



Your Dreams, Our Challenge

Sustainability Data Book

2020

For the Year Ended December 31, 2019



Editing Policy Contents

This Sustainability Data Book contains non-financial aspects (sustainability reporting) and complements the AGC Integrated Report 2020, in which the AGC Group publishes its broad range of business strategies and business activities. The information herein is based on the Core option of the GRI (Global Reporting Initiative) and GRI standards.

Beginning in 2019, the report's title has been changed from CSR Activity Report (Detailed) to Sustainability Data Book. In addition to non-financial data, individual policies, promotional structures, activity goals and achievements are reported in regard to the Group's CSR activities. Initiatives in the countries and regions AGC is active in are introduced on the AGC Group's CSR website. The Sustainability Data Book should be viewed alongside the CSR website to foster a deeper understanding of the social responsibility activities implemented by the AGC Group.

Scope of This Report

- **Reporting Period**
2019 (Jan.–Dec. 2019)
Some information includes content from 2018 and/or 2020
- **Organizations Covered in the Report**
AGC and its 213 consolidated subsidiaries
(Group companies worldwide)
- **Primary Notation and Report Targets Used in the Report**
 - **The AGC Group**
Same as “Organizations Covered in the Report” mentioned above
 - **The AGC Group (Japan)**
Group companies in Japan including AGC
 - **AGC/the Company**
AGC Inc. (on an unconsolidated basis)
 - **Asia/Group companies in Asia**
Group companies in Asia excluding the AGC Group (Japan)

Dates of Publication

Japanese version: July 2020 (Last date of publication: July 2019)
English version: August 2020 (Last date of publication: July 2019)

Regarding Future Assumption, Forecasts and Plans

The Sustainability Data Book 2020 is based on the latest information available to the AGC Group at the time of editing this report. Nevertheless, please note that information regarding future forecasts may vary with fluctuations in the business environment that lead to unexpected results and/or phenomena.

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Message from the President



The AGC Group Vision, **“Look Beyond”**, includes a section entitled Our Mission, which is shared by all 50,000 members of the AGC Group in about 30 countries and regions worldwide. It states, “AGC, an everyday essential part of our world—AGC’s unique materials and solutions make people’s lives better around the world every day.” The vision also includes a section entitled Our Shared Values, comprised of “Innovation & Operational Excellence,” “Diversity,” “Environment” and “Integrity.” These values provide standards for the actions of every member of the Group.

The Sustainability Data Book 2020 showcases the AGC Group’s interaction with its stakeholders and the Group’s fundamental policy towards its CSR activities, and the initiatives therein.

[Click here to watch a video about the AGC Plus management policy \(about two and a half minutes in length\)](#)

For more than 110 years, the AGC Group has been contributing to people’s livelihoods and industrial development. Guided by the AGC Group Vision, we will continue to provide new materials and solutions that meet the changing needs of each era, aiming to be an essential part of the world. At the same time, we remain strongly committed to the sustainable development of countries worldwide with the hope of ensuring a bright future for our planet.

On behalf of management, I would like to express our appreciation for the understanding and support of all the Group’s stakeholders.

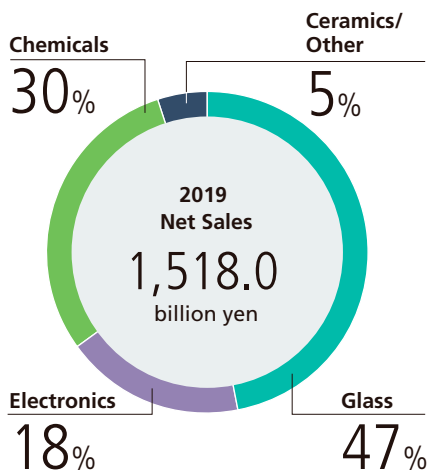
Overview of the AGC Group

Business Overview¹

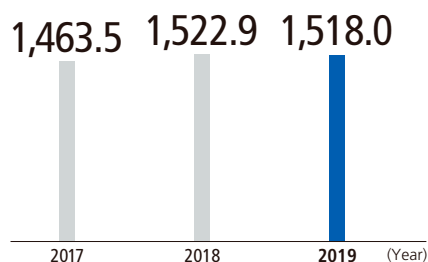
The AGC Group's business extends into four fields: glass, electronics, chemicals and ceramics. Through world-leading technologies and expertise the Group has developed over a century of technological innovation, it provides a diverse lineup of products for customers across a wide range of industries. From architectural glass and automotive glass and extending to display glass and electronic materials—as well as high-function materials such as chemicals and ceramics—the AGC Group proposes new solutions from its unique manufacturing perspective.

In order to further enrich society, the AGC Group is constantly pushing the limits in the creation of new standards of value.

● Sales Ratio²

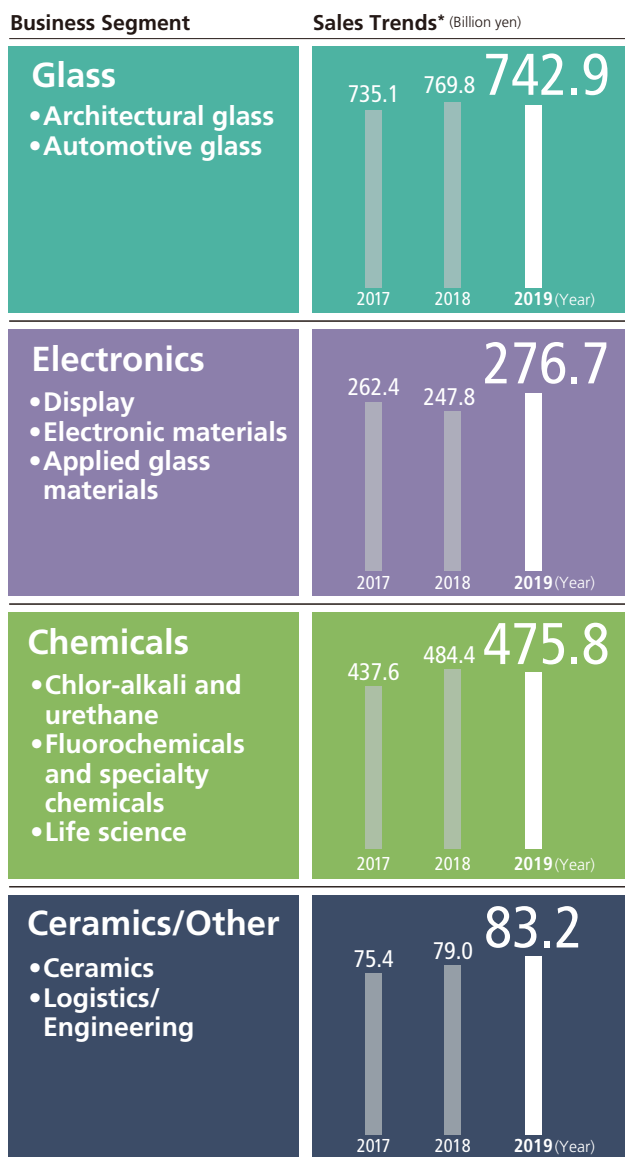


● Sales Trends (Billion yen)



¹ Numeric data is based on International Financial Reporting Standards (IFRS). (Subject organizations: AGC, Inc. and its consolidated subsidiaries / Target period: Each business year ending December 31)
² Sales Ratio calculated from sales to external customers.

● Business Segment



* Sales by business were calculated before elimination, therefore the sum will not match company-wide sales when totaled.

Corporate Data (As of the end of December 2019)

Company Name	AGC Inc.	Capital	90,873 million yen
Head Office	1-5-1, Marunouchi, Chiyoda-ku, Tokyo 100-8405 JAPAN	Outstanding Stock	227,441,381 shares
Founded	September 8, 1907	Employees	Approx. 55,600 (consolidated), 6,998 (non-consolidated)
Incorporated	June 1, 1950	Consolidated Group Companies	213 (177 overseas)

Global Network

The AGC Group's business has extended into over 30 countries and regions. In its glass business, which has markets around the world, the Group has product development and manufacturing bases in the three regions of Japan/Asia, Europe and the Americas. In its electronics business, as its client businesses are concentrated in East Asia, development and manufacturing bases are concentrated in Japan and other Asian countries.

In the chemicals business, the Group has been working on expanding its manufacturing bases with a focus on Southeast Asia, where infrastructure development is progressing.

Utilizing this global network, the AGC Group strives to expand businesses and grow even deeper roots in local communities, while exploring opportunities to develop new business areas.

Europe

Net sales: **338.7** billion yen

Operating profit: **15.1** billion yen

Employees: Approx. **17,100**

- Architectural glass
- Automotive glass
- Fluorochemicals
- Life Science

The Americas

Net sales: **172.6** billion yen

Operating profit: **5.5** billion yen

Employees: Approx. **5,300**

- Architectural glass
- Automotive glass
- Electronic materials
- Fluorochemicals
- Life Science

AGC Group

Net sales: **1,518.0** billion yen

Operating profit: **101.6** billion yen

Group employees: Approx. **55,600**

Japan/Asia

Net sales: **1,006.7** billion yen

Operating profit: **121.7** billion yen

Employees: Approx. **33,200**

- Architectural glass
- Automotive glass
- Display
- Electronic materials
- Chlor-alkali and urethane
- Fluorochemicals and specialty chemicals
- Life Science
- Ceramics

* Because operating profit by region is calculated without the deduction of local common expenses; its total will not match the group's operating profit as a whole.

CSR and Related Policies

Fundamental Approach

In order to fulfill the tenets of “Our Mission,” “Our Shared Values” and “Our Spirit” as outlined in the Group Vision **“Look Beyond”**, the AGC Group endeavors to foster trust, meet the expectations of the community, and contribute to the creation of a sustainable society.

The Group uses ISO 26000, an international standard on social responsibility, as a guideline for its global CSR activities. Moreover, in line with the AGC Group Charter of Corporate Behavior (see page 7), the Group takes voluntary action for social responsibility with the aim of gaining society’s trust and growing and developing as a company.

The AGC Group Vision Overview

The AGC Group Vision

“Look Beyond”

“Look Beyond” is the AGC Group’s corporate philosophy on which all the activities of the Group are founded.

“Look Beyond”

Structure and elements of **“Look Beyond”**



Our Mission

AGC, an everyday essential part of our world
—AGC’s unique materials and solutions make people’s lives better around the world every day—

- We, the AGC Group, aim to continue being the “first choice” solution provider for our customers by building long-term trusted relationships with them through unique materials and solutions developed using our wide-ranging material and production technologies. We will continue offering products and solutions that customers and society need, thereby making people’s lives better around the world every day.

Our Shared Values

Innovation & Operational excellence

- We will continuously seek innovations in the technology, products and services we provide by thinking beyond conventional ideas and frameworks.
- We will continuously create new value which satisfies the needs of our potential and future customers by thinking from the customer’s perspective and accurately forecasting the changes in society and markets.
- We will continuously improve our operations for maximum efficiency and quality in every activity and will strive for the highest possible standard of performance.

Diversity

- We will respect individuals with different capabilities and personalities, and our global management will operate without regard to nationality, gender or background.
- We will respect cultural diversity regardless of race, ethnicity, religion, language, and nationality.
- We will respect different perspectives and opinions at all times.

Environment

- We, as good global citizens, will contribute to the creation of a sustainable society in harmony with nature.
- We will strive to ensure and further improve occupational health and safety in our working environment.

Integrity

- We will build open and fair relationships with all of our stakeholders based on the highest ethical standards.
- We will strictly comply with applicable laws and regulations.
- We will fulfill our responsibilities in relation to all the products and services we provide to achieve customer satisfaction and trust.

Our Spirit

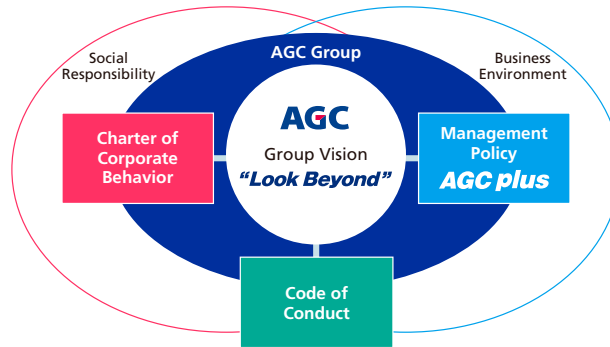
“Never take the easy way out, but confront difficulties.”

- The founding spirit of Toshiya Iwasaki, who established Asahi Glass Company in 1907.

AGC Group Vision **“Look Beyond”**

AGC Group Charter of Corporate Behavior

The Group Charter sets forth and declares the perspectives that form the basis of our behavior to ensure that the AGC Group will remain a good corporate citizen.



Management Policy **AGC plus**

The Management Policy sets the course of action for all the Group’s business activities providing social and business aspirations, guidelines and directives. It is revised as necessary to reflect changes in the business environment and circumstances of the Group.

AGC Group Code of Conduct

The Code of Conduct sets forth standards to be observed by all Group members from the perspective of “integrity” in Our Shared Values under the AGC Group Vision **“Look Beyond”**.

AGC Group Brand Statement

At the AGC Group, the brand statement of “Your Dreams, Our Challenge” is a central communication link between AGC and the world. The statement entails that we will continue to provide products that benefit peoples’ daily lives, and contribute to society’s development through the creation of new value.

“Your Dreams, Our Challenge”

Never take the easy way out, but confront difficulties
Trust is the best way to inspire people
Strive to develop technologies that will change the world
A sense of mission leads us to advance

For more than a century, AGC has been guided by these founding spirits. Our unique materials, solutions and reliable partnerships have facilitated leading innovations across diverse industries and markets.

Today, by working with others to combine knowledge and advanced technology, we help make ever greater achievements possible, and bring bolder ideas to life.

Your Dreams, Our Challenge

AGC Group Charter of Corporate Behavior (Established on June 1, 2007 and revised on March 9, 2016)

Under the tenet of “Our Mission” in the Group vision, **“Look Beyond”** the AGC Group strives to be a company trusted by all of 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. To this end, the Group has established the AGC Group Charter of Corporate Behavior and acts in line with the following principles.

Integrity: Sincere Behavior

1. The AGC Group will develop and provide useful goods and services of superior quality, 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 of the countries and regions in which it does business and will respect international norms of behavior.
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.
4. The AGC Group will maintain sound relationships with government agencies and other responsible organizations. The Group will not support any person or group that threatens 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 others including customers and 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 pursue technological innovations and new product developments that reflect due consideration for the environment and will participate in 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 its business activities.

Diversity: Respect for People

9. The AGC Group will respect human rights and will operate its business with due regard for the cultures and customs of each country and region in the world.
10. The AGC Group will respect people's diverse capabilities and personal dignity and will create fair and open environments at its workplaces without discrimination based on race, ethnicity, religion, nationality, gender, disability, or any other legally protected group.
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, employees, and other members of society by gathering their opinions and disclosing information in a fair and appropriate manner.

The managements 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 at the same time, will seek its business partners' cooperation.

The managements will also promote the development and implementation of systems that the principles stipulated in this Charter can be duly incorporated into the Group's decision making and implementation.

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.

CSR Promotion System

Management Structure

The AGC Group established a CSR Committee in 2005 to promote CSR policy measures. The AGC Group CEO presides as the CSR Committee chair, and heads of each business and corporate division deliberate over general policies and issues related to the Group's CSR activities four times annually. The results of deliberations by the CSR Committee are shared globally across the AGC Group through subcommittees specializing in compliance and EHSQ¹ management. These results are then reflected in measures implemented by the Group's in-house Companies and SBUs².

- 1 Environment, Occupational Health & Safety and Quality
- 2 Strategic Business Unit

Activities for Raising Awareness of the Group Vision

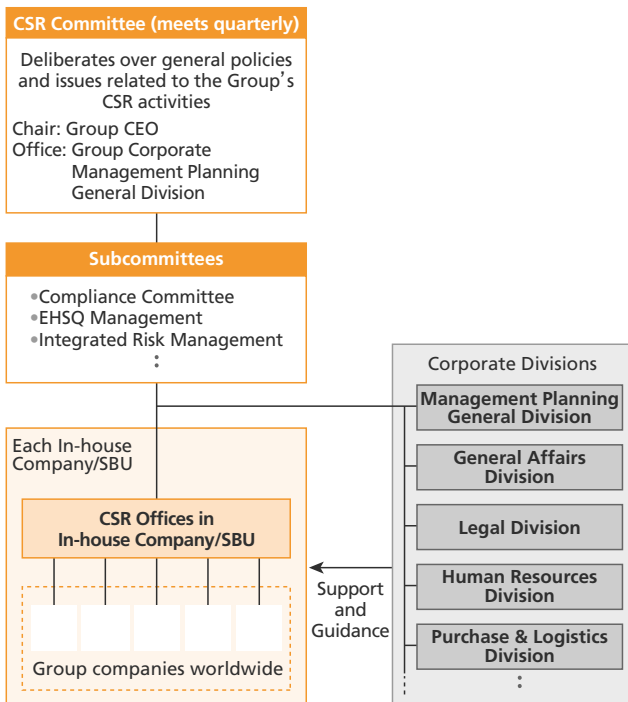
The AGC Group disseminates the Group Vision **"Look Beyond"**. Through in-house education, in-plant posters, vision books, the group news portal "We are AGC!" (see page 14) and other channels, the Group shares the Group Vision with domestic and overseas Group members and companies that have newly joined the AGC Group.

Also, through an employee engagement survey (see page 28) conducted regularly, the Group confirms the degree of employee awareness and comprehension regarding the Group Vision.

CSR Material Issues and the PDCA Cycle

In 2011, the AGC Group began to establish CSR material issues in line with ISO 26000 and create policies based on these issues and their importance to society. The Group also sets targets and performance levels to be achieved through the PDCA cycle. The content of the Group's CSR activities in this area is published on the CSR website page and disclosed to the Group's shareholders.

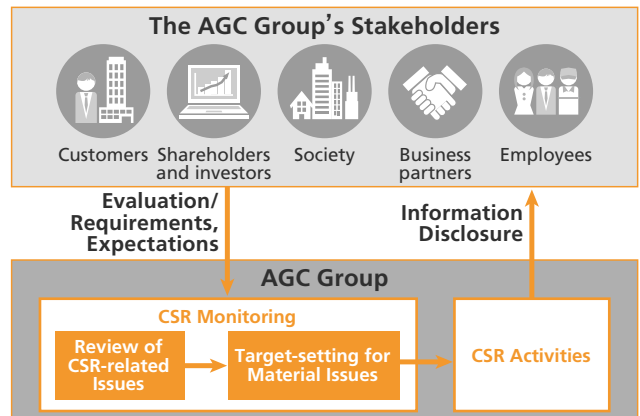
• CSR Promotion System



• ISO26000 and CSR Material Issues for the AGC Group

ISO 26000 Items		AGC Group's CSR material issues
Core subjects	Issues	
Organizational Governance	Decision-making processes and structures	Organizational governance
Human Rights and Labor Practices	Conditions of work and social protection	Fair working conditions
	Health and safety at work	Occupational health & safety
	Human development and training in the workplace	Human resource development
The Environment	Prevention of pollution	Pollution prevention
	Sustainable resource use	Sustainable use of resources
	Climate change mitigation and adaptation	Climate change initiatives
Fair Operating Practices	Anti-corruption	Anti-corruption
	Fair competition	Compliance with antitrust laws
	Promoting social responsibility in the value chain	Social responsibility in the supply chain
Consumer Issues	Protecting consumers' health and safety	Product safety

• The CSR PDCA Cycle



Group-wide Initiatives

Operating the EHSQ Management System

The AGC Group conducts EHSQ (Environment, Occupational Health & Safety and Quality) management according to the characteristics of each business unit and relevant customer requests. In order to realize EHSQ management with a bird's eye view of the entire Group, we established the EHSQ Management System for basic management common to each field in 2013, and it has been in operation ever since. Within the system, the AGC Group EHSQ Management Regulations stipulate the roles of the Group CEO, EHSQ management supervisors and department managers. In addition, the Group has established annual focus points regarding EHSQ for the entire Group. The AGC Group CEO regularly reviews how well these points and relevant initiatives have been addressed, and carries out the PDCA (Plan, Do, Check, Act) cycle.

Stakeholders

Fundamental Approach

The corporate behavior of the AGC Group is based in its relations, not only with customers, but with all stakeholders, including shareholders, investors, business partners, governments, NPOs/NGOs, local communities, and employees and their families.

Accordingly, the AGC Group Charter of Corporate Behavior states that the Group will seek to communicate with all its stakeholders, including customers, local communities, shareholders and employees. The Group listens to their opinions and discloses corporate information promptly and fairly.

● AGC Group Communication with Stakeholders

Customers

- Information dissemination with press releases
- Exhibition booths at trade shows
- AGC studio showroom



Milan Design Week

Shareholders and Investors

- Regular stockholders' meetings
- Financial settlement briefings
- Information sessions for investors
- Facility tours
- Publishing AGC Financial Review, etc.



Earnings presentation (Japan)

Employees and their Families

- The Group's in-house magazine, We are AGC!
- Information over the Intranet
- Opportunities to exchange views directly with the CEO
- Employee engagement surveys
- Help lines • Labor-management talks, etc.



The Group's in-house magazine, We are AGC!



Management Structure

The AGC Group has established a support department for each stakeholder group and cooperates with relevant departments to proactively disclose corporate information in a prompt and proper manner. The Group also creates opportunities to act on the opinions of its stakeholders for business management, promoting two-way communication between stakeholders and the AGC Group.

Local Communities

- Plant tours, job training
- Employee participation in local events
- Social contribution activities etc.



Social Welfare Activities (Brazil)

NPOs/NGOs

- Periodic opinion exchanges
- Cooperation on individual projects etc.



Site dialogue (Thailand)

Business Partners

- Satisfaction surveys
- Social gatherings
- Dialogue through the AGC Supplier's Association, etc.



Meeting with business partners (Japan)
* As the 2020 policy briefing was cancelled, content shown here is from 2019.

Governments

- Dialogue through economic organizations and industry associations
- Dialogue and cooperation with local governments
- Social contribution activities, etc.



CSR-DIW Continuous Award 2019

Group-wide Initiatives

Formulation of Group Communication Guidelines

The AGC Group has established Group Communication Guidelines to accurately disseminate Group information. Adhering to guidelines of the public relations divisions of Group companies in Japan, the rest of Asia, Europe and the Americas, the Group follows rules regarding the dissemination and receipt of information within and outside the Group.

Concerning the timely disclosure of company information, supervisors nominated from each department and major Group companies obtain and release information through the Corporate Communications and IR Offices. In addition, negative information is also appropriately disclosed on the Group website and via the media.

Communication Tools for Each Type of Stakeholder

The AGC Group employs a variety of communication tools to satisfy stakeholders' requests, such as pamphlets that introduce the Group management and initiatives (AGC Integrated Report, AGC Financial Review) and an official website. Since 2013, the Group has been sharing information through SNS (social networking services) including Facebook and Instagram.

Feedback from Stakeholders via the Website


The AGC Group regularly asks for your opinions and comments regarding the AGC Integrated Report and the homepage via our website.

We take these responses into account to further improve our CSR activities, and use them in the creation of various reports, and our website.

● Communication Tools for Each Type of Stakeholder

For all of our stakeholders

AGC Integrated Report 2020
<https://www.agc.com/en/csr/book/>



A Broad Overview of the AGC Group's
Corporate Vision, Financial and
Non-financial Information

For all stakeholders



AGC Website
<https://www.agc.com/en/>

Provides information about the AGC Group more widely, timely and in more detail

For shareholders and investors



Financial Review
<https://www.agc.com/en/ir/library/financial/>

Reports wide-ranging information on the AGC Group in detail and in a timely manner (English only)

For CSR-related experts* and stakeholders with an interest in CSR



CSR Website
<https://www.agc.com/en/csr/>

Comprehensively reports on the AGC Group's efforts to fulfill its social responsibilities



Sustainability Data Book 2020 (this report)

Reports on the AGC Group's non-financial data and its various CSR policies, promotional structures and CSR activity goals and achievements (PDF file only)

* ESG research agencies, etc

Customers

Group-wide Initiatives

Promoting Global Technology & Networking Activities

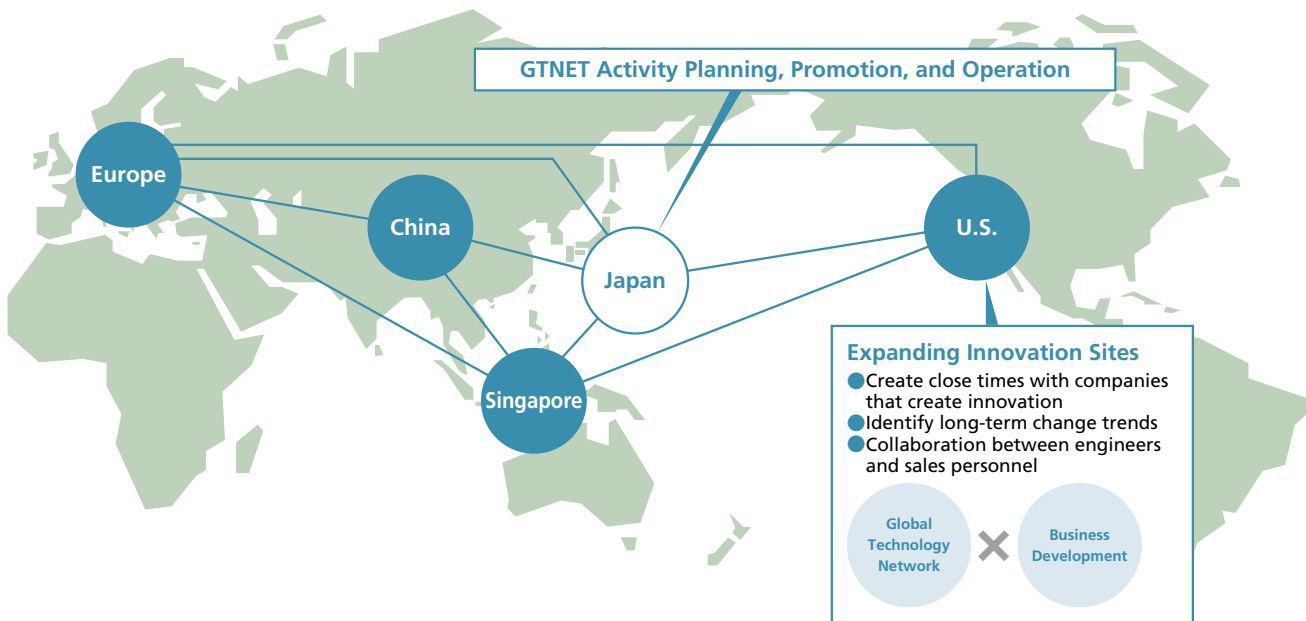
As a manufacturer of materials, the AGC Group deals with many customers in various countries and regions. Accordingly, the Group has established customer centers for each division to obtain direct customer feedback and is working on product development and improvement as well as boosting CS (customer satisfaction).

The Group is also promoting the use of proprietary Global Technology Networking (GTNET) activities to discover social issues, trends in leading markets and cutting-edge technology in a timely manner and relate findings to Group businesses. In these activities, the Group has established offices in North America (Silicon Valley), Europe (Belgium), Southeast Asia (Singapore) and China, where there are many leading electronics and IT-related corporations as well as research facilities of car makers. Through surveys on technological trends, the Group makes proposals regarding the use of new technologies.

Distribution of Information on Group Business, Products and Services

In addition to press releases, the AGC Group informs its customers about its businesses, products and services by operating showrooms and various other initiatives.

● Global Technology Networking to Enhance R&D Capabilities



Exhibitions Hosted

The AGC Group regularly hosts private exhibitions for customers, expanding its business through product and technology demonstrations. The Group also actively participates in exhibitions both within and outside Japan. In 2019, it exhibited at Milan Design Week (Italy) and China International Import Expo to promote AGC Group initiatives.

AGC Studio Showroom

Renovated under the theme “New discoveries with every visit” in 2017, the AGC studio showroom exhibits actual uses of AGC products and the diverse solutions they provide. Special collaboration exhibits with designers are also hosted regularly. Location: 2-5-18 Kyobashi, Chuo-ku, Tokyo Kyobashi Soseikan 1/2F

●International Exhibitions in 2019

Milan Design Week	
Dates	April 9–14, 2019
Location	Milan, Italy
Details	Under the theme of “Emergence of Form,” AGC introduced its molding and processing technologies to show how form is born from materials, allowing AGC to continue evolving gradually and explore new possibilities.
Main visitors	Design Industry Representatives



China International Import Expo	
Dates	November 6–10, 2019
Location	Shanghai, China
Details	AGC products were promoted alongside the AGC brand in China
Main visitors	People from all walks of life



Shareholders and Investors

Group-wide Initiatives

General Shareholders' Meeting

The general shareholders' meeting provides a convenient opportunity for AGC to interact directly with its shareholders to appropriately disclose resolutions, and more. Specifically, notices of convocation are sent as early as possible and posted on the company website in both Japanese and English. Notices regarding exercise of voting rights, resolutions and results of the exercise of voting rights are posted to the homepage in both languages.



Dialogue with Shareholders and Investors

Analysts and Institutional Investors

Through briefing sessions on medium term management strategies and financial results, the AGC Group creates opportunities for direct dialogue between analysts, institutional investors and Group management. The Group also provides online audio streaming of briefing sessions in both Japanese and English. Additionally, Group executives, including the Group CEO and CFO, pay regular visits to institutional investors to promote active dialogue.



Briefing session

Individual Investors and Shareholders

To help individual shareholders deepen their understanding of the AGC, the Group posts self-presentation materials on the Group website.

Moreover, the Group participates in IR seminars for individual investors and provides opportunities for such investors to tour the Group's plants.

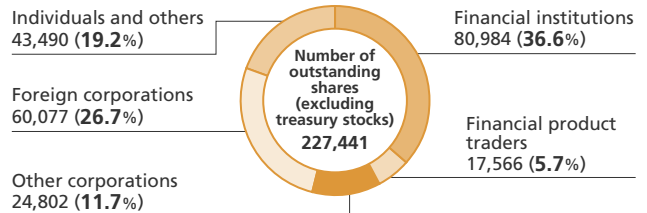
In addition, the AGC Review is published twice a year, providing easy-to-understand explanations of the Group's global business activities and products, as well as providing information about its management strategies and business performance.

Shareholder Returns

Based on a policy of continuing to provide more than the current annual dividend per stock, the AGC Group is doing its utmost to return profits to shareholders by aiming for a dividend payout ratio (consolidated) of more than 50%, including acquisitions of its own shares, while giving comprehensive consideration to consolidated business results and future investment plans, among others. The AGC Group will take the fundamental approach of applying retained earnings to R&D, capital investment, and loans and investments as well as merger and acquisition activities to improve its corporate value while strengthening its financial position.

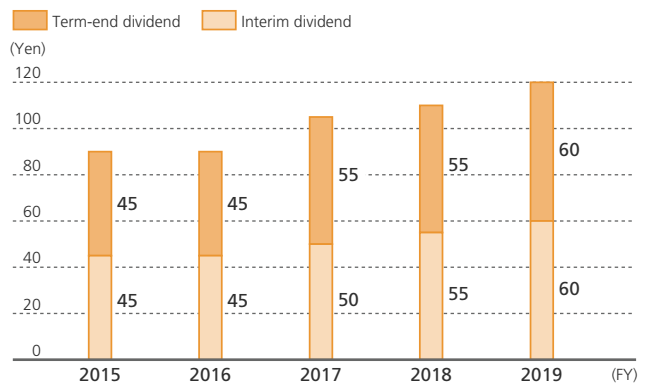
Number of Shares Held by Type of Investors

(as of December 31, 2019)
(Unit : 1,000 shares)



* The sums do not total 100% because calculations are made excluding shares in the Group purchased by the Group itself, and holders of shares less than one unit.

Dividends per Share



* Dividend Per Share is calculated in consideration of the effects of the 5 into 1 share consolidation implemented at AGC on July 1, 2017.

[Homepage link: AGC Glass Information for Shareholders and Investors](#)

[Homepage link: AGC Glass External Corporate Review](#)

Employees

Group-wide Initiatives

Publication of the Group Magazine “We are AGC!”

The Group publishes an in-house magazine, We are AGC!, which is distributed to all employees and details the Group’s values and the direction it plans to take. It profiles AGC Group employees working around the world and the Group’s wide-ranging activities, helping employees and readers to deepen their understanding of the Group. The magazine is published every three months in Japanese and English.



The Group’s in-house magazine We are AGC!

