

# AGC Sustainability Data Book 2025



# Contents

- 02 Message from the CEO
- 03 Message from the GM of Sustainability Division

# Sustainability at the AGC Group

- 04 AGC Group Philosophy
- 05 Process for Identifying Long-Term Social Issues (Materiality)
- Of The AGC Group's Recognition of Long-Term Social Issues (Materiality)
- 08 Sustainability Management System
- 09 Stakeholders Engagement

#### Governance

- 10 Corporate Governance
- 11 Internal Controls
- 13 Risk Management
- 15 Compliance
- 17 Maintaining Information Security
- 18 Respect for Intellectual Property Rights
- 19 Tax Payments
- 20 EHSQ Management

#### Environmental

- 21 Environmental Strategy to Realize the Social Value "Blue planet"
- 32 Addressing Climate Change
- 47 Effective Use of Resources
- 54 Considering Relationships with Local Communities and the Environment
- 59 Stakeholder Communication, Including Environmental Compliance
- 52 Verification Statement

#### Social

- 64 Respecting Human Rights
- 66 Human Resource Management
- 69 Global Promotion of Diversity
- 72 Employee Education
- 74 Improving Employee Engagement
- 76 Ensuring Work-Life Balance
- 78 Creating a Comfortable Workplace
- 81 Occupational Health and Safety
- 87 Industrial Safety and Security
- 89 Supply Chain
- 92 Fair Transactions
- 94 Ensuring Quality
- 96 Product Safety Initiatives
- 97 Pursuit of Customer Satisfaction (CS)
- 98 Social Contribution Activities

### GRI Standards Index

99 GRI Standards Index

# **Editorial Policy**

Sustainability Data Book 2025 contains non-financial aspects (sustainability reporting) and complements the AGC Integrated Report 2025, in which the AGC Group publishes its broad range of business strategies and business activities. The information herein refers the Global Reporting Initiative Universal Standards (GRI 1: Foundation 2021)

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

# Scope of This Report

Reporting Period

2024 (Jan.-Dec. 2024)

Some information includes content from 2023 and/or 2025.

Organizations Covered in the Report

AGC Inc. and its consolidated subsidiaries (Group companies worldwide)

Primary Notation and Report Subjects 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 Inc.
- AGC · · · · · AGC Inc. (on a non-consolidated basis)
- Group companies in Asia · · · · · · Group companies in Asia, excluding the AGC Group (Japan)

### **Dates of Publication**

Japanese version: August 2025 (Previous date of publication: August 2024)

English version: September 2025 (Previous date of publication: September 2024)

# Future Assumptions, Forecasts, and Plans

Sustainability Data Book 2025 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. Please note in advance.

# ▶ Main Communication Tools of the AGC Group



# Message from the CEO



Representative Director, President & CEO

Yoshinori Hirai

We contribute to the sustainability of the world through developing human resources with a long-term perspective and by providing materials and solutions from a long-term perspective.

In 2025, the AGC Group redefined "Look Beyond," previously known as its "Group Vision," as its new "Group Philosophy," and updated its content to align with the times. Our Shared Values, which we updated to match the times, are Innovation & Operational Excellence, Sustainability for a Blue planet, One Team with Diversity, and Integrity & Trust. In other words, we added Trust to Integrity, which had been part of our values until now. Environment, safety, quality, and compliance are the prerequisites for our business, and we aim to earn the trust of society and customers based on this integrity. To reaffirm our commitment in this regard, we made Integrity & Trust one of Our Shared Values.

Under the medium-term management plan, *AGC plus-2026*, we have defined three social values that the AGC Group will create through our products and technologies, as we look to deepen our sustainability management: "Blue planet," "Innovation," and "Well-being." Furthermore, we have combined these with "reduce greenhouse gas emissions with regard to limiting our environmental impact," and "increase employee engagement scores with regard to human capital," and have set a total of seven KPIs. We intend to closely track our progress in relation to these indicators.

Our long-term management strategy "Vision 2030" states that we strive to help realize a sustainable society and continuously grow and evolve as an excellent company. The AGC Group's products and services are based on materials, meaning they take many years to go from R&D to commercialization. Making a meaningful contribution through materials requires the efforts of multiple generations of people

over many years, something that is not possible with short-term management policies. The fact that it takes such a long time means that the people of several generations are involved. Therefore, to contribute to the realization of a sustainable society through materials, it is essential that we have a long-term perspective and develop systems and the personnel to operate these systems over the long term. Our corporate culture is based on three elements: open communication, taking on challenges, and encouraging initiative. With this culture, we aim to ensure high levels of engagement, support the chemical reaction of knowledge, and strengthen on-site capabilities—which will result in higher corporate value—by drawing out the strengths and unique characteristics of our diverse human resources and supporting self-directed learning and growth. The phrase "AGC People: Driving our Growth!" directly expresses this approach.

Since I was appointed as the Group CEO, I have always thought that personnel expenses are an investment, not a cost. Through a series of dialogue meetings at domestic and overseas work sites, we have promoted various initiatives to draw out the strengths and individuality of our diverse human resources from a long-term perspective. By proactively utilizing its human resources, the AGC Group will aim to become an excellent company that grows and evolves continuously. We will endeavor to build trust through communication with members of society, as part of the AGC Group's aim to continuously grow and evolve to enable us to be "an everyday essential part of our world." I would greatly appreciate your continued understanding and support as we proceed.

# Message from the GM of Sustainability Division

# We are steadily advancing measures to achieve our sustainability goals.

Since its founding, the AGC Group has continuously provided products that contribute to society as demanded at the time and made people's lives better around the world every day with its unique materials and solutions. The economic value generated through the social value created by producing products that contribute to society has been used as a source of growth and reinvested in research and development, facilities, and human capital, thereby perpetuating a virtuous cycle of value creation and growth. Our sustainability management aims to contribute to the sustainability of society and increase our corporate value.

# Setting Sustainability KPIs and Steadily Implementing Measures

Based on the trends in long-term social issues and the characteristics of the AGC Group's businesses, we identified the "major risks" and "major opportunities" for AGC Group. Particularly focusing on "major opportunities," we introduced three types of social value that the AGC Group aims to create with its products and technologies: "Blue planet" (realization of a sustainable global environment), "Innovation" (creation of an innovative future society), and "Well-being" (contribution to safe and secure living). We aim to create economic value and enhance corporate value through providing these social values. To realize our long-term management strategy, "Vision 2030," the AGC plus-2026 medium-term management plan sets five KPIs to measure business growth from a sustainability perspective in these three areas, and two KPIs to measure the sustainability of our management base: "GHG (Scope 1 and 2) Emissions" and "Employee engagement score," for a total of seven sustainability KPIs. By reliably monitoring these activities, we are working to deepen our sustainability management.

With regard to GHG emissions reduction, we aim to achieve net zero carbon emissions (Scope 1 and 2)



GM of Sustainability Div., Corporate Planning General Div.

# Yuki Ihara

by 2050. One example of the measures we are taking to achieve our goal is the demonstration experiment that we have started with Saint-Gobain, a company headquartered in France, to significantly reduce CO<sub>2</sub> emissions in glass manufacturing. Among other initiatives, we are developing technologies for the use of green energy such as hydrogen and ammonia while studying the introduction of carbon dioxide capture, utilization and storage (CCS/CCUS). In this way, we will contribute to the realization of a sustainable global environment by strengthening collaboration with external organizations, rather than limiting our initiatives to the AGC Group alone.

As we strive to embody "AGC People: Driving our Growth!," we are implementing measures based on large-scale engagement surveys conducted every three years and confirming their effectiveness through annual pulse surveys to pinpoint trends and issues. Each organization is taking proactive measures to create the AGC Group that enhances corporate value by demonstrating the strengths and individuality of its diverse human resources. To add momentum to such endeavors, the management team personally visits work sites and engages in dialogue with the employees.

# Toward the Sustainability of Society and of the AGC Group

In 2024, we added a human rights complaint contact desk and strengthened our system for responding quickly and appropriately to feedback from employees and stakeholders. In addition, we are reviewing the governance structure of the entire Group to ensure transparent management. The Environment Response Meeting, established under the Sustainability Committee, concentrates on discussions related to climate change while also addressing other environmental issues as topics for broad discussion.

At the beginning of 2025, the AGC Group renewed "Our Shared Values" within its Group philosophy "Look Beyond" in a form that is more aligned with the times. The AGC Group has clarified its commitment to realizing its Vision by establishing four key values that all group employees share as the foundation for all their actions: Innovation & Operational Excellence, Sustainability for a Blue planet, One Team with Diversity, and Integrity & Trust.

The AGC Group will continue to promote various measures to further deepen its sustainability management and contribute to the realization of a sustainable society. To that end, we kindly request the ongoing understanding and support of our stakeholders.



# "Look Beyond"



# **Our Purpose**

# "AGC, an everyday essential part of our world"

We "Look Beyond" to make people's lives better around the world by delivering our unique materials and solutions.

We, the AGC Group, aim to continue being the "first choice" solution provider for our customers by building long-term, trust-based 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 always **"Look Beyond"** and tirelessly pursue innovations in technology, products, and services.
- We aim for excellence in quality and efficiency through continuous improvement.
- · We continually challenge ourselves to deliver value through innovation and operational excellence.

# Sustainability for a Blue Planet

- We contribute to creating a sustainable society and constantly grow and evolve.
- We achieve economic value through fostering social value.
- We strive to create safe and secure workplaces.

# One Team with Diversity

- We value different perspectives.
- We seek diverse capabilities and personalities of individuals of all backgrounds and beliefs, and by leveraging each other's strengths we create value as One Team.

# Integrity & Trust

- We comply with all applicable laws and regulations, building open and fair relationships with all our stakeholders based on the highest ethical standards.
- We aim to achieve customer satisfaction and trust for all our products and services.
- We create trust with all stakeholders, internally and externally, by acting with integrity.

# **Our Spirit**

# "Never take the easy way out, but confront difficulties"

These are the words of Toshiya Iwasaki who founded Asahi Glass Co., Ltd. in September 1907.

Management Policy 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.

Management Policy AGC plus 2.0

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.

AGC Group Charter of Corporate Behavior

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 philosophy "Look Beyond."

**#** AGC Group Code of Conduct



# Process for Identifying Long-Term Social Issues (Materiality)

Following the process below, the AGC Group identifies long-term social issues as major risks and major opportunities that might have an impact on the long-term direction of business and corporate value.

# SDGs mapping

To enable analysis of our long-term social issues, we reconfirmed our current progress toward the realization of sustainability by using the 169 targets of the SDGs as the basis for an analysis of the types of social issues addressed by our existing products.

- 1. Focused on existing mainstay products in each business field
- 2. Calculated the "business impact score" for each product based on its sales and growth potential
- 3. Linked each product to the SDG targets to which it can contribute
- 4. Described the type of social value that the AGC Group is creating in relation to each SDG by taking into account the contributions of all products linked to a given target
- 5. Added up the total business impact score of all products linked to each type of social value
- 6. Corrected the business impact score for each type of social value based on the degree of contribution to addressing social issues
- 7. Set the corrected results as the social impact score and identified the top 15 types of notable social value

# The above procedure identified fields where existing products can help address current social issues.

Energy saving, creation, and storage and climate change mitigation





Construction of smart cities





Provision of reliable, safe water resources



Realization of safe, comfortable





Health improvement and realization of longer life spans



**Analyzing social** issues and trends

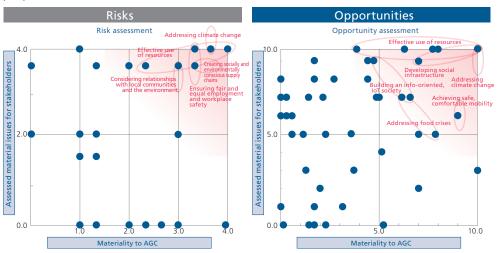
In light of its current contributions to the resolution of social issues, major risks and opportunities for the Group going forward were identified through analysis of future trends in social issues. (The analysis results were also used as basic information in preparing Vision 2030.)

#### 1. Compiled a list of social issues

- 169 targets of the SDGs
- Sustainability megatrends (circular economy, etc.)
- Based on the Global Risks Report (World Economic Forum), compiled a list of items representing opportunities and risks for the AGC Group (79 items in total)

## 2. Assessment of major risks and major opportunities

We evaluated "major risks" and "major opportunities" for stakeholders and the AGC Group from the perspective of social issues.



Identifying major risks and opportunities

Based on the results of analyzing trends in social issues and in light of expert opinions, we identified major risks and major opportunities associated with simultaneously achieving sustainable development of society, and sustainable growth as a corporate group.

# **Major Risks**

Addressing climate change

# **Major Opportunities**

- Social issues to be solved through products and technologies
- Effective use of resources
- Creating socially and environmental- conscious supply
- Ensuring fair and equal employment and workplace
- Considering relationships with local communities and the environment
- - Developing social infrastructure Achieving safe, comfortable mobility
- Addressing food crises
- Building an info-oriented, IoT society
- Facilitating better health and longevity



These risks and opportunities are discussed and determined by the Sustainability Committee and the Board of Directors and were then used as the foundation for setting sustainability targets.



The AGC Group's Recognition of Long-Term Social Issues (Materiality)

In light of long-term trends in social issues, the AGC Group has identified major risks and opportunities associated with simultaneously moving toward a sustainable society and the sustainable growth of the Group.

Based on these major risks and opportunities, the AGC Group has established a long-term management strategy, strategies for each of its businesses, and sustainability (non-financial) targets while engaging in business activities with the aim of creating social and economic value.

Major Risks	Solve Social Issues through Healthy Corporate Activities
Major Opportunities	Solve Social Issues through Products and Technologies

# ▶ Recognition of Long-Term Social Issues (Materiality) and Their Relevance to Business Activities

The AGC Group's Re	ecognition of Long-Term Social Issues (Mate	rial Issues)	Examples of the AGC Group's initiatives Governance/Environmental/Social				
	Since the Paris Agreement was reached in 2015, a shift toward decarbonization has been gathering momentum. Stricter energy-related policies and statutory regulations are expected. Also, socially calls are growing for companies to achieve net-zero greenhouse gas emissions.	Major Risks	•Reduction of Scope 1, 2, and 3 emissions This Issue P.40	•Transition plan in the Glass Business This Issue P.38	ess Chemicals Business		• Reduction of Scope 3 GHG Emissions This Issue P.39
Addressing Climate Change		Major Opportunities	Window glass for improved thermal insulation and heat shielding performance     This Issue P.44	• Automotive glass that cuts infrared rays and reduces heat  This Issue P.45	• Next-generation coolants and solvents  (This Issue) P.45	●Lon-exchange membranes for brine electrolysis to reduce electricity use and improve carbon emission efficiency This Issue P.45	• Furnace walls for reducing heat loads and improving energy efficiency in high-temperature equipment  This Issue P.46
Effective use of	There are concerns that stricter regulations on the use of depletable resources, such as rare earths, and higher demand for water resources accompanying further urbanization could seriously impact the production activities of companies. In addition, as the recycling-based economy accelerates, society increasingly expects companies to reduce waste and promote recycling.	Major Risks	• Recycling of cover glass for solar panels  This Issue P.49	Recycling of waste glass from buildings     This Issue P.50	Recovery and recycling of waste in the fluorinated product manufacturing process     This Issue P.50	•Assessing the impact of the use of water resources This Issue P.52	Reduction of water consumption at manufacturing sites     This Issue P.53
resources		Major Opportunities	Double glazing glass that reduces resource consumption and waste generation throughout the entire life cycle of buildings  This Issue P.51	•An agricultural fluoropolymer resin film used in greenhouses  This Issue P.51	•Solvent-soluble fluoropolymer resin with high weather resistance and corrosion resistance, reducing resource consumption This Issue P.51	•Hydrocarbon-based ion exchange membranes for treating saline wastewater  This Issue P.53	Bio-based epichlorohydrin (ECH) made from non-fossil raw materials     This Issue P.31
Developing social infrastructure	While the economic growth of emerging countries necessitates the development of such social infrastructure as housing, roads, railroads, and public services, developed countries must deal with the aging of their social infrastructure. Moreover, there is a growing need to develop resilient infrastructure that can withstand the intensified disasters being caused by climate change.	Major Opportunities	•Sodium hypochlorite contr quality improvement This Issue P.56	impr semi	s-ceramic substrates contributing to roved brightness and output of LED iconductor lasers Website	and Building integra (This Issue) P.31	ted photovoltaics (BIPV)
Achieving safe, comfortable mobility	The spread of automobiles in emerging countries is causing concern over rising traffic accident deaths. Meanwhile, addressing the mobility needs of the elderly, those living in lesspopulated areas, and other vulnerable groups in society is becoming increasingly important. Further, as autonomous driving becomes more widespread, expectations are increasing with respect to the establishment of safety technologies, such as sensors and cameras, and the enhancement of in-car entertainment.	Major Opportunities	● Next-generation mobility Integrated Report P.34-36	Low-E coated glass for panoramic automotive roofs  This Issue P.44	Next-generation display system for safer and more advanced cockpits     AGC Website	Windshield glass equipped with FIR camera  (AGC Website)	High-performance sound insulation glass     AGC Website

Addressing food crises	The problems of hunger and malnutrition in the world's poorest regions have yet to be resolved, and there are concerns that the situation will worsen due to disasters and droughts caused by the climate change of recent years. Also, to cope with a growing world population, food productivity must improve.	Major Opportunities	•An agricultural fluoropolysin greenhouses  This Issue P.51		cract development and manufa chemicals ebsite	● Feed additives (AGC Website)	for livestock heat protection
Building an info-oriented, IoT society	With the spread of information and communication technologies in emerging countries, reliable, inexpensive access to information needs to be provided. In developed countries, the early dissemination of next-generation high-speed communication technologies, such as 5G, promises to improve the quality of remote medical care and information transmission.	Major Opportunities	Development and marketing of semiconductor-related products     Integrated Report P.54-57	Glass substrates with micropores contributing to miniaturization and high-speed operation of electronic devices     AGC Website	• Glass antenna that turns a window into a base station  AGC Website	Glass for various applications in digital equipment     AGC Website	● Plastic optical fiber AGC Website
Facilitating better health and longevity	Given that the number of young people losing their lives due to non-communicable diseases remains high worldwide, there is a need to reduce such deaths by providing stable supplies of pharmaceuticals for prevention and treatment. In addition, a trend toward increased division and specialization in the pharmaceutical industry, which is aimed at improving the productivity of the industry as a whole and diversifying its risks, is becoming more pronounced.	Major Opportunities	Contract development and manufacturing of biopharmaceuticals and ge cell therapeutics     AGC Website	manufacturing o	f exhaust ga	as treatment that s to air quality ent	ssue culture products : Website
Creating socially and environmental-conscious supply chains	As supply chains become more globalized and complex, the risk of issues arising in relation to illegal employment, such as forced labor and child labor, at suppliers and subcontractors is increasing. Further, tighter environmental regulations are leading to concern over potential regulatory violations at operating bases.	Major Risks	Point of contact for compliance in procurement activities This Issue P.89	• Initiatives in concert wit our business partners  This Issue P.90	Promoting green procurement  This Issue P.91	•Initiatives related to high-risk minerals (conflic minerals and cobalt)  This Issue P.91	Hosting workshops on the environment, safety, and compliance     This Issue P.91
Ensuring fair and equal employment and workplace safety	There is a growing need for compliance in employment and respect for workers' rights as well as for safety measures at manufacturing sites due to the increasing number of unskilled and elderly workers.	Major Risks	• Establishment of a global hotline  This Issue P.16	• Self-assessments of human rights and labor practices  This Issue P.65	• Empowering women This Issue P.69-70	• Improving the level of safety management (safety culture assessment activities)  This Issue P.84	Continuing to advance risk assessments     This Issue P.85
Considering Relationships with Local Communities and the Environment	Due to population growth and urbanization in various parts of the world, interest in expanding living areas and maintaining biodiversity in surrounding areas is growing. Also, in emerging countries there is an increasing focus on improving quality of life as living standards improve. Efforts to build good relationships with local residents and governments in the vicinity of operating bases are also becoming more important.	Major Risks	• Measures to address key risks This Issue P.87	•Volunteer leave and sabbatical system  This Issue P.98	• Impact reduction and natural regeneration through on-site implementation  This Issue P.30	• Chemical substance management  This Issue P.57	• Prevention of environmental accidents  This Issue P.58

# Sustainability Management System

The cornerstone of AGC Group's sustainability management is the creation of three types of social value: "Blue Planet," "Innovation," and "Well-being." These have been identified as "major opportunities" among the risks and opportunities (Materiality) that are crucial for the AGC Group's contribution to solving long-term social issues faced by the world and for achieving the AGC Group's sustainable growth. These areas are set as domains where we will contribute to solving social issues through our products and technologies.

