sales
1,214.7
billion yen

Note Sales ratios and sales by business segment is calculated using amount of net sales to external customers.



AGC Group Vision

“Look Beyond”

Our Mission—We, the AGC Group, “Look Beyond” to make the world a brighter place.

As a global materials and components supplier, based on our core technologies in glass, fluorine chemistry and their related fields, we will continue to:

“Look Beyond” ... Anticipate and envision the future,

“Look Beyond” ... Have perspectives beyond our own fields of expertise and

“Look Beyond” ... Pursue innovations, not becoming complacent with the status quo.

By “Looking Beyond,” we will continue to create value worldwide, demonstrating the vast potential of the Group’s entire organization.



Our Shared Values

Our four Shared Values are to be adopted and followed by all members of the Group and are of the foremost importance in accomplishing Our Mission. These Shared Values, described below, will serve as the basis for every judgment we make and action we take collectively and individually.

Innovation & Operational Excellence

We will continuously pursue innovations in technology, products, services, business models and human resources. We will continuously improve our operations for maximum efficiency and quality in every activity and at all times strive for the highest possible standard of performance. (“Never take the easy way out, but confront difficulties”)¹

Diversity

We will respect individuals with different cultures, capabilities and personalities, and our global management will operate without regard to nationality, gender or background.

Environment

We, as good global citizens, will shoulder the responsibility to contribute to a sustainable society in harmony with nature.

Integrity

We will build open and fair relationships with all of our stakeholders based on the highest ethical standards.

¹ “Never take the easy way out, but confront difficulties” is the founding principle of Asahi Glass.

Financial and Non-Financial Highlights

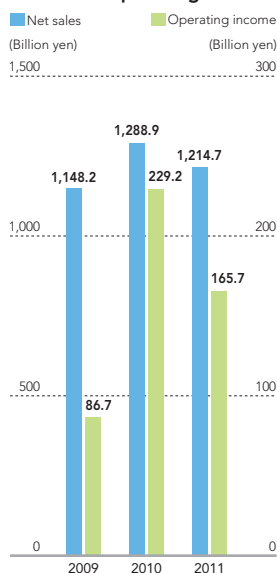
Asahi Glass Co., Ltd. and Consolidated Subsidiaries
Fiscal years ending on December 31 (consolidated)

	2009	2010	2011	Increase (Decrease)
Income statement and balance sheet data (million yen)				
Net sales ¹	¥ 1,148,198	¥ 1,288,947	¥ 1,214,672	¥ (74,275)
Operating income	86,682	229,205	165,663	(63,542)
Net income	19,985	123,184	95,290	(27,894)
Total assets	1,781,875	1,764,038	1,691,556	(72,482)
Total net assets	808,312	849,815	850,460	645
Sales by business segment (million yen)				
Glass	¥ 525,008	¥ 570,921	¥ 554,423	¥ (16,498)
Electronics	369,341	435,301	386,512	(48,789)
Chemicals	233,696	260,078	248,573	(11,505)
Ceramics/Other	68,889	77,305	83,915	6,610
Sales ratio by business segment (%)¹				
Glass	42	44	46	—
Electronics	32	34	32	—
Chemicals	20	20	20	—
Ceramics/Other	6	2	2	—
Other financial data				
Research and development costs (million yen)	¥ 44,958	¥ 39,399	¥ 46,442	¥ 7,043
Capital expenditures (million yen)	124,937	117,439	152,705	35,266
Return on equity (ROE) (%)	2.7	15.8	11.8	—
Return on assets (ROA) (%) ²	4.8	12.9	9.6	—

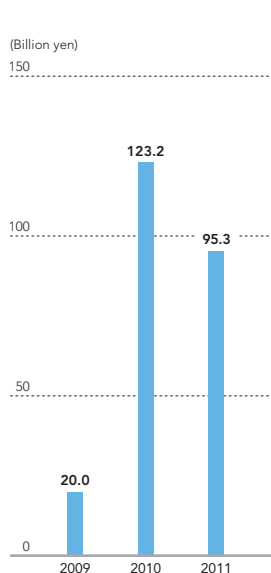
¹ Sales ratios and sales by business segment is calculated using amount of net sales to external customers.

² Based on operating income.

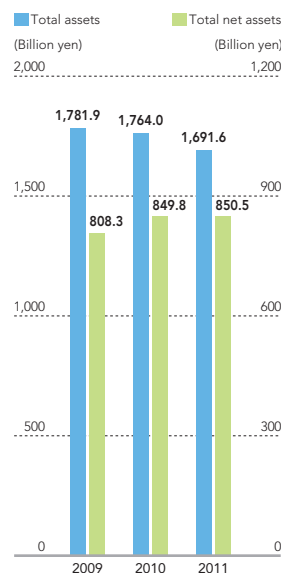
Net sales/Operating income



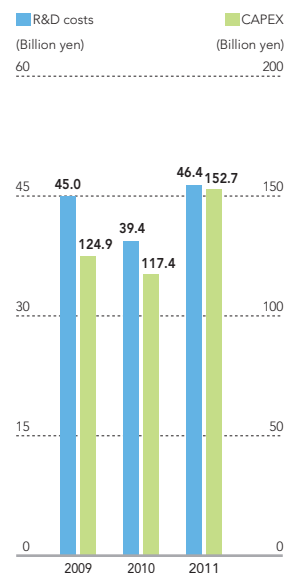
Net income



Total assets/Total net assets



R&D costs/CAPEX

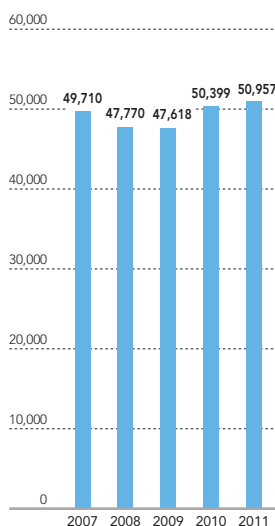


	2009	2010	2011	Increase (Decrease)
Sales by geographical segment (million yen)				
Japan	¥ 658,556	¥ 777,612	¥ —	¥ —
Asia ³	417,976	495,669	923,034	427,365
North America	76,452	86,081	81,006	(5,075)
Europe	236,076	232,961	243,230	10,269
Sales ratio by geographical segment (%)				
Japan	47	49	—	—
Asia ³	30	31	74	—
North America	6	5	6	—
Europe	17	15	20	—
Non-financial data				
Number of employees	47,618	50,399	50,957	558
Total energy consumption (PJ)	125	145	147	2
Greenhouse gas emissions (1,000 tons-CO ₂)	8,020	9,220	9,860	640
Ratio of sales to fast-growing markets (%) ⁴	14	—	19	—
Ratio of environment-related sales (%) ⁴	13	—	16	—
Ratio of sales of new products (%) ⁴	4	—	8	—

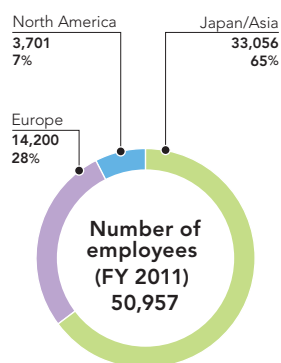
³ From fiscal year 2011, the figure includes both Japan and Asia.

⁴ Data for fiscal 2009 is provided to show comparison before and after introduction of the **“Grow Beyond-2012”** medium-term management plan in 2010.

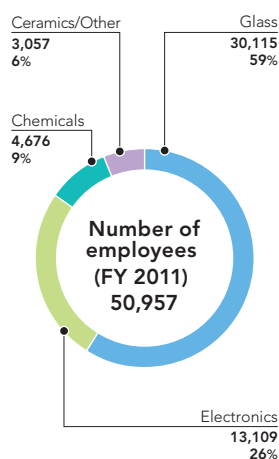
Number of employees



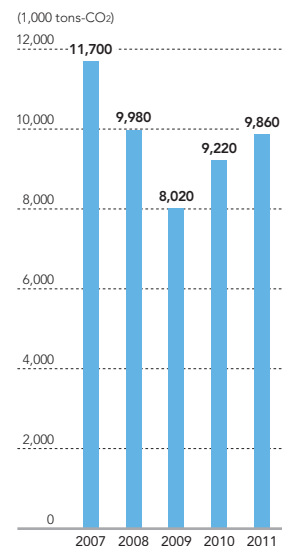
Employees and employee ratio by geographical segment



Employees and employee ratio by business segment



Greenhouse gas emissions



CEO Message

We Will Continue to Develop the AGC Group with the Goal to be an Outstanding Global Enterprise that is Highly Profitable, Fast-Growing and Contributes to the Realization of a Sustainable Society



K. Ishimura

Kazuhiko Ishimura
President & CEO

In February 2010, the AGC Group formulated its "Aspirations for 2020" as a group-wide vision for the future.

AGC's Aspirations for 2020

The AGC Group aspires to excel as a highly profitable and fast-growing global enterprise making contributions to a sustainable society by:

- Having strong and differentiated technologies
- Giving consideration to environmental friendliness not only of products but also for overall production processes and business activities
- Contributing to the development of fast-growing regions

To realize these aspirations, the AGC Group is currently focusing on the following three measures under its management policy, **Grow Beyond**.

We regard the first measure as our Second Round of Globalization.

The AGC Group has already been pursuing globalization by actively developing its business in regions such as Asia, Europe and North America.

In recent years, however, with the economies of advanced countries stagnating, fast-growing countries are emerging as growth-drivers, and issues such as demand for resources are coming to the fore. These changes have resulted in a considerable global shift. To respond to these changes, we intend to raise the AGC Group's presence in the advanced and fast-growing regions where it already operates, and moreover, develop business in particularly fast-growing countries that we have yet to enter. In this way, our Second Round of Globalization promotes the expansion and evolution of the AGC Group in tandem with the growth of these regions.

As a specific example of this measure, we decided to launch full-scale architectural and automotive glass operations in Brazil last year, where we are currently constructing a plant in the state of São Paulo.

Our second measure is designed to pursue differentiation as a Glass-technology-driven Company. The AGC Group was the first company in Japan to produce flat glass on an industrial scale, going on to make glass for automobiles, electronic displays and other products that have continually supported people's livelihoods and economic development in each generation.

Last year, the Group launched Dragontrail™, a high-performance specialty glass for chemical strengthening, to meet the burgeoning demand for cover glass for smartphones and other devices. We also released the world's thinnest glass substrates for touch panels, with a thickness of 0.28 millimeters, and successfully developed ultra-thin sheet glass using the float method. At only 0.1 millimeters thick, it is also the thinnest float glass in the world.

While further evolving glass technologies, the AGC Group works to combine and develop the Group's core technologies in glass, chemicals and ceramics as a means to further differentiate our products and establish a dominant position as a strong competitor in the market.

Our third measure aims to Deliver Technology Solutions for Environmental and Energy Issues.

The AGC Group's operations require a vast amount of energy for various processes including glass melting and caustic soda electrolytic processes. Recognizing its responsibility to society as a major energy consumer, the Group is doing its utmost to cut down on the energy used in these production processes. Indeed, we have already established some of the world's most advanced energy-saving technologies, and are introducing them into the Group's plants worldwide.

At the same time, the AGC Group's energy-saving production processes give rise to energy-conserving architectural and automotive glass, as well as solar power-related materials and components. As their usage grows, these products are making an increasingly significant contribution to solving environmental and energy-related problems on a global scale through their superior performance.

On both of these fronts—working diligently to conserve energy in production processes and promoting environmentally friendly products—we intend to apply our technological capabilities to help solve environmental and energy problems.

By steadily carrying out these **Grow Beyond** measures, the AGC Group is building the foundations for growth at an accelerated pace while contributing to the creation of a sustainable society through its business activities. In this manner, we aspire to be an outstanding and truly global corporate enterprise that consistently earns the trust and meets the expectations of all stakeholders, including customers, shareholders, investors, business partners and the public at large.

By Enhancing Our Business Strengths and Accelerating the Building of Foundations for Growth, We Will Pursue Continuing Growth Alongside Our Stakeholders



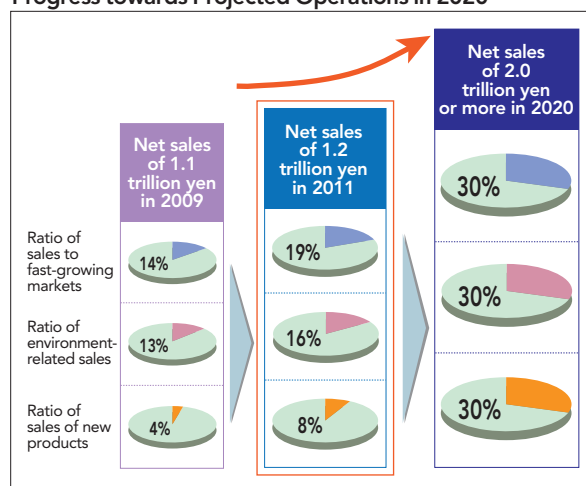
Kazuhiko Ishimura
President & CEO

Q1 Tell us about the progress of the medium-term management plan.

A1 Even in this harsh management environment, the ratios of sales in fast-growing areas and of new and environment-related products are steadily growing.

As a concrete figure for the Aspirations for 2020, the AGC Group is aiming for net sales of over two trillion yen and 30% sales ratios in fast-growing markets, environment-related items and new products. In fiscal 2011, in order to realize these goals, we worked to build foundations for growth and bolster the earning power of our existing operations based on the medium-term management plan **“Grow Beyond-2012”**. Specifically, we implemented measures to expand our operations in fast-growing regions: in addition to putting a TFT-LCD glass substrates polishing plant into operation in China, we entered the architectural and automotive glass business in Brazil, and increased the capacity of our chemicals production facilities in Indonesia. We launched new products, such as specialty glass for chemical strengthening, and also expanded our lineup of energy-

Progress towards Projected Operations in 2020



saving glass and other environment-related products.

As a result of these and other measures, sales ratios are steadily improving: in fiscal 2011, our ratio of sales to fast-growing markets, ratio of environment-related sales, and ratio of sales of new products increased to 19%, 16% and 8% respectively.

Q2 How do you perceive the changes in the business environment that have occurred since the plan was drafted?

A2 I see handling those changes as an issue that must be overcome, but also as an opportunity.

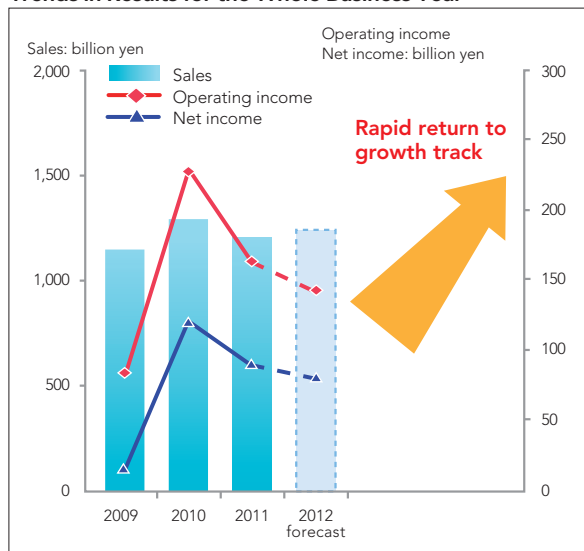
At present, the business environment surrounding the AGC Group is undergoing drastic changes. The growth rate of the flat panel display (FPD) market is slowing as demand from replacing cathode-ray tubes runs its course. In addition, due to economic development in fast-growing countries and the unstable international situation, the prices of resources and energy are anticipated to rise and stay high. On top of that, although high growth in fast-growing markets is expected to continue, with the effects of the European financial crisis, future prospects are uncertain for the global economy as a whole, including developed countries, and are expected to stay that way.

These changes are not transient, and I have a strong sense of urgency about them. But at the same time, I see these challenging times as the perfect opportunity to enhance the Group's business strengths and build foundations for growth.



For example, in response to the FPD market's slowing growth rate, we can work to increase the profitability of glass and chemicals operations as well as strengthen related operations, and, as a result, reduce our dependence on FPD operations for profit. Also, rising resource and energy prices should be seen as an opportunity to

Trends in Results for the Whole Business Year



thoroughly improve the energy efficiency of our production facilities, thereby enhancing our cost competitiveness. In addition, treating these changes in the operating environment as a business opportunity, we will expedite sales of energy-saving products and accelerate expansion of operations in fast-growing markets where high growth is anticipated.

By managing these changes in the business environment, the AGC Group will use fiscal 2012 as the foundation for a reversal of its business results and a rapid return to its growth track.

Q3 Tell us about specific growth strategies.

A3 In addition to raising the profitability of existing businesses, we will accelerate the building of foundations for growth from three perspectives.

We will work to enhance our business strengths and to accelerate the building of foundations for growth.

With regard to enhancing our business strengths, we will institute various measures in all lines of business to further improve productivity, such as introducing innovative, high-efficiency production facilities and optimizing production facilities to match demand trends. We will also push forward measures to increase investment efficiency and improve cash flows through inventory reduction.

Meanwhile, based on the management policy **Grow Beyond**, we will work to accelerate the building of foundations for growth from three perspectives: the Second Round of Globalization, becoming a Glass-technology-driven Company and Delivering Technology Solutions for Environmental and Energy Issues.

In the Second Round of Globalization, we will advance the expansion of automotive glass sales and the production of TFT-LCD glass substrates in China, where we have already launched business operations. In addition, we will steadily respond to the growing demand for architectural and automotive glass in Russia and Central and Eastern Europe. We will use all these measures to further enhance the AGC Group’s presence. We are also planning to expand the geographical scope of our operations as we

promote architectural and automotive glass operations in Brazil, an area into which we recently entered, and seek opportunities for market entry into areas where we do not yet have a presence.

With regard to measures to become a Glass-technology-driven Company, we are leveraging the light weight, thinness and high strength of specialty glass for chemical strengthening and expanding its applications beyond displays into other areas such as solar panels and the automotive and housing sectors.

In order to Deliver Technology Solutions for Environmental and Energy Issues, we are promoting the development and sales expansion of energy-saving glass for eco-friendly housing and eco-friendly vehicles, LED and OLED lighting materials, and lithium-ion battery cathode materials.



In addition, all our operations—glass, electronics, chemicals and ceramics—provide products geared to the solar power generation market. We are also working on making significant improvements to the energy efficiency of our production processes through the use of innovative production technology.

Through all these initiatives, we strive to further contribute to solving environmental and energy issues.

Application of Specialty Glass for Chemical Strengthening



Q4 Tell us about the AGC Group’s strengths.

A4 We aim to differentiate our products and operations by utilizing the unique technology we have accumulated across many fields, including glass, chemicals and ceramics.

I think one of the AGC Group’s biggest strengths lies in its technology. The AGC Group is not limited to glass: it has accumulated unique technology across the fields of chemicals and ceramics as well. The Group evolves each unique technology to the fullest, pursuing high-level pro-

duction technology that delivers high value-added products while saving energy and resources. We also integrate these technologies to develop differentiated products and strengthen our market competitiveness.

A good example of this product differentiation is the fusion of glass technology and chemical coating technology that resulted in UV Verre Premium™, the world's first automotive tempered glass for front doors that blocks approximately 99% of UV rays. The glass has been well received by customers who have actually used it. In addition, a fine example of heightened market competitiveness is the use of ceramics technology cultivated over many years to develop a glass-melting furnace with excellent durability and heat-resistance, resulting in improvements to productivity and the quality of our glass products.

Q5 How are you working to fully manifest Group strengths?

A5 We have introduced Skill Map, a human resources database organized by field of expertise, to make effective use of our human resources.

Our accumulation of unique technologies in the fields of glass, chemicals and ceramics derives from our excellent human resources. In order to leverage fully the expertise of each AGC Group employee, we created Skill Map, a human resources database organized by field of expertise, which was rolled out in 2010. The database holds the work histories of employees with high-level technical knowledge, expertise and know-how, and the rich business knowledge and experience at Group companies around the world.

Skill Map has enabled us to quickly select the most suitable members when beginning cross-section product development projects, and also draft rational recruitment plans in line with future growth strategy. There are now independent lively exchanges across divisional boundaries, such as global "in-company academic societies" comprising employees working in the same field. Such active commitment is due in large part to the introduction of Skill Map (See page 49).

Q6 Tell us how the AGC Group's CSR activities are contributing to the creation of sustainable societies.

A6 We listen to communities, striving to be a Group that engenders trust, expectation and support.

As a member of society, a corporation has a responsibility to a wide range of stakeholders, including customers, shareholders and investors, society at large, business partners and employees. It should not simply pursue profit, ignoring communities and the environment. Therefore, corporations must have a due sense of balance, face their stakeholders, and try to respond to their requests and expectations.

The AGC Group is engaged in various initiatives geared to the creation of a sustainable society based on its corporate mission under the Group vision

"Look Beyond" : We "Look Beyond" to make the world a brighter place. For example, in an effort to ameliorate global environmental issues, we are developing and manufacturing energy-saving architectural glass, solar-related materials and components, and other environmentally friendly products, and promoting the widespread use of such green products around the world. We are also helping to solve regional social problems in the fast-growing regions in which we operate, providing educational support in cooperation with local organizations, for example.

As a Group, I feel it is our obligation to continue to provide technology and services that meet the expectations of society, while remaining attentive to its needs. As such, I appreciate the support we receive as a Group from everyone, and the expectations for our future initiatives.



Looking to the Future of the Global Environment Aiming to Create a Sustainable Society



Mr. Bunker Roy (India)
Founder of Barefoot College

Dr. Jane Lubchenco (United States)
Biologist

Kazuhiko Ishimura
AGC Group CEO

The Blue Planet Prize is awarded by the Asahi Glass Foundation to honor individuals and organizations that have made significant contributions to progress in natural science as well as to the realization of a sustainable society. Celebrating its 20th anniversary in 2011, the Blue Planet Prize is now recognized as a prestigious environmental award worldwide. On November 8, 2011, the winners of the prize in 2011 were invited to the AGC Group Headquarters to talk about global environmental issues.

Ishimura: Established in 1933, the Asahi Glass Foundation's major activity back then was to offer funding for research for the chemical industry at universities. In 1992, based on the advice of former Chairperson of the Science Council of Japan, Dr. Jiro Kondo, who believed that environmental issues would become increasingly important, the Foundation created the Blue Planet Prize to award individuals and organizations contributing to research related to environmental problems. The prize is regarded as the Nobel Prize in the field of environmental related issues.

Lubchenco: It's wonderful when successful companies like the AGC Group have the wisdom to establish a foundation

to benefit society. The Blue Planet Prize recognizes the importance of the environment of the blue planet that we all share. With great humility and deep respect for the Earth, I am greatly honored to accept this award.

Roy: I believe I'm the second Indian who has won the award in the past 20 years since it was established. And, if I'm not mistaken, I'm the only prizewinner who actually lives and works in a rural area. In this way, I think it must have been a challenge for the Blue Planet Prize to choose Barefoot College. It's the first time the award has spotlighted the traditional knowledge and skills that poor people have around the world.

Ishimura: While supporting this award, the AGC Group is developing technologies to dramatically reduce energy consumption in energy-intensive glass manufacturing processes as a part of our efforts to respond to global environmental issues.



Profiles of the Prize Winners

Dr. Jane Lubchenco (United States), biologist

Dr. Jane Lubchenco has achieved outstanding academic results in her research in the field of marine ecology, and has cultivated new fields that incorporate elements of geology, material cycles, and ecosystems. She is one of the most quoted biologists in the world, and has had a significant impact on the research of marine ecology. Dr. Lubchenco has put forth the unique idea of a "social contract" between scientists and society in which there are close relationships between biodiversity, human health, the economy, the social responsibility of scientists, and national security. She thus indicates an identity for scientists who are working to tackle global environmental issues.



Barefoot College (India), founder Mr. Bunker Roy

For 40 years, Barefoot College has conducted low-profile educational activities aimed at addressing poverty and improving the quality of life in the rural communities of developing countries, and has achieved significant results in supporting the efforts of local residents to resolve problems themselves. Barefoot College operates in India and other developing countries in which rural communities are facing problems, and it makes use of local traditional knowledge as well as new knowledge, including the use of small-scale solar electric power generation. The organization has given education to provide local residents with opportunities and systems that enable them to learn how to improve their quality of life. Thus, over a period of many years, Barefoot College has succeeded in developing independent and sustainable rural communities in various regions that are in tune with natural ecosystems.



Roy: At Barefoot College, we have been utilizing solar power generation in agricultural communities. Is the AGC Group making use of solar energy? The ocean can also be considered as a source of energy, of course. What are your thoughts on that?

Ishimura: While solar power is not yet capable of generating the high temperatures required for glass production, we use the electricity generated from PV systems for other operations. As for harnessing the power from the ocean, we are looking at future possibilities. Meanwhile, we are working to develop and manufacture solar-related materials and components that improve power generation efficiency by leveraging our strengths in the glass, chemicals and ceramics technologies. We intend to promote these solar technologies and products worldwide.

