



AGC GROUP CSR Report 2009

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This report is structured based on the AGC Group Charter of Corporate Behavior (see page 9).

AGC Group Charter of Corporate Behavior (Extract)

- Integrity: Sincere Behavior
- Environment and Safety: With Due Consideration
- Diversity: **Respect for People**
- Harmony with Society: From "Responsibility" to "Reliability"

The AGC Group is fostering communication with stakeholders through various media.

AGC

Financial Review

For general corporate activities
AGC Report

This corporate brochure/annual report outlines the corporate vision of the AGC Group and introduces its current business position.

For financial information

Financial Review

This publication outlines the AGC Group's business situation and reports on its financial performance, including consolidated financial statements.

For general information

Website

The AGC Group's general information is available online. We are committed to timely and detailed information disclosure on the Asahi Glass website, through which visitors can also access the websites of other major Group companies.



For CSR activities

(this report)

The report introduces the social and environmental initiatives the AGC Group is taking based on the AGC Group Charter of Corporate Behavior.



For initiatives taken at each Group site

Site Report

(Only for domestic sites)

The report introduces the environmental, occupational health and safety, and industrial safety and security measures taken at Asahi Glass's domestic plants and at the sites of major Group companies.





Website of Asahi Glass: http://www.agc.co.jp/ english/



CSR-related web page: http://www.agc.co.jp/ english/csr/



Investor Relations web page: http://www.agc. co.jp/english/ir/

Editorial Policy

This report is designed to communicate, in a clear manner, how the Asahi Glass Company (AGC) Group is striving to fulfill its corporate social responsibility (CSR), aiming to further develop the trust of society and ensuring its sustainable development.

Featured articles outline how the AGC Group is contributing to the global environment through its innovative technologies and products, under the headline of "Delivering Technology Solutions for Climate Change"—a target which we have set in our new management policy **Grow Beyond**.

In the pages following the featured articles, the report introduces various activities that the AGC Group is conducting from the viewpoint of CSR, and describes their concepts, targets and results, future challenges, mechanisms, and specific activities and case examples.

Scope of Reporting

The report covers the activities of the AGC Group in fiscal 2008 (from January to December 2008).

* The report also mentions some activities conducted in fiscal 2009.

In this report, the "AGC Group" refers to the Asahi Glass Company Group.

- * The AGC Group comprises Asahi Glass Co., Ltd. (AGC) and its consolidated subsidiaries in Japan and overseas (a total of 192 companies).
- * "Asahi Glass" refers to Asahi Glass Co., Ltd., the parent company of the Group, including its head office, the Research Center, and the Kansai, Kitakyushu, Keihin, Takasago, Chiba, Aichi, Kashima, and Sagami Plants.

Reference Guidelines

Sustainability Reporting Guidelines 2006, Global Reporting Initiative Environmental Reporting Guidelines (2007), Japanese Ministry of the Environment

Publication

June 2009

URL of the CSR-related web page

http://www.agc.co.jp/english/csr/ (To be updated in June and July 2009 for the Japanese version and English version, respectively)

* 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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Message from the President & COO

Aiming to Become a Corporate Group that is Trusted, Counted on and Supported by Society

Fiscal 2008 was a year of radical change. The AGC Group recorded its highest ever operating profit in the first half of this fiscal year, but saw decreases in both net sales and net income in the latter half due to the global economic recession. We are now facing economic difficulties, although in this we are not alone. In these trying circumstances, it is essential that we prepare ourselves to be ready to propel the Group forward when demand recovers. For example, we need to direct resources into the development of technologies that will contribute to prevent climate change, as well as into the development of global human resources.

Pursuing Growth while Meeting the Expectations of Society

In 2007, we established the AGC Group Charter of Corporate Behavior to implement the shared values contained in our Group vision, **"Look Beyond"**. As stated in the preface to the Charter, we must continue to fulfill our social responsibility and win even more trust from society if we wish to survive in the market. Accordingly, the AGC Group is committed to achieving its own growth while meeting the expectations of society by contributing to the solution of environmental problems and creating employment opportunities in regions where we establish new business.

Based on this idea, we formulated our new management policy, **Grow Beyond**. In this policy, we focus on "building foundations for growth" and on "the growth of individual employees and the entire Group under the slogan —Our People are Our Strength."

Building Foundations for Growth to Become a Truly World-Class Global Enterprise

To build foundations for growth, the AGC Group will focus on the following three points while taking into account market changes over the medium- to long-term.

(1) Delivering technology solutions for climate change

Although climate change is a serious issue that could threaten the business continuity of the AGC Group, it also provides a great opportunity for us to contribute to society through our business. Glass manufacturing requires a lot of energy, and so we regard it as our duty to use it more efficiently. To this end we will make strenuous efforts. I am confident that we can contribute to prevent the climate change issue through our glass and chemical technologies. Specifically, we will focus on developing highly efficient materials for solar cells and producing and promoting energy-saving glass on a global scale.

(2) Glass technology-driven company

— We will meet new needs through our core technology. The AGC Group will continue to contribute to society by further refining its glass technology as its core technology. For example, we are developing a technology to halve energy consumption in glass manufacturing. Substantial improvements in productivity will in turn lead to a significant decrease in our environmental impact and costs. Also, by combining our glass and chemical technologies in a more proactive manner, we will provide our customers with products of higher value.

(3) Second round of globalization

---- We will make another leap forward as a global enterprise.

The AGC Group will enhance its global management, taking into account worldwide trends. We will launch our business in new countries and regions additional to Japan, Asia, Europe and North America, where we already have operations, and provide our customers all over the world with optimal products. To facilitate our acceptance on a global basis, I believe it is necessary for us to construct new business models that fit in with local cultures and customs, and to also give consideration to biodiversity, which is deemed to be as critical as the prevention of climate change.

We are AGC

Achieving the Growth of Individual Employees and the Entire Group under the Slogan of "Our People are Our Strength"

Our people both form our growth foundation and provide solutions for various challenges. Recognizing this, we will give sufficient growth opportunities to employees who have high motivation toward their own growth and are highly committed to meeting various challenges in their work. These include opportunities to take on more difficult challenges in a self-directed manner, which we believe will drive them to pursue further growth. The AGC Group has approximately 50,000 employees working in a range of countries and regions with different commercial customs and social practices. The diversity of our workforce gives the Group a great advantage, which we will use to transform ourselves into a world-class global enterprise in the truest sense—a robust group that meets expectations for its growth through both organizational growth spiral and personal growth spiral complementing each other to create a self-propelling cycle of development.

To Readers of This Report

Asahi Glass celebrated its 100th anniversary in 2007, and now we are proactively making use of both the technologies we have accumulated over the past century and our global human resources in order to create new value for our customers while fulfilling our social responsibilities. As an example of this, we have featured technology solutions for climate change in this report. In addition, we are currently formulating the Group's basic policy on community relations and have included a report on the dialogue meeting held on our community relations activities with some of our external stakeholders who have expertise in this area.

We will continue to listen and respond to the concerns and comments of our stakeholders, and to develop technologies and services to meet the needs of society in our effort to become a global corporate group that people around the world can count on and support in the knowledge that we are committed to steadily achieving the best possible results. To this end, we sincerely invite you to submit any comments and opinions you may have on this report or any aspect of the AGC Group.

Kazuhiko Ishimura President & COO

K. Ishimura

The AGC Group's Global Business Operations

The AGC Group is operating its business globally, in approximately 30 countries and regions, and has about 50,000 employees across the world. As a materials and components manufacturer with core technologies in glass and chemistry, we are making concerted efforts to create new value.

Europe

Number of employees: approx. 14,300 Net sales: 355.3 billion yen Operating income: 25.7 billion yen Major business areas: Flat glass Automotive glass Chemicals

7 10104
Number of employees:
approx. 15,800
Net sales:
419.1 billion yen
Operating income:
56.9 billion yen
Major business areas:
Flat glass
Automotive glass
Diaplay glass

Display glass Electronic materials Chemicals Ceramics

Number of employees:
approx. 13,000
Net sales:
810.8 billion yen
Operating income:
77.7 billion yen
Main business areas:
Flat glass
Automotive glass
Display glass
Electronic materials
Chemicals
Ceramics

Japan

Company Profile	(as of the end of December 2008)
Name:	Asahi Glass Co., Ltd.

Name:	Asahi Glass Co., Ltd.		
Head Office:	1-12-1, Yurakucho, Chiyoda-ku Tokyo 100-8405, Japan		
Date of Establishment:	September 8, 1907		
Date of Incorporation:	June 1, 1950		
Paid-in Capital:	90,873 million yen		
Stock Issued:	1,186,705,905 shares		
Number of Employees:	(Unconsolidated) 6,110 (Consolidated) 47,770		
Number of Consolidated 192 (of which 151 are lo	d Subsidiaries: ocated overseas)		

□ Net Sales (100 million yen) Consolidated 20,000 Unconsolidated 18.000 16.812 16,205 16,000 -15.267 14.443 1/ 757 14.000 ----12.000 10,000 --8,000 ----6,371 6,459 6.349 5 799 5 762 6,000 4,000 2,000 0

2006

2007

2008

(FY)

□ Operating Income



2004

2005

* As of the end of fiscal 2008 * The total sum of the net sales and operating income of each region does not amount to the sales and operating income of the Group because of consolidation elimination.

North America

Number of employees: approx. 4,700 Net sales: 128.1 billion yen Operating income: deficit of 4.4 billion yen Main business areas: Flat glass Automotive glass Electronic materials Chemicals



□ Major Business by Segment

Segment		Main Products			
Glass	Flat glass business	Float flat glass, figured glass, polished wired glass, heat-absorbing glass, heat-reflective glass, architectural glass, fabricated glass for industrial use, photovoltaic cover glass, etc.			
Operations	Automotive glass business	Tempered glass for automobiles, laminated glass for automobiles, etc.			
	Other glass business	Lighting lamp glass products, industrial glass products, etc.			
Electronics &	Display business	Liquid crystal display (LCD) glass substrates, plasma display panel (PDP) glass substrates, glass bulbs for cathode-ray tubes (CRT), etc.			
Display Operations	Electronic materials business	Glass frit and paste, materials for semiconductor manufacturing equipment, synthetic quartz glass, optoelectron- ics materials, optical filters for PDPs, LCD backlight glass tubes, optical membranes, etc.			
Chemicals	Chlor-alkali & urethane business	Vinyl chloride monomers, caustic soda, urethane materials, etc.			
Operations	Fluorochemicals & specialty chemicals business	Fluorinated resins, gases and solvents, water and oil repellents, battery materials, iodine products, etc.			
Other Operations		Ceramics products, etc.			

Variety of the AGC Group's Products

The AGC Group's products include glass used for vehicles and buildings, and materials for solar cells, digital home electric appliances, and kitchen detergents. These products contribute to people's safe and comfortable lives. By further developing and combining glass and chemical technologies, we will continue to make the world a brighter place.

Various glass products

- Energy-saving heat blocking/insulating glass (Ecoglass) (page 16)
- 2 Heat-insulating security glass
- 3 Laminated security glass
- 4 Design glass
- 5 Mirrors
- 6 Glass for refrigeration showcases
- Materials for solar cells (glass substrates, cover glass, etc.) (page 13)
- 8 Polycarbonate resin sheets (e.g., for coating railroad fences and automatic vending machines)
- 9 Laminated glass for automobiles (page 18)
- 10 Tempered glass for automobiles
- 1 Glass for vehicles (e.g., trains)
- 12 Glass for automotive lamps
- 13 Glass for fluorescent lamps
- 14 Heat resistant glassware
- Glass and plastic products for physical, chemical, and medical usage

Various electronics- and display-related products

- 6 Flat panel display (FPD) glass (page 39) (e.g., LCD TVs, plasma TVs, computer monitors, and cell phones)
- 17 Backlight glass tubes for LCDs
- 18 Optical planar devices (e.g., CD/DVD optical pickups)
- 19 Projector materials
- 20 Optical filters for plasma display panels (PDP)
- Glass frit paste (page 13)
- 22 Glass substrates for hard disks (e.g., portable audio players)
- 23 Micro glass (e.g., digital cameras)
- 24 Glass filters (e.g., digital cameras)

Various chemical products and others

- 25 Caustic soda (e.g., soaps)
- 26 Sodium bicarbonate (e.g., household detergents)
- Sodium hypochlorite (e.g., fungicides, disinfectants, and bleaches for household use)
- 28 Urethane (e.g., seats for automobiles)
- Pluorinated resins (page 39) (e.g., cell phones and fuel hoses for automobiles)
- Fluoropolymer films (page 13) (e.g., greenhouses and front/backing sheets of solar cells)
- Fluorinated water/oil repellents (page 35) (e.g., shoes and packages for fast-food)
- Pluorinated resin for highly weather-resistant coating (e.g., bridges and airplanes)
- 33 Fluorinated solvents (e.g., dry cleaning solvents)
- 34 Fiber reinforced plastic (FRP) antenna pillar (page 15)
- 35 Liquid crystal materials
- 36 Ingredients for eye drops





The AGC Group's Vision and CSR

For the AGC Group, the pursuit of its group vision **"Look Beyond"** represents the fulfillment of its CSR. We regard it our mission to **"Look Beyond"** to make the world a brighter place.

In accomplishing this mission, all employees of the AGC Group are encouraged to take action based on the Group's shared values of "Innovation & Operational Excellence," "Diversity," "Environment," and "Integrity." We would thereby like to achieve sustainable growth as a socially trusted corporate group.



Our Shared Values

All employees of the Group follow Our Shared Values in accomplishing Our Mission. By taking action based on these values, we will contribute to the creation of a fair and sustainable society and be even more trusted by society. As a declaration of our commitment to achieving this target, we have formulated the AGC Group Charter of Corporate Behavior, as shown below.



AGC Group Charter of Corporate Behavior (Established on June 1, 2007)

The AGC Group strives to be a company trusted by all its stakeholders, a company that meets the expectations of the world business community to grow and develop responsibly, and a company that significantly contributes to a healthier global society. We in the AGC Group will achieve these goals by practicing the following principles that are based on our shared values of *"Look Beyond"*.

Integrity: Sincere Behavior

- 1. The AGC Group will develop and provide useful goods and services of superior quality, while giving due consideration to safety and the environment, and will strive for customer satisfaction and loyalty.
- 2. The AGC Group will understand and comply with applicable laws and regulations in the countries in which it does business.
- 3. The AGC Group will promote fair trade and conduct its operations in accordance with the principle of fair competition and all applicable laws and regulations. The Group will support the development of appropriate competition laws.
- 4. The AGC Group will maintain sound relationships with government agencies and other responsible organizations. The Group will not support organizations that threaten the order and security of society.
- 5. The AGC Group will properly manage and safeguard its own proprietary information, intellectual property, and other assets and will respect the property rights and interests of its customers and other business partners.

Environment and Safety: With Due Consideration

- 6. The AGC Group regards environmental conservation as an essential responsibility of global citizens and will proactively contribute to the development of a sustainable society.
- 7. The AGC Group will seek to implement technological innovations and new product developments that reflect due consideration for the environment and will participate in ongoing activities to preserve the environment and safety and security at work.
- 8. The AGC Group will maintain its workplaces with a proper regard to occupational health and safety for the people related to the business activities of the Group.

Diversity: Respect for People

- 9. The AGC Group will respect cultural diversity in race, ethnicity, religion, language, gender, and background.
- 10. The AGC Group will respect people's diverse capabilities and personal dignity in the Group's business activities and will create fair and open environments at its workplaces without discrimination.
- 11. The AGC Group will not engage in forced labor or child labor and will not tolerate infringements of human rights.

Harmony with Society: From "Responsibility" to "Reliability"

- 12. The AGC Group will strive to be a trusted corporate citizen, fulfilling its responsibilities to the communities in which it does business.
- 13. The AGC Group will build productive and proper relationships with business partners and encourage them to adhere to business principles consistent with its own.
- 14. The AGC Group will communicate responsibly with customers, local citizens, shareholders, and other members of society by disclosing information in a fair and appropriate manner.

The management of all AGC Group companies, recognizing that it is their responsibility to realize the spirit of this Charter, will take the initiative to achieve an understanding of the Charter within all Group companies and the companies with which they do business. We will pay attention to the voices of our stakeholders, both internal and external, and promote the development and implementation of systems that will enhance ethical corporate behavior under the vision *"Look Beyond"*.

In the case of any behavior contrary to the principles of this Charter, we will work to identify the cause and prevent a recurrence, making it clear to those inside and outside Group companies that the situation is being addressed diligently. We will take appropriate corrective and disciplinary actions when necessary.

Toward the Future in 2030 – Delivering Technology Solutions for Climate Change

In 2008, the AGC Group formulated its new management policy **Grow Beyond** to realize the Group vision **"Look Beyond"**.

This policy envisions a desirable future for the AGC Group in 2015, taking into account the changes that might be made to the global market structure by 2030. In the policy, we list "Delivering Technology Solutions for Climate Change" as one of our management priorities.

We have been contributing to prevent climate change by advancing and combining our glass and chemical technologies to develop and supply energy-saving glass as well as materials for solar cells and fuel cells. Moreover, we have been actively implementing measures to save more energy in our production process, recognizing ourselves as a part of an energy-intensive industry.

We will accelerate our technological development to contribute to a sustainable society, keeping our desirable future image as the AGC Group in synchronization with the world's future.

The Basic Concept of Management Policy

Second Round of Globalization We will make another leap forward as a global enterprise

Anticipating global changes in the business environment such as the growth of the BRICs, we will strengthen the Group's global management capability and we will also start our business in areas where we have had no business operations in order to build new foundations for our future growth.

Building foundations for growth

Delivering technology solutions for climate change

We will accelerate the development and the permeation of materials for solar cells and fuel cells to contribute to the prevention of climate change. In addition, we will actively implement measures to improve the energy efficiency of our production technologies as a glass and chemical manufacturer consuming a large amount of energy.

As for specific examples, see pages 12 to 21.

Glass technology-driven company

Grow Beyond

We will meet new needs through our core technology

We will differentiate our business by the following initiatives: to refine the AGC Group's glass technologies we have accumulated over years, to combine glass and chemical technologies to provide our customers with higher value, to save costs drastically through the innovation of production processes, and to develop new business models through the use of IT.

Embed the former management policy, the "JIKKO" mindset, as the AGC Group's DNA

Realize the full potential of our people under the slogan of "Our People are Our Strength." *See page 44.

For a Sustainable Society, We Will Deliver Innovative Technologies and Products through the Active Use of Energy Conservation Technologies

Katsuhisa Kato Senior Executive Officer & CTO

CO₂ concentrations in the atmosphere have increased by approximately 30% from the level at the time of the Industrial Revolution. According to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), CO₂ concentrations are said to have risen due to deforestation and fuels as energy sources. This means that human beings are changing the natural environment through their energy-consuming lifestyle. Some also argue that CO₂ increase has exerted a large impact on global warming and recent abnormal weather phenomena.

We, humankind, are thus making changes to the environment, and it is important for each of us to take appropriate care in our daily lives, by remaining highly aware of the importance of energy saving. This alone, however, is not enough. In addition to each individual's efforts, international policies and innovative scientific and technological measures should be implemented toward a sustainable society.

The AGC Group is a unique enterprise in the world with a wide range of technologies, including glass, chemical, and ceramic technologies. We are saving energy in actual terms by increasing the yield (per unit) in our daily production processes. We are also promoting the development of technologies to manufacture energy-saving glass innovatively and to recycle materials for greenhouse gas emission reduction, and are reviewing our manufacturing methods to conserve more energy. Combining



technologies helps to accelerate the achievement of results.

Moreover, we are developing and supplying environmentally valuable products such as Ecoglass, materials for solar cells, and other various materials to help our customers save energy.

These initiatives and technological developments will in turn help the AGC Group reduce its costs and expand its business arena through the provision of a wider range of products. I, however, regard the accomplishment of these activities as a duty that the socially trustworthy enterprise must fulfill toward a sustainable society.

Our commitment to becoming an enterprise that has higher expectations from society is incorporated in our management policy **Grow Beyond**, and this idea forms the background of our basic environmental policy.

With this spirit, all members of the AGC Group, myself included, will strive toward the future.

New management policy Grow Beyond



Making Combined Use of Glass and Chemical Technologies to Blaze a Trail for the Future of Solar Cells

A number of countries in the world are proactively introducing solar cells.

A solar cell is a device that converts solar rays into electric power. Its outstanding feature is that it does not emit CO₂ during power generation. In order to popularize solar cells to prevent climate change, it is necessary to develop technologies not only to improve their efficiency, but also to reduce their introduction cost and to increase their durability for long use under severe conditions.