# **Three Types of Social Value**

Realization of a sustainable global environment	We contribute to the sustainability of the planet on which all life depends by reducing the environmental impact of our products from raw material procurement to use by customers.
Innovation Creation of an innovative future society	We contribute to the creation of innovative future society by providing materials and solutions that support the world's most advanced technologies.
Well-being Contribution to safe and secure living	We contribute to safe, secure, comfortable, and healthy lives by providing products necessary for daily life, infrastructure, and healthcare in a more stable manner.

# **Agc Group Sustainability KPIs**

In light of trends in long-term social issues, the AGC Group sets long-term management strategies, business strategies, and sustainability goals and KPIs based on major risks and opportunities to achieve both contribution to a sustainable society and the sustainable growth of the Group.

#### KPIs to Measure the Sustainability of Our Management Foundations

k	(PI
GHG (Scope 1 and 2) Emissions	Employee engagement score

# KPIs to Measure Business Growth from a Sustainability Perspective

Three Types of Social Value	КРІ			
Blue planet	Shipment volume index for architectural products contributing to GHG reduction	Index for GHG emissions reduction by low-GWP Chemicals products		
Innovation	Total sales index for products contributing to ne Performance Chemicals)	ext-generation society (Electronics, Mobility,		
Well-being	Shipment volume index for products contributing to social infrastructure development in fast- growing regions (main chlor-alkali products)	Index for Life Science sales		

# 

Based on our recognition of long-term social issues, we promote sustainability management centered on the creation of "three types of social values." We identify major risks and opportunities that could affect the long-term direction of management and corporate value as the AGC Group's materiality. Based on this, we work to resolve issues by responding appropriately to risks and making the most of opportunities. Important matters are decided by the Board of Directors, and the details of deliberations by the Management Committee, Sustainability Committee, and HR Committee are reported to the Board of Directors.

Committee Name	Purpose	Frequency	Attendees
Management Committee	Executive decision-making and monitoring of business management	Approx. 26 times a year	CEO, CFO, CTO, finance-related officers, and others nominated according to the agenda
Sustainability Committee			CEO, CFO, CTO, Audit & Supervisory Board members All heads of in-house company / SBU and corporate division
HR Committee	Identification and development of group management human resources and promotion of diversity	7 times a year	CEO, CFO, CTO, GM of the human resources division In-house company presidents
Environment Response Meeting	Discussion and deliberation of environment-related sustainability management issues	8 times a year	GM of EHSQ General Div., GM of Sustainability Div., heads of each corporate division involved in sustainability management strategy planning, and environment and sustainability officers of in-house companies / SBUs
The AGC Group EHS Committee	Discussion and deliberation of management issues related to the environment and occupational health and safety of the AGC Group	4 times a year	GM of EHSQ General Div., GM of Sustainability Div., heads of in-house companies / SBUs in charge of EHS (safety and environment) and corporate division officers in charge of EHS promotion
Human Rights Issue Response Liaison System	Sharing and strengthening cooperation on AGC's salient human rights issues toward establishing and maintaining a system for respect for human rights	Twice a year	GM of Sustainability Division Divisions involved in addressing human rights issues

# Stakeholder Engagement

# Fundamental Approach

The corporate behavior of the AGC Group is based on its relations not only with customers but also with all stakeholders, including shareholders, investors, business partners, governments, NPOs / NGOs, local communities, and employees and their families as well as future generations who will lead a sustainable society. The AGC Group Charter of Corporate Behavior states that the AGC Group will seek to communicate with all its stakeholders and listen to their opinions and discloses corporate information promptly and fairly.

# **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.

# ▶The AGC Group Communication with Stakeholders



Earnings presentation (Japan)

We are AGC!

#### Shareholders and Investors

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



Exhibition booth

hareholde

# Information

dissemination with press releases Publication of

advertorials in online media

000

AGC Manufacturing



outreach science class (Japan)

#### NPO • NGO

· Periodic opinion exchanges

**Local Communities** 

local events

activities, etc.

Plant tours, on-site classes

Employee participation in

Various social contribution

Collaboration by project, etc.



Donation to a foundation for the visually impaired (Thailand)

#### Governments

- Dialogue through economic organizations and
- Dialogue and cooperation with local governments
- Various social contribution activities, etc.



CSR-DIW Continuous Award 2021

# **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
- Helplines
- Labor-management talks, etc.

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

#### **Business Partners**

- Satisfaction surveys
- Social gathering with business partners
- Dialog through business partner meetings, etc.



Meeting with business partners (Japan)

# **Groupwide 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 business division and major Group companies obtain and release information through the Corporate Communications & Investor Relations Division. In addition, negative information is also appropriately disclosed on the official AGC website and via the media.

# Communication Tools for Each Type of Stakeholder

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, Financial Review) and the official AGC website. Since 2013, the Group has been sharing information through social media including Facebook and Instagram.

## Feedback from Stakeholders via the AGC Official Website

The AGC Group regularly asks for opinions and comments regarding the AGC Integrated Report and its official website.

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

# **Corporate Governance**



# Fundamental Approach

The AGC Group is constantly working to strengthen and improve its corporate governance with a view to raising the Group's corporate value over the medium to long term and ensuring its continuous growth. Accordingly, the AGC Group has established the AGC Group Corporate Governance Basic Policy, a basic views to its corporate governance system.

### Basic Views on the Corporate Governance Structure

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

#### Corporate Governance

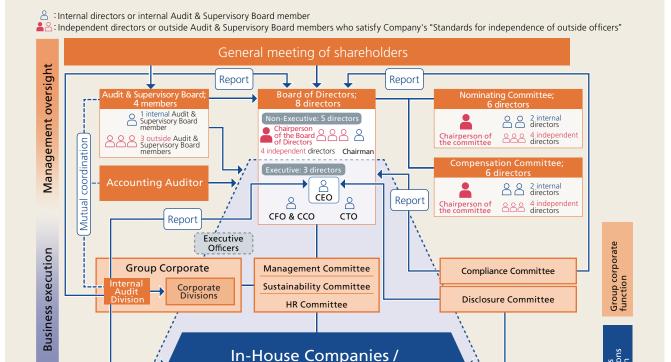
## ▶ Attendance of Directors at Board of Directors' Meetings

FY	Attendance
2020	100%
2021	99%
2022	100%
2023	99%
2024	100%

# ▶ Attendance of Audit & Supervisory Board Members at Board of Directors' Meetings

FY	Attendance
2020	100%
2021	100%
2022	100%
2023	100%
2024	100%

## ▶The AGC Group's Corporate Governance System (as of July 1st, 2025)



\* \*An in-house company is defined as a business unit that has net sales exceeding ¥200.0 billion and which conducts its business globally. There are six In-House Companies: the Architectural Glass Europe & Americas Company, the Architectural Glass Asia Pacific Company, the Automotive Company, the Electronics Company, the Chemicals Company, and the Life Science Company. Business units of a smaller size than this are defined as SBUs (strategic business units), and currently there is AGC Ceramics Co., Ltd. as an independent SBU.

Strategic Business Units (SBUs)\*

# **Internal Controls**



# Fundamental Approach

In response to the enforcement of the Companies Act, the establishment of AGC's Corporate Policy over Internal Control was approved by a resolution of the Board of Directors at a meeting held in May 2006. The aim was to review and ensure the appropriateness of the Company's business operation systems, including the compliance system.

### Basic Items for Corporate Policy over Internal Control

- 1. Compliance program
- 2. Information retention and management system
- 3. Risk management system
- 4. System for efficient business execution
- 5. System for reports to AGC by AGC Group companies
- 6. Audit system of the Audit & Supervisory Board Members

This corporate policy is reviewed annually by the Board of Directors, and the AGC Group ensures the appropriateness of the Group's operations through the operation of the "Internal Control System" established in accordance with this policy.

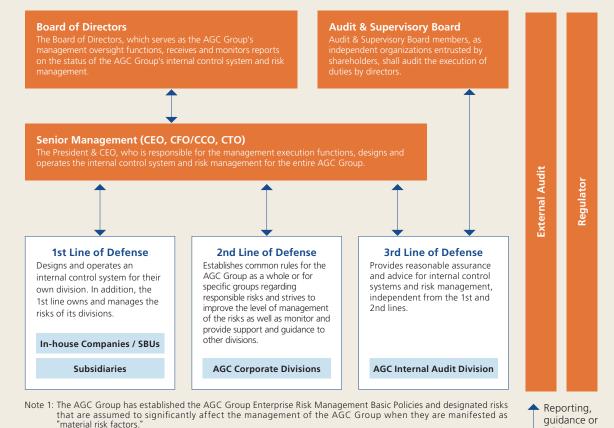


# Management Structure

The AGC Group's internal control system is established and operated by the President and CEO, who is responsible for the management execution functions, to strengthen the Group's internal control. The Board of Directors, which fulfills a management supervisory function, approves the corporate policy and periodically monitors the establishment and operational status of the internal control system. In addition, Audit & Supervisory Board members monitor and verify the internal control system from an independent standpoint and evaluate its effectiveness.

With respect to business execution under this structure, the AGC Group Three Lines of Defense Model has organized the business divisions, corporate divisions, and Internal Audit Division respectively as the first, second, and third lines of defense. A framework has thus been established to ensure the appropriateness of operations of the entire Group.

### ▶The AGC Group Three Lines of Defense Model



- Note 2: In-house Companies and SBUs have established various systems for managing subsidiaries, including a "2nd line of defense" function (in such organizations as the Business Planning & Administration Divisions and CSR Divisions) for them. The AGC Corporate Divisions provide support and guidance to the subsidiaries in cooperation with these organizations.

#### Internal Audits

As the 3rd line of defense and to maintain its independence, the AGC Internal Audit Division has appointed a corporate internal audit global leader (General Manager of the AGC Internal Audit Division) who reports directly to the President & CEO, overseeing the person in charge of each audit division located in Asia, Europe, and North America. Through internal audits, audit divisions in each region promote the establishment, operation, and improvement of Group companies' internal controls. In addition, the corporate internal audit global leader promptly reports important matters identified by audits to the President & CEO and also regularly reports to the Board of Directors and Audit & Supervisory Board members.

In carrying out internal audits, the AGC Group establishes common global auditing items. In 2024, the Group established (1) Compliance with Antitrust Laws and Regulations, (2) Information Security Management, (3) Anti-Bribery Control, and (4) Data Accuracy as focus items. In addition, when selecting items for audit, the Group uses criteria established on the basis of risk. In 2024, the Group audited 35 Group companies globally by combining on-site audits, remote audits, collaborative audits with the internal audit divisions of the Group companies, and dataenabled digital audits in ways that were best suited to the situations at the Group companies being audited.

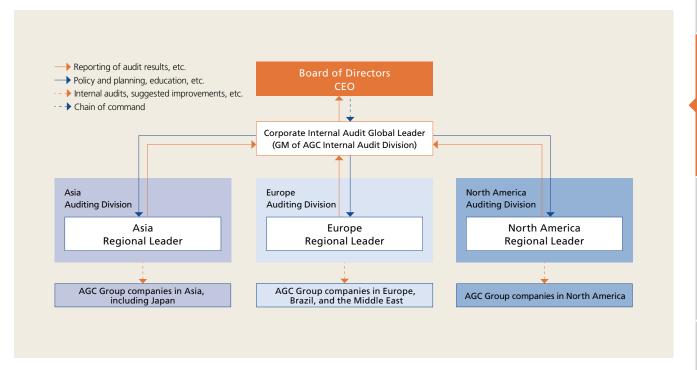
The Group also conducts pre-operational and M&A audits to assess the internal control status of newly established companies and companies that have joined the AGC Group through M&A. In 2024, the Group performed four such audits globally.

In addition, as part of our "Theme Audit", which audits specific business domains or cross-organizational control activities, in 2024 the Group conducted audits focusing on measures to address the fraud risk at smaller sites.

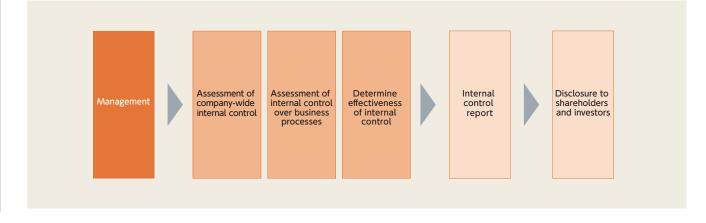
## Internal Controls for Financial Reporting

The AGC Group established "AGC Group Internal Control over Financial Reporting Implementation Regulations" in compliance with the Financial Instruments and Exchange Act. Based on these regulations, the Group establishes, operates, and evaluates internal controls for financial reporting. Internal controls regarding financial reporting were evaluated as being effective in 2024, and the appropriateness of the valuation has also been reported by the external auditor.

## ▶Global Internal Auditing Structure



### ▶ Processes Based on "AGC Group Internal Control over Financial Reporting Implementation Regulations"



# Risk Management



# Fundamental Approach

At the AGC Group, in accordance with the Corporate Policy over Internal Control resolved by the Board of Directors, and for the purpose of appropriately managing risks that could hinder the achievement of Group management objectives and establishing and operating a crisis response framework, we have formulated the AGC Group Enterprise Risk Management Basic Policies. The Group as a whole is working on enterprise risk management based on this policy.



# **Management Structure**

We identify risks that could hinder the achievement of the Group's management objectives, divide them into management levels for suppressing the occurrence of risks and response levels for when risks occur, and implement measures based on Enterprise Risk Management (ERM) framework.

In implementing ERM, we have clearly defined the corporate divisions responsible for individual risks and crisis events in accordance with "The AGC Group Three Line Defense Model," and we are working to continuously improve our risk response capabilities through collaboration with business divisions. The status of risk management is reported annually to the Board of Directors for monitoring.

Long-term sustainability risks are addressed by the Sustainability Committee. (P.8)



# Group-wide Initiatives

### Risk Management

The AGC Group has established the AGC Group Risk Management Implementation Regulations, and among the risks that could hinder the achievement of the Group's management targets, those that require particularly intensive monitoring from the perspective of their potential impact on the Group's management and the likelihood of their occurrence are selected as key risks.

The Group implements measures aimed at mitigating the materialization of such risks, and conducts annual self-assessments across the Group to continuously improve the level of risk management.

## ▶AGC Group Risk Classification

- Strategy
- Operation
- Compliance
- Sustainability
- Natural disasters / Infectious diseases
- Cybersecurity / Information security
- Financial

## **Business Continuity / Crisis Management**

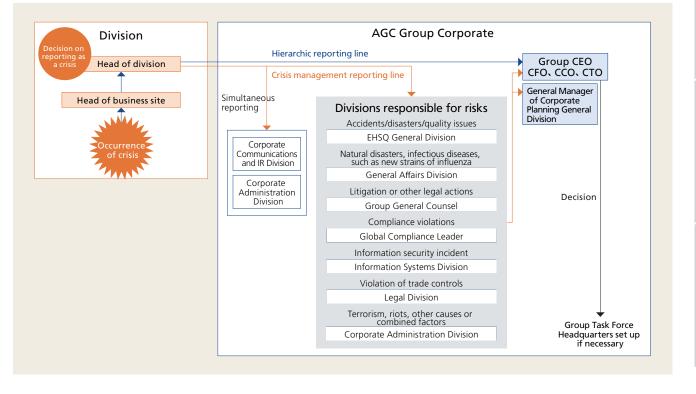
The AGC Group has established a Business Continuity Management (BCM) system to minimize the impact of crises that may have a significant effect on business activities and has set

### ▶ Reporting Line During a Crisis Situation

forth procedures for reporting and responding to such crises in the AGC Group Rules for Crisis Management and Business Continuity Management.

Under this system, we have established a "Crisis Management Reporting Line" to ensure prompt and reliable access to information in the event of a crisis. We have also established response procedures so that the Group Task Force Headquarters can be immediately set up as necessary to ensure a smooth crises response.

In order to respond properly to crises especially in the event of accidents or disasters, each site implements safety and disaster prevention initiatives. In addition, the AGC Group has developed a Business Continuity Plan (BCP) to ensure the continuation of operations, and strives to continuously enhance and improve its level of responsiveness to achieve recovery and restore operations in a rapid manner.



## BCP Establishment and Improvement

The AGC Group, under the AGC Group Rules for Crisis Management and Business Continuity Management, has established four basic policies for responding to accidents and disasters. These policies are: "human life and safety first," "prevention of secondary disasters," "contribution to and harmony with local communities," and "business continuity." Each business division and site develops its own BCP.

In line with these policies, we have evaluated risks relating to earthquakes, high winds, floods, etc., across our major Group sites around the world (approximately 200 locations). We have created a hazard map, which categorizes the severity of hazard risks through color-coding. At sites in high-risk areas, we are advancing efforts to develop BCPs. Please refer to "Addressing Climate Change" on P.32, as our medium- to long-term response to natural disasters is addressed as a physical risk of climate change.

For earthquakes in particular, we have developed BCPs for our main high-risk sites in Japan and Asia. Every year at our headquarters, we conduct tabletop drills involving the Group CEO, division heads, and relevant key personnel, with the aim of raising awareness and improving the effectiveness of BCPs. In 2024, we conducted a drill simulating an earthquake directly under Tokyo, and held an online workshop to discuss initial responses, potential damage and our responses in each division, and cross-organization coordination when a disaster strikes.

At the AGC Group (Japan), we have been operating an employee safety confirmation system since 2009 that checks the safety of employees and their families in case of a disaster, and we conduct Group-wide safety notification drills twice a year in Japan. We also conduct response training for power outages caused by natural disasters at our business locations in Southeast Asia.

We will verify the effectiveness of our established BCPs through repeated drills while continuing to improve our BCPs.

Regarding infectious diseases, we have continued our operations through the implementation of BCP prepared by businesses including each site during the global spread of COVID-19 that started in 2020. Even today, in preparation for the next outbreak of large-scale infectious diseases, the AGC Group has established and maintains a BCP-based response system that incorporates various measures, such as remote work, to ensure human life and safety as well as to minimize the impact and continue operations in such an event.

# Compliance



# Fundamental Approach

## Formulating a Groupwide Code of Conduct

Compliance is the fundamental premise underlying the AGC 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 requirements that take into account the laws, regulations, and business customs of those areas.