Lubchenco: It's been very exciting to hear about some of the cutting-edge technologies the AGC Group is developing that make the world better, not only by creating environment friendly products but also by making its own operations more environmentally friendly. We look forward to more of these kinds of activities in the future.

Note This article is an excerpt from the conversation.

The Asahi Glass Foundation: It was established in 1933 as the Asahi Foundation for Chemical Industry Promotion in commemoration of the 25th anniversary of the founding of Asahi Glass Co., Ltd. At that time, its primary

function was to provide grants for research and development activities. In 1992, the Foundation revised its programs, changed its name to the current one, and established the Blue Planet Prize. The foundation has continued to carry out a variety of activities centering on its research grant-making and commendation programs.

Asahi Glass Foundation Supports Publication of Joint Paper by Laureates of the Blue Planet Prize

Blue Planet Prize laureates jointly presented a paper titled, *The Environment and Development Challenges: The Imperative to Act*, at the 12th Special Session of the Governing Council meeting of the United Nations Environment Programme in February 2012.



Representing the Blue Planet Prize laureates, British professor, Dr. Robert Watson, gave a presentation.



For more information on the joint paper presented by the Blue Planet Prize laureates:

www.af-info.or.jp/en/bppl laureates/



Contributing to Sustainable Development with

The Brazil Project

Against a backdrop of rapid economic growth, the demand for glass in Brazil is growing. The AGC Group has decided to build a new plant in the Brazilian state of São Paulo to act as a springboard for new growth. New challenges for the AGC Group include providing state-of-the-art glass solutions as a global glass supplier, and opening new frontiers for business while confronting social issues in Brazil's developing society.

Opening the Brazilian Market toward the Second Round of Globalization

The concept of a second round of globalization is presented in the AGC Group's management policy, **Grow Beyond**, and the Group has made further business expansion in fast-growing markets one of the pillars of its future growth strategy. As specific goals, the "Aspirations for 2020" include Group sales of over 2 trillion yen, with sales from fast-growing markets making up more than 30%. At present, the AGC Group's presence in fast-growing countries is increasing steadily: it holds the top share in architectural and automotive glass in Russia, and is also expanding its share in India and China with a focus on the automo-

tive market. However, business expansion must not be limited to these markets if the Aspirations for 2020 are to be realized: the opening of new growth markets is vital. To that end, for the past few years, the AGC Group has been considering a move into Brazil, a blank area on its business map.



Brazil has a population of approximately 200 million – the fifth largest in the world – and in 2010 the country had achieved high economic growth of 7.5%. Future plans include hosting a succession of international sporting events, and as a result, increased demand in the construction market is expected. Growth in the automotive sector is also remarkable: more than 3.6 million new cars were sold in 2011, making Brazil the fourth largest consumer in the world, and the number manufactured in 2015 is predicted to reach 4 million. In addition, young people, who comprise a high percentage of the current Brazilian population, will constitute the future mainstream of consumers, and so economic growth can be expected to continue over the medium and long-term.

Of course there are risks, economic instability among them. However, the country holds abundant potential above and beyond its current growth. The Group decided that the time was finally right to advance, and construction of the plant was given the go-ahead.



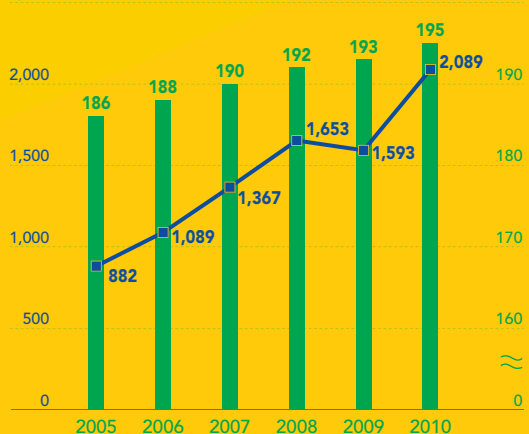
Kei Yonamoto

Asahi Glass
Executive Vice President
Brazil Global Project
Team Leader

As one of the BRICS countries, Brazil is seeing continued high economic growth. The country boasts territory approximately 23 times the size of Japan, and has used this vast area for concentrated efforts in the agricultural, livestock and mining industries. In recent years, it has promoted the production of ethanol, an energy source that does not use fossil resources, and the construction of infrastructure used in social and daily life, and its gross domestic product (GDP) is greatly expanding. On the other hand, energy consumption and CO₂ emissions per person are also increasing, and there is a need for a harmonized growth strategy that will balance the economic development of society with the global environment.

Gross Domestic Product (GDP)/Population Change in Brazil

(Billion U.S. dollars) ■ Gross Domestic Product ■ Population Change (Millions)



Source: Ministry of Internal Affairs and Communications Statistics Bureau Website (Japanese only)
<http://www.stat.go.jp/data/sekai/index.htm>



AGC Glass Brazil

AGC Vidros do Brasil Ltda.

Site:

Guaratinguetá City, São Paulo, Brazil

Portion of ownership:

AGC Group 100%

Description of business:

Manufacture and sales of architectural and automotive glass

Production capacity¹:

Float glass (220,000 tons/year), automotive glass (for 500,000 cars/year)

No. of employees¹:

Approximately 500

¹ As of 2016

Concentrating the Full Power of the AGC Group to Realize a Stable Supply of High-Quality Products

Competing companies have long held an oligopoly in both the construction and automotive sectors of the Brazilian glass market. However, in recent years, as the economy has grown, the scale of the market has expanded rapidly. The resulting vigorous demand cannot be completely satisfied by domestic production, and imports from Asia and Europe are increasing. For this reason, through skillful use of the state-of-the-art technology and business know-how it has cultivated in the global market, the AGC Group is confident of success.

The Group is moving forward with preparations for this advance, putting together a lateral team composed of personnel of diverse nationalities with a focus on European members, and concentrating the knowledge and experience gained from prior advances into countries and regions around the world. In particular, with the global development of auto manufacturers, more emphasis has been placed on the globally standardized quality of components, and the Group's ability to provide such components is a tremendous asset with regard to auto-



motive glass. At present, the AGC Group is building a float glass furnace to act as the core facility for glass production, as well as the production facility for high-value-added architectural

and automotive glass in the state of São Paulo. Operation is planned to begin in stages starting in 2013. The new plant will be equipped with state-of-the-art equipment and operation expertise to



ensure globally standardized quality, which is made possible through the standardization of production facilities and operation procedures across the Group. I am confident that the products manufactured at the new plant will undoubtedly display high market competitiveness with regard to quality, supply stability and cost performance. The Group is proactively expanding its business for glass with outstanding thermal insulation and other high-value-added products. Through its supply of these products, the Group plans to contribute to environmental consciousness and improvements in quality of life in Brazil. It will also give consideration to environmental degradation, disparity of wealth and other issues in Brazilian society, and intends to address them through manufacturing processes and social contribution activities.

I have personally had many opportunities to speak to personnel at stores in the area. The AGC Group is held in high regard, and there is palpable anticipation locally about the arrival of the first new glass supplier in a long time. The Group is resolved to use its full power to launch its business in Brazil, to contribute to local society and industry, and to lead growth strategy for the AGC Group through opening the new frontier of the Brazilian market.

We will Leverage the AGC Group's Global Technological Expertise and Know-How to Contribute to Brazil's Economic and Social Development



Davide Cappellino

President
AGC Glass Brazil

Supporting the Growth of Brazil by Providing Advanced Glass Solutions

The Brazilian economy has been growing rapidly in recent years, and driven by the growth of the construction and automotive sectors, glass consumption has been following the same trend. Yet for many years, Brazil's glass market has been dominated by other companies. AGC Brazil aims to support the development of the Brazilian glass market by bringing the best of AGC Group's global experience, providing customers with high quality glass at reasonable prices. Windows in Brazil are often basic, performing poorly in terms of protection from heat, cold and noise. We will offer more sophisticated and efficient glass applications, improving quality of life for Brazilians by contributing to their comfort. We have already started selling glass through a distribution center located near São Paulo. For the moment the glass is imported from Europe, but we are accelerating construction of our plant in order to be able to produce locally as soon as possible.

AGC Brazil will also support the actions of all AGC Group In-house Companies, for example in exploring and opening the Brazilian market to products from the Chemicals Company.

Taking Responsibility as a Global Enterprise to Deal with Global Environmental Problems

AGC Brazil will not be just an economic operator, focusing only on the business opportunities of this promising market. Our ambition is also to play a social role, offering concrete contributions to the development of Brazilian society and its people.

This large country is today facing many challenges in a number of fields. The growing economy is absorbing natural resources and a growing amount of energy, and environmental preservation is an increasingly urgent issue. Socially, Brazil is characterized by great disparities between the rich classes and a vast portion of the population who still live in poverty.

AGC Brazil will put in place cutting-edge technology to reduce consumption of energy and water, as well as South America's most advanced system for the treatment of fumes and protection of the surrounding environment.

In the meantime, we will invest in efforts to improve the public school system and support programs to help children and adolescents improve skills for better jobs. We will contribute to job creation for our future colleagues both directly and indirectly, working with local administrations and communities.



Finalized image of
new plant in Brazil

Contributing to the Resolution of Education and Poverty Issues to Facilitate Prosperous Coexistence with Brazilian Society

While Brazil experiences rapid economic growth, widening disparities are resulting in more serious poverty issues. One thing that prevents the poor from escaping poverty is lack of education. Although the school attendance rate in Brazil is comparatively high, many children fail grades or drop out due to inadequate educational environments or lack of understanding on the part of their families. When they enter society, they do so without the education necessary to find decent jobs. Before launching its business in Brazil, the AGC Group held several talks with local administrations and a number of NGOs, gathering opinions from experts before it began to consider social contribution activities for Brazil. As a result, based on an awareness of the severity of education issues in Brazilian society and on the concepts of "Support for the next generation" and "Harmony with local communities" given in the AGC Group Social Contribution Basic Policy, the Group has addressed support for education in the region.

Supporting Improvements to the Public School System

The Ayrton Senna Institute (est. 1994) is developing programs to improve public education all across Brazil in order to reduce illiteracy, age-grade distortion, failure and dropouts. The AGC Group supports the Institute's new learning environment improvement program in Guaratinguetá City, which involves training for public school teachers and the improvement of school materials.



AGC Group CEO Kazuhiko Ishimura (right) and Ayrton Senna Institute President Viviane Senna (left)

Support for Job Hunting among Local Young People through Job Training and Before/After School Care

For over 30 years, Casa Betânia has operated a before and after school care program for young people from the poorest areas of Guaratinguetá City by providing meals and extracurricular lessons. Their goal is to support children to be successful at school, and to protect them from violence, drugs and other temptations. The AGC Group will help Casa Betânia expand the capacity of their child care facility to accommodate more children, and will build a new job training center to support job hunting among the area's young people.



Photo credits: Mr. Moises Moraes

Stakeholder's Voice

“It is with Great Joy that Guaratinguetá Receives the AGC Group, a Leading Producer of Glass in the World.”

The AGC Group is seriously concerned with issues related to education and the environment. We are proud to say that this company will be our partner in sustainable development and social activities, as well as for job creation and social programs that focus on education in our country. We wish AGC Glass Brazil the greatest success.



Junior Fillipo
Mayor of Guaratinguetá

Driving the Evolution of Smartphones and Tablet PCs

The Future is Now with Dragontrail™

The AGC Group introduces Dragontrail™—a revolutionary cover glass that is resistant to scratching and shocks and keeps displays looking pristine. The Group has drawn on its highly advanced and diverse technologies developed over many years to create a cover glass for today's generation. Demonstrating material properties never seen before, Dragontrail™ is attracting attention from device manufacturers all over the world.



Developing Specialty Glass for Protecting Displays and Touch Panels from Shocks and Scratches

The markets for smartphones and tablet PCs equipped with touch panels are growing on a global scale. The displays and touch panels of these mobile devices not only need to be cared for because the LCD screen is directly touched during operations, but they also require protection from shocks that can result from dropping the device while on the move, and scratches that might occur from scraping inside carrying bags.

To provide an ideal material for protecting displays and touch panels, AGC Group has developed a cover glass that realizes a level of strength far beyond that of conventionally used soda-lime glass, and a highly scratch-resistant, glossy texture impossible to attain with resin display covers.

With a Proactive Approach from Customers' Product Design Stage, Seeking Materials Needed in the Next Generation

Development of Dragontrail™ commenced in December 2007. After listening to opinions from the industrial design division of an electronic device manufacturer who stresses the importance of advanced design and the texture of materials, the AGC Group came to recognize the need for a completely new cover glass like nothing seen before—strong enough not to break even if dropped, and with a texture that radiates beauty and refinement.

The Group's customers are mostly manufacturers of

materials and components such as liquid crystal panels. In a highly innovative field like electronic devices, however, there are many cases in which the manufacturer of a finished product decides on the raw materials and components used in their products. In an effort to incorporate AGC products into the basic design of finished products, the AGC Group approaches not only direct customers but also the manufacturers of finished products from the initial product design stage.

It was in this context that the AGC Group responded to the need for an all-new cover glass. Smartphones equipped with touch panels were only beginning to appear at that time, but the Group expected a bright future for cover glass, and decided to cultivate it as a Group core product to follow its glass substrates for flat-panel displays (FPDs). Using commercially successful glass for chemical strengthening as a point of reference, the Group designated researchers specializing in materials development from AGC Research Center to create glass that is stronger and more scratch-resistant than its previous materials, and at the same time, brought together personnel involved in glass melting and mold processing from AGC Production Technology Center to swiftly prepare for mass production. Aiming for smooth project management,





Dragontrail™

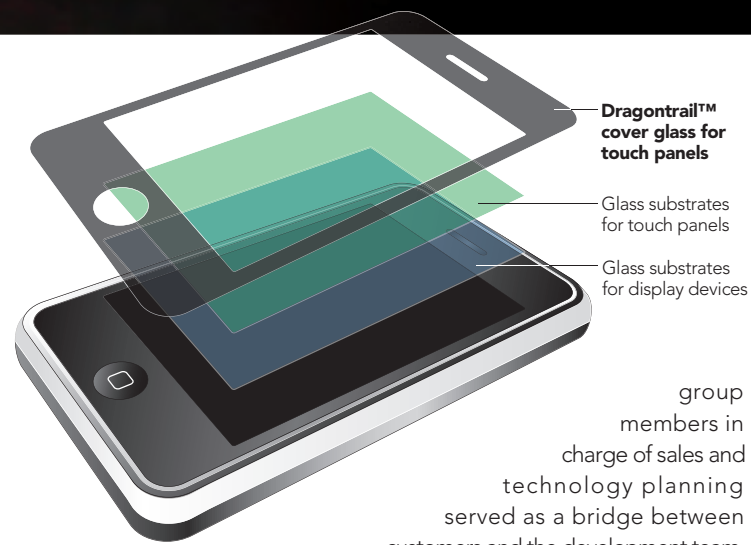
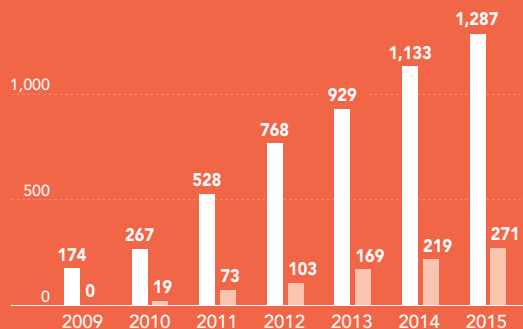
Dragontrail™ is a specialty glass that is highly receptive to chemical strengthening. It is designed for use as touch panel cover glass with smartphones, tablet PCs and other devices. The AGC Group has launched a promotional campaign centered on the image of a dragon for this revolutionary new product.

Rapid Growth of the Global Markets for Smartphones and Tablet PCs

The number of smartphones shipped globally shot up from about 200 million units in 2009 to 500 million units in 2011. Likewise, shipments of tablet PCs, which took the market by storm from 2010, reached almost 80 million units in 2011—around four times the amount in the previous year. Driving the trend is the introduction of 3G-capable mobile phones by major manufacturers and compatible 3G services made available in countries around the world, along with the popularity of social media and the spreading usage of applications and content tailored to these devices. The markets for smartphones and tablet PCs are expected to grow steadily, with shipments forecast at about 1.3 billion units and about 300 million units, respectively, in 2015.

Shipments of Smartphones and Tablet PCs (in-house research)

(Millions of units) ■ Smartphones ■ Tablet PCs



Dragontrail™ cover glass for touch panels

Glass substrates for touch panels

Glass substrates for display devices

group members in charge of sales and technology planning served as a bridge between customers and the development team.

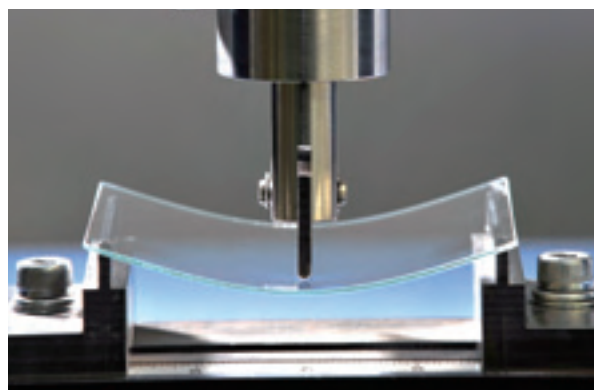
Focusing on Speeding Up Materials Development According to the Lifecycles of Customers' Products

The AGC Group has an especially high degree of technical expertise in designing the composition of glass by applying various techniques to control its material properties, including hardness, uniformity, transparency, strength, scratch-resistance and density. In the Dragontrail™ project, the Group successfully achieved the composition of the new glass after the first six months or so.

When prototypes were being evaluated by customers, however, problems arose related to the speed of prototype development. Products that the Group has traditionally dealt with were glass for automobiles and build-

ings, which have a lifespan of several years to several decades. In comparison, the product lifecycle of electronic devices is several years at longest, and products with a short lifespan are generally upgraded to a new model only about half a year after their release. Accordingly, development periods are also comparatively shorter. With no previous experience in such short-term development cycles, the AGC Group responded to customer requests to provide new prototypes within a month or even just a week.

To create an environment conducive to swift product development, the AGC Group undertook various in-house measures to help the project members efficiently focus on their work. The speed of prototype production gradually improved, and in 2008, the customer adopted the Group's specialty glass for chemical strengthening for its new smartphones. The AGC Group began mass production from that time onward.



Feature 2

Driving the Evolution of Smartphones and Tablet PCs

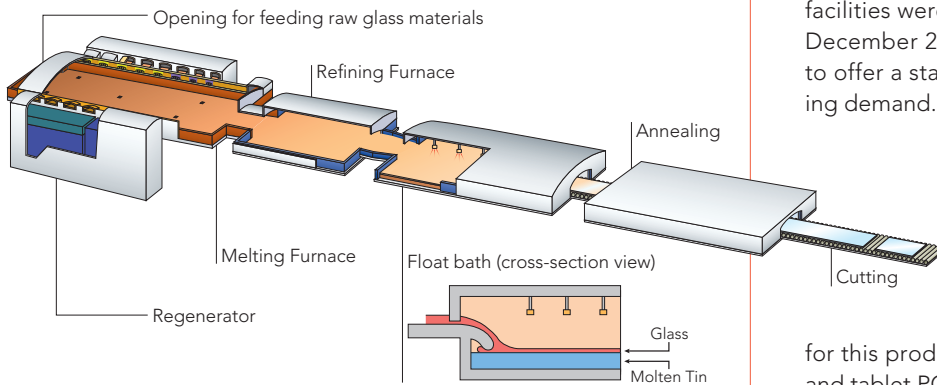
The Future is Now with Dragontrail™

Key Technology

Mass Production and Larger Sized Glass Sheets Optimally Achieved with the Float Method

The float method is a means to form glass by horizontally floating it on molten tin from a large furnace. Highly suitable for large volume and large-sized glass production, the float method is widely used to manufacture architectural and automotive glass. The AGC Group succeeded in the mass production of FPD glass substrates by the float method for the first time in the world, and successfully increased both area size and productivity of FPD glass substrates. Today, this method is fully utilized in efficient mass-production of Dragontrail™.

The Float Method for Flat Glass Production



In January 2011, the AGC Group announced worldwide that it would capitalize on the rapidly growing demand for smartphones and tablet PCs with a newly developed specialty glass designed especially for these devices. Calling the product "Dragontrail™," the Group held press conferences in various places around the world.

Establishing a Stable Supply System to Meet Growing Demand

Customers have lauded Dragontrail™ not only for its excellent strength and scratch-resistance, but also because it can be manufactured efficiently using the float method, a manufacturing process that is best suited for producing large volumes of flat glass. New float glass facilities were installed at the Group's Takasago Plant in December 2011, thereby improving the Group's ability to offer a stable supply of the product in line with growing demand.

Along with this effort to keep Dragontrail™ in stable supply and further improve product performance, the AGC Group is working to develop and provide high-value-added materials that are ahead of their time, with the view to broaden the applications for this product as cover glass not only for smartphones and tablet PCs but also computer displays, car navigation systems and flat-panel televisions.

Words from Key Personnel Involved in the Dragontrail™ Project

Responding to the Growing Usage of Touch Panels by Providing Cover Glass Best Suited for All Applications

Nobuhiko Imajyo

General Manager, Business Planning Office, Electronics Company



Today, touch panel operation is not limited to smartphones and tablet PCs, but is also used in a variety of electronic products, including digital cameras and multifunction remote controls for televisions and hard disk recorders. In the field of personal computers, the recent Ultrabook™¹ incorporates both a keyboard and a touch panel. Furthermore, with new operating systems that support touch panel operations scheduled for release in this year, notebook PCs equipped with touch panel operability are expected to enter the mainstream. Similarly, in the automotive industry, vehicle console panels are

being fitted with touch panels, and all kinds of equipment, including car stereos, navigations systems and air conditioners are being developed to incorporate indicators and touch panels. As the usages of such displays and touch panels expand, the AGC Group is capitalizing on the properties of Dragontrail™, which can be produced in various thicknesses, with the plan to broaden its applications in even more fields.

Dragontrail™ offers the potential to contribute to the design of all of these devices. It can be used not only as the main glass component of smartphones, for instance, but could also be considered for designs that cover the entire body of a phone in glass.

¹ Ultrabook™ is a registered trademark of Intel Corporation



Dragontrail™ used in automotive applications

Dragontrail™ Featured in a Range of Media in Japan and Overseas

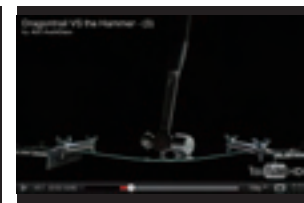
“Dragontrail™ is multiple times stronger than soda-lime glass commonly used in windows, resists scratches and has a ‘beautiful, pristine’ finish. A brief test by AP proved impressive, with the glass showing virtually no damage after being scratched hard for several seconds with a key.”—*Japan Times (AP/Aflo)*, January 22, 2011 edition

“The AGC Group will develop “Dragontrail™,” a cover glass for touchscreen panels, into a new pillar of earnings... The press conference for the product was held with simultaneous interpretation into English. In addition, the press release was issued not only in Japan but also in Europe, the United States, China, South Korea and Taiwan. Such a multilingual announcement is not usual for the AGC Group, indicating the strong emphasis that the Group places on the product.”—*Nikkei Sangyo Shimbun*, January 25, 2011 edition

Note English translation by Asahi Glass



Dragontrail™ attracted considerable interest from the many visitors to the AGC exhibit at SID Display Week 2011, the Society for Information Display's Symposium, Seminar, and Exhibition, held in Los Angeles, United States, in May 2011.



A video presentation of Dragontrail™, including a video showing its strength against a hammer blow, is available on YouTube™¹.

¹ YouTube™ is a registered trademark of Google Corporation.

Dragontrail™ Receives the 2011 Nikkei Superior Products and Services Award² from the *Nikkei Sangyo Shimbun* and Praise from the Review Committee

Comments from the Review Committee

Ken Sakamura

Professor, University of Tokyo Interfaculty Initiative in Information Studies

“While overseas companies are increasing their presence in recent years, these award-winning products reminded me that Japan still has a number of technologies that we can be proud of to the world. The materials- and parts-related technology, which Japan has been good at, is also evolving every year, and AGC’s “Dragontrail” is the very symbol of such advancement. It is a world-class product that addresses the expanding market for smart phones.”—*Nikkei Sangyo Shimbun*, January 4, 2012 edition (partial excerpt)



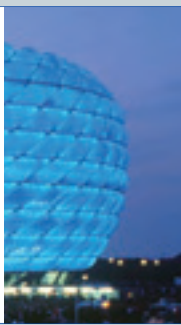
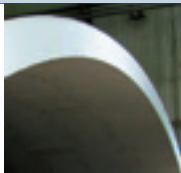
Note English translation by Asahi Glass

² An award given to particularly outstanding new products and services from those published in the range of Nikkei Inc. media concerns in 2011

Chapter 1

Business Overview

The AGC Group contributes to the realization of a sustainable society through its various business activities, such as glass, electronics, and chemicals.