The AGC Group is making combined use of its core technologies, namely in glass, chemicals, and ceramics, to develop technologies to improve the efficiency, durability, and productivity of solar cells and to provide materials for these cells.

Expansion of the solar cell market

The solar cell market has been rapidly expanding in countries such as Germany, Japan, the United States and Spain in recent years. In 2007, solar cells generating a total of approximately 3,500 MW^{*1} of energy were produced worldwide. This market is expected to increase to approximately 17,000 MW^{*1} in 2011.

*1. AGC estimate

Reduction effect in CO_2 emissions due to the expansion of the solar cell market

A shift from thermal power generation to solar cells will lead to a reduction in CO₂ emissions. It is predicted that global CO₂ emissions can be reduced by 11 million tons in 2010 and by 120 million tons in 2020 through the expanded use of solar cells.

Reduction effect in $\ensuremath{\text{CO}_2}$ emissions through the introduction of solar power generation





Contributing to the Reduction of CO₂ Emissions by Improving the Power Generation Efficiency, Durability, and Productivity of Solar Cells

Solar cells are expected to help reduce CO₂ emissions throughout the world.

The AGC Group is contributing to the higher performance of solar cells through its glass, chemical, and ceramics technologies. To be specific, in the field of photovoltaic cover glass, we hold the leading share of the world market.

The Add Gloup's materials a	and technologies for solar cens	Glass	Chemicals	Ceramics
	Using light efficiently	1 2		
Increasing efficiency	Transmitting light	2 3	4	
	Increasing conductivity and purity	(5)		6
Increasing durability Increasing weatherability			(4)	
	Lightening module weight		(4)	
Increasing productivity	Improving process			6 7

The AGC Group's materials and technologies for solar cells

①Transparent conductive oxide (TCO)-coated glass substrate

See page 14.

②Antireflection coating

We have developed this low reflective technology by applying our unique coating technology. The light transmittance is improved by coating photovoltaic cover glass with this technology, which in turn improves the efficiency of solar cells.

③Figured glass (photovoltaic cover glass)

This figured glass scatters light due to the adoption of a unique surface morphology technology and helps increase the light transmission to solar cells, in particular for light of



specific wavelengths that can be easily converted to energy.

④Fluoropolymer films for front sheets and backing sheets of PV modules

When used as front sheets for photovoltaic (PV) modules, these films help improve the efficiency of solar cells because they transmit most light (around 95%).



When used as backing sheets, they help improve the durability because of

their excellent weatherability and they do not deteriorate even if left outdoors for a long time. Their lightness is also a feature which helps reduce the weight of PV modules.

5Powder glass

We have developed this product by combining our glass, chemical, and ceramic technologies. It is used for binding silver and aluminum electrodes and contributes to improve their conductivity.



Now

6Sputtering targets for TCO films

The sputtering targets are used to make thin films by vacuum sputtering. (In a vacuum chamber, ions hit the target and its components rush out and stick to the board op-



posite the target.) For example, we use the materials to make TCO films, which are indispensable as front-side electrodes for solar cells (see page 14).

High purity SiC components for solar cells

These SiC materials have high purity and they are used as a jig in the semiconductor thermal process. During the wafer processing for solar cells, they do not deform even at temperatures of 1,200°C or higher because of their excellent heat resistance and high temperature strength.



①Transparent conductive oxide (TCO) films that improve the power generation efficiency of thin film silicon solar cells through their surface concavoconvex texture

What is a TCO film?

In thin film silicon solar cells,^{*1} TCO films function as conductors (electrodes) that derive electrical energy from sunlight. These films must meet the following conditions: they must be able to conduct electricity, they must be transparent, and they must be able to efficiently scatter light by means of their surface concavoconvex texture, to conduct more light into the photovoltaic layer for higher power generation efficiency.

*1. Thin-film silicon solar cells are made by forming very thin silicon films on glass substrates. These cells use only about one-hundredth the amount of silicon compared with typical crystalline silicon solar cells (solar cells made by processing silicon ingots into wafers). On the other hand, thin-film silicon solar cells have lower power generation efficiency (less than 10%) compared with crystalline silicon cells (approx. 15%), which is the challenge for thin-film silicon solar cells.

Features of the AGC Group's technology

The AGC Group's TCO films have the following characteristics: they are highly conductive films with low electric resistance and scatter light very efficiently. We embarked on the development of TCO films in 1985. Our first product, Type U TCO film became the world's standard for TCO films, but it scattered only 10% of incoming sunlight (haze rate). After releasing the Type VU TCO film, which had a better haze rate, on the market, we unveiled the development of Type HU TCO film, which can scatter up to 90% of incoming sunlight through our original nano-scale (one-billionth of a meter) film forming technology. By generating smaller concavoconvex parts onto the existing concavoconvex surface, we have made it possible for the film to reflect sunlight in a more complex manner in order to conduct more light into the photovoltaic layer for improving the power generation efficiency.

The AGC Group also possesses a technology to coat TCO films onto float glass concurrently at the time the glass is produced. We will continue our development activities to meet the needs of still more customers.

We Will Provide Global Solutions to Climate Change



Philippe Bastien President of the Solar SBU, Flat Glass Company



We know about the limited availability of fossil energy sources, including oil. In addition, we know that climate change is a reality and this is agreed by everyone today. Against this backdrop, a number of countries are proactively introducing power generation using renewable energy such as solar power. In Europe, driven by state policies, including regulatory initiatives, the use of solar energy has been further expanding, particularly in Germany and Spain. The introduction of solar cells has also been favorably promoted in countries like Greece, the Czech Republic, Bulgaria, Italy, and France, and this trend is not limited to Europe. The accelerated use of solar power is also expected in the United States, where there is increasing momentum for environmental protection, as well as in Japan, which is planning to introduce a feed-in-tariff system—a system in which a fixed price is paid for electricity generated by the use of renewable energy. The solar

We Will Expand the **Possibility** of Solar Cells by Future → Making Combined Use of Our Glass, Chemical, and Ceramic Technology

The AGC Group has a range of core technologies, including those for glass production, in which we have long experience; for glass composition, which we have established in the development of glass components for displays; for glass processing, which we have accumulated in the automobile glass filed; and fluorochemical and ceramic technologies to ensure high durability of products even under severe conditions.

We will combine these technologies to propose new solutions and products, thereby accelerating to popularize solar cells and contributing to prevent climate change.

Proposing technologies to blaze a trail for the future of solar cells



market will boom even further once grid parity (i.e., the cost of solar electricity equals that of conventional electricity) is met.

In February 2008, the AGC Group created the Solar SBU within its Flat Glass Company with the aim of establishing a global system for the development, production, and sale of glass materials used for solar cells. We will respond to the global expansion of solar cell markets via the use of this global system, which indeed provides us with a competitive advantage. Specifically, regarding photovoltaic (PV) cover glass, which we are currently producing in our bases in the United States, Belgium, and the Philippines, we will also start producing this material in China. As for transparent conductive oxide (TCO)-coated glass substrates, we will examine producing them in regions with high market growth potential, in addition to our current bases in Japan, the United States, and Belgium.

On the technological front, we will further differentiate ourselves

by using the core glass technology we have long accumulated in our business operations. It is essential for us, a supplier of glass materials, to help our customers to increase their efficiency, and we can do this by providing them with such products as cover glass with antireflection coating and TCO-coated glass substrates. Customers will be able to save on costs if the power generation efficiency of their solar cell modules is increased, for example, and this will help to achieve the grid parity and consequently to expand the solar cell market.

In the near future, we will strengthen our ties with other business units within the Group in order to develop materials that will further increase the possibilities of solar cells and provide global solutions to climate change. We are confident that we can contribute to the prevention of climate change through our technology, as upheld in our new management policy, *Grow Beyond*.

Energy-Saving Glass Promises both CO₂ Emission Reductions and Comfortable Lives

Glass, which has long been used to keep out wind and cold air while bringing in sunlight, is now being used as a useful tool to prevent climate change. The AGC Group globally produces and supplies glass that contributes to energy conservation through its excellent thermal insulation performance. While fostering the use of such energy-saving glass, we are also promoting its recycling as a member of the Flat Glass Manufacturers Association of Japan.

The World Already **Acknowledges** the Usefulness of Window Glass to Prevent ... Now Climate Change

Ecoglass^{*1} contributing to the prevention of climate change with its excellent thermal insulation performance

Ecoglass is composed of two sheets of glass, one of which is made of low-emissive glass, with a dry air layer sealed between the two. It has higher thermal insulation performance than ordinary double-glazing glass.⁴² Replacing the window glass of a detached house in Tokyo with Ecoglass allows a reduction of CO₂ emissions by 265.5 kg annually and a saving of approximately 50,000 yen in cooling and heating costs.⁴³



Making more people in Japan recognize the usefulness of window glass to prevent climate change

Double-glazing glass is widely used in the EU countries and the United States. In Finland, Sweden, Denmark, and Austria specifically, the usage rate of double-glazing glass reached 100% for both new and existing houses in 2000. In Germany, where advanced environmental regulations have been implemented, it is prohibited to use single sheet glass for new house windows. Also in the United States, it is said that the use of double-glazing glass has been promoted by public and private incentives (especially those given by electric power companies) as well as by environmental laws and regulations.

On the contrary, the usage rate of double-glazing glass was as low as 5% in Japan in 2000, and most of such products consisted of ordinary double-glazing glass. In 2006, the Flat Glass Manufacturers Association of Japan launched a campaign to raise people's awareness of the usefulness of Ecoglass for reducing CO₂ emissions. As a result, the usage rate of Ecoglass reached 27% for new detached houses and 5% for new apartment houses. However, the total usage rate for existing and new houses is still far lower in Japan than in the EU countries and the United States. If the window glass of all houses in Japan is 100% replaced with Ecoglass, CO₂ emission from households can be decreased by 10.4%.



If the window glass of all houses in Japan is 100% replaced with Ecoglass, CO_2 emissions from households (166 million tons) will be reduced by 10.4%.^{*4} In reality, CO_2 emissions from households increased by as much as 36% in 2006 from the level in 1990.

©AGC Flat Glass Europe

Greenhouse gas

emissions from households in Japan: 166 million tons (in 2006)

We Will Make Ecoglass Even More Environmentally Friendly through LCA*5

Offsetting an increase in CO_2 emissions in production by an energy-saving effect in the use phase

Although the environmental impact of Ecoglass production is larger than that of single sheet glass production, the impact can be offset by the energy-saving effect achieved by the use of Ecoglass. Ecoglass therefore exerts less environmental impact than single sheet glass throughout its entire lifecycle. For example, the production of one square meter of Thermobel Energy, which we sell in Europe emits approximately 25 kg of CO₂, but replacing single glazing with this product leads to a reduction in CO₂ of approximately 91 kg^{*6} on an annual basis. This means that the total environmental impact caused by Thermobel Energy will fall below the impact of single glazing after it has been used for around three and a half months.

Starting measures to recycle Ecoglass

Double-glazing glass, including Ecoglass, is difficult to break down, so it is simply buried in the disposal phase or recycled only as material for making insulators. The Flat Glass Manufacturers Association of Japan, to which Asahi Glass belongs, is implementing measures to establish the technology and mechanisms needed to recycle Ecoglass as an industry association responsible for promoting this glass. Such technology and mechanisms will be able to recycle Ecoglass back into Ecoglass, which leads to reducing the environmental impact of its manufacture.

- *1. Ecoglass is the trade name for low-emissive double-glazing glass products approved by the Flat Glass Manufacturers Association of Japan, to which Asahi Glass and two other Japanese flat glass manufacturers belong.
- *2. Double-glazing glass is composed of two sheets of glass, between which a dry air layer is sealed to increase its thermal insulation performance.
- *3. Based on the data provided on the "Simulator" web page of the Flat Glass Manufacturers Association of Japan's website on Ecoglass (Japanese only) 4. Survey of by the Elic Claps Manufacturers Association of Japan's Manufacturers and State Claps Manufacturers (Japanese only)
- *4. Surveyed by the Flat Glass Manufacturers Association of Japan *5. A life cycle assessment (LCA) is made to evaluate the environmental impact of a
- 5. A life cycle assessment (ECA) is induce to evaluate the environmental impact of a product throughout its entire lifecycle, from the exploitation of resources, production, transportation, use, recovery, and recycling, to disposal.
- *6. Measured in north central France



Website on Ecoglass (Japanese only): http://www.ecoglass.jp/

Contributing to the Development of a Sustainable Motorized Society through Glass and Chemical Technologies

A greater number of people all over the world are currently enjoying the comfort and convenience of automobile travel. In response to this, the AGC Group has been contributing to develop energy-saving automobiles through manufacturing eco-friendly glass products, such as a glass that helps to reduce the amount of energy used by onboard air conditioners, and another that is both highly effective in reducing noise and lowering weight. Moreover, drawing upon the technologies that we have long accumulated in our chemicals business, we are proactively seeking technological developments for the shift from fossil to non-fossil fuels, including the development of a fuel cell component and the technology to produce second-generation bioethanol.

Improving the Energy Conservation Performance of Automobiles through Glass ... Technologies

Energy-saving glass "Coolverre"

Coolverre is an automotive glass that blocks ultraviolet rays (UV) and infrared rays (IR). It substantially blocks middle infrared rays, which mostly cause the skin to sense frizzling heat. Through Coolverre, the in-vehicle temperature can be reduced by 2 to 3°C.*¹ As a result, drivers feel cooler inside the vehicle, and this in turn leads to a reduction in energy consumption by air conditioning.

*1. AGC estimate



Technology to produce bioethanol without using food crops

Due to increasing demand for biofuels, the international prices of corn and wheat are rising sharply, with some concerned that this might lead to a food crisis. Against this backdrop, technologies that promise to produce bioethanol without using food crops are attracting worldwide attention. Cellulose-based materials such as bagasse (sugarcane waste) will not ferment on their own, but adding a certain group of enzymes allows these materials to be saccharified and fermented. The AGC Group has long been conducting research related to its ASPEX technology (protein production system using fission yeast), which can be used to produce these enzymes efficiently, and we are continuing efforts to make even more efficient products.

Sustainable energy chain

Meeting a Difficult **Challenge** with Future • > Chemical Technologies: the Shift from Fossil to Non-Fossil Fuels

MEA: Core component of fuel cells for automobiles

In fuel cells, an ion exchange membrane is installed to generate electrical energy through the chemical reaction of hydrogen and oxygen. To make fuel cell vehicles more popular for the eventual achievement of a low-carbon society, it is essential to do two things: to develop a hydrogen infrastructure and to make fuel cells more compact for use in automobiles. In respect to the latter, the AGC Group has been promoting the development and practical use of membrane-electrode assemblies (MEAs) as a core component of polymer electrolyte fuel cells, which enable them to be smaller and lighter. To be used in automobiles, fuel cells are subjected to severe conditions (temperatures of 100°C or higher and low humidity), and so the MEAs used in the cells must have high durability. Using the technology that we have accumulated in the development of fluoropolymer ion-exchange membranes, we have created a highly durable MEA that can be operated continuously for 6,000 hours or longer at above 100°C and at 50% or lower humidity. This MEA is expected to be put into practical use, ahead of other MEA products.





19



Changing the Glass Manufacturing Method to Meet the Challenge of Reducing CO₂ Emissions in the Manufacturing Process

Feeding raw materials Glass raw materials (a mixture of silica sand, soda ash, lime and so on) are fed into the furnace.



Reducing CO₂ Emissions by Improving the Manufacturing Process

Fuel conversion

Some of our facilities have replaced heavy oil used for glass melting with natural gas. Through the use of natural gas, we can reduce CO₂ emissions from combustion by 20% compared with the use of heavy oil. Moreover, we can reduce the emissions of sulfur oxide (SOx) from glass melting to nearly zero, which will in turn reduce the total emissions of SOx.

All-electric melting

In the all-electric melting method, electric current is directly applied to glass materials to melt them. This method is suitable for relatively small furnaces. Materials are heated directly instead of indirectly by the heat radiated from the combustion flame, and this improves the energy efficiency. At present, we are operating all-electric furnaces in Japan, Thailand, and other regions.

Total oxygen combustion

The total oxygen combustion method uses only oxygen for fuel combustion in glass manufacturing. This method is more energy-efficient because it does not heat nitrogen, which accounts for approximately 80% of air and is not necessary for combustion. Also, this method is effective in reducing NOx because the combustion gas contains almost no nitrogen, thus helping to curb NOx generation itself. Asahi Glass introduced this method to the Keihin Plant in 2001, a first in flat glass production in Japan. This has resulted in reducing energy consumption and CO₂ emissions per unit production of glass by about 30% each.

Now

The energy intensive glass industry accounts for approximately 1% of total industry energy consumption.*¹ Taking this fact seriously, the AGC Group is proactively implementing measures to save energy in its manufacturing process, in addition to contributing to prevent climate change through its glass technology. As a result of improving the process, CO₂ emissions from Asahi Glass (unconsolidated) decreased by 36% in fiscal 2008 from the fiscal 1990 level.

We cannot, however, deny the fact that there is a limit to such improvements. Accordingly, we will review the glass manufacturing method itself and strive to reform it drastically to reduce our use of energy in a substantial manner.

*1. Actual result in Japan

Glass manufacturing process (float method)

Glass manufacturing gives the biggest impact on the environment mainly due to the process of melting materials, such as silica sand and soda ash, by fuel oil to produce chemical reactions, as well as the process of keeping the melted materials in the melting tank for long hours to manufacture homogenous glass without air bubbles. During these processes, the large melting tank of over several ten meters in length, has to be kept at a high temperature for many hours.



Taking on the **Challenge of Halving** CO₂ Emissions from Glass Melting

In-flight melting

In-flight melting is a method of melting glass materials in air using plasma combustion flames, that could reach up to 10,000°C. This method enables the instant completion of the melting process, which usually consumes a lot of energy. Specifically, granular materials with pre-adjusted composition are injected into the furnace from above and the materials pass through between the electrodes to be instantly melted by plasma combustion flames. By adopting in-flight melting to change the glass manufacturing method itself, we will be able to halve CO₂ emissions from glass manufacturing. Also, we will be able to downsize the melting tank to a width of several meters.

^{*} Research has been conducted since 2005 to develop innovatively energy-saving glass melting technology (in-flight-melting technology), commissioned by the New Energy and Industrial Technology Development Organization (NEDO). In 2008, we launched a project, targeted for completion by 2013, to identify the equipment necessary for practical use of the technology, and to study possible glass quality and the feasibility of mass production by the new melting method.



Report on the AGC Group's CSR Activities in Fiscal 2008

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- With Full Awareness that Our Operations Have High Environmental Impact 40...Occupational Health & Safety
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Harmony with Society: From "Responsibility" to "Reliability" 50...Stakeholder Dialogue

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Targets, Results, and Self-Evaluation of the CSR Activities

In this report, we show the targets and results of fiscal 2008 and the targets for fiscal 2009 for each theme of our CSR activities. As for the results of fiscal 2008, we self-evaluate them on a scale from A to C. We will continue to improve our CSR activities by self-evaluating the results.

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

Corporate Governance

As its basic policy on corporate governance, Asahi Glass clearly separates the functions of "oversight" and "execution" of management, aiming to reinforce the management oversight function while ensuring quick decision-making in management execution. Under this basic policy, we have implemented various measures to improve our corporate governance system, including the appointment of outside directors, the adoption of an executive officer system, and the establishment of a non-statutory Nominating Committee and a Compensation Committee.

In March 2007, as part of our efforts in corporate governance, we revised the directors' compensation system by taking into

consideration the discussion at the Compensation Committee and the Board of Directors. We abolished the retirement benefit program for directors and introduced stock compensation-type stock options, to share with shareholders the benefits and risks related to stock price fluctuations. In addition, we have recently established the positions of "Chairman & CEO" and "President & COO" to further strengthen the function of business strategies for the AGC Group, as well as to increase the efficiency and speed of the business execution in an assertive manner. In this way, we will continue to strengthen our corporate governance.



*1. 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 four In-House Companies: the Flat Glass Company, the Automotive Glass Company, the Display Company, and the Chemicals Company. Business units of smaller sizes than this are defined as Strategic Business Units (SBUs).

CSR Promotion System

The AGC Group established its CSR Committee in 2005. This Committee, which serves as an organization to fulfill CSR by the Group, is chaired by the President & COO and composed of the CFO, CTO, and the heads of the in-house organizations. It discusses the Group's CSR-related policies and issues. In fiscal 2008, the Committee held four meetings to discuss these matters and monitor the CSR activities conducted by in-house organizations.