Distribution of “AGC World” on the Intranet

AGC World, online content delivered via the Intranet, presents timely messages from top management and information on the AGC Group both inside and outside Japan through articles and video content. This content is created in Japanese and English and can be viewed at Group companies globally. It also includes a message from the Group CEO on the brand statement “Your Dreams, Our Challenge,” which was declared in 2018. Conversations between Group employees are also posted here alongside articles that provide the chance to learn about SDGs and more. AGC World functions as a place to effectively consider the Group’s mission as a whole.

Furthermore, in 2019, the Group CEO visited 40 locations in Japan and overseas and had conversations with approximately 4,000 employees. Rather than a one-sided message from the CEO, communication was encouraged through discussion on proposals submitted at each location. These talks were uploaded to AGC World as examples of opportunities for open communication, and the Group CEO’s answers to live questions from employees were shared effectively within the Group.



The Group CEO engaging in dialogue with employees as introduced through AGC World

Local communities, NGOs/NPOs, Governments

Group-wide Initiatives

Participation in External Initiatives

The AGC Group is actively involved in initiatives in various countries and regions.

For example, AGC Flat Glass (Thailand) Public participated in the CSR-DIW Initiative promoted by the Thailand Ministry of Industry’s Department of Industrial Works (DIW) to gain CSR certification (CSR-DIW) based on ISO 26000 standards. In addition, AGC is a member of the Council for Better Corporate Citizenship (CBCC).

Communication with Local Communities

The AGC Group regularly communicates with the communities around its sites, working to promote understanding of the Group’s business activities among local communities with the aim of developing together with those communities. Activities are promoted on a site-by-site basis and are tailored to conditions in each region. The sites host regular dialogue meetings and plant tours for area residents and children, amongst other events.

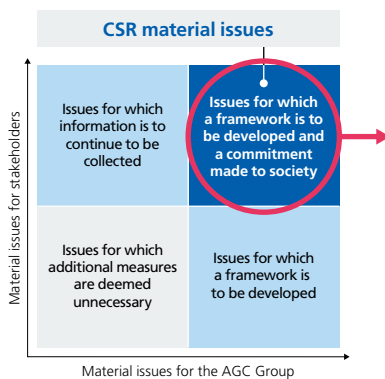
[Homepage link: AGC’s CSR—For Society](#)

[Homepage link: Site Reports](#)

Organizational Governance

In 2011, the AGC Group began CSR monitoring based on ISO 26000. In CSR monitoring, issues defined in ISO 26000 are classified into four categories on the basis of their importance to either the AGC Group or its stakeholders. From these categories, a CSR Matrix is created, and issues judged important to both sides are recognized as CSR Material Issues. At present, there are eleven established CSR Material Issues, and their targets and current progress are provided on the following page.

Matrix of CSR Issues



CSR Material Issues relating to the AGC Group

ISO 26000 Items	Issues	AGC Group's material issues
Core subjects		
Organizational Governance	Decision-making processes and structures	Organizational governance
Human Rights and Labor Practices	Conditions of work and social protection	Fair working conditions
	Health and safety at work	Occupational health & safety
The Environment	Human development and training in the workplace	Human resource development
	Prevention of pollution	Pollution prevention
	Sustainable resource use	Sustainable use of resources
Fair Operating Practices	Climate change mitigation and adaptation	Climate change initiatives
	Anti-corruption	Anti-corruption
	Fair competition	Compliance with antitrust laws
Consumer Issues	Promoting social responsibility in the value chain	Social responsibility in the supply chain
	Protecting consumers' health and safety	Product safety

CSR Material Issues of the AGC Group Corresponding to Organizational Governance

Decision-making processes and structures

Reasons for Selection

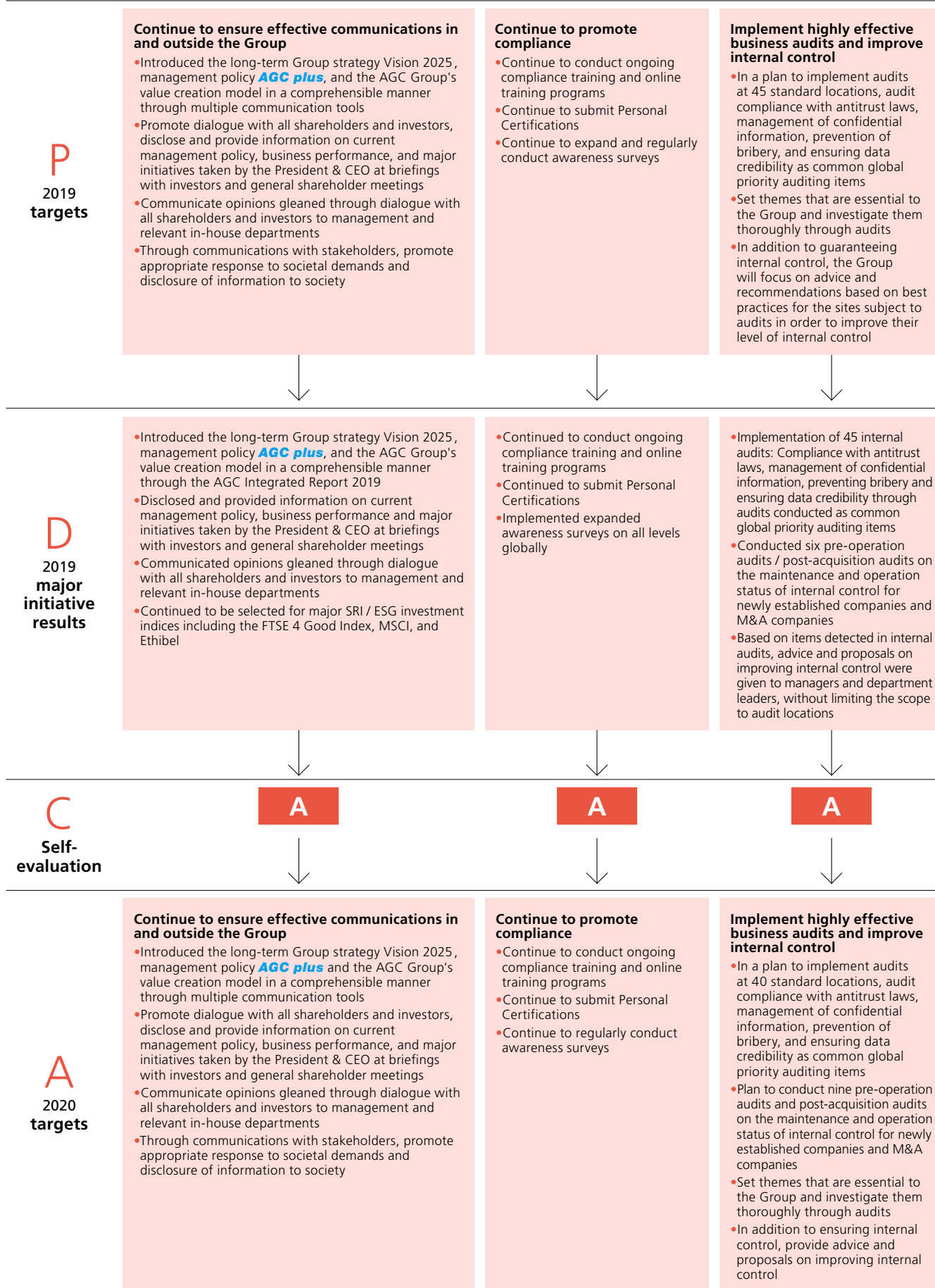
Organizational governance is the foundation of Core Issues in ISO 26000 and is indispensable in the promotion of social responsibility. With legislation regarding disclosure of non-financial information becoming stricter in respective countries and regions, companies are required to improve the transparency and accountability of their activities, adopting ethical behavior voluntarily.

The AGC Group recognizes that it is essential to include corporate ethics in all of its business activities in order to continue business operations.

ISO 26000 related actions and expectations

- Nurture an environment in which the principle of social responsibility (accountability) is practiced
- Nurture an environment in which the principle of social responsibility (transparency) is practiced
- Nurture an environment in which the principle of social responsibility (ethical behavior) is practiced
- Nurture an environment in which the principle of social responsibility (respect for the rule of law) is practiced
- Balance the authority, responsibility and ability levels of decision-makers
- Periodically review and evaluate the governance process

Results of Activities Relating to CSR Material Issues in 2019



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 and some issues still remain
C: Unsatisfactory level, in which the intended target has not been achieved

Corporate Governance

Fundamental Approach

AGC is working to strengthen and improve its corporate governance with a view to raise the Group's corporate value over the medium and long terms and ensure its continuous growth. The Group has established the AGC Group Corporate Governance Basic Policy, a basic approach to its corporate governance system.

Basic Approach to the Corporate Governance System

- Clearly separate the management oversight and execution functions
- Clearly define corporate and business execution functions in the context of management execution

🔗 Homepage link: AGC "Corporate Governance"

● Attendance Rate of Directors in Board of Directors Meetings

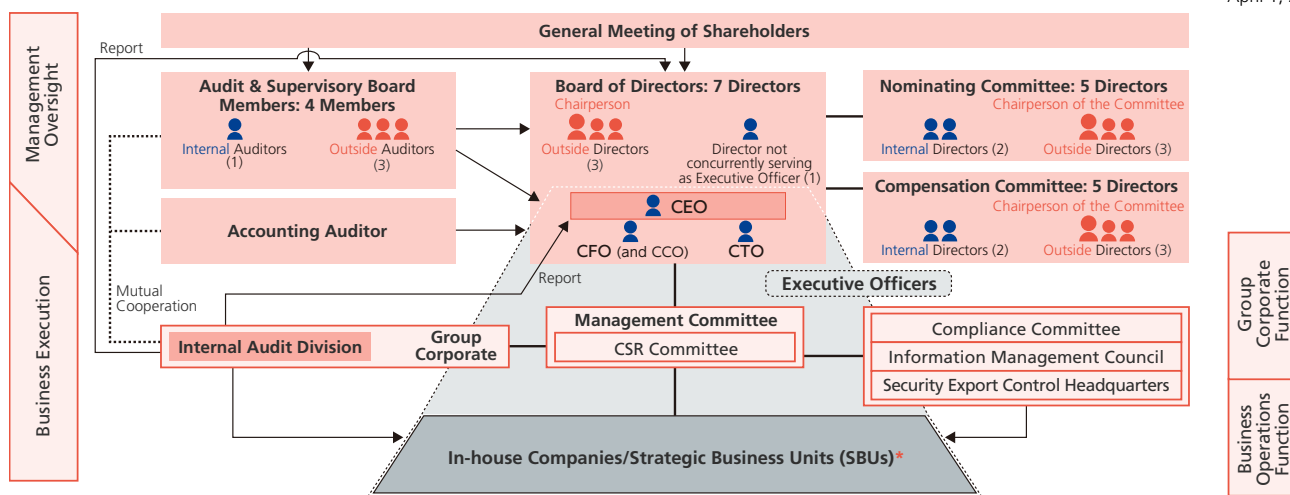
FY	Attendance rate
2017	98%
2018	100%
2019	99%

● Attendance Rate of Auditors in Board of Auditors Meetings

FY	Attendance rate
2017	100%
2018	100%
2019	100%

● Corporate Governance Structure Overview

April 1, 2020



● Internal directors or internal Audit & Supervisory Board Members ● Outside directors or outside Audit & Supervisory Board Members who satisfy AGC's "standards for independence of outside officers"

* 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 Building & Industrial Glass Company, the Automotive Company, the Electronics Company and the Chemicals Company. Business units smaller than this are defined as Strategic Business Units (SBUs).

Management Structure

Internal Control

In response to the establishment of the Companies Act, AGC voted on its Corporate Policy on Internal Control at the Board of Directors meeting held in May 2006. The aim was to review and ensure the appropriateness of its business operation systems, including the compliance system.

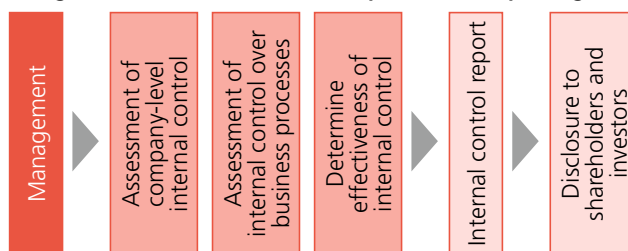
Basic Items for Internal Control

1. Compliance Program
2. Information Retention and Management System with respect to business operations
3. Risk Management System
4. System to ensure efficient and effective business execution
5. System for reporting from Group companies to AGC
6. Corporate Auditors' audit system

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

Internal control regarding financial reporting was evaluated as being effective in 2018, and an external auditor confirmed the appropriateness of the system in its evaluation.

● Processes Based on Internal Control Implementation Regulations Related to AGC Group Financial Reporting



Risk Management

Management Structure

The AGC Group is united in its efforts regarding risk management, and has established the AGC Group Enterprise Risk Management Basic Policies on the basis of its Corporate Policy over Internal Control, formulated by the Board of Directors. Under this basic policy, the Group has designated risks that could significantly hinder achieving various objectives of the AGC Group, dividing risk management into 1) a management level intended to control the appearance of risks and 2) a response level when such risks have manifested, and managing them accordingly.

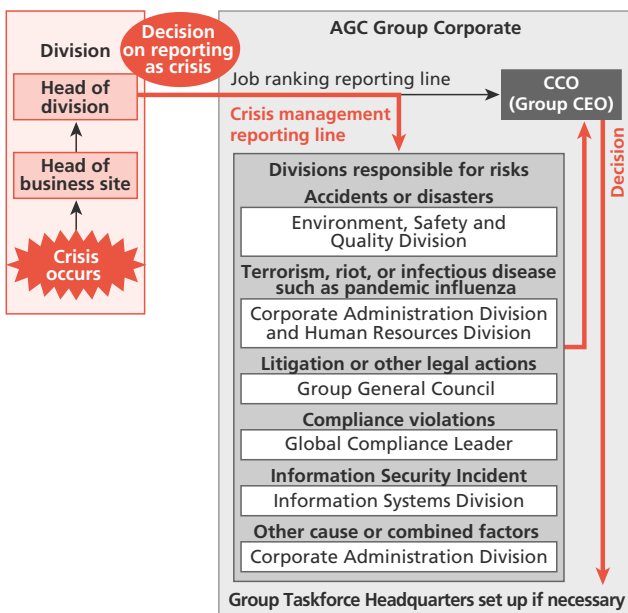
Responding effectively in the event a risk occurs

To prepare for a crisis that could have a serious impact on its business activities, the AGC Group has established reporting and response procedures in its AGC Group Crisis Management Guidelines, and set up a framework designed to minimize the impact of such a crisis. To respond to the occurrence of accidents and disasters in particular, accident prevention measures are undertaken at each business site, business continuity plans (BCP) have been established, and improvement measures are continually implemented to increase the Group's ability to quickly restore and resume operations.

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

- Natural disasters such as earthquakes
- Procurement of resources
- Overseas business development
- Serious legal violations
- Environmental regulations
- Market conditions with regard to product demand
- Occupational accidents
- Product liability

● Reporting Line During a Crisis Situation



Group-wide Initiatives

Business Continuity Approach

The AGC Group has formulated the AGC Group Business Continuity Plan (BCP) Development Guidelines for use by divisions and business sites when formulating BCPs in preparation for large-scale accidents or disasters. The Group's BCP is continuously maintained and improved upon based on the business continuity management (BCM) process.

Formulating a BCP in Accordance with the AGC Group Basic Policy to Cope with Natural Disasters

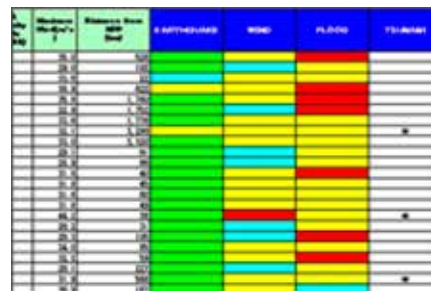
Recognizing that a large-scale natural disaster could seriously impact its business activities, the AGC Group has set four concepts to respond effectively: human life and safety first, prevention of secondary disasters, contribution to and co-existence with society, and business continuity (see page 19).

Based on these concepts, the Group has assessed risks related to earthquakes, wind damage, flooding and other natural disasters at its major business sites (about 200 around the world). It has produced hazard maps that color-code hazard risks by degree and formulated business continuity plans (BCP) for business sites that face high hazards and risks.

At every major business site in Japan and Asia, where there is a high risk of earthquakes, BCPs for earthquakes are fully developed. Furthermore, simulation drills are held every year at AGC's headquarters, with participation by the Group CEO, the heads of each division and major interested parties. These drills ensure the BCP is understood by all participants, while augmenting its effectiveness. In 2019, the Group ran an emergency earthquake drill with the supposed epicenter directly beneath the Tokyo Metropolitan Area, including theoretical training exercises and workshops prompting all divisions to actively cooperate and respond in the event of disaster.

In addition, since 2009, the AGC Group (Japan) has been using a safety confirmation system for confirming the safety of employees and their families in the event of a disaster, and practices such drills across the Group twice annually. In addition, Group companies in Southeast Asia conduct drills for responding to power outages caused by a natural disaster.

The AGC Group intends to repeat these drills in the future in order to verify how effectively the established BCP can be carried out and to continuously make improvements to the plan.



Hazard map

AGC GROUP BASIC POLICY TO COPE WITH NATURAL DISASTERS

Human Life and safety first, prevention of secondary disasters, contribution to society and co-existence with it, and business continuity are the four basic concepts to counter natural disasters.

Based on the following concepts, the AGC Group shall plan and implement countermeasures against risks of massive natural disasters in advance. When a natural disaster occurs, the Group shall place utmost priority on the security of human lives and safety and make maximum efforts in preventing the spread of damage, supporting the local community and maintaining the Group's important business operations.

- We shall place the highest priority on the security of the lives and safety of all the people involved in the corporate activities of the AGC Group (employees and their families, customers, suppliers, and people in local community).
- We shall prevent the damage from spreading and the occurrence of a secondary disaster in order to ensure the safety of the surrounding region.
- We shall always try to coexist with the local community, and when a natural disaster occurs, we shall contribute to the community in a coordinated manner
- We shall fulfill our responsibility to the society and at the same time minimize the damage to our enterprise value by maintaining/quickly restoring the Group's important business operations.

March 1, 2011

Internal Audits

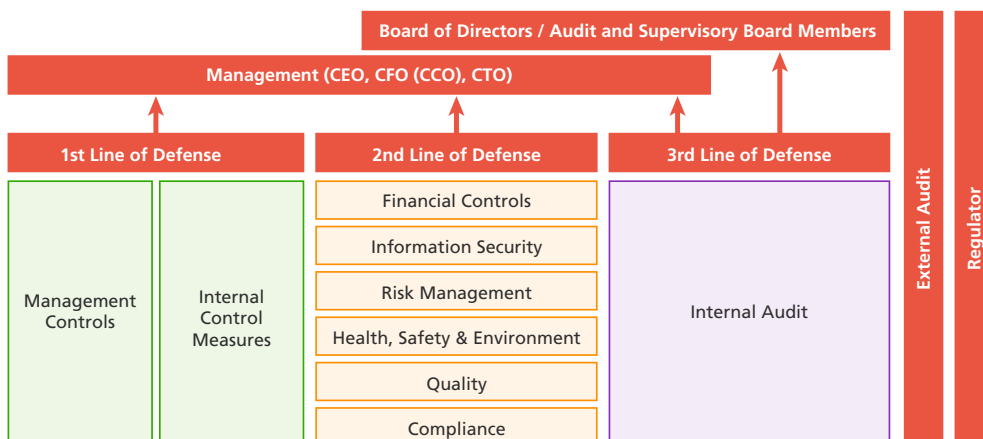
Establishment and Operation of the Internal Control System

The AGC Group is strengthening its internal control system as detailed below:

- The Board of Directors, which has a managerial supervisory function, monitors the establishment and operation status of the AGC Group's internal control system.
- The President & CEO, who is responsible for the management's executive functions, establishes and operates the internal control system of the AGC Group.
- Audit and Supervisory Board Members monitor and verify the internal control system. Executive management functions are implemented based on the concept of the following "Three Line Defense Model."

- As the 1st line of defense, responsible persons in each in-house company, SBU and division establish and operate the internal control system of organizations under their control.
- As the 2nd line of defense, Corporate Divisions continuously monitor the establishment and operation status of the internal control system of each division and Group company.
- As the 3rd line of defense, the Internal Audit Division independently audits the establishment and operation status of the internal control system of each division.

•The AGC Group's Three Line Defense Model (Reference: The Institute of Internal Auditors)



Internal Audit

In order to maintain its independence, the Internal Audit Division has established a Corporate Internal Audit Global Leader (head of the Internal Audit Division at AGC) who reports directly to the CEO, overseeing the leader of each audit division (regional leader) established in Japan, Asia, Europe and North America.

Under this system, audit departments in each region promote the establishment, operation and improvement of Group companies' internal control through effective and efficient auditing. In addition, the Corporate Internal Audit Global Leader promptly reports important matters detected by audits to the CEO and also regularly reports to Audit and Supervisory Board Members and corporate auditors.

A number of common global auditing items have been established. In 2019, 45 targets were audited, focusing on (1) Compliance with Antitrust Laws and Regulations, (2) Information Security Management, (3) Anti-Bribery Control and (4) Data Accuracy. When selecting items for audit, the Group uses criteria established on the basis of risk.

In addition, the Group conducts "pre-operational and M&A audits" to assess the internal control status of newly established companies and M&A companies. In 2019, such audits were performed in Asia including Japan (1 case) and Europe (5 cases).

Additionally, Group-wide crucial "thematic audits" were also carried out on specific themes, providing even deeper results.

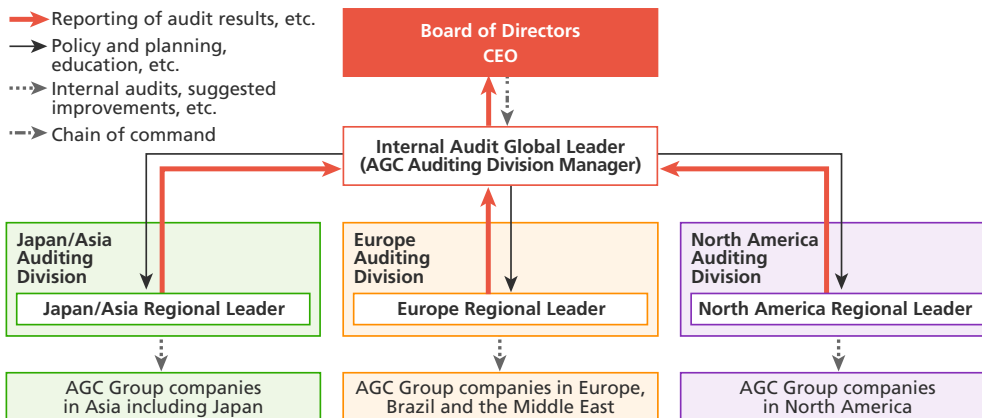
EHSQ Monitoring

In the AGC Group, each division and Group company conducts internal audits as the first line of defense to assess their progress in Environment, Occupational Health & Safety and Quality (EHSQ) activities.

As the second line of defense, the Environment, Safety and Quality Division, which is a corporate division, works to ensure thorough implementation of the Plan-Do-Check-Act (PDCA) cycle in each division and Group company by conducting lateral monitoring across the Group and reports relevant results to the CEO.

As the third line of defense, an auditing expert from the Environment, Safety, and Quality Division participates in audits carried out by the Internal Audit Division and reports to the CEO on major risks detected in Group company audits.

● Global Internal Auditing Structure



Compliance

Fundamental Approach

Formulating a Group-Wide Code of Conduct

Compliance is the fundamental premise underlying the Group's business activities. To that end, the AGC Group Code of Conduct sets forth requirements for all employees in the workplace. The code comprises global requirements of business conduct that all employees must follow regardless of country or region, and regional supplements that take into account the laws and business customs of those locales. By the end of June 2020, 14 editions of the AGC Group Code of Conduct had been issued in 19 languages.

Items for the AGC Group Code of Conduct Global Requirements

1. Foundations for Compliance
2. Fair Competition and Antitrust
3. Workplace Health and Safety
4. Environment
5. Respect for People
6. Quality and Safety of Products and Services
7. Reports and Records
8. Insider Trading
9. Company and Third-Party Assets and Confidential Information
10. Conflict of Interest
11. Gifts and Entertainment
12. Relations with Government Officials and Politicians
13. International Trade Controls

The working regulations of each AGC Group company state that a violation of the AGC Group Code of Conduct is grounds for disciplinary action. In addition, if an employee voluntarily reports his or her own Code of Conduct violation, this will be taken into consideration when determining disciplinary action.

The contents of Material Issues for CSR activities in the AGC Group (selected through the CSR monitoring framework based on ISO 26000) are related in the following table to the respective Code of Conduct Global Requirement items.

Relationship with CSR Material Issues

Material Issues (ISO 26000: Issue Base)	Corresponding code of conduct Global Requirements
Decision-making processes and structures	1. Foundations for Compliance 7. Reports and Records
Conditions of work and social protection	5. Respect for People
Health and safety at work	3. Workplace Health and Safety
Human development and training in the workplace	5. Respect for People
Prevention of pollution	3. Workplace Health and Safety 4. Environment
Sustainable resource use	4. Environment
Climate change mitigation and adaptation	4. Environment
Anti-corruption	11. Gifts and Entertainment 12. Relations with Government Officials and Politicians
Fair competition	2. Fair Competition and Antitrust
Promoting social responsibility in the value chain	4. Environment 5. Respect for People etc.
Protecting consumers' health and safety	6. Quality and Safety of Products and Services

Management Structure

Establishment of Global Compliance System

The AGC Group has established a Chief Compliance Officer (CCO) responsible for development of the compliance framework and promotion of compliance in the AGC Group. Under the supervision of the CCO, a Global Compliance Leader, Global Compliance Committee and local Compliance Committees are established to plan and implement compliance programs and monitor respective regions' compliance efforts. Reports are regularly made to the Board of Directors regarding group-wide policies and the current status of the compliance system.

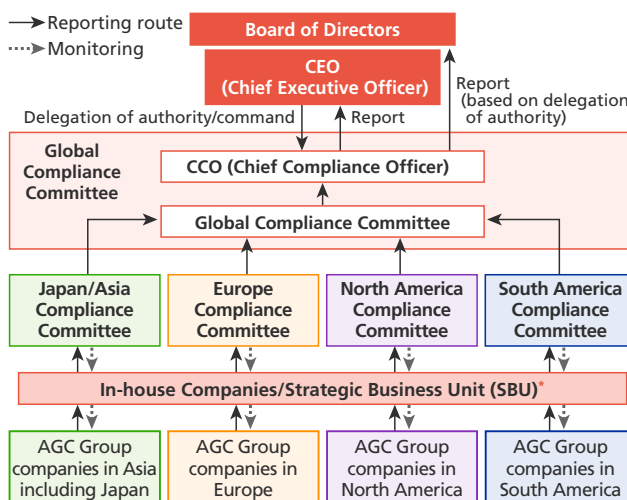
In accordance with the guidelines of the compliance reporting system, serious compliance violations are promptly reported to top management.

Submission of Personal Certification on the Code of Conduct

The AGC Group has introduced a system in which its employees periodically submit a personal certification to follow the AGC Group Code of Conduct. The goal of the system is to turn the submission of certifications into an opportunity for every single employee to renew their awareness of compliance and take a fresh look at business affairs and the workplace.

Global Compliance System

(As of July 1, 2020)



* SBU is a counter for Strategic Business Units

Group-wide Initiatives

Establishing Different Help Lines

The AGC Group has established several varieties of help lines to serve as consultation desks regarding the Code of Conduct.

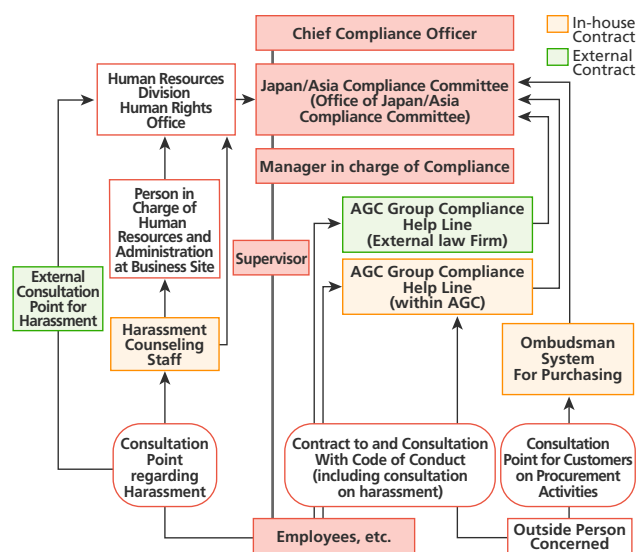
As a general rule, help lines are set up at each company, while additional area-wide help lines are established in Europe, North America and Asia. Further, in Japan employees can also contact external lawyers, and in global locations a common external contact point has been established.

To encourage employees to use the help lines, the Group protects the anonymity of anyone reporting and strictly forbids any act of retaliation against anyone who makes a report in good faith.

When those who report offer their real names, efforts are made to facilitate effective two-way communication and provide feedback on the status and results of handling reported issues.

For the purpose of providing help line contact information, help line numbers are listed in the AGC Group Code of Conduct distributed to all employees. They are also publicized in each country and region through efforts such as placing posters at each site.

● Help Line Reporting Route (AGC)



● Help Line Consultations (AGC Group)

FY	Number of consultations
2019	Approx. 360

* This number includes messages and direct consultations made via the help line and questions and requests about the system.

Implementing Compliance Training

In order to promote the Code of Conduct globally, the AGC Group provides various training opportunities to its employees around the world, and has placed particular emphasis on strengthening compliance training worldwide.

For example, the Group continually implements compliance-related online training (e-learning) in Japan, Europe and North America. The Group also proactively promotes training activities intended to reinforce compliance in each country and region, including classroom training as well as the production of training materials that include illustrations and quizzes, compliance pocket-sized cards, simulations, video materials for training and educational posters.



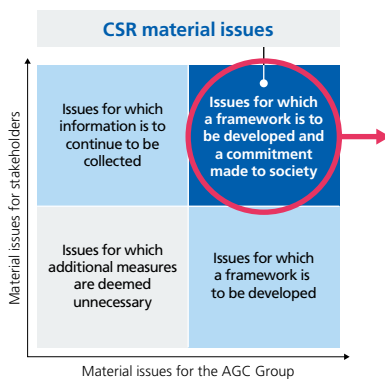
Implementing Compliance Surveys

The AGC Group uses surveys to gauge the level of compliance in the workplace and the ease of use of help lines. Based on the results, any necessary measures are implemented.

Human Rights and Labor

In 2011, the AGC Group began CSR monitoring based on ISO 26000. In CSR monitoring, issues defined in ISO 26000 are classified into four categories on the basis of their importance to either the AGC Group or its stakeholders. From these categories, a CSR Matrix is created, and issues judged important to both sides are recognized as CSR Material Issues. At present, there are eleven established CSR Material Issues, and their targets and current progress are posted on the following page.

Matrix of CSR Issues



CSR Material Issues relating to the AGC Group

ISO 26000 Items	Issues	AGC Group's material issues
Core subjects		
Organizational Governance	Decision-making processes and structures	Organizational governance
Human Rights and Labor Practices	Conditions of work and social protection	Fair working conditions
	Health and safety at work	Occupational health & safety
	Human development and training in the workplace	Human resource development
The Environment	Prevention of pollution	Pollution prevention
	Sustainable resource use	Sustainable use of resources
	Climate change mitigation and adaptation	Climate change initiatives
Fair Operating Practices	Anti-corruption	Anti-corruption
	Fair competition	Compliance with antitrust laws
	Promoting social responsibility in the value chain	Social responsibility in the supply chain
Consumer Issues	Protecting consumers' health and safety	Product safety

CSR Material Issues of the AGC Group Corresponding to Human Rights and Labor Practices

Conditions of work and social protection

Reasons for Selection

Company employees expect a working environment that fully values their health and safety, and also request that regulations concerning working conditions and employee protection are observed. The AGC Group operates in approximately 30 countries and regions. The Group complies with all local labor-related laws and regulations and is aware that promoting the creation of work environments in which employees can work with satisfaction and pride is important to its business activities.