Operations	Sales Ratio	Products/Services (Market Share of Primary Products)
<p>Glass Operations</p> 	<p>46%</p>	<ul style="list-style-type: none"> • Flat glass No. 1 in World Float glass, low-emissivity (Low-E) glass, double glazing glass for solar control/heat-insulation, safety glass, decorative glass, glass for solar power systems • Automotive glass No. 1 in World Tempered automotive glass, laminated automotive glass
<p>Electronics Operations</p> 	<p>32%</p>	<ul style="list-style-type: none"> • Display glass Glass substrates for LCD-TFTs No. 2 in World Glass substrates for PDPs No. 1 in World Specialty glass for display applications, glass substrates for display devices, display-related materials • Electronics materials and parts CMP slurry, glass frit and paste, aspherical glass lenses (micro glass), Carboglass™, synthetic quartz glass, optical thin-film products
<p>Chemicals Operations</p> 	<p>20%</p>	<ul style="list-style-type: none"> • Chlor-alkali & urethane Raw materials for vinyl chloride polymer, caustic soda, urethane materials • Fluorochemicals & specialty chemicals Fluoropolymers (ETFE) No. 1 in World Water and oil repellents, pharmaceutical and agrochemical intermediates and active ingredients, iodine-related products, battery materials
<p>Ceramics/ Others</p> 	<p>2%</p>	<ul style="list-style-type: none"> • Ceramics Various refractory materials, fine ceramics, sputtering targets • Logistics / Engineering

Technology

Environment

Global Business

Activity Highlights

- UV-blocking tempered glass "UV Verre Premium™" automotive glass eliminates approximately 99% of UV rays [▶P. 27](#)



- Stopray Ultravision™ 50 is a high-performance Magnetron coated glass with a triple silver coating



- Low-E double-glazing glass contributes to pleasant living that's easier on the environment [▶P. 28](#)



- Total oxygen combustion dramatically improves combustion efficiency during glass production [▶P. 63](#)
- In-flight melting greatly reduces the amount of CO₂ emitted during glass manufacturing [▶P. 63](#)

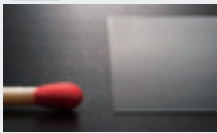
- Entering the Brazilian market [▶P. 15](#)



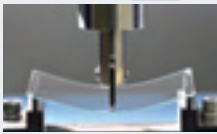
- Russia—One of the world's largest glass manufacturing facilities [▶P. 27](#)



- 0.1 mm ultra-thin glass, the world's thinnest glass manufactured by the float method [▶P. 31](#)



- "Dragontrail™", specialty glass for chemical strengthening [▶P. 19](#)



- Glass-ceramics substrate "GCHP™" contributes to evolution of LED lighting [▶P. 31](#)



- Glass frit and paste contribute to improved electrical properties as electrode binders for photovoltaic devices [▶P. 38](#)



- Strengthening production in China for TFT-LCD glass substrates [▶P. 32](#)



- China (Shenzhen)—Setting up a production line for TFT-LCD glass substrates [▶P. 32](#)

- Strengthening of pharmaceutical and agrochemical intermediates and active ingredients operations through fluorochemical technology [▶P. 35](#)

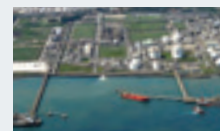


- Fluorine ion-exchange membrane "Flemion™" to be used in the bilateral offset credit system [▶P. 35](#)



- CO₂ emissions cut through introduction of gas turbines
- Implementation of CO₂ recovery and recycling process using caustic soda

- New production and sales site for cathode materials for lithium-ion batteries to be constructed in China
- 30% expansion of electrolysis capacity in Indonesia [▶P. 36](#)



- Sputtering targets for transparent conductive thin film for photovoltaic TCO glass substrates [▶P. 38](#)

Glass Operations

Around the world, the AGC Group provides high-performance products that bring new value to the fields of construction, automobiles, and solar power generation.



Sunergy™, pyrolytic coated glass, from the Glass Company were used for Naberezhnaya Tower in Moscow (Russia)

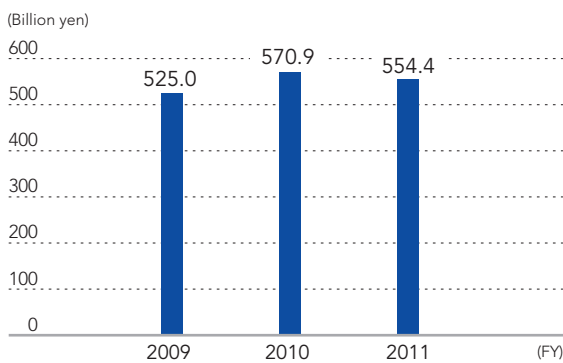
Description of Business

Glass Operations consist of businesses centered on the fields of flat glass and automotive glass. In the flat glass business, the AGC Group offers an array of flat glass products that meet the needs of each region: float glass, fabricated glass for architectural use, decorative glass, glass for solar power systems and other products. Emphasis is also placed on energy-saving glass products that can contribute to the reduction of environmental impact, including products with heat insulation/shielding features and CSP glass mirrors. In the automotive glass business, global marketing and the Group's most advanced technologies are utilized in the pursuit of value-greater safety, excellent design, interior comfort and environmental performance. The value-added automotive glass products the AGC Group offers include UV-cut glass, IR-cut glass, and glass antennae. The Group's flat glass and automotive glass (new vehicle market) businesses hold a leading share of the world market. In fiscal 2011, the Group's sales for the flat glass sector and the automotive glass sector were 325.4 billion yen and 229 billion yen respectively, resulting in net sales of 554.4 billion yen and operating income of 9.9 billion yen for the Glass Operations.

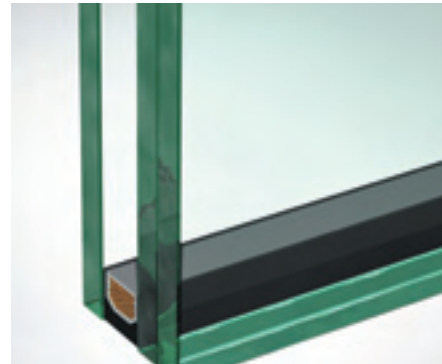
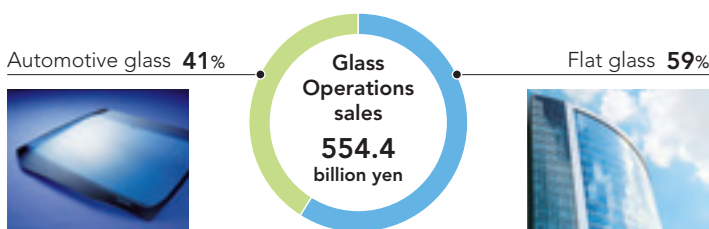
Market share rankings of major products (AGC estimates)

Flat glass **No. 1 worldwide**
 Automotive glass **No. 1 worldwide**

Sales Trends



Sector-Based Sales Share



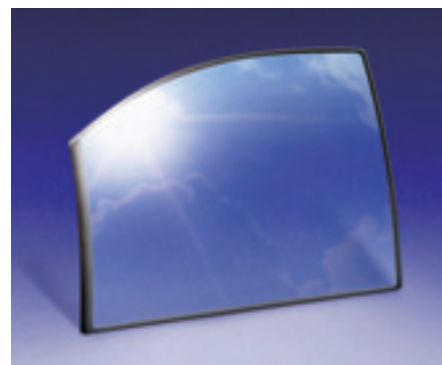
Low emissivity (Low-E) double-glazing glass



Photovoltaic cover glass "Solite™"



"Vitro Color Glass™" and "Lacobel™" for interior wall cladding



"UV Verre Premium™" for automotive glass

Glass Operations

Activity Highlights

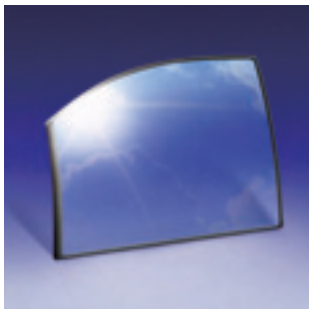
Technology

UV-blocking tempered glass “UV Verre Premium™” automotive glass eliminates approximately 99% of UV rays Winner, Nikkan Kogyo Shimbun’s “10 Best New Products of 2011” Award

Concern for health and beauty is resulting in mounting consciousness of protection from ultraviolet (UV) rays. In an independent AGC Group survey of drivers, many female drivers said that they “were concerned about UV rays” in the areas around car windows. In response to these customer concerns, the Group began to develop high-performance UV-cut glass for car windows. After overcoming many technological challenges, the Group successfully developed a high-performance UV absorbent with scratch-resistant properties. The commer-

cial production of “UV Verre Premium™” began in December 2010. It is the first tempered automotive glass for automotive door windows in the world¹ to cut approximately 99% of UV rays². Since its release, UV Verre Premium™ has been rated highly by car manufacturers, and it is being used in an increasingly wide variety of cars, including the latest hybrids.

- ¹ As of December 2010; survey conducted by AGC.
- ² Measured by AGC based on ISO 9050 standards.



UV Verre Premium™



A test with a UV checker, which reacts when exposed to ultraviolet rays.



The UV checker turned purple when the window was opened; when shielded by UV Verre Premium™, the color fades away.

Global Business

Operating in Russia, the World’s Largest Glass Manufacturing Facility

At the AGC Group’s Klin Plant, located approximately 80 km northwest of Russia’s capital, Moscow, the Group operates the largest glass manufacturing facility in the world. This facility was created to handle the future growth anticipated in the Russian construction market, and is capable of producing 1,000 tons of glass per day, in thicknesses ranging from 4 to 12 mm. The plant also holds processing facilities for high-performance heat-insulating coated glass, laminated glass and

decorative glass, enabling the production of high value-added products. Particular to the plant are technological innovations incorporated throughout the plant to efficiently turn out high quality products, as is the ability to reduce energy consumption during production. The AGC Group will continue to advance into regions in which market expansion is anticipated and actively expand its production capacity.



Russia



Klin Plant, located approximately 80 km northwest of Moscow



One of the largest glass manufacturing facilities in the world, in the Klin Plant

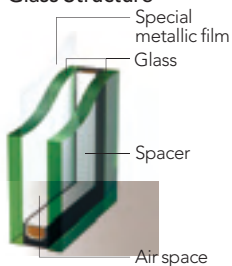
Environment

Low-E Double-glazing Glass Contributes to Pleasant Living That's Easier on the Environment

Low-E double-glazing glass is energy-saving window glass in which the heat insulating and solar control performance of double-glazing glass have been further improved by coating one pane with a special metallic film. As general environmental awareness has risen in recent years, strict standards for heat insulation have been introduced for window glass in homes and buildings, particularly in Europe and North America. Low-E double-glazing glass helps reduce energy consumption, and its popularity is growing around the world. In response to these needs, the AGC Group provides energy-saving glass for use in the apertures of a variety of houses and buildings. For

example, Stopray Ultravision 50 is a new energy-saving window glass with three layers of silver coating. This product realizes extremely high selectivity in solar energy transmittance, blocking solar heat from outside at a level of 20% while allowing about 50% of visible light to penetrate. Stopray Ultravision 50 is a beautiful and highly efficient glass that leads the latest trends in architectural design and satisfies demands for energy conservation. The AGC Group will continue to introduce state-of-the-art coating technologies and strive to develop even higher-performing products, developing and providing ideal Low-E double-glazing glass for every region.

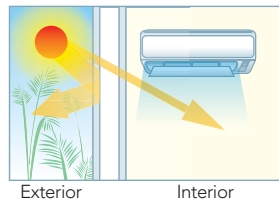
Low-E Double-glazing Glass Structure



Low-E Double-glazing Glass Mechanism

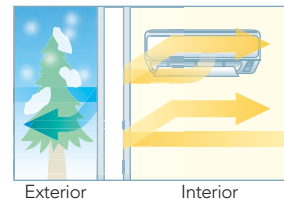
In warm/hot regions:

In summer, effectively shields solar radiation and heat from the outside (solar control effect), reducing air conditioning use.



In cold regions:

In winter, effectively blocks cold air from entering and warm air from escaping (heat insulating effect), reducing heater use.



Electronics Operations

Using its unique manufacturing methods and high-level production technology, the AGC Group provides creative glass products to support the evolution of displays and electronic instruments.



The Electronics Company's glass for display panels brings innovation to graphic displays

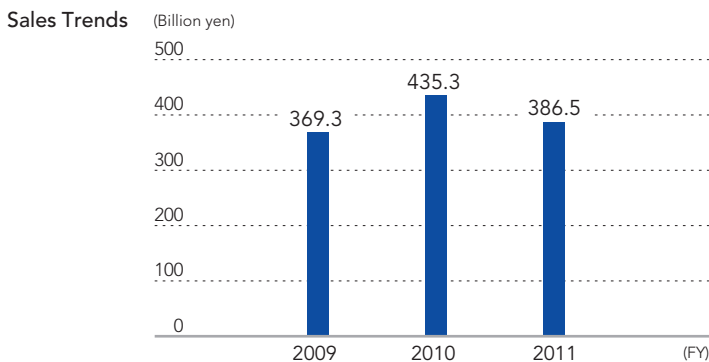
Description of Business

The AGC Group's Electronics Operations offer high value-added products in the display sector and the electronics materials and parts sector, which support the evolution of displays and electronics devices. In the display sector, the Group's TFT-LCD glass and plasma display (PDP) glass boast a leading share of the world market. By leveraging its unique production methods and high-level production technologies, the Group is pursuing R&D of next-generation image display devices while also enhancing its international competitiveness. Its presence is increasingly acknowledged in the world of image displays, which serve as a key interface tying people and information networks together. In the electronic materials and parts sector, the Group's product line-ups include semiconductor process materials and parts, such as synthetic quartz glass and high-purity silicon carbide; display materials and parts used in PDP optical filters; optical components such as visibility compensation filters for CCD optical filters; and glass substrates for hard disks; each of which is making a contribution to the evolution of electronics devices. In fiscal 2011, the Group's sales for the display sector and the electronics materials and parts sector were 331 billion yen and 55.6 billion yen respectively, resulting in net sales of 386.5 billion yen and operating income of 133.5 billion yen for the Electronics Operations.

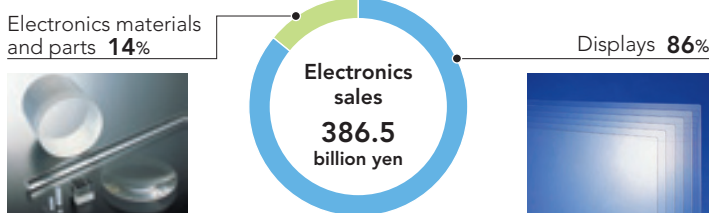
Market share rankings of major products (AGC estimates)

Glass substrates for TFT-LCDs **No. 2 worldwide**

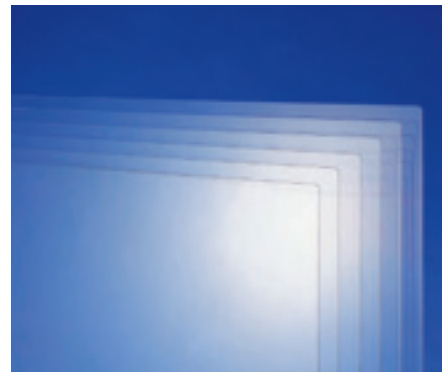
Glass substrates for PDPs **No. 1 worldwide**



Sector-Based Sales Share



"Dragontrail™" specialty glass for chemical strengthening



Glass substrates for TFTs



Synthetic quartz glass



Visibility compensation filters

Electronics Operations

Activity Highlights

Technology

0.1 mm Ultra-Thin Glass, the World's Thinnest Glass Manufactured by the Float Method

Since early on, the AGC Group has been actively working to make glass ultra-thin. In May 2011, using its years of high-level process management expertise, the Group succeeded in developing ultra-thin sheet glass. At 0.1 mm thick, the glass is the thinnest in the world to be produced by the float method. This ultra-thin glass can be rolled up like film. Not only will it facilitate thinner LCD displays on cellular phones and other

equipment, it can also be fitted on curved surfaces and used in flexible next-generation displays which users can roll into tubes and carry with them. In addition, glass material is superior to the existing resin and other films in terms of heat and chemical resistance, electric insulation, and gas barrier qualities. It is anticipated that new uses will be developed in various areas, including the electronics and energy sectors, to exploit these characteristics.



A roll of ultra-thin glass



Ultra-thin glass



Environment

Glass-Ceramics Substrate "GCHP™" Contributes to Evolution of LED Lighting

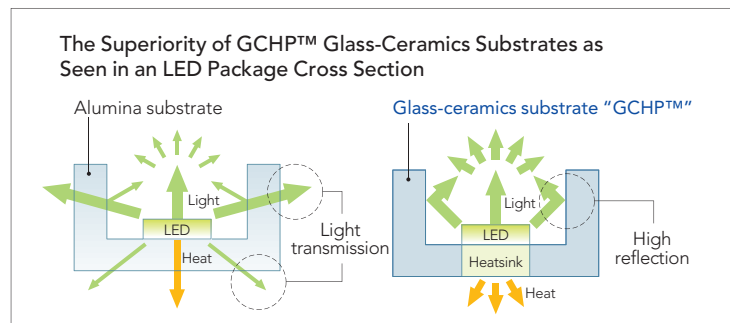
The spread of energy-saving LED lighting began with low power products such as backlights for cellular phones, PCs and LCD TVs. Lately, however, the range of applications has begun expanding to include high power products, including general indoor and outdoor lighting, interior and exterior lighting for automobiles, street lamps, and tunnel lighting. These LED lights get their increased intensity and improved endurance

from the glass-ceramics substrate GCHP™. When LEDs are used in high power applications, the amount of heat they generate increases. GCHP™ enhances the durability of LEDs and enables them to be used in high power applications as the glass-ceramics substrate is more reliable than the existing resin

or alumina substrates with regard to heat dissipation and discoloration. In addition, its reflectivity is from 20 to 30% higher than that of alumina substrates, so intensity may be increased effectively. Since its release, GCHP™ has been held in high regard by LED and automobile manufacturers both in Japan and abroad, and is being adopted in products including general lighting and automobiles, for various uses.



GCHP™—a glass-ceramics substrate for high-power LED lighting



Global Business

Strengthening Production in China for TFT-LCD Glass Substrates

Driven by increasing demand for LCD TVs and personal computers, especially in fast-growing markets, growth in the global flat panel display market is expected to continue. Particularly in China, demand for TFT-LCD panels has been surging in recent years, and leading panel manufacturers are planning to build new production plants for large-sized LCD panels. Consequently, demand for large-sized glass substrates, which are a necessary part of panel production, is anticipated to increase as well. In order to reliably respond to this expansion



AGC Display Glass (Kunshan), new plant

of demand in the Chinese market, the AGC Group has built a second processing plant in the country, following its first TFT-LCD glass substrate manufacturing plant in Kunshan City,

Jiangsu Province which commenced operation in autumn of 2011. Equipped with a processing line that can handle up to eighth-generation TFT-LCD glass substrates (approximately 2,200 mm x approximately 2,400 mm), the new processing plant is located in Shenzhen City, Guangdong Province, and mass production is scheduled to start in 2012.



China

AGC Display Glass (Kunshan)

AGC Display Glass (Shenzhen)



Chemicals Operations

Create a safe, secure, comfortable and environmentally friendly world with chemical technology.



The Chemicals Company's Fluon® ETFE Film product was used in the Allianz Arena, a German soccer stadium

Description of Business

Chemicals Operations are expanding based on the sectors of chlor-alkali and urethane, and fluorochemicals and specialty chemicals.

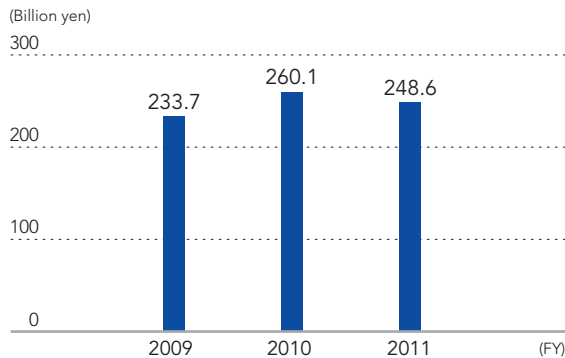
In the chlor-alkali and urethane sector, the Group offers basic chemical products, such as caustic soda and sodium bicarbonate, which are extremely versatile in daily use and in an array of industries. Urethane-based products are indispensable for comfortable living, for example, heat-insulating materials for walls, and automobile seats. In the fluorochemicals and specialty chemicals sector, the Group boasts the world's leading technology and offers products that show exceptionally high-performance in heat resistance, chemical resistance, and weather-resistance, among which fluoropolymer ETFE maintains a leading share of the world market. Other products include fluoropolymers and fluoroelastomers that have drawn the attention of the automotive and aerospace industries; fluoropolymer films for architectural applications; and fluoropolymers for coatings with excellent weather-resistant properties used in bridges and towers. Further, Chemicals Operations offer new multifunctional materials for the electronics and display sectors as well. In fiscal 2011, the Group's sales for the chlor-alkali and urethane sector were 160.4 billion yen and sales for the fluorochemicals and specialty chemicals were 97.3 billion yen, resulting in net sales of 248.6 billion yen¹ and operating income of 18.1 billion yen for the Chemicals Operations.

¹ Sales to external customers; different from sales total from each sector.

Market share ranking of major products (AGC estimates)

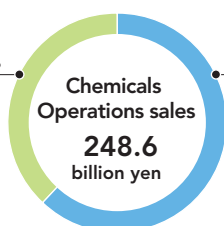
Fluoropolymers (ETFE) **No. 1 worldwide**

Sales Trends



Sector-Based Sales Share

Fluorochemicals and specialty chemicals **38%**



Chlor-alkali and urethane **62%**



Under the vision "Chemistry for a Blue Planet," The AGC Group's Chemicals Operations brings safety, reassurance and comfort to customers' homes; and contributes to environmental conservation.



Fluon® fluoropolymer films used at the UNIQLO Shinsaibashi store



"Asahi Guard™" fluorinated water and oil repellents



"Lumiflon™" highly weather-resistant fluoropolymer resin for coating



Fluoropolymer "Fluon® ETFE" used in tubes and hoses

Chemicals Operations

Activity Highlights

Technology

Strengthening of Pharmaceutical and Agrochemical Intermediates and Active Ingredients Operations through Fluorochemical Technology

Taking advantage of its long-established fluorochemicals technology, the AGC Group is dedicating its resources to the supply of differentiated products in the pharmaceutical and agrochemical intermediates and active ingredients sector. Tapros ophthalmic solution 0.0015%, released domestically in Japan in December 2008, is a glaucoma medicine that uses the active pharmaceutical ingredient "Tafluprost," which was created through a joint effort between the AGC Group and Santen Pharmaceutical. A fusion of the Group's proprietary fluorochemical and organic synthesis technologies, this pharmaceutical product shows outstanding characteristics, such as in its effectiveness in lowering intra-ocular pressure, the primary treatment for glaucoma. New medicines using Tafluprost are contributing to the treatment of glaucoma worldwide. Starting with Japan, these are now being sold in 37 countries

throughout Europe, Asia and the United States.

With the intent of doubling its production capacity for pharmaceutical and agrochemical intermediates and active ingredients, the AGC Group is building two new plants at AGC Wakasa Chemicals. The plant in Wakasa Town, Fukui Prefecture, will be used to produce agrochemical intermediates and active ingredients such as insecticide and fungicide, and is scheduled to begin operation around November 2012. The active ingredients for glaucoma treatment will be manufactured at the plant in Obama City, Fukui Prefecture; production is planned to begin in 2013.