Moreover, we hold monthly meetings of the employees actually engaged in CSR at each organization, where attendees discuss the measures needed to solve specific issues.



CSR Committee

Internal Control

Asahi Glass decided on its corporate policy over internal control at the Board of Directors meeting held in May 2006. Subsequently, we partially revised the policy reflecting the changes of our situation, including the establishment of the AGC Group Code of Conduct in October 2008.

Basic items for internal control

- ①Compliance program
- ②Information retention and management system

③Risk management system

- (4) System to ensure efficient and effective business execution
- **(5)**System for management of group companies
- ⁽⁶⁾Matters regarding auditors

Internal Control Measures for Financial Reporting

As for internal control over financial reporting, we have built up a mechanism to establish, operate, and assess internal controls pursuant to the Financial Instruments and Exchange Law, promulgated in June 2006. Using this mechanism, we started the full implementation of internal control over financial reporting in fiscal 2009.



Risk Management

Based on its corporate policy over internal control, the AGC Group makes it a rule to identify important risk factors and monitor and discuss the state of risk control periodically at the meetings of the Management Committee and the Board of Directors.

In identifying important risk factors, we conduct questionnaire surveys across the Group to create a risk map that indicates the impact and frequency of possible risks, which we use for risk assessment. Then the Management Committee and the Board of Directors discuss the factors at their meetings, and the related organizations formulate the action plans to implement the Plan, Do, Check, and Act (PDCA) cycle for the continuous improvement of their risk control levels.

These measures are designed to raise the risk consciousness of the Group members, to prevent the occurrence of problems, and, in the event of their actual occurrence, to deal with the problems in a prompt and appropriate manner to minimize their impact.

Formulation of a business continuity plan (BCP)

Among important risk factors which might cause large-scale accidents and disasters, we are implementing measures to formulate and operate business continuity plans (BCPs). Specifically, we are taking countermeasures against earthquakes in Japan (see Topic below) and new strains of influenza.*¹ In preparation against the new flu, we have organized a project team to examine necessary measures.

*1.The new flu is a disease caused by flu viruses from animals, in particular from birds. The viruses do not usually infect humans, but some viruses mutate so that they can infect humans, grow in humans, and be efficiently passed from human to human.

Topic Preparing against Earthquakes by Formulating Business Continuity Plans (BCPs) (Japan)

In preparation for portential large-scale accidents and disasters, we need to formulate and operate business continuity plans (BCPs), including plans to ensure the supply of materials and delivery of products in the event of emergencies, in addition to planning measures to minimize damage to our employees and facilities. In Japan, the AGC Group has been fostering the formulation of BCPs against earthquakes in addition to implementing seismic diagnosis of and reinforcement measures for plants and other facilities in a planned manner.

In December 2008, we held a mock disaster exercise, simulating an earthquake in the Tokai area, where a large-scale earthquake is likely to take place. In the exercise, the in-house organization made a series of decisions on how to deal with the earthquake within a short time and then evaluated the results of their actions, with a view to improving the effectiveness of our BCPs. Participants in the exercise experienced the difficulty of promptly and appropriately dealing with the changes made to the situation every few minutes.



Discussing the optimal action to be taken in reference to the layout of the plant

Compliance

Basis for Fair and Transparent Corporate Activities

Concept

The AGC Group is committed to increasing the fairness and transparency of its business operations, regarding strict compliance as the basis for Our Shared Value, Integrity, and as a premise for its sustainability as a corporate citizen.



Approach Higher Corporate Ethics to Enhance Trust from Society

Global Compliance System

In order to make all employees of the AGC Group aware of the importance of compliance, we have implemented compliance programs under the global compliance system as shown below. Furthermore, we periodically collect compliance-related information, incorporate the data in our compliance measures, and use them in our compliance monitoring activities. The collected information will be reported to the Board of Directors, shared by the In-House Companies/SBUs through the CSR Committee, and incorporated in their departmental rules.

Any serious noncompliance will be promptly reported to management through the compliance reporting system to take immediate countermeasures.

Web

Global Legal Management System—a system to promptly identify and report disputes and litigations occurring across the AGC Group on a global basis, and to reduce legal risks: http://www.agc.co.jp/english/csr/compliance/index.html



Compliance

Code of Conduct

Each of the AGC Group companies used to have its own Code of Conduct based on Asahi Glass's Code of Conduct, but in order to permeate the value of Integrity and emphasize its importance across the Group, we have newly established the AGC Group Code of Conduct for the entire Group.

The AGC Group Code of Conduct is composed of the global common part, which stipulates the specific rules with which all Group companies and employees should comply, and a part describing the regional rules that apply to individual countries and regions. The regional part also includes explanations about the differences in laws, regulations, and commercial customs of the various countries and regions, as well as supplements to the global common part. (The Code of Conduct, including each regional part, has been in place since June 2008.)

We are holding briefing sessions and providing necessary training to make all employees of the Group aware of the AGC Group Code of Conduct and their obligations to comply with it.



Discussing global measures through regular meetings with top management

Compliance education provided in fiscal 2008 (AGC Group) •Number of employees receiving online training (e-learning): approx. 12,700

•Number of employees receiving offline communication: approx. 2,800*1

*1. Number of employees receiving the offline communication provided by the Compliance Committee of Asahi Glass targeting domestic Group companies (Excluding education designed for all employees conducted by each Group Company)

Compliance Certificate

The AGC Group has introduced a program whereby employees submit a certificate of compliance with the Code of Conduct on a regular basis. This program is designed to encourage employees to renew their recognition of the importance of compliance and review their operations and workplaces from the viewpoint of compliance. In the future, we aim to collect compliance certificates from all the Group employees.

In fiscal 2008, approximately 31,000 employees, or 64% of all Group employees were covered by the program, whereas 25,000 employees, or 46%, were covered in fiscal 2007. At Asahi Glass, all employees, including part-timers, submitted the certificates.

Compliance Help Lines

The AGC Group's Help Lines, which we have implemented to ensure compliance with local laws and regulations in Asia including Japan, Europe, and North America, serve as contact points allowing employees to report and make inquiries regarding compliance-related issues. In the management of these Help Lines, we are committed to protecting the anonymity of those contacting the Lines, and strictly prohibit acts of retaliation against users in good faith. Furthermore, we promote communication with employees who have made contacts under their own names.

In fiscal 2008, the Help Lines received a total of 301 contacts from employees of the entire AGC Group and 53 from employees of Asahi Glass and domestic Group companies. Also in the same year, we increased the number of regional Help Lines and now have Lines for Japan, South Korea, and Taiwan, in addition to those for Europe, North America, and China.



Help Line Reporting Route (Asahi Glass): http://www.agc.co.jp/english/csr/compliance/

Compliance with Antitrust Laws

In February 2005, the European Commission conducted on-site inspections of Asahi Glass's subsidiaries on suspicion of their past anticompetitive behavior in the European glass market. As a result, the Commission imposed fines in November 2007 and in November 2008 for anticompetitive behavior concerning the flat glass sector and the automotive glass sector in Europe, respectively. We sincerely and fully cooperated with the Commission's investigations. Asahi Glass acutely recognizes its social responsibility to supervise the actions of its subsidiaries from a Group management point of view.

The AGC Group has long been committed to preventing violations of antitrust laws through education, Group policies, and monitoring. We take the incident in Europe with the utmost seriousness, and pledge to further implement various measures, including providing reinforced compliance education on antitrust laws to each region and organization, monitoring participation by Group companies in trade organizations, and conducting antitrust law-related audits on pricing histories, in order to prevent the occurrence of similar incidents.

Measures implemented in fiscal 2008 to prevent noncompliance with antitrust laws (AGC Group)

•Number of employees receiving online education (e-learning): approx. 7,000*²

•Number of employees receiving face-to-face education: approx. 1,000* $^{\rm 3}$

•Number of audited sites: eight

*2. Mainly managers and employees in charge of sales
 *3. Mainly employees in charge of sales

Information Security

Asahi Glass manages confidential information based on its Information Security Policy and Standard (formulated in 2001) and its information security guidelines (published in 2007). Also, we are steadily implementing a Plan, Do, Check, and Act (PDCA) cycle for information security through education, involving such activities as e-learning, self-checks, and internal audits. We have implemented the Policy and Standard, the guidelines, and other such measures at domestic Group companies and also at some overseas Group companies, thereby improving our information security.

In fiscal 2008, we implemented the information security guidelines at Group companies in Asia and expanded the range of companies targeted for self-check to include Group companies in Europe.

In fiscal 2009, we will continue to implement measures to raise our information management level in consideration of the situations of each of our bases and the regional circumstances.

Information security measures implemented in fiscal 2008 (AGC Group)

Distribution of the information security guidelines

•Copies in Japanese, English, simplified Chinese, traditional Chinese, Korean, Thai, Indonesian, and Tagalog were distributed to Group companies in Asia including Japan.

Self-check on information security

- •Asahi Glass: approx. 3,400 employees
- •Other Group companies in Japan: approx. 3,600 employees (up 600 from fiscal 2007)
- •Group companies in Asia: approx. 2,600 employees (up 800 from fiscal 2007)
- •Group companies in Europe: approx. 6,400

Approach CSR Promotion in Cooperation with Business Partners

AGC Group Purchasing Policy

AGC Group values the idea of the Group Vision **"Look Beyond"** and the "AGC Group Charter of Corporate Behavior" and will regulate our performances on purchasing which are explicitly stated in the following "AGC Group Purchasing Policy"

1. Basic Purchasing Principle

(1) Fair & Equitable trade

- Our procurement policy is to consistently search for innovative technologies, product and services with a "Fair" and "Equitable" manner globally. (2) Compliance to related Laws & Regulations, and Pro-environment
- behavior AGC Group will comply with the applicable laws and regulations of each country where our procurement takes place, and give due regard to safety and environment.
- (3) Partnership
 - AGC Group will establish a long-term, mutual prosperous partnership, based on our shared vision, to produce a better product with our business partners.
- To this end, we shall endeavor to keep close communication with our business partners to build and enhance our trusting relationship. (4) Protection of information, intellectual property and other assets
- (4) Protection of information, intellectual property and other asserts AGC Group will properly manage and protect the proprietary information, intellectual property and assets of our business partners while procuring goods and services.

2. Criteria for Selecting Business Partners

AGC Group will apply key criteria to evaluate and select business partners, as follows.

- (1) Sound management, Steady supply and Flexibility to match with the fluctuating demand.
- (2) Appropriate Quality, Pricing, Delivery date punctuality and technical service level.

3. Expectation of Business Partners

The AGC Group strives to be a company trusted by all its stakeholders a company that meets the expectations of the world business community to grow and develop responsibility, and a company that significantly contributes to a healthier global society.

Essentially, CSR activities are performed on voluntary basis initiated by each individual company.

However, for the AGC group, to pursue the CSR policy, it is imperative for all the supply-chain linked companies to pursue their individual CSR activities as well.

Accordingly, to enable us to jointly work with our business partners, we kindly ask our partners to understand our policy and to cooperate. The factors related with our Business Partners are,

- Concentrate to supply products and services with good quality, considering Safety & Environment and Compliance to Laws & Regulations of each country.
- (2) Secure and proper managing of Proprietary information and Intellectual property.
- (3) Not to be engaged to forced labor or child labor and never tolerate infringements of human rights.
- (4) Make efforts to environment preservation and ensuring safety and
- (5) Maintain adequate level of occupational health and safety.

Topic Conducting a Satisfaction Survey Targeting Business Partners

In October 2008, we conducted a questionnaire survey among our 160 major business partners to measure levels of business satisfaction with Asahi Glass. The survey was designed to help us maintain and improve the relations of trust with them and develop together as partners who aim to manufacture better products. In the questionnaire, they gave their evaluations of some given items, including quotations and contracts. We were able to receive a number of useful opinions regarding our purchasing negotiations and communications. We sincerely accepted the results and will use them for future improvement.

Ensuring Fair Purchasing Practices

Asahi Glass adopted an ombudsman system for purchasing in 2004, in order to ensure transparency in its procurement activities and prevent misconduct. Under this system, business partners are able to report any problems concerning deals with AGC Group companies in writing to the General Manager of the Purchase and Logistics Center of Asahi Glass. We strictly keep the confidentiality of the matters for the business partners who made such reports and promptly implement measures to solve the identified problems.

In addition, we formulated the AGC Group Purchasing Policy and ask our business partners to support us in conducting purchasing activities in line with the AGC Group Charter of Corporate Behavior (see page 9). Furthermore, we revised the terms and conditions of our basic purchasing agreement from the viewpoint of CSR and have begun updating agreements concluded with business partners in the past to incorporate the revision, starting from those concluded with major business partners in Japan. In the future, we will raise awareness of the Purchasing Policy and expand the number of business partners to whom the revised terms and conditions are applied.

Compliance with the Act for Securing the Proper Operation of Worker Dispatching Undertakings and Improved Working Conditions for Dispatched Workers

Contract workers and temporary workers dispatched from employment agencies play an important role in the business of Asahi Glass. In light of this, we formulated the in-house guidelines for the proper treatment of these workers in July 2008 and held briefing sessions at each of our plants to make them fully aware of the guidelines. In the future, we will conduct regular monitoring through internal audit to ensure their compliance with the Act.

Compliance with the Act against Delay in Payment of Subcontract Proceeds, Etc., to Subcontractors

Asahi Glass is checking the details of agreements with subcontractors and is educating employees in charge of subcontractor matters to comply with the Act, in order to ensure fair trade with the subcontractors. Also, we are improving education methods through such measures as using PCs.

Торіс

Study Seminars Held to Build Fair Relations with Business Partners

Asahi Glass is implementing measures to ensure the appropriate employment of contract workers and temporary workers. These measures include awareness raising and education on the matter within Asahi Glass and study seminars with our business partners. In June 2008, we held a seminar to introduce measures taken by the AGC Group. After the introduction, an external lecturer was invited to give a speech on appropriate work contracting, employee leasing, and the dispatching of temporary workers. We received high evaluations from participants in the seminar, who gave us comments, such as "It is indeed important to raise the awareness of both workers and companies, to ensure their appropriate employment."



Study seminar

Quality and Customer Satisfaction (CS)

To Increase Customer Satisfaction and Win Their Trust

Concept The AGC Group is committed to improving quality in every aspect of its business operations by implementing process reform to improve the quality of its products and services in order to increase customer satisfaction and by changing employee's ways of thinking based on the idea of incorporating the concept of CS into each employee's daily work processes.



Approach Improving Quality from the Viewpoint of CS

Quality Management System

The AGC Group is promoting the acquisition of ISO 9001 and ISO/TS 16949 certifications for its quality management systems so that it can continue to provide customers with high-quality products and services.

As of December 2008, we have acquired the following certifications. We will continue to make effective use of the certified management systems to ensure strict quality management.

□ Acquisition of ISO 9001 and ISO/TS 16949 certification

Location	Number of certified organizations
Japan	34
Asia	23
Europe	55
North America	14
Total	126

*Percentage of AGC Group employees at the certified organizations: 83% (as of December 2008)

Measures to Improve Product and Service Quality Surveys on compliance with product-related laws and regulations

In fiscal 2007, the AGC Group conducted interview surveys on Asahi Glass and three other major domestic Group companies to reexamine their compliance with product-related laws and regulations. In fiscal 2008, we clarified the legal and regulatory requirements to be met by our products by creating a list of these requirements, thereby ensuring strict compliance with the related laws and regulations.

Compliance with the Consumer Product Safety Act

Following the revision of the Consumer Product Safety Act in December 2006, manufacturers who have become aware of a serious product-related accident must notify the Minister of Economy, Trade and Industry of the fact within 10 days.

Asahi Glass established its rules for compliance with the Act

in January 2008, which stipulates the measures to be taken by the relevant departments in the event of a serious productrelated accident. In March 2008, a Product Quality Group was established within the CSR Office to reduce product qualityrelated risks, implement preventive measures, and prepare for prompt responses to such accidents.

In fiscal 2008, we notified the Ministry of three serious productrelated accidents, including those that might not have been caused by our products, and are undertaking appropriate responses.

Encouraging employees to acquire the quality control (QC) certificate

The AGC Group is encouraging employees in Japan to acquire a certificate on quality control (QC) issued by the Japanese Society for Quality Control. This organization issues certificates on knowledge of quality control in four levels. In fiscal 2008, a total of 174 Group employees passed the certification examination.

The AGC Group makes use of this certification system in order to objectively evaluate the level of quality control enforced by employees in charge of quality control and to raise quality control awareness across the Group for further improvement of its product quality.

Number of employees who passed the QC certification examination

(Persons)



DIV

Harmony with Soc

Measures to Increase Customer Satisfaction (CS)

The AGC Group is encouraging all employees to give satisfaction to customers in their daily business operations, based on the slogan of "incorporating the concept of CS into each employee's daily work processes."

CS is an abbreviation for customer satisfaction, but we do not limit "customers" to our customers in the market. We include "people and organizations who receive work-in-process within the Group" in our definition of customers. In our CS activities, employees identify the problems to be solved from the viewpoints of their customers, with the ultimate aim of providing higher value to our customers in the market. The achievement of this goal will in turn provide the AGC Group with a strong foundation for further growth.

In fiscal 2008, each of our In-House Companies and SBUs selfevaluated their business, taking approaches such as focusing on management quality, with the aim of providing their customers with higher value. The results were incorporated into our mediumterm plan as improvement measures. At present, we are in the process of actually implementing these measures.



Eight steps for incorporating the concept of CS into each employee's daily work processes http://www.agc.co.jp/english/csr/customer/cs01.html

CS Education

The AGC Group provides employees with CS education to encourage them to incorporate the concept of CS into their daily work processes and offer more value to their customers. This education is given in consideration of the features of each organization and department of the Group.

Specifically, we change the details and duration of our CS Seminar depending on who will attend it. For example, we held a seminar

on communication and the CS viewpoint for employees of the In-House Companies and SBUs, and a seminar on the quality management systems and the CS viewpoint for mid-level managers



Presentation by participants

of our affiliates. Over the period from the launch of the CS Seminar in 2005 to the end of fiscal 2008, a total of 167 seminars were held, in which a total of 3,608 employees participated.

□ CS education and training given in fiscal 2008

Name	Target	Theme	Number of participants
CS Dialogue	Mainly man- agers	Business administration incorporating the concept of CS	212 participants in 25 meet- ings (90 participants in four meet- ings overseas)
CS Seminar	Managers and general employees	Basics and tips for CS	1,491 participants in 68 seminars (240 participants in 11 meet- ings overseas)



*Handbook on the idea of "incorporating the concept of CS into each employee's daily work processes" published in seven languages (Japanese, English, simplified Chinese, traditional Chinese, Korean, Thai, and Indonesian).

CS Commendation

The AGC Group awards "CS commendation" under its commendation system (see page 45). CS commendation is awarded to individuals and organizations that have achieved great results by incorporating the concept of CS into their daily work processes and changing their traditional ways of operation. Their excellent activities are introduced across the Group to encourage

the entire Group to make concerted efforts for CS.

In fiscal 2008, 24 individuals and teams and nine organizations were awarded CS commendation.



Presentation of commended cases held concurrently with the commendation ceremony



Environmental Activities

With Full Awareness that Our Operations Have High Environmental Impact

Concept

The AGC Group, being fully aware of the high environmental impact of its operations, regards the environment as one of its most important management priorities, and all Group companies are committed to contributing to developing a sustainable society.

_				
	Targets for fiscal 2008	Results in fiscal 2008	Self- evaluation	Targets for fiscal 2009
	To promote global environmental man- agement	Achieved zero emissions ^{*1} at seven sites of Asahi Glass	А	 To implement measures to achieve zero emissions on a global scale
	2 To establish an environmental manage- ment system in consideration of product lifecycles	Conducted a survey on the AGC Group's existing environmentally friendly products	B*2	 To promote the development, manufac- ture, and sale of environmentally friendly products
	To establish a comprehensive chemical substance management system	Completed the pre-registration of a total of 101 substances for the AGC Group in compliance with the REACH regulation	 To implement measures to achieve a 40% reduction in VOC emissions from the 2001 level in 2010 (Asahi Glass and its domestic Group companies) 	
	To implement measures to reduce greenhouse gas emissions	 Achieved a 36% reduction in CO₂ emissions from the fiscal 1990 level (by Asahi Glass) 	А	 To reduce CO₂ emissions by approximately 1% from the average value for 2006 and 2007 during the first com-
	To improve environmental communica- tion and enhance environmental educa- tion programs	Held an environmental forum to share information across the Group and ac- cepted trainees under the "Eco-Intern- ship" program of the Japanese Ministry of the Environment	A	mitment period* ^s of the Kyoto Protocol (Asahi Glass)

As for the criteria for self-evaluation, see page 22.