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.

# Management Structure

## **Establishment of Global Compliance System**

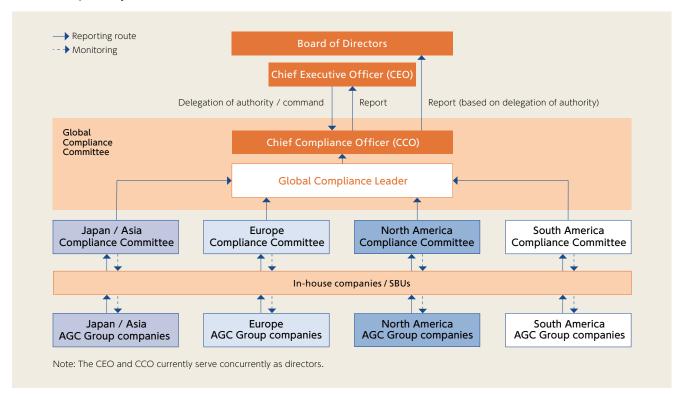
The AGC Group has appointed a Chief Compliance Officer (CCO) responsible for the development of the compliance framework and promotion of compliance in the AGC Group. Under the supervision of the CCO, a global compliance leader, the Global Compliance Committee, and regional compliance committees plan and implement compliance programs, monitor respective regions' compliance efforts, and regularly report to the Board of Directors regarding Groupwide policies and the current status of the compliance system. In accordance with the guidelines of the compliance reporting system, the AGC Group has established a

system for promptly reporting serious compliance violations to senior 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 all employees to renew their awareness of compliance and take a fresh look at business affairs and the workplace.

### ▶ Global Compliance System (as of December 31, 2024)





# **Group-wide Initiatives**

#### **Establishment of a Global Hotline**

The AGC Group has established various reporting and consultation hotlines regarding our Code of Conduct, including human rights. As a general rule, hotlines are set up at each Group company, while additional area-wide hotlines have been established in Europe, North America, South America, and Asia. Further, in Japan, we have established a hotline for all employees of the Group to report to, as well as a hotline for them to seek advice from external lawyers, while in global locations we have established a common external hotline.

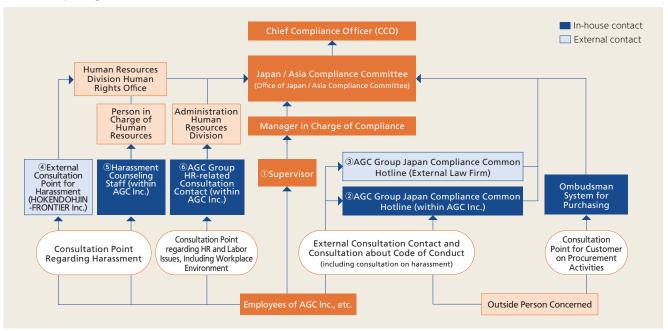
To encourage employees to use the hotlines, the Group makes full consideration to ensure the anonymity of whistleblowers and strictly forbids any act of retaliation or attempts to identify the whistleblower. When whistleblowers offer their real names, communication is facilitated, and feedback is provided on the status and results of handling the reported issues.

To provide contact information for the hotlines, hotline contacts are listed in the AGC Group Code of Conduct distributed to all employees. These contacts are also publicized in each country and region through efforts such as placing posters at each site.

### Number of reports received via hotlines (AGC Group)

2024	Japan/ Asia	Europe	North America	Other	Total
A: Alleged violation of Group Code of Conduct (excluding B case)	74	11	30	10	125
B: Trouble between employees (sexual harassment, power harassment, etc.)	146	5	28	12	191
C: Inquiries, requests and opinions regarding the Code of Conduct and company systems	218	15	13	0	246
Total (A + B + C)	438	31	71	22	562

## ▶ Hotline Reporting Route (AGC)



## 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 continuously implements compliance-related training for officers and employees. It proactively promotes training activities intended to reinforce compliance in each country and region, including classroom training, implementing e-learning using training materials incorporating illustrations and quizzes, as well as the production of pocket-sized compliance cards, newsletters, video materials for training, and educational posters. In addition, in light of the strengthening of anti-corruption regulations and measures against bribery in the international community, we are focusing on implementing anti-bribery education particularly in countries and regions with high bribery risks. Furthermore, we have proactively carried out training activities by holding numerous online training and e-learning sessions in various regions.

# Implementing Compliance Surveys

The AGC Group uses surveys to gauge the level of compliance in the workplace and awareness of hotlines, and implements any necessary measures based on the results.



# **Maintaining Information Security**



# Fundamental Approach

Based on ISO 27000, the international standard for information security management systems, the AGC Group established the AGC Group Information Security Basic Policy, which is shared Group-wide, and the AGC Group appropriately stores, uses, and manages information assets and protects personal information.

There were no customer complaints regarding the invasion of privacy in 2024.



# Management Structure

Under the AGC Group Information Security Basic Policy, the AGC Group has formulated its management regulations and guidelines based on the AGC Group's common initiative items, and has established a necessary management system. In addition, in preparation for a serious information security incident occurring, the AGC Group has established a system to minimize the impact in accordance with the AGC Group Rules for Crisis Management and Business Continuity Management.



# Group-wide Initiatives

# Strengthening Response Capabilities against Cyberattacks

To maintain stable transactions with its customers, the AGC Group is reinforcing initiatives for tackling the increasing threat of cyberattacks.

- We have formulated Groupwide common management regulations based on international standards for measures to address the security of our information systems and production equipment as well as improve our protection and detection solution. At the same time, we have put in place a management system under which we are working to improve structures and carry out training with a view to strengthening our ability to respond quickly in the event of an information security incident occurring.
- To ensure the reliability of these measures, we are continuously implementing technological penetration testing and comprehensive assessments by third parties.
- In light of the diversification of working patterns in the post-COVID-19 era, we have responded by strengthening our existing security measures for remote work.

### **Internal Audits on Information Security**

The AGC Group has selected "measures for preventing leaks of important confidential information" as one of the shared priority items for internal audits (see P.12: Internal Audits).

#### Information Security Training

The AGC Group strives to raise awareness of information security by providing training to new graduates and career employees upon joining as well as annual training to existing employees, in order to respond appropriately to cyberattacks and other security risks.

# 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 rights, and assets, and it strives to respect the intellectual property rights of others, including customers and business partners.



# **Management Structure**

Under the supervision of the CTO, the Intellectual Property Division conducts various intellectual property activities. We have organized teams corresponding to each business division, and we carry out tasks such as formulating intellectual property strategies, applying for patents and securing rights, and conducting research and analysis in collaboration with business divisions and research laboratories.



# Group-wide Initiatives

# Protection and Utilization of Intellectual Property Rights Created by the AGC Group

The AGC Group engages in intellectual property activities to enhance its competitive advantage by creating, protecting, and strengthening intellectual property rights (such as patent rights, utility model rights, trademark rights, design rights, copyrights, etc.) as important resources for its business strategy. Through this, we aim to contribute to the creation of continuous profits through the power of intellectual property.

For example, the Group globally files intellectual property applications for inventions created at development sites in each country and works to acquire rights adapted to its business activities. Since 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.

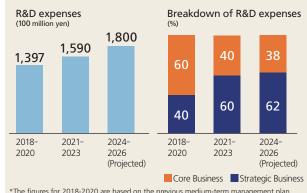
In addition, intellectual property conferences attended by the heads of each business division are regularly held by each division to promote intellectual property strategies linked to their business and brand strategies by utilizing the intellectual property rights held by the Group.

## ▶ Cycle of Intellectual Property Creation



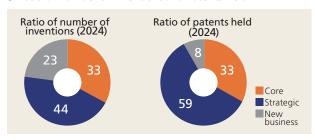
Under its "ambidextrous development" strategy, the AGC Group has been gradually increasing its total R&D expenses in line with the scale of its business, while increasing the ratio of R&D expenses to create and strengthen Strategic Businesses, with a view to transforming its business portfolio. In line with this, the Intellectual Property Division is also building a strategic intellectual property portfolio.

#### ▶ R&D Expenses



# \*The figures for 2018-2020 are based on the previous medium-term management plan, while the figures for 2021-2023 and 2024-2026 are based on the definition of Core and Strategic in the new medium-term management plan.

#### ▶ Ratio of Number of Inventions and Patents Held



# Prevention of Infringement of the Intellectual Property Rights of Other Parties

The AGC Group is creating a framework, including employee education, to prevent infringement of the intellectual property rights of others. The Group continuously monitors the intellectual property rights of others and checks to make sure it will not be violating said rights 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 perspectives of adequately protecting its own intellectual property rights and respecting those of others.

In Japan, aside from hosting intellectual property training for employees in the initial stages of their joining the firm, 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 implemented at overseas Group companies and tailored to suit local conditions.

# **AGC's Initiatives**

## Award System for Inventors of Employees

AGC has a substantial Award System for Inventors 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 the legal framework in each country and region, taking each location's present circumstances into consideration.

B Award system for inventors

# Tax Payments



# Fundamental Approach

The AGC Group recognizes that proper tax payments impact the economic and social development of each country and region. Ensuring proper tax payment as a corporate social responsibility, we endeavor to ensure accurate and timely tax returns pursuant to the tax laws and the spirit of law of each country and region. We have formulated the AGC Group Tax Compliance Policy based on this basic view of taxation.

## **AGC Group Tax Compliance Policy**

(Established on June 29th, 2018, revised on March 27th, 2024)

 Basic stance on taxation (proper tax payments are a corporate social responsibility)

Under its management policy, AGC plus 2.0, the AGC Group is committed to providing positive value to all stakeholders. Through this, the Group aims to earn the trust and expectations of society, and also contribute to realizing a sustainable society.

Compliance is a fundamental principle underlying the AGC Group's all business activities. The "AGC Group Code of Conduct" (7. Reports and Records), which summarizes matters that the AGC Group's employees are expected to observe, states the following:

We honestly record, report and disclose information so that our records reflect the facts.

We comply with financial, accounting and tax laws and company accounting policies and rules.

AGC and AGC Group companies endeavor to ensure accurate and timely tax returns pursuant to the tax laws and the spirit of law of each country and region. We recognize that proper tax payments impact the economic and social development of each country and region, and that ensuring proper tax payments is one of our corporate social responsibilities.

II. Transactions between affiliated companies (based on arm's length pricing)

As set out in the following "AGC Group Transfer Pricing Policy," the AGC Group determines the transfer pricing for transactions between affiliated companies by applying arm's length principle.

1. The transfer pricing for tangible goods and/or services should be determined by applying arm's length principle

reflecting the functions performed by the parties, taking into account the assets used by and risks assumed by them based on product groups and/or service categories.

- 2. The intellectual ownership (including patents, copyrights, trade secrets, know-how, brands and so on) is legally registered in the name of the contributing companies of the group who have developed the technologies and know-how. The right to use the intellectual asset can be afterwards granted to other companies of the group but an arm's length compensation will have to be paid by those companies. To determine the compensation, reference will be made to the acquisition costs, the fair market value, and so on.
- 3. The transfer pricing of financial transactions should be reasonably determined by applying arm's length principle, by reference to estimated funding rates for borrowers and estimated return rates for lenders from investment or deposit or in consideration of the level of margin for lenders.
- III. Relationship with tax authorities (building relationships of trust in good faith, reducing uncertainty, and preventing double taxation)

In addition to appropriate tax reporting and payments to the respective tax authorities in each country and region, the AGC Group will respond in good faith with regard to various types of tax investigations, preliminary consultations, disclosure of relevant information, etc.

The AGC Group is dedicated to building constructive relationships of trust with the tax authorities of each country and region to ensure proper tax compliance.

The AGC Group also strives to reduce taxation uncertainty and prevent double taxation by building and maintaining fair trust relationships with the tax authorities of each country and region.

IV. Transparency - responding to international efforts (enhancement of corporate value and fulfillment of corporate social responsibility through appropriate tax payment and information disclosure according to the BEPS Action Plan)

The AGC Group recognizes the BEPS Action Plan (a countermeasure against Base Erosion and Profit Shifting), established by OECD/G20, as an important international tax framework for preventing international tax avoidance and excessive tax planning, and for ensuring tax transparency through tax information disclosure.

The AGC Group shall refrain from using excessive tax incentive schemes in low or no-tax countries and regions.

The AGC Group also understands that arbitrary tax avoidance or lack of tax compliance may result not only in immediate financial risks such as tax litigation and penalties, but also poses a risk to the AGC Group's reputation in addition to a risk of adversely affecting economic and social development or damaging relationships with the countries and regions in which the Group operates.

As a global business entity with social responsibilities, the AGC Group is committed to closely monitoring trends in international tax frameworks and responding to any changes in a timely manner. In addition to aiming to improve its corporate value through these efforts, the AGC Group also considers these efforts to be vital in fulfilling its social responsibilities as a global business entity.

# **EHSQ Management**



# Fundamental Approach

The AGC Group believes that safety, the environment, quality, and compliance are prerequisites for conducting business. Guided by the Group philosophy **"Look Beyond"** and corresponding management policies, we are promoting EHSQ (Environment, Industrial Safety & Security, Occupational Health & Safety, Quality) management across all aspects of our business activities.



# **Management Structure**

Management related to EHSQ must be integrated with the business. The AGC Group implements management tailored to the business structure of each business division.

To further clarify the AGC Group's commitment to sustainability management, in 2023, we revised our policies for the environment, industrial safety & security, occupational health and safety, and quality, which had previously existed separately, and consolidated them under a single AGC Group EHSQ Policy.

Furthermore, since 2013, the Group has been using the EHSQ Management System to manage EHSQ across the entire Group. The EHSQ management system is based on the AGC Group EHSQ Management Regulations, which clarify the roles and responsibilities of the Group CEO, EHSQ Management Representative, and each department head. We set Group objectives related to EHSQ, and the CEO regularly reviews the status of their achievement and activities, running a PDCA (Plan-Do-Check-Act) cycle.

## **AGC Group EHSQ Policy**

(Established on January 1st, 2023, and revised on January 1st, 2025)

To realize a sustainable society and to grow and evolve continuously, AGC Group pursues the Group philosophy "Look Beyond" and engages in EHSQ (Environment, Industrial Safety & Security, Occupational Health & Safety, Quality) as a prerequisite of our business activities.

#### Environment

We commit to achieve sustainability in society and our company by contributing to decarbonization, a circular economy, and harmony with nature in all phases of our value chain.

#### Industrial Safety and Security

We proactively engage in industrial safety and security activities based on the philosophy, "ensuring security is our fundamental obligation as a company operating business in local communities."

#### Occupational Health and Safety

Our motto is "No Production without assurance of safety." We are committed to sharing and demonstrating this motto with all workers of the AGC Group.

#### Quality

Based on the principle of "incorporating customer satisfaction perspective into our daily work," we develop and provide products and services to continuously create the value that meet customer expectations.



The environmental management system is explained on P.59, the occupational health and safety management system on P.81, and the quality management system on P.94.

# Environmental Strategy for the Social Value 'Blue planet'

# Fundamental Approach

The AGC Group's corporate philosophy, "Look Beyond", includes "Sustainability for a Blue planet" as one of Our Shared Values that guide all actions.

These values reflect our commitment, as expressed in our statements: "We contribute to creating a sustainable society and constantly grow and evolve" and "We achieve economic value through fostering social value."

These aspirations not only guide the AGC Group's future direction, but also form the cornerstone of our environmental initiatives.

For example, initiatives to reduce greenhouse gases (GHG) and promote resource circulation help address global challenges and also drive our technological innovation and business growth.

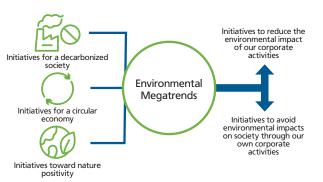
Guided by this philosophy, the AGC Group continues to pursue "Our Purpose": to continue to be an everyday essential part of our world.

Global environmental issues are emerging as structural risks that are intricately linked to various challenges such as climate change, resource depletion, and biodiversity loss, against the backdrop of population growth and expanding economic activities. Individual environmental impacts such as resource consumption, changes in land use, and the emission of chemical substances interact with each other and ultimately have the potential to threaten the foundations of humanity and society.

This loss of environmental balance also affects corporate activities, and can be a factor that leads to business continuity risks and supply chain instability. As a company that plays a role in global economic activities, the AGC Group recognizes that it is affected by environmental changes while also recognizing that its own business activities exert an impact on such changes.

Based on this recognition, the AGC Group considers harmony

with the global environment to be one of the most important aspects of its business activities and product solutions. We are working to strengthen the resilience of our business and enhance our long-term corporate value by addressing complex environmental issues. In addition, we are promoting initiatives aimed at achieving both a sustainable society and sustainable growth through an integrated environmental strategy that turns challenges into opportunities.



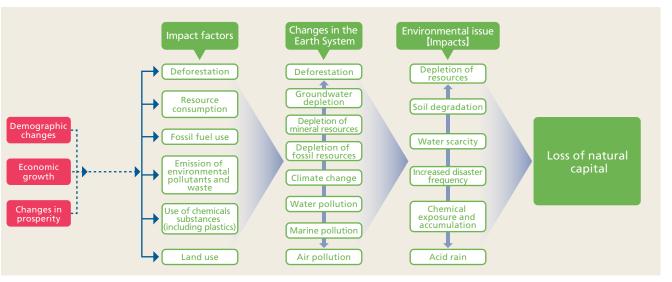
Furthermore, global megatrends, such as decarbonization, the circular economy, and nature positivity are important external factors that significantly impact the business environment and management strategy of the AGC Group.

Based on this thinking, the AGC Group considers compliance with laws and regulations at its sites around the world to be a prerequisite for its business, and is working to reduce environmental impacts throughout the entire value chain, from raw materials to product usage and disposal. We also aim to achieve sustainable growth as a company while contributing to the sustainability of the planet that supports all life.

#### Local Environmental Issues as Clusters of Issues

The AGC Group recognizes that environmental challenges such as climate change, resource constraints, and impacts on local communities have a direct impact on our business strategies. These issues are risks for companies, but they are also themes that we must address responsibly, and sources of new growth opportunities. Based on this recognition, and taking into account social trends and long-term perspectives, we have identified the four themes following as environmental materialities (priority issues).

## ▶ Local Environmental Issues as Clusters of Issues



- · Response to climate change
- · Effective use of resources
- Considering our relationships with local communities and the environment
- Building socially and environmentally conscious supply chains These materialities are based on an assessment of both the impact of our business activities on the environment and society, and the impact of environmental changes on our business, and are positioned as priority issues in management. In addition, we conduct regular reviews and incorporate them into our management strategy to achieve both the enhancement of corporate value and the creation of social value.

For more information on the identification of materiality see P.5 of this Data Book.

# **Major Risks**

Solving Social Issues through Healthy Corporate Activities

- Addressing climate change
- Building socially and environmentally conscious supply chains
- Ensuring fair and equal employment and workplace safety
- Considering our relationships with local communities and the environment

# **Major Opportunities**

Solving Social Issues through Products and Technologies

- Effective use of resources
- Developing social infrastructure
   Achieving safe and comfortable mobility
- Addressing food crises
- Building an information-intensive and IoT society
- Facilitating better health and longevity

We analyze these factors in terms of both risks and opportunities and strategically reflect them in our business activities and technological development.