Tafluprost, Pharmaceutical active ingredient

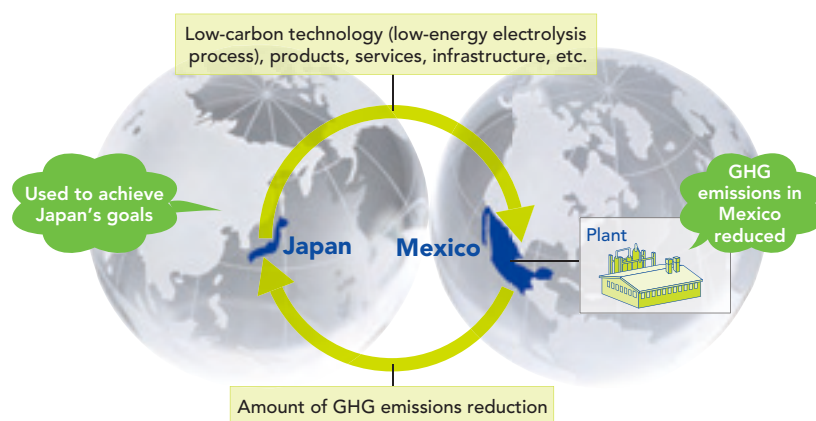
Environment

Fluorine Ion-Exchange Membrane "Flemion™" to be Used in the Bilateral Offset Credit System

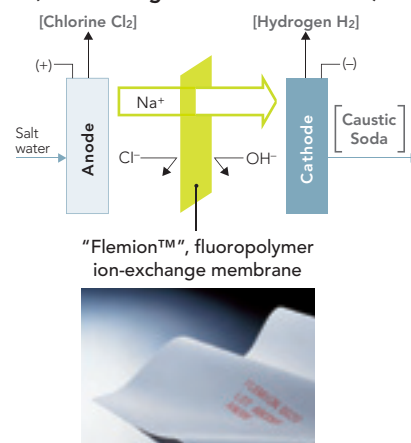
The "Bilateral Offset Credit System" proposed by the Japanese government has the advantage of allowing developed and developing countries to promptly implement greenhouse gas (GHG) emissions reduction initiatives through bilateral agreements, without going through the United Nations approval process, as was necessary with the conventional emissions trading system. In preparation for the realization of this new system, the Ministry of Economy, Trade and Industry is examining projects involving the popularization of climate change mitigation technology, and the AGC Group's low-energy electrolysis¹ process has been adopted as one such project. The purpose of this initiative is to examine the verification proce-

dures and methods of measuring the amount of GHG emissions reduction using the result of energy usage reduction at two chemicals plants in Mexico, where the AGC Group's fluorine ion-exchange membrane "Flemion™" has been introduced to drastically reduce energy consumption for the electrolysis process, which is a process used to manufacture caustic soda and other chemicals. Generally the ion-exchange membrane facilitates an energy reduction of approximately 40% as compared to the conventional mercury method, and these efforts are anticipated to result in an annual CO₂ emissions reduction of between 60-80,000 tons.

¹ Electrolysis of brine that produces caustic soda and chlorine



Electrolysis Process Mechanism (Ion-Exchange Membrane Method)



PT Asahimas Chemical
(Cilegon, Banten Province, Indonesia)

Indonesia

Global Business

30% Expansion of Electrolysis¹ Capacity in Indonesia

Caustic soda is an alkali product that is widely used as a basic industrial chemical, as well as in rayon, soaps and detergents, seasonings, paper and pulp. In the Asian region, demand for caustic soda has been expanding year by year against the background of a favorable economy, and such a trend is expected to continue along with the economic growth of the region. In order to respond to growing demand for caustic soda and chlorine derivatives in the Asian market, the AGC Group is investing approximately 5 billion yen into its Indonesian local subsidiary, PT Asahimas Chemical to increase the electrolysis production capacity of the plant by 30%. This will give AGC Group's PT Asahimas Chemical a caustic soda production capacity of approximately 500,000 tons annually. The expansion of the electrolysis facility will also result in increased production of chlorine, which is produced along with

caustic soda. The AGC Group will utilize this chlorine in the production of ethylene dichloride (EDC) and other products in an effort to help respond to expanding demand for chlorine derivatives in the Asian regions with a focus on Indonesia.

¹ Brine electrolysis to produce chlorine and caustic soda



PT Asahimas Chemical

Responsibilities to Society

Prompt Resumption of Lifeline Product Supply Following Great East Japan Earthquake

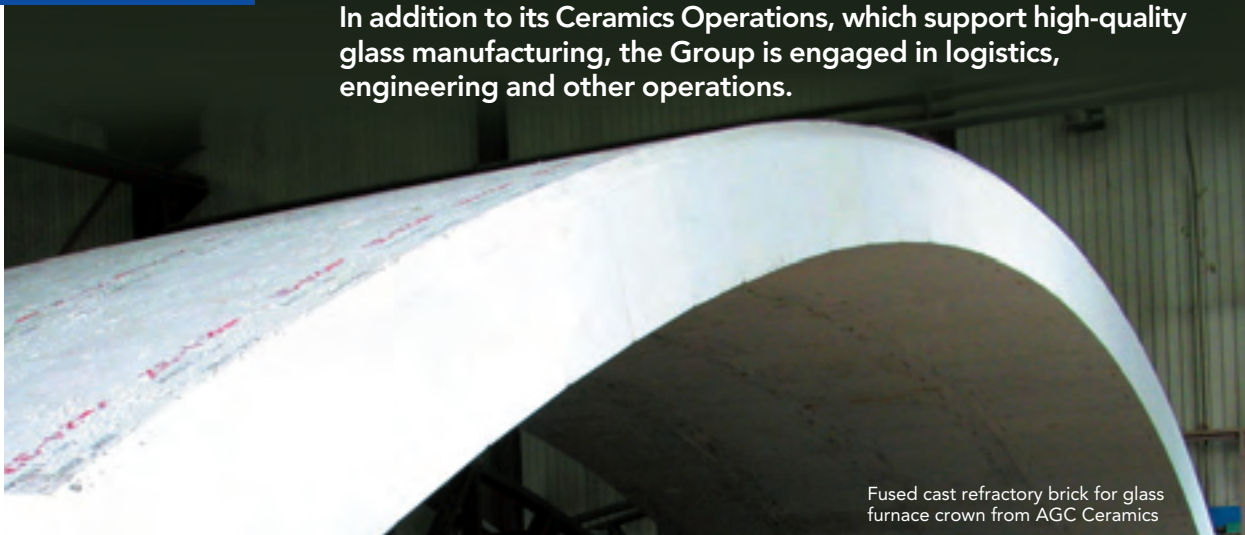
On March 11, 2011, the Great East Japan Earthquake struck Japan and halted the operation of the Chiba and Kashima plants of Asahi Glass. The facilities are crucial domestic production bases for the Group's chemicals operations, such as manufacturing products vital to civic lifelines, such as sodium hypochlorite, used to purify municipal water, and medical sodium bicarbonate. In this state of emergency, the AGC Group moved in accordance with its established Business Continuity Plan (BCP), and employees at headquarters, plants and branch offices stood together and worked towards recovery. There were many challenging issues following the disaster, including restricted entry to certain areas of the plants

and supply restrictions on electricity, crude petroleum and gasoline. However, the Group worked with the related ministries and agencies and pressed forward with recovery activities, and as a result, was able to resume supply of these lifeline products early. In addition to fulfilling its responsibility to supply necessary products as a manufacturer, the Group was able to be of assistance in preserving lives and preventing civic disorder following the disaster.



Ceramics/Other Operations

In addition to its Ceramics Operations, which support high-quality glass manufacturing, the Group is engaged in logistics, engineering and other operations.



Fused cast refractory brick for glass furnace crown from AGC Ceramics

Description of Business

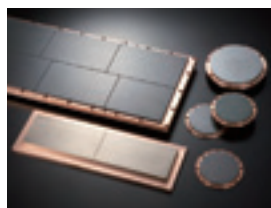
The refractories used in glass melting furnaces play an important role in the stable production of high-quality glass. The AGC Group's ceramics business has its roots in the 1916 production of refractory bricks for glass furnaces. Through the years, the Group has cultivated expertise in fused cast refractories, bonded refractories, monolithic refractories and fine ceramics, and offers engineering services and high-quality products based on these four material technologies. AGC Ceramics is dedicated to creating innovation under the banner of two visions: Glass Ceramics Innovation and Green Ceramics Innovation. In the glass engineering business, the company offers highly-durable, highly functional fused cast bricks that extend the life of glass furnaces and save energy and reduce CO₂ during the glass production process, and proposes a wide range of solutions based on these high-performance products. In the environmental energy business, the company strives to create products and technologies that contribute to environmental conservation, including ultra-insulating monolithic refractories and bonded refractories that contribute to saving energy and reducing the environmental impact of factory furnaces, and fine ceramics products such as high-temperature fans and sputtering targets used for TCO substrates for PV modules. In addition to the ceramics operations, the AGC Group is also engaged in logistics, engineering, and other operations. The fiscal 2011 sales for those services amounted to 83.9 billion yen, with operating income of 4 billion yen.



Fused cast bonded refractory bricks for glass melting furnaces



THERMOTECT™ ultra-insulating monolithic refractory brick

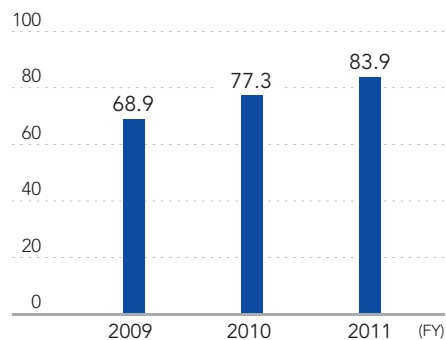


Ceramic sputtering targets



Cement rotary kiln

Sales Trends (Billion yen)



The AGC Group continues to contribute to efficient energy use and the creation of clean energy, by integrating advanced technologies in glass, electronics, chemicals and ceramics.

In order to realize an energy recycling society and create clean energy, the AGC Group has made strides in developing a range of technologies in each of its businesses, and providing products that create new value. Such contributions include photovoltaic products like photovoltaic cover glass and glass substrates, and a variety of clean energy products such as CSP mirrors, cathode materials for lithium-ion batteries and seal materials.

Glass Operations



**Photovoltaic cover glass
Solite™ Plus**

This photovoltaic cover glass is designed to utilize more light. AGC's unique coating effectively lowers surface reflection and raises light transmittance.



**Building integrated photovoltaics
Sunjoule™**

These Photovoltaic modules absorb sunlight on both surfaces for power generation. The modules can be installed vertically on roads and roof fencing.



CSP Mirrors

AGC's CSP mirrors collect sunlight more efficiently. A thin, curved, concave type is also available.

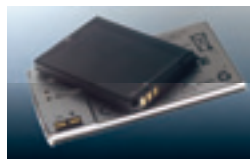
Electronics Operations



**Photovoltaic electrode binder
Glass frit and paste**

Glass materials used for insulation, airtight sealing, and protection, which can be used in silver or aluminum electrode binders to help improve conductivity.

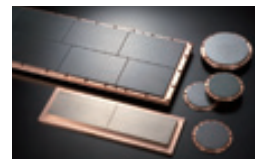
Chemicals Operations



**Electrode materials for
lithium ion batteries**

Cathode Materials for lithium ion batteries that are used in mobile phones and personal notebook computers. Lithium ion batteries are highly durable for repeated re-charging.

Ceramics Operations



**Sputtering target for
transparent conductive thin films**

This material is used to create transparent conductive films, which are indispensable for surface electrodes of PV cells. The AGC Group offers high-quality materials based on its fine ceramics techniques.

Exhibiting Sunjoule™ Power-Generation Glass at the 42nd Tokyo Motor Show 2011

The AGC Group hosted an exhibit called "SMART MOBILITY CITY 2011" at the 42nd Tokyo Motor Show 2011, held at Tokyo Big Sight from December 3-11, 2011. In an easy-to-understand exhibit with video and onsite demonstrations, the AGC Group introduced how glass can lead to "smart" lifestyles that are people-friendly and socially harmonious. The exhibit highlighted the Sunjoule™ power-generation glass and other functional glass products which contribute to the creation of clean energy. The AGC booth also showcased a futuristic car whose body color changes over time and with the seasons and Dragontrail™, a specialty glass for chemical strengthening which garnered a lot of attention in a hands-on exhibit.



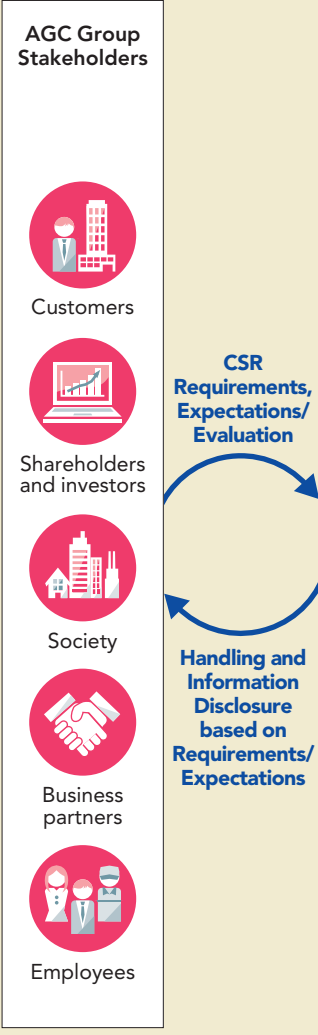
Chapter 2

Responsibilities to Our Stakeholders

The AGC Group's Vision and CSR

In order to fulfill its corporate mission to "Look beyond to make the world a brighter place" as outlined in the Group Vision "**Look Beyond**", the AGC Group endeavors to both foster trust and meet the expectations of the community and contribute to the creation of a sustainable society by adopting behaviors based on our shared values (see page 4). Further, the Group utilizes the ISO 26000, an international standard on social responsibility as a guideline for its global CSR activities in order to more concretely demonstrate values-based conduct and establish the AGC Group Charter of Corporate Behavior.

 Charter of Corporate Behavior (full text)
CSR Information Supplement P. 1



AGC CSR Monitoring Framework

STEP 1

Creation of the CSR Monitoring Sheet

The CSR Monitoring Sheet is based on the core subjects/issues and related actions and expectations as detailed in ISO 26000. The sheet consists of a table listing some 200 issues relating to actions and expectations required of the AGC Group by its stakeholders; the impact on each stakeholder, the activity status (Group/regional) and the relevant organization are given for each issue.

CSR Monitoring Sheet

About the icons on each page:



Related data can be found in the CSR Information Supplement (PDF) www.agc.com/english/csr/book/



Related information can be found on the CSR Website

CSR Promotion System

The AGC Group established the CSR Committee in 2005 as an in-house organization dedicated to promoting CSR. On the CSR Committee, the AGC Group CEO presides as the committee chair, while the board of directors, corporate auditors and the head of each organization deliberate over general policies and issues related to the Group's CSR activities on a quarterly basis. Moreover, the CSR Promotions Team, which consists of CSR executives from each of the In-house Companies, as well as the human resources, purchases and audit departments, discuss and share responsibility for each policy and issue prior to the CSR Committee meeting.

Developing the CSR Monitoring Framework Based on ISO 26000

In fiscal 2011, in order to assess the AGC Group's CSR activities from the perspective of stakeholders and strengthen policies that benefit the community, the Group developed the CSR monitoring framework based on ISO 26000. As part of this development, the Group took the following three steps: (1) creation of a CSR Monitoring Sheet; (2) implementation of communications within the Group; and (3) goal-setting for materiality issues (see figure below).

From this point forward, in addition to continuing to monitor critical items made to reflect the changing expectations of society, the Group will examine applicability according to business segment and region.

STEP 2

Implementation of Communications within the Group

In addition to holding a seminar on ISO 26000 led by an outside expert, dialogues have been initiated between CSR Office staff and CSR representatives in each organization, lasting a period of two months.

The Group seeks to deepen understanding of the content of each issue and, after narrowing the items, place each within one of four quadrants in the matrix of CSR issues (diagram right) for each organization.

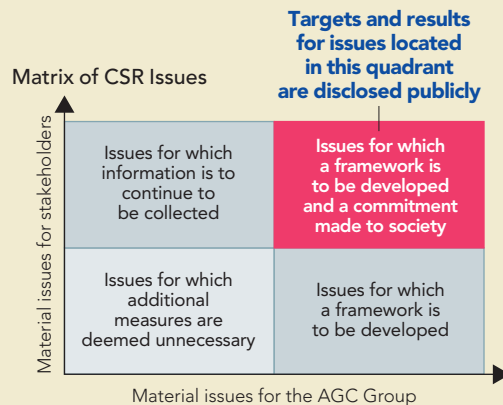


ISO 26000 workshop led by Mr. Eiichiro Adachi from the Japan Research Institute

STEP 3

Target-Setting for Materiality Issues

Targets and the relevant organizations are assigned for each issue in the matrix of CSR issues and progress toward the targets is monitored on an annual basis by the CSR Committee. The targets and results for issues located in the most critical quadrant of the matrix are reported to stakeholders in the AGC Report.



Targets and Results

In line with the results of CSR monitoring, “Targets and Results” are disclosed with regard to items located in the most critical quadrant within the matrix of CSR issues.

ISO 26000 Items			Reference	Fiscal 2011 targets
Core subjects	Issues	Related actions and expectations (major issues)		
Organizational Governance	Decision-making processes and structures	<ul style="list-style-type: none"> Nurture an environment in which the principle of social responsibility (accountability, transparency) is practiced 	P. 44	<p>Continue to ensure effective communications in and outside the Group</p> <ul style="list-style-type: none"> Continue to gain society’s trust by conducting timely and appropriate disclosure Continuously interact with stakeholders through dialogues and providing reports that reflect society’s expectations and the progress made by the Group
		<ul style="list-style-type: none"> Nurture an environment in which the principle of social responsibility (ethical behavior, respect for the rule of law) is practiced 	P. 46	<p>Continue to promote compliance</p> <ul style="list-style-type: none"> Review the Group Code of Conduct and prepare the revision Further expand the scope of employees submitting Personal Certifications on the Code of Conduct
		<ul style="list-style-type: none"> Periodically review and evaluate the governance process 	P. 44	<p>Implementing effective audits and promoting the PDCA cycle</p> <ul style="list-style-type: none"> Conduct audits of countermeasures against leakage of confidential information and compliance with antitrust laws, with an emphasis on the Group’s global uniformity Commence audits targeting specific downside risks³
Labor Practices	Conditions of work and social protection	<ul style="list-style-type: none"> Comply with any obligation concerning the provision of protection for workers in the country of operation 	P. 47	<p>Create a work environment where employees can work with satisfaction and pride</p> <ul style="list-style-type: none"> Give each in-house organization feedback on the third Employee Satisfaction (ES) survey Prepare a self-inspection list for human rights and labor practices and conduct a survey to check compliance within the Group Continue implementing the AGC Group Award system
	Health and safety at work	<ul style="list-style-type: none"> Develop, implement and maintain policy on occupational health and safety Understand and apply principles of health and safety management (elimination, substitution, engineering controls, administrative controls, work procedures and personal protective equipment) Analyze and control the health and safety risks in organizational activities 	PP. 50–51	<p>Foster the Group’s safety management activities</p> <ul style="list-style-type: none"> Improve the effectiveness of the occupational health and safety management system (OHSMS) Enhance education on health and safety, including safety promotion activities Expand disaster prevention activities focusing on unsafe human behaviors <p>Reduce risks by improving health and safety audits</p> <p>Promote and ensure machinery safety</p> <ul style="list-style-type: none"> Foster measures to expand the implementation of the new machinery safety standard Expand the Safety Assessor program into more Group companies
	Human resource development and training in the workplace	<ul style="list-style-type: none"> Provide all workers at all stages of their work experience with access to skills development, training and apprenticeships Provide all workers at all stages of their work experience with access to opportunities for career advancement 	PP. 48–49	<p>Develop human resources that can drive the Group forward</p> <ul style="list-style-type: none"> Continue implementing measures for the development of human resources for global management⁶ Expand the employment of human resources for global management <p>Enhance employee education and training programs</p> <ul style="list-style-type: none"> Expand the scope of the AGC Group improvement activities
The Environment	Prevention of pollution	<ul style="list-style-type: none"> Identify the impact of its decisions and activities on the environment Measure, record and report on its significant sources of pollution and reduction of pollution, water consumption, waste generation and energy consumption Prepare an environmental accident prevention program and an emergency plan involving workers, authorities, local communities and other relevant stakeholders Implement measures aimed at preventing pollution and waste and properly manage unavoidable pollution and waste 	PP. 52–56	<p>Further implement the integrated environmental management system (Integrated EMS) on a global basis</p> <ul style="list-style-type: none"> Increase the number of sites in the Group incorporated in the integrated EMS Further enhance environmental-related communications globally <p>Promote Zero-landfill (waste) in the Group⁷</p>
	Climate change mitigation and adaptation	<ul style="list-style-type: none"> Identify the sources of direct and indirect GHG emissions and define the scope of its responsibility Measure, record and report on its significant GHG emissions, preferably using methods defined in internationally agreed standards Implement measures to reduce the direct and indirect GHG emissions within its sphere of influence Realize energy savings by purchasing of energy efficient goods and development of energy efficient products 	PP. 52–54	<p>Promote environmental activities according to the highest standards in the materials industry by establishing environmental targets for the Group</p> <ul style="list-style-type: none"> Examine and set the Group’s environmental targets Continue examining the lifecycle CO₂
Fair Operating Practices	Anti-corruption	<ul style="list-style-type: none"> Identify the risks of corruption and implement and maintain policies and practices that counter corruption 		Included in the “Continue to promote compliance” section
	Fair competition	<ul style="list-style-type: none"> Conduct its activities in a manner consistent with competition laws and regulations, and cooperate with the appropriate authorities Establish procedures to prevent engaging in anti-competitive behavior Train employees on the importance of competition legislation and fair competition 	P. 57	Improve training and auditing related to compliance with antitrust laws

1 One of the leading global socially responsible investing (SRI) indexes
 2 A Swiss SRI value assessment company
 3 Downside risk is defined as the risk of damage to the AGC Group’s reputation and trustworthiness

4 Enterprise Risk Management is carried out throughout the Group
 5 Reason for B evaluation: A total of two fatal occupational accidents took place within the AGC Group.
 6 Human resources whose achievement at a global level is expected.