- *1. Asahi Glass defines zero emissions as recycling 99% or more of waste.
- *2. Reason for B evaluation: Because we have yet to establish a system to provide a wider range of environmentally friendly products.
 *3. From 2008 to 2012

AGC Group Basic Environmental Policy (Established on February 9, 2001 and revised on June 25, 2008) Basic Policy Guidelines for Environmental Activities

AGC Group has designated environmental activities as one of the Shared Values in the Group Vision, *"Look Beyond"*, with the awareness of large amount of natural resources and energy usage in its activities.

As a global material and component provider, we shall contribute to the development of a sustainable society through:

- effective use of limited natural resources and energy, and

- consideration of the influence of our activities on the natural environment including climate change and biological diversity.

Slogan

Play your part as a responsible citizen in creating a better environment.

Approach Reducing Environmental Impacts through Concerted Efforts of the Group

Integrated Environmental Management System

The AGC Group is conducting its business in glass, electronics and displays, chemicals, and other fields, each of which differs in its environmental impact. In the past, each base and Group company independently implemented measures to reduce its environmental impact, but since 2003, the Group has been establishing an Integrated Environmental Management System (Integrated EMS), recognizing the necessity of taking relevant procedures across the entire Group in a unified manner. Since 2007, we have been striving to establish an Integrated EMS on a global scale. The Automotive Glass Company, ahead of other In-House Companies, incorporated its overseas sites into the system in 2006. The Flat Glass Company has also completed the incorporation of all Group companies in Asia and has begun incorporating those in Europe and North America into the system.

The Display and Chemicals Companies as well as the Electronics & Energy General Division are also steadily incorporating the related

AGC Group will implement environmental activities based on the following Guidelines throughout our business activities.

- 0 We will make continuous improvements based on the Integrated Environmental Management System.
- ② We will comply with all regulations and standards prescribed by environmental laws, ordinances, treaties and agreements.
- ③ We will take steps to reduce environmental impact and to prevent pollution. We will set voluntary targets in regards to resource conservation, global-warming countermeasures, waste reduction and recycling, and the proper control of chemicals. We will work to accomplish these goals while making further improvements.
- ④ We will develop and provide eco-conscious products, technologies, services, and facilities for society in all areas of our activities.
- (5) We will actively communicate with our stakeholders to foster an appropriate understanding of all aspects of our environmental activities.

The AGC Group Environmental Policy is disclosed to the public.

overseas companies into the system, which will be completed by 2010.

Moreover, as part of the Integrated EMS, we have been fostering internal auditors on the EMS with the qualification of assistance to ISO 14001 inspectors. This will also help improve the quality of internal audit.

□ AGC Group's ISO 14001-Certified Manufacturing Sites

	4)	As of the end of December 2008)
Location	No. of manufacturing sites	No. of certified manufacturing sites (No. of sites incorporated into the Integrated EMS)
Asahi Glass	11	11(11)
Japan	55	44(40)
Asia	31	27(24)
Europe	51	43(12)
North America	22	7(7)
Total	170	132(94)

* As for non-manufacturing sites, a total of 101 sites are ISO 14001-certified (including the Integrated EMS).

Relationship between Business and the Environment



* Scope of data: Asahi Glass (unconsolidated)

Totals do not always match the sum of the individual figures because of rounding.

* See pages 32 and after for details of environmental performance data.
 *4. PJ (peta joule) = 10¹⁵ J (joule)

*5. Total for fiscal 2007



Environmental Activities

AGC Environmental Indicator

Asahi Glass introduced the AGC Environmental Indicator to analyze the environmental impact from its manufacturing activities in an objective manner. Since fiscal 2006, we have been reducing our environmental impact by clearly determining priorities based on this indicator. We calculate the indicator by comparing our sales (economic effect) on Japan's GDP and our substances of concern (SOC) emissions from our manufacturing activities on total domestic SOC. We thus estimate our environmental impact in relation to our economic contribution to the country's GDP.

To improve the Indicator values, we must reduce our emissions beyond the rate of reduction achieved by the entire country under the following conditions.

- Asahi Glass sales vary almost in line with Japan's GDP, and so the rate of our economic contribution to the country's GDP remains nearly constant.
- Total SOC emissions are on the decrease in Japan's industrial sector as environmental awareness increases.

In fiscal 2008, Asahi Glass successfully reduced the Indicator values for all the targeted substances to "2 or below," which was our initial goal. We will continue to examine and eventually set the global target for the entire Group.

Topic Receiving the Highest Commendation for Environmental Activities (the Philippines)

AGC Flat Glass Philippines (AGPH), which manufactures and sells various types of float glass received the PEZA Environmental Performance (PEP) Award from the Philippine Economic Zone Authority (PEZA) in February 2008. To select the winners of the award, PEZA made a series of examinations and on-site inspections of 1,700 companies in the Philippines. AGPH's implementation of an Environmental Management System based on ISO 14001 is highly regarded. It helped AGPH to achieve the compliance with the domestic environmental laws and regulations or to sustain its commitment to waste management, materials recycling and pollution prevention. Its contribution to local communities was also highly praised.



The PEP Award Trophy

□ How to Calculate the AGC Environmental Indicator

		SOC emissions by Asahi Glass
AGC Environmental	impact ratio	Total SOC emissions in Japan
Indicator	Economic	Sales of Asahi Glass
	Contribution	Japan's GDP

Features of the AGC Environmental Indicator

- Calculating the environmental impact of each substance allows identification of which substances give relatively more environmental impact.
- It is possible to continue improvement activities to achieve higher targets without taking a baseline year into consideration.

Conventional environmental indicator

- If an absolute value is set as a target, continuity of data might be lost as the business structure changes.
- If an efficiency indicator per unit of sales is used, the motivation to decrease the absolute amount of emissions might be lowered.

□ AGC Environmental Indicator

Topic

	Scope of data: Asahi Glass (unconsolic			
		Fiscal 2008		
	Tar- get	Economic size Environmental impact	AGC Environmental Indicator	Tar- get*1
Sales	-	645.9 billion yen	1.0	-
Total energy consumption		35 PJ	1.8	2.0
Greenhouse gas emis- sions		2.78 million tons	1.7	1.7
of which CO2 emissions		2.19 million tons	1.4	1.5
SOx	20	725 tons	1.1	1.3
NOx	2.0	1,910 tons	1.8	2.4
Soot and dust		42 tons	0.6	0.9
Sent to landfill		8,000 tons	0.3	0.3
COD		580 tons	0.4	0.3

*1. At present, we are making improvements based on the actual results in fiscal 2007.

The AGC Group Environmental Forum 2008 on Zero Emissions*²

Each year the Group organizes the AGC Group Environmental Forum for the purpose of sharing excellent cases of environmental activities as well as challenges the Group faces. In fiscal 2008, the forum was held in Tokyo with the participation of 125 members from 10 countries and regions for two days over July 10 and 11. Participants actively discussed the measures and problems to be tackled to achieve zero emissions across the entire Group.

At this forum, a total of five cases were presented by representatives from Japan/Asia, Europe, and North America. The Automotive Glass Company, an In-House Company, for example, reported the higher profitability achieved through waste reduction and recycling at its two plants in the United States. The Company has been achieving zero emissions on a global basis and completed the establishment of its Integrated EMS in fiscal 2006.

*2. Asahi Glass defines zero emissions as the recycling of 99% or more of waste.



AGC Group Environmental Forum 2008

Reduction in Greenhouse Gas Emissions

The AGC Group is committed to energy conservation and the emission reduction of fluorinated greenhouse gases. We are also fostering the technological development, manufacture, and use of solar cell materials (see pages 12 to 15) and low-emissive double-glazing glass (Ecoglass: see pages 16 and 17) as products to help reduce CO₂ emissions from society at large.

Asahi Glass participates in the Japanese government's "Experimental Introduction of an Integrated Domestic Market for Emissions Trading." For the first commitment period of Kyoto Protocol (2008 to 2012), we have set the target of reducing CO₂ emissions in our manufacturing process by approximately 1% from the average level for 2006 and 2007. To this end, we are striving to reduce our CO₂ emissions.

Reducing CO₂ emissions from manufacturing sites and offices

In fiscal 2008, Asahi Glass reduced CO₂ emissions from the use of energy in its manufacturing process by 36% from the level in the baseline year (1990) of the Kyoto Protocol. We could achieve this mainly for the following reasons: domestic business restructuring; fuel conversion for glass furnaces; the improvement of our manufacturing process through the total oxygen combustion and all-electric melting methods (see page 20); and the introduction of a cogeneration system (see Topic on page 34). Moreover, we are also conducting activities at our offices. For example, we allow employees at our Asahi Glass head office to wear casual attire at their workplaces and set the thermostats of air conditioners at more environmentally friendly temperatures.

Reducing emissions of greenhouse gases other than CO₂

As for greenhouse gases other than CO₂, Asahi Glass manufactures and sells fluorinated gases, namely HFC, PFC, and SF₆. These gases have much higher global warming potentials than CO₂. In light of this fact, we have been aggressively reducing the emissions of these gases from our manufacturing processes and are also promoting their recovery and recycling. As a result, we reduced their emissions by 95% from the baseline year (1995) of the Kyoto Protocol in fiscal 2008. The amount thus reduced is approximately 30% of the total reductions achieved in Japan in fiscal 2007. In addition, we have been recovering fluorinated gases from our customers and breaking down and recycling them since fiscal 1997 (see page 36).

Emissions of Greenhouse Gases



*3. In fiscal 2006, we changed the CO₂ conversion factor for electricity from each individual electric power companies' indicators to the statutory factor (0.555 tons-CO₂/MWh), and this has led to a nominal increase of 10% in CO₂ emissions.

*4. The scope of data varies by fiscal year.

□ The AGC Group's Total Energy Consumption in Fiscal 2008



□ The AGC Group's Greenhouse Gas Emissions in Fiscal 2008



* Figures in parentheses are results in fiscal 2007.

* The total energy consumption and greenhouse gas emissions do not always add up to 100% because of rounding.

Topic Receiving the Agency for Natural Resources and Energy Director-General's Award for Ongoing Energy Conservation Activities (Japan)

AGC Display Glass Yonezawa (ADY) manufactures glass substrates for flat panel displays. As part of its ongoing commitment to energy conservation, ADY replaced the heating system used in its administrative building in fiscal 2007 with a pump-type heater that utilizes hot water generated in the manufacturing process, resulting in an approximately 100-ton reduction in CO₂ emissions on an annual basis. Moreover, over three years from 2005, ADY implemented five energy conservation projects, including using waste heat from the manufacturing process. As a result, it reduced its energy intensity in fiscal 2007 by approximately 30% from the fiscal 2004 level.

In February 2009, in recognition of these efforts, ADY was granted the Agency for Natural Resources and Energy Director-General's Award under the Commendation Program to Excellent Energy Management Factories held by the Energy Conservation Center, Japan (ECCJ).



Award ceremony for the Commendation Program to Excellent Energy Management Factories

Environment and Safety

Environmental Activities

Reducing CO₂ Emissions from Transportation

The revised Act Concerning the Rational Use of Energy was put into effect in April 2006. As a "Specified Consigner"^{*1} defined by the law, Asahi Glass has been reducing per-unit CO₂ emissions from its transportation activities, setting fiscal 2006 as the baseline. Our transportation volume totaled 850 million ton-kilos^{*2} (equivalent to 69,000 tons of CO₂ emissions per year) in fiscal 2006 (from April 2006 to March 2007).

In fiscal 2007 (from January to December 2007), we reduced both our CO₂ emissions per ton-kilo and CO₂ emissions per ton of shipment by 3.6%. (We use the former as an efficiency indicator for our entire transportation activities and the latter as a management indicator.)

In fiscal 2008 (from January to December 2008), partially due to substantial changes in our business environment, including periodical repair of our main manufacturing plants, our CO₂ emissions per ton-kilo decreased by 3.9% from the fiscal 2006 level, but emissions per ton of shipment increased by 0.8%.

We will further strengthen our CO₂ emission reduction measures in the transportation field. Specifically, we will improve our transportation efficiency by consolidating our bases, promoting modal shift, upsizing transportation vehicles, and expanding the use of low-emission vehicles, while making effective use of local ports and arranging joint transportation with other companies. Furthermore, by avoiding idling and encouraging "eco-driving," we will make ourselves even more environmentally conscious.

*1. Under the law, companies that consign freight transportation of a volume of 30 million ton-kilos or more per year are classified as "Specified Consigners." There are 865 Specified Consigners in Japan (as of the end of June 2008).

*2. When freight weighing one ton is carried over one kilometer, the transportation volume is represented as one ton-kilo.

"Reducing CO₂ emissions by the effective use of local ports" and "Reducing CO₂ emissions by joint transportation with other companies":

http://www.agc.co.jp/english/csr/environment/teigen_ onshitsu.html

The Chemicals Company's Commitment to Reducing Greenhouse Gas Emissions

The Chemicals Company has been reducing its environmental impact to live up to its mission, "Chemistry for a Blue Planet."

Reducing CO₂ emissions by about 14,500 tons per year through the effective use of hydrogen generated from brine electrolysis

Topic

Asahi Glass Kashima Plant used to use part of the hydrogen generated from brine electrolysis as boiler fuel. The electrolysis process was usually conducted during the night for manufacturing caustic soda and other products, and not all of this large volume of hydrogen thus produced was utilized as boiler fuel. Furthermore, hydrogen had to be supplied to the equipment at a certain fixed pressure level. To adjust the pressure, some of the generated hydrogen was discharged into the air. To solve this problem, the plant installed a hydrogen holder for pressure adjustment and reduced a new hydrogen boiler with high processing performance to enable all the generated hydrogen to be used as boiler fuel. As a result, the plant saved energy at a rate of about 6,350 kiloliters per year in oil equivalent, thereby reducing its CO₂ emissions by approximately 14,500 tons annually.

In recognition of this initiative, the plant received the ECCJ Chairman's Award at the National Contest of Energy Conservation Successful Cases for fiscal 2008.



Hydrogen boiler contributing to substantial CO2 emission reductions

Reducing CO₂ emissions by 140,000 tons a year by introducing a new gas turbine

Asahi Glass Chiba Plant has replaced its heavy oil-powered gas turbine power generator with a natural gas-powered one to substantially reduce soot, dust, and SOx generation. For the new gas turbine, an aircraft engine is used for higher thermal efficiency and more advanced combustion control, which results in an outstanding reduction in NOx generation. In addition, the plant can now make full use of the natural gas it exploits and has substantially reduced its environmental impact.

- CO2 emissions: 25% reduction (approx. 140,000 tons/year)
- Energy intensity: 8% reduction (energy conservation of 21,000 kl/year in oil equivalent)
- SOx: 92% reduction (approx. 22,000 Nm³/year)
- NOx: 49% reduction (approx. 108,000 Nm³/year)
- Soot and dust: 62% reduction (approx. 10 tons/year)



Gas turbine power generator newly introduced to the Chiba Plant

Proper Management of Chemical Substances

In 2006, the Japanese government started to regulate suspended particulate matters (SPM) and volatile organic compounds (VOC), which could cause photochemical oxidant formation. This regulation was intended to reduce total emissions of these substances by 30% (of which 20% should be reduced through voluntary measures taken by companies) from the year 2000 level by 2010. Asahi Glass and other domestic Group companies set a target to reduce the emissions of these substances by 25% from the year 2001 level by 2010, a higher numerical target than the voluntary target set by the government. Indeed, we achieved the government-set target as early as in fiscal 2006. We subsequently set a higher target, a 40% reduction, and Asahi Glass achieved a 38% reduction in fiscal 2007.

With regard to the EU's REACH regulation, we conducted a survey on the chemical substances contained in our products, materials and other related materials as well as their usage, targeting the entire supply chain. Based on the results, we identified all the substances to be registered under the regulation and completed the pre-registration of a total of 101 substances across the entire AGC Group within the pre-registration period ended in December 2008. For chemical substances contained in our products, we provide relevant information through the Joint Article Management Promotion-consortium (JAMP), of which we are a member.

Prevention of Soil and Groundwater Contamination

The AGC Group formulated its Guideline for Prevention of Soil and Groundwater Contamination in 2005. While stating that strict compliance with the applicable laws and regulations is a prerequisite, the Guideline sets the 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 the measures to prevent the spread of any pollutants and to decontaminate the polluted sites. We regularly report the progress to the relevant administration agency and disclose the information on our website and through other media.



*3. The scope of data varies by fiscal year.

Diversity

Environment and Safety

Asbestos

The AGC Group has been removing friable asbestos used as protective equipment and insulating materials in the manufacturing process. Asahi Glass and all domestic Group companies completed the removal in fiscal 2008.

Topic Asahi Glass Becomes the First Japanese Company to Support the bluesign® Standard

The bluesigne standard is an industry standard used in the textile and clothing field designed to encourage the provision of superior products in terms of environment, health, and safety (EHS) throughout the overall supply chain.

Asahi Glass has become the first Japanese company to be certified as a supporter of the bluesign[®] standard, receiving high evaluations for its environmental consideration in its manufacturing process, commitment to safety at workplaces, quality assurance, and various other matters.

We currently have bluesign® certification for some of our Asahi Guard fluorinated water/oil repellents, including the Asahi Guard E-SERIES, which do not contain perfluorooctanoic acid (PFOA).*⁴ PFOA is found almost everywhere in the environment, including in human blood, although at very low levels. We plan to increase the number of the products certified with the bluesign® mark, mainly from the E-SERIES line.

*4. At or above the detection limit



Fabric processed with Asahi Guard



Environmental Activities

Waste Reduction Activities

Asahi Glass conducted waste reduction activities to achieve zero emissions^{*1} in fiscal 2008. We achieved this target at seven of our bases in the fiscal year, but ended with a total recycling rate of 96.8% due to sticking points in the development of recycling technologies in the chemicals business. We have once again set the goal of achieving zero emissions in fiscal 2010 and are determined to expand the range of these activities on a global scale across the Group.

*1. We define zero emissions as recycling of 99% or more of waste.

*2. The scope of data varies by fiscal year.

□ Waste Sent to Landfill and the Recycling Rate



Prevention of Air and Water Pollution

The AGC Group is actively installing emission gas treatment facilities and providing instruction on measurement and analysis technologies overseas by capitalizing on its domestic experience in pollution prevention.

Regarding environmental performance data, we started totaling the data of all domestic Group companies in fiscal 2006 and those of overseas Group companies in fiscal 2007.



Topic Contributing to the Prevention of Climate Change by Recovering and Recycling CFCs (Japan)

AGC Chemicals Company manufactures HCFCs and HFCs as substitutes for CFCs. To fulfill its responsibility as a manufacturer of these products, which are supplied to home electric appliance makers and automakers, the Chemicals Company has been recovering and recycling waste CFCs at Asahi Glass Chiba Plant since 1997. Because the global warming potential of CFCs ranges from several hundred to 10,000 times that of CO₂, we can make a great contribution to the prevention of global warming by recycling waste CFCs.

Highly pure recovered CFCs are refined and processed into materials for fluorinated resin at the recycling plant. Those with low purity are broken down into CO_2 , hydrochloric acid, and hydrofluoric acid at the decomposition plant which has an annual processing capacity of 1,000 tons. Subsequently, by reacting the hydrofluoric acid with lime hydrate, fluorite is produced, which is in turn used as a material for fluorinated products.

In fiscal 2007, the Plant recovered and decomposed approximately 2.4 million tons of CFCs in CO_2 equivalent, up about 0.5 million tons from the level in fiscal 2006. It accounted for approximately 20% of the total CFC processing volume in Japan. The AGC Group will continue its efforts to prevent climate change and make more effective use of resources.