ISO 26000 related actions and expectations

- Confirm the compliance of work condition with national laws and regulations and international labor standards
- Comply with any obligation concerning the provision of protection for workers in the country of operation
- Comply with the working hours established in laws or regulations

Health and safety at work

Reasons for Selection

Corporations seek to create a workplace environment and working conditions that are safe and healthy for employees. Conscious that it has a workplace at which the risk of occupational accidents is comparatively high, the AGC Group identifies Safety as a business activity prerequisite in its management policy **AGC plus**, and places great importance on the creation of a working environment where employees can work under safe and healthy conditions.

ISO 26000 related actions and expectations

- Develop, implement and maintain policy on occupational health and safety
- Understand and apply principles of health and safety management (elimination, substitution, engineering controls, administrative controls, work procedures and personal protective equipment)
- Analyze and control the health and safety risks in organizational activities

Human development and training in the workplace

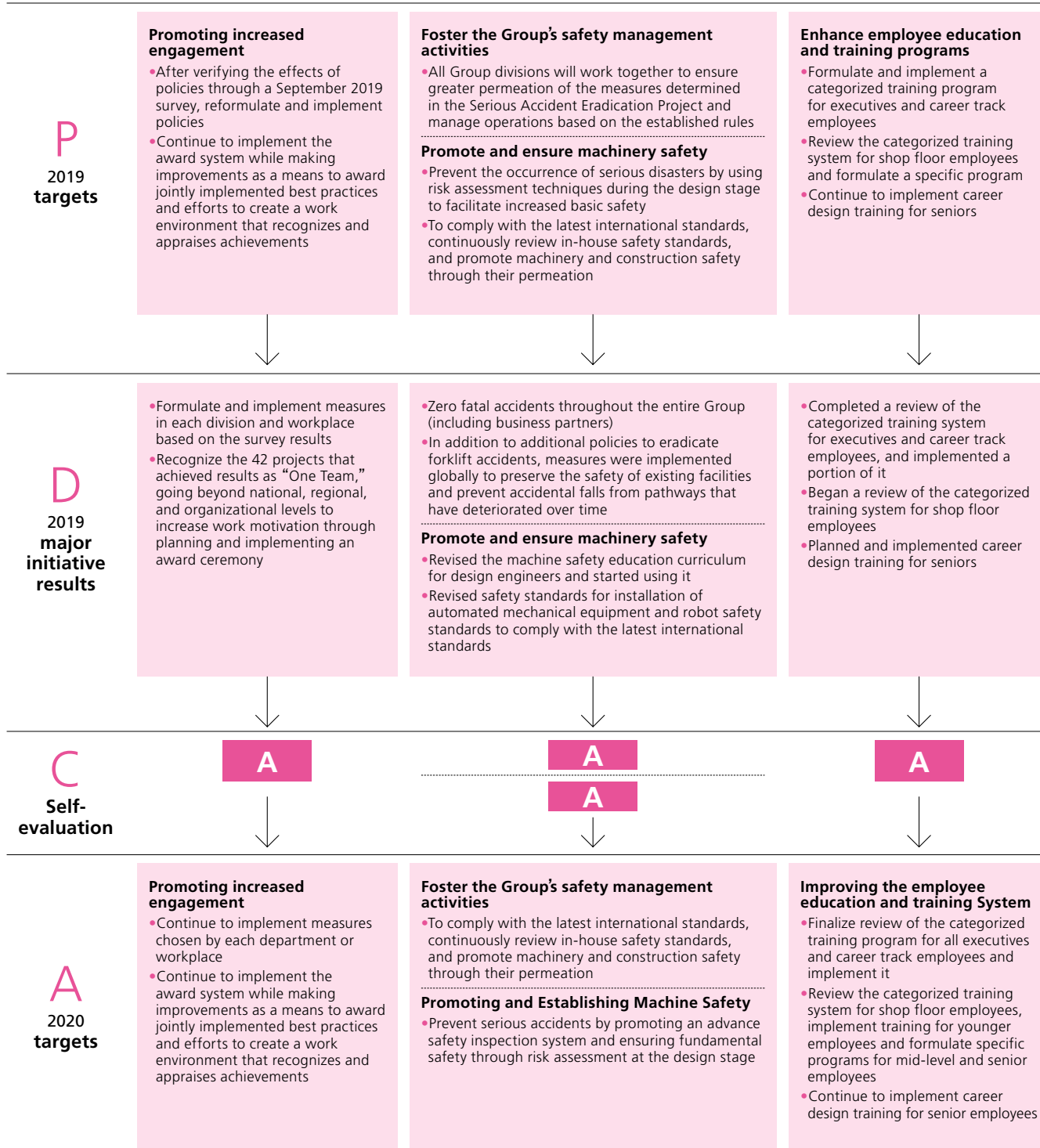
Reasons for Selection

Corporations are expected to provide opportunities for their employees to grow, develop their abilities and skills and improve their standard of living, from financial, social and cultural viewpoints. The AGC Group believes that human resources are the driving force behind the AGC Group's business operations, and that creating a framework that supports the growth of its employees is important.

ISO 26000 related actions and expectations

- Provide all workers at all stages of their work experience with access to skills development, training and apprenticeships
- Provide all workers at all stages of their work experience with access to opportunities for career advancement

Results of Activities Relating to CSR Material Issues in 2019



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 and some issues still remain
C: Unsatisfactory level, in which the intended target has not been achieved

Human Resources Management

Fundamental Approach

To continuously evolve as a truly global enterprise, the AGC Group has set the 7 Key Principles for People aimed at realizing progressive human resources management.

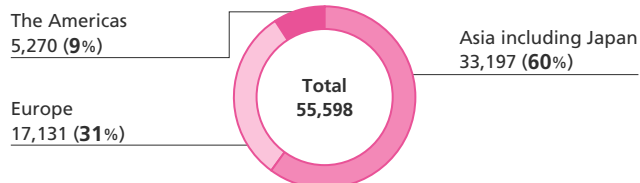
Management Structure

In the AGC Group, the human resources division takes initiative in conducting human resources management in line with the 7 Key Principles for People, which define our philosophy towards human resources management.

With regards to labor laws and practices in each country or region as well as employees' understanding of their roles, the Group works in cooperation with HR representatives in each company and region to execute the principles.

● Number of Group Employees by Region (AGC Group)

(As of December 31, 2019)



AGC Group “7 Key Principles for People”

The AGC Group wishes to pursue these principles as the foundation of our “7 Key Principles for People” to maximize our performance as a truly global corporation.

Implementation of “*Look Beyond*”

AGC Group requires all employees to commit to our Shared Values of “*Look Beyond*”—Our four Shared Values: Innovation & Operational Excellence, Diversity, Environment, and Integrity

Diversity for Organizational Competitiveness

AGC Group builds teams of diverse people who support our four Shared Values of “*Look Beyond*” and have the abilities to contribute to organizational competitiveness.

Development and Growth

AGC Group encourages employees to grow and provides them with opportunities for self-development.

Job Satisfaction and Pride

AGC Group encourages employees to achieve their goals so that they feel a sense of pride and satisfaction in their work.

Work Environment and Conditions

AGC Group provides a safe and healthy work environment.

Open Communication

AGC Group emphasizes open communication in the workplace to create a better organizational climate.

Evaluation, Recognition and Rewarding Performance

AGC Group evaluates and recognizes employees who contribute to the organization and rewards their contributions.

Group-wide Initiatives

Fostering Global Leaders

The Group identifies talent from all over the world, regardless of nationality and gender, in order to promote fostering global leaders who can lead the global group forward in a systematic and organized way. The Group trains diverse talent at the global, national and regional level.

In an effort to promote the localization of business management for Group companies in each region, the Group encourage assignments and projects outside the home country as well as Group-wide training courses and on-site training, in accordance with the current status of respective businesses and regions.

In 2019, the Group hosted a global program to develop talented management personnel for Group companies and divisions in all countries and regions where they operate.

●The AGC Group's Leader Training Programs



AGC Initiatives

Human Resource Management System

AGC manages employees fairly in consideration of their abilities and performance. The company aims to provide its diverse range of employees with the systems and environments necessary to help them perform their jobs, without discrimination based on gender, age or disability.

For that reason, the company clarifies employees' roles, functions and responsibilities, and utilizes and evaluates capable employees fairly regardless of age, length of service or gender.

●Number of Employees at AGC

As of December 31, 2019 excluding those dispatched from other Group Companies

Classification	Male	Female	Total	Percentage of Female
Managers	2,898	165	3,063	5.4%
Career-track positions	814	174	988	17.6%
Non-Managers	3,193	119	3,312	3.6%
Shop-floor workers				
Clerical positions	14	521	535	97.4%
Subtotal	4,021	814	4,835	16.8%
Total	6,919	979	7,898	12.4%

●Employee-Related Data of AGC

As of December 31, 2019

Item	Male	Female	Total
Average age	42.9	42.0	42.8
Average length of service	18.1 years	14.9 years	17.7 years
Average overtime working hours	19.9 hours/month (average for members of the labor union)		
Percentage of paid leave taken	91.4% (average for members of the labor union)		

●Number of Employee Retiring (AGC)

Period: April 2019 to March 2020

- excluding employees retiring upon reaching mandatory retirement Age

	Number of people
Retirees	179

●Retention Rate of New Employees (AGC)

As of April 2020

Year of recruitment	Number of people	Retained employees ¹	Retention rate
2016	61	57	93.4%

Respecting Human Rights

Fundamental Approach

In 2011, the United Nations Human Rights Council announced its Guiding Principles on Business and Human Rights. Among the stated principles is “the responsibility of companies to respect human rights.” As an initiative in line with this principle, the AGC Group—a company that values human rights—created a definition of “Respect for People” in the AGC Group Charter of Corporate Behavior.

Furthermore, regarding employees’ rights to freedom of association and collective bargaining, the Group complies with the laws and regulations of each country or region and respects the relevant international norms.

Management Structure

The AGC Group conducts human rights efforts in collaboration with relevant departments. The human resources department is responsible for human rights issues within the group, and the CSR Department deals with human rights due diligence in the supply chain. In addition, the compliance department plays a central role in conducting human rights training within the Group.

Group-wide Initiatives

Responding to Issues Regarding Human Rights and Labor Relations

The human resources department and relevant workplaces cooperate to deal with human rights and labor relations issues. The Group also responds seriously to claims and comments received via the homepage and other channels, from persons inside and outside the company.

Regular Self-Assessment of Human Rights and Labor Practices

The AGC Group conducts self-assessment of human rights and labor practices every three years at Group companies in and outside of Japan in order to ascertain the status of respecting human rights and the labor practices within the Group. The Group carried out such assessment at approximately 190 companies in 2019, and responded promptly to cases requiring rectification. The next round of assessment is scheduled in 2022, after the Group updates its checklist based on social trends and other factors.

Further, we’re asking our business partners to fill out a Supplier CSR Survey to grasp the current situation of the Group’s supply chain and initiatives regarding human rights and labor practices. The contents of the survey are currently being reassessed.

Support for the UK Modern Slavery Act

AGC Chemicals Europe released the following official statement in accordance with the UK Modern Slavery Act 2015. Annual Statement on Slavery and Human Trafficking https://www.agcce.com/PDFs/Annual_Statement_on_Slavery_and_Human_Trafficking.pdf

● Important Human Rights Issues in the Chemical and Construction Material Industries

Core operation/ Supply chain	Workplace conditions	Working hours
		Health and safety
		Disciplinary measures
	Discrimination	During work
		Redundancy and dismissal
	Forced or compulsory labor	Deposits and papers
		Forced overtime
		Trafficking in human
	Freedom of association	Freedom of association and collective bargaining
		Conflict with local law
Community	Resources	Use of natural resources
Society and government	Relations with governments	Bribery and corruption
		Gov’ts with poor human rights records
	Relations with consumers	Health and safety

AGC Initiatives

Measures to Deal with Human Rights Issues and Harassment

At AGC, the Human Rights Office and the Legal Division Compliance Group work together to provide employees with a work environment that is free from discrimination or harassment, providing compliance training programs and preventing harassment. For early detection of problems, AGC has set up internal and external contacts, including a helpline, for persons to seek advice. In the event a problem occurs at the workplace, the Group addresses it not only by re-educating the individuals involved, but also by treating it as an organizational issue for the workplace where the problem arose. Moreover, the helpline can be used not only by employees at AGC, but also by employees of the entire Group.

Regarding issues of harassment, such as sexual or power harassment, the Group holds rank-specific training and workplace dialogue meetings to prevent and stop such behavior. The Group also encourages employees in difficulty to seek advice as early as possible if they encounter any form of harassment so the issue can be resolved.

Freedom of Association and the Right to Collective Bargaining

Within AGC, the employees' union—the AGC Labor Union—works to maintain and strengthen healthy labor-management relations. In labor-management negotiations, both 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. The union managers and directors of AGC have meetings that are focused on management of the entire business at least twice a year.

● Data about the Labor Union (AGC)

FY	Number of members*	Average age	Average length of service
2015	3,815	39.6	16 years and 10 months
2016	3,766	40.3	17 years and 4 months
2017	3,954	40.1	16 years and 4 months
2018	4,154	39.4	15 years and 1 months
2019	4,212	39.4	15 years and 3 months

* AGC adopts a union shop system under its labor agreement.

Improving Employee Engagement

Fundamental Approach

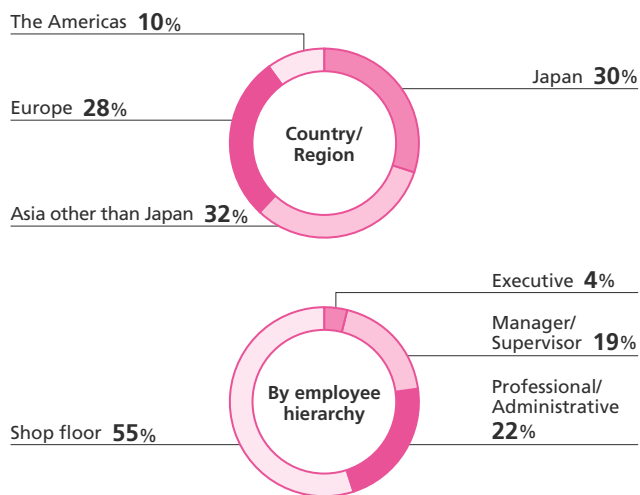
The AGC Group aims to be a company that succeeds because of its human resources, ensuring that its employees are motivated to work and improving corporate culture. In other words, we strive for improved employee engagement, and to further improve it, employees, management and Group executives all consider ways to solve problems and find appropriate measures through dialogue. The Group also strives to make these ways of thinking and activities part of its employees' daily work.

Group-wide Initiatives

Since 2005, every three years the Group has conducted engagement surveys targeting Group company employees both inside and outside Japan, with the aim of improving overall engagement. Based on the results of these surveys, the Group formulates and executes necessary policies at individual divisions or workplaces, and confirms the positive effect of the policies in the following survey.

Most recently, in September 2019 the Group conducted a sixth survey in 22 languages targeting approximately 48,000 individuals. The positive response rate increased compared to the previous survey in 2016, and the effect of measures taken by each division and workplace was evident. Currently, based on the results of the 2019 survey, we are discussing workplace issues and developing additional measures to resolve them.

● Engagement Survey Respondents by Region/Job (6th Survey)



● Engagement Survey Respondents

	Eligible employees	Respondents	Response rate
First survey (conducted in July 2005)	9,247	8,435	91%
Second survey (conducted in November 2007)	40,100	31,126	78%
Third survey (conducted in November 2010)	39,055	31,729	81%
Fourth survey (conducted in November 2013)	40,321	33,214	82%
Fifth survey (conducted in November 2016)	43,546	36,773	84%
Six survey (conducted in September 2019)	47,533	41,897	88%

● Engagement Survey Question Items

Employee Engagement	Employee Enablement	Change from Previous Iterations
1. Clear and Promising Direction 2. Leadership 3. Quality and Customer Focus 4. Respect and Recognition 5. Development Opportunities 6. Compensation	1. Performance Management and Compensation 2. Authority and Empowerment 3. Resource 4. Collaboration 5. Work Efficiency	in the Understanding and Practice of “Look Beyond”

Establishment of the AGC Group CEO Awards System

The AGC Group has set up an annual global system for offering CEO awards, with the goal of creating a positive corporate culture that encourages respect, commendation of success and recognition of efforts amongst its members. Information on the award-winning activities is shared via the intranet website. To maintain a high level of motivation for its employees, the Group is constantly rethinking ways to acknowledge and commend their contributions.

● Commendations Awarded Across the AGC Group 2019

Division	Number
Architectural and Industrial Glass	8
Automotive	8
Electronics	9
Chemicals	8
AGC Ceramics	2
CTO Office ¹	5
CFO Office ² and Internal Auditing	2
Total	42

¹ Productivity Innovation Division, Business Development Division, Intellectual Property Division, Environment, Safety and Quality Division, Technology General Division

² Management Planning Division, Administration, Public Relations and IR Division, Legal Affairs, Human Resources, Finance and Control, Purchase and Logistics and Information Systems Divisions

Maximizing Employee Potential Through Diverse Working Styles

The AGC Group has described its long-term growth strategy in “Vision 2025.” To put this strategy into practice, the Group has been reviewing working styles since 2016 that allow each employee to work to their full potential, and working environments that allow Group employees to work creatively.

In 2017, for example, the Group implemented a system at AGC proper that gives employees time off in the case of their spouse transferring jobs, and a system that provides teleworking options—not only limited to cases of childcare or nursing care. Also, the Group has revamped its re-employment registration system, envisioning potential life stage changes for once-retired employees. The introduction of these systems promotes more flexible and diverse working styles.

The Group will continue to encourage the use and establishment of these systems. By doing so, AGC aims to be a company that succeeds because of their human resources—the largest asset in the Group—and draws out their maximum potential.

In order to maximize their potential, it is crucial to guarantee the physical and mental wellbeing of each employee, which directly leads to increased employee activity, satisfaction and productivity. This is the foundation of a company that succeeds because of their human resources. To this end, the Group actively supports “Healthy Management” initiatives applicable to AGC as a whole.

Work-Life Balance

Fundamental Approach

The foundation of the AGC Group's human resource management, the 7 Key Principles for People, outline how to maintain a work environment that allows employees to work safely. Based on these principles, the Group seeks to secure and maintain a work environment and conditions that allow employees to work with enthusiasm.

Management Structure

The human resources department is the main body in the AGC Group working to ensure a quality work-life balance for Group employees. Based on the laws and practices of each country and each region, the Group considers work-life balance on a company-by-company basis, in light of the nature of business conducted by the company in question.

AGC Initiatives

AGC is improving its workplace environment with the aim of helping its employees perform their jobs with peace of mind and fully demonstrate their abilities at every stage of their lives. More specifically, in addition to maintaining a system for work-life balance, AGC creates an environment that facilitates use of these systems.

Supporting Employees Caring for Children or Family Members

AGC has implemented several systems for employees who care for children and family members, including a childcare leave system, a child nursing leave system and a shortened working hour system.

● Comparison between AGC's System and Legal Requirements

System	Details
Childcare leave	Available until the child becomes two years old
Shortened working hours for childcare	Working hours can be shortened by up to 2.5 hours per day until the child completes third grade at elementary school.
Capping of the number of overtime and holiday working hours for childcare, including exemptions for late-night work	If an employee wishes, their overtime, holiday and late-night working hours may be capped or exempted
Child nursing care leave	Five days allowed per child each year until the child completes third grade at elementary school
Support for nursery use	Nurseries that AGC is affiliated with may be used in areas of high need (Tokyo and Kanagawa)
Working from home	Working from home is possible without stating reasons such as raising children or nursing care (no limit on number of days)
Flextime	Flextime without core working hours is possible without stating reasons such as raising children or nursing care
Leave of absence during spouse's job transfer	Leave of absence possible if required to accompany spouse on new job transfer (maximum 3 years)
Registration for re-employment of retirees	Registration for re-employment possible for those who quit the company voluntarily for any of the following reasons: marriage, childbirth, raising children, spouse's job transfer or nursing care.
Women's mentorship system	Mentorships from senior female employees are available for work-related experience counseling or personal advice (general career-track position female employees)

In 2012, the Group introduced a flexible work-from-home system that eliminates commute time and allows employees to spend more time with their children and others requiring care.

In recognition of the results of these various initiatives, in 2008, 2011 and 2015 AGC was certified by the Tokyo Labor Bureau of the Ministry of Health, Labor and Welfare, based on the Act on Advancement of Measures to Support Raising Next-Generation Children, and authorized to use the Kurumin certification mark to indicate its support for the next generation.

Further, AGC was selected by the Ministry of Economy, Trade and Industry in cooperation with the Tokyo Stock Exchange as a NADESHIKO brand company for its exceptional promotion of women's success (2019).

● Employees Taking Childcare/Family Care Leaves

FY	No. of employees who took childcare leave	No. of employees who took family care leave
2015	99 (Including 12 male employees and 7 employees taking short-term childcare leave)	1
2016	87 (Including 7 male employees and 7 employees taking short-term childcare leave)	5 (Including 1 employee taking short-term nursing leave)
2017	76 (Including 11 male employees and 7 employees taking short-term childcare leave)	2 (Including 1 employee taking short-term nursing leave)
2018	97 (Including 16 employees taking short-term childcare leave)	7 (including 3 employees taking nursing leave)
2019	81 (Including 11 male employees)	5



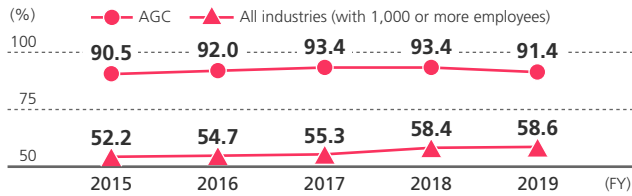
AGC was selected as a NADESHIKO brand company in 2019

Next Generation Support Certification Mark "Kurumin"

Promoting Annual Paid Leave (AGC)

The percentage of leave consumed came to 91.4% (labor union member average) at AGC in 2019. As a part of the annual paid leave system, the Group has also introduced a half-day leave system for employees.

●Average Percentage of Annual Paid Leave Used



1 Labor union member average

2 Data for all industries is sourced from a General Survey on Working Conditions by the Ministry of Health, Labour and Welfare

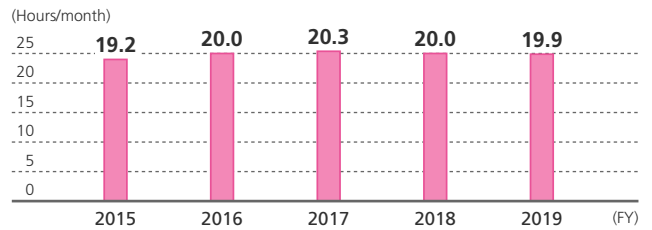
Reducing Overtime Working Hours

AGC strives for proper management of working hours. Currently, based on the idea that the Group will strive to reduce overtime and holiday work by finding ways to work more efficiently, and ensure that unpaid overtime is not worked, the Group (1) manage daily work through sufficient communication between administrators and their subordinates; (2) implement agreements with the labor union based on Labor Standards Law; and (3) promote appropriate management of working hours using data recorded by ID card readers.

To prevent health complications caused by overwork, AGC has set in-house standards, which are stricter than those mandated by law, requiring employees who have completed a certain amount of overtime to visit an occupational physician.

In addition, sharing of case studies is promoted so that human resources managers at each Group company in Japan can discover activities that promote effective management of work hours.

●Trends in Overtime Working Hours (AGC)



Global Promotion of Diversity

Fundamental Approach

The AGC Group has highlighted the importance of diversity—the source of the Group’s competitiveness in the long term—in “Our Shared Values” from the Group Vision **“Look Beyond”**, and strives to achieve such diversity. “Diversity for Organizational Competitiveness” is addressed in the 7 Key Principles for People, which aims at realizing progressive human resources management. “Respect for People” is discussed in the Charter of Corporate Behavior. Based on these guidelines, the Group strives to create fair and open workplace environments free of discrimination.

Management Structure

In the AGC Group, the human resources department is the main player in setting goals for achieving diversity. Concrete measures are devised in cooperation with human resource departments in each company and region.

Group-wide Initiatives

Hiring Diverse Personnel

To strengthen the Group’s brand as a global employer, the AGC Group has created a standard recruiting website for Japan, Europe and Thailand, featuring a consistent recruitment brand message for the Group.

Since 2010, when hiring new graduates for career-track positions, AGC has boosted efforts to hire Japanese and non-Japanese students graduating from overseas universities as well as foreign students graduating from Japanese universities. In fiscal 2019, the company hired five new non-Japanese graduates.

Also, the Asia Pacific region is an important location in AGC’s business strategy. To accelerate new business and market development, the local holding company AGC Asia Pacific was established in Singapore in 2013, and regardless of country of origin, the Group is hiring ambitious, highly capable talent from both inside and outside the region.

● Foreign Nationals Hired during New Graduate Recruitment for Career-Track Positions (AGC)

Fiscal Year	Exchange students in Japan	Graduates of Overseas Universities
2015	2	0
2016	4	0
2017	1	0
2018	1	1
2019	3	2



The recruiting webpage for Japan



The recruiting webpage for Europe

Women’s Career Development

The AGC Group is promoting the career development of its female members, in accordance with the principle of global management without regard to gender, as declared in the “Diversity” section of the Group Vision **“Look Beyond”**. At present, women hold 3.5% of management positions (division manager or higher) and 5.7% of executive positions (senior supervisor or higher; excluding members over 60 years old) at AGC proper.

Guided by the AGC Group Charter of Corporate Behavior, the Group is striving to create fair and open environments at its workplaces, free of discrimination based on gender or any other characteristic.

AGC has appointed one woman as an outside director and one woman as an Audit & Supervisory Board Member on its Board of Directors through internal assignment. The company actively employs women and creates a workplace environment facilitating the career development of female employees.

AGC Support

Further Employment and Promotion of Female Employees

AGC aims to make the most of diversity in the workplace, and developing the talents of female employees is a top priority. The Group (1) assigns female staff to director and managerial positions and is actively expanding the hiring of skilled female staff, creating a workplace where they flourish and (2) implements necessary systems and frameworks to create a workplace environment in which women can demonstrate their abilities.

With regard to recruitment, in 2011 AGC set a target specifying that at least 20% of new graduates hired for career-track positions be female; in 2019, 23.9% of the new graduates hired were female. Also, female staff members are being assigned to director positions and provided a workplace where they can thrive. To create a supportive environment, AGC created a waiting list rehiring system that registers employees who have left the company but hope to return to work. This system prioritizes hires from the list over the external human resource market. In addition, AGC introduced a mentoring system for female employees, through which senior female staff provide guidance to junior female staff. AGC also set up a daycare support system, establishing corporate contracts with daycare centers. This ensures support for employees who have difficulty starting or returning to work due to a lack of open nursery school spaces. As of 2016, AGC has concluded contracts with two daycare centers in Tokyo and Yokohama. This system is available to both male and female employees. Additionally, in order to realize more efficient and flexible working styles, the potential applicants and applicable number of uses of the work-from-home system have been expanded.

Support for raising children

AGC provides support through a cross-departmental network of female employees for raising children, including the following: (1) Introduction of a Nursery Use Support System for external nurseries registered as AGC corporate bodies, (2) Creation and distribution of handbooks for pregnant women or women raising children, both for employees and managers, (3) Tri-party meetings between the Women's Activity Secretariat, female employees and their managers (both before taking childcare leave and after returning) and (4) Career design seminars after returning to work.



Women's career design seminar after returning to work

● Trends in Percentage of Female Managers (division manager or higher)

FY	Proportion of female employees
2015	2.6%
2016	2.6%
2017	2.7%
2018	3.3%
2019	3.5%

● Trends in Percentage of Female Managers (general supervisor or higher)

FY	Proportion of female employees
2015	4.5%
2016	4.6%
2017	4.7%
2018	5.2%
2019	5.7%

* As of December 31, 2019 (excluding members over 60 years old).

● Number of Female New Graduates Recruited for General Career-Track Positions

FY	Number of new female graduates	Total new graduates	Percentage of female employees
2017	18	98	18.4%
2018	23	132	17.4%
2019	26	109	23.9%

Employment of Senior Citizens

In April 2006, AGC introduced a system to continuously employ retiring non-managers who meet personnel criteria for continuous employment. The criteria are provided in the labor-management agreement with the aim of utilizing the expertise, technologies and skills of retirees and reinforcing personnel ranks.

Since 2013, AGC has been gradually raising the age limit of employees eligible to apply for continuous employment, in accordance with a revision of the Law Concerning Stabilization of Employment of Older Persons, and plans to abolish age limitations by 2025.

Similarly, going beyond legal stipulations, AGC has been gradually raising its retirement age, currently set at 60, since 2015, and will bring it up to 65 in 2025. This will allow employees over 60 to continue thriving in important positions in the workplace.

● Transitions in the number of continuously employed individuals aged 60 or more

FY	Number of reemployed retirees	Number of retirees	Continuous employment rate
2015	90	118	76.3%
2016	111	124	89.5%
2017	63	84	75.0%
2018	64	100	64.0%
2019	None	—	—

* As shown in the table below, the age of retirement is gradually increasing, and there weren't any retirees in 2019.

● Reference: retirement age for employees based on date of turning 60 (up to 2021)

Age turning 60	Retirement age	Year of retirement
2016	62	2018
2017	63	2020
2018		2021
2019	64	2023
2020		2024
2021		2026

Employment of People Living with Disabilities

AGC has expanded employment opportunities for people living with disabilities. AGC has exceeded the employment rate of people with disabilities designated by law, and continues to promote understanding of this initiative throughout the company.

● Employment Rate of People with Disabilities

FY	Number of people with disabilities (actual number)	Employment rate
2015	110	2.15%
2016	112	2.17%
2017	122	2.30%
2018	127	2.28%
2019	129	2.23%

The Special Subsidiary, AGC Sunsmile

AGC Sunsmile is a special subsidiary established in 2002 with a view to increasing the employment of people living with intellectual disabilities. In cooperation with relevant organizations, the company strives to provide a better work environment for employees with high motivation. Duties consist mainly of cleaning company offices, dormitories and company residences, and the business is being developed in the Keihin, Sagami and Kansai areas.

At the AGC Kansai Plant (Takasago Factory), people living with intellectual disabilities are put in charge of greening activities and janitorial work, and the factory is endeavoring to create even further opportunities. Intellectually disabled individuals are also actively engaged in janitorial work at the Chiba Plant.

Employee Education

Fundamental Approach

The AGC Group outlined its policy on Development and Growth in the 7 Key Principles for People, which aims at realizing progressive human resources management. The Group has established a variety of training programs, such as technology and skill training provided alongside rank-specific training. AGC Asahi Glass aims to be a company that succeeds because of their human resources—the driving force for the growth of the Group's business operations—and this training further supports employee growth.

equipped with the same machines and equipment used in AGC Group plants, provides trainees with practical, hands-on learning opportunities. Trainees are able to learn about processes they may not encounter in their daily work at the plant; for example, the structure of a melting furnace and troubleshooting methods relevant therein. Training is also provided to business partners to boost the standard of manufacturing excellence and personnel cultivation throughout the supply chain.

Management Structure

The AGC Group organizes an educational system, chiefly through the human resources department, in cooperation with individual companies and personnel officers in each region. In addition, the training systems and methods are continuously reviewed and improved.



Training and Education Building



Accommodation facility at the AGC Monozukuri Training Center

Group-wide Initiatives

AGC Monozukuri Training Center

The AGC Monozukuri Training Center is an educational facility designed to effectively cultivate AGC Group personnel. The Training Center is comprised of two areas, one for training and one for practice, and it provides training on about 80 clerical and technical topics, principally for AGC Group employees in Japan. On the practice side, technical education is designed around the concepts of “the site, the work and the conditions.” This building,

● Number of Monozukuri Training Center Users

FY	Annual training hours (hours/person)
2017	27,543
2018	29,952
2019	21,969

Rank-specific training

Rank-specific training in the AGC Group is targeted at new employees, employees carrying out certain roles and newly appointed managers. In order to strengthen management roles and functions, rank-specific training is provided for representatives and managers. Rank-specific training is provided for employees in Korea, China and Taiwan, as well as employees in Japan. In addition to rank-specific training, we also provide many opportunities for elective training in respective specialty areas.

Provision of online training

Since 2014, the Group has been providing employee training online as part of its “Learn anytime, anywhere” workplace-building initiative. As of 2019, nine of 82 training courses had been made available online or through videos. Through supplementation of these courses, the Group will continue to support its employees’ education.

Promoting AGC Group Improvement & Innovation Activities

The AGC Group promotes “AGC Group Improvement & Innovation Activities” in order to raise the productivity of the entire Group. In addition to improving productivity throughout the supply chain, the Group is actively expanding the scope of activities to related departments, such as sales and marketing.