Criteria for Self-evaluation

A: Satisfactory level, in which the intended target has been achieved

B: Almost satisfactory level, in which a part of the intended target has not yet been achieved

C: Unsatisfactory level, in which the intended target has not been achieved

The AGC Group Targets and Results			
	Fiscal 2011 results	Self-evaluation	Fiscal 2012 targets
	<ul style="list-style-type: none"> Promptly disclosed information on issues of particular interest to the public, including the impact of the Great East Japan Earthquake and major flooding in Thailand on the Group's operations Addressed issues in relation to ISO 26000 and reflected the demands of society in the 2011 CSR Report Asahi Glass was reinstated in the Dow Jones Sustainability World Index¹ and given a Bronze Class in the sustainable rating of Sustainability Asset Management² 	A	<p>Continue to ensure effective communications in and outside the Group</p> <ul style="list-style-type: none"> Continue to gain society's trust by conducting timely and appropriate disclosure Publish a combined annual and CSR report that more clearly presents the AGC Group's approach to progressively integrating business operations and corporate social responsibility Enhance communications both in and outside the Group to establish a stronger basis for CSR activities
	<ul style="list-style-type: none"> Completed a review of the Group Code of Conduct Obtained Personal Certifications on the Code of Conduct from about 38,000 employees, representing 81% of all Group employees 	A	<p>Continue to promote compliance</p> <ul style="list-style-type: none"> Revise the Group Code of Conduct Further expand the scope of Group employees requested to submit Personal Certifications on the Code of Conduct Conduct ongoing compliance training and online training programs for all Group employees
	<ul style="list-style-type: none"> Conducted internal audits at 49 sites in the Group, focusing on the Group's global uniformity and covering the establishment of a framework for complying with antitrust laws and protecting confidential information Carried out audits to examine the implementation of Enterprise Risk Management⁴ by divisions in charge of handling respective downside risks³ 	A	<p>Implementing effective audits and promoting the PDCA cycle</p> <ul style="list-style-type: none"> Continue conducting audits of the framework in the Group for observing antitrust laws and measures for protecting confidential information Conduct audits targeting the completion and application of a business continuity plan (BCP) across Group companies in Asia including Japan
	<ul style="list-style-type: none"> Provided the results of the third Employee Satisfaction (ES) survey to employees, formulated and implemented measures to improve ES at each in-house organization, and announced the measures to the entire Group in a message from the CEO Distributed the self-inspection list for human rights and labor practices in December 2010, and checked the status of compliance at 157 Group companies; necessary corrective measures were promptly implemented Increased the number of AGC Group CEO Awards awardees by approximately 20%, increasing the awardees particularly from Group companies in Asia and Europe and its contents with expanded measures to facilitate global cooperation in the award system 	A	<p>Create a work environment where employees can work with satisfaction and pride</p> <ul style="list-style-type: none"> Promote the Group-wide development of measures to improve employee satisfaction, and create opportunities to regularly review related activities undertaken at each in-house organization Employ a second voluntary self-inspection of human rights and labor practices in the Group Continue to implement the award system while making improvements as a means to award jointly implemented best practices and efforts to create a work environment that recognizes and appraises achievements
	<ul style="list-style-type: none"> Obtained third-party certification of the OHSMS at 83 plants as of December 31, 2011 Enhanced education on health and safety by implementing ongoing safety promotion activities and expanding safety patrol training into stratified educational seminars, Hazard Simulation Training was expanded to Group companies Produced a booklet on preventing disasters caused by human error to draw attention to unsafe behaviors at work, and commenced training at every organization 	B ⁵	<p>Foster the Group's safety management activities</p> <ul style="list-style-type: none"> Increase the effectiveness of the OHSMS Continue to enhance education on health and safety, including safety promotion activities Reduce accidents due to unsafe actions as well as accidents caused by elderly employees Raise the level of health management
	<ul style="list-style-type: none"> From March 2011, internal audits of environment, safety and security were implemented with the Internal Audit Office in an effort to improve efficiency 		<p>Reduce risks by improving health and safety audits</p> <ul style="list-style-type: none"> Conduct audits particularly at plants with high risks associated with health and safety while aiming to develop a more global auditing system
	<ul style="list-style-type: none"> Prior Safety Assessment System, safety inspections in advance of installing production facilities, being implemented at most plants in Japan Conducted machinery safety training for supervisors from all relevant organizations in Japan, and expanded the training to include Group companies in Asia other than Japan Increased the number of employees qualified as safety assessors by 80 and qualified as safety basic assessors by 239 in Asia including Japan 	A	<p>Promote and ensure machinery safety</p> <ul style="list-style-type: none"> Improve the effectiveness of safety inspections taken in advance of installing production facilities Expand the implementation of training related to machinery safety
	<ul style="list-style-type: none"> Continued conducting next-generation leader training, and included training sessions in China for the first time Contemplated the organization and human resources aspirations for 2020, and established priority tasks toward this end for the medium term; employed the Skill Map (see page 49) in employment plans for technical personnel 		<p>Develop human resources that can drive the Group forward</p> <ul style="list-style-type: none"> Improve the content of next-generation leader training Continue employing global management staff⁶
	<ul style="list-style-type: none"> Beginning with Japan, expanded the AGC Group improvement activities to certain areas of Asia, Europe and North America 	B ⁸	<p>Enhance employee education and training programs</p> <ul style="list-style-type: none"> Develop new training programs that make use of online training Continue expanding the scope of the AGC Group improvement activities
	<ul style="list-style-type: none"> Newly added one Group company to the integrated EMS, bringing the total number of participating plants up to 96 in the Group 		<p>Promoting risk reduction and preventive measures</p>
	<ul style="list-style-type: none"> Achieved a recycling rate of 96.9% as the Group average 		<p>Promote Zero-landfill (waste)⁷ in the Group</p>
	<ul style="list-style-type: none"> Environmental products accounted for 16% of total sales Implemented a bilateral offset credit mechanism feasibility study with Mexico (see page 35) 	A	<p>Promote environmental activities according to the highest standards in the materials industry</p> <ul style="list-style-type: none"> Promote the development of environmental products Achieve an AGC Environmental Indicator level of 1.3 or less for greenhouse gases Facilitate energy conservation in manufacturing processes, etc.
	<ul style="list-style-type: none"> Provided training on compliance with antitrust laws to about 6,400 employees through online training and 740 employees through classroom training Created guidelines to ensure adherence to antitrust laws and conducted related audits at 52 Group companies and in-house organizations 	A ⁹	<p>Improve training and auditing related to compliance with antitrust laws</p>

⁷ Zero-landfill (waste) is defined as recycling of 99% or more of waste.

⁸ The reasons for the self-evaluation of "B" are that the AGC Group Environmental Forum was cancelled owing to the Great East Japan Earthquake, and Zero-landfill (waste) for waste matter have not yet been achieved.

⁹ For details of the settlement case with the European Commission investigating the Group's violation of competition laws in the glass bulbs for cathode-ray tubes (CRT) market, see page 57.

Organizational Governance

The management of the AGC Group strives to achieve efficient and fully transparent operations as it works to undertake proper and effective decision-making, management execution and supervision.

Corporate Governance

■ Approach to Corporate Governance

As stated in its basic policy concerning corporate governance, the AGC Group clearly separates the functions of oversight and execution of management, aiming to strengthen the management oversight function while ensuring quick decision-making in management execution. Under this policy, the Group has been implementing measures to improve both the management system and internal control system in order to ensure highly transparent and efficient management.

■ Corporate Governance Structure

The Board of Directors of Asahi Glass comprises seven directors, including three outside directors¹, and is tasked with approving the AGC Group's basic policy and monitoring the execution of its management.

The management execution function is the responsibility of executive officers below the President & CEO. As an advisory committee to the President & CEO, Asahi Glass establishes the Management Committees and discusses business management monitoring and decisions regarding management execution. A system of In-house Companies (quasi-subsidiaries within the Group) has been introduced and a global consolidated management system is adopted with regard to business execution. Much of the responsibility and

authority for business execution has been delegated to the In-house Companies and the SBU.

For the selection and evaluation of directors and executive officers and for their compensation, Asahi Glass has established respectively the Nominating Committee and the Compensation Committee as non-statutory advisory committees to ensure the objectivity and transparency of any decisions made. More than half the members of each committee are outside directors. In order to ensure impartiality in the selection of independent directors, the Group has determined its own selection standards over and above the regulations of Japanese corporate law.

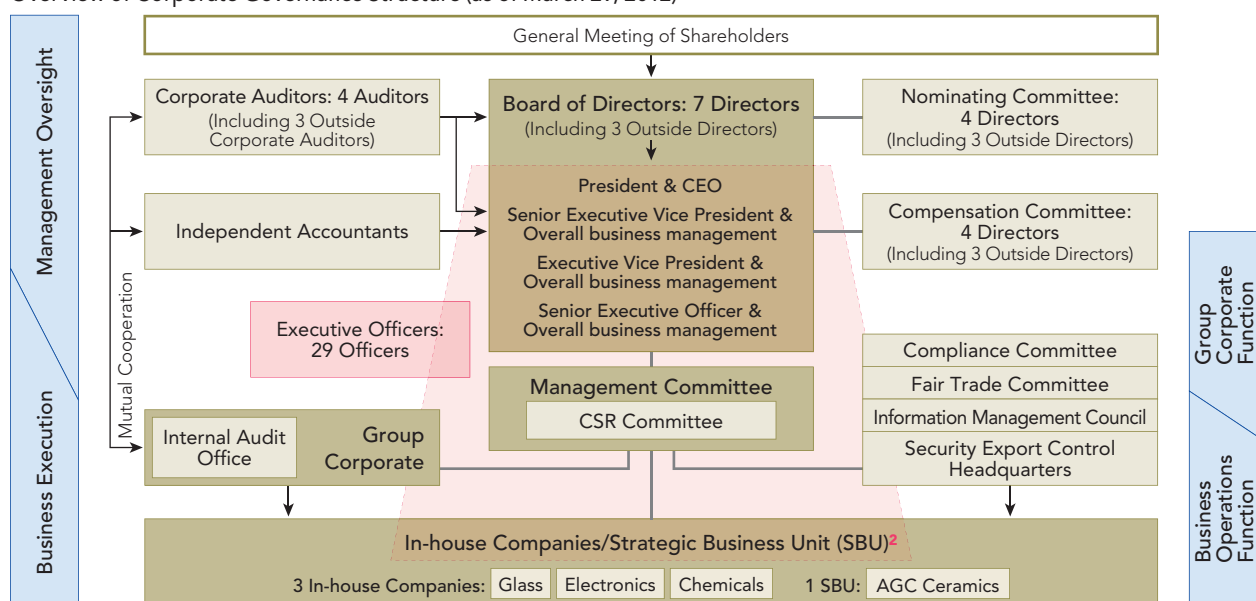
As to the compensation of directors (excluding outside directors) and executive officers, Asahi Glass has introduced compensation-type stock options allowing them to share benefits with shareholders, and has also introduced performance-linked bonuses for executive officers (including directors who serve also as executive officers). Independent directors, on the other hand, are paid only monthly compensation.

Asahi Glass has also adopted a corporate auditor system. As of the end of March 2012, the Board of Corporate Auditors comprised four corporate auditors, including three independent auditors.

¹ As of March 29, 2012

 Attendance rate of each director in Board of Director meetings
CSR Information Supplement P. 2

Overview of Corporate Governance Structure (as of March 29, 2012)



² An In-house Company is defined as a business unit with net sales exceeding 200 billion yen which conducts its business globally. At present, there are three In-house Companies: the Glass Company, the Electronics Company and the Chemicals Company. Business units smaller than this are defined as Strategic Business Units (SBUs).

Internal Control

In response to the establishment of the Companies Act, Asahi Glass voted on its corporate policy over internal control at the Board of Directors meeting held in May 2006. The aim was to review and ensure the appropriateness of its business operation systems, including the compliance system.

After introducing the Internal Control Report System in compliance with the Financial Instruments and Exchange Act, the AGC Group Internal Control over Financial Reporting Implementation Regulations was established. Based on these regulations, the Group establishes, operates and evaluates internal controls for financial reporting.

Internal control was evaluated as being effective in fiscal 2010 and 2011, and an external auditor confirmed the appropriateness of the system in its evaluation.

In fiscal 2012, an e-learning program for employees is planned with the aim of strengthening internal control functions.

Implementation of Internal Audits

In order to maintain the independence of internal auditing divisions and implement effective and efficient auditing, the AGC Group has set up a framework that assigns the internal auditing global leader under the supervision of the Group CEO to oversee the regional leaders of Asia including Japan, Europe and North America. Under this system, each regional auditing division monitors their respective organization and works to make improvements. The global leader in charge of these divisions promptly reports on results to the Group CEO, and periodically submits reports to the Board of Corporate Auditors and the Board of Directors. Since fiscal 2010, in addition to the oversight of audits at each organization, fiscal year global projects designed to improve the level of management for the Group are also prepared.

In fiscal 2011, the AGC Group conducted audits under the fiscal year project of complying with anti-monopoly laws and managing confidential information, and began pre-audits of the status of internal controls at new companies before their operations commenced.

 Internal Audit System Structure
CSR Information Supplement P. 2

Participation in External Initiatives

The AGC Group is a member of the World Business Council for Sustainable Development (WBCSD) along with about 200 other companies around the world.



Additionally, Asahi Glass is a member of the Council for Better Corporate Citizenship (CBCC) and Group companies are also actively involved in initiatives in their respective countries and regions. For instance, AGC Flat Glass (Thailand) Public participated in the CSR-DIW Initiative promoted by Thailand's Department of Industrial Works (DIW) to gain CSR certification based on ISO 26000 standards.

Communication with Stakeholders

The AGC Group actively discloses corporate information to stakeholders in a timely and appropriate manner. To manage the prompt disclosure of information, the Timely Information Disclosure Committee holds regular meetings to deliberate and decide on the need to disclose information related to matters under discussion by the Management Committee and Board of Directors, based on disclosure rules of the stock exchanges. For information of high interest to stakeholders, the public relations departments of Group companies in the Asia including Japan, Europe and North America regions cooperate to ensure such information is announced appropriately and promptly.

The AGC Group provides various opportunities to engage in dialogue with shareholders and investors as a means to incorporate their opinions into management plans and ensure that they are fully informed of the Group's management strategies and financial performance.

The AGC Group makes efforts to improve the convenience of information it provides to shareholders regarding the general meetings of shareholders, such as ensuring that notices of convocation are sent out as early as possible and posted on the Group's Web site. Shareholders are also able to exercise their voting rights via the Internet.

As part of investor relations activities, management holds presentations on its strategies and financial results, meetings to discuss quarterly and yearly financial results, and tours of facilities for analysts and institutional investors. Members of management also met for interviews on about 220 occasions in fiscal 2011. Furthermore, small meetings are held for individual investors, and a publication for shareholders, *AGC Review*, is issued twice per year. Through these means, the AGC Group aims to provide clearly presented information not only covering management strategies and financial results but also business activities and products.

Furthermore, the AGC Group engages in interactive communications with stakeholders at all of its business sites, holding various kinds of events and dialogues with invited experts.

 For more information on stakeholder dialogues:
www.agc.com/english/csr/communication/shd/

Organizational Governance

Risk Management

■ Approach to Risk Management

The AGC Group is united in its efforts regarding risk management. Founded on the corporate policy over internal control determined by the Board of Directors, the AGC Group defines its important risk factors, assesses their management status and reports the results to the Management Committee and the Board of Directors for periodic discussion. Divisions with jurisdiction over specific risk formulate action plans for risk management and develop a Plan, Do, Check and Act (PDCA) cycle in order to continuously improve and reform the level of risk management.

Examples of risks managed by the AGC Group as a whole include those related to the following:

- Procurement of resources
- Product liability
- Occupational accidents
- Global environmental issues
- Intellectual property rights
- Compliance
- Natural disasters such as earthquakes
- Pandemic influenza
- Information security

■ Business Continuity Management (BCM) Structure

The AGC Group began formulating its business continuity plan (BCP) in fiscal 2008 to prepare for a large-scale accident or disaster. Additionally, in March 2011, the Group issued the AGC Group Business Continuity Plan (BCP) Development Guideline as guidelines for use by divisions and sites when formulating BCPs for each type of risk. BCPs are reliably implemented and assessed based on the business continuity management process (BCM) for continuously maintaining and improving BCPs.

Measures for Natural Disasters

In March 2011, the Group established the AGC Group Basic Principle to Cope with Natural Disasters to prepare for large-scale natural disasters that might take place in the regions in which the Group operates, and as a means to promote integrated and comprehensive countermeasures at sites in regions around the world where disaster risks are particularly high.

In response to the Great East Japan Earthquake, occurred in March 2011, the Group revised these basic principles in December and established Rules for the AGC Group Taskforce Headquarters (Natural Disasters Version). Furthermore, simulated drills for carrying out a business continuity plan were jointly conducted by business sites in Japan based on multiple scenarios, including damage to head office and other sites caused by major earthquakes occurring in the country's Tokai, Tonankai and Nankai regions.



The simulated drills jointly conducted in October 2011

Each of the Group's initiatives related to risk management and business continuity plans
www.agc.com/english/csr/integrity/riskmng_2.html

Electronics Company

Preparing for a Major Earthquake in Areas around Tokyo with Training for a Switch of Headquarters

In September 2011, the Electronics Company carried out drills simulating a switch of headquarters to the Kansai region. The drills assumed a scenario of an earthquake directly striking areas around Tokyo with a seismic intensity of level 6 and paralyzing the functions of the Group's headquarters. The purpose of the drills was to practice setting up an alternative headquarters in Kansai region at the request of the In-house Company President due to the inability to use the headquarters building, or also in the event that communications from headquarters had broken down for a certain period as a result of the earthquake.

Headquarters, plants in the Kansai region and manufacturing plants in and outside of Japan participated in the training.

Under the hypothetical scenarios, it was confirmed that infrastructure and systems to be employed according to the BCP could operate, including a backup server located in the Kansai region that backs up data from the server at headquarters, the external Internet reporting system that maintains security, the emergency communication confirmation system, priority-use mobile phones and satellite communications. In addition to these initial drills, recovery activity training was conducted to examine how substitute production could be achieved through cooperation between manufacturing plants and sales divisions both in and outside Japan, based on the scenario of damage to manufacturing plants in the areas around Tokyo due to a disaster.

Compliance

■ The AGC Group Code of Conduct

The AGC Group Code of Conduct was established in June 2008 to ensure that all members of the AGC Group share the same values. The code comprises global requirements of business conduct for all employees in the Group to follow, as well as regional supplements that take into account the differing laws and business customs of respective countries and regions and include items to supplement the global requirements.

Revisions to the Code of Conduct are planned in fiscal 2012 based on considerations of new risks that arise from changes in social conditions and revisions to laws in countries where the Group operates, as well as on the shared needs of the Group.

 Code of Conduct (Items for global requirements)
CSR Information Supplement P. 3

■ Global Compliance System

The AGC Group has established three compliance committees below the Global Compliance Leader in the three regions of Asia including Japan, Europe and North America. Each compliance committee plans, prepares and implements compliance programs and then monitors its region's compliance efforts. Further, the committees hold a global compliance meeting twice per year to draw up policies, measures and other matters for the Group as a whole, the results of which are reported to the Board of Directors. In addition, the AGC Group has established a framework for promptly reporting information on serious violations of compliance to management through a system designed to monitor reports of compliance issues.

 Global Compliance System
CSR Information Supplement P. 3

■ Submission of Personal Certification on the Code of Conduct

The AGC Group has introduced a system in which its employees periodically submit a personal certification to follow the AGC Group Code of Conduct. In this way, employees are given regular opportunities to renew their awareness of compliance and take a fresh look at business affairs and the workplace. The Group is aiming to expand the system to cover every employee.

In fiscal 2011, 38,000 employees submitted personal certifications, which is equivalent to 81% of all Group employees.

 Compliance training results
CSR Information Supplement P. 3

■ Establishing Help Lines Globally

The AGC Group has established compliance help lines¹ for the Group as a whole and for each individual company to serve as a consultation service on compliance-related issues. To encourage employees to use the service, the Group protects the anonymity of callers and strictly forbids any act of retaliation against anyone who makes a report in good faith. When users offer their real names, efforts are made to facilitate effective two-way communication and provide feedback on the status and results of handling reported problems.

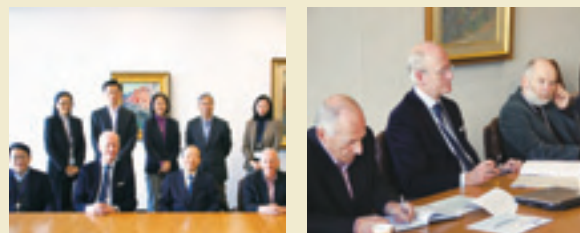
¹ National and regional help lines have been set up in Europe, North America, China, Japan, South Korea, and Taiwan.

 Number of help line consultations
CSR Information Supplement P. 3

AGC Group

Holding Global Compliance Meetings Attended by Compliance Managers from Each Region

To promote compliance policies in three world regions, the AGC Group holds a Global Compliance Meeting twice per year, with participation by managers in charge of compliance committees in each respective region. At the meetings, participants decide on medium-term compliance plans, monitor the progress of measures undertaken in each region and share information concerning compliance. The information and decisions from these meetings are then shared at meetings of the regional compliance committees to facilitate the implementation of such measures.



The Global Compliance Meeting

Human Rights and Labor Practices

The AGC Group is working to create a workplace environment that is safe and rewarding, while achieving continuous growth with mutual respect among employees.

Fundamental Approach 7 Key Principles for People

To continuously evolve as a truly global enterprise, the AGC Group has formulated the 7 Key Principles for People to guide its various initiatives and activities aimed at realizing progressive human resources management.

 7 Key Principles for People (full text)
CSR Information Supplement P. 4

Respecting Human Rights and Implementing Progressive Labor Practices

As specified in the Respect for People principles of the AGC Group Charter of Corporate Behavior, the AGC Group strives to respect human rights while forbidding discrimination, forced labor, child labor, or any infringement on human rights. To determine the level of compliance with the Charter at each of its Group companies, in 2010 the AGC Group created a survey form for Group-wide distribution. Based on results from 157 companies that conducted voluntary self-inspections, necessary corrective measures were promptly implemented.

If problems related to human rights or labor issues occur, they are jointly addressed by the human resources department and the workplaces involved. Meanwhile, issues that are brought to attention via the Group's help lines are handled by those in charge of compliance.

 Selection of labor-related data
CSR Information Supplement P. 6

Surveys and Other Initiatives for Improving Employee Satisfaction (ES)

The AGC Group implements Employee Satisfaction (ES) improvement activities that allow employees to explore ways to solve issues in collaboration with management, including the Group's executives, applying the concepts of effective communication and employee participation. These activities incorporate ES approaches and initiatives in everyday management with the aim to evaluate and treat employees appropriately and provide greater opportunities for their personal growth and success. In one specific initiative, drawing on the results of its ES survey, the Group organizes small-group meetings at each workplace and formulates and implements action plans designed to improve ES through communication.

The Group has conducted the surveys since 2005, and carried out a third survey in November 2010 in 18 languages involving about 40,000 employees.

 Data related to ES survey
CSR Information Supplement P. 5

Establishment of the AGC Group Awards System

The AGC Group has set up a system for offering various awards with the goal to create a positive corporate culture that recognizes the contributions and efforts of its members. Awards ceremonies are held in the three regions of Asia including Japan, Europe, and North America, and information on the awarded activities are shared in in-house magazines and the in-house homepage. As a result of efforts to promote the awards system throughout the Group, awards presented to European and Asian Group companies increased and the total number raised by about 20% in fiscal 2011 compared to the previous fiscal year.

 Number of AGC Group awards
CSR Information Supplement P. 5

AGC Flat Glass Czech A.S.

AGC Flat Glass Czech Acquires SA 8000 Certification

In May 2011, AGC Flat Glass Czech A.S. (AFCZ) newly acquired SA 8000, a global social accountability standard for decent working conditions. Certification was performed for all of AFCZ: five manufacturing plants and a company service center with nearly 1,000 employees. SA 8000 certification indicates that AFCZ gives appropriate attention to worker health and safety and ensures suitable work-life balance and conditions for employee development. By acquiring SA 8000, the company declares its commitment to fight human rights violations, child labor and forced labor.

“AFCZ Believes it is a Competitive Advantage as a Company to Show Improvements in the Working Environment”

There were a number of tough steps leading up to our SA 8000 certification. First there was staff training, including an internal auditor, then the final adaptation of documents, including modifications of contractual relationships with suppliers. Although we voluntarily adhere to principles of good management, certification according to SA 8000 may represent a competitive advantage in the eyes of the society. In the future, we're considering extending the certification to other Group companies in Central Europe.



Libor Sehnal
HR Manager, AGC
Flat Glass Czech A.S.

Making the Most of Diversity

■ Drawing the Big Picture of Organization and Human Resources in 2020

Based on its management outlook and business development strategies, in February 2011 the AGC Group began drawing a big picture of its organization and human resources in 2020 with the aim to draw on its diversity—the source of the Group’s competitiveness over the long term.

As a part of these efforts, the AGC Group estimated the number of employees needed in each segment and country to implement its strategies aimed at 2020, in consideration of the total number of managers and employees working in the Group at present. Based on these results, the Group determined priority tasks over the medium to long term: secure personnel for global management, secure key personnel in China, and cultivate local management staff in Southeast Asia. Going forward, the Group plans to carry out an array of initiatives designed to complete these tasks.

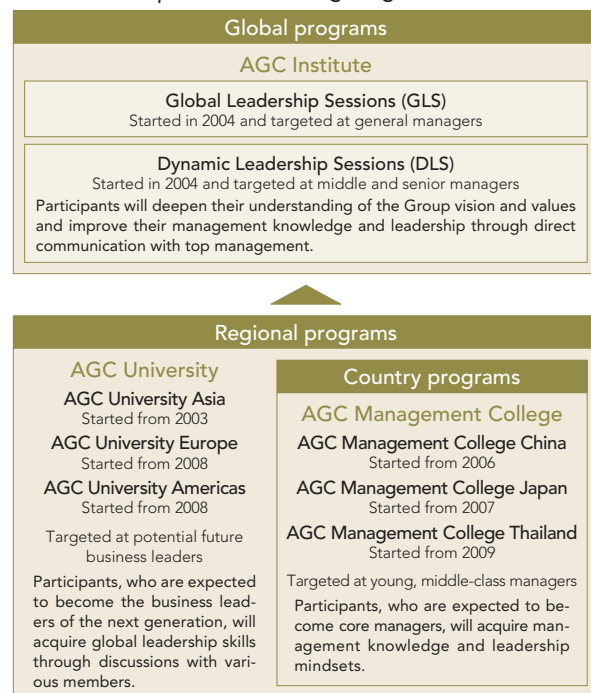
 Employee composition and recruitment data
CSR Information Supplement PP. 6-7

■ Grooming Global Leaders to Manage Diverse Human Resources

It is essential for managers at the helm of a global enterprise to have leadership qualities that are derived from values generated through diversity. Therefore, to cultivate managers who can drive the Group forward, the AGC Group is grooming employees from a diversity of countries and regions regardless of nationality or gender as future leaders through the training system outlined in the chart at right.

Since fiscal 2011, the AGC Group has been stepping up efforts to localize business operations at its Group companies in every region, inviting employees from around the world to Japan for necessary training and education. For instance, engineers from Group companies in Indonesia participated in onsite training in Japan at the Chemicals Company, a program that will expand to Group companies in Thailand and the United States in the future.

The AGC Group's Leader Training Programs



Electronics Company

Conducting Training in Japan for Key Personnel from Main Group Companies in Asia

In line with the Group's efforts to localize business operations at its companies, the Electronics Company conducts training in Japan for the period of two months for key personnel from Group companies around Asia, with the aim to cultivate local staff for future leadership roles. In fiscal 2011, seven trainees from four Group companies in South Korea and China participated in such training, through which they learned about the management philosophy, methods for improving productivity and other subjects.