□ NO_x Emissions



□ SOx Emissions



□ The AGC Group's Environmental Performance Data

	Waste sent to landfill (1,000 tons)	SOx emissions (tons)	NOx emissions (tons)	Soot and dust emissions (tons)	COD emissions (tons)
Fiscal 2007	71	18,000	31,800	2,350	2,610
Fiscal 2008	58	17,800	39,900	2,430	2,630

Topic

Air Pollution Prevention Activities Conducted by AGC Flat Glass Europe

AGC Flat Glass Europe (AFEU), which manufactures and sells a variety of float glass, has been gradually introducing air pollution preventing equipment to its glass melting furnaces since 2004. The equipment is composed of a dust collector, a smoke ventilator, and desulfurization and denitration units. The equipment removes soot and dust, SOx, and NOx to purify the exhaust gases. Moreover, waste from this equipment is recycled into glass materials and exhaust heat is also reused by an on-site boiler. AFEU is thus implementing energy conservation measures to combat climate change in addition to restraining air pollution. To ensure the appropriate operation of the equipment and compliance with air pollution-related laws and regulations, AFEU has also introduced an ISO 17025-certified mobile analyzer. (ISO 17025 provides for the general requirements for the competence of testing and calibration laboratories.)

As of 2008, AFEU has introduced this equipment to nine of its melting furnaces and plans to add further units during large-scale repair works. Specifically, it plans to introduce the equipment to another two furnaces by 2010.

183 183 150 169 100

□ Soot and Dust Emissions

(t)

300

250

200

178

50 90 110 80 66 42 0

2004 2005 2006 2007 2008 (FY) *3. The amount decreased because the scope of consolidated domestic affiliates was changed.

□ COD Emissions*4



sewage treatment facilities.



Air pollution prevention equipment installed at the Retenice Plant in the Czech Republic

Asahi Glass (unconsolidated)

Domestic affiliates*

Environmental Activities

Environmental Accounting

In order to accurately determine the management resources spent in reducing environmental impacts and the resultant effects, Asahi Glass calculates its environmental accounting data based on the AGC Environmental Accounting Calculation Manual created in line with the Environmental Accounting Guidelines 2005 (Ministry of the Environment).

In fiscal 2008, we invested in environmental protection significantly more than in the previous fiscal year. Specifically, we substantially increased our investment in pollution prevention. For example, we made investments in the wastewater treatment facilities and smoke ventilation/desulfurization units for the new production facilities installed at Asahi Glass Takasago Plant.

We also renewed the air pollution preventing equipment for the glass melting furnace during the large repair work at Asahi Glass Kashima Plant. In addition, we made an investment in the operation of a highly efficient natural gas-powered gas turbine at Asahi Glass Chiba Plant.

Regarding environmental costs, the R&D cost increased compared with the previous fiscal year, due to intensive investments in environmental fields by the Research Center and the Chemicals Company. As for the environmental remediation cost, both investment and cost decreased as a result of the completion of the decontamination of the soil and groundwater at the former Funabashi Plant.

Scope of data: Asahi Glass (unconsolidated) Targeted period: January 1 to December 31, 2008

Environmental Conservation Cost		(Mi	llions of yen)
		Investment	Cost
(1)Business	(1)Business area		6,458
	(1) - 1 Pollution prevention	4,424	4,139
Breakdown	(1) - 2 Global environmental conservation	3,948	757
	(1) - 3 Resource circulation	18	1,562
(2)Upstream/downstream		0	700
(3)Administration		0	718
(4)R&D		1,430	7,767
(5)Social activity		35	68
(6)Environmental remediation		691	1,079
Total		10,547	16,790

*The breakdown figures do not always add up to the total because of rounding.

Environmental Conservation Benefits

	Change in environmental impact*1	Simple Y-to-Y change*1	Sales-corrected change*1
Total energy consumption	-3PJ	-8%	-8%
CO2 emissions	-210,000 t-CO2	-9%	-9%
Waste sent to landfill	-1,000 t	-11%	-11%
COD emissions	-64 t	-10%	-10%
SOx emissions	-132 t	-15%	-15%
NOx emissions	-610 t	-24%	-24%
Soot and dust emissions	-24 t	-36%	-36%
Effects on upstream/down-	Recycling of product shipment pack- aging materials		(Actual benefits listed in table on right)
stream cost	Cullet collection	373,000 t	
Other environ- mental conserva-	/iron- onserva- tions (not measured by Asabi Glass)		

· Change in environmental impact = (Fiscal 2008 output volume) - (Fiscal 2007 output volume)

· Asahi Glass (unconsolidated) Y-to-Y sales ratio = (Fiscal 2008 sales) / (Fiscal 2007 sales) = 6,459/6,349 = 1.017

 Sales-corrected change = Simple Y-to-Y change / Y-to-Y sales ratio
 *1. Change in environmental impact and simple Y-to-Y change: A positive figure indicates an increase and a negative figure indicates a decrease in environmental impact from the previous fiscal year's level

□ Breakdown of Environmen- □ Breakdown of Environmental Cost tal Investment



*Because the method of allocating cost and investment for environmental remediation differs depending on the year of calculation, environmental remediation costs are excluded from the above summation.

*The breakdown figures do not always add up to the total because of rounding.

Economic Benefit Associated with Environmental Conservation (Actual Benefit) (Millions of yen)

Benefit		Value	Value (FY2007)
Revenue from the recycling of waste generated by main business and used products		509	479
Evpopoo	Effects of energy saving	1,657	1,053
saving	Lower waste treatment costs due to resources saving and recycling	390	313

Developing Fluon PTFE E-SERIES without Using PFOA as Polymerization Surfactant

Polytetrafluoroethylene (PTFE) products are used in various applications, including coating cooking pans as well as electric wires used for precision electronic devices. Traditionally, perfluorooctanoic acid (PFOA) has been widely used worldwide as a polymerization surfactant for PTFE products, due to its high chemical stability and cost effectiveness. However, there have been concerns expressed about the persistence in the environment of some fluorochemicals, including PFOA. Therefore, in 2006, the US Environmental Protection Agency (USEPA) initiated a program to reduce PFOA contents in products by 95% by 2010 and to zero by 2015. Since then, the Agency has been asking manufacturers of fluorinated chemicals around the world to participate in the program.

In response, AGC Chemicals Company embarked on the development of a surfactant that did not contain PFOA,*² capitalizing on its proprietary fluorination technology. As a result, in September 2008, we released the Fluon PTFE E-SERIES as a PFOA-free, environmentally friendly fluorinated resin. Within 2010, we will make all our PTFE products PFOA free.

*2. At or above the detection limit



Providing Arsenic-Free LCD Glass

As materials for thin film transistor liquid crystal displays (TFT-LCD) mainly used for TVs, cell phones, and PC monitors, non-alkali glass substrates are needed to prevent the contamination of liquid crystal materials and the deterioration of their transistor properties.

The AGC Group succeeded in its first commercialization of nonalkali LCD glass by the float method, which is an optimal method for the mass production and upsizing of glass substrates (see page 21). Moreover, by optimizing technologies for glass composition and material combustion, we were able to start the mass production of LCD glass substrates for our customers without using arsenic—a substance that has been used as an indispensable additive for the removal of small bubbles from glass.



Roiceram-C: Contributing to Higher Energy Efficiency in the Manufacturing Process

AGC Ceramics manufactures and sells Roiceram-C silicon carbide. This ceramic material is highly heat-resistant and contributes to higher energy efficiency in the manufacturing process. Specifically, it enables process control in a high temperature zone, which had been impossible with metal materials.

There are usually several dozen hot blast pipes installed around a blast furnace but in the past, no highly heat-resistant control valves were available for the pipes. Therefore, the same hot blast volume was constantly sent into the furnace for the combustion of materials. In other words, hot air was sent even to the parts inside the furnace that were unevenly heated, resulting in damage to the furnace wall materials. This problem, however, can be solved by using Roiceram-C as a material for the control valves. Roiceram-C can lead to the long-term stable control of the hot blast volume sent into the furnace; furthermore, hot air can be sent in the necessary amount to only the necessary locations, which will in turn help prolong the life of the furnace and improve the combustion and energy efficiency.

In addition, Roiceram-C can be applied to high temperature gas control products such as high-temperature fans, leading to higher energy efficiency in the manufacturing process through the waste heat from high temperature gas.

□ Furnace incorporating hot blast control valves made from Roiceram-C



Research into Fission Yeast for Highly Efficient Production of Biodegradable Plastics

Biodegradable plastics contribute to the prevention of climate change and waste reduction because they are eventually broken down into water and CO₂ by microorganisms. One of the major materials used for the plastics is polylactate, and the AGC Group is promoting research into the fission yeast minimum genome factory (MGF), which can produce lactate to be used as material for polylactate in a very efficient manner. At present, we are improving the fission yeast to produce lactate for the manufacture of biodegradable plastics. The fission yeast is also expected to play a useful role in the production of bioethanol using non-food crops. (See page 19.)

□ Cycle scheme of biodegradable plastics



Environment and Safety

Occupational Health & Safety

No Production Should be Operated without Assurance of Safety

Concept Based on the management's principle that "no production should be operated without assurance of safety," the AGC Group is ensuring occupational health and safety at its production sites by applying its Occupational Health & Safety Management System (OHSMS) and securing the equipment's safety.



- *1. Standards for occupational health & safety management systems certified by a third party
- *2. Traditional safety activities: promotion of the 5Ss (sein[neatness], seiton[orderliness], seiketsu[cleanliness], seisou[cleanness], and shitsuke[discipline]), hazard prediction, near-miss management (hiyari-hatto), and safety patrols
- *3. Reason for B evaluation: Delay in the revision of the new equipment criteria

The AGC Group Basic Occupational Health & Safety Policy (Extract)

- 0 We will focus on Risk Assessments and prevention to make our OHSMS more effective.
- (2) We will further improve on-site occupational health and safety programs and activities that involve all employees and develop a sustainable OH & S culture.
- ③ Our leaders will ensure a safe work environment for our employees and foster wellbeing within our AGC community.
 - The AGC Group's Concept of Safety Management

Approach Ensuring Employees' Health and Safety

Global Safety Management

Given that machines and equipment can break down and people can make mistakes, the AGC Group is committed to identifying potential risk factors to reduce the number of occupational accidents at its manufacturing sites. We are also combining our traditional safety activities^{*2} with the Occupational Health & Safety Management System (OHSMS) to increase the effectiveness of the activities. In addition, we conduct safety patrols and training seminars at our manufacturing sites across the world and organize global health & safety symposiums (see Topic) to share excellent safety measures.

*4. Risk assessment: Activities of the cycle to comprehensively identify risks associated with equipment and work processes, to evaluate the risk levels and to implement safety measures, prioritizing serious risks

④ We will implement OH & S activities in all production line activities and ensure compliance.

(5) We will encourage proactive employee participation in all OH & S activities inspired by open, honest and fair interactions and communications.



Topic Strengthening Health and Safety Activities across the AGC Group

The AGC Group has been holding its Global Health & Safety Symposium every year since 2005 in order to share excellent safety measures and discuss common challenges for improving our health and safety levels. In fiscal 2008, we held this symposium in Japan with the participation of 128 employees in charge of health and safety at 16 Group companies in nine countries, who actively engaged in discussions.

As a result of this yearly symposium, the Group's health and safety activities have been enhanced. For example, the Rayong Plant of AGC Flat Glass (Thailand), which manufactures and sells various float glass products, was commended as the Best Safety Factory by the Thai government in May 2008. The plant was recognized for its impressive safety results in compliance with local safety- and health-related laws, having recorded no serious occupational accidents.



Best Safety Factory Award ceremony



Members participating in the Symposium held at the Chiba Plant

Enhancing the Inherent Safety of New Equipment

To ensure manufacturing sites' safety, it is most important to enhance the inherent safety of equipment. Accordingly, the AGC Group is raising the safety level of its new equipment by responding to international safety standards such as ISO 12100, in addition to implementing safety measures for existing equipment through risk assessment. For example, Asahi Glass encourages employees to obtain qualifications as safety assessors,*5 who conduct risk assessment on the design and manufacturing stages of new equipment to be introduced to its plants with the aim of ensuring the equipment's safety. Since 2005, we have been holding biannual in-house intensive seminars for employees in charge of equipment design and manufacturing and safety at domestic Group companies and other cooperating companies. As a result, of 884 qualified safety sub-assessors in Japan (as of the end of 2008), 107 are employees of the AGC Group and its cooperating companies.

Risk assessment has been increasingly conducted by the safety assessors on the design and manufacturing stages of new equipment since fiscal 2007, and in fiscal 2010, we will conduct such risk assessment on all new equipment before its introduction to our sites. Our next step is to expand the risk assessment target to include Group companies in Asia, thereby promoting wider activities for the introduction of safer equipment.

*5. Under the qualification system for skills on equipment safety, engineers are qualified on three different levels as "safety lead assessors," "safety assessors," and "safety sub-assessors."

Occupational Accidents in Fiscal 2008

In fiscal 2008, the AGC Group (companies in Japan and other Asian countries) incurred 110 occupational accidents.^{*6} In particular, accidents in Group companies in Asia decreased by 16 (32%) from the previous fiscal year. This is due to the efforts to prevent cuts and other similar occupational accidents. Specifically, protectors were attached to work-in-process glass products at manufacturing sites and employees were standardized to use protective equipment. We will continue to introduce safer equipment while correcting the "unsafe behaviors" of workers that have caused occupational accidents and providing insight into the background to such behaviors in order to implement specific countermeasures.

Since fiscal 2007, we have been collecting information about occupational accidents that took place across the AGC Group, including companies in Europe and North America. Based on the tabulation results, we will foster Group-wide safety management and reduce occupational accidents globally.

□ Number of Occupational Accidents in Fiscal 2008^{*6} (AGC Group companies in Japan and other Asian countries)

	Asahi Glass	Other domestic Group companies	Group companies in Asia	Total
Fatalities	0 (0)	0 (0)	2 (2)	2 (2)
Accidents requiring leave	6 (5)	8 (9)	16 (26)	30 (40)
Accidents not requiring leave	11 (6)	16 (10)	16 (22)	43 (38)
Accidents of minor injuries	34 (44)	1 (10)	Not counted	35 (54)
Total	51 (55)	25 (29)	34 (50)	110 (134)

*6. The numbers of accidents of minor injuries and more serious injuries were totaled for Asahi Glass (unconsolidated) and some other domestic Group companies, and the numbers of accidents not requiring leave and more serious accidents were totaled for other Group companies in and outside Japan. Figures in parentheses are numbers of occupational accidents in fiscal 2007.

□ Changes in the Frequency Rate for Accidents Requiring Leave^{*7} (Asahi Glass*⁸)



*8. Asahi Glass data include employees at all operating sites (including cooperating companies).

□ Types of Occupational Accidents in Fiscal 2008 (AGC Group companies in Japan and other Asian countries)



Topic Communicating a Safety Message throughout the Group

The AGC Group created a safety awareness promotion poster at the suggestion of the Group COO. Through this poster, we aim to share the management's principle that "No production should be operated without assurance of safety" across the Group to foster safe manufacturing activities, keeping in mind the message that the COO wishes to communicate to employees through this principle: "We must give first priority to safety in our manufacturing activities throughout our business operations." We created the poster in 17 languages (Japanese, simplified Chinese, traditional Chinese, Thai, Indonesian, Tagalog, Korean, English, Dutch, Spanish, Portuguese, Hungarian, French, Russian, Italian, German, and Czech) and began distributing approximately 7,000 copies to the plants of Group companies in November 2008. Some of these plants display the poster in several languages.



Safety posters (in English, Japanese, and Thai from the left)

Occupational Health & Safety

Cooperation with Business Partners

The AGC Group conducts its business in cooperation with a large number of business partners. Their cooperation is necessary to ensure occupational health and safety. In fiscal 2008, we held lectures on health and safety given by invited external speakers, and tours to the plants of other companies with excellent safety records in cooperation with our business partners. We are thus striving to ensure health and safety, strengthening ties with our business partners across the supply chain.

Health and safety trainings provided to business partners in fiscal 2008

①Safety seminars

Seminars on the AGC Group's safety management and safety activities conducted by other companies

②Plant tours of other companies with excellent safety records

3Lectures on health

Lectures on mental health care and open-minded workplaces



Safety seminar

Web

Health Management Policy http://www.agc.co.jp/english/csr/employee/anzen.html

Health Management Policy

In March 2007, the AGC Group set its Health Management Policy, regarding it necessary to clearly show the Group's policy of health management to employees. Asahi Glass has been implementing measures to manage the health of employees based on this policy, which provides for health consciousness, corporate support for employee health, and self-discipline by employees.

Major health management measures

①Special health instructions against the metabolic syndrome

- ②Provision of free-of-charge detailed health checks to employees with findings that require further testing in regular checkups, and of half the cost of medical checkups for the early detection of cancer
- ③Drastic measures to prevent health damage due to excessive work
- ④Encouragement of physical exercise through sport and recreational events

Mental Health Care

In recent years, the number of workers with mental health problems has been increasing, and this is becoming a social concern. Accordingly, Asahi Glass has been enhancing its mental health care measures for employees.

Major mental health care measures

- ①Employees' support program
 - Under the program, employees and their family can consult external experts (counselors) about their mental problems in person or by phone. The consultation details are kept strictly confidential.
- ②Training (e-learning) for managers
- Training for managers, who play a vital role in the mental healthcare of employees, has been provided through e-learning so that managers can obtain and review necessary knowledge and information.
- ③Mental checkups by employees themselves

For employees to understand their health situation and manage their health in a proactive manner, mental checkup sheets are distributed, to help prevent and detect their mental problems at an early stage.

④Support program for employees with mental problems to return to the workplace

This is a program to support employees who have taken longterm leave due to mental problems to return to their workplaces.

ITH LOVE, AGC RIDE

Topic Holding a "Safety and Environmental Children's Day" Event to Promote Safety and Environmental Activities at Home (United States)

One of the fiscal 2008 goals of the Elizabethtown Plant (Kentucky) of the AGC Automotive Americas, which manufactures and sells automotive glass, was to bridge the gap between Environmental Health and Safety (EH&S) within the workplace and at home.

To achieve this goal, the Plant held a "Safety and Environmental Children's Day" event in July 2008, inviting the children of employees and several different local organizations. At the venue, electric safety training, dunking booths and bouncy houses were established, and an event named the Bicycle Safety City was held to promote the use of bicycle helmets. In addition, a disaster relief drill was conducted using a helicopter, and the Plant's good examples of compliance with the safety and environmental standards were introduced.

To make this event memorable for employees, the participating children created a big banner with their handprints and signatures. The banner reads, "Be Safe, We are counting on you... with love, AGC Kids," and is now hung in the Plant as a daily reminder of the importance of the health, safety and environmental efforts of employees.



Industrial Safety & Security

Protection of Society and the AGC Group against Contingencies

Concept

The AGC Group has been implementing measures to minimize the damage caused by accidents. Specifically, we are trying to prevent contingencies (accidents and natural disasters) and to promptly and appropriately take action in the case of actual occurrence.

Targets for fiscal 2008

- To identify and figure out risks through audits, etc.
- 2 To incorporate the concept of business continuity in earthquake countermeasures
- 3 To continue to have a third party evaluate the emergency drills to further increase their effectiveness

Results in fiscal 2008	Self- evaluation
Conducted 30 audits based on the audit plan	B*1
Began formulating a business continuity plan (BCP)	А
Shared the results of the third-party evaluation made in the previous year across all the plants of Asahi Glass	B*2
As for the criteria for self-evaluation, see page 22.	
As for the criteria for self-evaluation, see page 22.	

Reason for B evaluation: The checklist has not yet been completed for quantitative evaluation. *2. Reason for B evaluation: No third-party evaluation was newly made.

The AGC Group Basic Industrial Safety & Security Policy (Extract)

① The AGC Group shall comply with all laws, ordinances, treaties and standards concerning industrial safety and securities, both nationally and locally. (2) The AGC Group shall carry out activities for industrial safety & security to prevent accidents or disaster from occurring, and shall strive for continual improvement.

3 The AGC Group shall make efforts to communicate with stakeholders such as the local community.



Fire Prevention

The AGC Group has been continuously improving its fire prevention activities through environment, safety and security audits on a global scale. In March 2008, Asahi Glass Kashima Plant successfully passed an examination to update its certification under the High Pressure Gas Safety Act based on new certification standards. In other words, the plant obtained a qualification to conduct completion and safety inspections for its high-pressure gas equipment. To update the certification based on the new standards, the Plant formulated and disseminated new industrial safety and security manuals, rules and criteria, identified relevant risk factors, and managed all relevant changes to improve its industrial safety level.

In fiscal 2008, Asahi Glass suffered eight small fires. Asahi Glass and other Group companies are sharing the analyzed data of past fires to prevent the reoccurrence of fires.

As for the leakage of molten glass that took place at Asahi Glass Takasago Plant in July 2008, we deeply regret the inconvenience caused by the incident to local inhabitants and companies and to local governmental officials, including the fire department. We are thoroughly implementing improvement measures based on our investigation of the causes to prevent similar accidents in the future.