In recent years, the Group has been working to raise the likelihood of success in its business ventures by incorporating productivity-boosting measures when constructing a new business or production line.

Initiatives in Europe

At the Automotive Company, engineers from factories around the world periodically share best practices in web meetings and face-to-face talks, promoting the construction and development of AGC’s global standards. Particularly in Europe, the Automotive Company is promoting training and implementation of improvement activities based on the Toyota Production System.

Initiatives in Asia

In Asia, the Group holds seminars on improvement activities approximately five times a year at major bases in China, and nurtures improvement theme leaders at each site. Moreover, the Group is working to improve productivity using IoT tools at model factories, and is deploying the results horizontally to other plants.

CNA : Cross-Divisional Network Activities

The AGC Group created Cross-divisional Network Activities (CNA) to enable employees possessing common skills to network.

These activities would otherwise be impossible due to employees' day-to-day work being conducted in different organizations. Objectives of this initiative include building networks between employees with common skills and honing specialist skillsets while engaging in issue resolution.

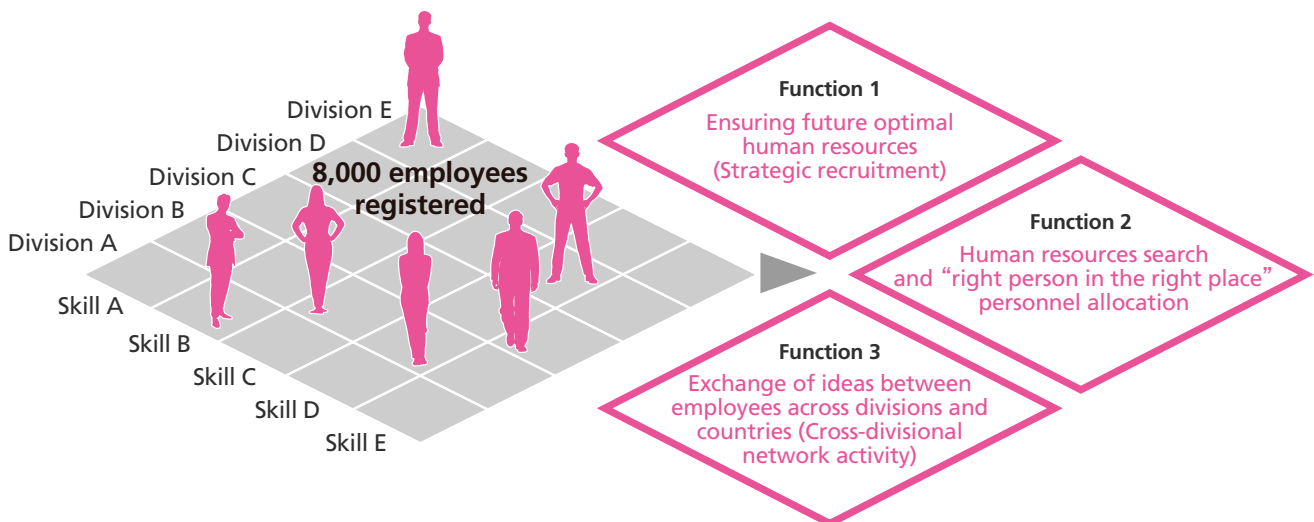
Cross-divisional Network Activities take place on various levels, from information sharing to joint research. By discussing potential roadblocks and bringing together skills and knowledge, solutions to common issues and ideas for new technology emerge. For example, collaboration between the sales and R&D departments gives the customer a role in the R&D process, allowing them to bring in viewpoints and fresh ideas that can spark new initiatives.

Skill Map: A Unique Personnel Database

The AGC Group introduced a unique personnel database, Skill Map, in 2010. This group-wide database, in which employees are registered by their specialty, enables the Group to "see" the skills held by employees in various divisions. As of the end of 2018, approximately 8,000 employees are registered in the Skill Map in 28 technical categories and 12 sales/administrative categories. The database has been linked to effective utilization of human resources and facilitating communication.

Introducing Skill Map has enabled users to see which organization employees with certain skills belong to, facilitating strategic recruitment in accordance with the growth strategy. The database also facilitates the human resources search and "right person in the right place" personnel allocation. It is also utilized in implementing cross-divisional network activities.

●The Three Functions of Skill Map



Individual Company Initiatives

Career Development Support (AGC)

AGC has introduced the Challenging Career System to encourage employees to raise their hand and apply for the jobs they want. The system assigns appropriate people to newly launched businesses and operations that need strengthening, further invigorating the organization in the process. In addition, the Professional System and the Meister System have also been adopted in order to appropriately evaluate and manage those with highly specialized expertise or advanced technological skills.

Challenging Career System

An in-house voluntary recruitment system, under which employees apply to job offers publicly given by in-house organizations once a month (applied to a total of 200 employees). An in-house "free agent" system, under which employees register the jobs that they wish to perform at other departments, and undergo screening individually to get the jobs (applied to a total of 108 employees).

Professional System

A system under which managers who have extremely high practical knowledge, skills or behavioral traits regarding technological skills and expertise vital to the AGC Group, and can exercise them to great effect, are certified as professionals, evaluated and treated appropriately. (47 managers)

Meister System

A system under which engineers who have outstanding technical skills and knowledge vital to the continuous development of the AGC Group, exercise them to great effect, and are responsible for the training and guidance of their successors are certified, evaluated and treated appropriately (applied to 6 employees)

Note Current numbers as of end of December 2019. The number listed for "Challenging Career System" is the total number of users since 1999

Occupational Health & Safety

Fundamental Approach

The AGC Group has formulated the AGC Group Basic Occupational Health & Safety Policy and promotes activities to create a safe and healthy work environment under the occupational health and safety policy of “No production without safety.”

AGC Group Basic Occupational Health & Safety Policy

(Established on February 9, 2001 and revised on March 29, 2013)

Basic Policy

The AGC Group will manage its Occupational Health and Safety (hereinafter “OH & S”) under the policy of “No Production without Safety” and all managers will ensure that the OH & S policy should be clearly understood and permeated throughout the Group and that all of the employees should be actively involved in the promotion of OH & S activities.

Guidelines for Occupational Health and Safety Activities

We will actively implement OH & S activities by addressing any possible issues on occupational accidents and illnesses to achieve continual improvement in our OH & S performance, based on the following guidelines.

We will enhance the level of our Risk Assessments to promote effective use of our OHSMS.

We will continue our conventional on-site safety activities without making them mere repetitive routine.

Managers will treat their subordinates like a family member and ensure safety at workplaces.

We will promote intrinsic safety of equipment, and look for continual improvement in the workplace environment.

We will implement OH & S activities as a part of production line activities. The departments in charge of OH & S will provide necessary support for line management.

We will comply with OH & S related laws and requirements.

We will encourage proactive employee participation in all OH & S activities through open, honest and fair interactions and communication at workplaces.

Management Structure

The AGC Group is pushing ahead with health and safety activities based on the concept of an occupational health and safety management system (OHSMS).

Since 2013, the Group has been using the EHSQ (Environment, Occupational Health & Safety and Quality) Management System to manage EHSQ across the entire Group. Pivotal aspects of EHSQ management that the Group must carry out are defined in the AGC Group Occupational Safety and Health Regulations and applied globally at each Group company and SBU.

Additionally, each business site manages its own activities based on the OHSMS system, and strives to improve health and safety management levels through audits conducted by corporate divisions and individual business units.

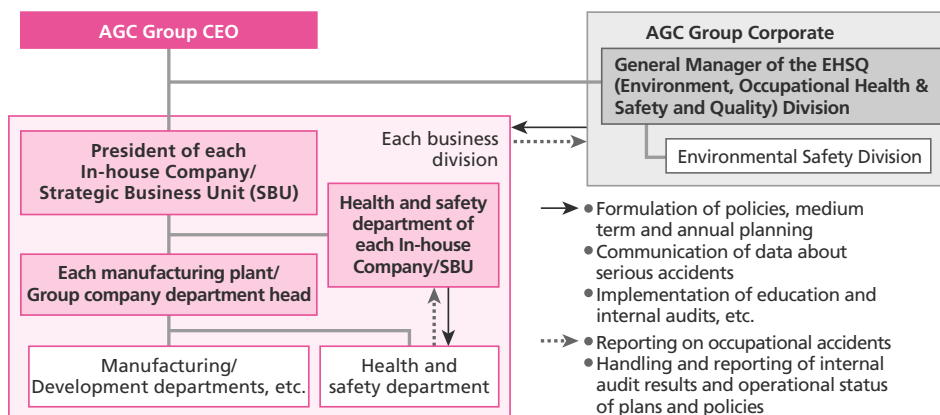
Each business unit examines their policies and measures, reports the progress at EHSQ management reviews and more, and continuously conducts improvement activities.

● Number of Plants Obtaining Third-Party Certification for OHSMS

(As of the end of December 2019)

Coverage	Number of certified plants
AGC	1
Group companies in Japan	5
Group companies in Asia other than Japan	14
Group companies in Europe	54
Group companies in North America	3
Total	77

●The AGC Group’s Health and Safety Management Initiatives



Group-wide Initiatives

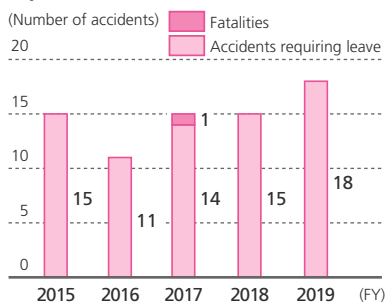
Developing a System to Collect Global Accident Data

The AGC Group has developed a system for collecting the standardized occupational accident data of the Group globally, including its business partners at business sites, and sharing this information laterally.

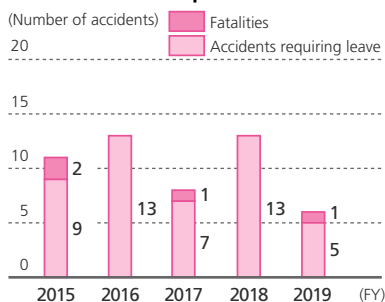
Due to these initiatives, over the long-term incidents have trended downward. In the past few years, the number of occupational accidents has leveled off, although some areas have seen an increase.

● Number of Occupational Accidents (AGC Group including Business Partners)

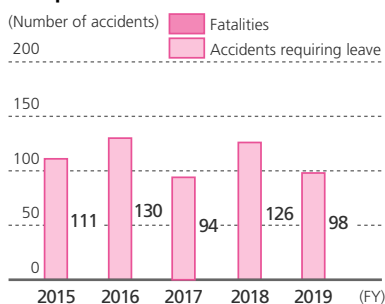
Japan



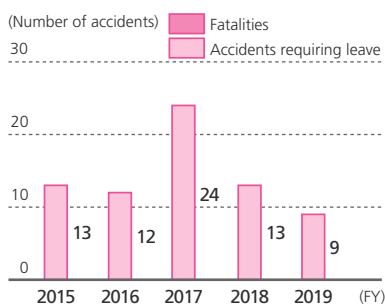
Asia other than Japan



Europe



The Americas



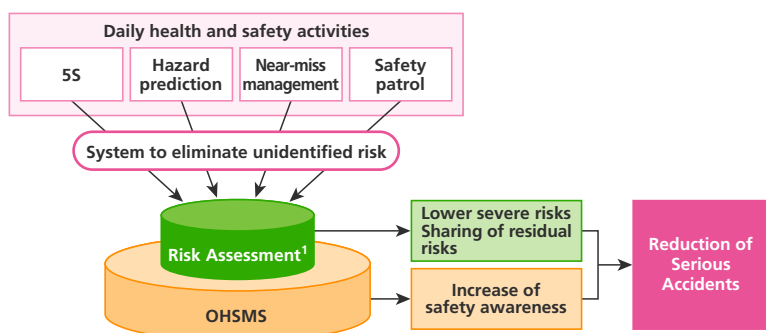
* The assessment criteria for accidents requiring leave differ among Asia including Japan, Europe and The Americas, which disables the simple comparison of the numbers of occupational accidents among each region. To improve accuracy, data has been traced back to previous years before adjusting figures.

● Occupational Accidents in 2019 (includes AGC Group in Japan and Asia / business partners)

Type	Japan		Asia other than Japan	Total
	Major sites	Others		
Death	0 (0)	0 (0)	1 (0)	1 (0)
Leave of Absence	11 (10)	7 (5)	5 (13)	23 (28)
No Leave of Absence	15 (6)	5 (2)	3 (9)	23 (17)
Minor injuries	42 (28)	—	—	42 (28)
Total	68 (44)	12 (7)	9 (22)	89 (73)

* The figures in parentheses represent the numbers of occupational accidents in 2018.

● The AGC Group's Health and Safety Management Initiatives



* Activities to comprehensively identify risks associated with facilities and work processes, to evaluate the risk levels, and to implement safety measures, prioritizing serious risks

Promoting safety activity-related information sharing that eclipses national and departmental boundaries

(Architectural and Industrial Glass Company/ Automotive Company)

In the AGC Group (Asia), meetings are held for employees in charge of safety from all relevant countries. Issues requiring reform are shared through activities that highlight the Group's stance on health, safety and environment, and each participating country aspires to improve their safety initiatives through these meetings.



Meetings for employees in charge of safety include healthy debate

Continuing to Advance Risk Assessment

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

The AGC Group (Japan) trains managers and supervisors, and implements routine training for employees who conduct risk assessment at manufacturing sites.

In 2009, the Group began Safety Enhancement Activities, selecting qualified individuals from those in charge of development, manufacturing, equipment or other important matters at each manufacturing site to conduct intensive education on risk assessment and daily safety activities.* In 2019, 34 people completed the program, and these individuals now work as core safety personnel. There are currently over 300 core safety personnel operating across all business sites.

At the AGC Group in Asia, certain managers and engineers in each country and region are designated as Safety Key Persons. These individuals receive one week of group training in Japan focused on basic concepts of risk assessment and international standards for machine safety.



Participants in the training for Safety Key Persons

* Health and safety conventional activities such as the 5S (seiri [sort], seiton [set in order], seiso [shine], seiketsu [standardize] and shitsuke [sustain]), risk prediction, near-miss management (hiyari-hatto) and safety patrols.

Promoting Machinery Safety by Introducing Safe Manufacturing Machines

Reducing risks associated with manufacturing machinery is essential for realizing safe production workplaces. Building on efforts to minimize machine-related risk through established risk assessment methods, the Group is working to ensure the installation of safer manufacturing machinery through additional risk assessment protocols at the design stage.

In Europe, risk-reduced facilities were introduced based on the local law-enforced system of CE marking¹. Additionally, the crucial role of risk assessment by facility users is stipulated in the EU framework.

In Japan and the rest of Asia, the Group encourages all managers responsible for safety to obtain qualifications as Safety Assessors and Safety Basic Assessors under a Certification System², so they have a full understanding of international safety standards when adopting plans and machinery.

The number of employees with this certification rose further in 2018, with a particularly large increase in the number of employees from Asian Group companies obtaining Safety Basic Assessor Certification, totaling over 100 individuals in Thailand, Indonesia, China and elsewhere.

The number of employees with safety assessor certification in Japan has also risen steadily. The certified individuals are assigned tasks as risk assessors and inspectors.



Training for Safety Basic Assessor Certification (Thailand)

¹ Products with the CE mark certifies that they meet the standards set by all member states of the European Union.

² The safety assessor certification is awarded for understanding and practical skills related to machinery safety. Based on international safety standards and developed by Nippon Electric Control Equipment Industries Association and other organizations, the certification is verified by a third party. Three levels of certification are available: Safety Lead Assessor, Safety Assessor and Safety Sub-Assessor. The certification for the assessment of basic safety, which targets operators of machinery and tests fundamental knowledge of machinery safety, is verified by a third party.

Establishing a Chemical Substance Management System

According to the Strategic Approach to International Chemicals Management (SAICM) established in 2006, any country manufacturing or using chemical substances is required to minimize the adverse effects of these process on humans and the environment by 2020. In Japan, this includes chemical substance risk assessment in accordance with revisions to Japan's Industrial Safety and Health Law. Other countries are also required to build on and expand their chemical substance management systems. The AGC Group is carrying out appropriate activities, namely managing chemical substances used in each worksite, appointing experienced chemical substance managers and conducting appropriate risk assessments, all in order to improve chemical substance management levels.

For risk assessments of chemical substances, the Group created its own standardized assessment method, and has made it known group-wide by conducting training at production sites and other worksites.

Based on the Globally Harmonized System of Classification and Labeling of Chemicals, the Group's assessment method is a simple and useful way to assess the risks, danger or toxicity of chemical substances, and can be applied in any country worldwide.



Chemical Substance Risk Assessment training

Improving the Level of Safety Awareness

The AGC Group is implementing stratified education to raise safety awareness.

The Human Error Prevention Manual, amongst others, is a proprietary textbook that has been translated into multiple languages for use in training courses at each plant.

The Group also conducts practical training for safety patrols in Asia, including Japan, to give workers the skills needed to identify latent but serious workplace risks while on patrol. In the training, participants conduct a safety patrol along a mock production line with more than 110 flaws. This first-hand experience in machinery safety builds skill in identifying the risks caused by unsafe situations in facilities.

Since 2012, this training has been conducted for safety managers throughout Japan, and several safety managers from Group companies outside Japan have also received the training. A safety patrol facility has been partially deployed at Asahimas Flat Glass in Indonesia, mainly focused on providing similar training for safety managers in the region.

Furthermore, a meeting to announce improvement initiatives is held every year in autumn by the Purchase & Logistics Division in AGC and AGC Logistics (AGL). At the meeting, improvements to safety and quality regarding distribution of goods by Business Partners (BP) and AGL are announced. To promote a common culture of safety between AGL and the BPs, a full circuit inspection and “finger-pointing and call” safety check are carried out at each BP company, and around their trucks.



Practical safety patrol training

Implementing Hazard Simulation Training

The AGC Group is putting into effect “Safety Sensory Education” that simulates occupational accidents, such as getting caught in machinery or receiving an electrical shock, with the aim of enhancing safety awareness and eliminating unsafe behavior leading to occupational accidents. In recent years, content that allows users to experience dangerous situations through virtual reality (VR) technology has also increased.

Currently, the AGC Group is introducing several types of safety sensory facilities at the AGC Monozukuri Training Center and a number of business sites, in addition to implementing VR content. It is also promoting the training of instructors who can lead Safety Sensory Education on a regular basis.



Leak simulation of chemical hazardous materials (Indonesia)



Simulation of how to hold glass safely (Japan)



Experiencing the danger of a forklift crash through virtual reality (VR) technology (Japan)

AGC Initiatives

Labor Union Participation in Health and Safety Measures (AGC)

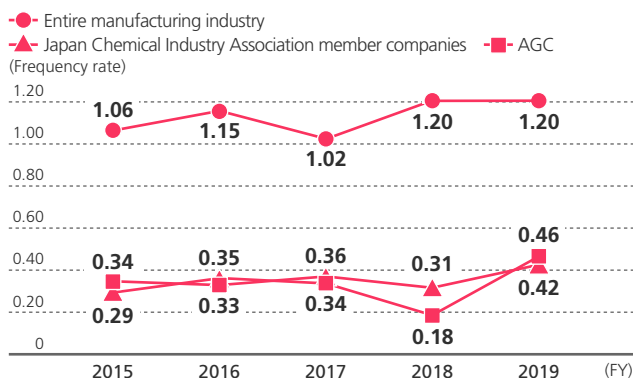
At AGC, safety and health committees are established at each site based on collective labor agreements, and labor unions’ opinions regarding safety and health are considered. Business partners working within the site also participate in the committee.

Safety officers and employee representatives are given regular opportunities to exchange opinions, which are then reflected into various safety and health measures.

●Trend in the Severity Rate of Accidents Requiring Leave (AGC including Business Partners)

	2018	2019
Entire manufacturing industry	0.10	0.10
Japan Chemical Industry association members	0.026	0.01
AGC	0.007	0.031

●Trend in Frequency Rate for Accidents Requiring Leave (AGC including Business Partners)



Creating a Comfortable Workplace

Fundamental Approach

Through occupational health and safety activities, the AGC Group promotes the creation of a pleasant workplace environment based on its Basic Occupational Health & Safety Policy.

To clarify its position on employee health management, the Group has established the AGC Health Management Policy, which details its vision for the health management of all employees.

AGC Health Management Policy

(Established on March 1, 2007)

The AGC Group has established the following health management policy to be followed by its employees in conducting their business operations, to continuously create value for the world under the Group Vision **“Look Beyond”**

Health consciousness

Employees represent one of the most important assets for the AGC Group, and health is one of the most important elements of the daily lives of employees.

Corporate support for employee health

The AGC Group will actively implement measures to maintain and promote the physical and mental health of its employees, thereby supporting them in driving the growth of the Group by fully displaying their individual abilities, and in striving to lead meaningful lives.

Self-discipline by employees

Employees themselves must be aware of the importance of their health, and they must maintain and promote their health through self-discipline, taking responsibility for their own health.

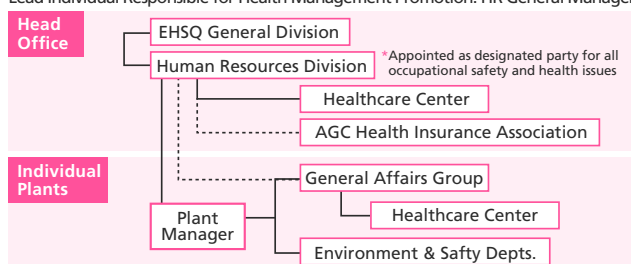
* The AGC Group plans to extend this Health Management Policy from AGC to Group companies in and outside of Japan in the future.

Management Structure

Occupational Health Management through Divisional Cooperation

In accordance with the AGC Basic Occupational Health & Safety Policy and AGC Health Management Policy, the AGC Group works with related divisions on measures to continue providing a positive workplace environment. This is accomplished by making the HR General Manager the lead individual responsible for Health Management promotion. They are appointed as designated party for all occupational safety and health issues, with related divisions collaborating for extra support.

Lead Individual Responsible for Health Management Promotion: HR General Manager



AGC Group-wide Initiatives

[Japan] AGC Group General Affairs Personnel Network Conference

The AGC Group holds regular conferences for general affairs personnel from each Group company in Japan. Outside lecturers are invited to speak, providing a chance for the personnel to deepen their understanding on the latest trends in labor laws. Through discussion, the participants also review health management, work styles and Group policies on matters including harassment prevention. In addition to the conferences, the Group regularly checks employee working hours and the status of response to legal changes, working to enhance collaboration within AGC.

In response to growing attention from society regarding compliance, the AGC Group is promoting the creation of comfortable working environments through occupational safety and health activities for everyone at AGC.

Initiatives at Individual Companies

AGC's Initiatives

Promoting Health Management

- Maintaining and promoting physical and mental health increases employee vitality and improves productivity. It is a fundamental part of AGC's efforts to become a company that succeeds because of its human resources.
- This is a strategic initiative to ensure that every employee working at the AGC Group can continue to maximize their capacity.



Health Management Goals

- **Continuously maintaining and promoting health**
 - By looking after their health, every AGC employee should be able to continue to work actively as they age.
- **Improving productivity and job satisfaction**
 - Every AGC employee should be able to work productively by utilizing a number of work styles and improving their physical and mental condition.
 - Employees should be able to make the most of their capacity and derive satisfaction from their work.
- **Enriching public and private life**
 - Every AGC employee should have a fulfilling life at the company and at home, deriving satisfaction from both work and private life.

When our motivated human resources can maximize their potential, the company becomes stronger as a whole.

The Direction of AGC's Initiatives

The Group will establish Key Performance Indicators (KPIs) based on health management activities under the AGC Health Management Policy and carry out the following health management activities while implementing the PDCA cycle:

- **Improving the rate of secondary health checkups when necessary after a health check, and the rate of participation in health guidance on lifestyle-related diseases and metabolic syndrome**
- **Enhancing of mental health care, including stress checks, etc.**
- **Ensuring that employees are not exposed to second-hand smoke and reducing the employee smoking rate**
- **Establishing good exercise habits**

Health Management Activity Status

- **Enhancing follow-ups for with those with abnormal findings during a physical examination**
 - Regular health check rate
2019: 100% ⇒ Continue as current
 - Secondary health check rate
2019: 81% ⇒ Aim for 100%
- **Preventing mental health problems**
 - Stress check participation rate
2019: 96% ⇒ Aim for 100%
 - Conducting seminars on self-care and training for managers to look after the health of their employees
- **Ensuring that employees are not exposed to second-hand smoke and reducing the employee smoking rate**
 - Complete indoor smoking ban
Achieved at some business establishments in 2019
To be achieved company-wide in 2021
 - Number of smoking areas
2019: decrease of 34%
 - Banning tobacco sales at business sites (2019)
 - Smoking rate
2019: year-on-year decrease of 1%
- **Establishment of exercise habits (walking)**
 - 2019: 4,300 participants



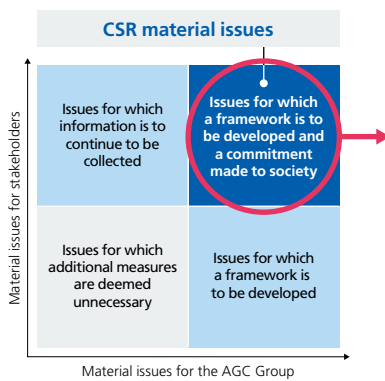
Certified as a White 500 Company in the 2020 Health & Productivity Outstanding Organizations Recognition Program

Society

In 2011, the AGC Group began CSR monitoring based on ISO 26000. In CSR monitoring, issues defined in ISO 26000 are classified into four categories on the basis of their importance to either the AGC Group or its stakeholders. From these categories, a CSR Matrix is created, and issues judged important to both sides are recognized as CSR Material Issues. At present, there are eleven established CSR Material Issues, and their targets and current progress are provided on the following page.

Note Core issues for ISO 26000 regarding society: “Fair Operating Environment” and “Community”

Matrix of CSR Issues



CSR Material Issues relating to the AGC Group

ISO 26000 Items	Issues	AGC Group's material issues
Core subjects		
Organizational Governance	Decision-making processes and structures	Organizational governance
Human Rights and Labor Practices	Conditions of work and social protection	Fair working conditions
	Health and safety at work	Occupational health & safety
The Environment	Human development and training in the workplace	Human resource development
	Prevention of pollution	Pollution prevention
	Sustainable resource use	Sustainable use of resources
Fair Operating Practices	Climate change mitigation and adaptation	Climate change initiatives
	Anti-corruption	Anti-corruption
	Fair competition	Compliance with antitrust laws
Consumer Issues	Promoting social responsibility in the value chain	Social responsibility in the supply chain
	Protecting consumers' health and safety	Product safety

CSR Material Issues of the AGC Group Corresponding to Fair Operating Practices

Anti-corruption

Reasons for Selection

With anti-corruption given as one of the United Nations Global Compact's ten principles, European and American laws and regulations related to anti-corruption are being strengthened, the exposure of corruption is advancing in fast-growing countries, and society's interest in anti-corruption measures is rising. The AGC Group operates in approximately 30 countries and regions and conducts business on a global scale, thus it views corruption as a major risk.

ISO 26000 related actions and expectations

- Identify the risks of corruption and implement and maintain policies and practices that counter corruption
- Provide commitment, encouragement and oversight for policy implementation regarding anti-corruption by top management
- Raise awareness of corruption and preventative measures among employees, representatives, contractors and suppliers
- Establish and maintain an effective anti-corruption system
- Adopt mechanisms to report and follow up on information regarding violations
- Promote the introduction of anti-corruption practices in the value chain

Fair competition

Reasons for Selection

In recent years many countries, including fast-growing nations, have strengthened their regulations and enforcement regarding antitrust laws, and there is strong demand for corporate compliance. Due to the features of its business (a large share or an oligopolistic industry) and having received orders of payment for surcharges from the authorities concerned in the past, the AGC Group is aware that antitrust law violations pose a major risk to its business activities.

ISO 26000 related actions and expectations

- Conduct activities in a manner consistent with competition laws and regulations, and cooperate with the appropriate authorities
- Establish procedures to prevent engaging in anti-competitive behavior
- Train employees on the importance of competition legislation and fair competition

Promoting social responsibility in the value chain

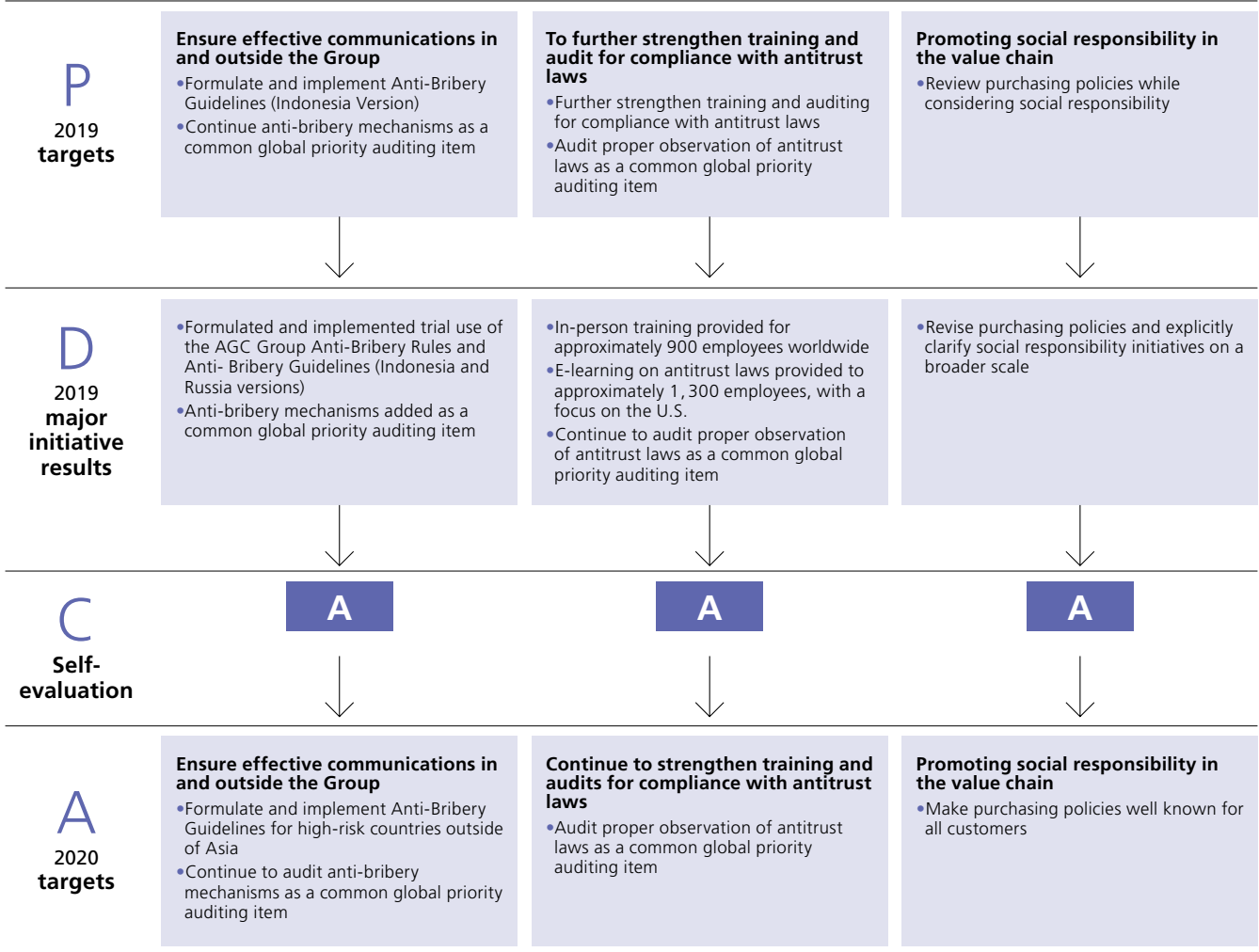
Reasons for Selection

Corporations look to ensure compliance with laws and regulations throughout their entire supply chain as they expand worldwide. The Group recognizes the need to promote certain activities across its supply chain in order to resolve social issues stemming from human rights, labor practices and the environment.