Furthermore, recognizing that changes in the global environment are having a widespread impact on social structures and lifestyles, the AGC Group is working to solve social issues through its unique material technologies and process innovations. This initiative emphasizes collaboration with diverse stakeholders, including suppliers, customers, and local communities, and promotes value co-creation across the entire value chain.

# **Environmental Policy**

To communicate its Group philosophy, "Look Beyond," and its fundamental approach to addressing environmental issues as a consistent policy both within and outside the organization, the AGC Group has established its Environment Policy. This policy demonstrates our fundamental stance toward the realization of a

sustainable society by taking responsible action toward the environment in all of our business activities.

#### **AGC Group Environment Policy**

(Established on February 9th, 2001, revised on January 1st, 2023)

We commit to achieving sustainability in society and our company by contributing to decarbonization, a circular economy, and harmony with nature in all phases of our value chain.

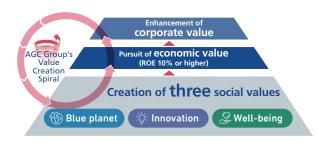
- In order to contribute to decarbonization, a circular economy, and harmony with nature, we set environmental goals based on the AGC Group's sustainability targets and strive to achieve and further improve them.
- We strive to develop and offer products, technologies, services, and equipment to society, taking into due consideration of the sustainability and our entire value chain, and respond to the changing era with innovative solutions.
- 3. We continuously improve our environmental performance, in accordance with our environmental management system.
- We comply with the relevant internal and external environmental rules, work toward the prevention of pollution and other related issues, and contribute to environmental protection.

# Environmental Strategy in the Medium-Term Management Plan "AGC plus-2026"

The AGC Group recognizes that it is the responsibility of companies to give back to society the value they have created through the creation of social value, and that this is the starting point for sustainable growth.

Based on this thinking, in the medium-term management plan *AGC plus-2026* rolled out in 2024, the AGC Group redefined the social value it aims to create through its business activities into three pillars: Blue planet, Innovation, and Wellbeing. Among these, "Blue planet" aims to contribute to the realization of a sustainable global environment by reducing environmental impact throughout the entire value chain, from raw materials to product usage and disposal, thereby contributing to

the sustainability of Earth, on which all life depends. This aims to contribute to reducing the environmental impact on society through the provision of solutions via products and technologies, with the goal of achieving both the resolution of global issues and business growth, thereby enhancing corporate value.



Business portfolio transformation



Promotion of sustainability management

In particular, we recognize that addressing climate change and the transition to a low-carbon and decarbonized society, which are progressing internationally, are important issues that deeply affect the sustainability of the global economy and businesses, and will have a medium- to long-term impact on AGC Group's business activities. Based on our unique material and process technologies, we continuously examine and implement initiatives that contribute to both social and corporate value.

We also consider the realization of nature positivity to be important from the perspective of building a resilient society and ensuring the sustainability of our business through the conservation and restoration of natural capital. Natural capital, including biodiversity, is a fundamental management resource that underpins the value creation of the AGC Group, and we believe that maintaining and restoring its soundness is essential for long-term business continuity. In addition to reducing negative environmental impacts, we will actively be engaged in restoring natural capital.

The AGC Group remains committed to taking on the challenge of realizing a sustainable society that will continue for future generations through "Blue planet" value creation.

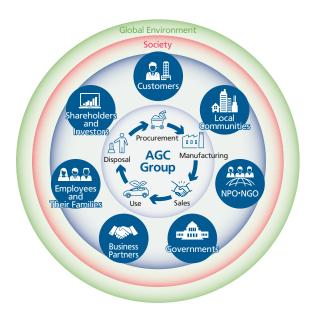
### **Environmental Information Disclosure**

Based on the AGC Group's environmental policies and strategies, with regard to climate change, we are committed to disclosing information in accordance with the disclosure framework based on the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). At the same time, we are mindful of the disclosure standards of the International Sustainability Standards Board (ISSB), which integrate the content of the TCFD recommendations. In addition, with regard to the conservation of natural capital, we are communicating systematic and step-bystep initiatives while referring to the disclosure framework established by the Task Force on Nature-related Financial Disclosures (TNFD).

### **Collaboration with Various Initiatives**

Addressing environmental issues extends across the entire value chain, from raw materials to product usage and disposal. Through collaboration with various stakeholders, we aim to reduce our environmental impact and create social value through our products and solutions.

To enhance its effectiveness, the AGC Group participates in various initiatives and actively engages in the establishment of international rules and the sharing of best practices.



# Major Initiatives in which AGC Participates (in the Environmental Field)

#### ❖ 30by30 Alliance for Biodiversity

(Sponsored by the Ministry of the Environment, Japan) 30by30 | Ministry of the Environment

**Overview:** A public-private partnership framework aimed at achieving the international goal of "30by30," which aims to conserve or protect at least 30% of land and sea areas as healthy ecosystems by 2030.

**Purpose of participation:** We participate in the initiative based on the belief that accelerating efforts across society to conserve and restore natural capital is directly linked to the sustainability of corporate activities.

**Achievements:** The area along the Tsurumi Line where the Yokohama Technical Center is situated has been registered as a certified Natural Symbiosis Site.

See P. 31 of this Data Book for details.



#### ❖ Japan Business Initiative for Biodiversity

## JBIB Home | Japan Business Initiative for Biodiversity

**Overview:** Companies collaborate to promote research and dissemination of practical methods for biodiversity conservation and sustainable use.

**Purpose of participation:** Our membership aims to deepen business operations that take biodiversity into account and to co-create social value through the sharing of scientific knowledge. **Achievements:** As part of a working group initiative in which participating companies collaboratively explored specific themes, the Company served as the leader of the "Natural Capital Assessment Working Group" in 2024, contributing by facilitating discussions and helping to guide the direction.



#### Keidanren Nature Conservation Council

<u>Keidanren Nature Conservation Fund / Keidanren Nature Conservation Council</u>

**Overview:** An organization within Keidanren that aims to promote nature and biodiversity conservation through the business community. It collaborates with nature conservation organizations in Japan and abroad to carry out a wide range of activities.

**Purpose of participation:** We participate to contribute to nature conservation from a corporate perspective and to contribute to sustainable development through policy proposals and dialogue with society.

**Accomplishments:** In 2024, we participated in the Keidanren mission to COP16 and were actively engaged in international conservation discussions.





# Governance

We have established a governance structure led by the Board of Directors to identify risks and opportunities arising from environmental issues and to incorporate them into our strategies. In addition, we are conducting a multifaceted assessment of our relationship with nature by referencing the TNFD (Task Force on Nature-related Financial Disclosures) and are promoting measures in line with international frameworks.

In line with the progress of social issues related to the environment, we have established a governance system that supports regular reviews and strategic decision-making at the Board of Directors level to properly evaluate and manage the risks and opportunities that the Company may face.

In terms of the execution structure, we strive for continuous improvement and enhanced responsiveness through periodic monitoring by the Board of Directors and Management Committee regarding identified risks and opportunities and the status of their management.

In addition, we have established a system whereby each corporate division, in-house company, and SBU (strategic business unit) conducts risk analysis and develops response policies tailored to their respective businesses and individual projects. Where necessary, these are submitted to the Management Committee or Board of Directors for deliberation and decision-making.

# Environmental Governance Structure Supervision and Management Led by the Board of Directors

The AGC Group considers addressing social issues, including the environment, to be an important factor in formulating its management strategy, and has established a supervisory structure led by the Board of Directors. The Board of Directors deliberates and resolves on the Group's overall management targets and management policies for environmental risk and opportunity, and makes decisions aimed at sustainable growth and long-term enhancement of corporate value.

In addition, the AGC Group's Board of Directors includes outside directors with expertise in sustainability and the global environment and actively promotes the integration of environment-related risks

and opportunities into management strategy. This structure enables us to appropriately manage environmental risks and opportunities, thereby enhancing corporate value.

Indicators for Evaluating Executive Compensation
Under AGC plus-2026, which aims for the deepening of
sustainability management, Scope 1 and 2 GHG emissions intensity
per unit of net sales has been incorporated as a key indicator for
determining stock compensation for directors and executive officers.
This indicator has been incorporated into the compensation system
alongside financial KPIs such as ROE, EBITDA, and relative TSR,
enhancing incentives for management to work toward improving
sustainable corporate value, including climate change response. This
creates a framework whereby executive compensation is linked to
progress in GHG emissions reductions, thereby making senior

# Promotion Structure at Management and Executive Levels Sustainability Committee

management directly accountable for addressing climate change.

Based on a recognition of long-term social issues, the AGC Group promotes sustainability management aiming at creating three types of social value: "Blue Planet," "Innovation," and "Well-being." As the highest organization for deliberation and decision-making on matters related to this fundamental policy and its measures, the Sustainability Committee is chaired by the President and CEO, and held four times a year, with attendance by the CFO, CTO, Audit & Supervisory Board members, and all heads of in-house company / SBU and corporate divisions.

The Sustainability Committee plays a central role in decision-making, especially in environmental risk management, which is integrated into the overall management strategy. The committee deliberates and decides on risk assessments and response policies for global issues such as climate change, resource depletion, and biodiversity loss, based on the situation of each business division and international trends, and then reports to the Board of Directors twice a year. In this way, we integrate the management of environmental risks and opportunities into our corporate management, ensuring sustainable growth and enhancing our competitive advantage. In addition, we establish strategic directions for monitoring and improving environmental performance through the Sustainability Committee and deploy company-wide initiatives.

For more information on the Sustainability Committee, please refer to P.8 of this Data Book.

# **Environmental Response Meeting**

The Environmental Response Meeting is an executive-level

committee that conducts specialized analysis and takes action on environmental risks based on resolutions made by the Sustainability Committee. Chaired by the General Manager of the EHSQ General Division and the General Manager of the Sustainability Division, this meeting is attended by representatives responsible for business divisions and corporate divisions for environmental matters.

This meeting is held eight times a year, and project teams are formed based on specific themes to promote swift and effective risk responses. In this way, we support proactive decision-making on environmental issues and the realization of sustainable business operations.

### **AGC Group EHS Committee**

The AGC Group has established the AGC Group EHS\* Committee as a forum for specialized discussion and deliberation on environmental issues that are directly linked to the stable operation of our business, such as the status of compliance with environmental laws and regulations and the status of accident prevention, which are among the matters deliberated and decided upon by the Sustainability Committee.

This committee convenes four times a year, chaired by the executive officer in charge of environmental matters based on the AGC Group EHS Committee Criteria, and is attended by environmental representatives from in-house companies and strategic business units (SBUs), as well as those in charge of environmental matters at corporate divisions. The committee reviews the status of compliance with applicable environmental laws and regulations, accident prevention measures, and shares information on environmental risk management efforts and conditions in each business division, and works to enhance EHS management and reduce risks across the Group.

\* EHS: Environment, Health and Safety



## **EHSQ Divisional Review**

Through these decision-making processes, the AGC Group verifies various initiatives to achieve environmental targets and address risks and opportunities through the operation of the ISO 14001 environmental management system. Based on the AGC Group EHSQ Management Regulations, we have established a system to appropriately manage and evaluate the progress of medium- and long-term targets and annual priority initiatives related to the environment, safety, and quality (EHSQ).

As part of these efforts, we conduct periodic divisional reviews to confirm the implementation status of each division, while also evaluating the overall effectiveness of our environmental policies, systems, and results through EHSQ Management Reviews.

In these divisional reviews, we audit and evaluate the progress of achievement of medium- and long-term goals and annual targets, analyze any gaps between actual results and targets, and factor these into future action plans, leading to continuous improvement and stronger governance.

Human Rights Policy and Initiatives Related to Affected Stakeholders Such as Indigenous Peoples and Local Communities, and Oversight by the Board of Directors and Senior Executives

The AGC Group has established the AGC Group Charter of Corporate Behavior and the AGC Group Human Rights Policy, and we act in accordance with the UN Guiding Principles on Business and Human Rights and other internationally recognized human rights standards.

We recognize that consideration for the human rights and living environments of indigenous peoples and local communities is essential in evaluating the relationship with natural capital. We have positioned respect for human rights as a fundamental principle of our management alongside our responsibility to the environment. As such, we are working to identify and address our impact based on the AGC Group Human Rights Policy.

For more information on the Human Rights Policy, see P.64 of this Data Book.



# Strategy

The AGC Group regards the management of naturerelated risks and the conservation of natural capital as essential issues that contribute to the enhancement of long-term corporate value and the building of a sustainable society.

# Environmental DIRO Identified

For the AGC Group, natural capital is one of the management resources that underpins its business activities. In particular, natural capital includes natural resources, energy, and raw materials necessary for the provision of products and services, as well as natural functions (sinks) that absorb, neutralize, and circulate environmental impacts generated throughout the value chain. Specifically, a wide range of environmental factors, including weather stability, air, water, soil, forests, mineral resources, biodiversity, and ecosystem health, interact with each other and affect society and our entire value chain. We recognize that appropriately understanding and managing our dependencies and impact on these natural capital assets is vital to maintaining and enhancing our corporate value. We also believe that strategically addressing our relationship with natural capital is important not only for the sustainable growth of our business, but also for contributing to the realization of a sustainable society. To this end, we are working to systematically assess and address nature-related risks and opportunities by referring to the disclosure framework established by the Task Force on Nature-related Financial Disclosures (TNFD). Specifically, based on the LEAP (Locate, Evaluate, Assess, Prepare) approach, we identify and analyze our points of contact with natural capital and proceed to identify risks and opportunities sequentially, starting with areas that are highly relevant to the business.

Furthermore, in conducting the assessment, we visualize the risks and opportunities arising from dependencies and impacts on natural capital from the four perspectives called DIRO (Dependencies, Impacts, Risks, and Opportunities). This enables us to identify vulnerabilities and business opportunities across the entire value chain, with the aim of creating social value through sustainable business operations and the conservation of natural capital.

The AGC Group identifies and manages risks and opportunities arising from its business activities' dependencies and impacts on natural capital. In particular, we are promoting assessment and response across the entire value chain for the following key environmental themes.

#### **Dependencies**

The AGC Group's business activities rely on the following natural capital and social infrastructure.

- Energy supply: The AGC Group uses fossil fuels and electricity, especially in high-temperature processes such as glass manufacturing
- Water resources: Large amounts of water are used for multiple purposes, including cooling, cleaning, and reaction processes in the manufacturing operations.
- Natural resources and raw materials: Natural materials such as silica sand, soda ash, rare metals, and palm oil are utilized
- Climate stability: Business continuity depends on the stability of climatic conditions such as temperature, precipitation, and frequency of disasters
- Regulatory and policy environment: Business activities depend on consistency with legal frameworks such as carbon pricing systems, environmental standards, and hazardous substance regulations

#### **Impacts**

The AGC Group's business activities have the following impacts.

- Environmental impacts of raw materials: Impact on ecosystems and land use due to mineral resource extraction and agricultural land development (palm oil, etc.)
- Impact on the atmosphere, including greenhouse gases: GHG emissions across the value chain, and emissions of air pollutants within legal limits
- Impact on water discharge and water quality: Impact of water discharge containing water pollutants within legal standards, and thermal and chemical stress on aquatic ecosystems
- Use and discharge of hazardous substances: Use of specific substances in some products
- Indirect impacts on biodiversity: Impacts through raw materials, such as deforestation, water pollution, and soil alteration as well as impacts on ecosystems resulting from the use and disposal of plastics
- Provision of products and solutions that contribute to addressing environmental issues

#### **Risks**

The AGC Group recognizes the following environment-related risks arising from dependencies and impacts.

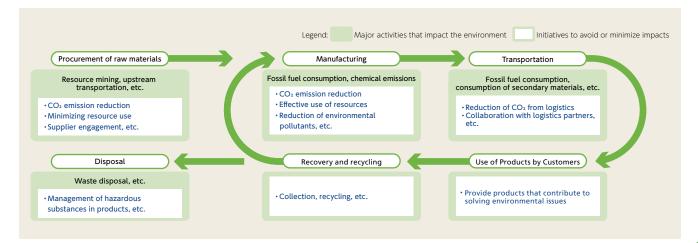
- Transition risk (climate change)
  - Increase in costs due to stricter regulations such as the introduction of carbon pricing
  - Decrease in market demand for high-emission products
- Physical risks (climate and disasters)
  - Operational interruptions and damage to facilities caused by extreme weather such as floods, heat waves, and drought
  - Production constraints due to regional scarcity of water resources
- Resource constraints, Price fluctuation risk
  - Supply uncertainties and cost increases for mineral and biological resources
- Compliance and reputation risk
  - Damage to reputation due to non-compliance with international environmental standards, including existing laws and regulations
  - Materialization of environmental and social issues throughout the supply chain

#### **Opportunities**

The AGC Group anticipates the following opportunities through addressing environmental issues.

- Development of products that contribute to a low-carbon society Contributing to customers' CO<sub>2</sub> reduction through the provision of energy-efficient, lightweight, and long-life products
- Use of renewable energy and resources Transformation of cost structure and improvement of external evaluation through the introduction of renewable energy and utilization of recycled materials
- Building a green supply chain Gaining stakeholder trust through procurement standards that require consideration for the environment and third-party certification such as RSPO
- Products and technologies with reduced environmental impact Strengthening market competitiveness through the selection of materials with low impact on natural capital and improvements in manufacturing processes
- Strengthening the brand through environmental initiatives Staying ahead of regulatory changes and improving mediumto long-term reputation among investors, customers, and local communities

## ▶ Value Chain Impact and Initiatives (from the perspective of "natural capital")



#### Major Dependencies and Impacts of the AGC Group's Business on Natural Capital and Biodiversity

	AGC's	Natural capital in	mpacts and dependencies sho	own by each tool	Manifestina analysis	Activities
	activities	ENCORE	BRF*1	MST*2	Monitoring metric	Activities
Dependencies	Water resource use	Groundwater, Surface water	Water scarcity	_	Water intake by business and water source	P.51∼
	Water resource use	Water resource use	_	Water resource use	Water withdrawal from high water stress areas	P.51~
	GHG emissions	GHG emissions	_	GHG emissions	Scope 1, 2, and 3 in 2030 Reduce GHG emissions by 30% versus 2019 levels	P.40∼
Impacts	Waste emissions	Solid waste	_	Solid waste	Final landfill ratio of less than 1% in 2025	P.54∼
impacts	Pollutants	Non-GHG air pollutants, Soil pollutants, Water pollutants	Pollution	Soil pollutants / Water pollutants	Appropriate management of pollutant emissions and chemical substances contained in our products	P.55∼
	Mineral resource extraction, Land use	Terrestrial ecosystem use	Loss of forest area	Use of terrestrial ecosystems, freshwater ecosystems, and marine ecosystems	Under consideration	_

<sup>\*1</sup> BRF: Biodiversity Risk Filter. Tool for screening and prioritizing biodiversity-related risks

<sup>\*2</sup> MST: Materiality Screening Tool. Tool recommended in Step 1a (Materiality Screening) of SBTN Methodologies

# Scenarios Used for Environmental DIRO Assessment

The AGC Group uses multiple external scenarios and analysis tools to identify and assess the relationship between its business activities and a wide range of environmental issues beyond climate change, including resource depletion, biodiversity loss, and environmental pollution. Specifically, we are identifying dependencies and impacts mainly in our direct operations using international assessment tools such as the following.