□ Important Tips on Fire Prevention at the AGC Group

Ignition source	High-temperature equipment or sparks from welding
Ignition cause	Insufficient hazard prediction, defects in equipment, insufficient cleaning
Specific measures	 To implement safety patrols for fire prevention To conduct hazard prediction activities prior to work (especially for welding) To check the location of fire extinguishers before start-

ing work that might cause fire

cause fire

To check for embers after finishing work that might

Earthquake Countermeasures

Asahi Glass formulated a manual on earthquake countermeasures in 1995 and revised it in 2007. In fiscal 2008, we began formulating BCPs against earthquakes at Asahi Glass and other domestic Group companies. (See page 24.)

Targets for fiscal 2009

through auditing

at domestic bases

To create a checklist for quantitative

evaluation and identify possible risks

To formulate BCPs against earthquakes

To make responses to the risks specific

to each region and business, including natural disasters, fires, and explosions.

Disaster Prevention Measures

The plants of the AGC Group regularly implement emergency drills. In fiscal 2007, the Kansai and Kashima Plants of Asahi Glass had their comprehensive emergency drills evaluated by a thirdparty consulting company. In fiscal 2008, the information obtained through the third-party evaluation was shared across all the plants of Asahi Glass for stronger risk management.

Topic

Contributing to the Extinction of a **Neighborhood Wood Fire (Japan)**

AGC Electronics (AGEL), based in Koriyama City, Fukushima Prefecture, which manufactures and sells electronic components and products, contributed greatly to the extinction of a local fire. On February 19, 2008, AGEL detected a fire in its neighborhood and informed the local fire department. It then dispatched its own firefighting team comprising about 20 members to the site, and the team extinguished the fire in cooperation with the local fire department. Although about 600 square meters of land covered with dried grass was scorched, no one was injured by the fire.

In recognition of the speedy activity, AGEL was given a letter of thanks from the fire headquarters of Koriyama City. AGEL plans to prepare the firefighting team to respond to emergencies even at night and on holidays by encouraging the members to be more committed to disaster prevention.



Firefighting activity by the plant's team

Employee Satisfaction (ES): Employee Job Satisfaction and Pride in Accomplishment

Driving Force to Maximize Corporate Value

The AGC Group relies on the capabilities of its employees as a basis of increasing its corporate value and improves its work environment to enable all the employees to work with satisfaction and pride in their daily operations and to share mutual respect based on the value of diversity.



*2. In April 2009, we decided to postpone the third ES survey slated for November 2009.

The AGC Group "7 Key Principles for People"

- Implementation of "Look Beyond" Job Satisfaction and Pride
- Diversity for Organizational Competitiveness
 - Work Environment and Conditions
- Development and Growth
- Open Communication

The AGC Group "7 Key Principles for People" (full text): Web http://www.agc.co.jp/english/csr/employee/es01.html

Generating a virtuous circle of individual and organizational growths by bringing out employees' full abilities (AGC Group) Approach

ES Improvement Activities Based on the ES Survey

Based on the "7 Key Principles for People," which comprises the AGC Group's direction in human resources management, we have been conducting the AGC Group ES improvement activities since 2005.

In order to clarify problems and as a part of our communication with employees, we conducted our first ES survey in 2005 and the second survey in November 2007 with an expanded scope. We plan to conduct the third ES survey in November 2009*2. In these surveys we ask employees their opinions concerning eight ES improvement elements which include their workplace atmosphere, the skills for growth, evaluation, and treatment. We have been incorporating the survey results into our measures to cultivate a still further improved corporate culture.

Web

Flow of ES Improvement Activities: http://www.agc.co/jp/english/csr/employee/es01.html

Second ES Survey (November 2007)

The second ES survey was conducted in 18 languages, targeting approximately 40,000 employees in a greater number of countries and areas. (The first ES survey was conducted in 13 languages, targeting 15,600 employees.) Through this survey, we verified the effect of ES improvement measures implemented after the first survey and identified the ES levels of employees including new participants in the survey. With the results, we will further strengthen our ES improvement activities, while executing the Plan, Do, Check, and Act (PDCA) cycle thoroughly throughout the Group.

Significance of ES Improvement Activities

ES improvement activities are essential to motivate employees to improve the quality of their work accomplishments. We therefore promote the incorporation of ES ideas and measures in the management mechanism of daily operations for all employees.

• Evaluation, Recognition and Rewarding Performance

ES Improvement Measures for the AGC Group

Recognizing the importance of ES as explained above, we are implementing the following measures:

- ① To improve communication between managers and subordinates to achive their goals
 - (Persons in charge: all leaders within the organization)
- Human resources development is an important priority. Leaders will promote personal growth and foster an environment where their subordinates are able to learn. They will also engage in open and frequent communication with the subordinates to provide appropriate support for attaining targets
- 2 To offer more educational opportunities for growth (Persons in charge: AGC Group)
- Provide employees with more educational opportunities (programs to cultivate human resources, stratified training, and departmental training) to help them make the best use of their abilities
- ③ To ensure appropriate evaluation and treatment (Persons in charge: all leaders within the organization)
- Leaders will evaluate employees' contributions with fairness and transparency, and treat them accordingly. They will also fully communicate with the subordinates to give them feedback on the evaluation results
- ④ To improve the system for Group-wide internal communication (Persons in charge: AGC Group)
- Promote direct and interactive communications through top managements' visits to the Group's business sites on a continual basis
- The AGC Group Web will be expanded in order to promptly share information within the Group.
- (5) To foster a better corporate climate with recognition and praise (Persons in charge: AGC Group)
- Participation in the Group Award System will be promoted, while enhancing the system itself. Good practices will thereby be shared throughout the Group.

The AGC Group Award System

In order to foster a better corporate climate in which employees are encouraged to respect each other and appreciate their mutual achievements and efforts, the AGC Group has introduced an award system targeting all employees.

Activities for which *"Look Beyond"* Award and CS Award have been granted are summarized in a booklet, copies of which are distributed to all Group employees to share the good examples across the board.



Year Book outlining examples of excellent activities (published in 18 languages)

□ Commendations Awarded across the AGC Group and Numbers Thereof (FY2008)

Types	Number
"Look Beyond" Award	18
CS Award	33
Excellent Quality Improvement Plant Award	5
Excellent Cost Reduction Plant Award	5
Excellent Safety Plant Award	21
Environmental Contribution Award	7
KAIZEN Award	20
Enhancement and Transfer Technologies & Skills Award	16
Environmental Improvement Award	2
Technical Innovation & Performance Award	18
New Business/New Market Development Award	8
Excellent Business Support Award	13
Total	166

Leader Training

The AGC Group is a global corporate group comprising approximately 50,000 employees, who work in a total of 27 countries and regions. Leaders of the Group must have a range of leadership skills and abilities based on the value of diversity. In order to develop human resources who can become the future leaders of the Group, we are globally educating employees in our leader training programs as outlined below, irrespective of nationality and gender.

□ The AGC Group Leader Training Programs

Global programs	
AGC Institute	
Global Leadership Session (GLS) Started in 2004 and targeted at general managers	
Dynamic Leadership Sessions (DLS) Started in 2004 and targeted at middle and senior managers	
Participants will deepen their understanding of the Group vision and	

Participants will deepen their understanding of the Group vision and values and improve their management knowledge and leadership through direct communication with top management.



Topic

Diversity Creates the Leadership in the AGC Group

The AGC Group upholds the slogan of "Our People are Our Strength" as an important pillar of its Grow Beyond management policy, believing that individual growth leads to the growth of the entire AGC Group. Based on this idea, we aim to achieve a virtuous circle of individual and organizational growth.

In the leader training programs described above, participants with various types of work experience gather together to engage in a process in which they collaborate with each other to solve a problem. Participants can learn multiple viewpoints and business approaches and gain great inspiration from each other. These programs thus provide them with precious experience, which will help them become the leaders of the global corporate Group in the future.

DLS 2008 participant's voice

Working on a cross-cultural taskforce activities required excellent organization and strong interpersonal communications skills. In addition, I was able to gain an insight into modern management techniques. The opportunity to speak directly (and quite openly) with our Group top management was of extreme value for us. Overall, it was really a fantastic experience and,



what's most important, we had a lot of fun with our team!

Philipp Demidov Chief Financial Officer, AGC Flat Glass Russia

AGC University Asia 2007 participant's voice

Getting a better understanding of the core values of the AGC Group and the importance and strength of diversity of the AGC Group, spurred me to press on and continue to coordinate marketing functions with various departments with a long-term perspective, for the common good of the Group.



Casey Ong Manager, Asia Pacific Marketing and Sales, AGC Chemicals Singapore

Employee Satisfaction (ES): Employee Job Satisfaction and Pride in Accomplishment

Pursuing Quality Manufacturing and Reinforcing Production Site Expertise

"Identification of necessary technologies and skills" and "development of human resources"

The AGC Group has global production sites and so it is essential to transfer the manufacturing technologies and skills developed by experienced and highly skilled workers to following generations.

In 2004, we listed "pursuing quality manufacturing and reinforcing production site expertise," which means "enhancing and transferring technologies and skills," as one of the major items in our management policy. To achieve these goals, we specified the required technologies and skills at each workplace and started to develop talents along with the plans for the education and development of human resources. Through these measures, we achieved our target for the first stage of quality manufacturing, which was to raise the level of technologies and skills across the Group.

In 2008, we entered the second stage of activities and have since been implementing measures to further promote the development of human resources. Specifically, we are improving the work environment to motivate employees to develop themselves into "high performers" (experienced and highly skilled workers).

□ The AGC Group's Measures for Enhancing and Transferring Technologies and Skill





Cultivating a corporate culture for quality manufacturing

First Stage (launched in 2004) Transferring the manufacturing technologies and raising the level of technologies and skills across the Group

It is approximately four and a half years since the AGC Group began conducting the activities to raise the entire Group's level of technologies and skills, selecting some of its in-house orginizations as exemplary models of quality manufacturing. We have achieved certain results in establishing both systems and facilities, and now the concept of "quality manufacturing" is shared by a greater number of employees at our production sites than ever before. We will continue to improve relevant trainings in terms of both content and method of provision, and will implement the Plan, Do, Check, and Act (PDCA) cycle on a continual basis.

Achievenments of the First Stage

Systems

The Monozukuri (Quality Manufacturing) Enhancement Division, In-House Companies/SBUs, and affiliated companies collaborated to formulate training criteria, educational systems, and training seminar systems, and to introduce a system to report training progress.

Facilities

The AGC Monozukuri Training Center and training facilities for each of the In-House Companies, SBUs, and affiliated companies were established.

□ Numbers of and Users at the Monozukuri Training Center

FY	Number
Fiscal 2006 (opened in July)	11,247
Fiscal 2007	23,344
Fiscal 2008	30,044

Second Stage (launched in 2008)

Improving the work environment to help employees strive to become high performers with new technologies and skills

To ensure quality manufacturing, we need to develop high performers who can assume leadership at our production sites and help cultivate a corporate culture aimed at quality manufacturing. In the 1980s, on-the-job training (OJT) was provided to employees as an integral part of their work, which developed them into high performers. At present, however, we need to consciously provide employees with such special opportunities. Accordingly, from fiscal 2008, the AGC Group launched the second stage of its activities for pursuing quality manufacturing and reinforcing product site expertise. Specifically, we are improving the work environment to help employees strive to become high performers with new technologies and skills. The growth of employees will result in the growth of the Group, which will in turn enable us to build a system that can contribute to the creation of a sustainable society.

Major activities in the Second Stage

- Establishment of a system for new employees' education at the launch of an overseas base (Electronics & Energy General Division)
- Development and implementation of a training program for overseas supervisors (Automotive Glass Company)
- Human Resources Development for Enhancing and Transferring Technologies and Skills



Торіс

Quality Manufacturing and Development of Human Resources across the Supply Chain

We opened the AGC Monozukuri Training Center in 2006. This center identifies the educational challenges on technologies and skills, and develops and supports human resources who can contribute to the successful implementation of the Group's business strategies. The center provides more than 150 seminars for AGC Group companies in Japan and Asia and also holds seminars for cooperating companies, with a view to fostering quality manufacturing and human resources development throughout the chain.



AGC Seminar Guide for AGC Group companies (left) and AGC Monozukuri Seminar for cooperating companies (right)

Asahi Glass Human Resources Management (HRM) System

Asahi Glass treats employees fairly in consideration of their abilities and performance. We aim to provide our diverse range of employees with the systems and environments necessary to help them perform their jobs, without discrimination based on gender, age, or disability.

We have introduced the following two human resources management systems in order to clarify employees' roles, functions, and responsibilities; to utilize capable employees regardless of their age, length of service, and gender; and to evaluate them in a fair manner.

Job grading system (for managers, introduced in 2005)

The job grading system is an HRM system focusing on the functional roles and responsibilities of managers, which is linked with each business and organization and geared toward the accomplishment of their business goals, and is designed to keep a good balance between the responsibilities of managers and their compensation, thereby strengthening the competitiveness of the entire company.

Three different career courses (for non-managers, introduced in 2003) Each career course provides compensation and evaluation systems based on their features.

Employee-Related Data of Asahi Glass

Number of Employees

(as of December 31, 2008, excluding those dispatched to other organizations)

Classification		Male	Female	Total	Percentage of females
1	Managers		71	1,798	3.9%
	E Course*1	651	77	728	10.6%
Non-	S Course*2	3,116	44	3,160	1.4%
managers	C Course*3	15	409	424	96.5%
	Subtotal	3,782	530	4,312	12.3%
	Total	5,509	601	6,110	9.8%

*1. Applied to employees who will promote business strategies and implement enhancement measures for their departments as key persons

2. Applied to employees who will contribute to production activities by acquiring, improving, and handing down production technologies and skills

*3. Applied to employees who will be in charge of conducting clerical work accurately and quickly

Other Employment Data

	Male Female		Total	
Average age	42.0	37.3	40.9	
Average length of service	18 years and 7 months	11 years and 5 months	17 years and 8 months	
Average overtime working hours	23.1 hours/month (average for members of the labor unic			

Career Development

Asahi Glass has in place the Challenging Career System. This is a system to encourage employees to choose jobs in which they can use their expertise, and through this system we place the right people where necessary, such as in newly launched businesses and areas that need to be reinforced. This serves as a further stimulus to our organization.

Also, we have the Professional System and the Meister System to utilize and evaluate those having advanced technologies and skills.

Challenging Career System

- An in-house voluntary recruitment system, under which employees apply to job offers publicly given by in-house departments once a month (applied to 13 employees in fiscal 2008)
- An in-house "free agent" system, under which employees register the jobs that they wish to perform at other departments, and undergo screening individually according to their details of registration (applied to four employees in fiscal 2008)

Professional System

A system under which managers having extremely advanced technological skills and expertise are used as high-level professionals, and evaluated and treated appropriately (applied to 22 managers as of December 31, 2008)

Meister System

A system under which engineers having extremely high skills and knowledge are used as highly skilled engineers, and evaluated and treated appropriately (applied to seven engineers as of December 31, 2008)



Information about Asahi Glass's human resources development: http://www.agc.co.jp/english/csr/employee/es02.html

Further Employment and Promotion of Female Employees

At Asahi Glass, the number of female non-managerial staff (excluding those temporarily dispatched to other companies) is 530, accounting for approximately 12.3% of all non-managers. The number of female managers is 71, 11 more than the previous year, and accounts for approximately 3.9% of all managers. We will continue to build necessary systems and examine measures to increase the number of female employees and managers toward the achievement of Diversity, which is one of our shared values under our Group vision.

Employment of Retirees

In April 2006, following the revision of the Act Concerning Stabilization of Employment of Older Persons, Asahi Glass introduced a system to continuously employ retiring non-managers who meet the personnel criteria for continuous employment, which are provided for in the labor-management agreement, with the aim of utilizing the expertise, technologies, and skills of retirees.

Subsequently in April 2008, we introduced a new continuous employment system in view of increasing social need for the employment of retirees, after conducting surveys to identify the retirees' needs and the workplace needs for the securing and transfer of technologies and skills. Under the new system, we have expanded the range of employees who are eligible for the system, thereby enabling more employees to continue to work until they reach the legal retirement age.

We are committed to providing work opportunities where employees with diverse backgrounds and high motivation can fully display their abilities and make use of their experience, regardless of age.

□ Continuous Employment Rate of Retirees

FY	Number of reem- ployed retirees	Number of fixed age retirements	Continuous employment rate
2006	20	84	23.8%
2007	46	126	36.5%
2008*4	94	159	59.1%

*4. In April 2008, we revised the continuous employment system for non-managers to expand the range of employees who are eligible for the system. As a result, the rate increased from the levels up to 2007.

Employee Satisfaction (ES): Employee Job Satisfaction and Pride in Accomplishment

Employment of People with Disabilities

In order to realize the concept of Diversity, Asahi Glass has increased the employment of people with disabilities. In fiscal 2008, our employment rate of people with disabilities reached 1.95%, exceeding the rate designated by law (1.80%) for the first time. We will continue to make efforts to further raise the employment rate by fostering cooperation with relevant organizations.

Employment Rate of People with Disabilities

FY	Number of people with disabilities (actual number)	Employment rate
2004	87	1.60%
2005	82	1.51%
2006	83	1.54%
2007	94	1.74%
2008	105	1.95%

The Special Subsidiary, AGC Sunsmile, Inc.

In fiscal 2002, Asahi Glass established AGC Sunsmile, Inc. as its special subsidiary with a view to increasing the employment of people with intellectual disabilities. Employees of this company are engaged mainly in cleaning at the business sites and the company residences.

In fiscal 2008, AGC Sunsmile established new bases in the Sagami and Osaka districts in addition to its existing base in the Yokohama district. We will continue to increase the number of these bases and expand the jobs and staff of the company so as to achieve more employment of people with disabilities.

Work-Life Balance

In order to help its employees perform their jobs with ease of mind and fully demonstrate their abilities at every stage of their lives, Asahi Glass is improving its workplace environment to make it more comfortable and implementing measures to help employees keep a good balance between their work and private lives.

Supporting Employees in Balancing Their Work and Childcare

We have long been providing employees with better conditions than legally required under our childcare support systems. In 2007, we revised the systems in order to further strengthen them. Moreover, we were successfully certified as a childcare-



supporting employer in April 2008 by the Tokyo Labour Bureau of the Ministry of Health, Labour and Welfare based on the Law for Measures to Support the Development of the Next Generation, for our action plan reported in 2005. Accordingly, we are authorized to use the certification mark, which is shown on the right. We will continuously review our support systems to make them easier for employees to use and will also introduce new systems upon their request.

□ Comparison between Asahi Glass's Childcare Leave System and Legal Requirements

Legal requirements	Asahi Glass's system		
Childcare leave			
Available until the child becomes one year old (or eighteen months old, depending upon conditions) if the spouse is working	 Available until the child becomes eighteen months old or until the end of the April im- mediately following the child's first birthday, whichever is longer, regardless of whether the spouse is working or not Available as a special "short-term childcare leave" if the leave period is less than one month 		
Shortened working hours for childcare			
Available until the child becomes three years old Employers are required to make efforts to shorten the working hours of employees with children aged three years or older, until the child enters elementary school.	 Working hours can be shortened by up to 2.5 hours per day until the child completes third grade education at elementary school. This system is available on a multiple basis. After a certain period has passed since start- ing to use this system, the employee may alter their application details (the number of hours they wish to have reduced, their work starting and finishing times, etc.) 		
Capping of the number of overtime ar	nd holiday working hours for childcare		
The overtime working hours should not ex- ceed 24 hours per month or 150 hours per year if an employee with a pre-elementary school-aged child so requests.	 If an employee so wishes, their overtime and holiday working hours may be reduced to zero until their child completes third grade education at elementary school. 		
Other			
-	 Flexible working hours without fixed "core working hours" Support for using facilities and services for childcare under the selective benefits pack- age system A system in which employees, as a general rule, assume the same job after returning from leave 		

Experiencing the Difficulty and Pleasure of Childcare during the Short-Term Childcare Leave

In January 2008, at the time of the birth of my second child, I took short-term childcare leave for a month. We are a nuclear family household and our parents do not live near us. During the leave period, I was mainly responsible for taking care of my first son. My wife was hospitalized for two weeks after the delivery of our second child, and I felt so grateful that I was able to utilize the childcare leave system thanks to the generous support of my manager and colleagues, who kindly let me take the leave even though the workplace was so busy at that time.