ISO 26000 related actions and expectations

- Integrate ethical, social, environmental and gender equality criteria and health and safety in its purchasing, distribution and contracting policies
- Carry out appropriate due diligence and monitoring of the organizations with which it has relationships

Results of Activities Relating to CSR Material Issues in 2019



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 and some issues still remain
C: Unsatisfactory level, in which the intended target has not been achieved

Fair Transactions

Fundamental Approach

In its Charter of Corporate Behavior, the AGC Group stipulates that it will conduct appropriate transactions and otherwise conduct its business in accordance with the principle of fair competition and all applicable laws and regulations. The Group also strives to maintain a sound relationship with politicians, the government, other organizations and individuals and firmly confront antisocial forces, aiming to conduct fair transactions.

Management Structure

Since 2006, the AGC Group has been implementing a global legal management system and strengthening monthly reporting and monitoring on disputes faced by the Group, in order to grasp their status quickly and deal with each case appropriately.

With regard to the disputes faced by the Group, information is gathered at the Group General Counsel level then is promptly reported to the top management and Group CEO. Moreover, periodic reports are given to the Board of Directors on the progress of the disputes and the status of the global legal system.

In addition, the AGC Group is working to reduce legal risk by hosting legal affairs meetings with Regional General Counsels and cooperating with related in-house divisions.

Group-wide Initiatives

Compliance with Antitrust Laws

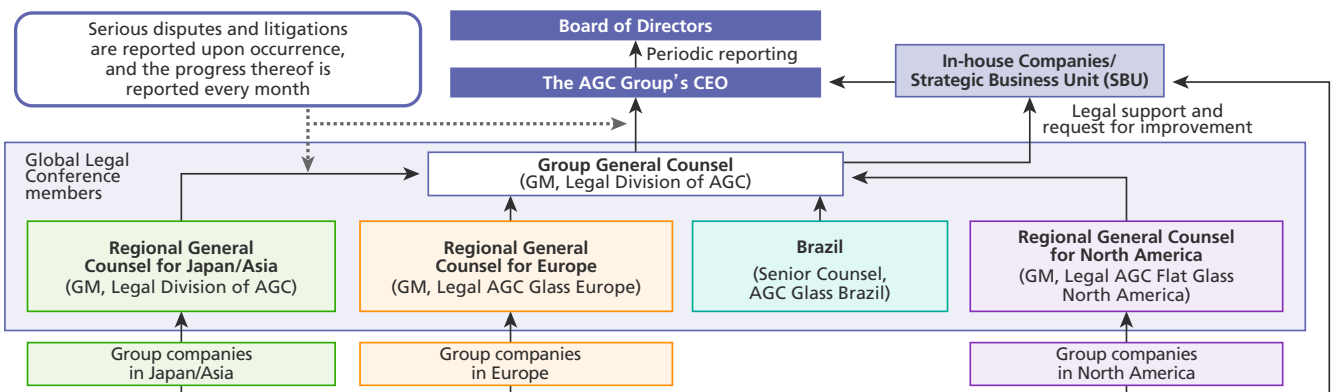
In addition to the Group Code of Conduct that summarizes matters all employees must comply with in their work, the AGC Group has formulated and implemented global guidelines for compliance with antitrust laws. The Guidelines state that, when meeting with a competitor company, (1) the legality of the purpose of the meeting shall be fully examined and participation shall be allowed only on an extremely limited basis, (2) advance permission to attend must be obtained from a supervisor and (3) following attendance, meeting minutes must be prepared.

Moreover, the Group is promoting face-to-face and e-learning education regarding compliance with antitrust laws in each region and organization. One of the global common priority audit items for internal audit is “Organization and procedure for compliance with antitrust law.” Audits of the state of compliance with these global guidelines are also implemented.

● Status of Implementing Measures for Complying with Antitrust Laws (AGC Group)

FY	Number of participants in e-learning	Number of internal audits
2019	Approx. 1,300	51 (Group companies and divisions)

● Global Legal Management System



Preventative Measures for Anti-Corruption

The AGC Group Code of Conduct stipulates that the AGC Group maintains sound relationships with government agencies and other responsible organizations and individuals, and the Group works to comply with each country and region's laws and regulations regarding anti-corruption.

In addition, with the prevention of bribery and other corrupt practices being strengthened worldwide, the AGC Group is promoting relevant education for its employees. In addition to the AGC Group Anti-Bribery Rules for public officers, the Group established and put procedures, concepts and judgment criteria into operation for high-risk countries and regions.

Compliance with Contracting Requirements and the Worker Dispatching Act

The AGC Group conducts business in collaboration with business partners involving contracting companies and temporary workers.

In addition, the Group annually conducts a survey on compliance with contracting requirements at AGC production plants and major Group companies in Japan, and has confirmed that compliance-related rules were observed in 2019. The Group will continue to make efforts to disseminate and thoroughly comply with contract requirements and comply with the revised Worker Dispatching Act.

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

The AGC Group continually educates staff and managers to ensure compliance with the Act against Delay in Payment of Subcontract

Proceeds, etc., to Subcontractors (hereafter "the Act").

Since 2009, the Group has conducted e-learning initiatives for employees who work with transactions affected by "the Act," including employees located in Group companies in Japan.

In 2019, the Group conducted e-learning about the Act for approximately 7,800 employees. Additionally, in November, a liaison conference was held by approximately 20 subcontracting and purchasing management supervisors from each business division.

Prevention of Insider Trading

To protect its shareholders and investors, and ensure the fairness and reliability of securities markets, the AGC Group is making every effort to spread awareness of the prevention of insider trading.

In addition to clearly stating in the AGC Group Code of Conduct that insider trading is forbidden, systems intended to prevent it are stipulated in the Information Control Council Establishment Guidelines and the Insider Trading Prevention and Control Rules.

Furthermore, regular opportunities to learn about the AGC Group Code of Conduct are provided and information regarding the prevention of insider trading is thoroughly disseminated. Understanding of this information is reaffirmed when oaths are taken. Special training is implemented for directors, executive managers and personnel in specific posts (corporate planning, accounting, finance, Corporate Communications, IR, etc.)

Furthermore, if an AGC Group director or employee has concerns as to whether buying or selling stock could fall under insider trading, the Information Control Council prepares a system for review and works to prevent any instance of insider trading.

Respect for Intellectual Property Rights

Fundamental Approach

As stipulated in the AGC Group Charter of Corporate Behavior, the AGC Group properly manages and protects the company's information, intellectual property and assets, and strives to respect the intellectual property rights of others, including customers and business partners.

Management Structure

The AGC Group considers intellectual property rights such as patents, utility model rights, trademark rights, design rights, copyrights as valuable intangible assets and the Intellectual Property Division takes the lead in protecting and enforcing these rights.

Group-wide Initiatives

Protection and utilization of intellectual property rights created within the Group

In addition to creating intellectual property rights as a vital business strategy resource, the Group works to protect and increase it and promotes the use of intellectual property to

heighten its competitive advantage.

For example, the Group globally files IP applications for inventions created at development sites in each country and works to acquire rights adapted to its business activities. Since the procedures for the protection of intellectual property rights differ by country, rights acquisition is conducted in cooperation with local patent attorney offices and Group companies. The Group also takes strict action on any infringements of its intellectual property rights by other parties in compliance with the local laws and regulations of each country.

In addition, in order to use the intellectual property rights held by the Group to promote intellectual property strategy linked to the business and brand strategies of each business division, intellectual property conferences attended by the heads of each business division are held regularly in each division.

● Cycle of Intellectual Property Creation



Prevention of infringement of the intellectual property of other parties

The AGC Group is creating a framework, including employee education, to prevent infringement on the intellectual property rights of others. The AGC Group continuously monitors the intellectual property rights of others and checks to make sure it will not be violating the rights of others before new products are released or new business operations commence.

Employee Training Regarding Intellectual Property Rights

The AGC Group emphasizes employee training regarding intellectual property rights from the dual perspective of adequately protecting its own rights and respecting the rights of others.

In Japan, aside from hosting intellectual property training for new employees, the Group carries out intellectual property training and promotes intellectual property education for each

in-house company, technical division and research division as necessary. Additionally, intellectual property training is also implemented at overseas Group companies, tailored to suit local conditions.

Initiatives at Individual Companies

Rewarding the Inventions of Employees

AGC has a substantial reward system in place for outstanding employee inventions. Similar systems are being prepared at Group companies in Japan.

In addition, reward systems are being prepared overseas based on legal framework in each country and region, taking each locale's present condition into consideration.

Maintaining Information Security

Fundamental Approach

Based on ISO 27000, the international standard for information security management systems, the AGC Group established an Information Security Policy. Based on this policy, which is shared across the entire Group, the Group appropriately stores, uses and manages informational assets and protects personal information.

Management Structure

Based on the Information Security Policy, the AGC Group has formulated standards and guidelines based on regional circumstances in Europe, North America, and Asia, including Japan.

In addition, the Group has established a system to minimize the impact of any loss, theft, leak, etc. of information assets in accordance with the AGC Group Crisis Management Guidelines.

Group-wide Initiatives

Information security education / self-checking

In order to improve the level of information security, the AGC Group regularly conducts education and information security self-checks by e-learning and other means on a global basis, thereby improving the situation regarding information security.

The Group has created textbooks on information security policy in eight local languages spoken in the countries and regions it operates. Multimedia teaching materials, including videos and e-learning materials, are also shared through the company intranet for open use by Group employees.

In addition, meetings are held regularly for those in charge of information security to improve on the self-check results of the previous year and provide necessary education.

●Self-Checks on Information Security: 2019

AGC	Group companies in Japan	Group companies in Asia other than Japan	Group companies in Europe	Group companies in North America
7,500	4,800	6,700	5,000	1,200

Internal audits on information security

The AGC Group has selected "measures for preventing leaks of important confidential information" as one of the shared global priority items for internal audits (see page 20). To prevent information leakage, the Group audits the information security promotion system and regularly inspects and reviews the Group's internal network, sites of connection with the internet and the operational status of important IT infrastructure.

Initiatives at Individual Companies

Information Security Training

Information security training is implemented at AGC as part of the training for new graduate employees and mid-career employees.

Supply Chain

Fundamental Approach

As described in the AGC Group Charter of Corporate Behavior, the AGC Group strives to establish mutually beneficial and appropriate relationships with business partners, ensuring that the principles of compliance with the Charter are in line with the fundamental stance of the AGC Group. By so doing, the Group seeks to promote good supply chain management.

Management Structure

The Purchase & Logistics Division plays the main role in continuing the stable procurement of raw materials and other materials. It also conducts initiatives to solve social issues involving human rights, labor practices or the environment with business partners and the rest of the supply chain. The Group has established the AGC Group Purchasing Policy, which clearly states the Group's responsibility to help realize a sustainable society. The Group asks its business partners to understand and cooperate with this policy.

Group-wide Initiatives

Point of Contact for Suppliers regarding Procurement Activities

The AGC Group is committed to ensuring the transparency of purchasing transactions and preventing fraud. As part of this, in 2019 we revised the Ombudsman System for Purchasing, which had been in place since 2003, and set up a point of contact for suppliers regarding procurement activities. It can be used by business partners to point out problems related to transactions with AGC Group employees by e-mail, telephone, or regular mail, and the issues raised are kept strictly confidential and resolved promptly.

Regular review of the content of contracts

To promote supply chain management, the AGC Group uses the most up-to-date contract with relevant CSR clauses when making new contracts or renewing contracts with business partners.

AGC Group Purchasing Policy (Revised on January 1, 2020)

AGC Group values the idea of the Group Vision **"Look Beyond"** and the "AGC Group Charter of Corporate Behavior" (see page 7) 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 transactions
Our procurement policy is to consistently search for innovative technologies, products and services with a fair and equitable manner globally.
- 2 Compliance to related laws & regulations, and behavior considering safety, environment & human rights
In carrying out purchasing activities, AGC will comply with the applicable laws and regulations of each country and international norms, act with integrity and give due consideration to safety, environment, natural resource conservation and human rights.
In particular, in order not to promote conflicts or foster human rights violations through the procurement of mineral resources, identifying conflict minerals (tin, tantalum, tungsten, gold) and cobalt as high-risk minerals, we will promote responsible mineral procurement through the

adoption of smelters and refiners that have been certified as not using minerals that are related to armed forces or injustice such as human rights violations.

- 3 Partnership with business partners
AGC will establish a long-term, mutual prosperous partnership to produce a better product with our business partners. To this end, we will 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
AGC will properly manage and protect the proprietary information, intellectual property and other assets of our business partners while procuring goods and services.

2. Criteria for Selecting Business Partners

AGC 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, consideration to Safety & Environment and Technical service level.
- 3 Making endeavors to realize each item of the "Request for Cooperation in Sustainable Procurement" below.

3. Request for Cooperation in Sustainable Procurement

AGC 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.

In order to fulfill our social responsibilities towards the realization of a sustainable society as the AGC Group, we would like to promote our efforts together with the companies linked to our supply chain.

Accordingly, we would like to share with and request to our business partners compliance and enforcement of the following points and would like to ask our partners' understanding and cooperation.

1 Legal compliance, fairness and integrity

To comply with laws and international norms of each country and region, conduct fair transactions, and execute the following:

- Maintain healthy and normal relations with politics and government, and do not give or receive inappropriate profits in relation to stakeholders.
- Do not engage in activities that hinder fair competition in the market or abuse superior bargaining position.
- Establish a management system for the import and export of goods and technologies regulated by laws and regulations of each country and region and carry out proper export procedures.
- In the procurement of mineral resources contained in products, identify conflict minerals (tin, tantalum, tungsten, gold) and cobalt as high-risk minerals, and promote responsible mineral procurement through the adoption of smelters and refiners that have been certified as not using minerals that are related to armed forces or injustice such as human rights violations.
- Do not have any relationship with anti-social forces.
- Establish and put into practice a mechanism such as policies, organizations, guidelines, reporting systems and educations, to enforce thorough compliance and to prevent and detect inappropriate practices at an early stage.

2 Environment, safety and quality

To provide high-quality, safe and environmentally friendly products and services, reduce environmental burdens, ensure product and workplace safety, and implement the following:

- Comply with the laws and regulations of each country and region regarding the environment, and appropriately manage chemical substances contained in products and chemical substances discharged to the external environment based on laws and regulations.
- Strive to protect the environment and natural resources and reduce the final disposal volume of waste.
- Establish an environmental management system and continuously operate and improve it.

- Contribute to the prevention of global warming and strive to save energy.

- Work for safety, security and disaster prevention, and work to prevent accidents.

- Products meet the safety standards stipulated by the laws and regulations of each country and region and provide accurate information on items that may cause danger or health damage to users.

3 Human rights and labor

Respect the dignity and human rights of all people and do the following:

- Do not discriminate against people regardless of race, ethnicity, religion, nationality, political affiliation, age, gender, disability, marriage, sexual preference or any other positions.
- Do not engage in acts such as sexual harassment or power harassment that deny the personality of others or harm personal dignity.
- Do not allow forced labor, slave labor, child labor, unfair low-paid labor, and do not participate in human rights violations.
- Respect employee rights and build and maintain good relationships with employees through discussion and dialogue.
- Comply with the laws and regulations of each country and region regarding employee working hours, holidays, paid leave grants and wages.
- Establish an environment where employees can work safely and physically and mentally healthily.

4 Risk, information and intellectual property management

Establish a system to avoid risk on business and execute the following for information and intellectual property management.

- Establish a business continuity plan that provides measures to enable business continuity or early recovery when an unforeseen circumstance such as a disaster or accident occurs, and upon such occurrence, cope with it promptly and disclose accurate information.
- Make proper recording and reporting necessary for the business activities based on the facts, and as well as keeping record, make appropriate information management so that confidential information of the parties such as customers, business partners and own companies including personal information will not be leaked.
- Disclose information such as financial status, business results, and details of business activities appropriately to stakeholders as appropriate.
- Properly manage own and other parties' intellectual properties, and do not obtain third-party trade secrets by illegal means or perform any act that infringes on the intellectual property of a third party.

Implementing CSR Procurement Surveys

The AGC Group regularly conducts CSR procurement surveys. To grasp the implementation status of CSR activities at its business partners, the Group has created Group-wide questionnaires and guidelines used to confirm the activities' progress.

[Homepage link: The AGC Group Guide for CSR Implementation Survey](#)

Educational support for business partners

The AGC Group conducts its business in cooperation with a large number of business partners, and implements a range of measures with the entire supply chain.

Policy Briefing for Business Partners Hosted

Since 1997, the AGC Group has held briefing sessions for its business partners to deepen communications with its partners and expand and unify its business activities across the supply chain.

In 2019, around 270 business partners from 140 companies in various industries in Japan and overseas attended the session. Business partners were presented with a letter of appreciation for their ongoing cooperation and the AGC Group CEO gave a presentation on the Group's mid-term management plan. Following the meeting, a lively exchange of views took place between the business partners, AGC Group executives and AGC Group division heads. (As the 2020 policy briefing was cancelled, content shown here is from 2019.)



Business partners who were presented the CEO award

Promoting Green Procurement

In 2005, the Group formulated the AGC Group Integrated Green Procurement Guidelines, which provides a common approach for all business divisions. In accordance with these guidelines, green procurement guidelines for each business division were created to facilitate green procurement of raw materials and other materials suited to each business.

[Homepage link: AGC Group Integrated Green Procurement Guidelines](#)

Initiatives Related to Conflict Minerals

Taking the conflict minerals issue as an important CSR issue, the AGC Group improves transparency in the supply chain together with its business partners and ensures responsible mineral sourcing practices. By so doing, the AGC Group fulfills its social responsibility as a global enterprise.

With the passage of the financial reform bill in the United States in July 2010, targeted companies are now obligated to disclose use of designated minerals (so-called conflict minerals) mined in the Democratic Republic of the Congo and surrounding countries. For responsible sourcing, the AGC Group will take appropriate measures to work with its business partners in the event that there are concerns that any conflict minerals mined in the designated areas assist militant groups.

Hosting CSR workshops

AGC hosts CSR workshops for major business partners every other month. It also promotes sharing of information on each company's CSR activities, inspections of outstanding plants and hosts lectures twice a year.

The Group also prepares various training programs for its business partners, with a view to promoting manufacturing and human resource development throughout the supply chain.

Assessing Business Partners' Satisfaction with the AGC Group through an Annual Survey

Since 2008, AGC has been conducting an annual survey of its major business partners to assess the level of satisfaction they have in their relationships with the AGC Group. The purpose of the survey is to build relationships of trust with these business partners and create a mutually beneficial environment for producing better products.

The anonymity of the survey is guaranteed so that respondents can feel comfortable in answering questions candidly and honestly. About 200 business partners have been surveyed each year, and the overall results were shared with business partners who responded to the survey and relevant personnel at AGC.



The survey sent to business partners

Social Contribution Activities

AGC Group Social Contribution Basic Policy

Under the three pillars of the AGC Group Social Contribution Basic Policy—(1) Support for the next generation, (2) Harmony with local communities and (3) Natural environment conservation—the AGC Group carries out social contribution activities in over 20 countries and regions throughout Japan/Asia, Americas and Europe.

Moving forward, the Group will continue to actively promote social contribution for its diverse stakeholders and conduct activities that lead to the resolution of social issues.

● Total Financial Expenditure on Social Contribution Activities (AGC Group)

FY	Amount
2016	541 million yen
2017	643 million yen
2018	543 million yen
2019	569 million yen

● Total number of Employee Participation in Social Contribution Activities (AGC Group)

FY	Number of Employees
2018	20,332
2019	23,914

AGC Group Social Contribution Basic Policy

(Established on February 10, 2010)

In its AGC Group Charter of Corporate Behavior, the AGC Group declares it will “strive to be a trusted corporate citizen, fulfilling its responsibilities to the communities in which it does business.” To achieve this, we conduct social contribution activities in three priority areas.

Priority areas

1. Support for the next generation
We, as a creator of future value, support the development of children, who will carry the future, helping them to live out their dreams.
2. Harmony with local communities
We, as a member of the communities in which we operate, contribute to their sustainable development.
3. Natural environment conservation
We, as a global enterprise, contribute to the solution of global environmental problems.

● Total Expenditures by Field of Emphasis: 2019 (AGC Group)

Category	Amount	Rate
Support for the next generation	281 million yen	49%
Harmony with local communities	159 million yen	28%
Natural environment conservation	67 million yen	12%
Others	60 million yen	11%

● Expenditures by Use: 2019 Results (AGC Group)

Purpose of Use	Amount	Rate
Donations, material donations	322 million yen	56%
Employee participation and dispatch	197 million yen	35%
Voluntary programs	32 million yen	6%
Opening of facilities, acceptance of tours	16 million yen	3%

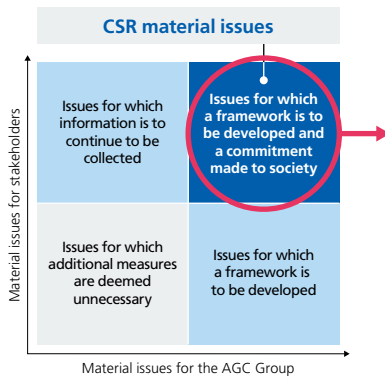


Product Responsibility

In 2011, the AGC Group began CSR monitoring based on ISO 26000. In CSR monitoring, issues defined in ISO 26000 are classified into four categories on the basis of their importance to either the AGC Group or its stakeholders. From these categories, a CSR Matrix is created, and issues judged important to both sides are recognized as CSR Material Issues. At present, there are eleven established CSR Material Issues, and their targets and current progress are provided on the following page.

Note Core ISO 26000 subject relating to product responsibility: "Consumer Issues"

Matrix of CSR Issues



CSR Material Issues relating to the AGC Group

ISO 26000 Items	Issues	AGC Group's material issues
Core subjects		
Organizational Governance	Decision-making processes and structures	Organizational governance
Human Rights and Labor Practices	Conditions of work and social protection	Fair working conditions
	Health and safety at work	Occupational health & safety
The Environment	Human development and training in the workplace	Human resource development
	Prevention of pollution	Pollution prevention
	Sustainable resource use	Sustainable use of resources
Fair Operating Practices	Climate change mitigation and adaptation	Climate change initiatives
	Anti-corruption	Anti-corruption
Consumer Issues	Fair competition	Compliance with antitrust laws
	Promoting social responsibility in the value chain	Social responsibility in the supply chain
	Protecting consumers' health and safety	Product safety

CSR Material Issues Corresponding to Consumer Issues

Protecting consumers' health and safety

Reasons for Selection

In recent years, as safety consciousness of society grows, the level of consumer product safety required by society has continued to rise. As a materials manufacturer, the AGC Group is aware that promoting solid initiatives for product safety with regard to its own products is important to its business activities.

ISO 26000 related actions and expectations

- Under normal and reasonably foreseeable conditions of use, provide products that are safe for users and other persons, their properties and the environment
- Assess the adequacy of laws, regulations and standards regarding health and safety (if a response is necessary, it should exceed the minimum safety requirements)
- Avoid the use of harmful chemicals in product development. If such chemicals must be included, products should be clearly labeled
- Assess and disclose information regarding human health risks before the introduction of new materials, technology or production methods
- Convey vital safety information to consumers using symbols
- Provide consumers with instructions regarding proper use of products and warnings about the risks that use may entail

Results of Activities Relating to CSR Material Issues in 2019

P
2019
targets

Improvement of risk management capabilities with regard to product safety

- Considering all processes that create products and/or services, continue thorough risk management that is conscious of their end use, and prevent any deviation from agreements both inside and outside the company



D
2019
major
initiative
results

- Each company SBU worked to achieve their targets, but the following quality problems were found at the affiliated company AGC Plibrico.
 - It became apparent since approximately 2005 that AGC Plibrico created and provided to customers material test reports for externally purchased heat-resistant steel casting anchors that were not based on actual test results.



C
Self-
evaluation

C



A
2020
targets

Improvement of risk management and organizational functionality capabilities in regard to product safety and quality assurance

- Continuing from the previous year, implemented preventive measures that take risks into consideration—especially measures to prevent deviations from internal and external agreements—in all processes relevant to creating products and services
- Took preventive measures after promoting communication with related parties across departments and divisions, accumulating knowledge, sharing information and providing education on cases of quality issues
- Promoted automation of quality inspections

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 and some issues still remain
C: Unsatisfactory level, in which the intended target has not been achieved

Quality Assurance

Fundamental Approach

In line with the AGC Group Basic Quality Policy, the AGC Group strives to raise the quality of its products and services.

Management Structure

Under the AGC Group Basic Quality Policy, the AGC Group has established autonomous quality management systems that comply with ISO9001 and similar standards in each division. To this end, the Group conducts internal audits and reviews in a manner best suited to the business and division in question, and continuously improves the effectiveness and efficiency of quality management systems.

In addition, since 2013, in accordance with the concept of EHSQ Management, the CSR Office (currently the EHSQ General Division) seeks to comprehensively understand the EHSQ (Environment, Occupational Health & Safety and Quality) initiatives of the entire Group. The office is also building a system that contributes to EHSQ-related management activities for the entire Group. Regarding quality, the Group holds an Expanded Quality Conference for the managers of the quality departments in each business division every year to share issues and example cases. In 2019, to minimize and prevent undesired effects caused

by deviation from laws, regulations and customer requirements regarding the AGC Group's products and services, the Group conducted product life-end risk assessments. This allowed the Group to share its knowledge of risks with end users as well as AGC Group philosophy regarding the automation of inspection.

●Acquisition of ISO 9001 and ISO/IATF 16949* Certification

As of the end of December 2019

Location	Number of certified organizations
Japan	35
Asia other than Japan	31
Europe	63
The Americas/South America	17
Total	146

* Standards for quality management systems to be applied in the automotive industry, which requires compliance with the global procurement criteria for automotive parts

AGC Group Basic Quality Policy

(Established on September 8, 2004 and revised on March 29, 2013)

Basic Policy

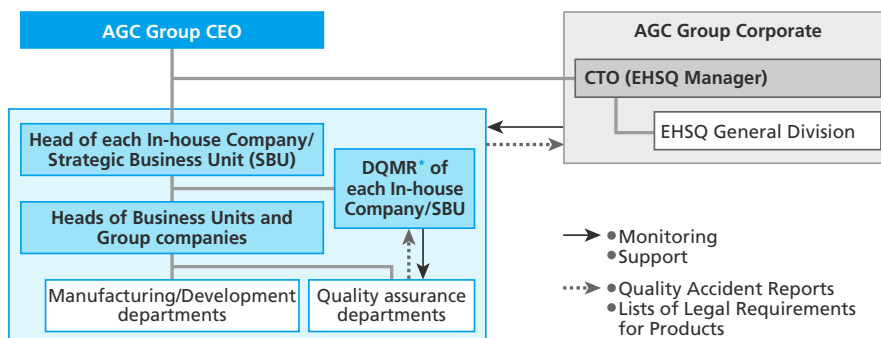
The AGC Group will continue to create the expected value by pursuing "Innovation & Operational Excellence" as one of the Shared Values in the Group Vision "Look Beyond".

Guidelines for Quality Activities

Having "Incorporating the concept of CS into daily work processes" as the fundamental of our businesses, we will act to gain trust from our stakeholders including customers, based on the following guidelines.

1. We will provide products and services that conform to the requirements of laws, regulations, and customers.
2. We will ensure and improve the quality of our products and services including appropriate consideration to safety and environment.
3. We all will participate in the continual improvement of effectiveness and efficiency of our quality management, and each of us will individually strive to enhance the value of our work.
4. In order to ensure that the above points are materialized, each will establish individual policy and target, and implement the PDCA cycle.

●Quality Management System



* DQMR: Division quality management representative

Group-wide Initiatives

Compliance with Legal and Regulatory Requirements regarding for Products

The AGC Group strictly complies with laws and regulations regarding products by creating a list of requirements for each business division and clarifying the legal and regulatory requirements that each product must meet. The content of the list is subject to appropriate review. The Group began expanding this initiative to Asian countries in 2012.

Initiatives at Individual Companies

Improper Acts Related to the Quality of Heat-resistant Steel Casting Anchors for Refractories at AGC Plibrico

In December 2019, it became apparent that since around 2005, the AGC affiliate company AGC Plibrico Co., Ltd. created material test reports for 26 heat-resistant steel casting anchors for refractories* that were not based on actual test results. The items were purchased by AGC Plibrico from an outsourced company and sold to customers who had been shown the fabricated test results. In addition, in 2006 it was found that there was an incident in which AGC Plibrico was aware of quality nonconformity, but did not take corrective action.

After this was discovered, AGC Plibrico stopped supplying the product and commissioned an external organization to analyze the chemical components in company inventory. As a result, some items were found to be nonconformant. For this reason, AGC Plibrico conducted a simulation to confirm the safety of the nonconforming products and see if the refractories could potentially collapse due to them. The safety of the nonconforming products was examined and it was found that the refractories would not collapse.

By January 2020, AGC Plibrico Co., Ltd. explained the details of

this matter and the verification results to all domestic customers that were shipped this product after 2005. They also explained measures being taken to prevent recurrence, centering on employee education, strengthening their quality control systems and manufacturing subcontractor management.

Two years before in 2017, the AGC Group discovered inappropriate behavior regarding quality compliance at a Group company, and implemented measures including (1) an anonymous quality compliance questionnaire targeting all employees of the Group company and (2) quality self-inspection at all manufacturing sites. However, the AGC Plibrico case in question was not discovered.

To that end, in March 2020 a questionnaire was implemented with modified content based on points of reflection taken from the previous case, in order to understand the situation.

Specifically, the questionnaire was expanded to include dispatched employees and contracted employees, and from the outset, respondents were given a detailed explanation of the above-mentioned incident and its impact on the entire AGC Group.

The document also requested that all employees immediately report instances of improper conduct, and in order to confirm any information gathered from their answers, they were asked to provide their names.

Further, the specialized survey aimed at understanding the situation at each Group company business site in Japan that began in March 2020 is accompanied by a similarly specialized self-inspection survey at AGC plants that promotes the same premise. The surveys have not revealed any major issues.

Lastly, the AGC Group plans to implement this self-inspection survey regimen at its international business sites, boosting employee awareness of quality control issues and creating a corporate culture that does not tolerate improper conduct.

* Metal support for monolithic refractories installed on furnace shells of steel plants, waste incineration plants, oil refinery plants, etc.

Product Safety Initiatives

Fundamental Approach

Under the AGC Group's management policy of "increasing safety, security and comfort around the world," the Group conducts reviews from the perspective of product safety, from the product development stage through to trial manufacture and actual manufacture, to avoid harm or danger to the customer.

The Group fully discloses appropriate information for safe use of its products and has acquired Japan Industrial Standard (JIS) certification for some of its products. Product safety is also certified by third-party organizations.

Management Structure

Within the AGC Group, each division builds autonomous quality management systems that comply with ISO 9001 and other standards. The Group also conducts internal audits and reviews best suited to the business and division in question and continuously improves the effectiveness and efficiency of quality management systems.

Group-wide Initiatives

Compliance with the Consumer Product Safety Act

The AGC Group (Japan) has created a system to promptly report serious accidents regarding Group products to the Consumer Affairs Agency and prevent damage escalation, based on the Consumer Product Safety Act and Safe Management of Product-related Defects Standards (revised 2014). By confirming risk management conditions on a regular basis corresponding to the risk level set for the product in question and through other initiatives, the Group seeks to prevent accidents before they occur.

Adding to these efforts, information on product accidents released by the Consumer Affairs Agency and National Institute of Technology and Evaluation (NITE) is collected and classified when it concerns AGC Group products. The information is shared internally.

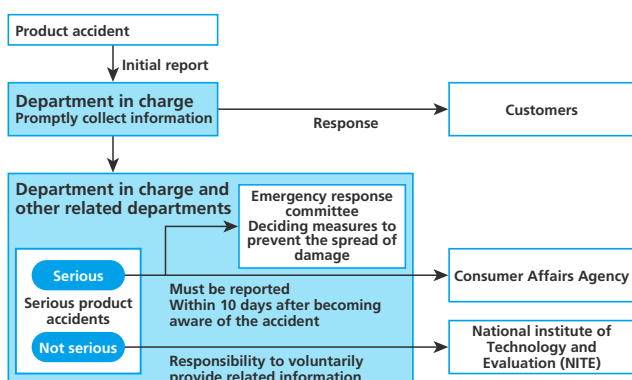
Study meetings are held to allow the employees in charge at related Group divisions to maintain and raise knowledge of product safety.

In fiscal 2019, the AGC Group reported one serious incident to the Consumer Affairs Agency, and the agency ultimately could not determine if this incident was the result of a product defect.