- ENCORE (Natural Capital Finance Alliance): Visualization of the dependencies and impacts of natural capital and business activities
- Biodiversity Risk Filter (WWF): Biodiversity risk assessment by region
- SBTN (Science Based Targets Network) sector materiality tool:
   Materiality screening of nature-related issues

In addition to the above, with regard to climate change, we conduct both quantitative and qualitative analyses of transition risks—such as carbon pricing and regulatory tightening—and physical risks—such as rising temperatures and disaster risks. These assessments are based on emissions scenarios, including the Net Zero Emissions by 2050 Scenario (the NZE Scenario, which aims to limit temperature rise to 1.5°C above pre-industrial levels), the Announced Pledges Scenario (APS) reflecting national climate commitments, and the RCP8.5 Scenario (projecting a temperature increase of around 4°C).

Based on these tools, we have assessed that our manufacturing processes for glass and chemical products may impact ecosystems through the use of water resources, land use for raw material extraction, and emissions of greenhouse gases, waste, and pollutants to air and water quality.

Based on the results of these analyses, the AGC Group has identified climate change, resource depletion, and environmental pollution as environmental issues and is conducting deep dives into each theme to manage risks and opportunities and integrate them into its business strategies.

For details on risks and opportunities related to climate change, resource depletion, and environmental pollution, as well as related activities, please refer to the thematic sections that follow.

# **Direct Operation Locations in Priority Areas**

Recognizing that one of the identified dependencies and impacts may involve potential effects on biodiversity from direct operations, the AGC Group conducted biodiversity risk assessments at each of its sites as outlined below.

As a result, it was confirmed that, at present, there are no cases in which our business activities are having a significant impact on specific species. On the other hand, in cases where our involvement can contribute to avoiding biodiversity loss or to conserving and restoring biodiversity, we are actively engaged in related initiatives.

#### **Biodiversity Conservation in Environmental Assessments**

The AGC Group complies with environmental assessment laws and regulations in each country and region when constructing business sites and facilities or implementing large-scale projects, while assessing the impact on the natural environment and biodiversity. In particular, in areas where the vulnerability of biodiversity is deemed high, we take measures to avoid, minimize, or mitigate risks according to the degree of risk as part of our due diligence prior to the commencement of operations. In this way, we are striving to achieve both environmental conservation and sustainable business development.

In particular, we explicitly incorporate the assessment of impacts on rare species and their habitats and on key ecosystem services, and, in accordance with the mitigation hierarchy of "avoid, minimize, restore, and offset (AMRO)," which is adopted in the environmental legislation of many countries as well as in international disclosure standards, we take a prioritized approach from the early stage of development.

We will continue our initiatives to mainstream biodiversity and promote the sustainable use of natural capital through collaboration with local communities, expert organizations, and government agencies.

## **Engagement with Ecologically Protected Areas**

Accordingly, the AGC Group regularly confirms and categorizes the status of protected areas within a 10-kilometer radius of 270 manufacturing and non-manufacturing sites in Japan and overseas. In these activities, the AGC Group gathers information on Japan and other countries concerning their Key Biodiversity Areas (KBA\*1), which are included in the World Database on Protected Areas (WDPA\*2), as well as information regarding species on the International Union for Conservation of Nature (IUCN) Red List by using open data in Japan and the Integrated Biodiversity Assessment Tool (IBAT\*3).

▶ Number of Protected Areas and IUCN Red List Species within 10 km and within 50 km of AGC Group Sites

		Within 50 km		
	Protected areas	WDPA*2	KBA*1	IUCN*4 Species on the IUCN Red List, etc.
Asia	127	124	77	134
Europe	102	100	60	104
The Americas	15	15	8	14

<sup>\*4</sup> IUCN: International Union for Conservation of Nature

 Number of Species on the IUCN Red List and Domestic Conservation Lists in Areas within 50 km of AGC Group Sites

IUCN Red List Categories	Number of species
Critically Endangered (CR)	265 species
Endangered (EN)	650 species
Vulnerable (VU)	1,050 species
Near threatened (NT)	1,006 species

# Risk and Impact Management

The AGC Group recognizes that environmental DIRO (dependencies, impacts, risks, and opportunities) interact with each other and have a significant impact on environmental strategies. We are conducting analysis and strategy development in accordance with the LEAP approach developed and recommended by TNFD, based on the assumption that these relationships are not unidirectional but rather a complex web of both synergistic and antagonistic relationships.

<sup>\*1</sup> KBA: Key biodiversity area

<sup>\*2</sup> WDPA: The World Database on Protected Areas

<sup>\*3</sup> IBAT: Integrated Biodiversity Assessment Tool

## **Environmental DIRO Identification Process**

Step	Details	Relationship with DIRO	
L:LocateIdentify	the locations where the company interfaces with natural capital (geography and value chain)	Where dependencies and impacts occurring arise (spatial identification)	
E: Evaluate Quantitatively and qualitatively evaluate the nature and significance of dependencies and impacts on natural capital		Quantitatively and qualitatively evaluate the importance of dependencies and impacts	
A: Assess Evaluate the risks and opportunities derived from dependencies and impacts		Identify and prioritize risks and opportunities	
P: Prepare	Organize management decisions, targets, response measures, and reporting systems	Reflect in management, targets, and disclosure policies	

#### L:Locate (Identify Interfaces with Nature)

The AGC Group identifies its interfaces with natural capital throughout the entire value chain, including procurement, manufacturing, use, and disposal. In particular, we are focusing on understanding the use of natural resources in direct operations such as glass manufacturing, which requires large amounts of natural resources and energy, and chemical product production, which requires high-purity water.

#### E. Evaluate (Evaluate Dependencies and Impacts)

Using external assessment tools such as ENCORE, Biodiversity Risk Filter, and SBTN sector materiality tool, we have quantitatively assessed the dependencies on and impacts on natural capital in the manufacturing processes of glass and chemical products, which are core businesses of the AGC Group. These tools are based on cross-industry analysis and help clarify the relationship between natural capital and industrial activity, and the assessment results for the AGC Group also reflect trends common to the manufacturing industry.

This analysis confirmed the following dependencies and impacts.

- Main dependencies: Dependence on water resources, mineral resources, and energy, etc.
- Main impacts: GHG emissions, waste generation, pressure on water and soil pollution, and impacts on ecosystems

Furthermore, the following relationships have been clarified regarding the interplay between dependencies and impacts.

- ◆ Examples of synergistic relationships include:
  - · Chemical manufacturing, which is highly dependent on water

- resources, faces increased production risks during water shortages
- Glass manufacturing is relatively highly dependent on upstream natural resources, and if society takes measures to reduce the impact of extraction and logistics on ecosystems, procurement risks may increase.
- Businesses with high environmental impact face increased risks of stricter regulations and declining social evaluation
- ◆ Examples of antagonistic relationships include:
  - Reduction of environmental impact creates new product development and market opportunities (e.g., low-carbon glass, use of recycled materials)
  - Environmental risk countermeasures lead to technological innovation and strengthen competitiveness (e.g., improved energy efficiency, wastewater reuse).

### A. Assess (Risks and Opportunities Assessment)

Based on the results of dependency and impact analysis, we evaluate risks to our businesses, such as water risks, regulatory requirements, and rising resource procurement costs as well as opportunities from demand for environmentally friendly products and the expansion of the market for low-carbon materials. We identify nature-related themes that should be prioritized, considering the scope, severity, and feasibility of response.

#### P. Prepare (Response and Reflection in Strategy)

Based on the evaluation results, we are formulating specific targets and action plans for reducing GHG emissions, optimizing water usage, and utilizing circular materials. In addition, we emphasize the following perspectives in formulating our environmental strategy.

- Integrated understanding: Analysis based on the assumption of a structure in which environmental DIRO interact in complex ways
- Utilization of quantitative and qualitative data: Evaluation combining environmental performance data and stakeholder feedback
- Stakeholder involvement: Reflecting the input of customers, local communities, employees, regulatory authorities, and other stakeholders in strategy formulation
- Strategy prioritization and resource allocation: Focusing resources on key themes and maximizing environmental and business value Through such initiatives, the AGC Group accurately identifies risks and opportunities related to natural capital and biodiversity, and

promotes the advancement of its environmental strategy and the establishment of a sustainable business infrastructure.

We identify environmental impacts in the value chain beyond our own activities and require all business partners to comply with the AGC Group Integrated Green Procurement Guidelines to ensure environmentally responsible procurement. In our green procurement initiatives, we thoroughly manage harmful substances contained in the raw materials and services we procure, and we give priority to suppliers who have obtained and maintain thirdparty certifications for their environmental and quality management systems. In addition to compliance with relevant laws and regulations, we require accurate and timely disclosure of information on environmentally hazardous substances to environment specified by the AGC Group. As a general rule, we require the acquisition of certification for environmental management systems and cooperation with our environmental measures. Based on these standards, we strive to build responsible relationships with our business partners, and if we determine that their response is insufficient, we may reconsider our business relationship with them in accordance with our agreements.

For more information on green procurement, see P.91 of this Data Book.

# Process of the Organization for Managing Environmental DIRO

The AGC Group considers environment-related risks to be an important management issue and evaluates and manages to them under an integrated management structure. Environmental risk assessment is conducted by referring to assessments of both transition risks and physical risks, utilizing scenario analysis and tools issued by international organizations, and supervising and controlling at the senior management level. Continuous improvement is achieved through running a PDCA cycle.

In addition, the AGC Group identifies and assesses environment-related risks from short-, medium-, and long-term perspectives based on the AGC Group Risk Management Implementation Rules. Environmental, risk management, and business divisions collaborate to assess the likelihood of occurrence and severity of impact throughout the supply and value chain.

The results of risk identification and analysis are deliberated by the Sustainability Committee, reported to the Management Committee, and reflected in strategic decision-making. Each business division conducts risk assessments at each site and implements continuous monitoring under an integrated risk management framework.

## Integration into Company-wide Risk Management

The AGC Group promotes risk assessment and response under an enterprise risk management (ERM) framework in order to comprehensively and enterprise-wide identify and manage environment-related risks. In risk assessments conducted every three years, risks related to climate change, biodiversity, and natural resources are identified from multiple perspectives, and the items selected as major risks are subject to deliberation and supervision by the Management Committee and the Board of Directors, based on the AGC Group Enterprise Risk Management Basic Policies before company-wide countermeasures are implemented.

In addition, based on the AGC Group Risk Management Implementation Rules, the corporate divisions, in-house companies, and strategic business units (SBUs) formulate and implement policies and management plans to address environment-related risks. In addition to self-assessments conducted by each organization at the end of the fiscal year, senior management reviews are conducted to establish a PDCA (Plan-Do-Check-Act) cycle and ensure ongoing improvement.

Furthermore, the Internal Audit Division is responsible for independent monitoring from a third-party perspective and regularly verifies the appropriateness of the risk assessment process and the effectiveness of the management structure. In this manner, we ensure transparency and reliability in risk management through a multi-layered system of audits, evaluations, and reviews. For information on measures to address short-term physical risks such as natural disasters, please refer to the "Business Continuity / Crisis Management System" on P.13 of this Data Book.

In addition, to promote the establishment of management systems tailored to the risk attributes of each site, we require sites with significant environmental risks to obtain external certification such as ISO 14001 in accordance with the AGC Group Environmental Management Working Rules, and we implement initiatives in accordance with the standards at other sites as well. Taking into account these initiatives at these sites, the entire AGC Group is also working to strengthen strategic management in line with its Environment Policy and higher-level targets.

The status of initiatives at each site is evaluated through internal inspections and external reviews, and the results are monitored by the business and corporate divisions. These are reported to senior management through the EHS Committee, Sustainability Committee, and Management Review meetings, and are reflected in strategic decision-making and improvement activities at the enterprise level.

For more information on the AGC Group's acquisition of ISO 14001 certification, see P.59 of this Data Book.



# **Metrics and Targets**

With the launch of *AGC plus-2026*, which aims for the deepening of sustainability management, the AGC Group has set new sustainability KPIs, and is strengthening the management of progress. As risk and opportunity assessment indicators related to the environment, we set Scope 1, 2, and 3 GHG emission reduction targets and set growth indicators for products that contribute to GHG emission reduction, and reflect them in management decision-making.

Based on the results of environmental DIRO analysis, in addition to the sustainability KPI, we identify issues from various perspectives such as proper use of water, reduction of pollutants, and prevention of environmental accidents. We are also promoting activities for setting mid- to long-term goals while aiming to achieve short-term KPIs.

# Targets and Indicators

	KPIs and Monitoring Indicators	Sustainability KPls
Climate change	Scope 1 and 2 GHG emissions	*
	Scope 1 and 2 GHG emissions intensity per unit of net sales	
	Scope 3 GHG emissions	
	Shipment volume index for architectural products contributing to GHG reduction	*
	Index for GHG emissions reduction by low-GWP chemicals products	*
	Percentage of major suppliers setting GHG emissions reduction targets	
	Percentage of high water risk sites where measures are implemented	
Depletion of resources	Percentage of measures implemented at high water risk sites: 100%	
Environmental pollution		
Environmental accidents	Number of serious environmental incidents: 0	
Common	Implementation of activities related to biodiversity conservation: All sites	

For KPI results and related information on climate change, resource depletion, and environmental pollution, please refer to the thematic sections that follow.

## Metrics Used to Assess and Manage Dependencies and Impacts

The AGC Group has established the AGC Group Environmental Management Working Rules to ensure that appropriate environmental management is implemented at all of its approximately 200 Group companies around the world. These rules require that all sites be classified into three levels according to environmental risk and that activities appropriate to each level of risk be implemented. As a foundation for appropriately understanding and managing our dependencies on and impacts of all natural capital, we have established global environmental management guidelines and are centrally managing environment-related data through a shared cloud system.

This system includes various data necessary for setting and evaluating environment-related KPIs, such as energy consumption, emissions, waste, and water consumption. It serves as a basis for quantitatively understanding the environmental burden of each site. Going forward, we will continue to visualize and analyze our dependencies on and impacts of natural capital.



# Initiatives to Achieve Environmental Targets

The AGC Group incorporates consideration for natural capital and biodiversity into its management strategy and is implementing multifaceted initiatives at the institutional, technological, partnership, and operational levels.

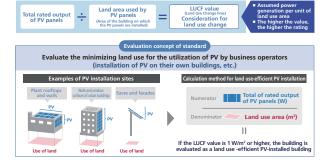
The AGC Group's initiatives are aligned with the perspectives emphasized by TNFD, such as "visualizing dependencies on and impacts of nature," "impact reduction," "rule making," and "strategic collaboration based on scientific evidence," demonstrating AGC Group's company-wide commitment to coexisting with natural capital. Going forward, we will continue to enhance environmental, social, and business sustainability through a three-layer structure of institutions, technologies, and implementation.

# Contribution to System Formation and Standardization

Environmental issues cannot be resolved through the efforts of individual companies alone, and it is essential to develop social infrastructure such as systems and standards. The AGC Group contributes to the creation of a common foundation for a sustainable society by incorporating its expertise in products and processes into system design and participating in cross-industry standard setting.

As a noteworthy achievement, in the field of BIPV (Building-Integrated Photovoltaics), we played a leading role in developing a new indicator that "visualizes" consideration for natural capital when procuring renewable energy, by spearheading the formulation of a standard issued by the Japanese Standards Association (JSA).

- Click here to see the news release. (Japanese article only)
- ▶ Method for Calculating the Land Use Efficiency Score for Buildings, etc. under This JSA Standard



In addition, we are actively involved in international standardization activities such as ISO, IEC, and CEN, providing technical support for the development of standards on themes such as recycled water utilization, circularity indicators, biomass material evaluation, and biodiversity considerations. We are also participating in discussions regarding revisions to the Extended Producer Responsibility (EPR) system policy approach, particularly in Europe, and providing our perspective as a materials manufacturer on the design of a circular economy.

# Visualizing Environmental Value through Products and Certifications

The AGC Group believes that products with environmental performance that exceeds legal requirements offer added value, and we are actively pursuing third-party certifications alongside

transparent information disclosure. This enables us to visualize the environmental impact throughout the entire product life cycle and contributes to improving the customers' environmental performance.

As an example, AGC Glass Europe S.A. was the first company in Europe in 2010 to obtain Cradle to Cradle (C2C) certification® for flat glass and coated glass. Architectural Glass Asia Pacific Company has obtained Environmental Product Declarations (EPDs) for architectural float glass and other products in Japan and Asia.

These products are eligible for additional points as environmentally friendly products in green building certification systems such as LEED, WELL, BREEAM, and DGNB, and also comply with national procurement policies and green procurement standards in various countries. Obtaining such certifications contributes to promoting decarbonization and resource circulation in the construction and infrastructure sectors, supporting the growth of a sustainable construction market.

# Value Creation through Intellectual Property and Scientific Knowledge

Securing innovative environmental technologies and supporting intellectual property strategies are indispensable to transforming solutions to environmental challenges into economic value. The AGC Group considers acquiring patents related to environmental technologies to be part of its management strategy, and is promoting the protection of technologies for products and processes that contribute to solving environmental issues, as well as their diffusion into the markets.

As of December 2024, AGC held 645 patents related to SDG Goals 7 (Affordable and Clean Energy), 12 (Responsible Consumption and Production), and 13 (Climate Action), accounting for approximately 11% of its total patent portfolio.

In addition, to put natural capital assessment into practical application, in 2023 we established the AGC Nature Positive Assessment Research Field, a joint industry-academic program with the Graduate School of Engineering, Hokkaido University. In this program, we are working to establish methods for quantitatively assessing the positive and negative impacts of corporate activities on natural capital, utilizing environmental performance data that we have accumulated over many years.

© Click here to see the news release. (Japanese article only)

Impact Reduction and Natural Regeneration through On-site Implementation

Use of Waste Glass (Cullet) in Tidal Flat Regeneration (Takasago Factory)

We reprocess cullet generated during manufacturing into artificial silica sand and supply it to tidal flat regeneration projects. Tidal flats are important natural environments that contribute to water purification and the restoration of biodiversity, and safe, environmentally compatible sandy material is required for their regeneration. The Takasago Factory provides cullet of appropriate quality by making it edgeless using a mill sizer and conducting elution tests, thus achieving both ecosystem restoration and resource circulation.

#### **Use of Sustainable Wood**

Glass products manufactured in Europe are generally transported on recyclable and reusable pallets, but wooden pallets are used for some extra-regional shipments. These pallets are made of PEFC-certified sustainable wood\*\*\*\*2.

- \*1 PEFC (Programme for the Endorsement of Forest Certification schemes) is the world's largest forest certification program, operated by a non-profit NGO that aims for sustainable forest management.
- \*2 For shipments from the four countries where the main glass manufacturing sites in Europe are located.

# Conservation of Endangered Plants on Premises (Yokohama Technical Center)

Volunteer employees are leading conservation activities at a site where several endangered orchid species, such as Golden Orchids, Silver Orchids, and Kugenumaran (sword-leaved helleborine), grow wild. We are working to preserve valuable natural environments in urban areas by continuing to remove non-native species and improve the environment. In recognition of these activities, the site was certified as a "Nature Symbiosis Site" by the Ministry of the Environment.

Click here to see the news release.



White: Sword-leaved Helleborine Orchid Yellow: Golden Orchid



Conservation activity

Golden Orchid: Designated as vulnerable in the Ministry of the Environment's Red List 2020 and Kanagawa Prefecture's Red List 2020

Silver Orchid: Designated as critically endangered, vulnerable, and near threatened in the red lists of 39 prefectures

Sword-leaved Helleborine Orchid: Designated as vulnerable in the Ministry of the
Environment's Red List 2020 and Kanagawa
Prefecture's Red List 2020

# Coral Reef Cultivation and Community Collaboration (AGC Vinythai)

AGC Vinythai Public Company Limited (Thailand) has been continuously implementing the Coral Reef Cultivation Project since 2003, and so far, it has planted more than 100,000 coral colonies along the Gulf of Thailand. By reusing our own PVC pipes as coral nursery beds and collaborating with the Thai Department of National Parks, academic institutions, and local communities, we are achieving both the restoration of marine ecosystems and the revitalization of the local economy.