As an inexperienced housekeeper, I got up at 6:00 am to prepare a lunch box for my son. I indeed had a lot of things to do throughout the day, including taking my son to and from kindergarten, taking care of him at home, cleaning the house, doing the washing, going shopping, and cooking. It was harder than I expected, but it was also a great pleasure and comfort for me to be able to spend a lot of time with my son. It was really a wonderful experience for me. Also, by taking care of my son, who felt uneasy and lonely being detached from his mother, I was able to support my wife mentally.

Thanks to this experience, I was able to broaden my view and learned how to multitask in a more efficient manner. Although the leave period has finished, I have been continuously supporting my wife in household work and childcare. At the workplace, I devote myself more to my work than before, and at home I concentrate on housework and childcare. I use my commuting time to switch gear and make effective use of my time.

You cannot take advantage of childcare leave so many times in your life. I strongly recommend male employees who hesitate to take this leave to take it. The leave indeed gave me an opportunity to strengthen my family ties, and also to grow myself.



Research Center, Asahi Glass Co., Ltd.

Supporting employees in balancing their work and family care

Asahi Glass is also actively supporting employees in working and caring for their family members in a compatible manner.

Systems to support the compatibility of work and family care

- Employees can take family care leave or work shorter hours for up to one year per family member who needs to be cared for, and up to twice for the same member, as required.
- Family care leave of less than one month is treated as special "short-term family care leave."
- Flexible working hours without fixed "core working hours"

FY	No. of employees who took childcare leave	No. of employees who took family care leave
2004	40	1
2005	29	1
2006	30	3
2007	43*1 (including two employees taking short-term childcare leave)	5 (including one employee taking short-term family care leave)
2008	42*2 (including two employees taking short-term childcare leave)	2

Employees taking Childcare/Family Care Leaves

*1. of which two employees were male*2. of which three employees were male

Annual paid leave

The percentage of the leave consumed came to 91.4% (average for the labor union members) at Asahi Glass in fiscal 2008, up 0.4% from the previous year.

In fiscal 2008, we introduced a half-day leave system to enable employees to use their paid leave more efficiently and flexibly.



Reducing overtime working hours

Regarding overtime work, Asahi Glass has the following principles: (1) to reduce overtime and holiday work through the improvement of work efficiency; and (2) to prevent employees from working overtime without pay. Based on these principles, we are committed to managing the daily work of employees based on sufficient communication between managers and subordinates, and complying with the Labor Standards Act with regard to labor-management discussions and related procedures. Also, by precisely recording the arriving and leaving times, we identify how long each employee stays at the workplace. We have a system to clarify the reasons for excessive overtime work, to improve the situation and to manage employees' working hours appropriately.

As for the prevention of health damage due to overwork, we have our own criteria, which are stricter than the law requires. Based on these criteria, we mandate overtime workers to consult the industrial doctor, thereby ensuring their health in advance.

We will continue to implement these measures to provide all employees with an environment where they can work with high motivation in good health.

Labor-Management Relations

In Asahi Glass, the Asahi Glass Labor Union is organized. In labormanagement negotiations, both the labor and the management sides take a logical and reasonable attitude to solve problems through discussion. The labor union negotiates with the management on working and other conditions for its members.

In addition to open daily communications, the labor union management and directors of the company have a standing council on the entire business management at least twice a year.

Protection of Human Rights and Prevention of Harassment

The AGC Group, based on its principles under "Respect for People" set forth in its Charter of Corporate Behavior, is committed to respecting human rights, rejecting discrimination, forced labor and child labor, and never being involved in the violation of human rights. Also, employees are enlightened concerning this matter when senior executives visit their business sites or auditors conduct audits there.

Regarding respect for human rights and the prohibition of discrimination, Asahi Glass explicitly states these policies in its Code of Conduct and employee regulations, and ensures that all employees abide by them as part of their basic responsibility, through such measures as giving them relevant training. Also, we have a special section for human rights protection and promote work environments that are free from discrimination. For early detection of problems, we offer both internal and external contacts whom employees, in the event that they become victims, can consult with ease of mind. Reported cases are treated through the retraining of perpetrators combined with an emphasis on reforming the consciousness of the workplace.

As for harassment, we conduct seminars for top executives and training for managers to prevent harassment. In addition, we are improving the skills of our staff in charge of personnel affairs and counsellors on sexual harassment so that employees can use a better and easier consulting system.

Stakeholder Dialogue The Future Direction of AGC Group's Community Relations Program



The AGC Group regards it as one of its responsibilities as a corporate citizen to conduct community relations activities in cooperation with local communities and in harmony with the global environment. At this fourth stakeholder meeting, we exchanged opinions with our stakeholders on the challenges to be met and the approaches to be taken by the Group with regard to community relations based on the shared values of the Group vision *"Look Beyond"*.

Challenges for the AGC Group, and Expectations of Society

Mr. Kudo: We at the AGC Group aim to become a corporate group that is counted on and trusted by the global community, a group whose continued success and longevity is deemed important. To this end, we are committed to contributing to society through our products and services as well as implementing community relations activities with goals shared by the entire Group. The AGC Group operates businesses in approximately 30 countries and regions and is conducting community relations activities at each of its bases across the world. We do not, however, have a common global policy for our community relations program, which has led to some problems. Specifically, we do not have a clear picture of all the community relations activities conducted throughout the Group, so we are unable to fully explain them to our stakeholders. If we have a common policy, we can better explain to our stakeholders why we are engaged in particular activities and more easily build relations of trust with them. In addition, our employees will be more firmly united, feeling that they belong to a company that is giving something back to society. We have therefore come to regard it necessary to clarify the AGC Group's policy on community relations. To facilitate this, we think it important to (1) continue the activities; (2) conduct them in a consistent manner; (3) value existing activities; and (4) take a bottom-up approach to meeting local community needs.

Mr. Shimosawa: As an NGO, we would like companies to conduct community relations activities on a long-term basis. If NGOs, corporate employees, and local communities cooperate in grassroots activities with a long-term outlook, they will be able to achieve even greater results. Some prefer short-term activities with visible achievements as well as activities that can be easily publicized through photos, but what is really essential is that we earn the trust of local residents to the extent that they think, "We can rely on this company when we have a problem." In this context, I do think that it is quite important for companies to conduct grassroots activities based in local communities.

Mr. Azuma: As a prerequisite for companies conducting community relations activities, they must be able to explain why they are doing so to their stakeholders. There are a whole range of problems that need to be addressed so companies have to decide which problems to focus on. A company must first identify what is important to their stakeholders as well as their own business priorities before they can give persuasive explanations to

Date:

9:30 to 11:30 am on Friday, Feb. 20, 2009

Place:

Head office of Asahi Glass (in Tokyo)

Participants



Mr. Tomihiko Azuma

Department Manager, Social Contribution Office, CSR Promotion Unit, NEC Corporation



Mr. Takashi Shimosawa

Secretary General, Japan NGO Center for International Cooperation (JANIC)



Mr. Shinji Nagase Liaison Officer, United Nations Volunteers (UNV) Tokyo Liaison Office





their stakeholders, which includes the company's employees and shareholders. I think the most important thing is to prioritize the problems and formulate appropriate strategies to deal with them. **Mr. Nagase:** Since the birth of humankind, people have naturally helped each other in their daily tasks. We at the United Nations Volunteers therefore would argue that every community engages in some kind of volunteer activity, even if the word "volunteer" is not specifically used. Companies will find it much easier to conduct a range of activities if they first make contact with local communities through volunteer activities. I therefore think it quite meaningful for companies to conduct volunteer activities as part of their community relations program.

Mr. Ito: AGC Flat Glass (Thailand) has been around for 45 years now and is deeply rooted in Thai society. We have been conducting a variety of community relations activities including outdoor environmental education for elementary school students and reforestation activities such as planting trees and restocking rivers with young fish. We also grant scholarships, organize seminars on glass at local universities, and accept interns as ways of supporting local education. We have been conducting these activities for a long time now and, in my opinion, we can do this because Thai people, living in a society strongly influenced by Buddhism, take it for granted that the "haves" have a responsibility to help out the "have-nots." In Thailand, it is quite natural—not to mention mandatory—for companies that are doing well to give something back to society. I think this is one of the core beliefs underpinning Thai society.

The AGC Group's Draft Basic Policy on Community Relations—How to Intertwine Social Issues and Business Requirements

Mr. Kudo: The AGC Group has formulated its draft basic policy on community relations. We are determined to address social problems through our business activities as well as to conduct social activities as part of our corporate social responsibility and to support employees' independent volunteer activities toward the achievement of a healthier global environment and community. After receiving feedback on this draft from both inside and outside the Group, we will finalize the policy. As for which field of activities to prioritize, we are considering the three themes of "human resources development," "harmony with local communities," and "contribution to the natural environment."

Mr. Azuma: According to the CEO and COO messages in the AGC Group CSR Report 2008, the Group gives first priority to environmental protection, and so I think the Group will be able to develop strong community relations by prioritizing environmental problems above other issues. For the incorporation of community relations activities into a corporate CSR program, it is necessary that the themes of these activities are closely and consistently related to the themes of the company's CSR. Also, one should address separately the problems that can be solved through business activities. The general themes, however, should be the same for both. This is the basic approach that I would recommend because it is clear and easy to understand. In the actual conduct of

Facilitator



Mr. Yoshihiko Yamabuki

Senior Producer and General Manager of the Kansai Business Division, General Press Corporation

Participants from the AGC Group



Hiroyuki Ito

President of AGC Flat Glass (Thailand) Public Co., Ltd. Participating via videoconference



Shinichi Kawakami

Executive Officer, General Manager of Human Resources and Administration Center, Asahi Glass Co., Ltd.



Eiichi Kudo

Executive Officer, General Manager of CSR Office, Asahi Glass Co., Ltd.



these kinds of activities, however, the company will be faced with problems that are not directly related to its business. In particular in Japan, there tends to be pressure on companies to conduct activities that are beneficial to society even in fields that are not closely related to their business. In such cases, it is important for all employees to understand why they need to conduct the activities.

Mr. Shimosawa: The three themes mentioned earlier make sense to me because, my organization, as an NGO, deals with them on a profound level. With regard to "human resources development," it is important to help the socially disadvantaged, who tend to be isolated from the rest of society, to be truly accepted as valued members of society. You will be able to conduct activities to this end in a more effective manner by utilizing the expertise of NGOs, such as ours.

Mr. Nagase: The progress of volunteer activities throughout the world, as described in a report submitted to the Secretary-General of the United Nations, underpins the appropriateness of the three themes, namely "human resources development," "harmony with local communities," and "contribution to the natural environment." In particular in terms of human resources development, the report insists that it is extremely important to assist young people, who account for a large percentage of the populations of developing countries, to acquire the skills they will need to support themselves in the future. We also have the Millennium Development Goals^{*1} as a common challenge to be met by the international community. Toward the achievement of these targets by 2015, the governments of developed countries are required to provide more support to developing countries through official development assistance (ODA). Volunteer activities must also be conducted to this end. We at the United Nations Volunteers regard it one of our missions to boost volunteerism around the world, and so we are very happy that the AGC Group is committed to supporting

*1. The Millennium Development Goals (MDGs) is an integrated framework of international development goals that were adopted in the 1990s and is based on the United Nations Millennium Declaration, signed in September 2000. MDGs are a set of eight goals that should be met by 2015, including the eradication of extreme poverty and hunger and the achievement of universal primary education.



volunteer activities in its draft basic policy. We, in turn, would like to support the Group in its implementation of the policy.

Mr. Azuma: In Asia, presidents of subsidiaries and heads of local plants often assume leadership in volunteer activities. Inspired by them, their employees also become highly motivated to begin participating in such activities as a natural progression. In Europe and North America, on the other hand, volunteer activities are usually conducted within local communities and so people have different ideas about corporate volunteerism. In light of this, NEC makes sure to explain to local employees in the relevant regions why the company's community relations activities are necessary, insisting that such activities will have a positive effect on business performance. We then ask local employees to formulate an original plan for their own volunteer activities based on local conditions. In Japan, volunteer activities are not generally carried out by either local communities or companies, and so it is important to get employees involved. Initially, we encourage them to start with something very easy, such as collecting used stamps to send to schools in developing countries. Giving them positive feedback motivates them to move on to doing something more difficult. We therefore take different approaches in Japan, in other Asian countries, and in Europe and North America.

Mr. Ito: I am leading the community relations program undertaken by my company in my capacity as president. Over our 45-year history, however, we have already established a corporate culture in which employees proactively make contributions to society. We can take various measures to facilitate our activities, but the ultimate ideal situation is for employees to become independently involved in such activities. Among many other ways of raising employee awareness, I believe it is important for top executives to make efforts to cultivate this kind of culture.

Strengthening Community Relations through the Collection and Sharing of Information

Mr. Azuma: I think it is important for management to give clear messages on the underlying concept of community relations to employees and tell them about specific activities through a variety of media. At NEC, we send a "top message" to all employees throughout the world every single year, explaining why it is necessary for our group to conduct the activities. We also give around 3,000 examples of specific activities on our website in Japanese and English, to make the information available to all. By doing so, we can assure the top executives of our local operations that their activities are recognized and disclosed on a global scale. In addition, we publish a yearly magazine that outlines the beneficial activities conducted by our local operations and distribute 6,000 copies of it both inside and outside the company. Furthermore, we make it a rule to cooperate with NGOs regarding the activities we are supporting at head office. By utilizing the wide networks of the NGOs, we can increase the effects of our activities and provide relevant information over a wider area.

Mr. Shimosawa: According to a survey we conducted last year, local arms of Japanese companies do not often collaborate with NGOs. If, however, they seek the cooperation of local NGOs right from the planning stage, the NGOs, with their strong local knowledge, will help out with negotiations and arrangements. This kind of assistance is a very important aspect of the role that can be assumed by NGOs. If you want to promote community relations from the bottom up, it is important to share success stories with employees, clearly showing them how the results were achieved and how the activities were promoted, then solidify their commitment with the idea that starting locally will eventually provide opportunities to make global contributions.

Mr. Azuma: We also think it is essential to evaluate employee community relations activities. For example, we disclose the evaluation criteria for activities in which employees participate, and management gives annual commendations to those who have produced outstanding results. Such commendations motivate employees even more. Starting this year, we will ask those in charge of promoting community relations at each of our bases to participate in the evaluation process to increase its transparency. Mr. Ito: I had not thought about cooperating with NGOs and evaluating community relation activities and so what I have heard today at this meeting will be very useful to me.

Mr. Nagase: Volunteer activities are basically unpaid so it is critical

to acknowledge and reward participants in non-monetary ways and make sure they get some satisfaction out of their activities. People's values, however, differ by region and we need to acknowledge participants in locally appropriate ways.

Mr. Kawakami: I once developed a grand design for our community relations program, but it soon proved unsustainable. One of the reasons might have been that I thought it necessary to keep our business and community relations activities clearly separated from each other. Listening to you today, however, I have realized it would better for us to start with activities that are closely related to our business. Such activities will be easier to sustain. I also strongly agree that it is important to collect information and share it both inside and outside the company. This is undoubtedly essential for a company to maintain accountability.

Mr. Kudo: This meeting has given us a great opportunity to hear from our external stakeholders about the future direction of the AGC Group's community relations program, for which we are thankful. Within our company, some have argued that business and community relations activities should be kept separated, but the AGC Group's uniqueness is based upon the technologies and skills it commands. We should utilize these advantages not only in the solution of social problems, such as environmental issues, but also in combination with ongoing initiatives to bring about a more peaceful world and so on. This meeting has made us feel confident that we can gain the support of both our employees and other stakeholders.

The AGC Group tends to act only after formulating a complete plan. Regarding social problems, however, I think it is better for us to act first so that we may contribute to the solution of problems as early as possible. You have made some very thoughtful comments about how we can push our activities further. We will take definite steps toward achieving our target, formulating necessary measures as required as we actually implement our plan. Thank you so much for your time today.

Community Relations

Contribution as a Good Corporate Citizen



The AGC Group is engaged in a variety of community relations, with the aim of contributing to further enhancing a healthier society as a responsible corporate citizen.



Activities for harmony with Community local communities



Activities for contribution to the natural environment

Glass Power Campaign to Promote Laminated Glass for Disaster Resistance (Japan)

People Environment

The AGC Group has been implementing the Glass Power Campaign since October 2005 to promote the use of laminated glass for disaster resistance. We have developed this type of glass by applying the technology developed for our automotive laminated safety glass to large-sized architectural glass. This glass is uniquely designed not to shatter into tiny pieces even if it breaks. Recently, a number of natural disasters have struck Japan, including earthquakes and typhoons. On these occasions, some people were injured by broken glass and evacuation centers were rendered unusable due to broken window glass. In light of this fact, we regard it one of our missions as a glass manufacturer to foster the use of glass that contributes to safer living. To fulfill this mission, we have been donating laminated glass for disaster resistance to evacuation centers throughout Japan, and giving lectures on disaster prevention and global warming at elementary and junior high schools. In fiscal 2008, we made five donations of our highly disaster-resistant glass and gave 11 lectures at schools.

In December 2008, we gave a presentation on the Glass Power Campaign at a preliminary meeting of the Third Asian Ministerial Conference on Disaster Risk Reduction (AMCDRR) held by the UN International Strategy for Disaster Reduction (ISDR) in Kuala Lumpur in Malaysia. We received support for the Campaign from participants from Bangladesh and Fiji, who said, "The activity is really great. In any country, we must give first priority to providing people with safe evacuation centers."



Lecture at a school





Reporting the activity at a preliminary meeting of the AMCDRR

Continuously Contributing to Local Education and the Natural Environment for the Sustainable Development of the Neighborhoods of the Plants (Thailand)

People

Community Environment

AGC Flat Glass (Thailand)(AFT) is engaged in the manufacture and sale of various types of float glass. AFT has been continuously granting scholarships since 1974 and promoting tree planting and the release of young fish into the river since 2003, in order to conduct its manufacturing in harmony with the neighborhoods of its plants.

In October 2008, its employees and their families (500 people), as well as the pupils and teachers (80 people) of a local elementary school to which AFT donated a school building thirty years ago, planted 3,000 mangrove trees and released 8,000 young fish into the river in Rayong. In the afternoon, they moved to the school, where the company granted scholarships to 18 pupils and donated expenses for the repair of the school building. Also, initiatives undertaken by the pupils for the environment and water quality were introduced, and all participants enjoyed various games. Moreover, AFT held a painting competition on the theme of the environment and later made a desktop calendar comprising copies of the prize-winning works.



Releasing a lot of young fish

Repair and Extension of School Buildings by Employees (Thailand)

People Community

AGC Automotive Thailand (AATH), which manufactures and sells automotive glass, has been annually dispatching its employees to a school to repair or extend its building since 2003. The school is chosen from among the schools from which the employees graduated. After a school is selected, engineering employees draw up the necessary designs for its building, AATH pays for the construction materials, and the employees visit the school on a holiday to do repair or extension work. In recognition of their work, the employees, who are graduates of the school, become local heroes, and AAHT can thereby foster even better communications with local communities. In fiscal 2008, the dispatched employees constructed multipurpose facilities, a health room equipped with medicines, and a computer room with PCs and printers. In addition, they improved the playground and repainted the outer wall of the school.



Helping one another to repaint the wall

Becoming a Local Environmental Leader through Proactive Recycling (United States)

Community Environment

AGC Automotive Americas has its bases in the United States, Canada, and Mexico for the production and sale of automotive glass. Its plants in Elizabethtown, Kentucky and Bellefontaine, Ohio both achieved zero emissions in 2006 and have been actively conducting local environmental activities. In fiscal 2008, the plant in Elizabethtown collected about nine tons of end-of-use electrical products and also collected and recycled more than 760 liters of waste oil in support of the recycling activities conducted by local communities. Also at the Bellefontaine plant, employees conducted local cleanup activities under the slogan of "Make Recycling a Good Habit" and received a commendation from the local government in recognition of their contribution to the prevention of pollution.



Recycling team members, recognized as local environmental leaders by neighbors

Accepting Trainees on the Management of Chemical Substances under the "Eco-Internship" Program (Japan) People Environment

The "Eco-Internship" is a program implemented by the Ministry of the Environment since 2007, under which university students (including postgraduates) are dispatched to the environmental management departments of companies to undertake work experience in environment-related jobs. In September 2008, as in 2007, AGC Chemicals Company accepted two students under the program for two weeks with a view to contributing to the development of environment-conscious human resources. They learned chemicals management and environmental activities, and also received training on the effective use of energy and resources in the manufacturing process of pharmaceuticals at Asahi Glass Kashima Plant.