● Change in the Number of Reported Serious Product Accidents (AGC Group in Japan)

FY	Number of cases
2015	1
2016	1
2017	0
2018	0
2019	1

● Reporting Flow for Serious Product Accidents under the Consumer Product Safety Act



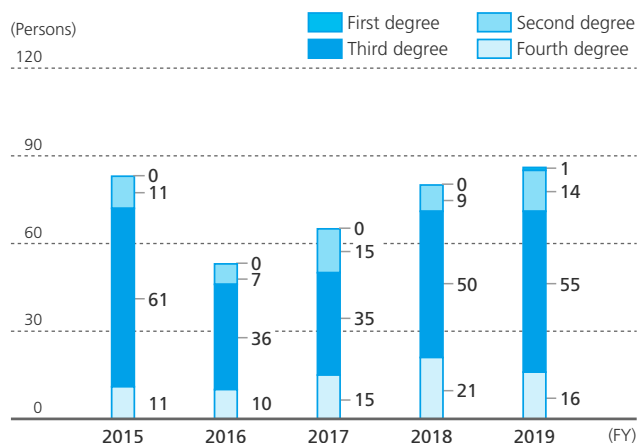
Implementing Quality Training

The AGC Group provides quality training in each business division according to their respective needs. Based on necessity, the Group is also taking steps to maintain and raise quality awareness through quality compliance training for employees based on internal and external quality case studies.

The AGC Group (Japan) encourages its employees to acquire a certificate on quality control (QC*). In 2019, 86 Group employees obtained such certification.

* QC Certificate: A certificate on quality control (QC) issued by the Japanese Society for Quality Control

● Number of Employees Who Passed the QC Certification Examination (AGC Group in Japan)



Regarding AGC Techno Glass' Recall of Heat-resistant Glass Bowls

A portion of heat-resistant glass bowls ("iwaki new bowl," 700 ml) sold by AGC Techno Glass from February to August 2018 were recalled beginning August 16, 2018 due to fine cracks that caused some bowls to separate.

The bowls were manufactured in January 2018 and 2,363 of them were sold from February to August of the same year. As of December 2018, 755 of them (34.4%) have been recalled. Further, as of June 2019, there have not been any reports of injury or ill health as a result of this recall.

Pursuit of Customer Satisfaction (CS)

Fundamental Approach

The AGC Group constantly strives to achieve Customer Satisfaction (CS). The Group defines customers as “people and organizations who receive benefit (value) from the products and information entailed in the AGC Group’s work,” and as such, the Group works towards CS of not only business customers but all Group members.

Management Structure

Under the quality management system of the AGC Group, each company takes various measures to enhance Customer Satisfaction (CS). In addition to conducting CS education through rank-specific training, the Group actively works to ensure the CS spirit is rooted in the AGC Group’s corporate culture.

Group-wide Initiatives

Implementing Full-Scale CS Training

Based on the management policy of bringing new value, functionality and trust to Group customers and clients, the employees of AGC incorporate the Customer Satisfaction (CS) viewpoint into their daily activities as a fundamental aspect of their work.

To add further value for its customers, the Group provides specialized CS training and other kinds of training to all divisions based on their specific characteristics. Moreover, CS is an important theme in the Group’s rank-specific training.

As of December 31, 2019, 8,109 employees (excluding training provided by specific divisions) have undergone CS training.

Customer Service

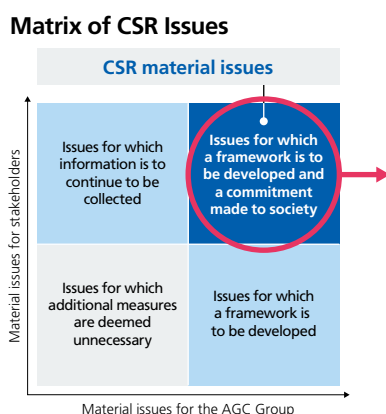
The AGC Group seeks to provide Customer Satisfaction (CS) by establishing customer centers and customer service windows for specific businesses.

The Building & Industrial Glass Company (Japan) has established a customer center for architectural glass to respond accurately to inquiries from customers in the building industry, as well as regular customers. The Building & Industrial Glass Company (Europe) also produces websites for customers in multiple local languages.

Also, the Chemicals Company has created inquiry forms on its website in 10 languages. A system is established to automatically forward inquiries accepted through these forms to the most qualified specialist available, depending on target business, product and region of the sender, and a timely response is sent to them.

Environmental

In 2011, the AGC Group began CSR monitoring based on ISO 26000. In CSR monitoring, issues defined in ISO 26000 are classified into four categories on the basis of their importance to either the AGC Group or its stakeholders. From these categories, a CSR Matrix is created, and issues judged important to both sides are recognized as CSR Material Issues. At present, there are eleven established CSR Material Issues, and their targets and current progress are provided on the following page.



CSR Material Issues relating to the AGC Group

ISO 26000 Items		AGC Group's material issues
Core subjects	Issues	
Organizational Governance	Decision-making processes and structures	Organizational governance
	Conditions of work and social protection	Fair working conditions
Human Rights and Labor Practices	Health and safety at work	Occupational health & safety
	Human development and training in the workplace	Human resource development
The Environment	Prevention of pollution	Pollution prevention
	Sustainable resource use	Sustainable use of resources
	Climate change mitigation and adaptation	Climate change initiatives
Fair Operating Practices	Anti-corruption	Anti-corruption
	Fair competition	Compliance with antitrust laws
	Promoting social responsibility in the value chain	Social responsibility in the supply chain
Consumer Issues	Protecting consumers' health and safety	Product safety

CSR Material Issues of the AGC Group Corresponding to the Environment

Prevention of pollution

Reasons for Selection

The problems caused by environmental impact and waste stemming from corporate activity affect the planet and local environment in a variety of ways, and the society is growing more concerned about preventing pollution and reducing environmental impact.

We recognize that preventing pollution and reducing environmental impact are our manufacturing industry's responsibilities.

ISO 26000 related actions and expectations

- Identify the impacts of its decisions and activities on the environment
- Identify the sources of pollution and waste related to the activities
- Measure, record and report on its significant sources of pollution and reduction of pollution, water consumption, waste generation and energy consumption
- Implement measures aimed at preventing pollution and waste and properly manage unavoidable pollution and waste
- Prepare an environmental accident prevention program and an emergency plan involving workers, authorities, local communities and other relevant stakeholders

Sustainable resource use

Reasons for Selection

As the world economy develops, resource procurement risks are becoming apparent on a global scale. Risks are particularly marked in energy and water procurement, and in rare metals, which are supplied by only a few regions. The AGC Group belongs to a business category that uses a relatively large amount of natural resources and energy, as well as rare metals and other materials. Accordingly, we consider the importance of procurement and decrease of such resources.

ISO 26000 related actions and expectations

- Identify the sources of energy, water and other resources used
- Measure, record and report on its significant uses of energy, water and other resources
- Implement measures to reduce its use of energy, water and other resources

Climate change mitigation and adaptation

Reasons for Selection

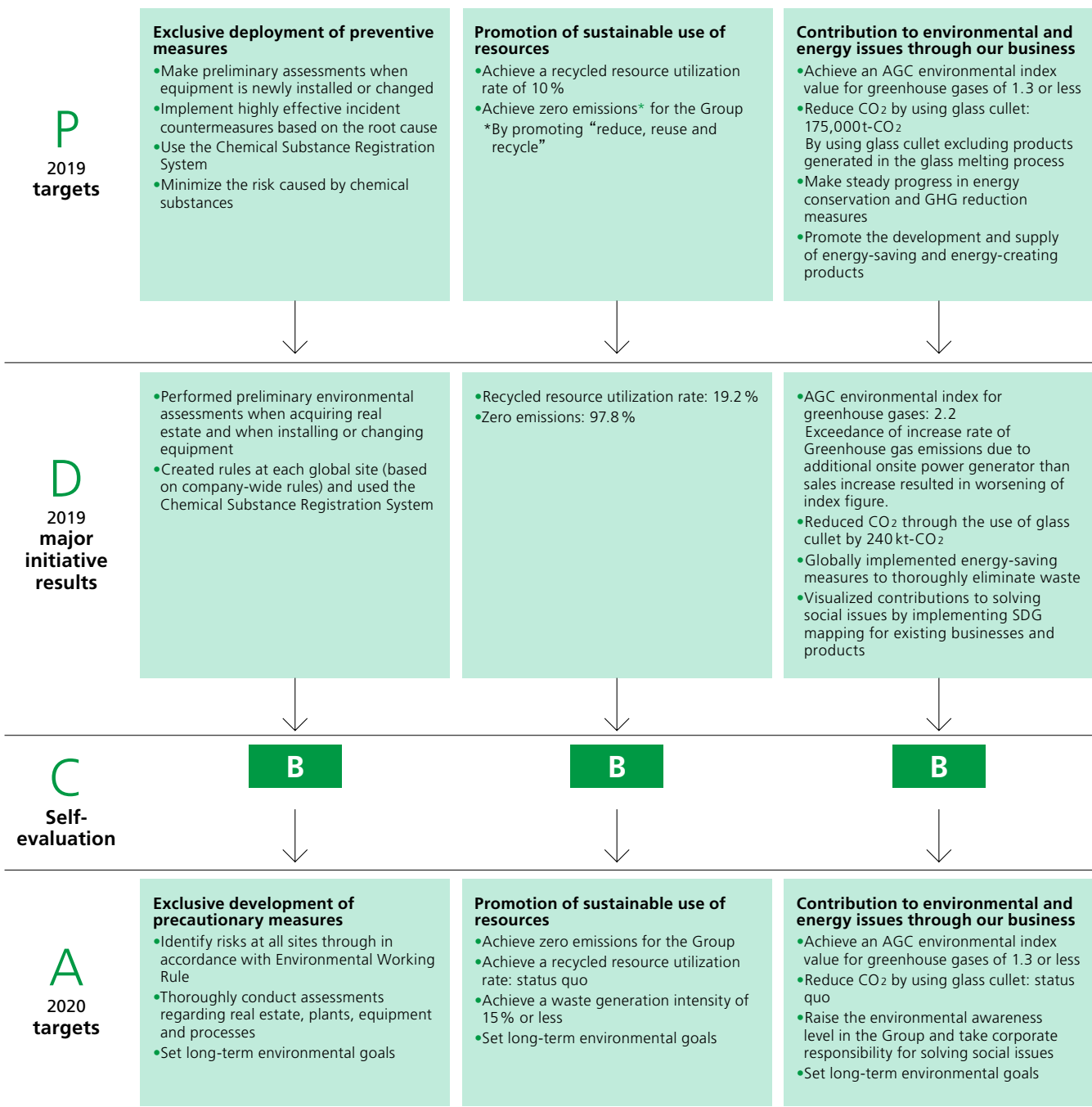
The demands and expectations of society regarding corporate initiatives to work for climate change issues is rising, to the extent that corporations are being requested to disclose their efforts for climate change and the amount of GHG emissions.

The AGC Group belongs to a business category that uses a relatively large amount of natural resources and energy. Accordingly, we consider its responsibility to reduce GHG emissions and energy usage.

ISO 26000 related actions and expectations

- Identify the sources of direct and indirect GHG emissions and define the scope of its responsibility
- Measure, record and report on its significant GHG emissions, preferably using methods defined in internationally agreed standards
- Implement measures to reduce the direct and indirect GHG emissions within its sphere of influence
- Realize energy savings by purchasing of high energy efficient goods and development of energy efficient products

Results of Activities Relating to CSR Material Issues in 2019



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 and some issues still remain
C: Unsatisfactory level, in which the intended target has not been achieved

Environmental Management

Fundamental Approach

Efforts to address environmental issues are being called for worldwide, and the AGC Group has positioned the environment as one of its most important management issues in terms of fulfilling social responsibility. The Group has included the environment in Our Shared Values, a set of values held by Group employees that acts as the foundation for employee behavior. Moreover, the Group has declared in the AGC Group Environment Policy that it will promote environmental initiatives in all phases of its business activities.

Based on this understanding and philosophy, the AGC Group is working to minimize the environmental impact of using energy and resources in manufacturing processes and is striving to solve environmental problems through its products.

AGC Group Environment Policy

(Revised on January 1, 2019)

Principle

At AGC Group we recognize that our businesses activities, by using a large amount of resources and energy, have an impact on the environment. In line with AGC Group vision **“Look Beyond”**, we have set the “environment” as one of our company shared values and we are committed to take actions accordingly.

We are also committed to contribute to the creation of a sustainable society as an outstanding player in the global Materials Industry by efficiently utilizing limited resources and energy and by taking account into due consideration our impact on the natural environment, including climate change and biodiversity.

Slogan

Let's all contribute to environmental activities, as a good global citizens.

Environmental codes of conduct

We commit to adhere to the following key principles:

1. Improve the environmental performance continuously, in accordance with environmental management system.
2. Comply with internal and external relevant environmental rules worldwide.
3. Set goals and do our utmost towards improving environmental impact of our business by addressing responsible use of resources, climate change mitigation and adaptation, waste avoidance and recycling, as well as appropriate management of chemicals substances.
4. Strive to offer to society our products, service and technologies taking into due consideration their environmental impacts.
5. Communicate about our progress to our internal and external stakeholders.

Management Structure

Building a New Environmental Management System

The AGC Group believes that strong management involvement is necessary to promote effective environmental activities, and has established a system that positions the CTO as Environmental Management Officer.

In FY 2013, we established the Environment, Occupational Health & Safety and Quality (EHSQ) Management System, with the CSR Office (the organization's name at that time) as its secretariat. The office tackled EHSQ to strengthen the Group's foundations for managing risk.

The Corporate General EHSQ division in charge of the secretariat plays the role of collecting information on global environmental activities, laws and regulations, and publicizing it throughout the Group, as well as formulating policies, rules and strategies related to environmental activities across the Group as a whole.

In addition, each company, SBU and division has a section in charge of environmental management, acting as command towers that support the promotion of environmental activities by both administrative divisions and affiliated companies.

Rebuilding the Group's Environmental Activity System

The AGC Group is establishing a comprehensive organization to control EHS activities in each region of Japan, making the Group's environmental activities stemming from the Japan Head Office more meaningful and timelier, in line with actual conditions in Japan. As a result, a system has been established to expand and promote activities in each region under the guidance of the Corporate General EHSQ.

An example of the system is the CESH (Chinese Environment and Safety Head Office) which was established in FY 2019 in China, where compliance with environmental laws has a major impact on our business. We continue to take measures in response to rapidly changing laws and regulations there.

The Environmental Management Working Rule was also enforced in FY 2020, and all AGC Group business sites are now divided into different categories of environmental activities (according to environmental risk) that are implemented accordingly. Through this system, all sites, including manufacturing sites that conduct environmental conservation activities, work with AGC employees as one AGC Group to engage in environmental activities according to their respective business configurations.

Promoting Continuous Improvement based on EMS

As one mechanism for continuously improving environmental management, we are asking Group members in certain environmental activity categories to perform activities based on the environmental management system (EMS).

In particular, we effectively use the input and output of management reviews and the results of external reviews as opportunities to understand the improvement status of the AGC Group. This information is also utilized to formulate policies and plans for the next fiscal year and beyond.

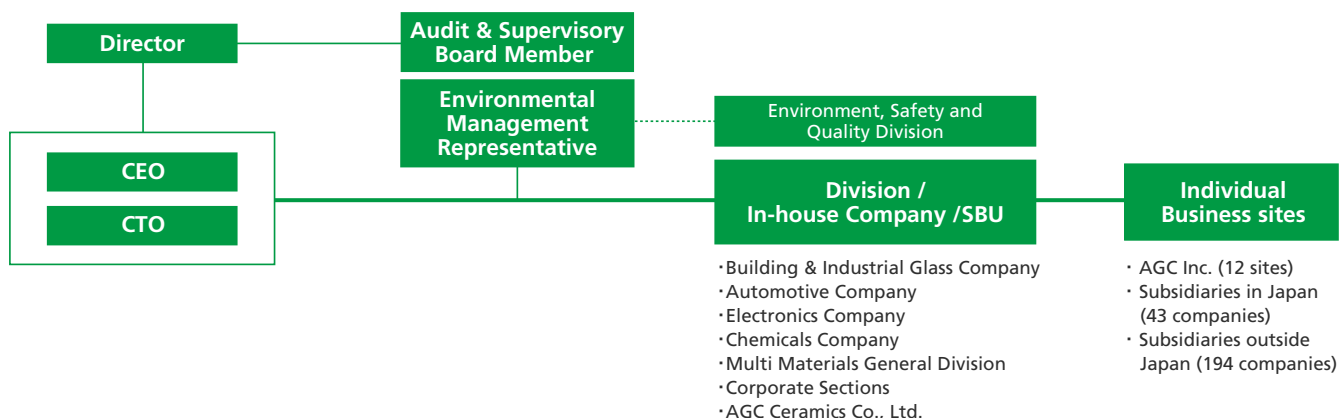
The AGC Group's ISO 14001 Integrated Certification

In addition to Group-wide activities, the AGC Group built an integrated environmental management system (AGC Integrated

EMS) targeting AGC and some subsidiaries in 2003 and uses the mechanism to continuously improve the environmental management of the AGC Group. Organizations subject to Integrated EMS are reviewed by a single external review organization under the same assessment criteria, and receive a single ISO 14001 certification.

Even at Group companies that do not participate in AGC Integrated EMS, we have built a management system that responds to the characteristics of each business and region, thereby continuously improving the environmental activities of the AGC Group. In addition, supervisory in-house companies and the Environment Office of the Corporate Environment, Safety and Quality Division monitors the environmental activities of the entire Group through an understanding of external organization's examination results.

● Integrated EMS Organization Chart (As of March 31, 2020)



● ISO 14001 Integrated Certification within the AGC Group

As of April 30, 2020

Number of companies	Number of sites	No. of sites with integrated certification
AGC Inc.	1	15
Affiliated companies (Japan)	20	73
Affiliated companies (Asia other than Japan)	28	40
Affiliated companies (Europe)	3	11
Affiliated companies (The Americas)	9	15
Total	61	154

* Because individual companies have multiple business sites, the number of sites exceeds the number of companies.

● Violations of Environmental Laws and Regulations in FY2019

as of March 31, 2020

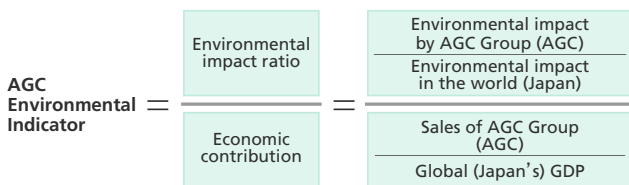
Amount of serious fines	0 yen
Sanctions other than fines	0
Cases raised in the dispute resolution mechanism	0

“AGC Environmental Indicator” to Determine Environmental Impacts

The AGC Group formulated the AGC Environmental Indicator as an index of environmental efficiency to independently assess the environmental impact of its manufacturing activities. Using this indicator, the Group can calculate how the environment is affected in relation to improvements in the Group’s economic performance, while at the same time striving to reduce the environmental impact shown by the indicator.

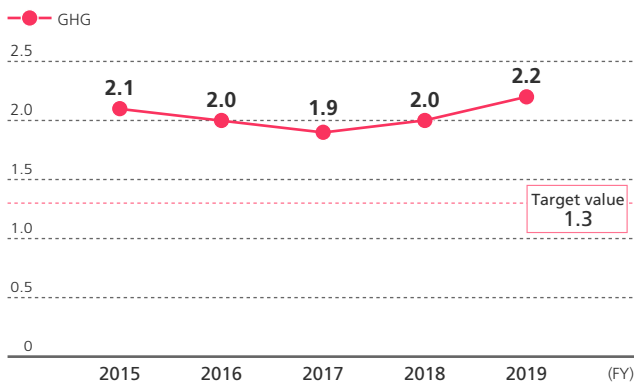
Setting the AGC environmental index allows the AGC Group’s position to be evaluated both in terms of sales and individual types of environmental impact, making it possible to determine AGC Group businesses that have relatively high environmental impact.

●AGC Environmental Indicator Calculation Method



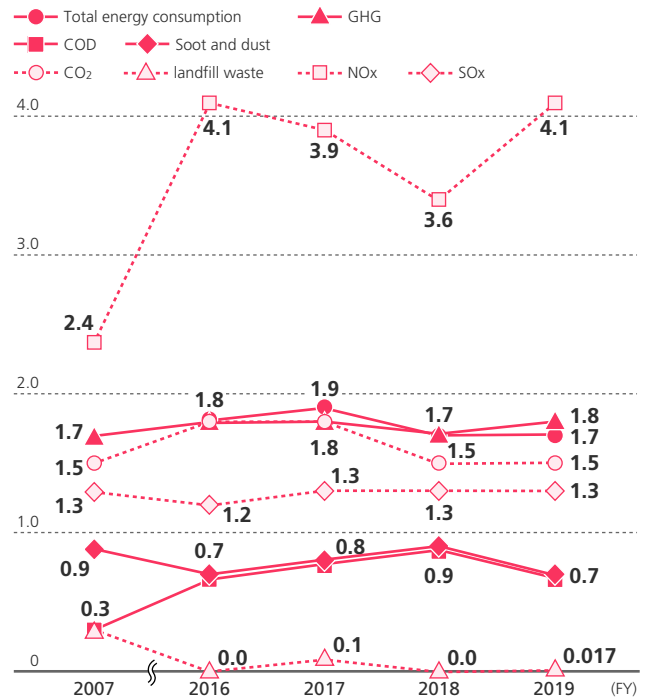
* Economic contribution is calculated on a USD basis for both AGC Group sales and global GDP.

●AGC Environmental Indicator (AGC Group)



* For details on greenhouse gases, please see Climate Change Initiatives on page 73.

●AGC Environmental Indicator (AGC Inc.)



* Total energy consumption is calculated using heat quantity against total electricity consumption at a rate of 3.6MJ/kWh.

Human Resource Training and Education

Fundamental Approach

The AGC Group is aware of the importance of training its employees including environmental managers in each department to reduce risks related to environment and the environmental impact arose from our business activities. Accordingly, we have been conducting training to improve the knowledge and skills of environmental staff and also conducting training for internal EMS auditors. In Japan, we are also focusing on training and lectures to raise awareness of environmental regulations that are being strengthened every year.

Group-wide Initiatives

Human Resource Development through the Skill Map

The AGC Group develops human resources that can employ environmental management skills by utilizing the Skill Map, which is the Group's proprietary human resource database. AGC holds meetings five to six times annually, lectures, and tours for environmental managers at the head office and each business site, in order to promote deep knowledge of recent environmental trends and environmental management technology.

In addition, environmental staff visit other sites and share environmental management methods, challenges and solutions to improve their skillsets and raise the environmental management standard at each location.

Internal EMS Auditor Training

Improving the quality of internal audits leads to further improvements in organizational management. To this end, the AGC Monozukuri Training Center provides group training for internal EMS auditors through a proprietary program.

Training in Japanese PRTR Law

Since fiscal 2009, we have carried out training on the formation of PRTR law and methods for calculating figures that will be disclosed to ensure that related staff properly understand it. Through this training, we are working to standardize the data calculation methods for each manufacturing process, make it known when rules are changed and maintain a system of data collection, calculation, checking and notification for ensure compliance to the Japanese environmental law.

Environmental Accounting

Costs and Benefits by Environmental Conservation

The AGC Group utilizes environmental accounting data to quantify managerial resources spent on reducing environmental impact and the resulting effects. The calculation method is based on the proprietary AGC Environmental Accounting Calculation Manual created in line with the Environmental Accounting Guidelines 2005 (published by the Ministry of the Environment).

● Environmental Conservation Cost (AGC Group)

(Millions of yen)

Fiscal Year	Investment	Cost
2017	18,800	36,700
2018	25,000	37,900
2019	17,500	38,800

* Some data used in the environmental conservation cost calculation process, is estimated based on actual performance data from AGC.

● Environmental Conservation Benefits¹ (AGC Group)

Item	Change in environmental impact ²	Simple Y-to-Y change	Sales-corrected change ³
Total energy consumption	+2 PJ	+2%	+2%
Greenhouse gas emissions ⁴	+781,000 t-CO ₂	+4%	+4%
Waste landfill	-8,000 t	-12%	-12%
COD discharge	-236 t	-7%	-7%
SOx emissions	-2,673 t	-29%	-29%
NOx emissions	+413 t	+2%	+2%
Soot and dust emissions	+711 t	+60%	+60%

¹ Change in environmental impact and simple fiscal 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.

² Change in environmental impact = (fiscal 2019 output volume) – (fiscal 2018 output volume)

³ Sales-corrected change = Simple fiscal Y-to-Y change / fiscal Y-to-Y sales ratio

AGC Group Y-to-Y sales ratio = (fiscal 2019 sales) / (fiscal 2018 sales) = 1.0

⁴ Greenhouse gas (GHG) emissions = scope 1 GHG emissions + scope 2 GHG emissions + scope 3 GHG emissions

Effective Use of Water Resources and the Prevention of Water Pollution

Fundamental Approach

The AGC Group regards the effective use of water resources and prevention of water pollution as important for promoting sustainable use of resources. As water is ubiquitous and imperative in all regions, it is vital to understand water risk conditions in each region and promote corresponding measures. Accordingly, in addition to determining the sites that are exposed to high water risk, each region has established mid-and long-term targets regarding water volume usage and water pollution. As a result, in 2020 AGC was recognized for its water risk initiatives, named to the CDP “Water Security A List”, the highest rank, for the first time. We are currently working to formulate the next medium-term target and implementing even more thorough risk management measures.

Group-wide Initiatives

Water Risk Assessment Evaluation According to Regional Characteristics

The AGC Group conducts comprehensive evaluations of water risks, which are present in all regions, by considering the results of evaluations performed at each site using the WRI (World Resources Institute) tool “Aqueduct.”¹ Information on any past disasters or difficulties related to water, the availability of emergency response equipment and BCP settings are also considered. Based on evaluation results, the Group implements countermeasures according to the characteristics of the area in question. These include installing reservoirs at sites with high risk of drought, relocating emergency power generation facilities from basements to the second floor or higher at sites with high flood risk, and installing drain pumps at sites with high tide risk.

Despite these measures, in January 2020, a flood in Spain unfortunately caused water damage at AGC Pharma Chemicals Europe over the floor, resulting in a temporary suspension of production. As AGC Pharma Chemicals Europe had conducted prior crisis management and prepared for production stoppages, they were able to resume production about four days after the disaster. To prevent similar flood damage, all Group companies thoroughly implement prevention measures.

¹ A tool that indicates region-specific water risk



A flooded floor at AGC Pharma Chemicals Europe

Disclosure of Water Usage through Product Recycling

The AGC Group takes in approximately 400 million m³ of water for use as cleaning and cooling in its production processes, and roughly its 85% is seawater used for indirect cooling.¹ Of the fresh water (water other than seawater that does not contain salt) that makes up 15% of the water intake, efforts are being made to use less water in the production processes and to recycle water that is used in order to use water resources more effectively.

The amount of fresh water recycled or cascaded² in the production process is equivalent to about 16 times the amount of fresh water used. Building on these existing measures, the AGC Group is promoting wastewater recycling alongside a reduction in clean water usage and wastewater through water filtration.

¹ A cooling method in which water does not come into direct contact with the object to be cooled and therefore generates relatively little pollution.

² A method of repeatedly using water according to changes in water quality rather than discarding it after a single use.

Preventing Water Pollution According to the Characteristics of Each Business Site

The AGC Group has established wastewater control targets that are tailored to the characteristics of each site, and makes global efforts to prevent water pollution.

The AGC Group has also established COD¹ goal of 0.3 in accordance with the AGC Environmental Indicator, implementing measures specific to each of its sites globally.

¹ Chemical Oxygen Demand: the amount of oxygen consumed in oxidizing the organic compounds in water with oxidizing agents.

Our Products bring Effective Use of Water

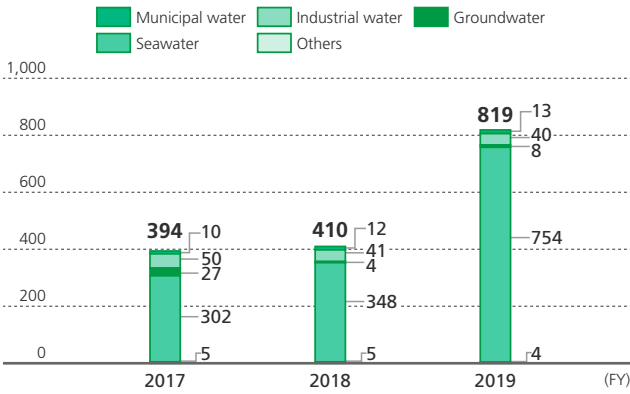
Through manufacturing and selling sodium hypochlorite, the AGC Group helps providing safe drinking water to people all over the world and contributes to river environment conservation through proper sewage treatment. In addition, through the production of ion exchange membranes and the sale and licensing of technology in processes that utilize them, it is now possible to create drinking water from water previously unusable in developing countries and to reuse purified wastewater. Through these initiatives, the AGC Group is making effective use of water resources and contributing to the health of local residents.

Disclosure of Water Usage through Product Recycling

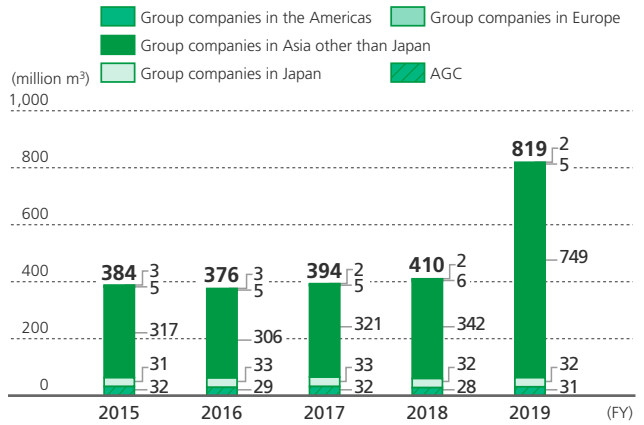
More consumers are interested in purchasing products that consider environmental impact. In an effort to give consumers and end users information on a product's environmental burden throughout its lifecycle, AGC Glass Europe has voluntarily issued Environmental Product Declaration labels for some products. In 2015, AGC Glass Europe received high praise for its float flat glass, which received Silver certification in the Water Stewardship category of the Cradle to Cradle Certified™ program offered by the management consultancy firm MBDC.

¹ Certification is awarded across five categories, including Material Health, and Water Stewardship.

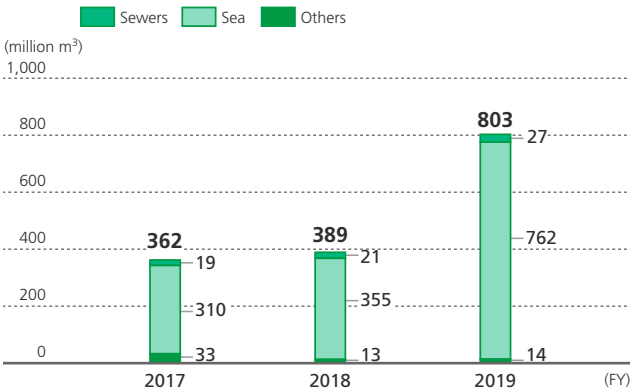
●Trends in Water Intake by Water Quality Type (AGC Group)



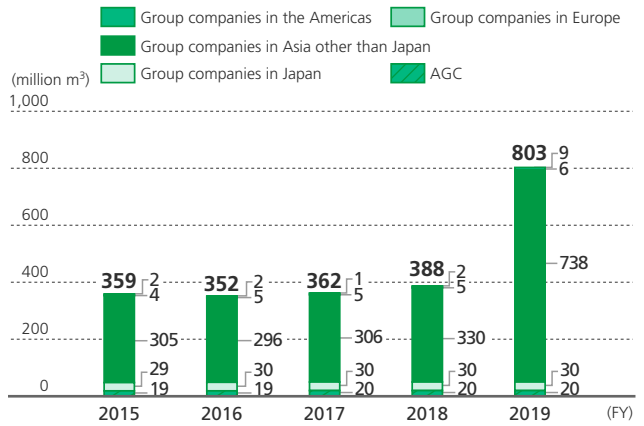
●Trends in Total Water Intake by Region (AGC Group)



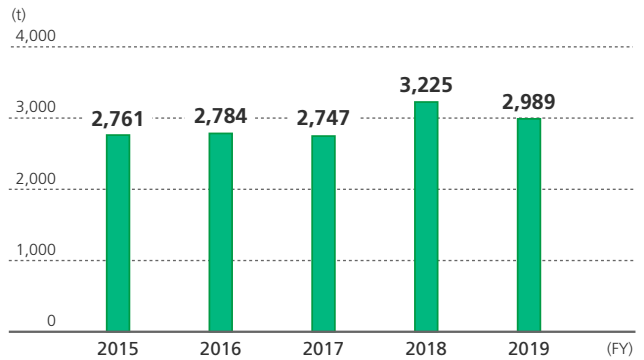
●Trends in Total Wastewater Volume by Destination (AGC Group)



●Trends in Total Wastewater Discharge (AGC Group)



●Trends in COD Discharge (AGC Group)



Chemical Substance Management

Fundamental Approach

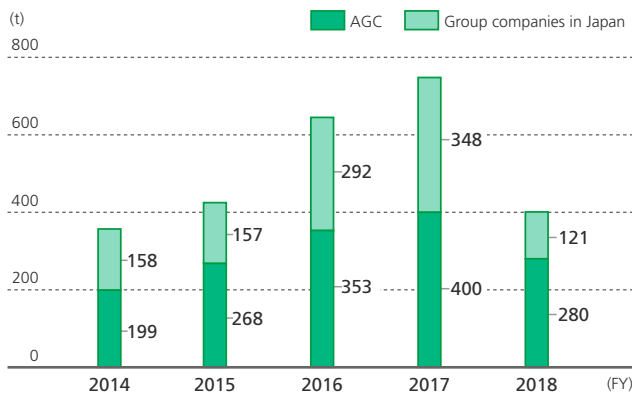
The AGC Group provides a diverse range of products, including glass for construction, automobiles and displays, parts for electronic devices, and chemicals and ceramics. We also use chemical substances in our manufacturing processes.