“ I Want to Apply What I Learned in Japan to Make Us the World’s Number One Display-related Company ”

In the training sessions I recently participated in, I realized that I did not know much about the world. The training gave me good opportunities to study the AGC Group’s corporate culture, as well as Japanese culture, proper management methods for every plant and the role that I should pursue in my work in the future. By drawing on what I learned and capitalizing on what South Korea has to offer, I want to help make us the world’s number one display-related business.



Lee Kyung Hyuk
 Executive Officer Manager, Asahi Glass Fine Techno Korea

Human Rights and Labor Practices

Employee Education System

Developing the Employee Education and Training System

The AGC Group's commitment to the idea that Our People are Our Strength, as found in its management policy, shows that it is taking steps to develop an education system to help its employees grow. It has put into place a training system to meet the needs of each In-house Company, in addition to providing technology- and skill-specific stratified training that enables each employee to learn the technologies and skills required by his or her position. The Group has also devised Group-wide activities, such as the AGC Group improvement activities, as well as an awards program.

 Employee education and training data
CSR Information Supplement P. 7

Promoting AGC Group Improvement Activities

Promoted through all departments, the AGC Group improvement activities are daily improvement activities and large-scale innovative improvement activities to achieve the overall goals of the organization.

To foster the activities efficiently and effectively across the entire Group, scientific methods are used, such as industrial engineering (IE)-based methods, in addition to the adoption of training to foster improvement experts and other leaders, throughout the entire organization. In fiscal 2011, beginning in Japan, the Group expanded such activities throughout Asia and into parts of Europe and North America.

AGC Glass Europe

The InnoWiz Program Aims to Turn Each and Every Member of Staff at AGEU into a Potential Innovator

In 2010, AGC Glass Europe (AGEU) launched the InnoWiz Program as part of the AGC Group's improvement activities. This program collects innovative ideas from employees throughout the company. After collection, ideas are submitted to the InnoWiz website, where employees can track the progress of their ideas. The InnoLink, a program coordinator at each site, ensures that the ideas are evaluated and, if appropriate, implemented. Through participative innovation, the objective of the program is to put in place a dynamic process to ensure implementation of a maximum number of ideas. As of the end of 2011, 8,000 people currently have access to the program and the website holds 4,000 ideas, 700 of which are being implemented.



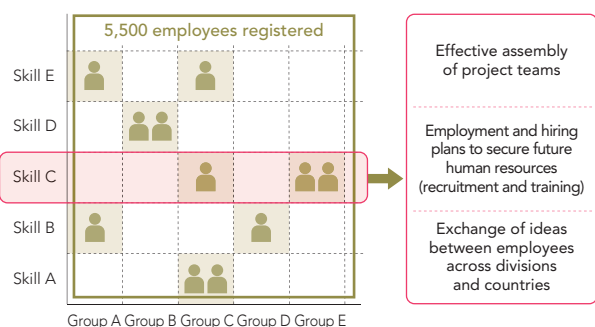
Winners of the Award for Excellence in the InnoWiz Program

In Focus Applying the Skill Map to Advance Human Resources Management

The AGC Group began applying Skill Map from fiscal 2010 with the aim to strengthen its competitiveness and further enhance employees' capabilities by facilitating exchanges between professional personnel that possess highly specialized knowledge, experience and skills. As of December 31, 2011, about 5,500 employees from various regions have been registered according to 26 technical categories and 14 sales and administrative categories of specialized fields in the Skill Map database, which is shared in the Group.

By utilizing the Skill Map system, the Group has been able to assemble effective teams for projects that extend across divisions and organizations, and to systematically plan the security of human resources in the future. By bringing together employees registered under every category of specialization from other in-house organizations or countries, the system has helped in the completion of operational tasks while improving the individual skills of all employees involved. For

example, research personnel in the AGC Group have shared ideas globally on the intranet in relation to their respective specialties. The Group also holds in-house conferences and workshops specific to each category of specialization under the system.



Occupational Health & Safety

Basic Idea of Occupational Health & Safety

The AGC Group has formulated the AGC Group Basic Occupational Health & Safety Policy and promotes activities to reduce the number of industrial and occupational accidents by assessing potential risks at on-site production facilities based on the occupational health and safety policy of "No production should be operated without assurance of safety." Also, the Group is committed to enhancing the effectiveness of its activities by combining its daily health and safety activities¹ with occupational health and safety management systems (OHSMS).

¹ Health and safety activities such as the 5S (*seiri* [neatness], *seiton* [orderliness], *seiketsu* [cleanliness], *seiso* [cleanness] and *shitsuke* [discipline]), hazard protection, near-miss management (*hiyari-hatto*) and safety patrols which are promoted traditionally.


 Basic Occupational Health & Safety Policy (full text)
CSR Information Supplement P. 8

Global Health and Safety Management System

The AGC Group is pushing ahead with health and safety activities by creating an occupational health and safety management system (OHSMS) in each In-house Company/SBU, and the CSR Committee regularly discusses relevant policies and measures, and its progress.

Also, the Group is urging each of its manufacturing plants to obtain certification from an external OHSMS certification institution, and, in addition, is taking steps to improve the management level of health and safety through internal audits conducted by the Internal Audit Office and each In-house Company/SBU.

Furthermore, the Group holds a Global Occupational Health and Safety Symposium on a regular basis with the participation of health and safety supervisors from various countries and regions, thereby disseminating best practices and deploying horizontal development at each manufacturing plant. In fiscal 2011, the symposium was suspended due to the Great East Japan Earthquake, but will be held in China in fiscal 2012.

 Occupational health and safety management system and Number of plants obtaining third-party certification for OHSMS
CSR Information Supplement P. 8

Reducing the Risk of Occupational Accidents

The AGC Group is taking steps to improve its risk assessment with an initiative to reduce the risk of occupational accidents.

The AGC Group (Japan) trained managers and supervisors, and, from fiscal 2009 onward, implemented training for employees who conduct risk assessment at manufacturing plants. Further, under the banner of strengthening safety activities, the Group has sought to implement intensive education for risk assessment after selecting Core Safety Facilitators from among those in manufacturing and facility divisions at each plant. By the end of fiscal 2011, 102 employees were participating in the training, and, for the medium-term, the Core Safety Facilitators were placed in strategic points at manufacturing plants, where they were expected to link safety and human resources training with the improvement of safety management by undertaking shop floor risk assessment.

Also, the AGC Group (Asia) continues to make improvements in risk assessment with educational programs tailored for each manufacturing plant, with six additional regional implementations, including in China and Thailand in fiscal 2011.

“AGEU Aims to Achieve Zero Severe Accidents through Enhanced Awareness of Safety Management and Implementation of Preventative Measures”

As Safety Director at AGC Glass Europe (AGEU), my first step has been to expand the managerial mindset from a focus on efficient practices to "no production without safety." Based on this commitment at all levels, our safety activity concentrates not only on countermeasures after accidents, but we also aim for preventive action and sharing best practices throughout the organization.

In particular we are pushing forward with a rolling Safety



A sign indicating a Lock-Out location

Improvement Plan comprising Lock-Out-Tag-Out¹ procedures and a new IT tool for safety reporting. In addition, to better organize safety in AGEU, we are running a 360° assessment on safety management in a mid-term plan by the new safety organization. We plan to reduce accidents with lost time by 50% per year, with an aim to achieve zero severe accidents in 2016.

¹ The system using tagged locks to prevent injury to workers due to a machine being accidentally switched on during maintenance and other work.



Jan van Loon
Safety Director
CSR office
AGC Glass Europe

Human Rights and Labor Practices

Machinery Safety to Introduce Safe Manufacturing Machines

In order to realize a safe production environment, having safe manufacturing machines is essential. To that end, the AGC Group is taking steps to update the safety of its existing facilities through ongoing risk assessment, while introducing safe manufacturing machinery (machinery safety).

The AGC Group (Europe) has introduced safe manufacturing facilities that have been assessed at the time of installation and design, based on EU directives and in accordance with international safety standards such as ISO 12100.

Starting in 2005, the AGC Group (Asia including Japan) has encouraged employees to qualify as Safety Assessors¹ to design and introduce facilities based on an understanding of international safety standards. By the end of fiscal 2011, a total of 360 employees had acquired Safety Sub-Assessor qualifications, while a total of 417 had obtained Safety Basic Assessor qualifications.

Moreover, beginning in April, 2010, when introducing new facilities, it has become mandatory in Japan to assess facilities at the time of design and production, and plans to make such risk assessment mandatory throughout the other Asian regions will begin in fiscal 2013.

¹ Under this qualification system for skills on machinery safety, which was established by some organizations including the Society of Safety Technology and Application, Japan, there are four different levels of qualifications: Safety Lead Assessors, Safety Assessors, Safety Sub-Assessors and Safety Basic Assessors.

Improving the Level of Safety Awareness

In Asia, the AGC Group is implementing safety education through stratified education programs designed to raise safety awareness among newly appointed managers and safety managers, as well as working to revitalize training related to daily health and safety activities such as near-miss management.

In fiscal 2011, the Group started Safety Patrol Training, which aims to develop observation of risk factors onsite at production facilities. Also, the Group launched an occupational accident prevention initiative focused on unsafe behavior, and created a text book on human error prevention slated for a fiscal 2012 global release, which classifies unsafe behavior and introduces preventive methods by category.



Safety Patrol Training

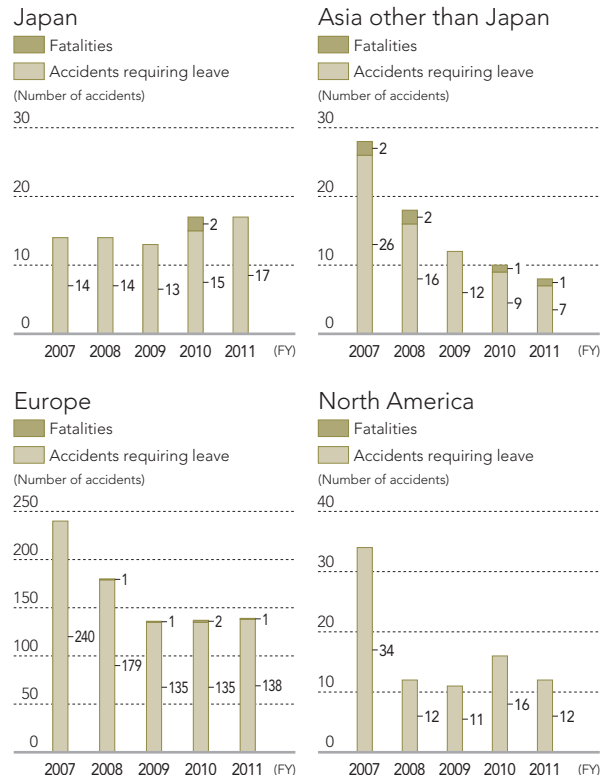
Occupational Accidents

The AGC Group has collected data since fiscal 2007 about occupational accidents at all locations throughout the Group.

The collected data shows trends of occupational accidents according to region; there appears to be no change of trends in Asia including Japan, while in Europe, due to advanced machinery safety, accidents involving workers getting caught in machinery are few, but accidents involving overturned vehicles and during forklift operation continue to occur. The Group is committed to reducing the number of occupational accidents by analyzing the results of its data collection and by promoting safety management initiatives throughout the entire Group.

In fiscal 2011, the AGC Group experienced two fatal occupational accidents (one victim in Asia; one in Europe). The Group is committed to the goal of achieving zero serious accidents in the medium-to long-term, accelerating the two initiatives—eliminating serious occupational accidents, and improving safety awareness in each individual employee.

Number of Occupational Accidents



Note

The assessment criteria for accidents requiring leave differ among Asia including Japan, Europe and North America, which disables the simple comparison of the numbers of occupational accidents among each region.

The Environment

The AGC Group regards the environment a top management priority and is committed to reducing environmental impact.

Environmental Management

■ The AGC Group Basic Environmental Policy

Recognizing that its operations have considerable impact on the environment, the AGC Group has positioned environmental protection as a top management priority. Accordingly, it has established the AGC Group Basic Environmental Policy to guide business activities in ways that contributes to the environment.

 Basic Environmental Policy (full text), Material Balance, Environmental Accounting
CSR Information Supplement PP. 10-12

■ Integrated Environmental Management System


The AGC Group has been building on and maintaining its integrated environmental management system (Integrated EMS) since 2003. The objectives of the system are as follows:

- 1) The Group aims to carry out environmental activities on an operational-wide basis rather than independently at each plant by integrating EMS in each of In-house Companies.
- 2) The Group aims to determine the effects of its entire operations on the environment in advance, extending from product design and assembly line organization through to manufacturing and transportation, to enable it to reduce

the environmental impact of its products over the products' entire lifecycle. Accordingly, it includes the head office, sales departments and R&D divisions in addition to manufacturing plants in the Integrated EMS framework.

Under this system, each organization works to attain the goals and plans set in the Integrated EMS, and progress is evaluated by management through the integrated EMS review. Furthermore, each plant is encouraged to have external inspections based on international standards by the same certification organization, as a way to determine the level of environmental management activities in each country and region where the Group operates. Management makes use of the results of these evaluations and inspections when drafting policies and plans for the following fiscal year to ensure that environmental management activities continuously improve.

With a view toward enhancing its integrated management system, the AGC Group employs the same certification organization to inspect its quality assurance and occupational health and safety management system in addition to the environmental system.

 Promotion structure of Integrated EMS and ISO 14001 certification status
CSR Information Supplement P. 10

Environmental Awards Received by the Glass Company

Environmental Performance Rating (PROPER) Program Green Award Received from the Government of Indonesia

In 2011, the PT Asahimas Flat Glass, Tbk's Sidoarjo Plant was awarded a Green level PROPER rating by the government of Indonesia in acknowledgement of the plant's excellent environment management programs.

1,002 companies currently participate in the PROPER program and of these, five received Gold ratings, the highest level, while 106 received Green ratings, the second-highest level. In Sidoarjo regency, only two sites received the Green rating.

The Sidoarjo Plant was evaluated in four key areas: whether they had complied with rules and regulations over the previous five years; whether they were implementing programs regarding energy saving, water conservation, and the handling of waste; whether they had biodiversity programs; and their CSR and community development activities.



AMG director receives the certificate from the Minister of the Environment

AGPH Receives Government Environmental Award in the Philippines

AGC Flat Glass Philippines (AGPH) received the Don Emilio Abello Energy Efficiency Award from the Department of Energy of the Philippines in December 2011. AGPH was given an outstanding prize, marking the second time it



Award ceremony

had received the award, having previously won in 2008. Named after the founder of the country's environmental conservation movement, the Don Emilio Abello Energy Efficiency Award is given to companies that demonstrate progress in improving energy efficiency and implementing effective measures aimed at mitigating climate change in line with national targets. AGPH received this award as the result of a number of energy-saving and conservation measures, including the optimization of air compressor operations, changes in lighting equipment and rationalization of air conditioning.

The Environment

Assessing Environmental Impact

■ The AGC Environmental Indicator to Determine Environmental Impact

The AGC Group formulated the AGC Environmental Indicator in 2006 to independently assess the environmental impact of its manufacturing activities (details shown below). By using this indicator, the Group can calculate how much the environment is affected in relation to improvements in its economic performance while making further improvements. The Indicator is calculated based on the ratio of the AGC Group's sales to GDP (economic contribution) and the ratio of the emissions of substances of concern (SOC) from the Group's manufacturing activities to the total (environmental impact ratio).

How to Calculate the AGC Environmental Indicator


$$\text{AGC Environmental Indicator} = \frac{\text{Environmental impact ratio}}{\text{Economic contribution}} = \frac{\frac{\text{SOC emissions by AGC Group (Asahi Glass)}}{\text{SOC emissions in the world (Japan)}}}{\frac{\text{Sales of AGC Group (Asahi Glass)}}{\text{Global (Japan's) GDP}}}$$

 AGC Environmental Indicator Data
CSR Information Supplement P. 12

Reduction in Greenhouse Gas Emissions

■ Cutting Down Emissions of Greenhouse Gas in Manufacturing Operations

Recognizing that it belongs to an energy-intensive industry, the AGC Group is promoting energy saving in areas such as within its production processes. In this regard, it has set a target value of 1.3 as measured by the AGC Environmental Indicator for greenhouse gas emissions. To meet this target, the Group is making use of fuel conversion and total oxygen combustion (see page 63) to improve production processes, installed cogeneration equipment and implemented energy conservation assessment. The value of the AGC Environmental Indicator for greenhouse gas emissions in fiscal 2011 was 1.5.

 Various energy-saving efforts in manufacturing operations
www.agc.com/english/csr/env/act/gas_2.html

Reducing Greenhouse Gases Besides CO₂

The AGC Group is manufacturing and selling products that emit greenhouse gases besides CO₂, fluorinated gases such as HFCs and SF₆. Because the greenhouse gas coefficient of these fluorocarbons can range between several hundred to about 10,000 times that of CO₂, they can be regarded as serious contributors to climate change. In this context, the Group is actively working to reduce its emissions of fluorocarbons generated from its manufacturing processes, and has continued to implement initiatives to recovering, breaking down and recycling fluorinated gases for its customers since fiscal 1997.

Furthermore, Asahi Glass reported that the volume of fluorinated gas emissions in fiscal 2011 was reduced by approximately 99% compared to the Kyoto Protocol benchmark year (1995).

 Emission of greenhouse gases other than CO₂
CSR Information Supplement P. 13


■ Reducing Greenhouse Gas Emissions in Offices, Transportation and Other Non-manufacturing Operations

The AGC Group is working to reduce greenhouse gas emissions in its non-manufacturing operations such as administration and sales divisions. For instance, AGC Glass Europe (AGEU) is promoting energy savings through its Going Green Campaign for all employees, including those working in offices. In another example, Asahi Glass moved its head office in August 2011 to a building where all electricity is generated by raw green power¹.

To reduce emissions of greenhouse gases in its transportation operations, each region where the AGC Group operates actively carries out a modal shift to transport, such as rail and ship. In addition, beginning in fiscal 2012, Asahi Glass plans to calculate CO₂ emissions according to the Greenhouse Gas Protocol's scope 3 standard for indirect emissions from such activities as employee business trips and commuting, transportation and supply chain operations.

¹ Green power is generated entirely by renewable energy and delivered directly to the consumer from the provider, allowing users to not simply consider green energy, but to directly experience their use of electricity.

 Per unit of energy consumption in transportation
CSR Information Supplement P. 13

 Range of initiatives for saving energy in non-manufacturing operations
www.agc.com/english/csr/env/act/gas_3.html

Total Energy Consumption



Greenhouse Gas Emissions



Note
Due to rounding, the percentage sum for each item does not necessarily amount to 100%.

AGC Flat Glass (Suzhou)

Promoting Water Reuse and Recycling

In October 2007, AGC Flat Glass (Suzhou) (AFS) established a water conservation team in response to government request and the plant’s own developing needs. The goal of the team was to obtain certification as a water-saving company from the local government and to lead the company’s water consumption and conservation activities.

When AFS started their water-saving activities, water intake was about 1,600 m³/day and wastewater discharge was about 900 m³/day. Through these activities, the aim was to reduce water intake to less than 1,000 m³/day and bring wastewater under 570 m³/day. The plant performed a water system balance test, installed water meters for all water lines and installed and modified equipment for wastewater recycling and its reuse. As a result, the company achieved its water consump-

Determining CO₂ Emissions over the Product Lifecycle

The AGC Group is proactively working to promote the technological development and production of photovoltaic module related materials, Low-E double glazing glass and other environmental products that can contribute to reducing the CO₂ emissions of society. By visualizing the results of these efforts, the Group is also making progress in calculating CO₂ emissions over product lifecycles.

AGC Glass Europe (AGEU), for example, has determined the CO₂ emissions generated when manufacturing glass products and the CO₂ emissions that can be reduced by using these products.

Effective Use of Water Resources

Effective Use of Water Resources and the Prevention of Water Pollution

In order to use its water resources more effectively, the AGC Group is promoting the recycling of cleaning and coolant water used in its manufacturing processes. Also, by setting environmental indicators, such as COD, that are specific to the characteristics of each site, the Group is working toward the prevention of water pollution.

In fiscal 2012, there are plans to tabulate water intake from all regions and drainage data in more detail than is conventionally used.

Total wastewater and COD emissions
CSR Information Supplement P. 13



Members of the water conservation team



Tank for wastewater reuse

The Environment

Proper Management of Chemical Substances

Since 1992, the AGC Group has utilized the MSDS (Material Safety Data Sheet), providing its customers with information regarding the use, proper handling during disposal and effect on the environment of its products.

In addition, the Group complies with the EU's REACH chemical substances regulations with regard to the chemicals contained in its products, and conducted its first registration up to November 2010. Underpinned by the Chemicals Company, REACH compliance is coordinated between the supervisors of related divisions and Group companies and their only representatives¹ within the EU. In Japan, the Group has joined the Joint Article Management Promotion-consortium (JAMP), and provides information for MSDS plus. The Group is also registered as a sponsor in a joint program among the private and the public sectors for collecting and releasing safety information of Japan HPV existing chemical substances (the Japan HPV Challenge Program).

¹ A system established by REACH, under which companies outside the EU appoint a corporation or individual to execute registrations and duties pursuant to REACH on their behalf.



VOC emissions and amount of PRTR substance emission/transference
CSR Information Supplement P. 14

Pollution Prevention

Air Pollution Prevention

The AGC Group is promoting the installation of exhaust gas treatment facilities and the improvement of measurement and analysis technology in its plants both in Japan and other countries. Necessary information about best practices and experiences with past pollution prevention activities within the Group are also shared beyond plants.

In China, environmental legislation is becoming stricter year by year. In 2007, while adopting coating equipment at AGC Flat Glass (Dalian) (AFD), an exhaust gas treatment facility was also installed. In 2009, Dalian city adopted stricter regulations for SOx emissions, and AFD was able to meet the regulation requirements by operating an existing desulfurization system, in operation since 2007.



SOx, NOx, soot and dust emissions
CSR Information Supplement P. 14

Prevention of Soil and Groundwater Contamination

While stating that strict compliance with the applicable laws and regulations is a prerequisite, the AGC Group's Guideline for Prevention of Soil and Groundwater Contamination sets standards for the storage and handling of hazardous substances, storage tank management, and for drainage and rainwater management. The Guideline also sets basic rules about information disclosure with respect to the measures to be taken when soil or groundwater contamination is detected.

Asahi Glass has been continuing measures to prevent the spread of any pollutants and to decontaminate polluted sites. It regularly reports progress to the relevant administrative agency and discloses this information on the Group website and through other media.

AGC Group

Participating in the United Nations Environment Programme's (UNEP) Treaty on Mercury Reduction Activities

The United Nations plans to draw up a treaty in 2013 on mercury reduction that will oblige businesses to manage their mercury, and has been advancing intergovernmental negotiations since 2010. The AGC group has moved beyond previous methods of brine electrolysis, such as diaphragm and mercury processes, to complete conversion to the ion-exchange membrane process in 2006, and cooperates as a supplier of important materials for ion-exchange membranes. In January 2011, the second assembly of the United Nations Environment Programme's (UNEP) intergovern-

mental negotiating committee to prepare a global legally binding instrument on mercury was held in Chiba Prefecture in Japan. The AGC Group attended this assembly to present its role in the mercury reduction treaty and its Flemion™ ion-exchange membrane.



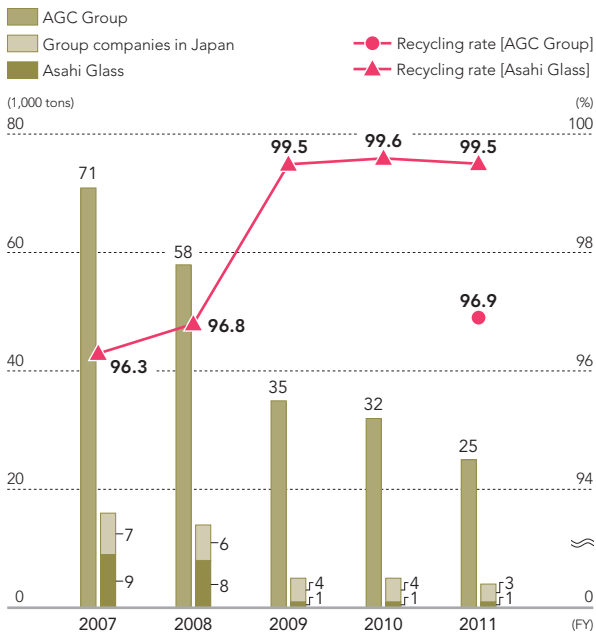
Display booth at the assembly venue

Waste Reduction

The AGC Group is striving to achieve Zero-landfill (waste)¹ globally. In fiscal 2011, 64 manufacturing plants achieved Zero-landfill (waste). The Group is encouraging improvement in plants that have not yet achieved Zero-landfill (waste) by introducing waste-reduction methods, new applications for recycling and other measures, supported by information sharing within the Group. The Group's overall recycling rate in fiscal 2011 was 96.6%.