Trainees compiling a report about the two-week experience

Contributing to Employment Creation through the Wooden Pallet Manufacturing Business (Indonesia)

Community

P.T. Asahimas Chemical (ASC), which manufactures and sells chemicals such as caustic soda and vinyl chloride in Indonesia, creates new employment through manufacturing wooden pallets for product transportation. ASC began this activity in 1999 to help people suffering under the economic crisis based on the idea: "better to provide a fishing rod rather than fish." As a result of giving easy-to-understand instructions to those engaged in the manufacture of the pallets on a continual basis, including how to manufacture the pallet and manage the materials, ASC has contributed to promoting local employment. It has also become possible for ASC to procure pallets meeting its quality criteria at appropriate prices by the set deadlines. At present, ASC is examining creating employment through projects other than pallet manufacturing.



Members of the pallet manufacturing company and ASC

Community Relations

Visiting Orphanages to Have Fun with the Children (South Korea)



AGC Display Glass Ochang, which manufactures glass substrates for flat panel displays in South Korea, believes it necessary to promote community relations on a steady and continuous basis, in order to conduct its business operations in harmony with local communities. Based on this idea, the employees continuously visit neighboring orphanages to cheer up the children. In December 2008, the president and employees visited Haeneung Children Nursing Home, where at least 100 children were living together. The participants enjoyed playing traditional games with the children, gave Christmas presents, and had fun with them.



Employees visiting Haeneung Children Nursing Home

Planting Mango Trees to Give Employees and Their Families an Opportunity to Raise Environmental Consciousness (Indonesia)

Environment

P.T. Asahimas Flat Glass (AMG) manufactures and sells float glass for buildings and automobiles in Indonesia. AMG aims to reform its plants into "greener and cleaner" ones by reducing the environmental impact from its manufacturing processes and actively contribute to the global environment with the participation of its employees. In fiscal 2008, AMG gave out more than 1,500 young mango trees to all employees and some of its partner companies, asking them to plant the trees with their families in their gardens. This was aimed at raising the environmental awareness of the employees and their families and to contribute to prevent global warming. In addition, AMG planted trees within its plant premises and held a competition based on the growth speed of the young trees planted by each department.



At the Jakarta plant, the plant head gave out young mango trees to employees.

Forest Volunteer Activities to Protect Biodiversity (Japan)

Environment

The AGC Group promises to give consideration to the influence of its activities on the natural environment, including climate change and biodiversity, in its Basic Environmental Policy. Accordingly, we provide employees with appropriate training to help them increase their environmental awareness and knowledge for environmental improvement. As part of this activity, we held a "forest volunteer" event in November 2008, with an aim to raise employees' environmental consciousness through tree thinning. On the day, about 30 employees and their families participated in an event held in a Kanagawa prefectural forest called "21st Century Forest." The volunteers cut down weakened trees following the advice of the instructors, thereby allowing sunlight to reach deep into the forest, which was previously too densely populated with trees, to foster the growth of the remaining trees.



Employees and their families participating in tree thinning

Reducing Both Waste and CO₂ by Composting Canteen Garbage (Japan)

Environment

AGC Display Glass Yonezawa (ADY), which manufactures glass substrates for flat panel displays, achieved zero emissions in 2004 and has since been improving the quality of its recycling activities. As part of this effort, ADY began composting garbage from its canteen in 2008. The garbage, which amounts to about 30 kg per day, is broken down by fermenters into 800 liters of liquid fertilizer. As a result, ADY has reduced CO₂ emissions from the incineration of garbage by 1,746 kg per month, in addition to reducing waste generation. The liquid fertilizer, which can be easily carried, is very popular among employees and partner companies, and ADY plans to further expand its use in the future.



Inputting garbage into the processing machine

Community Relations by Asahi Glass (Unconsolidated)

Asahi Glass is committed to contributing to a healthier society by donating to academic and research activities and providing support for glass art works. We also support local communities, including by organizing local events within our plants, providing free access to the owned fields, and cleaning up around their premises. Furthermore, we belong to the "1% Club"*¹ of the Japan Business Federation, a membership which we believe further facilitates our community relations.

- *1. A voluntary membership organization of individuals and companies established by the Japan Business Federation in November 1990, which donates at least 1% of the members' ordinary or discretionary income for community relations
- Breakdown of Financial Expenditure on Community Relations of Asahi Glass (Unconsolidated) by Category (for fiscal 2007)



Activities through Scholarship Foundations

Asahi Glass Scholarship Foundation

Since 1957, Asahi Glass has been offering scholarships to outstanding Japanese and foreign exchange students requiring financial assistance through the Asahi Glass Scholarship Foundation, aiming to help develop globally competent human resources.

□ Results in 2008

	Target	Number of students	Amount
Asahi Glass Scholarship Foundation	University students	43	40.8 million yen
	Foreign exchange students	19	24 million yen

Overseas Scholarship Foundations

As a means of giving back some of its profits to society and in commemoration of the 75th anniversary of its foundation, Asahi Glass established scholarship foundations overseas in Thailand and Indonesia, where it has a long history of business operations on a relatively large scale. The foundations grant scholarships to local high school and university students.

□ Results in 2007

	Target	Number of students	Amount
Asahi Glass Thailand Foundation	University students	8	96,000 baht (Approx. 370,000 yen)
Asahi Glass Indonesia Foundation	University students	54	97 million rupiah (Approx. 1.26 million yen)
	Senior high school students	40	37 million rupiah (Approx. 480,000 yen)

Students who receive those scholarships do not have to repay the money or subsequently work for the AGC Group.

The Blue Planet Prize Awarded by the Asahi Glass Foundation

The Asahi Glass Foundation strives to create a richer, more vibrant society and human civilization. To this end, the Foundation supports research and recognizes efforts to solve global issues in the leading-edge scientific and technological fields.

The Blue Planet Prize is an international environmental award anually presented to two individuals or organizations for outstand-

Main programs implemented by the Asahi Glass Foundation

- 1. Research Grant Program
- ①Research grants for natural science
 - (Research encouragement grants, research continuation grants for young researchers, and "step up" grants)
- $\ensuremath{\textcircled{}}$ Research grants for human and social science
- (Research encouragement grants, research continuation grants for young researchers, and "step up" grants)
- ③Task-oriented research grants
- Overseas research grants (in Thailand and Indonesia)
- ③Research grants-related activities (award ceremonies, research result presentation sessions, etc.)

2. Commendation Program

①The Blue Planet Prize

- Award ceremony
- Commemorative lectures by the winners
 ②Environment-related activities
- Conducting annual survey on global environmental issues
- Holding events and dispatching information about the global environment, including the Asahi Glass Foundation Special Round Table Conference on Global Environment Problems, which comprises the directors and councillors of the Foundation

3. Publications

- Annual reports and af-News (newsletters)
- Publications related to the Research Grant and Commendation Programs

Results in fiscal 2008

Total number of grants: 143 (117 domestic and 26 overseas)
 Total amount of grants: 235 million yen

ing achievements in scientific and technological fields, which have helped provide solutions to global environmental problems. The winners in 2008, the 17th year, were Dr. Claude Lorius from France and Professor Jose Goldemberg from Brazil. The award ceremony was held in Tokyo in the presence of Their Imperial Highnesses Prince and Princess Akishino on November 12, and the commemorative lectures were held at the United Nations University on the following day. Dr. Lorius and Professor Goldemberg gave lectures entitled, "Climate and Environment—50 years of adventures and research in Antarctica" and "A sustainable energy future," respectively.



The Blue Planet Prize award ceremony

Communication

Connected with Society through Relations of Trust

Concept

The AGC Group actively and appropriately discloses its corporate information in a timely manner so as to maintain sufficient communication with its stakeholders. Such frequent communication helps us incorporate their opinions and requests into our CSR-related activities and achieve their understanding and support of our activities.

Approach Increasing the Trust of Stakeholders through Sincere and Fair Communication

Public Relations

The AGC Group established its Group Communication Guideline based on the recognition that it is important to dispatch its information appropriately to the world at large. We have a cooperation system between sections in charge of public relations at Asahi Glass and its affiliates in Japan/Asia, Europe, and North America, and have set up the rules on disclosing and receiving information both within and outside the Group. Through these measures, we are fostering appropriate information disclosure and prompt information sharing across the Group, thereby maximizing our corporate value and promoting the integrated management of the Group.

As for the timely disclosure of corporate information, Asahi Glass appoints persons in charge of timely information disclosure from among the employees of its In-House Companies/SBUs and major affiliates, and the Corporate Communications & Investor Relations Division receives information from these staff. In addition to this system, based on the timely disclosure rules of the stock exchanges, our Timely Information Disclosure Committee holds regular meetings to deliberate and decide on the necessity of disclosure regarding the issues to be discussed by the Management Committee and the Board of Directors.

In addition, Asahi Glass discloses negative information appropriately, such as soil and groundwater contamination on its website and through press release. The Group carefully investigates the facts and promptly announce them, while receiving instructions from the government and experts.

Investor Relations (IR)

Information disclosure through various opportunities

The AGC Group is actively engaged in IR activities to help its shareholders and investors deepen their understanding of the Group by providing them with information regarding the Group's factual situation.

Various events for information disclosure

- Results briefings
- Company information sessions
- Activities for both domestic and foreign institutional investors
- Participation in briefing sessions for individual investors
- Acceptance of visits to the company
- · Holding of tours of the plants and the Research Center

Communication tools

As a part of the IR activities, the AGC Group publishes various communication tools mainly for shareholders and investors.

Communication tools

- AGC Report (corporate brochure)
- Financial Review (annual report showing the AGC Group's financial data)
- Company Overview (for investors)
- DVD introducing the company profile (for investors)
- Financial Data Book
- AGC Review (newsletter for investors)
- AGC Group CSR Report (this report)
- Website (http://www.agc.co.jp/english/ir/index.html)

Fair and prompt information disclosure

In order to achieve prompt and appropriate information disclosure, the AGC Group posts promptly disclosed information on its website, to ensure fair and timely information disclosure. In addition, the Group has a call center for individual investors.



Incorporating Internal and External Opinions in CSR Activities and Reports Results of the questionnaire on the AGC Group CSR Report 2008

The AGC Group receives opinions and comments from readers of its CSR reports through the enclosed questionnaire. As of the end of January 2009, we received 35 questionnaire replies, and we have referred to these replies in improving our CSR activities and our next CSR report.

□ Comments on the AGC Group CSR Report 2008



The percentage of respondents who chose answer 4 or 5 was zero for all three questions.

□ About the fulfillment of CSR



1 "Excellent" 2 3 4 5 "Very poor"

 Major opinions
 "It is great that the Group regards environmental protection as one of its management priorities."
 "I expect that the leadership ability of the Group will be further improved among other regions and companies as well."
 "The Group ensures the transparency and fairness of the report by introducing multiple third-party opinions to readers."

* The percentage of respondents who chose answer 4 or 5 was zero.

□ What readers would like to know more about or expect from the Group (major opinions) and our responses

• "I want the Group to clarify its priorities in CSR activities."

In the feature articles in this report, we have introduced our activities conducted on the theme of "Delivering Technology Solutions for Climate Change," to which we give first priority in CSR activities (see pages 10 to 21).

 "I want the Group to report more about its overseas companies."

We have mainly reported the activities conducted by the AGC Group and have proactively introduced overseas' examples in the Topics.

- "I want the Group to describe the targets and results more clearly in the reporting pages."
- We have added self-evaluation to the part showing the results in fiscal 2008 at the beginning of the first reporting pages for each of the activity themes (from page 25).
- "The design of the report is rather monotonous and should be improved to make it more exciting."

We have focused on the intelligibility for the feature articles, while summarizing our activities under the headings of "concept," "target" and "result" for the pages reporting our activities (from page 25). Also, we have edited the report by incorporating a lot of figures and tables.

□ Some opinions given online and our responses

On our website, we receive opinions and comments from viewers on our CSR activities and incorporate them to improve our activities and CSR reports. In the following, we introduce some of the opinions and our responses.

* Please note that due to space limitations, we have summarized some of the opinions shown below without changing the contexts.



we have tried to avoid using foreign languages except for certain proper nouns in the Japanese text. When we have had to use terms in foreign languages that are uncommon, we have added Japanese translations to enable readers to understand the sentences without difficulty.

"As a company operating in one of the countries most frequently struck by earthquakes in the world, I want Asahi Glass to manufacture safer products to ensure that nobody gets injured by broken glass, which I believe is the kind of CSR to be fulfilled by a glass manufacturer."

Under the Glass Power Campaign, the AGC Group has been donating laminated glass for disaster resistance to evacuation centers all over Japan, with a view to decreasing the number of people who get injured by broken glass in the case of earthquakes and other disasters. This highly disaster-resistant glass is composed of two glass sheets, which are bonded together by using a very robust special plastic film. The glass does not break easily, and even if it does, it will not shatter into tiny pieces (see page 54). "I want to know the details about the inquiries made to the Help Lines and how they were treated. I think it necessary for the company to disclose such information to the public."

In consideration of the employees who have used or will use the Help Lines, we will not disclose the specific details of their inquiries and concerns. Instead, we report how often the Help Lines are utilized by disclosing the number of contacts received by the Help Lines.

"As for community relations, Asahi Glass is conducting great activities that are unique to the company. Some of their activities, however, seem to have no clear relation with their business. I would like the company to conduct community relations more actively so as to be more suitable for a large business entity."

At present, we are conducting discussions to clarify the direction of the AGC Group's community relations and to formulate our basic policy on such activities. In this process, we have also listened to external opinions for reference (see pages 50 to 53). In addition, we have increased the number of activity examples introduced in the report (see pages 54 to 57). We plan to introduce a basic policy in the 2010 AGC Group CSR Report.

We have received third-party opinions about this AGC Group CSR Report 2009



Professor Katsuhiko Kokubu Graduate School of Business Administration, Kobe University

Strong Commitment to Preventing Climate Change

The most striking feature of this report is the sense it gives of the AGC Group's strong commitment to delivering technology solutions for climate change, which the Group upholds as one of its management policies. Specifically, the Group is developing materials for solar cells and fuel cells, and strengthening measures to reduce CO₂ emissions from its manufacturing processes. The Group is thus consistently promoting carbon management. Asahi Glass's strong commitment to the environment is also seen by its increasing investment in the environment. I would like the Group to set and announce either a quantitative or a qualitative target for technological development to combat climate change and work to achieve it on an ongoing basis as part of its environmental management.

Self-Evaluation of CSR Activities

The AGC Group has been improving its PDCA cycle for CSR activities. In this report, the Group describes its newly introduced self-evaluation system for CSR activities with grades of A, B and C, to improve the cycle even further. CSR activities are not always conducted in line with predefined targets. However, by self-evaluating their results, the Group can conduct its activities in a more practical manner. Self-evaluation is useful in reviewing past activities and should also be used to set the targets for the next fiscal year onward. I expect that the Group will make further progress in its PDCA cycle by making self-evaluation an essential element.

Systematic Use of the Environmental Management Indicator

Asahi Glass is setting its environmental targets based on the unique AGC Environmental Indicator, focusing on its environmental impact in Japan. The Group is systematically using this indicator, which I regard very highly. Nevertheless, the relationships between the overall and individual targets are sometimes difficult to understand in the report. Clarification of these relationships would increase the usefulness of the indicator. In addition, the transparency of the Group's environmental activities would be further improved if the environmental impact of each section within the Group was disclosed.

Introducing a Focus on Materiality

The AGC Group has been improving its CSR activities and I recommend the Group to incorporate the concept of "materiality" in its CSR activities for further improvement. For companies to conduct CSR activities, it is important to strengthen the PDCA cycle and evaluate the appropriateness of planning activities based on their materiality. To fulfill CSR, companies need to view this from both internal and external viewpoints in a well-balanced manner, for which the viewpoint of materiality is important. Being conscious of materiality can help the Group to formulate its CSR-related policies by the additional means of analyzing both internal and external matters. With severe economic conditions prevailing in fiscal 2009, the Group will face greater societal pressures including problems related to employment. Under such circumstances, measures based on the concept of materiality will increase in importance.

In Response to the Third-Party Opinions



Eiichi Kudo Executive Officer General Manager of CSR Office Asahi Glass Co., Ltd. In fiscal 2008, the AGC Group formulated its new management policy **Grow Beyond** to clarify the direction of the Group, taking into consideration long-term changes in society and the market. In our CSR report, we included feature articles on the theme of delivering technology solutions for climate change, which is one of the Group's measures for building foundations for growth. By achieving this goal, we can also contribute to solving global-scale problems in a straightforward manner. In the feature articles, we introduced how Group employees and technologies are and will be contributing to solving the problems.

CSR is related to a wide spectrum of corporate activities. In order to fulfill CSR as an integral part of our business management, we increased the frequency of the meetings of our CSR Committee and promoted information sharing within the Group. We also incorporated third-party opinions from past reports and set targets



Ms. One Akiyama President, Integrex Inc.

I believe CSR reports provide a means for companies to report their CSR activities and announce their commitment to implementing a Plan, Do, Check, and Act (PDCA) cycle for the fulfillment of their corporate mission. My comments on the AGC Group CSR report are framed by this belief.

1. Points to Be Commended

It is highly evident that the AGC Group is committed to pursuing the Group vision **"Look Beyond"** directly in its management policies and medium-term management plan, and that the Group's management is strongly determined to implement this vision. In particular, it is impressive that the Group is fulfilling its CSR in its core business by setting the goal of delivering technology solutions for climate change, which the world greatly needs, as one of its management priorities.

In the feature sections, the specific activities conducted to attain this goal are described, including not only current activities but also future activities and challenges. I found the articles in this section to be particularly interesting. The Group is reviewing its glass manufacturing methods in addition to promoting energy conservation in its manufacturing processes with a view to ultimately reducing the environmental impact of these processes. This is a clear demonstration of the Group's firm commitment to environmental protection.

The Group clearly describes its CSR activities for "Integrity," "Environment and Safety," "Diversity," and "Harmony with Society," which are based on the **"Look Beyond"** vision, as described in the AGC Group Charter of Corporate Behavior. In addition, the fiscal year targets, results and self-evaluation results, as well as the targets for the next fiscal year, are shown for each of the activity themes, making it clear how the Group is steadily implementing its PDCA cycle as part of its CSR activities. For example, in terms of "Diversity," the Group conducted an ES survey in 18 languages targeting about 40,000 employees in order to understand the actual situation, verify the effectiveness of the ES improvement activities, and develop future activities. This fact further confirms that the Group is steadily implementing its PDCA cycle.

2. Points to Be Improved

With regard to the activities targets, more specificity is advisable, including indications of numerical targets. If the targets and results were clearly shown in the "Approach" columns as well, it would be easier for readers to understand that the Group is indeed implementing a PDCA cycle with regard to the activities.

In this report, the Group describes its overseas CSR activities and provides data for the entire AGC Group worldwide, which is a commendable effort. In light of the importance of measures taken by the entire Group, however, it would be better if the CSR report included more global performance data and information about the problems faced and measures implemented by the Group overseas. This is certainly necessary for the AGC Group—a global enterprise that obtains more than half of its sales from overseas markets and has three-quarters of its employees working in foreign countries.

3. Expectations for the Future

The socioeconomic environment in which companies operate has been drastically changing since the outbreak of the financial crisis last year. Under these circumstances, only companies that conduct "socially optimal" business activities will be able to achieve sustainable growth. I hope that the AGC Group will continue to take on a range of challenges to implement its **"Look Beyond"** vision and make the world a brighter place.

for each in-house organization in a quantitative and concrete manner. We have been monitoring and self-evaluating the results in order to make more substantial improvements on a continual basis.

Furthermore, we held a dialogue meeting with our external stakeholders on our community relations, which is one of our tools for communication with various stakeholders.

We received useful comments on our activities from our thirdparty observers, specifically on the need to further develop a PDCA cycle in our CSR activities, to introduce the concept of "materiality," and to introduce more data about the activities we are conducting in foreign countries in our CSR report. These comments will be the most beneficial for the improvement of our activities. We will implement measures to meet these challenges and pursue our Group vision "Look Beyond" to ensure our sustainable growth.

We look forward to also receiving frank opinions and comments from the readers of this report.



(a) CAGC Flat Glass Europe
(c) * Solar Panels - Spain*, author Fernando Tomás (Zaragoza, Spain)
(c) * Property of ESTIF (European Solar Thermal Industry Federation)*

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