We believe in the importance of properly managing chemical substances while considering the environment, safety and human health throughout the product lifecycle, from development to manufacturing, distribution, use, final consumption, disposal and recycling. In addition, we believe in publicizing our chemical substance management and communicating it with society. To that end, we are actively working on Responsible Care, a set of voluntary activities we're engaged in within the context of the chemical industry.



The AGC Group has also signed the Responsible Care Global Charter, which was revised in 2014. Looking ahead to the World Summit on Sustainable Development's 2020 goal of "Minimizing chemical substances' negative effects on people and the environment," the Group is taking measures to further improve its chemical substance management.

● Changes in Volatile Organic Compound (VOC) Emissions (AGC Group in Japan)



Group-wide Initiatives

Compliance with Laws and Regulations and Management of Chemical Substances based on Proprietary Rules

Initiatives at the Manufacturing Phase

The AGC Group observes laws and regulations related to the management of chemical substances, and has established the AGC Group Chemical Substance Management Guidelines. The Group also voluntarily promotes management and risk assessment of chemical substances used at each manufacturing site, and appoints chemical substance managers. Through an in-house Chemical Substance Registration System, all chemical substances are closely registered and managed by the Group, including those that are not regulated by law yet can still cause environmental pollution or health damage.

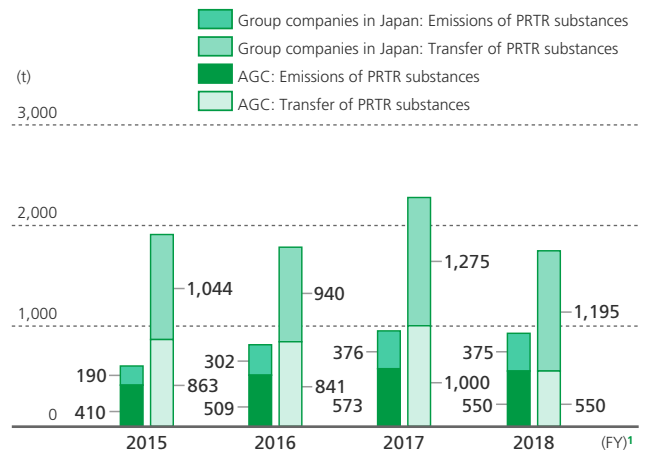
As part of these initiatives, the AGC Group is working to reduce substances used in manufacturing processes at the Group's Japanese business sites that are targeted by the PRTR Law.

Initiatives in the Supply Chain

Each business division within the AGC Group has established Green Procurement Guidelines in line with the AGC Group Green Procurement Integrated Guidelines, and asks the Group's business partners to correctly manage chemical substances and reduce their environmental impact. Specifically, the Group requests that its partners report on the content of controlled chemical substances, submit declarations of non-inclusion of substances with environmental impact (including packaging materials) and reduce the environmental impact of chemical substances used in the manufacturing process. Furthermore, we regularly check the status of management at our partner companies based on the contents of these reports.

For the benefit of our customers, we respond to environmental questionnaires on the management of environmentally hazardous substances, reduction of regulated chemical substances, reduction of packaging materials and waste and reduction of CO₂ emissions in manufacturing processes and logistics. We also provide reports on the consumption of water and initiatives to reduce its use.

● Emissions and Transfer Volume of Substances Regulated by the PRTR Act



1 Target period: April to March

Initiatives at the Transportation Phase

The AGC Group sites in Japan utilize a “Yellow Card” in accordance with the characteristics of chemical substances and products loaded on trucks and other modes of transportation to share emergency measures with all involved parties. This card has been prepared for each product and product type, with 104 types of cards issued as of the end of March 2019.

When transporting low volumes of dangerous goods along with other dangerous goods, we attach a label called a Container Yellow Card to the containers and packing of the dangerous goods to identify the chemical substances within.



Yellow Cards used by the AGC Group

Initiatives at the Use/Disposal Phase

The AGC Group issues SDS (Safety Data Sheets) for each of its products.¹ In addition to Japanese, they are also created in English, Chinese, Korean and Malay for customers using the Group's products worldwide. They provide information such as correct handling methods during product use/disposal, and environmental and health effects. The Group is also developing an SDS operation and management system in countries and regions other than Japan, and related work has already started in Europe, China and the United States.

In addition, a Globally Harmonized System of Classification and Labeling of Chemicals (GHS)² indication label is created in Japanese, English and Chinese. The Group is also developing other languages according to the specifications of the export destination country.

¹ A sheet with information regarding a chemical's characteristics and handling methods, provided to a recipient of chemicals before receipt of the chemicals themselves.

² A system for global harmonization in classification and labeling of chemical products.

● Number of SDS issued (as of March 31, 2020)

	March 2019	March 2020
Japanese version	1,977 types	1,999 types
English version	1,165 types	1,224 types
Chinese version	216 types	233 types

Registration of Chemical Substances Contained in Products

Chemical substances contained in our products must be registered in accordance with the laws not only in Japan, but also of the countries to which the products will be exported.

The Group has already registered the relevant chemical substances in response to the EU's REACH regulations on chemical substances.

Proper Management and Treatment of Asbestos

The AGC Group completed the removal of friable asbestos from its Japanese business sites in 2008. The Group also appropriately manages non-friable asbestos.

Proper Management and Treatment of PCBs

Under Japanese laws and regulations, all PCBs need to be appropriately disposed by March 2027.

Accordingly, AGC discontinued the use of electric devices that contained highly-concentrated PCBs in 2005, and did so in Japanese business sites in 2009.

At present, these devices are stored according to the relevant legislation, and their treatment, which is entrusted to the Japan Environmental Storage & Safety Corporation (JESCO), has been moving forward. Furthermore, the AGC Group will continue to systematically dispose of low concentration PCBs.



Storage location for PCB contaminants

Management of Mercury

In October 2013, the Minamata Convention on Mercury was adopted by the United Nations, and the stipulations came into effect on August 16, 2017.

The AGC Group conducted a survey to understand the current state of inclusion and use of mercury, not only in its own manufacturing processes, but across its entire supply chain. The results show that mercury is still used to some extent in measurement, in porosimeters and other measuring equipment. However, the use of such devices is allowed under proper controls, even though the above Convention has come into effect. Accordingly, although substitute products are unavailable, no operational risks are posed by the use of such devices. Additionally, products in which the use of mercury has been approved are used in compliance with laws and regulations, and will be replaced with substitutes wherever possible.

Air Pollution Prevention

Fundamental Approach

The AGC Group uses heavy oil and/or natural gas as a fuel in the glass manufacturing process which result SOx, NOx, soot and dust emitted in ambient air. Due to rapid global economic development, environmental air pollutant emissions are on the rise, and issues such as PM2.5 pollution, acid rain and transboundary pollution are becoming more prevalent on a global scale. In order to respond to such problems, the AGC Group works on to reduce environmental air pollutant emissions.

Group-wide Initiatives

Reducing Environmental Air Pollutants from Business Activities

To reduce air pollutants in the emission, the AGC Group has upgraded exhaust gas treatment facilities and making improvements in measurement and analysis techniques at sites. To further promote emission reduction measures, the Group has calculated annual emission amounts every fiscal year since 2001 and shares successful measurement examples for improvement and emission reduction throughout the Group.

Initiatives at Individual Companies

Complying with Regulations on SOx, NOx, Soot and Dust Emissions (China)

One of the countries which environmental regulations have become tighter year by year is China, where in 2014 NOx emissions were added to the country's glass furnace emission regulations. At the AGC Group's manufacturing bases in China, AGC Flat Glass (Dalian) Co., Ltd. and AGC Automotive (Suzhou) Co., Ltd. monitor NOx emissions while implementing measures to reduce emissions and conform to all regulations, including those for SOx, soot and dust.

Further, in 2015 after an amendment of Environmental Protection Law of the People's Republic of China for the first time in 27 years, environmental regulations in regard to ambient air, water and soil pollution, waste management, chemical substances, and preconstruction assessment have all been strengthened considerably. In line with these developments, AGC Group manufacturing sites in China have strengthened their exhaust gas treatment through additional desulphurization and denitration equipment, installed online monitoring equipment and upgraded to equipment that makes natural gas conversion possible. Through cooperation with local governments, the AGC Group in China has implemented environmental countermeasures to meet the strict new regulatory thresholds.

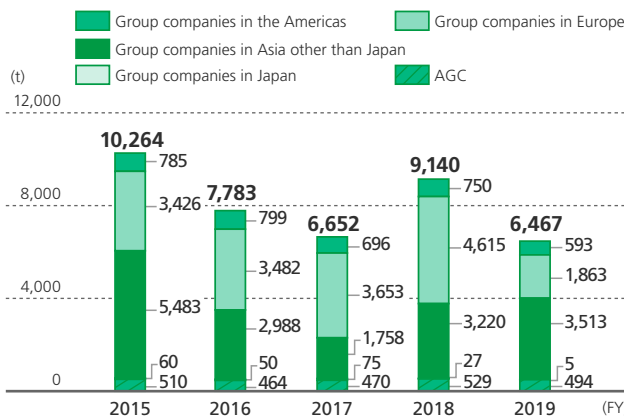
Major Products that Contribute to the Environment

Other Chemical Products

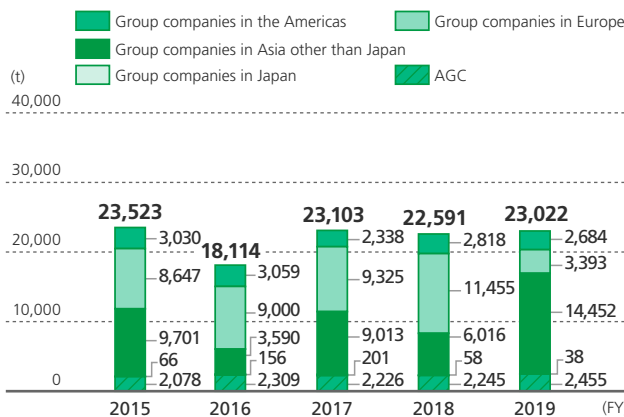
[ACLESYATM Highly Reactive Gas Emissions Neutralizer](#)
[open window](#)

Neutralizes HCL and SOx in Gas Emitted by Garbage Incinerators, Greatly Reducing Pollutants Released into the Atmosphere

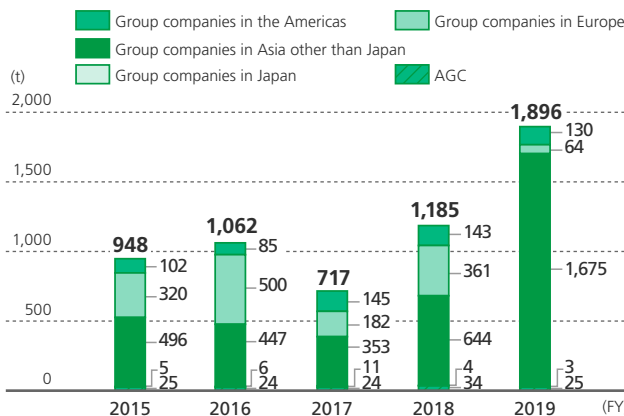
SOx Emissions (AGC Group)



NOx Emissions (AGC Group)



Soot and Dust Emissions (AGC Group)



Prevention of Soil and Groundwater Contamination

Fundamental Approach

Soil and groundwater contamination not only greatly impacts the environment, ecosystems and the health of local residents over a long period—assessing the situation and rectifying it also requires incredible time and expense for all parties involved. Truly, the effects of this manner of contamination are almost immeasurable. For this reason, the AGC Group has gone above measures required by law, establishing the Guidelines for Prevention of Soil and Groundwater Contamination to preemptively prevent all forms of soil and groundwater contamination.

Group-wide Initiatives

Preventing Pollution on the Basis of Our Own Guidelines

The AGC Group's Guideline for Prevention of Soil and Groundwater Contamination discloses information on standards for storage and handling of hazardous substances, storage tank management, wastewater and rainwater management, and countermeasures in the event of soil or groundwater contamination.

The AGC Group works to prevent the spread of known pollutants, decontaminate polluted sites, and report relevant progress to administrative agencies, disclosing relevant reports on its website and elsewhere.

Initiatives at Individual Companies

Status of Known Contamination Incidents

The following instances of contamination were discovered subsequent to leaks at plants that were in operation before the Soil Contamination Countermeasures Act came into force. The AGC Group currently implements strict leakage prevention measures to prevent contamination beyond legal compliance levels.

Examples at the Chiba Plant

Volatile organic compounds (1,2-dichloroethane, tetrachloroethylene, trichloroethylene, dichloromethane, carbon tetrachloride) were detected in a groundwater survey conducted at the Chiba Plant in 2001. AGC is taking measures to prevent the external spread of these substances by pumping up groundwater, purifying soil through soil vapor extraction and establishing water insulation walls.

Examples at the Kashima Plant

Dichloromethane and carbon tetrachloride were detected in a groundwater survey in 2006 at the Kashima Plant. AGC is taking measures to prevent the external spread of these substances by pumping up groundwater, purifying soil through soil vapor extraction and establishing water insulation walls.

Also, fluorine and arsenic surface soil contamination was discovered, so the soil was replaced and the surface re-covered.

Sustainable Use of Resources

Fundamental Approach

The AGC Group promotes its 3 R (Reduce, Reuse, Recycle) waste treatment policy as the foundation of environmental activities across the Group. As a result, the Group continues to reduce the amount of waste that is sent to landfill. Aiming sustainable resource usage, through reusing disposable waste such as glass cullet generated in the market as raw materials to the greatest extent possible, the Group is reducing its natural resource consumption.

Group-wide Initiatives

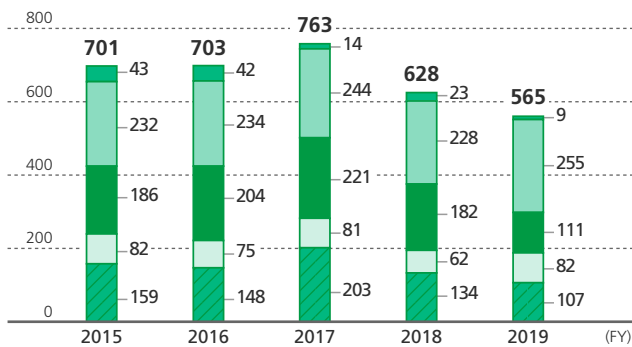
Global Promotion of Zero-Emission (waste)

The AGC Group promotes zero-emission (waste)* globally by advancing waste recycling based on the laws and regulations of each country and region, reducing waste generation and separating and collecting waste thoroughly.

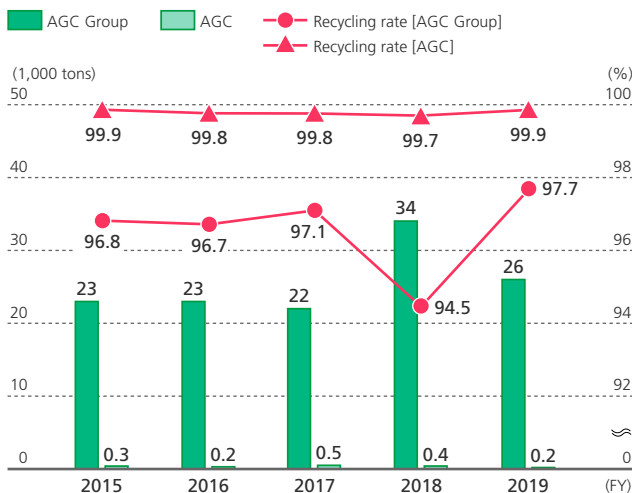
* Zero-Emission (waste) is defined as more than 99% of generated waste is recycled.

●Total Waste Generation (AGC Group)

Group companies in the Americas
Group companies in Asia other than Japan
Group companies in Europe
Group companies in Japan
AGC
(1,000 tons)

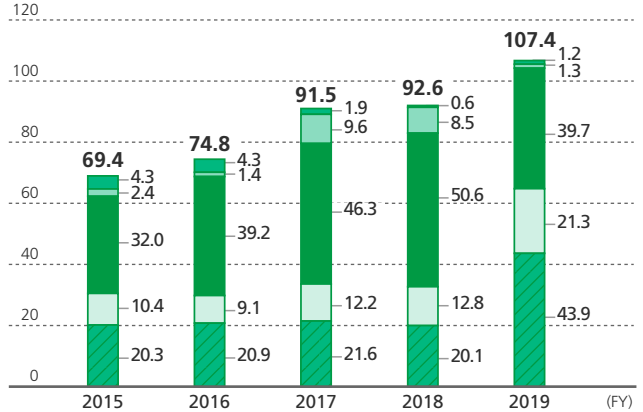


●Waste Landfill and Recycling Rates



●Amount of Hazardous Waste Generation (AGC Group)

Group companies in the Americas
Group companies in Asia other than Japan
Group companies in Europe
Group companies in Japan
AGC
(1,000 tons)



Treatment of Byproduct Oil in the Manufacturing Process

A large amount of byproduct oil is generated during the manufacturing process for chemical products. As this oil contains hazardous substances such as chlorine and fluorine, AGC treats it using dedicated equipment. Some of this equipment includes incinerators that incorporate special boilers to recover heat in the treatment process, contributing to energy-saving initiatives. In accordance with the Waste Management and Public Cleansing Act in Japan, AGC obtains legal permissions for its industrial waste oil treatment facilities, appropriately managing and inspecting them under guidance from administrative authorities, as well as disclosing their status.

Reducing Usage of Natural Resources

The AGC Group is part of an industry that uses natural resources such as silica sand to manufacture products. In order to effectively leverage the planet's limited natural resources and to achieve sustainable growth, the AGC Group has established utilization ratio targets for recycled resources.* Also, efforts are made to recover used products and reuse them as raw materials.

* Used goods and by-products that are useful and can be used as raw materials

Use of Glass Cullet

In the glass manufacturing process, the Group uses glass cullet as a substitute for raw materials such as silica sand. In addition to the glass ends generated during the manufacturing process, the Group also collects used glass from market for reuse as a raw material to the greatest extent possible.

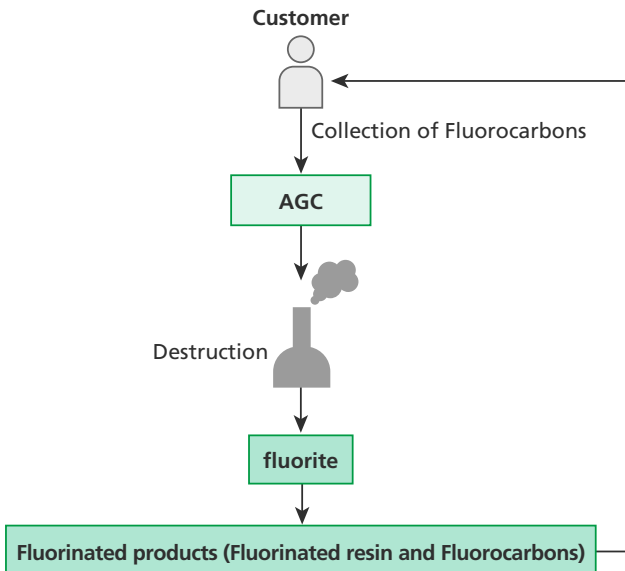
Recovery and Recycling of Fluorocarbons and Calcium Fluoride

In the Chemicals businesses, the AGC Group manufactures various fluorinated products such as alternatives for chlorofluorocarbons (HCFC, HFC) and hydrofluoric acid. Calcium fluoride (fluorite) is a natural resource used as raw material for these fluorinated products, but deposits and producing countries are limited, and most Japanese enterprises, including the AGC Group, largely depend on imports from China.

Since 1997, the AGC Group in Japan has been recovering used fluorocarbon products from customers, then destroying and recycling them at the AGC Chiba Plant. In recognition of these activities, AGC received the Minister of Economy, Trade and Industry Award in the Awards for Resources Recirculation Technologies and Systems in 2014 in Japan. In 2018, fluorocarbons equivalent to approximately 1.40 million tons of CO₂ (approximately 1.61 million tons in 2017) were collected and the calcium fluoride obtained through the destruction process was reused as raw material.

Also, at the same plant, calcium fluoride (fluorite) is recovered and reused from waste fluid generated in the manufacturing process. Furthermore, after customers use hydrofluoric acid in the wastewater treatment process, the Group recovers and reuses the waste calcium fluoride generated.

● Recovery and Recycling of Fluorocarbons



Initiatives at Individual Companies

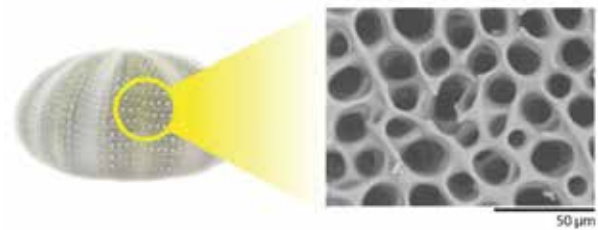
Effective Utilization of Discarded Sea Urchin Shells (Hokkaido Soda Co., Ltd.)

In March 2020, the AGC Group company Hokkaido Soda Co., Ltd. began selling a product called “uniporous,” a biological filter material that effectively utilizes sea urchin shells.

The annual catch of sea urchin in Hokkaido is about 4,300 tons, but only about 15% of that is edible flesh, and it takes a lot of time and effort to process the sea urchin shells, which account for most of the waste.

Based on the management policy of the AGC Group, Hokkaido Soda Co., Ltd. aims to solve this social issue through science and technology cultivated over many years. With cooperation from the Fisheries Research Department of the Hokkaido Research Organization, Hokkaido Soda Co., Ltd. has commercialized a biological filter material that takes advantage of sea urchin shells’ lightweight, porous structure, creating a highly adherent surface for bacteria.

This product was recognized for its high level of recyclability as a Hokkaido Certified Recycled Product in November 2019.



Sea urchin shell porous which are effective as a biological filter material

Climate Change Initiatives

Fundamental Approach

The signing of the 2015 Paris Agreement sparked rising interest in climate change around the world at the national and governmental level. As a result, stakeholders also have heightened expectations towards the roles private companies should play and the initiatives they should invest in regarding climate change.

The AGC Group's business activities are supported by ecosystem services that benefit from natural capital. While remaining aware that the Group uses a large amount of energy across its businesses, we promote the reduction of greenhouse gas (GHG) emissions throughout product life cycles, from business planning to product disposal, contributing to the realization of a sustainable society.

Reducing GHG Emissions and Actively Developing Energy-saving and Energy-creating Products

Across the entire manufacturing process, the Group is actively promoting energy conservation, introducing cogeneration systems and fuel conversion, and reducing the emission of CFCs, while also expanding the introduction of renewable energy at its business sites. In addition, by providing products and solutions that contribute to energy savings and energy generation, including eco-glass that enhances the cooling and heating of buildings and houses, refrigerants with extremely low global warming potential (GWP) and solar power generation systems, the Group is contributing to mitigating climate change.

● Specific examples of climate change risks and opportunities

Type	Content	
Accompanying risk	Policies, laws and regulations	• Cost increases due to carbon pricing, such as a carbon tax, and other expanded regulations on GHG emissions
	Technology	• Increased costs to realize the transition to low carbon technology, such as establishment of manufacturing methods that do not require fossil fuels
	Markets	• Decrease in demand for existing products due to consumer preferences changing
Physical risks	Short-term	• Effects on operations and logistics due to natural disasters such as heavy rainfall, floods and droughts
	Long-term	• Effects on operations and logistics due to inundations caused by long-term sea level rise, storm surges and typhoons stemming from an average temperature increase • Heatstroke in hot workplaces during the summer due to the rise in average temperature
Opportunities	Resource efficiency	• Cost reductions through more efficient use of mineral and water resources • Diversification of raw material options by utilizing recycled resources such as glass cullet and recovered fluorite
	Products	• Development and sales promotion of products that contribute to the alleviation of and adaptation to climate change, such as low-e double-glazing glass, alternative fluorocarbons with low global warming potential, and ion exchange membranes that contribute to the production of drinking water and water reuse
	Markets	• Access to new markets leveraging the strengths of the Group's technologies

To analyze the risks and opportunities associated with climate change in more detail, the Group conducted a pilot scenario analysis using the TCFD framework. The results confirmed that the impact of "carbon price," one of the main risk items, was particularly large. As a result, the Group is considering further

Initiatives for TCFD* Recommendations

The AGC Group announced its support for TCFD recommendations in May 2019, and is utilizing this framework to promote the following initiatives:

* TCFD: Task Force on Climate-related Financial Disclosures

● Governance

Group CEOs and other executives participate in a CSR Committee that discusses issues related to climate change and actively considers measures to guide the AGC Group's corporate activities in a low-carbon direction. The Board of Directors also recognizes climate change as a serious management risk and holds relevant discussions as appropriate.

● Strategy

Regarding the impact of climate change, an important factor in formulating management and business strategies, the AGC Group has identified evaluated risks and opportunities from now through 2030. Specifically, the items that may cause substantial fluctuations in business, income, expenses, etc. are organized as follows, and approaches are taken from the perspective of both mitigation and adaptation:

measures to reduce greenhouse gas emissions (including long-term targets), introducing internal carbon pricing and promoting low-carbon investment by incorporating climate change risk into investment indicators.

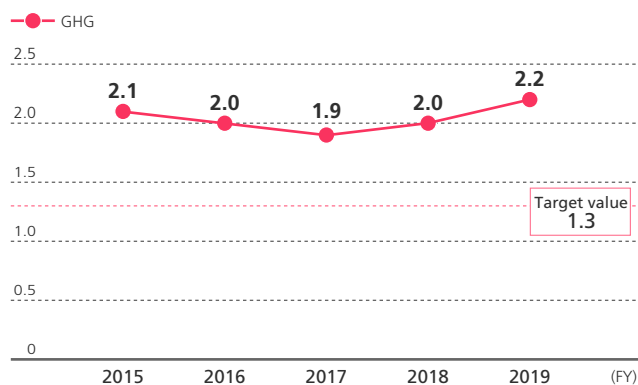
●Risk Management

The AGC Group collects and analyzes information on risk factors that have a major impact on our business, including climate change-related policies and regulations like carbon taxes and emissions trading, as well as trends in low-carbon technologies. We are also considering concrete countermeasures against the major risks revealed by the pilot scenario analysis.

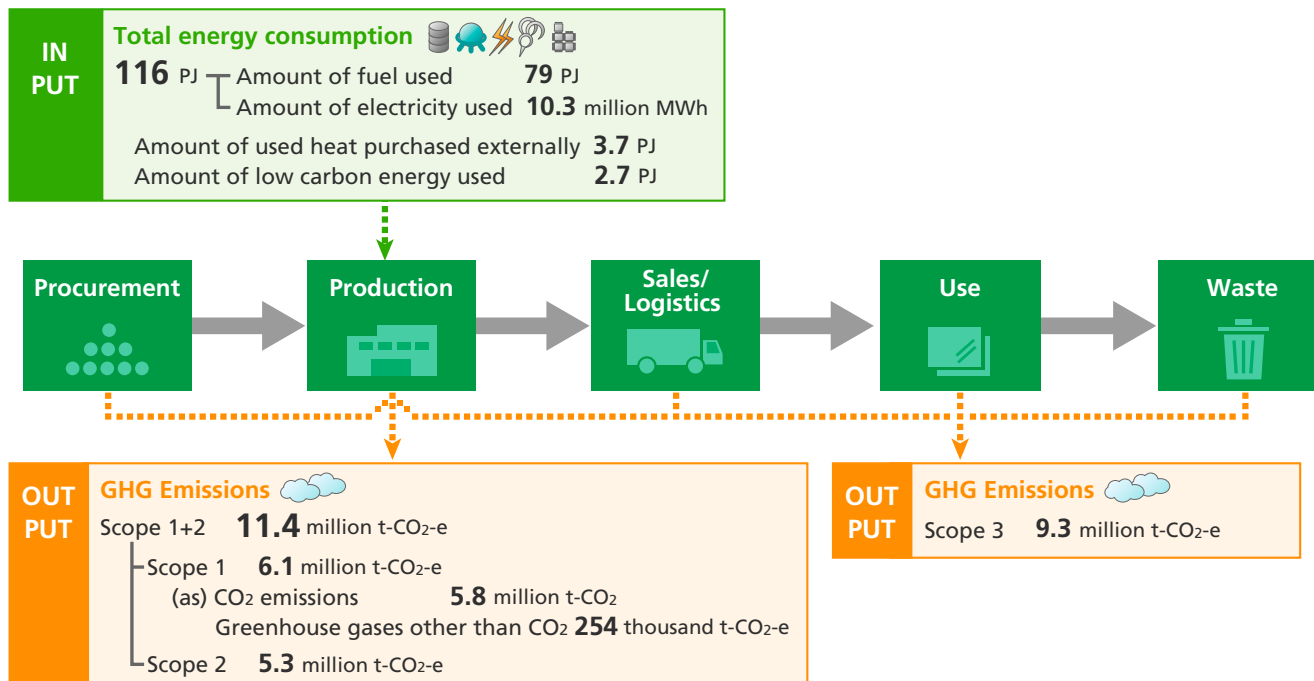
●Indicators and Goals

In efforts to mitigate climate change, the AGC Group has set a GHG emissions target value (AGC environmental indicator) of 1.3. The Group has formulated a corporate motto for CO₂ emissions, pledging to reduce CO₂ emissions by a cumulative amount six times the volume of AGC's total CO₂ emissions in 2020 through its energy-saving and energy-creating products. Accordingly, we are actively working on the development and sales of energy-saving and energy-creating products. Beginning in 2021, we plan to commence the implementation of long-term environmental goals and promote additional measures against climate change.

●AGC Environmental Indicator (AGC Group)



●2019 Energy-Related Material Balance (AGC Group)



Group-wide Initiatives

Reducing Natural Resource Use for Further Energy Savings

Mixing glass cullet with glass raw materials allows glass to be manufactured with less energy compared to when using only natural raw materials, such as silica sand. In order to reduce CO₂ emissions produced in the manufacturing process, the AGC Group has set a goal of reducing CO₂ emissions by 175 thousand t-CO₂ (60 thousand t-CO₂ at AGC alone) by 2020 through the use of cullet.¹

¹ Excludes those generated in glass melting processes

● Reductions in CO₂ Emissions Through Use of Glass Cullet

FY	AGC Group	AGC
2015	205 million t-CO ₂	38 million t-CO ₂
2016	202 million t-CO ₂	43 million t-CO ₂
2017	152 million t-CO ₂	39 million t-CO ₂
2018	95 million t-CO ₂	26 million t-CO ₂
2019	180 million t-CO ₂	60 million t-CO ₂
2020 (Target)	175 million t-CO ₂	60 million t-CO ₂

Investment in Solar Power Projects

The AGC Group has installed solar panels at three business sites in Japan. We are investing in a Photovoltaic Power Generation Project to effectively use land owned by the AGC Group and realize energy savings and energy creation through our products. The panels generated 25,000 kWh of power in FY2019.