Click here for more information

### Reducing Environmental Impact Through Our Products

#### Glass Business Products

#### BIPV

#### Product Introduction

BIPV (Building-Integrated Photovoltaics) is a type of glass with power generation cells enclosed between two sheets of glass. While fulfilling its role as architectural glass, it is now possible to generate electricity from facades, windows, canopies, balconies, and walls, which had not previously been utilized for power generation. SUNJOULE is a highly aesthetic solar power-generating glass that also takes into account daylighting and views, contributing to energy generation within buildings.
\*BIPV: Building-Integrated Photovoltaics

#### **Environmentally Considerations**

Since it can be installed on both existing and new buildings, it enables power generation without the need for new land development or land alteration. It is also recommended as a solution under the JSA-S1024, a standard that defines evaluation methods for the effective land use scores for buildings equipped with solar panels issued by the Japanese Standards Association. In addition, AGC is collaborating with academia to conduct environmental impact assessments of BIPV compared to conventional solar power generation.



Haneda Airport Terminal 2

Click here for detailed product information

## **Chemicals Business Products**

#### **EPINITY**<sup>™</sup>

#### Product Introduction

EPINITY<sup>TM</sup> is a 100% bio-based epichlorohydrin made from renewable glycerin derived from vegetable oil.

#### **Environmentally Considerations**

The raw material, renewable glycerin, has obtained RSB Certification\*1, an international certification for the sustainable use of resources, and RSPO Certification\*2 for the sustainable palm oil procurement. We consider sustainability throughout the entire product life cycle, and have confirmed in GHG emission calculations using the LCA (Life Cycle Assessment) methods that compared to conventional petroleum-derived ECH, it has up to 67% less GHG emissions. It not only contributes to the effective use of resources, but also addresses climate change issues.

- \*1 Roundtable on Sustainable Biomaterials
- \*2 Roundtable on Sustainable Palm Oil
- Click here for detailed product information

# Addressing Climate Change



# Fundamental Approach

The AGC Group considers climate change and global warming to be important issues that have a serious impact on society and the environment, and that initiatives to address these issues are part of our corporate social responsibility. Climate change also affects our own business activities and is at the same time a prerequisite for sustainable growth. AGC is committed to contributing to the resolution of social issues through the capabilities of materials and considers addressing climate change to be a top management priority.

The medium-term management plan *AGC plus-2026* integrates business activities and climate change countermeasures based on the three social values of "Blue planet," "Innovation," and "Wellbeing," including the introduction of decarbonization technologies, improvement of energy efficiency, and broader use of recycled materials.

We have positioned climate change as a key management issue directly linked to business continuity and competitiveness, which we see as essential to achieving our goal of Carbon Net-Zero by 2050, which covers Scope 1 and 2 GHG emissions. Amid a business environment characterized by rapidly changing energy supply, resource prices, and customer needs, we proactively identify risks and opportunities presented by climate change and incorporate them into our business strategy. We also actively seek to understand the intent and direction of relevant policies and systems being developed in various countries and regions, implementing proactive measures in response. This enables us to not only promote the reduction of our own greenhouse gas (GHG) emissions, but also to develop and deliver products and solutions that contribute to reducing GHG emissions in the use stage.

In addition, we have set a goal of achieving carbon net-zero by 2050, which covers Scope 1 and 2 GHG missions, with 2030 as a milestone, and are steadily advancing feasible and phased reductions while in line with progress in technological innovation and energy transition. Through such initiatives, we aim to contribute to a sustainable society while enhancing corporate value.



# Governance

The AGC Group has positioned climate change as a key management issue, and the Board of Directors regularly monitors the setting and execution of strategies and targets. In addition, we promote the assessment of risks and opportunities in collaboration with business divisions through deliberations at the Management Committee while endeavoring to improve the effectiveness of our governance system by reflecting the achievement of climate-related indicators and targets in the officer compensation system.

We conduct regular reviews and strategic decision-making at the Board of Directors level to effectively address climate-related risks and opportunities. Also, we have strengthened our executive structure and regularly monitor identified climate change-related risks and their management status through Board of Directors and Management Committee meetings. In addition, corporate divisions and in-house companies/SBUs analyze risks and consider countermeasures for each business or case, and discuss the identified risks and proposed countermeasures at the meetings of Board of Directors and Management Committee meetings when necessary.



# Supervision and Management Centering on the Board of Directors

The AGC Group, led by its Board of Directors, has established a system to manage management targets and risks and opportunities related to climate change governance across the entire Group. The

Board of Directors integrates these elements into its management strategy, deliberates and makes decisions aimed at sustainable growth and the long-term enhancement of corporate value.

The AGC Group's Board of Directors comprises members with expertise in sustainability and climate change and integrates climate risk and opportunity assessments into its management strategy. The Board of Directors promotes risk management and strategic decision-making based on the TCFD recommendations, contributing to the sustainable growth of corporate value.

# Indicators for Evaluating Executive Compensation Related to Climate Change

Under *AGC plus-2026*, which aims for the deepening of sustainability management, Scope 1 and 2 GHG emissions per unit of sales has been incorporated as a performance metric for determining executive compensation for directors and executive officers. This indicator has been incorporated into the compensation system alongside financial KPIs such as ROE, EBITDA, and relative TSR, strengthening incentives for management to work toward enhancing corporate value in a sustainable manner, including climate change response. This creates a framework whereby executive compensation is linked to progress in GHG emissions reductions, thereby clarifying accountability of senior management for addressing climate change.

# Role of Senior Management and Executive Bodies Management Committee

The Management Committee is chaired by the President & CEO and held every other week in principle. The Senior Executive Vice President and other key executive officers who oversee various functions attend the meeting and discuss and decide on important matters concerning the entire Company. When sustainability considerations regarding products and services are incorporated into business strategies in the strategies and performance of each in-house company and SBU, the direction and progress of these initiatives are regularly monitored as a part of the management agenda.

### **Sustainability Committee**

The AGC Group's Sustainability Committee is integrated into strategic decision-making as the highest-level authority for climate risk management. As an advisory body to the CEO, it is responsible for deliberating and deciding on climate-related matters and taking the lead in reporting to the Board of Directors.

Chaired by the CEO, the committee meets four times a year and is composed of the CFO, CTO, Audit & Supervisory Board

members, and persons in charge of each business division. The committee supports strategic decision-making by assessing climate-related risks and considering response measures and reporting the results to the Board of Directors twice a year. In alignment with our management strategies, the committee is promoting the enhancement of climate risk management and the strengthening of competitive advantage.

#### **Environmental Response Meeting**

The Environmental Response Meeting is an organization that evaluates and responds to all environmental risks, including climate change risks, at a specialized and practical level, based on resolutions made by the Sustainability Committee. Led by the General Manager of the EHSQ General Division and the General Manager of the Sustainability Division, this meeting is attended by representatives from business divisions in charge of CSR matters and heads of corporate divisions.

The meeting is held eight times a year in principle, and by organizing specialized projects for each issue, we are able to quickly and flexibly analyze and formulate countermeasures for the latest environmental issues and risks. This enables the meeting to convey timely information to senior management, support more informed decision-making, and play a role in reducing risk and achieving sustainable business operations.



The AGC Group identifies transition and physical risks and business opportunities arising from climate change and incorporates them into its strategic decision-making. We have assessed our financial impact using international scenarios and are in the process of reviewing our business portfolio and planning for energy conservation and for renewable energy investments to achieve decarbonization. We promote management strategies that both strengthen the medium- and long-term climate resilience and enhance corporate value.

# **Methodology for Climate Change Scenario Analysis**

The AGC Group positioned scenario analysis as one of the important tools for understanding the medium- and long-term risks and opportunities posed by climate change to its business and to reflect them in strategy formulation and resilience improvement. It has conducted scenario analysis based on the following framework.

#### Time Horizon for Evaluation

Short-term (1 year), medium-term (-2030), and long-term (-2050)

#### Scope of Analysis

Risks and opportunities associated with climate change, and natural disaster risks affecting manufacturing sites

#### Analysis Steps

- Selection of envisioned scenarios
- Extracting risks and opportunities and setting evaluation criteria
- · Impact assessment (quantitative/qualitative) by site and business
- Integration into strategy and business planning

### Scenarios Used and Main Applications

- Net Zero Emissions by 2050 Scenario (NZE scenario):
   A scenario developed by the International Energy Agency (IEA) that assumes the achievement of the goal of limiting the global temperature rise from pre-industrial times to less than 1.5°C. Used for assessing the implications of the low-carbon transition.
- Announced Pledges Scenario (APS):
   A scenario that reflects the NDC (Nationally Determined Contribution) targets decided by each country based on the Paris Agreement. Used to forecast carbon prices and strengthened regulations.
- RCP8.5 scenario:
   Climate scenario for acute physical risks (e.g., heavy rainfall, typhoons, high temperatures, drought, etc.) projecting a temperature rise of around 4°C from pre-industrial levels. Particularly used to assess natural disaster risks at manufacturing sites.

#### Type of Evaluation

- Quantitative evaluation:
- Estimated cost impact of rising carbon prices and energy costs
- Sensitivity analysis based on GHG emissions by Scope (1, 2, and 3) category and energy consumption by business, etc.
- Qualitative evaluation:
- · Location characteristics (flood risk, temperature changes)
- Vulnerability in the supply chain and impact on social license to operate, etc.

#### Use of Scenario Analysis

Based on the evaluation results of each scenario, we apply the findings to diversification of energy sources, prioritization of capital expenditures, formulation of emission reduction plans,

and KPI management, etc., and operate in alignment with the business plan for **AGC plus-2026**.

# **Identified Risks and Opportunities**

### Overview of Transition Risks

Among transition risks, we assessed that a rise in carbon prices would have a particularly significant impact on our business. Based on estimates assuming carbon prices in 2030, we calculated that the maximum annual cost burden could be approximately US\$1,000 million (approximately ¥150 billion).

#### Overview of Physical Risks

We recognize that natural disasters caused by climate change and chronic environmental changes pose significant risks to business continuity. In particular, extreme weather events such as floods, storm surges, and droughts can lead to operational shutdowns at manufacturing sites or disruptions to logistics, potentially resulting in lower sales and an increased costs for implementing countermeasures. Furthermore, we consider the decline in cooling efficiency of equipment and deterioration of working conditions caused by rising temperatures and heat waves as well as the impact on manufacturing processes caused by water resource depletion and water quality deterioration to be risks that cannot be overlooked.

#### **Overview of Opportunities**

Leveraging our strengths, we have identified specific business opportunities that can contribute to reducing GHG emissions and avoiding emissions during use, such as architectural window glass with high thermal insulation and durability, and a core product line of solvents and refrigerants with extremely low global warming potential (GWP). All of these are areas where future market growth is expected, as they meet social demands for energy efficiency and reduced environmental impact over their lifecycle.

# Impact of Risks and Opportunities on Business, Strategic, and Financial Planning

Impact of Transition Risks

Risks Related to Policies and Regulations: Rising Business Costs and Adaptation Burdens from Strengthened Carbon Regulations: Increased business costs and adaptation burdens from strengthened carbon regulations

We assess the impact of carbon pricing policies across different countries and regions and manage financial risks. Assuming that current Scope 1 and 2 GHG emissions are maintained, rising carbon prices by 2030 could result in up to US\$1,000 million (approximately ¥150 billion) in additional annual costs\*1.

This estimate is based on AGC Group's Scope 1 and 2 GHG emissions\*2 as of 2023, taking into account the possibility of carbon pricing introduction and increases in each country\*3. For example, under the EU ETS (Emissions Trading Scheme), the carbon price is expected to reach €100/t-CO2 or more by 2030\*4, and corresponding cost increases are anticipated. In addition, there are moves to introduce or strengthen carbon pricing in Asia and North America\*5.

This analysis quantifies the significant financial impact that advances in carbon pricing will have on energy-intensive manufacturing industries, reaffirming the necessity of reducing emissions at the Company and the importance of measures to avoid costs.

- \*1 Estimates are based on AGC's proprietary carbon pricing simulation and are subject to change due to policy changes in each country.
- \*2 Scope 1 and 2 GHG emissions as of 2023 are calculated based on the latest GHG inventory data.
- \*3 Considering the carbon pricing introduction and increase policies of each country (IEA, national policy documents, etc.)
- \*4 The carbon price under the European Emissions Trading Scheme (EU ETS) was about €80/t-CO<sub>2</sub> as of 2023. Projected values through to 2030 are €100–€150/t-CO<sub>2</sub> (Source: IEA, European Commission Report)
- \*5 Source: Government publications of each country, IEA
- → Measures to Address the Impact of Policy and Regulatory Risks The AGC Group is advancing the following types of initiatives to mitigate the impact of these transition risks.
  - Fuel conversion, oxygen combustion, and electrification of float glass melting furnaces
  - Reduce electricity consumption intensity and introduce renewable energy in chlor-alkali electrolysis facilities
  - Apply internal carbon pricing in investment decisions
  - Evaluate the business portfolio based on scenario analyses and GHG emissions efficiency

In addition, under **AGC plus-2026**, the Company has planned to allocate over 50 billion yen for investments to reduce Scope 1 and 2 GHG emissions, accelerating the transition to a low-carbon society.

Technology Risks: Shifts in Competitive Advantage and Rising Adaptation Costs Driven by Advances in Low-Carbon Technologies

We have identified the rising costs associated with energy transition and the adoption of low-carbon technologies as factors

impacting the entire Group. This includes higher direct costs for fossil fuel alternatives, increased capital expenditures for low-carbon technology development, and rising capital costs for renewable energy and energy-efficient technologies.

As markets shift toward decarbonization, companies are under growing pressure to decarbonize and lower GHG emissions, heightening the risk of increased capital expenditures and rising operational costs. The AGC Group assesses these risks and estimates their financial impact.

- → Measures to Address the Impact of Technology-Related Risks The AGC Group is implementing the following measures to minimize the impact of transition risks.
  - Expanding low-carbon businesses through strategic business portfolio review
  - Accelerating investment in the reduction of Scope 1 and 2 GHG emissions
  - Enhancing incentives for the development of low-carbon technologies through the implementation of an internal carbon pricing (ICP) system
  - Deploying energy-saving technologies and implementing renewable energy

In addition, under **AGC plus-2026**, the Group has planned to allocate over 50 billion yen to accelerate Scope 1 and 2 GHG emissions reduction through the development and deployment of low-carbon technologies.

# Reputation and Litigation Risks: Stakeholder Perceptions and Legal Challenges

Disclosing climate-related information may entail the risk of stakeholder complaints stemming from differences in interpretation, as well as the associated burden of responding to them. We also recognize the potential litigation risk from investors and stakeholders should the response to climate change be deemed insufficient. In particular, we carefully assess the disclosure of climate-related risks in our securities reports, as there is a risk that statements regarding their impact on financial results and business operations could be misinterpreted.

→ Measures to Address Reputation and Litigation Risk
The AGC Group works to ensure reliable and appropriate
disclosure of climate-related information, reduce related risks, and
comply with relevant disclosure requirements in each country.

- Highly transparent disclosure aligned with TCFD recommendations
- Appropriate assessment of climate-related risks and review of disclosure, in alignment with applicable climate laws and reporting standards in each country
- Ensuring consistency in disclosures to prevent misinterpretation
- Enhancing stakeholder trust through strengthened dialogue and engagement

# Market-related Risks: Market Shifts Driven by Climate Action

As global climate policies and the transition to low carbon advance, we anticipate increasing demand for low-carbon and renewable energy solutions, accompanied by a structural decline in demand for conventional high-carbon products. In addition, customers' decarbonization strategies and tighter environmental regulations may shift product selection criteria, intensify market competition.

Furthermore, rising transaction costs for products and raw materials with high GHG emissions (product carbon footprint) over the product lifecycle, as well as reduced competitiveness in carbon-regulated markets, may adversely affect business performance. Given the potential impact of these factors on the AGC Group's revenue and profit, we are assessing market risks and implementing appropriate countermeasures.

→ Measures to Address Market Risks

The AGC Group is implementing the following initiatives to address market risks associated with climate change and to maintain and enhance its business competitiveness.

- Strengthening product carbon footprint management and ensuring transparency in information disclosure
- Shifting toward a lower carbon footprint product portfolio
- Strengthening the development and sales of low-carbon and environmentally conscious products to respond to shifting demand
- Enhancing solution offerings aligned with customers' decarbonization strategies

Through these initiatives, we aim to achieve sustainable growth by leveraging climate-driven market changes as opportunities to enhance our competitiveness.

#### Impact of Physical Risks

## Acute Physical Risks:

Extreme weather events and climate change may cause damage from physical risks such as floods, storm surges, and droughts. These risks are particularly concentrated in the Asian, where we anticipate the following financial impacts.

#### Flood risk:

15 sites in Asia, 2 sites in Europe, 1 site in the Americas Maximum projected damage by 2050: 20.0 billion yen Average annual damage (considering a 1-in-100-year probability): 200 million ven

#### Storm surge risk:

3 sites in Asia

Maximum damage as of 2050: 2.0 billion yen Average annual damage: 20 million yen

## Drought risk:

17 sites in Asia, 3 in Europe, 1 in the Americas Potential impacts on production processes and raw materials procurement

Physical risks in the supply chain are recognized as a critical issue. Factors such as the geographic concentration of raw material sources, long procurement lead times, suppliers located in high water-risk regions, and limited flexibility in logistics networks are recognized as key contributors to increased supply chain vulnerability.

- → Measures to Address Acute Physical Risks The AGC Group implements the following measures based on site-specific physical risk assessments.
  - Measures at Our Own Sites Establishing business continuity plans: Standardized response measures for wind and flood events Reinforcing physical countermeasures: Installation of waterproof barriers and drainage pumps, as well as flood control measures Utilizing insurance: Procuring coverage for losses caused by wind and flood events

- Measures for the Supply Chain Diversifying the supply chain: Decentralizing procurement sources and ensuring alternative sourcing routes Optimizing inventory strategy: Mitigating supply risks by increasing inventories of products and raw materials
- Strengthening Long-term Risk Management Currently, each site is responding to risks. Going forward, we aim to implement a group-wide PDCA cycle for managing physical risks over the medium to long term. As part of this effort, we are enhancing our internal systems and governance rules to promote integrated and strategic risk management.

## Chronic Physical Risks:

Risks /

Main

Chronic physical risks such as temperature increases, precipitation variability, and water stress related to climate change may have a

material impact on manufacturing processes and raw materials procurement in our Glass and Chemicals Businesses.

→ Measures to Manage Chronic Physical Risks

We consider these risks to be manageable through appropriate adoption measures, enabling the continuity and stability of our operations. We are enhancing our resilience to chronic physical risks by strengthening site management, improving energy efficiency, and diversifying our raw material sourcing. In addition, we are securing greater operational flexibility by promoting sustainable water resource use and optimizing production systems, while maintaining the competitiveness of our Glass and Chemicals Businesses.