¹ Zero-landfill (waste) is defined as recycling more than 99% of waste.

Waste Sent to Landfill and the Recycling Rates



Biodiversity Conservation

The AGC Group states in its Basic Environmental Policy that it will give consideration to the influence of its activities on the natural environment including biological diversity. In April 2010 a document titled Consideration for Biodiversity was created, which shared important criteria on biodiversity in the course of business activities across the AGC Group. Asahi Glass is also a promotion partner for the Declaration of Biodiversity by Nippon Keidanren.

The AGC Group is also engaged in forestation activities, including planting trees in Thailand and Indonesia, and promotes the use of paper that contributes to sound forest management by thinning in Japan.

Promotion of forestation activities in each country and region
www.agc.com/english/csr/env/act/biodiversity.html

Industrial Safety & Security

In addition to striving to prevent accidents, damage from natural disasters and other crises (unforeseen accidents), the AGC Group is working to prevent the escalation of accidents that do occur by promoting countermeasures to deal promptly and accurately with such crises.

With regard to industrial safety and security activities, beginning in fiscal 2011, the Group has used an Integrated Environmental Management System to promote the reinforcement of risk reduction and preventative measures. Based on the action plans drawn up by the corporate organization, the CSR Office, each business division will promote fire prevention, disaster prevention and countermeasures for environment-related accidents. In addition to these, the Group will strive for continuous improvement through internal audits.

Basic Industry Safety & Security Policy (full text) and number of small fires
CSR Information Supplement P. 15

AGC Micro Glass (Thailand)

Intensive Implementation of Waste Reduction Measures Results in Vastly Improved Recycling Rate

In fiscal 2009, the waste-recycling rate at AGC Micro Glass (Thailand) (AMGT) was in the 50% range. However, by the latter half of fiscal 2010, AMGT had raised the rate to 99% and had achieved Zero-landfill (waste).

Results were achieved by analyzing the current state of waste generation, disposal and recycling, listing possible waste-reduction measures, then intensively implementing promising measures. In particular, AMGT was able to greatly reduce its amount of landfill waste by recycling the filters from air conditioning units through

dismantling and separation and by reselecting materials for the abrasive compounds used in sandblasting.

In addition, employee awareness has been raised through training in recycling and thorough actual performance of waste separation, and the circle of co-operation is expanding as each workplace conducts its own volunteer initiatives.



Main members in activities to improve the waste-recycling rate

Fair Operating Practices and Consumer Issues

Together with fair operating practices, the AGC Group pursues customer satisfaction based on the provision of high-quality products.

Fair Operating Practices

■ Compliance with Antitrust Laws

The AGC Group was investigated by the European Commission for possible violation of antitrust laws, from the second half of the 1990s to the mid-2000s, regarding glass bulbs for cathode-ray tubes (CRT). In October 2011, the Group reached a settlement with the European Commission and paid a fine of 45.1 million euros with the agency. In January 2012, Hankuk Electric Glass, a subsidiary of the Group, incurred a penalty of 18,318 million won after being investigated by Korean Fair Trade Commission regarding the same product.

In light of the past conducts mentioned above later being accused, and in order that such incidents do not occur in the future, the AGC Group is taking every step necessary to ensure that all its operations are in compliance with antitrust laws.

Specifically, in addition to the Group Code of Conduct, the Group has formulated and implemented global guidelines for compliance with antitrust laws. Under the guidelines, the legitimacy of having a meeting with a competitor company must be thoroughly vetted first. Thereafter, employees are obligated to obtain the permission of superiors in advance of the meeting, and then report in writing the outcome of the meeting. Further, the Group is implementing an array of additional measures, such as antitrust training workshops in each region and organization, monitoring of group enrollment and participation status in trade associations, and auditing of guideline compliance.

Measures implemented in fiscal 2011 to prevent noncompliance with antitrust laws (AGC Group)

- Number of employees receiving online training (e-learning): about 6,400
- Number of employees receiving classroom training: about 740
- Number of internal audited sites: 52 Group companies and divisions

 Global legal management system
CSR Information Supplement P. 16

■ Maintaining Information Security

The AGC Group is taking steps to promote appropriate storage, use, and management of information and information assets based on its Information Security Policy and Standard and its Information Security Guidelines. At the same time, the Group is steadily implementing a Plan, Do, Check and Act

(PDCA) cycle to continuously improve information security through education measures such as e-learning and self-checks, and internal audits. In addition, at connection points in the Group network and with the Internet, measures are regularly taken to analyze and evaluate the vulnerability of administrator IDs and passwords for critical IT equipment.

In fiscal 2011, the AGC Group self-inspected the information security level of Group companies in every region and integrated this with its improvement activities. Also, information security advisers from the major Group companies in Asia assembled together in each country and shared information about pertinent issues and approaches to information security.

 Number of self-checks on information security
CSR Information Supplement P. 16

■ Ensuring Fair Purchasing Practices

The AGC Group formulated the AGC Group Purchasing Policy in 2009, and asks business partners in its supply chain to conduct purchasing activities in line with this policy.

In addition, the AGC Group introduced the Ombudsman System for Purchasing in 2004, which has been a critical part of the Group's efforts to ensure transparency in its procurement activities and prevent misconduct. Under this system, business partners who encounter problems in dealing with AGC Group employees can notify in writing the General Manager of the Purchase and Logistics Center. Every effort is made to hold such reports strictly confidential while taking immediate steps to solve any identified problems.

 AGC Group Purchasing Policy (full text)
CSR Information Supplement P. 17

■ Prevention of Insider Trading

In order to protect its shareholders and investors, and ensure the fairness and reliability of securities markets, the AGC Group is making every effort to spread awareness of insider trading and devise ways to prevent such misconduct. The prohibition against insider trading is clearly stated in the common fundamental global principles in AGC Group's Code of Conduct, and the Group is committed to raising awareness of this rule across the Group through online training and the personal certifications to follow the Code of Conduct that are submitted by employees. Furthermore, in Japan, the Group has its own rules on the prevention of insider trading and on the Information Management Council. Based on these rules, if an AGC Group director/employee has concerns about commencing a trade, the chairman of the council will check the legality of the trade in advance, thereby preventing insider trading.

Consumer Issues

Quality Assurance

Improving the Quality of Products and Services

The AGC Group is committed to continuously improving effectiveness and efficiency by building and operating a quality management system based on ISO 9001 in each department, in accordance with the AGC Group Quality Management Principle and AGC Group CS Guideline.

Also, each In-house Company/SBU carries out its own internal audits and reviews in a way best suited to its business, while undertaking a Plan, Do, Check and Act (PDCA) cycle for continuous quality improvement. The CSR Office also conducts quality monitoring across the Group to ensure the effectiveness of management systems.

 CS Guideline (full text), Quality Management System, Status of System Acquisitions such as ISO 9001, Number of Employees who Passed the QC Certification Examination
CSR Information Supplement P. 18

Complying with Legal and Regulatory Requirements for Products

The AGC Group is taking steps to ensure compliance with pertinent laws and regulations, by creating a list of such requirements for each of its In-house Company/SBU and clarifying the legal and regulatory requirements that each of its products must meet. The nature of the list involved is revised annually in January.

Furthermore, in fiscal 2011, by identifying past violations outside the Group, and by compiling lists for products that fall under inspection laws (such as those determined by JIS), the Group has been promoting efforts to “visualize” compliance.

 Number of Reported Serious Product Accidents
CSR Information Supplement P. 18

Pursuit of Customer Satisfaction (CS)

The AGC Group is encouraging all employees to participate through their daily work in the enhancement of customer satisfaction under the slogan “incorporating the concept of CS into each employee’s daily work processes.” CS is an abbreviation for customer satisfaction, but the term is not limited to customers who are consumers in the marketplace. The Group includes in its definition of customers “people and organizations who receive benefit (value) from the outcome of work,” such as products and information, within the work process of the Group.

In fiscal 2011, the Group promoted initiatives such as integrating CS training at various levels of Group training, in order that the spirit of CS might take root in the DNA of the AGC Group.

 Number of participants in CS related training
CSR Information Supplement P. 17

 Efforts to promote CS in each In-house Company
www.agc.com/english/csr/fair/cs.html

Communication with Customers at the Glass Company

AGC Glass Europe Reaches Out to Stakeholders through Social Network Services (SNS)

With an aim to promote AGC as a brand and to interact with stakeholders, AGC Glass Europe (AGEU) began using social media services from July 2011. The initiative hopes to reach out to various stakeholders, such as customers, industry professionals, potential job candidates, the press and the public at large.

The result of the activity was a steady growth in fans, followers, likes, retweets and comments. This trend is expected to continue in 2012 with further target group interactivity.



Facebook™¹ page

¹ A registered trademark of Facebook Inc.

AGC studio: Developing a Space where the True Nature of Glass can be Experienced

In October 2010, Asahi Glass opened “AGC studio,” a place where the true nature of architectural glass can be experienced, in Kyobashi in Tokyo’s Chuo Ward. By the end of fiscal 2011, it had been visited by more than 10,000 visitors.



AGC studio is intended to be a place where general visitors with an interest in glass, not just business partners, researchers and architects, can stop in at their leisure and learn about the nature of glass and ask questions about how glass can be used or applied. By opening communication channels with a broader range of people, the Group aims to discover unprecedented applications of glass, and create a new culture of glass.

Community Involvement and Development

The AGC Group promotes activities that contribute to community development, working towards the resolution of social issues deriving from regional business development.

Social Contribution Activities

AGC Group Social Contribution Basic Policy

In February 2010, the AGC Group established the AGC Group Social Contribution Basic Policy. The Group had conducted social contribution activities in areas around the world prior to this, but thought it important to increase understanding among customers, shareholders, investors and society as well as business partners, employees and all other stakeholders in order to further promote these activities.

In fiscal 2011, a variety of social contribution activities introduced on these pages were implemented based on this policy.

In the future, in addition to continuing the activities in each region, the Group will promote activities meant to contribute to the resolution of social issues in fast-growing countries in which business activities are being developed.

 Social Contribution Basic Policy (full text)
CSR Information Supplement P. 19

AGC Group Social Contribution Basic Policy Priority Areas



Support for the next generation

We, as a creator of future value, support the development of children, who will carry the future, helping them to live out their dreams.



Harmony with local communities

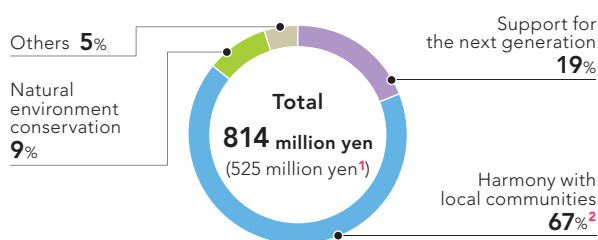
We, as a member of the communities in which we operate, contribute to their sustainable development.



Natural environment conservation

We, as a global enterprise, contribute to the solution of global environmental problems.

Expenditures in Fiscal 2011 for Social Contribution Activities



¹ Amount in parentheses is total for fiscal 2010

² Since expenditures related to the Great East Japan Earthquake fell under "Harmony with local communities," resultant expenditures for this area are comparatively greater.

 Detailed data regarding social contribution activity expenditures
CSR Information Supplement P. 19



Europe— AGC Group

Participation in activities that contribute to reductions in CO₂ emissions such as the promotion of low-carbon initiatives in schools

 Detailed information:
www.agc.com/english/csr/social/activity_4.html



Taiwan— AGC Display Glass Taiwan

Financing and volunteer activities instituted for children's home

 Detailed information:
www.agc.com/english/csr/social/activity_2.html



Indonesia— PT Asahimas Chemical

Creating jobs through wooden pallet business

 Detailed information:
www.agc.com/english/csr/social/activity_3.html



United States —
AGC Automotive Americas

Recovery and recycling of used electronic equipment, such as computers



Detailed information:
www.agc.com/english/csr/social/activity_4.html

In Focus

AFT Applies the PDCA Cycle in Activities Aimed at Contributing to Local Communities

AGC Flat Glass (Thailand) Public (AFT) began implementing the Plan, Do, Check, Act (PDCA) cycle in CSR operations in 2006, and since then, has expanded it to encompass community development activities conducted by the company since 1974. AFT created a standardized PDCA form to systematically evaluate the progress of each project from the standpoint of ensuring its sustainability. Furthermore, the company has been making the most of its management capabilities and networks to collaborate in various projects with community residents, experts and NGOs.

As an example of how the cycle is implemented, in its Open Kids' Vision project, AFT planned activities for improving the education of children in rural forested regions, and then made sure that everything, including constructing a multipurpose building in their region, was carried out. When progress was checked, it was apparent that the children had developed their skills in traditional dancing and music, through which they gained a deeper sense of pride in the local community. AFT is now acting on these results to plan future activities.

AFT intends to continue contributing to community development and foster these activities by implementing the PDCA cycle.



South Korea —
Asahi Glass Fine Techno Korea
Hanwook Techno Glass
Asahi PD Glass Korea

Books donated and book report competition hosted



Detailed information:
www.agc.com/english/csr/social/activity_2.html



AFT employees who built the facilities with local residents



PDCA sheet



Social contribution activities in various parts of the world



Support for the next generation
www.agc.com/english/csr/social/activity_2.html



Harmony with local communities
www.agc.com/english/csr/social/activity_3.html



Natural environment conservation
www.agc.com/english/csr/social/activity_4.html

Community Involvement and Development

Main Support Activities for Areas Affected by the Great East Japan Earthquake

AGC Group (Japan)

Laminated Glass for Earthquake/Typhoon Resistance Donated to Disaster Area Schools through Glass Power Campaign

As part of its contribution to society through business, the AGC Group runs the Glass Power Campaign, a project in which laminated glass for earthquake/typhoon resistance is donated to designated evacuation places in municipalities in Japan. At the end of 2010, donations had been made to 23 places since the project's beginning in October 2005.

In fiscal 2011, due to the Great East Japan Earthquake, donations were made to nine facilities in the prefectures of Iwate, Miyagi and Fukushima. Construction was performed in stages beginning in September, and by February 2012, donations to all the facilities had been completed. People involved with the recipient schools said, "Having safe glass here means that we've gained safety for the whole community, not just the school."



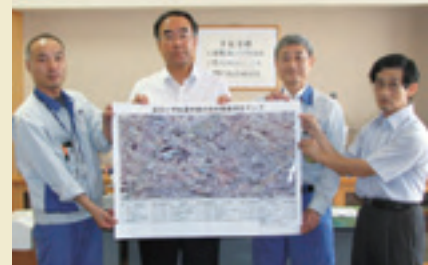
The gymnasium of Hashiura Municipal Elementary School in Ishinomaki City, a laminated glass for earthquake/typhoon resistance recipient

Providing Continuous Support for Disaster Victims as a Company Local to the Disaster Area

AGC Electronics (AGEL), located in Fukushima Prefecture's Koriyama City, believed that its own future could not be bright if the Fukushima area did not recover, and concentrated its efforts on supporting the victims of the Great East Japan Earthquake.

Specifically, the company donated fully laminated tempered glass tableware, an AGC Group product, and also hosted a social gathering in the form of a barbecue and provision of *imoni* (stewed potatoes) at temporary housing for refugees from Namie town. In addition, AGEL drew up and donated maps for area children showing the radiation measurements along the way to their schools.

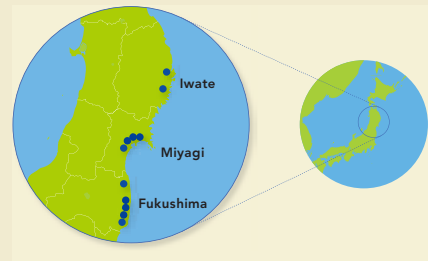
AGEL plans to continue doing what it can do for the local community, including conducting support activities at the temporary housing.




Donation of maps showing radiation measurements to the elementary school

New Scholarship System for High School Victims of Disaster

The Asahi Glass Scholarship Foundation has established a new scholarship system for high school students affected by the Great East Japan Earthquake in 2011. The effects of the earthquake on learning environments are varied and long-term. This system was established so that students who sustained damaging or economic effects would not be forced to give up on their studies, and provides scholarships to students currently in high school. Scholarships for students who plan to continue on to a higher institution after graduation will include the time they spend at that institution as well. Scholarship students will be recruited for three years, beginning in fiscal 2012, from 11 schools in the badly damaged area along the Pacific coast of the Tohoku Region.



High schools eligible for scholarships

 Measures taken in response to the Great East Japan Earthquake
www.agc.com/english/csr/social/news.html



CSR Website Access

Supplementary to the information presented in this report, the CSR Website is contains data and initiatives, as well as examples of activities that are not contained herein.

■ Initiatives ◆ Activity examples and employee comments ● Examples of CSR-related awards

Category in this report ¹	Title on CSR Web page and main content ²	Scope of activity	URL	
CSR at the AGC Group ▶ PP. 39–40	CSR Promotion System and Cases	● Progress in CSR Management Recognized by the Ministry of Industry in Thailand	AGC Flat Glass (Thailand) Public	www.agc.com/english/csr/agcgroupcsr/system.html
		● Regional Government in Indonesia Gives Top Honors in its CSR Awards	PT Asahimas Flat Glass, Tbk	
Organizational Governance ▶ PP. 43–46	Internal Audits	■ Environmental Safety and Security Audits	AGC Group	www.agc.com/english/csr/integrity/csrimg.html
	Participation in External Initiatives	■ Participating in Initiatives as a WBCSD Member Company	AGC Group	www.agc.com/english/csr/integrity/membership.html
	Risk Management	■ Measures for Pandemic Influenza/AGC Group Basic Principle to Cope with Natural Disaster/Business Continuity Plan Cases	AGC Group	www.agc.com/english/csr/integrity/riskmg.html
		◆ Ensuring Stable Procurement of the Rare Earth, Cerium oxide, for Glass-polishing Material	AGC Group	
	Compliance	◆ Guidelines Concerning Radiation Exposure to Ensure a Safe Working Environment for Employees	AGC Ceramics	
Compliance	■ Compliance Training ◆ Compliance Meeting Between Thailand, Indonesia and the Philippines ◆ Compliance Measures in Europe and North America	AGC Group AGC Group (Asia other than Japan) AGC Group (Europe/North America)	www.agc.com/english/csr/integrity/compliance.html	
Communication Activities	■ Public Relations/Investor Relations>Returns to Shareholders/Communication within the Group	AGC Group	www.agc.com/english/csr/communication/stakeholders.html	
Human Rights and Labor Practices ▶ PP. 47–51	Respect for Human Rights and Sufficient Labor Practices	● Thailand's Best Practice Workplace on Labor Relations and Labor Welfare Award Won Consecutively	AGC Automotive (Thailand)	www.agc.com/english/csr/employee/human_rights.html
		● Receiving KAPATID Award for Two Categories by the Employers Confederation of the Philippines	AGC Flat Glass Philippines	
	Making the Most of Diversity	◆ Exchange Researcher's Comment ◆ Comments from Participants of the Regional Program for Leader Training	Japan/Belgium AGC Group (Asia including Japan)	www.agc.com/english/csr/employee/diversity.html
	Employee Education	■ Transfer of Skills from High Performers/AGC Monozukuri Training Center ◆ Enhancement of Employee Safety, Technology and Skills Education, and Contributions to Regional Development of Human Resources	AGC Group PT Asahimas Chemical	www.agc.com/english/csr/employee/education.html
Occupational Health & Safety	■ Hazard Simulation Training/Health Management Policy ◆ Hazard Simulation Training Participants' Comment ◆ Implementation of Safety Measures beyond National and Organizational Boundaries ◆ Sharing the Importance of the Safety and Environment with Families and Local Communities	AGC Group PT Asahimas Flat Glass, Tbk Electronics Company/ Chemicals Company AGC Automotive Americas	www.agc.com/english/csr/employee/safety.html	
	● Achieving Zero Accidents by Indonesia's Ministry of Manpower and Transmigration ● Selected as Healthy Worksites	PT Asahimas Flat Glass, Tbk AGC Display Glass Taiwan		
The Environment ▶ PP. 52–56	Environmental Management	■ Expanding the Integrated EMS in each In-house Company/Promotion of Risk Reduction Activities at Each Plant	AGC Group	www.agc.com/english/csr/env/act/mng.html
	Environment, Safety & Security Education	◆ Going Green Campaign Sees Steady Improvement ◆ Eco Club—A Volunteer Group Involved in Activities for the Environment	AGC Glass Europe AGC Group (Japan)	www.agc.com/english/csr/env/act/education.html
	Reduction in Greenhouse Gas Emissions	◆ Installing a Co-generation System to Reduce GHG Emissions ◆ Melting Furnace Energy-Saving Technology (In-flight Melting, Total Oxygen Combustion, All-electric Melting, Fuel Conversion)	AGC Glass Europe AGC Group	www.agc.com/english/csr/env/act/gas.html
		◆ Using Caustic Soda to Recover and Recycle CO ₂ ◆ Expanding the Scope of Energy Conservation Assessment ◆ Recovering and Recycling CFCs ◆ Reducing the Environmental Impact of Transportation ◆ Implementing Rotating Shift Work to Save Electricity in the Aftermath of Japan's Earthquake Disaster	Chemicals Company AGC Group Chemicals Company AGC Glass Europe AGC Group (Japan)	
	Life Cycle CO ₂ Emissions	◆ Calculation of the Carbon Footprint Associated with the Manufacture and Use of Products	AGC Glass Europe	www.agc.com/english/csr/env/act/lc.html
	Water Resource Usage	◆ Selemion™, Ion-exchange Membranes, for Safe Drinking Water ◆ Reducing Water Use and Promoting Water Recycling	AGC Engineering PT Asahimas Flat Glass, Tbk	www.agc.com/english/csr/env/act/water.html
	Chemical Substances Management	■ Chemical Substances Management Manual/Considerations for Safety during Chemical Transport/Proper Management and Treatment of Asbestos	AGC Group	www.agc.com/english/csr/env/act/chemical.html
		■ Compliance with PRTR Act and VOC Reduction/Proper Management and Treatment of PCBs ◆ Accepting Trainees from OPCW ◆ Issuing MSDSs for Each Country	AGC Group (Japan) Chemicals Company Chemicals Company	
	Pollution Prevention	◆ Air Pollution Prevention Activities	AGC Glass Europe	www.agc.com/english/csr/env/act/pollution.html
	Biodiversity Conservation	◆ Forestation Activities in Each Country and Region ◆ Using Simple Pallets to Improve Transportation Efficiency ◆ Proactive Use of Paper that Contributes to Sound Forest Management by Thinning	AGC Group Companies AGC Group (Asia including Japan) AGC Group (Japan)	www.agc.com/english/csr/env/act/biodiversity.html
Environmental Products	■ Introducing Environmental Products	AGC Group	www.agc.com/english/csr/env/products/	
Industrial Safety & Security	■ Fire Prevention and Recurrence Prevention/Disaster Prevention and Environment-related Accident Countermeasures ◆ Safety and Security Efforts	AGC Group AGC Flat Glass (Dalian)	www.agc.com/english/csr/env/security.html	
Fair Operating Practices and Consumer Issues ▶ PP. 57–58	Fair Operating Practices	■ Global Legal Management System/Legal Employment of Contract and Temporary Workers/Compliance with the Act against Delay in Payment of Subcontract Proceeds, Etc., to Subcontractors/Protecting and Respecting Intellectual Property Rights	AGC Group	www.agc.com/english/csr/fair/habitp.html
	With Business Partners	■ Occupational Health and Safety Education Among Business Partners ■ Promoting Green Procurement/Initiatives Related to Conflict Minerals ◆ Satisfaction Survey for Business Partners, Annual Suppliers Meeting	AGC Group (Japan) AGC Group AGC Group	www.agc.com/english/csr/fair/business_partner.html
	Quality Assurance	■ Compliance with the Consumer Products Safety Act ■ Quality Management in Each In-house Company/Implementation of Quality Training	AGC Group (Japan) AGC Group	www.agc.com/english/csr/fair/qms.html
	Customer Satisfaction	■ Implementing Full-Scale CS Training ◆ Efforts to Promote CS in Each In-house Company	AGC Group AGC Group	www.agc.com/english/csr/fair/cs.html

¹ From "Organizational Governance" onwards, the core subjects cited in ISO 26000 ² Excerpt

Research & Development

Since its foundation, the AGC Group has developed its core technologies centered on the areas of glass, chemicals and ceramics. In an effort to build the foundations for growth set forth in *Grow Beyond*, the AGC Group examines global trends with a long-term perspective, sets a clear direction for technological strategies, and strives for the sophistication, integration and application of its core technologies.