● FY2019 Scope 3 GHG Emissions

Category	Overview	Calculation method	GHG Emissions
1	Purchased goods and services	Emissions calculated by multiplying resource input volume of product production by the emission intensity* per material.	2,582,934 t-CO ₂
2	Capital goods	Calculated by multiplying the amount of capital investment related to capital goods by the emission intensity* corresponding to the investment amount.	668,129 t-CO ₂
3	Fuel- and energy-related activities (not included in Scope 1 or Scope 2)	Calculated by multiplying the fuel and energy input amount at AGC Group offices / plants by the emission intensity* for individual fuels / energy sources.	1,080,670 t-CO ₂
4	Upstream transportation and distribution	Calculated based on the amount of resources input during product production and the ton-kilometer data for product transportation, where (1) the amount of emissions related to procurement of materials / parts, and (2) the amount of emissions from transportation at the time of shipping the product are multiplied by the emission intensity.*	1,153,754 t-CO ₂
5	Waste generated in operations	Calculated by multiplying the amount of externally disposed waste by the emission intensity per treatment method.*	29,807 t-CO ₂
6	Business travel	Global emissions are calculated through an estimation based on employee makeup ratios, considering the result calculated by multiplying the travel expenses for AGC alone by the emission intensity per transportation method.*	53,575 t-CO ₂
7	Employee commuting	Global emissions are calculated through an estimation based on employee makeup ratios, considering the result calculated by multiplying commuting expenses for AGC alone by emission intensity per transportation method.*	50,081 t-CO ₂
11	Use of sold products	Calculated by multiplying the GHGs emitted directly through use of sold products at sales outlets by emission intensity per product*, based on assumed usage conditions.	831,977 t-CO ₂ -e
12	End-of-life treatment of sold products	Calculated by subtracting the amount of waste at the manufacturing stage from the resource input amount and considering it as the amount of waste corresponding to the sold product, and multiplying this by the emission intensity per disposal method.*	2,748,780 t-CO ₂
13	Investments	Calculated by multiplying the CO ₂ emissions of manufacturing companies in which the AGC Group invests by the Group's ownership ratio for each company in which the Group invests.	59,466 t-CO ₂
Total			9,259,173 t-CO ₂ -e ★

* Emissions intensity mainly refers to the following documents:

Emissions intensity database on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain Ver.3.0 (Ministry of the Environment), Carbon Footprint Basic Database Ver.1.01, Carbon Footprint Common Intensity Ver.4.01 (Carbon Footprint Communication Program Office), MiLCA (Japan Environmental Management Association for Industry), and CFP Basic Intensity Ver. 3.0

* The boundary of data disclosed includes AGC and 103 group companies all over the world.

FY2019 GHG emissions marked with ★ are assured by KPMG AZSA Sustainability Co., Ltd.

Our Products with Lower GHG Emissions during Use

The AGC Group is making efforts to develop and sell products that help reduce GHG emissions at the stage when products are used by customers, such as energy-saving glass and alternative fluorocarbons with low global warming potential.

● Scope 3 GHG Emissions (AGC Group)

Output	2018	2019* ★
GHG emissions (Scope 1)	5.3 million t-CO ₂ -e	6.1 million t-CO ₂ -e
GHG emissions (Scope 2)	5.4 million t-CO ₂ -e	5.3 million t-CO ₂ -e
CO ₂ emissions (Scope 1+2)	10.6 million t-CO ₂	11.1 million t-CO ₂

* Thermal units and the emission factor are calculated as GHG emissions in accordance with the Act on the Rational Use of Energy (Energy Saving Act), the Act on Promotion of Global Warming Countermeasures and the EPA Greenhouse Gas Reporting Program. The electricity emission factor is based on the electricity supplier-specific factor or factor of the IEA (International Energy Agency) / China National Carbon Emissions Trading Scheme (*the IEA factor was used for bases in China in 2018). For the global warming potential of greenhouse gases other than CO₂, the values from the IPCC's Fourth Assessment Report are used.

* The total for FY 2019 includes chlorofluorocarbon gases that have a greenhouse effect and are not specified by the Act on Promotion of Global Warming Countermeasures. The emission factor has the value set by AGC with reference to the technical literature.

* Excludes GHG emissions from energy sold externally.

* The boundary of data disclosed includes AGC and 103 group companies all over the world.

Initiatives at Individual Companies

Installation of Solar Panels (Europe)

The AGC Glass Europe Group has installed solar panels on plants and office buildings to promote the use of renewable energy. In FY 2019, 5,050,000 kWh of power was generated, equivalent to approximately 1% of the Group's power usage.

Major Products that Contribute to the Environment

Energy-Saving Architectural Glass

[Eco-Glass \(Low-E Double Glazing Glass\)](#)

Energy-Saving Glass with Excellent Heat Insulation and Thermal Shielding for Improving the Efficiency of Cooling and Heating

[WINDOOR™ Refrigerator and Freezer Display Doors](#)

High Insulation Efficiency Refrigerator and Freezer Display Doors that Provide Excellent Energy Savings

Automotive Glass

[Coolverre™/UV Verre Premium Cool on™/UV Verre Premium Privashield™ \(Energy-Saving Glass for Automobiles\)](#)

Glass that Blocks Infrared and Ultraviolet Rays to the Benefit of Vehicle Drivers and the Global Environment

Glass for Solar Power Generation

[Sunjoule™ Glass with Built-In PV Modules](#)

Large-scale Module and Lighting-compatible Clean and Green Solar Power Generation System Using Laminated Glass

[Sunmax™ Premium \(Extra-Clear Glass\)](#)

Extremely Clear, Highly Reliable Glass, the Product of Choice for Photovoltaic Modules and Solar Mirrors

Fluorochemicals (Coating Materials / Refrigerants)

[Lumiflon™ \(Fluoropolymer for Coating\) / Bonnflon™ Sunbarrier \(Heat-Reflective Fluorinated Resin\)](#)

Fluorinated Resin Coating Materials that Contribute to Reducing CO₂ Emissions over the Lifecycle

[HFO- 1234yf, from the AMOLEA™ Series of Next-generation Refrigerants with Low Environmental Impact](#)

Retains HFO-1234yf Performance while Maintaining a Lower Global Warming Effect than Existing Products

Other Chemical Products

[ACLESYA™ Highly Reactive Gas Emissions Neutralizeropen window](#)

Neutralizes HCL and SO_x in Gas Emitted by Garbage Incinerators, Greatly Reducing Pollutants Released into the Atmosphere

[ExcenoI™ Urethane Material](#)

A Urethane Foam Material that Provides Superior Insulation without Using Freon Gas, which Has a High Global Warming Coefficient

Fluorochemicals (Film)

[Fluon® ETFE FILM \(Fluoropolymer Film\)](#)

A Versatile Fluoropolymer Film Offering Numerous Advantages Including Heat Resistance, Durability, Light Permeability, and Non-Flammability

Fuel Cell-Related Materials and Components

[Flemion™ \(Fluoropolymer Ion-Exchange Membrane\)](#)

Realizing Significant Energy Savings in the Production of Caustic Soda

Reducing Environmental Impact throughout Product Life Cycles

Fundamental Approach

The AGC Group evaluates its environmental impact not only during the manufacturing process, but throughout all product stages, including raw material procurement, sales, logistics, use and treatment, aiming to reduce environmental impact caused by a product through its lifecycle. The Group has also formulated a corporate motto for CO₂ emissions in 2020 to achieve an offset of six times the Group's annual CO₂ emissions emitted during manufacturing in any given year, through energy-saving and energy-creating products.

Third Party Certification for Environmental Products

By providing information on products' environmental impact throughout their life cycle, the Group enables its customers to preferentially purchase eco-friendly products.

Further, the AGC Group acquires third party certification for its environmental products. For example, AGC Glass Europe (AGEU) voluntarily issues environment-related third party certifications (Environmental Product Declarations, EPD) on select products.

Group-wide Initiatives

Development and Provision of Environmental Products in Line with AGC's Proprietary Guidelines

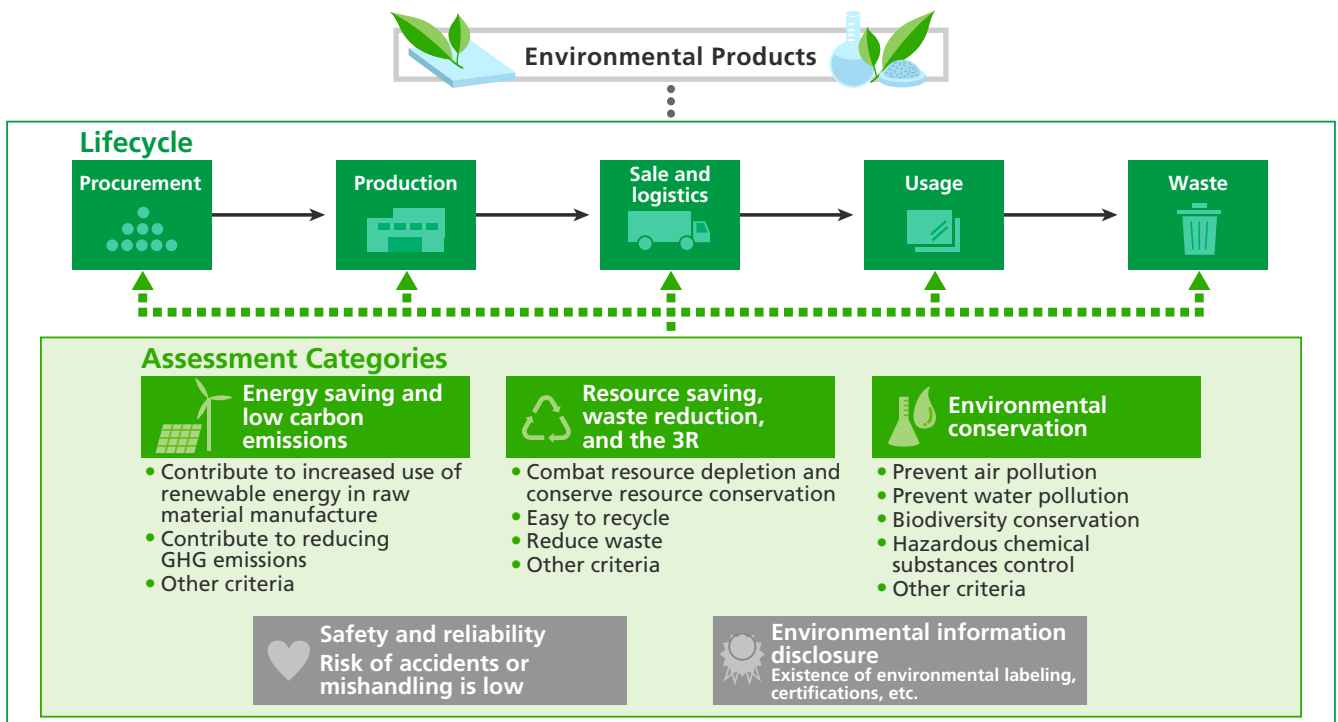
Guided by the AGC Group Environmental Policy, the Group strives to develop and provide environmental products, technologies, services, and installation techniques in consideration of their impact on the environment.

Specifically, products conforming to the AGC Group Environmental Product Guidelines are selected as environmental products. The Group promotes product development based on these Guidelines and, at each stage of product lifecycle, evaluates products in three categories: (1) energy saving and low carbon emissions, (2) resource saving, waste reduction and the 3R and (3) environmental conservation. Furthermore, products are assessed for their suitability as environmental products in light of product safety, security and environmental information disclosure.



EPD Certifications

●The Environmental Product Selection Process



Major Products that Contribute to the Environment

Energy-Saving Architectural Glass

Energy-Saving Architectural Glass

Eco-Glass (Low-E Double Glazing Glass)

Energy-saving glass with excellent heat insulation and thermal shielding that improve the efficiency of cooling and heating

Fluorochemicals (Refrigerants)

HFO- 1234yf, from the AMOLEATM Series of Next-generation Refrigerants with Low Environmental Impact

Retains HFO- 1234yf

Performance stays remained while lowering global warming effect than existing products

Biodiversity Conservation

Fundamental Approach

Through the AGC Group Environment Policy, the AGC Group has committed to contribute to a sustainable society as a leading global company in the I materials industry, efficiently utilizing limited resources and energy, and taking into account into its impact on the natural environment, including climate change and biodiversity. The Group also strives to conserve biodiversity through the formulation of the Considerations for Biodiversity.

Group-wide Initiatives

Participation as a Promoting Partner of the Nippon Keidanren Declaration of Biodiversity

AGC is a promoting partner of the Nippon Keidanren (Japan Business Federation) Declaration of Biodiversity. The Group has been contributing to conserving biodiversity through air- and water-based environmental conservation activities and others that reduce stress placed on the environment. Through endorsement of the goals of the seven principles of the Nippon Keidanren Declaration of Biodiversity, the Group is taking concrete steps to promote business activities that consider biodiversity.

Initiatives in Country and Region

Activities in Thailand

Since 2012, AGC Automotive Thailand (AATH) has been participating in a tree-planting activity called “Ruam Jai-Pakdi-Plook-Mahesak-Sak-Sa-Ya-Min” supported by Her Royal Highness Maha Chakri. This is a long-term conservation activity for Thailand's precious forest resources and an opportunity for AATH employees' children to learn about the importance of environmental conservation.

AGC Chemicals (Thailand) also engages in coastal conservation and joint tree planting activities with the Royal Forest Department through employee participation.



The AGC Automotive Thailand employees and families participating in forest conservation activities

Activities in China

In response to the Shenzhen City Government's call to "Build homes that are kind to the earth and advocate an eco-civilization," AGC Display Glass (Shenzhen) Inc. participated in the Shenzhen City Tree Planting Festival in March 2019, working together with employees and their families to boost greenery in the area.

Activities in Japan

The AGC Group encouraged employees across multiple Group companies located in Marunouchi, Tokyo to collect Bellmarks. The Bellmarks collected by the end of 2019 were donated to NGOs that support tree planting activities in developing countries.

Industrial Safety and Security

Fundamental Approach

The AGC Group recognizes the importance of industrial safety and security activities. Therefore, the AGC Group has established the Industry Safety and Security Policy to promote various issues surrounding industrial safety and security.

AGC Group Industrial Safety & Security Policy

(Established on February 7, 2003 and revised on January 1, 2019)

At AGC Group we will pursue our **“Look Beyond”** Vision with the strong belief that “actively engaging in security and disaster prevention activities is our fundamental obligation as a company developing business in the local community”

We commit to adhere to the following key principles:

1. Comply with relevant internal and external rules concerning industrial safety and security rules worldwide.
2. Develop and continuously improve management initiatives to prevent incidents associated with industrial safety and security.
3. Strive to communicate with internal and external stakeholders proactively.

Management Structure

In addition to striving to prevent accidents and other crises (unforeseen accidents), the AGC Group is working under the AGC Group Industry Safety and Security Policy to prevent the escalation of accidents that do occur by promoting countermeasures to deal promptly and accurately with such crises.

The Group incorporates industrial safety and security activities into its integrated Environmental Management System (EMS) and promotes risk reduction and preventive measures by applying the Plan-Do-Check-Act (PDCA) cycle.

Each business division will promote fire prevention, countermeasures for industrial safety accidents and risk assessment for natural disasters based on action plans drawn up for that year by the corporate Environment, Safety and Quality Division. In addition to these, the Group will strive for continuous improvement through internal audits that monitor the extent to which the above measures have been carried out.

Group-wide Initiatives

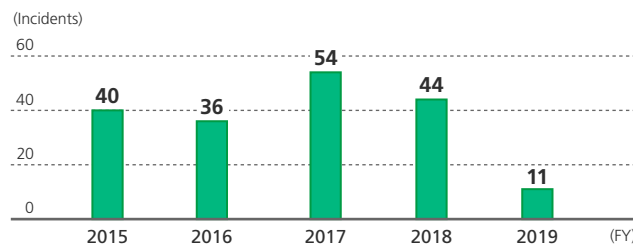
Preventing Accidents through Pre-assessment in Facility Development

When constructing, expanding or modifying facilities that are determined to be liable for risk, the Group conducts industrial safety and security-related risk assessment and confirms the intrinsic safety of the facility based on the Group's Prior Safety Assessment System. This occurs at the design stage and also during test operations when construction is completed. In addition, when safety assessment at a chemical plant indicates a high level of danger, a risk assessment is carried out using HAZOP or other means.

Prevention of Fire and Prevention of Reoccurrence

The AGC Group is working to continually improve fire prevention activities at domestic and overseas sites through environment, industrial safety and security preservation audits conducted by each business division and the Environment, Safety and Quality Division. In 2019, 11 fires broke out at Group sites. However, by quick initial response measures, none of them led to fatal incidents.

●Trend in the Number of Fires* (AGC Group)



* Fires included in the total figures are those that required extinguishing, from small fires put out with a single fire extinguisher to larger fires put out by a municipal fire department.

Initiatives to Improve Self industrial safety and security Capabilities

In 2019, the AGC Group began a industrial safety and security Project that incorporates fire department guidance, third-party security and safety culture assessments for reducing risks related to the environment, industrial safety and security. The project also strengthens self -industrial safety and security capabilities.

Education and Training for Security Incidents

When an industrial safety and security incident occurs, it is necessary to minimize the impact on employees and communities.

The AGC Group conducts disaster education and training at its business sites. Business sites under the guidance of fire departments a regularly conduct disciplinary training, disaster prevention training and rescue trainings



Emergency training at AGC headquarters



Training at the Chiba Plant



Training at the AGC Glass Products Eniwa Plant



Independent Assurance Report

To the President of AGC Inc.

We were engaged by AGC Inc. (the “Company”) to undertake a limited assurance engagement of the GHG emissions marked with a star ★ (the “Indicators”) for the period from January 1, 2019 to December 31, 2019 included in its Sustainability Data Book 2020 (the “Report”) for the fiscal year ended December 31, 2019.

The Company’s Responsibility

The Company is responsible for the preparation of the Indicators in accordance with its own reporting criteria (the “Company’s reporting criteria”), as described in the Report.

Our Responsibility

Our responsibility is to express a limited assurance conclusion on the Indicators based on the procedures we have performed. We conducted our engagement in accordance with the ‘International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information’ and the ‘ISAE 3410, Assurance Engagements on Greenhouse Gas Statements’ issued by the International Auditing and Assurance Standards Board. The limited assurance engagement consisted of making inquiries, primarily of persons responsible for the preparation of information presented in the Report, and applying analytical and other procedures, and the procedures performed vary in nature from, and are less in extent than for, a reasonable assurance engagement. The level of assurance provided is thus not as high as that provided by a reasonable assurance engagement. Our assurance procedures included:

- Interviewing the Company’s responsible personnel to obtain an understanding of its policy for preparing the Report and reviewing the Company’s reporting criteria.
- Inquiring about the design of the systems and methods used to collect and process the Indicators.
- Performing analytical procedures on the Indicators.
- Examining, on a test basis, evidence supporting the generation, aggregation and reporting of the Indicators in conformity with the Company’s reporting criteria, and recalculating the Indicators.
- Visiting the Company’s Aichi Plant selected on the basis of a risk analysis.
- Evaluating the overall presentation of the Indicators.

Conclusion

Based on the procedures performed, as described above, nothing has come to our attention that causes us to believe that the Indicators in the Report are not prepared, in all material respects, in accordance with the Company’s reporting criteria as described in the Report.

Our Independence and Quality Control

We have complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. In accordance with International Standard on Quality Control 1, we maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

KPMG AZSA Sustainability Co., Ltd.

KPMG AZSA Sustainability Co., Ltd.

Tokyo, Japan

July 2, 2020

GRI Standards Index

This Sustainability Data Book 2020 is a tool for non-financial information disclosure (sustainability reporting), and is based on the Core option of the GRI Standards.

Material aspects (material aspects for AGC Group: material issues) are selected based on CSR monitoring mechanisms that employ ISO26000. The management methods for each disclosed issue are given on the corresponding material issues page.

Core Option Criteria for the GRI Standards.

- Disclosing all General Standard Disclosures which are required for Core option
- Disclosing at least one Indicator related to each identified material aspect (material issue)

General Disclosures (core)

Only General Standard Disclosures required for Core option have been included.

1. Organizational profile

GRI Standards	Requirements	Page listed
GRI 102: General Disclosures	102-1 Name of the organization	AGC Integrated Report 2020 (P.86) Sustainability Data Book 2020 (P.3), Company Overview
	102-2 Activities, brands, products, and services	AGC Integrated Report 2020 (P.7-18, 35-50) Sustainability Data Book 2020 (P.3), Company Overview
	102-3 Location of headquarters	AGC Integrated Report 2020 (P.86) Sustainability Data Book 2020 (P.3), Company Overview
	102-4 Location of operations	Our Network
	102-5 Ownership and legal form	AGC Integrated Report 2020 (P.71-75) Corporate Governance
	102-6 Markets served	AGC Integrated Report 2020 (P.7-18, 35-50) Company Overview
	102-7 Scale of the organization	AGC Integrated Report 2020 (P.7-18, 35-50) Financial Review (English Only)
	102-8 Information on employees and other workers	Sustainability Data Book 2020 (P.25-26) Human Resources Management Sustainability Data Book 2020 (P.3) Corporate Data Sustainability Data Book 2020 (P.32-34) Global Promotion of Diversity
	102-9 Supply chain	Sustainability Data Book 2020 (P.49) AGC Group Social Contribution Basic Policy Sustainability Data Book 2020 (P.44) 2019 Activity Results for Material Issues Sustainability Data Book 2020 (P.48-50) Supply Chain
	102-10 Significant changes to the organization and its supply chain	Not applicable
	102-11 Precautionary Principle or approach	Financial Review (English Only) Sustainability Data Book 2020 (P.18-19) Risk Management
	102-12 External initiatives	Sustainability Data Book 2020 (P.8) CSR Promotion System Sustainability Data Book 2020 (P.9) Local communities, NGOs/NPOs, Governments
	102-13 Membership of associations	Sustainability Data Book 2020 (P.8) CSR Promotion System Sustainability Data Book 2020 (P.9) Local communities, NGOs/NPOs, Governments

2. Strategy

GRI Standards	Requirements		Page listed
GRI 102: General Disclosures	102-14	Statement from senior decision-maker	CSR Top Message AGC plus (Video) AGC plus

3. Ethics and integrity

GRI Standards	Requirements		Page listed
GRI 102: General Disclosures	102-16	Values, Principles, standards, and norms of behavior	Sustainability Data Book 2020 (P.1-2) Sustainability Data Book 2020 (P.5) CSR and Related Policies Sustainability Data Book 2020 (P.21-22) Compliance

4. Governance

GRI Standards	Requirements		Page listed
GRI 102: General Disclosures	102-18	Governance structure	AGC Integrated Report 2020 (P.71-75) Sustainability Data Book 2020 (P.17) Corporate Governance Corporate Governance Sustainability Data Book 2020 (P.8) CSR Promotion System

5. Stakeholder engagement

GRI Standards	Requirements		Page listed
GRI 102: General Disclosures	102-40	List of stakeholder groups	Corporate Governance Report Sustainability Data Book 2020 (P.8) CSR Promotion System Sustainability Data Book 2020 (P.9-10) Stakeholders
	102-41	Collective bargaining agreements	Sustainability Data Book 2020 (P.27-28) Respecting Human Rights
	102-42	The basis for identifying and selecting stakeholders with whom to engage.	Corporate Governance Report Sustainability Data Book 2020 (P.8) CSR Promotion System Sustainability Data Book 2020 (P.9-10) Stakeholders
	102-43	Approach to stakeholder engagement	Corporate Governance Report Sustainability Data Book 2020 (P.8) CSR Promotion System Sustainability Data Book 2020 (P.9-10) Stakeholders
	102-44	Key topics and concerns raised	Corporate Governance Report Sustainability Data Book 2020 (P.8) CSR Promotion System Sustainability Data Book 2020 (P.9-10) Stakeholders

6. Reporting practice

GRI Standards	Requirements		Page listed
GRI 102: General Disclosures	102-45	Entities included in the consolidated financial statements	AGC Integrated Report 2020 (P.7-8) Financial Review (English Only)
	102-46	Defining report content and topic Boundaries	AGC Integrated Report 2020 (P.1) Sustainability Data Book 2020 (P.8) CSR Promotion System Sustainability Data Book 2020 (P.9-10) Stakeholders
	102-47	List of material topics	Sustainability Data Book 2020 (P.8) CSR Promotion System
	102-48	Restatements of information	Not applicable
	102-49	Changes in reporting	Not applicable
	102-50	Reporting Period	AGC Integrated Report 2020 (P.1) Sustainability Data Book 2020 (P.1)
	102-51	Date of most recent report	Sustainability Data Book 2020 (P.1)
	102-52	Reporting cycle	AGC Integrated Report 2020 (P.1) Sustainability Data Book 2020 (P.1)
	102-53	Contact point for questions regarding the report	AGC Integrated Report 2020 (Back cover) CSR-related inquiries
	102-54	Claims of reporting in accordance with the GRI Standards	i. Core ii. This table
	102-55	GRI content index	This table
	102-56	External assurance	Financial Review (English Only) Independent Assurance Report (Limited assurance of the GHG emissions)

GRI Standards	Requirements		Page listed
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	AGC Integrated Report 2020 (P.1) Sustainability Data Book 2020 (P.8) CSR Promotion System Sustainability Data Book 2020 (P.9-10) Stakeholders

Material topics

Only items that were selected as material issues for AGC Group have been included.

Economic

GRI Standards	Requirements		Page listed
GRI 201: Economic Performance	201-1	Direct economic value generated and distributed	Financial Review (English Only)
	201-2	Financial implications and other risks and opportunities due to climate change	Financial Review (English Only) Sustainability Data Book 2020 (P.60-62) Environmental Management Sustainability Data Book 2020 (P.59) 2019 Activity Results for Material Issues Sustainability Data Book 2020 (P.73-76) Climate Change Initiatives Products and Technologies that Contribute to Environmental Solutions
	201-3	Defined benefit plan obligations and other retirement plans	Financial Review (English Only)
	201-4	Financial assistance received from government	
GRI 205: Anti-corruption	205-1	Operations assessed for risks related to corruption	Sustainability Data Book 2020 (P.44) 2019 Activity Results for Material Issues Sustainability Data Book 2020 (P.21-22) Compliance Sustainability Data Book 2020 (P.45-46) Fair Transactions
	205-2	Communication and training about anti-corruption policies and procedures	Sustainability Data Book 2020 (P.44) 2019 Activity Results for Material Issues Sustainability Data Book 2020 (P.21-22) Compliance Sustainability Data Book 2020 (P.45-46) Fair Transactions
	205-3	Confirmed incidents of corruption and actions taken	
GRI 206: Anti-competitive Behavior	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Press Release Sustainability Data Book 2020 (P.45-46) Fair Transactions

Environmental

GRI Standards	Requirements		Page listed
GRI 301: Materials	301-1	Materials used by weight or volume	Sustainability Data Book 2020 (P.62, 64) Environmental Management/ Environmental Accounting
	301-2	Recycled input materials used	Sustainability Data Book 2020 (P.71-72) Sustainable Use of Resources
	301-3	Reclaimed products and their packaging materials	
GRI 302: Energy	302-1	Energy consumption within the organization	Sustainability Data Book 2020 (P.62, 64) Environmental Management/ Environmental Accounting Sustainability Data Book 2020 (P.73-76) Climate Change Initiatives
	302-2	Energy consumption within the organization	Sustainability Data Book 2020 (P.73-76) Climate Change Initiatives
	302-3	Energy intensity	Sustainability Data Book 2020 (P.62, 64) Environmental Management/ Environmental Accounting Sustainability Data Book 2020 (P.73-76) Climate Change Initiatives
	302-4	Reduction of energy consumption	Sustainability Data Book 2020 (P.73-76) Climate Change Initiatives
	302-5	Reductions in energy requirements of products and services	Sustainability Data Book 2020 (P.62, 64) Environmental Management/ Environmental Accounting

GRI 303: Water	303-1	Water withdrawal by source	Sustainability Data Book 2020 (P.65-66) Effective Use of Water Resources and the Prevention of Water Pollution
	303-2	Water sources significantly affected by withdrawal of water	Sustainability Data Book 2020 (P.65-66) Effective Use of Water Resources and the Prevention of Water Pollution
	303-3	Water recycled and reused	
GRI 305: Emissions	305-1	Direct (Scope 1) GHG emissions	Sustainability Data Book 2020 (P.73-76) Climate Change Initiatives
	305-2	Energy indirect (Scope 2) GHG emissions	Sustainability Data Book 2020 (P.73-76) Climate Change Initiatives
	305-3	Other indirect (Scope 3) GHG emissions	Sustainability Data Book 2020 (P.73-76) Climate Change Initiatives
	305-4	GHG emissions intensity	Sustainability Data Book 2020 (P.62, 64) Environmental Management/ Environmental Accounting Sustainability Data Book 2020 (P.73-76) Climate Change Initiatives
	305-5	Reduction of GHG emissions	Sustainability Data Book 2020 (P.73-76) Climate Change Initiatives
	305-6	Emissions of ozone-depleting substances (ODS)	
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Sustainability Data Book 2020 (P.69) Air Pollution Prevention Site Reports
GRI 306: Effluents and Waste	306-1	Water discharge by quality and destination	Sustainability Data Book 2020 (P.65-66) Effective Use of Water Resources and the Prevention of Water Pollution Site Reports
	306-2	Waste by type and disposal method	Sustainability Data Book 2020 (P.62, 64) Environmental Management/ Environmental Accounting Sustainability Data Book 2020 (P.71-72) Sustainable Use of Resources Site Reports
	306-3	Significant spills	Not applicable
	306-4	Transport of hazardous waste	
	306-5	Water bodies affected by water discharges and / or runoff	
GRI 307: Environmental Compliance	307-1	Non-compliance with environmental laws and regulations	Sustainability Data Book 2020 (P.60) Environmental Management
GRI 308: Supplier Environmental Assessment	308-1	New suppliers that were screened using environmental criteria	
	308-2	Negative environmental impacts in the supply chain and actions taken	Sustainability Data Book 2020 (P.44) 2019 Activity Results for Material Issues Sustainability Data Book 2020 (P.48-50) Supply Chain

Social

GRI Standards	Requirements		Page listed
GRI 403: Occupational Health and Safety	403-1	Workers representation in formal joint management - worker health and safety committees	
	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	Sustainability Data Book 2020 (P.37-40) Occupational Health & Safety Site Reports
	403-3	Workers with high incidence or high risk of diseases related to their occupation	Sustainability Data Book 2020 (P.37-40) Occupational Health & Safety Site Reports
	403-4	Health and safety topics covered in formal agreements with trade unions	
GRI 404: Training and Education	404-1	Average hours of training per year per employee	Sustainability Data Book 2020 (P.34-36) Employee Education
	404-2	Programs for upgrading employee skills and transition assistance programs	Sustainability Data Book 2020 (P.24) 2019 Activity Results for Material Issues Sustainability Data Book 2020 (P.34-36) Employee Education Sustainability Data Book 2020 (P.32-34) Global Promotion of Diversity
	404-3	Percentage of employees receiving regular performance and career development reviews	Sustainability Data Book 2020 (P.25-26) Human Resources Management Sustainability Data Book 2020 (P.34-36) Employee Education
GRI 408: Child Labor	408-1	Operations and suppliers at significant risk for incidents of child labor	Sustainability Data Book 2020 (P.24) 2019 Activity Results for Material Issues Sustainability Data Book 2020 (P.27-28) Respecting Human Rights
GRI 409: Forced or Compulsory Labor	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Sustainability Data Book 2020 (P.24) 2019 Activity Results for Material Issues Sustainability Data Book 2020 (P.27-28) Respecting Human Rights
GRI 414: Supplier Social Assessment	414-1	New suppliers that were screened using social criteria	
	414-2	Negative social impacts in the supply chain and actions taken	Sustainability Data Book 2020 (P.44) 2019 Activity Results for Material Issues Sustainability Data Book 2020 (P.48-50) Supply Chain
GRI 416: Customer Health and Safety	416-1	Assessment of the health and safety impacts of product and service categories	Sustainability Data Book 2020 (P.54-55) Quality Assurance
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	Sustainability Data Book 2020 (P.54-55) Quality Assurance
GRI 417: Marketing and Labeling	417-1	Requirements for product and service information and labeling	Sustainability Data Book 2020 (P.67-68) Chemical Substances Management
	417-2	Incidents of non-compliance concerning product and service information and labeling	Sustainability Data Book 2020 (P.67-68) Chemical Substances Management
	417-3	Incidents of non-compliance concerning marketing communications	
GRI 419: Socioeconomic Compliance	419-1	Non-compliance with laws and regulations in the social and economic area	Press Release Sustainability Data Book 2020 (P.21-22) Compliance