## Positive Impacts from Opportunities

The AGC Group expects business opportunities to expand especially under an NZE scenario. By leveraging market projections from credible third-party institutions, we analyze changes in

# ▶ Business Impact and Response Based on Climate-related Scenarios

Main categories	Risks / Opportunities	Scenarios	Financial Impact		Responses
Transition Risks		Developed countries: US\$140/ t-CO <sub>2</sub> Emerging countries: US\$90/t-CO <sub>2</sub> (2030 / NZE (1.5°C )*1)*2	Up to approximately US\$1,000 million/year  *Assumes no change from 2023 emissions level (Scope 1 and 2 GHG emissions)  *Considers possible introduction of carbon pricing in each country and region by 2030 consolidated basis / NZE (1.5°C)	•	Fuel conversion, oxygen combustion, and electrification of float glass melting furnaces     Reduce electricity consumption intensity and introduce renewable energy in chlor-alkali electrolysis facilities     Reflect internal carbon pricing in investment decisions     Evaluate and transform business portfolio based on scenario analyses and carbon efficiency
Physical Risks	Acute Physical Risks (Floods)	2050 / RCP8.5 (4°C )*3	0.36 billion yen/year (18 sites in Japan and other countries)		Installation of flood and storm surge prevention equipment
	Building renovation market	2030 / APS (less than 2°C )*⁴	Renovation rates in Europe to double by 2030		Provision of window glass that excels in heat insulation and recyclability     Provision of Building Integrated Photovoltaics (BIPV)
Opportunities	Market for next- generation refrigerants and solvents	2030 / APS (less than 2°C )	Low-GWP refrigerant market expected to expand 2.2x in size by around 2030		Provision of next-generation refrigerants and solvents
	Hydrogen market	2030 / NZE (1.5℃ )	Increased water electrolyzer installation capacity (cumulative) (5.2 GW to 558 GW)		Provision of materials related to the production and use of hydrogen

- \*2 The NZE scenario-based calculation results that represent the highest risk for calculating financial impact based on multiple scenarios
- \*3 Representative Concentration Pathway scenario published in the IPCC Fifth Assessment Report
- \*4 APS scenario

product markets and integrate the findings and insights into our business planning.

Under the NZE and APS scenarios, the decarbonization market is forecast to expand at an accelerated pace. For example, the renovation ratio is projected to double, while the cumulative installed capacity of water electrolysis equipment is expected to surge from 5.2 GW to 558 GW. Furthermore, the market size of low-GWP refrigerants is expected to grow to 2.2 times its current size by 2030, and EV sales are also expected to increase by 3.2 times. These trends will accelerate the adoption of next-generation low-carbon technologies across the construction, automotive, and chemical sectors, thereby strengthening the AGC's product competitiveness.

Based on these future projections, we are promoting the market launch of such products as durable and recyclable architectural insulating window glass designed with resource circulation in mind, next-generation refrigerants and solvents with low GWP, and Building Integrated Photovoltaics (BIPV) glass. Through these products, we seek to contribute to the reduction of GHG emissions while responding to new market needs and strengthening our competitiveness.

In addition, in anticipation of stricter regulations, we are accelerating the development of products that contribute to a low-carbon society to strengthen regulatory alignment and translate emerging market opportunities into business growth. The AGC Group is investing in decarbonization technologies and optimizing its business portfolio with the aim of achieving both sustainable economic growth and reduced environmental impact.

### → Response to Realize Opportunities

AThe AGC Group views the expansion of the decarbonization market as a growth opportunity and is implementing strategies to respond swiftly and effectively to these market changes. As one facet of this, *AGC plus-2026*, includes plans to invest over 30 billion yen to expand sales of products that contribute to GHG emissions reduction. We are accelerating the development of low-carbon technologies particularly in the construction, automotive, and chemical sectors, aiming to enhance our product portfolio in support of a decarbonized society.

Furthermore, we are advancing technological development to improve energy efficiency and broaden the application of low-carbon technologies. By strengthening our global supply network, we are building a resilient business foundation capable of ensuring stable product supply and adapting flexibly to market shifts.

## **Resilience of Scenario-Based Strategies**

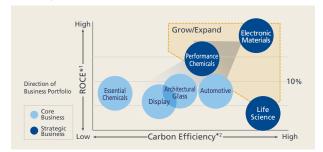
The AGC Group is strengthening the resilience of its business strategies to ensure sustainable growth under diverse climate scenarios. To address both transition and physical risks while maintaining business competitiveness and financial stability, we are advancing the following strategic initiatives.

## 1. Strengthening Portfolio Resilience

In accordance with its long-term management strategy and medium-term management plan, the AGC Group is working to build a business portfolio resilient to changes in market conditions with high asset efficiency, growth potential, and carbon efficiency. To achieve this, the Group is focusing on transforming the business structure and business models of its Core Businesses, expanding strategic businesses, and accelerating growth.

In the architectural, automotive, and chemical sectors, we are advancing the development of low-carbon technologies and expanding our product lineup in alignment with transition to a decarbonized society. In particular, we aim to simultaneously address climate change and strengthen our business portfolio by leveraging the market growth potential of low-carbon products such as high-insulation glass, components for zero-emission vehicles (ZEVs), and next-generation refrigerants and solvents.

## ► Direction of the Business Portfolio Transformation (Carbon Efficiency • ROCE)



ROCE: (OP of the year)  $\div$  (Operating asset at the year-end), OP for each business is before allocation of common expenses

- \*1 Created based on 2024 ROCE
- \*2 Based on 2023 emissions per 2024 sales

#### 2. Ensuring Financial Resilience

To address rising carbon prices, we are advancing the adoption of energy-saving technologies and implementing measures to reduce energy costs. We have also planned to invest over 30 billion yen to expand the sales of products that contribute to the reduction of GHG emissions. This will transform transition risks into growth opportunities.

## 3. Enhancing Resilience Through Technological Innovation

To prepare for long-term climate change risks, we are advancing the development of hydrogen- related technologies and energy-efficient products to enhance our market competitiveness. This approach ensures our ability to maintain business continuity and pursue growth under any scenario.

### 4. Technology Investment

The AGC Group is advancing technological innovation in the glass melting process and transitioning electricity sources in its Chlor-Alkali Business to renewable energy, as part of its efforts to achieve key milestones. This initiative promotes the decarbonization of manufacturing processes and builds a framework that transforms transition risks into growth opportunities.

Regarding float glass melting furnaces, we are promoting a technology implementation strategy aimed at reducing GHG emissions and formulating a strategy to adapt to a decarbonized society by 2050. By leveraging simulations of energy prices and carbon costs through 2050, we assess the economic viability of low-carbon technologies. At the same time, we promote global deployment of these technologies and optimize resource allocation to strengthen our long-term competitiveness.

### 5. Rule-Making Initiatives

Alongside developing products that contribute to the realization of a low-carbon society, the AGC Group is actively engaged in shaping international rules and standards. By leading standardization initiatives and proactively responding to regulations, we aim to expand market presence and establish distinct competitive advantage.

### 6. Internal Carbon Pricing System

The AGC Group has introduced an internal carbon pricing (ICP) system to assess carbon risks in GHG reduction investments and business investments. A carbon price is set for each region and year, with Japan applying US\$22/t-CO2 in 2030 and US\$175/t-CO2 in 2040. In making investment decisions, we calculate NPV (Net Present Value: future cash flows discounted to present value) factoring in carbon costs and compare the result with ordinary NPV to facilitate more realistic decision-making.

## 7. Participation in Initiatives to Address Climate Change

Addressing climate change involves initiatives across the entire value chain, from raw materials to product usage and disposal. Through collaboration with diverse stakeholders, we aim to minimize environmental impact and generate shared social value.

In the unlikely event that there is a significant disagreement with our opinion, we may, on an exceptional basis, oppose the position of the industry group or withdraw our membership.

For more information on stakeholder engagement in general, see P.9 of this Data Book "Stakeholder Engagement."

## Japanese Business Alliance for Smart Energy Worldwide (Japan)

Japanese Business Alliance for Smart Energy Worldwide (JASE-W)

Overview: Strong collaboration between member companies and the government to build energy-saving, new energy, and decarbonization projects and businesses outside of Japan for Japanese companies

**Purpose of participation**: To promote international expansion of our energy-saving and decarbonization technologies and to actively contribute to council activities

Achievements: We contributed to promoting ZEB initiatives in ASEAN countries by actively participating in the ZEB Solution Working Group, which aims to promote the gradual spread and realization of the ZEB\* concept as a foundation for disseminating building-related equipment and technologies in Japan, with the goal of facilitating wider adoption in ASEAN countries.



\* Zero Energy Building: A building designed to achieve a comfortable indoor environment while aiming to reduce the annual primary energy balance of the building to zero.

## Energy Conservation Center (Japan)

Energy Conservation Center, Japan (ECCJ)

**Overview**: A core organization that promotes energy conservation both in Japan and internationally, providing support through policies, human resource development, and technical information.

**Purpose of participation**: Sharing the latest policy and technical information, exchanging cross-industry knowledge, and advancing energy management at our manufacturing sites.

Achievements: The Chairman of the AGC Group serves as a

member of the Advisory Board, supporting the promotion of energy conservation activities.



## Climate Change Initiative (Japan)

— Japan Climate Initiative – JCI

Overview: Under the slogan "Toward a Japan that leads the world in combating climate change," a network of diverse actors, including businesses, local governments, and NGOs, is working together to accelerate action toward the realization of the Paris Agreement and the creation of a decarbonized society.

Purpose of participation: We endorse the objectives of JCI and participate in the network to advance decarbonization through our business activities and promote climate action across the entire supply chain.

Achievements: In 2023, we endorsed a carbon pricing proposal to simultaneously achieve our 2030 GHG emission reduction targets and enhance international competitiveness.



## GX League (Japan)

GX League official website

**Overview**: A framework for corporate collaboration to tackle the challenge of Japan's transition to carbon neutrality and lead the way in GX (green transformation)

**Purpose of participation**: Participation in various working groups for the emissions trading system (GX-ETS) and the creation of new markets

Achievements: GX-ETS sets short- and medium-term reduction targets and publishes progress on the GX Dashboard. In addition, we have been certified as a "GX Acceleration Declaration Company" in recognition of our active efforts to promote the social implementation of GX products and services and to advance GX throughout the supply chain, based on the evaluation of GX value.



## Flat Glass Manufacturers Association of Japan

## Flat Glass Manufacturers Association of Japan official website

**Overview**: An industry association that addresses various issues such as the environment, safety, and energy conservation with the aim of promoting the sound development of the flat glass industry and contribution to society.

Purpose of participation: Addressing shared issues in the flat glass industry, promoting the establishment of standards in technology, the environment, and safety, and collaborating to ensure the healthy development of the industry as a whole and to address social issues Achievements: Participated in the Flat Glass Recycling and Reuse Subcommittee within the Sustainability Special Committee and played a leading role in the Special Committee for the Review of CO<sub>2</sub> Emissions and Reduction Effectiveness Evaluation Indicators, established within the Association. These activities have been taken over by the Whole Carbon Subcommittee, which was established under the new Sustainability Special Committee within the Association in 2024.



一般社団法人

FLAT GLASS MANUFACTURERS

## National Movement for New and Prosperous Lifestyles toward Decarbonization—Participation in Public-Private Collaborative Association (Japan)

Deco-Katsu (National Movement for New and Prosperous Lifestyles toward Decarbonization) | Ministry of the Environment

**Overview**: A public-private partnership council (nicknamed the "Deco-Katsu Ouendan") initiated by the Ministry of the Environment to promote a national campaign for creating new and fulfilling lifestyles that support decarbonization.

**Purpose of participation**: Realizing a sustainable society from both the perspectives on "living" and "industry"

Achievements: We have been actively collaborating and consulting with the secretariat and other stakeholders to enhance consumer appeal for its products and services and to propose government policies.

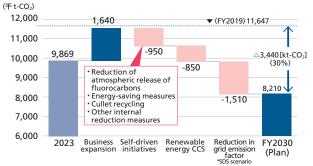


### Transition Plan

The AGC Group has formulated a decarbonization roadmap centered on the following initiatives as part of its transition plan to

achieve carbon net-zero by 2050. As a mid-term goal, we have set a target of reducing Scope 1 and 2 GHG emissions by 30% compared to 2019 levels by 2030, and are promoting phased reductions through the introduction of renewable energy, fuel conversion, and process improvements. These plans are linked to the business strategy and ensure alignment with **AGC plus-2026**.

## ▶ Reduction Roadmap(Created in 2024 based on 2023 results)



### Reduction of Scope 1 and 2 GHG Emissions

Approximately 99% of the AGC Group's Scope 1 and 2 emissions originate from its Glass Business (Architectural and Automotive), Electronics, and Chemicals Businesses. Of these emissions, with roughly half of the emissions coming from the Glass and Electronics Businesses combined, and the other half from the Chemicals Business. To achieve carbon net-zero by 2050, we are promoting reduction strategies tailored to the characteristics of each business.

## Transition Planning in the Glass Business

At the AGC Group, the operation of float glass melting furnaces accounts for approximately 70% of Scope 1 and 2 emissions in the Glass and Electronics Businesses. Therefore, we have identified the decarbonization of the melting process as our most critical challenge. In particular, the electrification of kilns and conversion to clean fuels are core measures in our decarbonization strategy.

We are implementing a regional optimization approach based on projected of GHG emission factors from electricity consumption in each area.

 Europe & Americas: We are prioritizing the introduction of electric boosters (auxiliary electric heating) in response to progress in electricity decarbonization.  Asia: Where decarbonizing electricity is relatively challenging, we are prioritizing the adoption of energy-saving technologies.

In addition, the following measures are being phased in as longterm emission reduction measures:

- Expanded use of clean fuels such as hydrogen and biofuels
- Reduction of raw material emissions through enhanced recycling of glass cullet (scrap and fragments)
- Development and introduction of CO<sub>2</sub> capture and utilization (CCU) technology from float melting furnaces

Float furnaces used in glass manufacturing are long-life equipment that generally operate for 15 years, so incorporating the best available low-carbon technologies at the time of replacement is critical. For this reason, a project team reporting directly to the CTO clarifies the priorities for technological development and oversees progress on a global scale.

In 2022, we accelerated the conversion from heavy fuel oil to natural gas and began full-scale introduction of electric boosters in Europe and Americas. Going forward, we will implement integrated decarbonization measures that combine electrification, fuel conversion, energy conservation, and recycling in accordance with the circumstances of each region.

Furthermore, we aim to improve the energy efficiency of the entire furnace and to establish a sustainable manufacturing system by combining our high-insulation ceramics technology and glass melting technology.

#### **Fuel Conversion**

### ■ Reduction of Fuel Oil

The AGC Group has started replacing heavy oil, used in processes such as glass melting, with natural gas at is facilities. Natural gas emits approximately 20% less CO<sub>2</sub> than heavy oil during combustion. In addition, using natural gas virtually eliminates sulfur oxide (SOx) emissions from fuel combustion.

## ■Ammonia Combustion

AGC has been selected by the New Energy and Industrial Technology Development Organization (NEDO) as a contractor on a project to develop fuel ammonia combustion technology for industrial furnaces. AGC will develop this project jointly with Taiyo Nippon Sanso Corporation, the National Institute of Advanced Industrial Science and Technology (AIST), and Tohoku University from December 2021 through March 2026.

## ■Total Oxygen Combustion

Oxy-fuel combustion method uses only oxygen for fuel combustion to produce glass. This method improves energy efficiency as it avoids heating nitrogen, which makes up about 80% of air and does not contribute to combustion. In addition, as combustion gas contains almost no nitrogen, this method also helps reduce nitrogen oxide (NOx) emissions.

### ■ All-Electric Melting

All-electric melting applies electric current directly to glass materials, making it suitable for relatively small furnaces. This method improves energy efficiency by directly heating materials, instead of relying on radiant heat from combustion flames.

### ■ Hydrogen Combustion

With the support of Air Liquide Japan G.K., AGC successfully conducted a demonstration test of glass manufacturing using hydrogen fuel. And we integrated our hydrogen combustion burners into a section of the conventional oxygen combustion process, which traditionally uses city gas.

#### Cullet Use

In the process of making sheet glass, cullet (glass shards) is used instead of virgin raw materials such as silica sand. Using cullet as a raw material for flat glass reduces the use of virgin and fuel materials, thereby loweing CO<sub>2</sub> emissions during glass production.

## Transition Plan in the Chemicals Business

In the Chemicals Business, the majority of Scope 1 and 2 GHG emissions stem from the operation of brine electrolysis facilities, making the electrification of these facilities and the use of renewable energy are key challenges. Approximately 40% of emissions come from on-site power generation facilities, and the remaining 60% comes from electricity purchased externally.

In response, we are implementing multiple measures in anticipation of greater renewable energy availability in the market. We will promote the use of biomass fuels in our on-site power generation facilities to reduce carbon emissions. Furthermore, we are working to secure long-term stability by expanding the procurement of electricity from renewable energy sources through extended procurement contracts. Furthermore, we are switching to energy-saving electrolyzers to improve energy efficiency.

## **Reduction of Electricity Consumption**

FORBLUE™ FLEMION™ is the world's first ion exchange membrane for brine electrolysis, developed by the AGC Group. The new generation membrane F-9060, announced in 2023, achieves the industry's lowest voltage and highest current efficiency to reduce electricity use and improve carbon emission efficiency during the production of chlor-alkali products. In addition to our in-house use, we contribute to environmental improvement by supplying this product to brine electrolysis manufacturers worldwide.

## ■ Reduction of Fluorocarbon Leakage

In Japan, AGC manages fluorocarbons used as refrigerants in commercial air-conditioners and refrigeration units based on the Act on Rational Use and Appropriate Management of Fluorocarbons, strengthening the operation and management of refrigeration units as well as improving the recovery of refrigerants and optimizing replenishment amounts during maintenance. We will continue effort to reduce fluorocarbon leakages by maintaining prevention measures and gradually replacing aging refrigeration units with state-of-the-art models that use low-GWP refrigerants.

### Fluorocarbon Leakage Volume by AGC Inc.

As a result, AGC's estimated fluorocarbon leakage for fiscal year 2024 was 13,898 t-CO<sub>2</sub>.

## Cross-Segment Initiatives

### Use of Renewable Energy

The AGC Group is introducing renewable energy at its sites around the world. Our sales offices had been prioritized in this initiative, and we have been preparing for and examining the large-scale rollout of renewable energy at our manufacturing sites. A cross-segment structure has been established to support these efforts, with preparations and assessments underway to ensure stable production. Going forward, the AGC Group will promote renewable energy adoption by helping to establish a global framework for renewable energy procurement.

## Reduction of Scope 3 GHG emissions

About 70% of the AGC Group's Scope 3 GHG emissions come from Category 1 (purchased products and services) and from Category 10, 11, and 12 (processing, use, and end-of-life treatment of sold products), which together cover the entire value chain.

In light of this, the AGC Group has set a goal of reducing its Scope 3 GHG emissions by 30% in 2030 compared to 2019, and is developing multiple initiatives in phases and across regions.

## Supplier Engagement

Since Scope 3 GHG emissions are difficult to reduce by the AGC Group alone, strategic partnerships and deeper collaboration are key. The AGC Group is therefore actively participating in industry and theme-specific initiatives aimed at addressing climate change. For example, we attend supplier briefings organized by our customers to understand their expectations and then implement internal initiatives to meet them. We also disclose information through CDP in response to customer requests, thereby contributing to enhanced environmental value across the entire value chain. In this way, the AGC Group will strengthen collaboration across the value chain and promote co-creation of value toward realizing a decarbonized society.