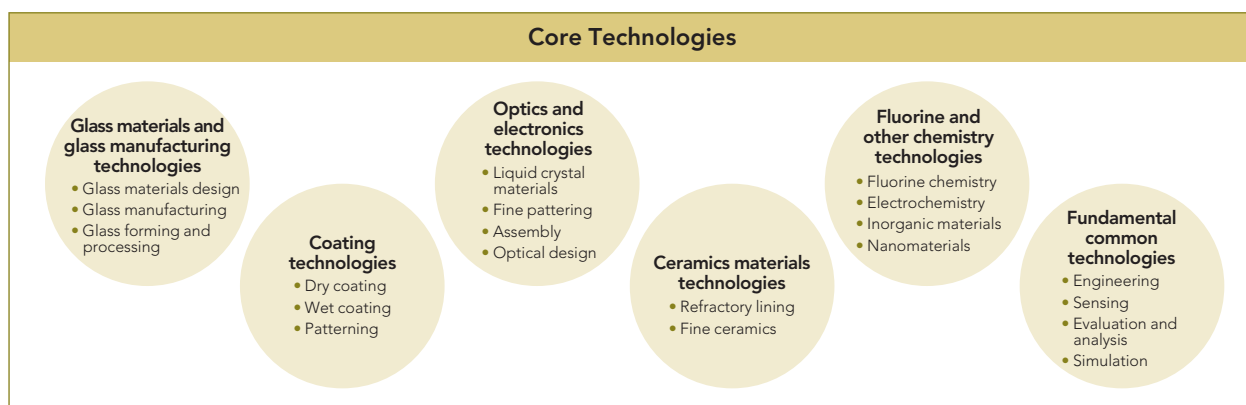
Building Foundations for Growth through the Sophistication, Integration and Application of the Group's Core Technologies

The AGC Group's core technologies are centered on "glass materials and glass manufacturing technologies," "coating technologies," "optics and electronics technologies," "ceramics material technologies" and "fluorine and other chemistry technologies," as well as "fundamental common

technologies" that form the basis for these technologies.

Through the sophistication, integration and application of our core technologies, the Group works on technological development to build foundations for growth set forth in the Group's management policy, *Grow Beyond*.

Core Technologies of the AGC Group and Foundations for Growth Set forth in *Grow Beyond*



Glass-technology-driven Company

Enhancing Manufacturing Technologies to Make Progress in New Product Development

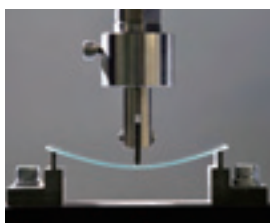
Ultra-Thin Glass

The AGC Group has successfully developed ultra-thin glass using the float process. This ultra-thin glass is the world's thinnest float glass with a thickness of only 0.1 millimeters. (See page 31)



Dragontrail™ Specialty Glass for Chemical Strengthening

The AGC Group has developed this specialty glass for chemical strengthening that dramatically increases the strength, scratch resistance, and texture quality of cover glass for smartphones and other displays. (See page 19)

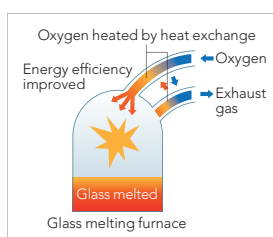


Delivering Technology Solutions for Environmental and Energy Issues

Developing Production Processes and Environmentally Friendly Products

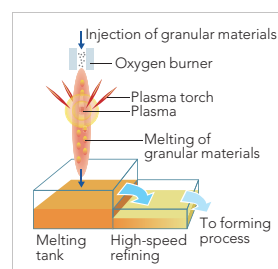
Hot-oxy Combustion

With oxygen as the sole fuel used, NO_x emissions are decreased and energy efficiency is increased.



In-flight Melting

By injecting granular materials into plasma combustion flames, energy and CO₂ emissions can be reduced by half during the glass melting stage.



Carrying out Seamless Operations Ranging from Basic Research to Product Development

In R&D, the Research Center studies basic, long-term, innovative, and inter-business themes, while the Production Technology Center and Engineering Center undertake the development of innovative production technologies and equipment technologies.

The R&D Centers of each In-house Company enhance production technologies and undertake product development in close contact with customers.

In 2012, the AGC Group newly established the Technology General Division that integrates the Research Center, Production Technology Center, Engineering Center and Intellectual Property Center and newly-established Technology Planning Office, which formulates group-wide technological strategies, to carry out the Group's comprehensive technology-related strategies in a more effective and efficient manner.

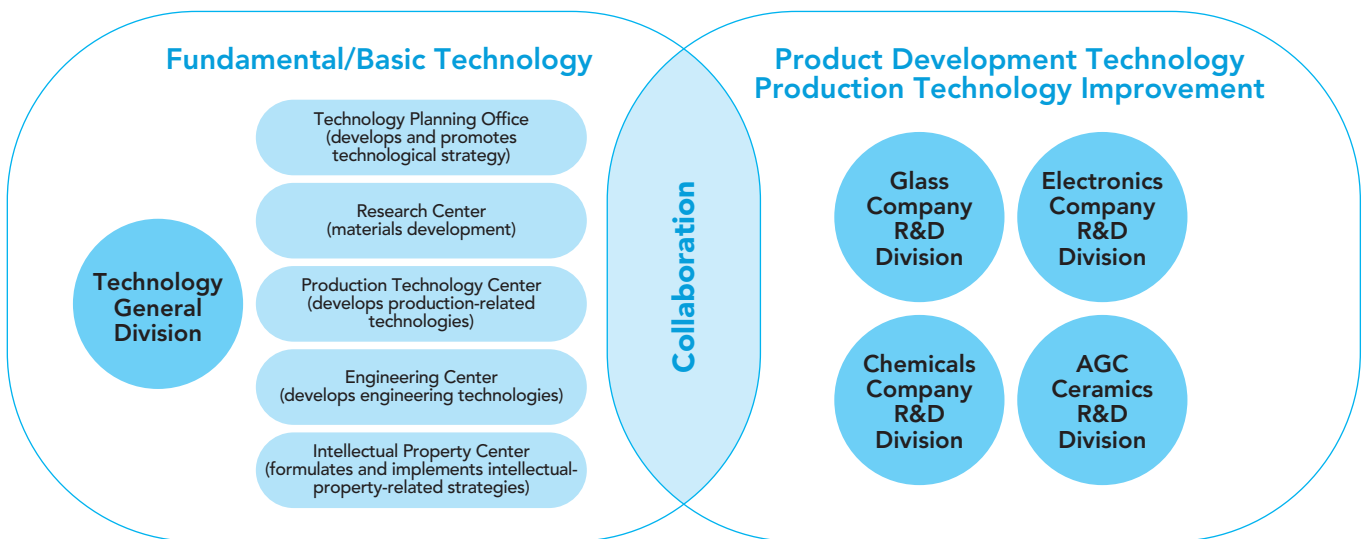
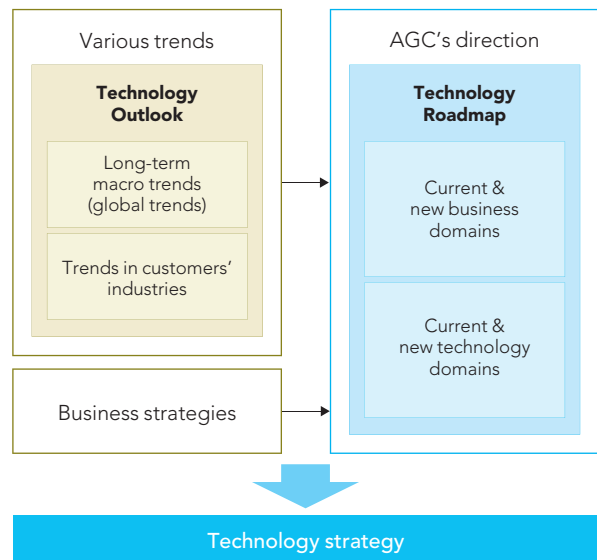


R&D Structure

Technology Outlook and Technology Roadmap, which Define the Direction of the Group's Technological Strategies

The AGC Group formulates a Technology Roadmap based on its Technology Outlook, which covers global trends in various areas such as energy, resources and population from a long-term perspective, and uses the comprehensive outlook along with the Group's mid- to long-term business strategies to set the direction of the Group's global technological strategies.

AGC Group Technology Outlook and Technology Roadmap



Global Network

The AGC Group is expanding its global business by leveraging its extensive networks of companies operating in some 30 countries and regions in Japan, Asia, Europe and North America.

● AGC Asahi Glass Co., Ltd.

Japan

- AGC Glass Products Co., Ltd.
- AGC Glass Kenzai Co., Ltd.
- AGC Okinawa Glass Kenzai Co., Ltd.
- AGC Amenitech Co., Ltd.
- AGC Fabritech Co., Ltd.
- AGC Automotive AMC Co., Ltd.
- AGC Automotive ACC Co., Ltd.
- AGC Automotive Takahashi Co., Ltd.
- AGC Automotive Takahashi Co., Ltd.
- AGC Display Glass Yonezawa Co., Ltd.
- AGC Electronics Co., Ltd.
- AGC Techno Glass Co., Ltd.
- AGC Micro Glass Co., Ltd.
- AGC Polycarbonate Co., Ltd.
- Optical Coatings Japan
- IWAKI Houseware Co., Ltd.
- ▲ Ise Chemicals Corporation
- ▲ Keiyo Monomer Co., Ltd.
- ▲ AGC Si-Tech Co., Ltd.
- ▲ AGC Engineering Co., Ltd.
- ▲ AGC Seimi Chemical Co., Ltd.
- ▲ AGC Coat-Tech Co., Ltd.
- ▲ AGC Polymer Material Co., Ltd.
- ▲ AGC Green-Tech Co., Ltd.
- ▲ AGC Wakasa Chemicals Co., Ltd.
- ▲ AGC Matex Co., Ltd.
- ▲ AGC Filtech Co., Ltd.
- ▲ Hokkaido Soda Co., Ltd.
- ◆ AGC Ceramics Co., Ltd.
- ◆ Japan Plibrico Industries Co., Ltd.
- AGC Research Institute Co., Ltd.
- AGC Insurance Management Co., Ltd.
- AGC Finance Co., Ltd.
- AGC Logistics Co., Ltd.
- AGC Technology Solutions Co., Ltd.

Asia

Thailand

- AGC Flat Glass (Thailand) Public Co., Ltd.
- AGC Automotive (Thailand) Co., Ltd.
- AGC Electronics (Thailand) Co., Ltd.
- AGC Techno Glass (Thailand) Co., Ltd.
- AGC Micro Glass (Thailand) Co., Ltd.
- ▲ AGC Chemicals (Thailand) Co., Ltd.
- ▲ AGC Matex (Thailand) Co., Ltd.
- AGC Technology Solutions (Thailand) Co., Ltd.

Indonesia

- PT Asahimas Flat Glass, Tbk
- PT IWAKI Glass Indonesia
- ▲ PT Asahimas Chemical
- AGC Technology Solutions (Indonesia) Co., Ltd.

Singapore

- AGC Flat Glass Asia Pacific Pte. Ltd.
- AGC Electronics Singapore Pte. Ltd.
- ▲ AGC Chemicals Asia Pacific Pte. Ltd.
- AGC Singapore Services Pte. Ltd.

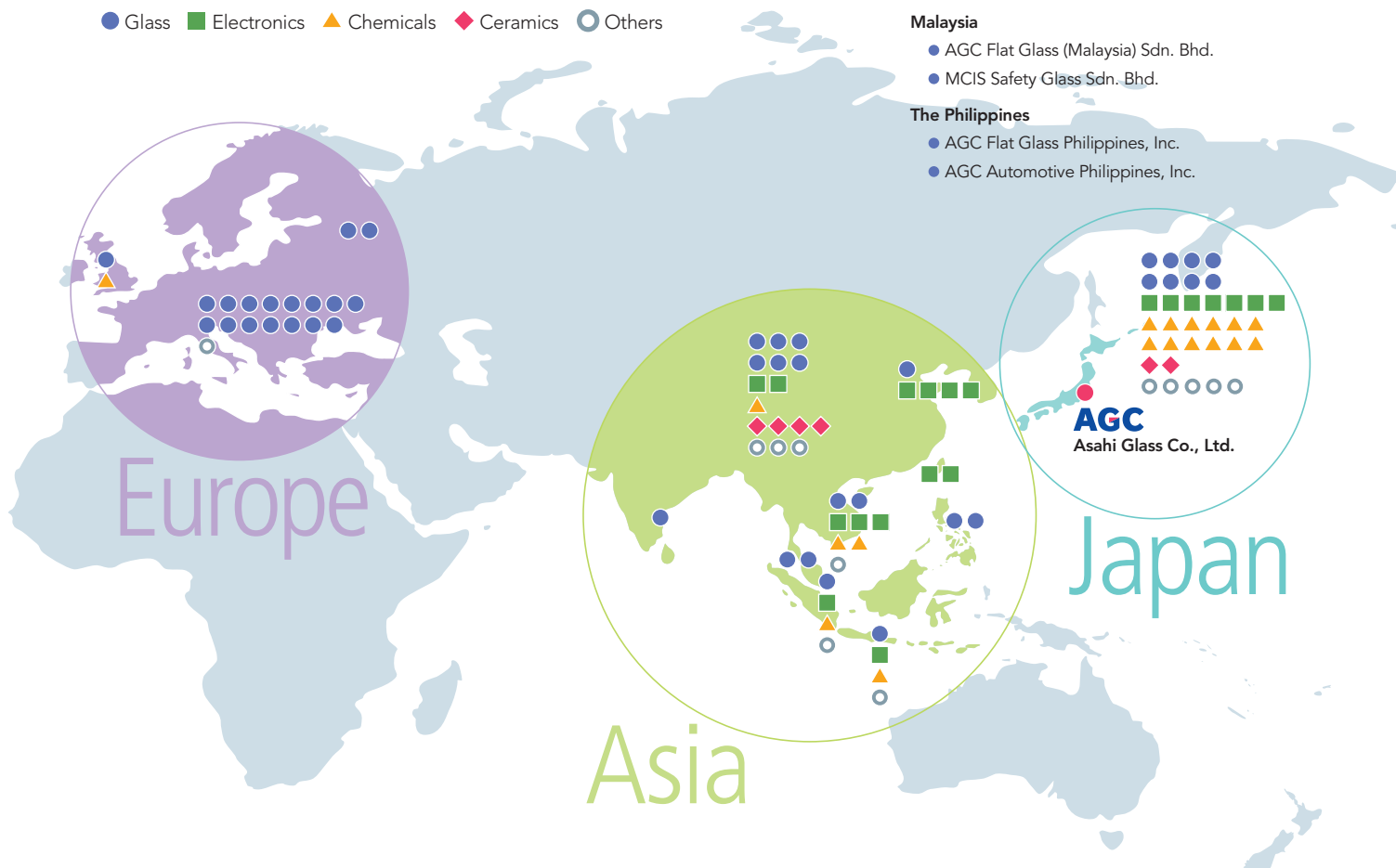
Malaysia

- AGC Flat Glass (Malaysia) Sdn. Bhd.
- MCIS Safety Glass Sdn. Bhd.

The Philippines

- AGC Flat Glass Philippines, Inc.
- AGC Automotive Philippines, Inc.

● Glass ■ Electronics ▲ Chemicals ◆ Ceramics ○ Others



Taiwan

- AGC Display Glass Taiwan Co., Ltd.
- AGC Electronics Taiwan Co., Ltd.

India

- Asahi India Glass Co., Ltd.

China

- AGC Flat Glass (Dalian) Co., Ltd.
- AGC Flat Glass (Suzhou) Co., Ltd.
- AGC Flat Glass Protech (Shenzhen) Co., Ltd.
- AGC Flat Glass (Hong Kong) Co., Ltd.
- AGC Automotive China Co., Ltd.
- AGC Automotive Foshan Co., Ltd.
- AGC Display Glass (Kunshan) Co., Ltd.
- AGC Display Glass (Shenzhen) Co., Ltd.
- ▲ AGC Chemicals Trading (Shanghai) Co., Ltd.
- ◆ Zibo Asahi Glass Alumina Materials Co., Ltd.
- ◆ Yixing AGC Ceramics Co., Ltd.
- ◆ Zibo GT Industrial Ceramics Co., Ltd.
- ◆ Plibrico (Dalian) Industries Co., Ltd.
- AGC (China) Holdings Co., Ltd.
- AGC Shanghai Co., Ltd.
- AGC Technology Solutions (Kunshan) Co., LTD.

Korea

- Korea Autoglass Corporation
- Hanwook Techno Glass Co., Ltd.
- Asahi Glass Fine Techno Korea Co., Ltd.
- Asahi PD Glass Korea Co., Ltd.
- AGC Display Glass Ochang Co., Ltd.

North America

The United States

- AGC Glass Company North America
- AGC Soda Corporation
- AGC Automotive Americas Co.
- AGC Automotive Americas R&D, Inc.
- AGC Electronics America, Inc.
- ▲ AGC Chemicals Americas, Inc.
- ▲ Woodward Iodine Corporation
- AGC America, Inc.
- AGC Capital, Inc.

Canada

- AGC Flat Glass North America Ltd.
- AGC Automotive Canada, Inc.

Mexico

- AGC Automotive Glass Mexico, S.A. de C.V.

South America

Brazil

- AGC Glass Brazil, Inc.

Europe

Belgium

- AGC Glass Europe S.A
- AGC Glass Europe Sales S.A
- AGC Automotive Europe S.A.
- AGC Automotive Belgium S.A.
- AGC Europe S.A.

The Netherlands

- AGC Flat Glass Nederland B.V.

The United Kingdom

- AGC Glass UK Ltd.
- ▲ AGC Chemicals Europe, Ltd.

Czech Republic

- AGC Flat Glass Czech a.s., clen AGC Group
- AGC Automotive Czech a.s.

Russia

- OJSC AGC Bor Glassworks
- AGC Flat Glass Klin LLC

France

- AGC France SAS

Italy

- AGC Flat Glass Italia S.r.l
- AGC Automotive Italia S.r.l

Spain

- AGC Flat Glass Iberica S.A.

Germany

- AGC Glass Germany GmbH

Hungary

- AGC Glass Hungary Ltd

Poland

- AGC Gdansk Sp. z o.o.

Turkey

- AGC Otomotiv Adapazari Üretim, Sanayi Ve Ticaret Anonim Şirketi

South America

North America

Note As of end of March 2012, including equity method affiliates, etc., not using the "AGC" brand name.

Board of Directors, Corporate Auditors and Executive Officers

Board of Directors



Kazuhiko Ishimura
Representative Director
President & CEO



Yuji Nishimi
Representative Director
Senior Executive Vice President



Katsuhisa Kato
Representative Director
Executive Vice President



Takashi Fujino
Director
Senior Executive Officer



Kunihiro Matsuo
Director (Outside)
[Attorney At Law,
Kunihiro Matsuo Law Office]



Hajime Sawabe
Director (Outside)
[Representative Director,
Chairman, TDK Corporation]



Masahiro Sakane
Director (Outside)
[Chairman of the Board,
Komatsu Ltd.]

Executive Officers Corporate

President & CEO

Kazuhiko Ishimura
CEO

Senior Executive Vice Presidents

Yuji Nishimi
Overall business management
(AGC Group improvement
activities, electronics business
and business development)

Akio Endo
President of Glass Company

Executive Vice Presidents

Katsuhisa Kato
Overall business management
(Technology); GM of Technology
General Division

Kei Yonamoto
Brazil Global Project
Team Leader

Senior Executive Officers

Shukichi Umemoto
GM of Finance & Control Office

Marehisa Ishiko
Regional President of North
America, Glass Company

Yoshiaki Tamura
President of Electronics
Company;
GM of Display General Div.,
Electronics Company

Jean-François Heris
Regional President of Europe,
Glass Company; President &
CEO of AGC Glass Europe

Takashi Fujino
Overall business management
(Finance); GM of Office of the
President

Masayuki Kamiya
Chief Representative of AGC
Group for China

Executive Officers

Tadayuki Oi
GM of Production Technology
Center, Technology General
Division

Yasumasa Nakao
Vice President, Technology,
Glass Company

Shinichi Kawakami
GM of Human Resources &
Administration Office

Takuya Shimamura
President of Chemicals
Company

Tetsuo Tatsuno
Vice President, Planning and
Coordination, Glass Company

Eisuke Yanagisawa
GM of Legal

Hiroshi Akagi
GM of Business Management
General Div., Chemicals
Company

Tokio Matsuo
GM of CSR Office

Akinobu Shimao
President of AGC Ceramics
Co., Ltd.

Tomoya Takigawa
GM of Research Center,
Technology General Division

Takashi Shimbo
President Director of AGC
(China) Holdings Co., Ltd.

Shinji Miyaji
Group Leader of Corporate
Planning Group, Office of the
President

Kimikazu Ichikawa
Regional President of
Japan/Asia Pacific, Glass
Company

Yoshinori Kobayashi
GM of Electronics General Div.,
Electronics Company

Kazuyoshi Watanabe
GM of Technology
Development General Div.,
Electronics Company

Yoshinori Hirai
GM of Business Development
Office

Kihachiro Okamoto
Vice President, Automotive,
Glass Company

Shigekuni Inoue
GM of Electronic Glass General
Div., Electronics Company

Corporate Auditors











Takashi Terashima
Izumi Tamai (Outside)

Shigeru Hikuma
(Outside)

Kenji Haga (Outside)

As of March 29, 2012

Milestones

<p>2002 Toward Global Management</p>	<p>History of AGC Group</p>	<p>Products & Technologies of AGC Group</p>
<p>1950 2001 Era of Growth and Expansion</p>	<p>2010 • New medium-term management plan "Grow Beyond-2012" started.</p> <p>2008 • Management policy Grow Beyond introduced.</p> <p>2007 • Group brand unified as "AGC." • Asahi Glass Company's 100th anniversary celebrated.</p> <p>2004 • "JIKKO" management policy introduced.</p> <p>2002 • Glaverbel made into a wholly owned subsidiary. • AGC Group Vision "Look Beyond" formulated. • Global In-house Company System introduced.</p>  <p>1992 • U.S. glassmaker AFG Industries, Inc. acquired. • The "Blue Planet Prize" to honor those who help solve environmental problems created by the Asahi Glass Foundation.</p> <p>1981 • Belgian glassmaker Glaverbel S.A. acquired. (photo 1)</p>  <p>1956 • Manufacture of automotive glass begun. (photo 2) • The Indo-Asahi Glass Co., Ltd. established in India.</p>  <p>1954 • Asahi Glass entered the Cathode Ray Tube (CRT) glass bulb business. (photo 3)</p> 	<p>2011 • "Dragontrail™" glass for chemical strengthening launched. (photo 6) • Development of 0.1-millimeter-thick "ultra-thin glass"—the world's thinnest—using the float method. (photo 7) • "UV Verre Premium™" glass for automotive door windows introduced.</p>   <p>2010 • Sales of "FONTEX™", a commercial plastic optical fiber enabling the world's highest transmission speed, launched.</p> <p>2006 • "Fluon® ETFE Film" selected for the main stadium and the venue for aquatics games at a global sport event in Beijing.</p> <p>1999 • Mass production of "PD200" glass substrate for plasma display panels (PDPs) begun.</p> <p>1998 • Mass production of a new alkali-free glass for TFT LCDs begun.</p> <p>1990 • "CYTOP™" transparent fluoropolymer developed.</p> <p>1980 • AZEC System of caustic soda manufacturing using ion-exchange membrane developed.</p> <p>1975 • Production of "Asahi Guard™" fluorinated water and oil repellents and "Aflon™COP" fluorinated resins begun. • Ion-exchange membrane method for manufacturing caustic soda developed.</p> <p>1966 • Production of float glass begun. (photo 8)</p>  <p>1961 • Asahi Glass diversified into organic chemicals, propylene oxide and propylene glycol production started.</p> <p>1954 • Production of double-glazing units (Pairglass™) begun.</p>
<p>1907 1949 The Early Years</p>	<p>1933 • Caustic soda production using lime process begun.</p> <p>1925 • Shoko Glass Co., Ltd. established in China. (photo 4)</p>  <p>1916 • Production of refractories begun at the Amagasaki Plant.</p> <p>1907 • Asahi Glass Company founded in Amagasaki, Hyogo Prefecture. (photo 5)</p> 	<p>1938 • Production of tempered glass and laminated glass begun.</p> <p>1928 • Production of ordinary sheet glass using the Fourcault process begun.</p> <p>1917 • First production of soda ash using the ammonium method in Japan.</p> <p>1909 • Production of Belgian-type hand-blown sheet glass (photo 9) • The first sheet glass successfully manufactured in Japan, begun.</p> 

ASAHI GLASS CO., LTD.

URL: <http://www.agc-group.com/en/>

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