## **Emission Reductions in Procurement and Logistics Areas**

We are promoting emissions reductions from raw materials through the introduction of low-carbon materials and the use of recycled raw materials as outlined below.

- Among glass products, in addition to in-process cullet, we actively recover and recycle cullet from post-use products to reduce the use of virgin raw materials.
- We are conducting a questionnaire survey of suppliers with a view to converting GHG emission factors to primary data. In the medium- and long-term, we are promoting the creation of frameworks to improve product-specific LCA (life cycle assessment) for supply chain emissions.
- Our engagement activities, including recommendations to obtain SBT certification, support emission reduction efforts by our key suppliers.
- In glass logistics, we have introduced special pallets with location data management to improve transportation efficiency and reduce the risk of loss. This contributes to the reduction of GHG emissions from logistics.

## Reduction of Emissions from Use of Products and Disposal

- We are strengthening the development and provision of environmentally conscious products such as high-insulation glass, materials for ZEVs, and low-GWP refrigerants and solvents to reduce environmental impact during the use phase. We also contribute directly to reducing our customers' Scope 1 and 2 GHG emissions.
- We are promoting technological development while incorporating recyclability into the design stage with the aim of enhancing resource recycling at the disposal stage.

## Contribution to the Decarbonization of Society (Avoided Emissions)

Avoided emissions refers to the estimated amount of GHG emissions reduced in the supply chain by replacing conventional products and services with the company's own lower-emission alternatives. The "Guidelines for Assessing the Contribution of Products to Avoided Greenhouse Gas Emissions" published by the Institute of Life Cycle Assessment, Japan defines this as "quantified amount of avoided emissions attributable to the target product throughout its entire life cycle—from raw material acquisition to disposal or recycling—compared to baseline scenario."

In the AGC Group, products that contribute to the environment and energy field account for about 10% of net sales.

Furthermore, as an initiative to reduce environmental impacts throughout the product life cycle, we have begun to assess the environmental impact using LCA methodologies from the planning, design, and development stages of our products. To accelerate our efforts to respond to climate change, we have established and put into effect the AGC Group Product Carbon Footprint (PCF) Guidelines as a new approach to visualizing CO<sub>2</sub> emissions per product. We have been evaluating the impact of our products on climate change based on their carbon footprint, and have now standardized the calculation methodology within the AGC Group. Through these efforts, we will promote the development and provision of products that help reduce environmental impact during use and have longer service lives. We will continue to actively promote the use of LCA methods from the product design and development stage and will leverage the AGC Group's technological capabilities to contribute through our products and solutions in areas where we can help reduce GHG emissions in society.



## Risk Management

The AGC Group considers climate-related risks to be an important management issue and evaluates and responds to them under an integrated management structure. We utilize scenario analysis to supervise and manage at the senior management level, and continuously improve by running a PDCA cycle.

## Risk Management Process

The AGC Group identifies and assesses climate-related risks from short-, medium-, and long-term perspectives based on the AGC Group Risk Management Implementation Rules. Environmental, risk management, and business divisions collaborate to assess the likelihood of occurrence and impact throughout the supply and value chain.

Climate-related risks are assessed from both transition and physical risk perspectives. Regarding transition risks, we refer to the emissions reduction standards set by SBTi and analyze them using scenarios that reflect each country's carbon pricing policies and regulatory trends. We are measuring the magnitude of risk by quantitatively assessing the impact on business costs by assuming changes in carbon prices in 2030 and 2050. We also employ external market data and energy price simulations to examine the impact of the diffusion of low-carbon technologies on each business.

In assessing physical risks, we use the RCP8.5 scenario to analyze risks such as floods, storm surges, and droughts for each of our business sites. We qualitatively assess risk levels on a five-point scale, and for floods and storm surges, we estimate flood risk in 2050 based on facility location data and Aqueduct Floods\* data. We then quantify the financial impact by taking into account the number of days of business suspension in the event of a disaster.

The results of risk identification and analysis are deliberated by the Sustainability Committee, reported to the Management Committee, and reflected in decision-making. Each business division conducts risk assessments at each site and implements continuous monitoring under an integrated risk management framework.

## Integration into Company-wide Risk Management

Under its integrated risk management framework, the AGC Group assesses climate change-related risks every three years and identifies major risk factors. Identified risks are supervised and deliberated by the Management Committee and the Board of Directors in accordance with the AGC Group Enterprise Risk Management Basic Policies, and are addressed on a companywide basis

In addition, based on the AGC Group Risk Management Implementation Rules, the corporate divisions, in-house companies, and strategic business units (SBUs) formulate and implement management plans for important environmental risks. Each organization conducts a self-assessment of its risk management level at the end of the fiscal year, and senior management monitors the results to establish a PDCA (Plan-Do-Check-Act) cycle and promote continuous improvement.

In addition, the Internal Audit Division conducts independent monitoring and regularly verifies the appropriateness of the risk assessment process and the status of risk management. This ensures transparency and effectiveness in our risk management. For more information on how physical risks (natural disasters) are addressed in a short-term perspective, see P.14 of this Data Book.

Furthermore, we update our risk assessment tools and review assessment results each year to enhance the accuracy of risk evaluations. Through these frameworks, the AGC Group integrates climate change risks into its management strategy and aims to achieve sustainable growth.



## **Metrics and Targets**

With the launch of *AGC plus-2026*, which aims at deepening of sustainability management, the AGC Group has set new sustainability KPIs, including addressing climate change, and is strengthening strategic progress management. As risk and opportunity assessment indicators, we manage GHG emission reduction targets, which we have been working on, and growth indicators for products that contribute to the environment and energy sectors, and reflect them in management decision-making.

## Risks and Opportunity Assessment Indicators

#### **Risk Assessment Indicators**

The AGC Group manages Scope 1, 2, and 3 GHG emissions as part of its KPIs and is promoting initiatives to realize a decarbonized society. Scope 1 and 2 GHG emission reduction targets were set in 2021 and the Scope 3 GHG emission reduction target was set in 2022. In addition, our 2030 GHG emissions reduction targets have received certification in 2023 by SBTi as Science Based Targets (SBT) aligned with the "Well Below  $2^{\circ}$ C (WB2 $^{\circ}$ C)" pathway, and comply with internationally recognized science-based standards.

## Reduction Targets for Scope 1 and 2 GHG Emissions:

- Long-term goal: Achieve net-zero carbon emissions by 2050, which covers Scope 1 and 2 GHG emissions.
- Medium-term target (2030):
- Reduce Scope 1 and 2 GHG emissions by 30%\* compared to 2019
- Reduce Scope 1 and 2 GHG emissions intensity (compared with sales) by 50% compared to 2019
- \* The electricity emission coefficient for 2030 is based on the figures determined using the Sustainable Development Scenario (SDS) published by the International Energy Agency (IEA).

### Reduction Target for Scope 3 GHG Emissions:

 By 2030, we aim to reduce Scope 3 GHG emissions by 30% from 2019 levels.

The target is the following major categories, which account for approximately 70% of overall Scope 3 GHG emissions:

- Category 1 (Purchased goods and services)
- Category 10 (Processing of sold products)
- · Category 11 (Use of sold products)
- · Category 12 (End-of-life treatment of sold products)

## **Engagement Targets:**

By 2027, we aim to promote the acquisition of SBT certification by major suppliers that account for 30% of GHG emissions in Category 1 and Category 3.

Approximately 25% of AGC Group's Scope 3 GHG emissions are attributable to emissions from suppliers, and we recognize that cooperation with our suppliers is essential in promoting GHG emission reduction initiatives. Therefore, we have established specific requirements for transactions, such as "accurately disclosing information on environmental impact substances designated by the AGC Group within the specified time frame"

<sup>\*</sup> Aqueduct Floods: A database of flood and storm surge inundation depths under current and future climate conditions provided by the World Resources Institute (WRI).

and "cooperating with the AGC Group's environmental activities," to facilitate smooth engagement.

## **Opportunity Assessment Indicators**

The AGC Group sees addressing climate change as a new growth opportunity and is advancing the expansion of products that contribute to environmental and energy solutions. Currently, environment and energy-related products account for about 10% of the Group's total sales. We will continue to expand areas where we can contribute to reducing GHG emissions by leveraging our technological capabilities.

We have set the following as part of our sustainability KPIs for **AGC plus-2026** to visualize the value created through addressing climate change.

- Architectural glass products: Accelerate the spread of energyefficient high-insulation glass by setting the "shipment volume index for architectural products contributing to GHG reductions" as a KPI
- Chemical low-GWP products: Promote market growth of low-GWP refrigerants and solvents by using "GHG emission reduction contribution index" as a KPI.

These indices use 2022 as the baseline (100), and by continuously monitoring growth from 2023 onward, we are accelerating the delivery of social value through our products.

## Progress on Risk and Opportunity Assessment Indicators

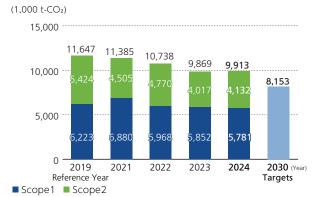
In fiscal 2024, Scope 1 and 2 GHG emissions totaled 9,913 thousand t-CO<sub>2</sub> and GHG emissions intensity per unit of sales was 0.47 thousand t-CO<sub>2</sub> per 100 million yen, representing reduction of 15% and 39% compared to the 2019 reference year.

The actual Scope 3 GHG emissions covered by SBT in fiscal year 2024 were 6,860 thousand t-CO<sub>2</sub>, a 39% reduction compared to the 2019 base year.

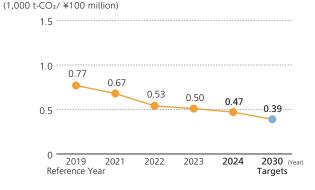
## Scope 1 and 2 GHG emissions

Compared to the previous fiscal year, we promoted initiatives to reduce emissions, such as expanding procurement of renewable electricity—mainly in Europe—and progressing fuel conversion in the glass melting process. However, due to fluctuations in production activities and other factors, total Scope 1 and 2 emissions increased by approximately 40,000 t-CO<sub>2</sub>.

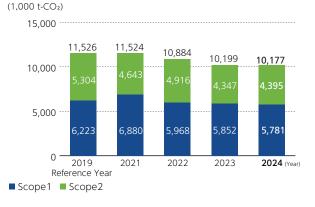
## ▶ Scope 1 and 2 GHG emissions (market-based)



## ▶ Scope 1 and 2 GHG emissions intensity (market-based)



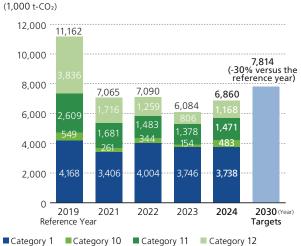
## ► (Reference) Scope 1 and 2 GHG emissions (location-based)



## Scope 3 GHG emissions

Reductions in Category 10, Category 11, and Category 12 have been achieved by converting fluorocarbon products sold by the AGC Group to products with lower global warming potential.

## ► Scope 3 GHG emissions (SBT target category)



= Category 1 = Category 10 = Category 11

For a breakdown of all Scope 3 GHG emissions, including categories not covered by the SBT target, see P.63 of this

Sustainability Data Book.

## **Engagement Targets:**

Through ongoing communication with key business partners, including an annual supplier questionnaire, the AGC Group encourages them to obtain SBT (Science Based Targets) certification and set GHG emission reduction targets based on scientific evidence.

We have been conducting supplier questionnaires since 2021, and in 2024, we requested responses from 73 target suppliers. Every year, the Procurement Division takes the lead in reviewing and improving the content of the questionnaire, and we believe that the quality of engagement is steadily improving along with the increase in response rates.

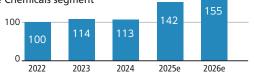
These initiatives will also contribute to the establishment of a system for collecting primary data (such as GHG emission factors by raw material) in the future and to laying the foundation for refining Scope 3 emissions.

## Achievements in Opportunity Assessment Indicators

▶ Shipment volume index for architectural products contributing to GHG reduction\*1



► Index for GHG emissions reduction by low-GWP products in the Chemicals segment



<sup>\*1</sup> Figures converted from 2023 on using 2022 as a base of 100.

## Reliability of GHG emissions calculations

### **Performance Management**

In 2020, the AGC Group began full-scale operation of an online platform to centrally manage various environmental performance data, including Scope 1, 2, and 3 GHG emissions, with the aim of accurately understanding and strengthening the management of GHG emissions. Doing so has helped us visualize emissions at each

site and identify challenges to reduction, improving the accuracy of analysis and responses.

Furthermore, from 2023 onward, we have set plans each year for Scope 1 and 2 emissions and created a PDCA-based management framework that integrates target-setting and performance tracking for Scope 1 and 2 emissions. We are stepping up quantitative and more practical initiatives to ensure the achievement of our medium- to long-term reduction targets.

## **Scope 1 and 2 GHG Emissions Calculation Conditions**

- Scope/Target: The organizational boundary for calculating GHG emissions within our Group is set based on the control approach defined by the GHG Protocol, and covers business entities over which the Group has financial control. Based on this, AGC Inc. and its affiliates (excluding associated companies and equity method affiliates) are included in the scope of calculation. However, among these, small sites (small sales offices, offices, etc.) with less than 50 employees and no environmental risk, calculation is optional. The sites in scope are 128 in total, including manufacturing and non-manufacturing sites of Group companies, including AGC Inc.
- Operational boundary: Target GHGs are those defined by the GHG Protocol and include CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFC, PFC, SF<sub>6</sub>, and NH<sub>3</sub>.
- ◆Scope 1 GHG emissions: AGC Inc. calculates greenhouse gas emissions based on the Act on the Rationalization of Energy Use and Shift to Non-fossil Energy (Act on the Rational Use of Energy) and the Act on the Promotion of Global Warming Countermeasures (Global Warming Countermeasures Act). Other sites in Japan and other countries calculate greenhouse gas emissions based on the GHG Protocol from major emission sources owned and managed by AGC.
- Scope 2 GHG emissions: Greenhouse gas emissions associated with the production of purchased energy such as electricity, steam, and heat are calculated.
- Activity volume: Values compiled in the AGC Group's environmental database system from January 1 to December 31, 2024.
- Emission factors:
- ◆Scope1:

<Heat generation and emission coefficients> Values specified by the Act on the Rational Use of Energy and the Global Warming Countermeas-ures Act, or theoretical values and values from academic literature are used. However, if emission factors provided by fuel suppliers or local governments and industry organizations are available, those shall be given priority. <**GWP>** The values in the IPCC Fifth Assessment Report (AR5) are used. For fluorocarbons (HFCs, PFCs) not specified in AR5, values set by AGC determined with reference to sources such as the GWP notification under the Act on Rational Use and Proper Management of Fluorocarbons and the IPCC Sixth Assessment Report (AR6), are used.

#### ◆Scope2:

- <Electricity (market-based)> Coefficients based on electricity contracts or renewable energy certificates/energy attribute certificates, emission factors published by electric power companies, residual mix factors from the Association of Issuing Bodies (AIB), etc. are used. When these factors are not available, location-based emission factors are used.
- <Electricity (location-based)> Country/region average emission factors such as the average factor specified in the previous section of the Global Warming Countermeasures Act (Japan), IEA Emissions Factors, and Sphera databases (for other regions ) are used.
- <Steam and heat> The emission factors specified in the Act on the Rational Use of Energy and the Global Warming Countermeasures Act are used. However, if certificates are used or emission factors provided by steam or heat suppliers are available, these are used instead.
- Others: Other detailed calculation conditions, such as quality standards for renewable energy certificates and energy attribute certificates, and rules for reporting for activity data, are calculated in accordance with the internal standards stipulated under the AGC Group Greenhouse Gas Calculation Guidelines and AGC Group's Environmental Performance Data Guidance, which were created based on the GHG Protocol.
- Scope 2 GHG Emissions Ensuring reliability and consistency in renewable energy procurement
   The AGC Group is adopting reliable and transparent tracking methods for the procurement of renewable energy to reduce
   Scope 2 GHG emissions. Currently, we are utilizing non-fossil certificates (with tracking), on-site solar power generation, renewable energy power menus, and the like, and quantitatively evaluating the emission reduction effects at each site in accordance with the GHG Protocol Scope 2 Guidance.

In addition, we will take into consideration regional differences in electricity supply and strive to use certificates within the same system. Going forward, we plan to gradually shift to additional renewable energy sources such as PPAs and on-site power generation.

#### **Scope 3 GHG Emissions Calculation Conditions**

- Scope of calculation:
- ◆ Organizations subject to calculation: AGC Inc. and its affiliates (excluding associates and equity method affiliates) are included in the scope of calculation based on concept of the financial control. However, among these, small sites (e.g., sales offices and branch offices) with fewer than 50 employees and no environmental risk are considered optional for calculation. In addition, there are Scope 3 categories that are not in scope for calculation depending on the location. For example, Category 1 and Category 4 are related to products and raw materials, and therefore are not in scope for calculation at non-manufacturing locations.
- ◆Scope 3 Categories in scope for calculation: In principle, the 15 categories specified by the GHG Protocol are subject to calculation. However, in cases where there are no applicable activities, emissions are negligible, or carbon emissions cannot be calculated, they may be excluded from calculation on an exceptional basis. Please refer to P.63 of this Data Book for details on the scope of calculation, including excluded Scope 3 categories from the calculation and the number of locations covered per category.
- Operational boundary: Emissions are calculated for greenhouse gases as defined by the GHG Protocol. In addition, Category 10, 11, and 12 include non-energy-related GHG emissions outside the seven gases, such as HCFCs and HFOs in

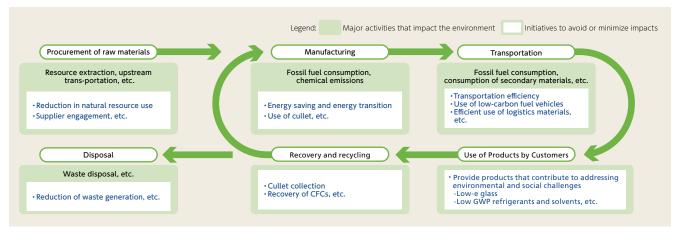
the calculations.

 Activity volume: Category 1, 3, 4 (including procurement logistics), and 5 use values collected in the AGC Group's environmental database system from January 1 to December 31, 2024. Other Scope 3 categories use values from securities reports (capital goods purchase costs), internal data (product shipment volumes, business travel expenses, transportation costs, etc.), and data published on public websites (Scope 1 and 2 GHG emissions from investee companies).

# Initiatives toward Achieving Climate Change Targets

The AGC Group is promoting a multifaceted approach to climate change to enhance its competitiveness and address social issues. In addition to reducing actual GHG emissions through fuel conversion, effective utilization of glass waste, logistics efficiency improvements, and the Joint Crediting Mechanism (JCM) system, we are also focusing on products' contribution to GHG reduction and requesting GHG reductions throughout the entire supply chain. We actively participate in rule-making activities such as standardization

▶Impacts and Initiatives across the Value Chain (from the perspective of "addressing climate change")



and policy proposals, aiming to be a driving force for the advancement of the industry as a whole.

## Initiatives in Rule-Making

Many environmental issues are difficult to resolve through the initiatives of individual companies alone, and coordination across the industry and entire value chain is essential. Fair and effective standards and rules must be established as a prerequisite for this coordination. In addition to developing and providing products that contribute to reducing environmental impact, the AGC Group is promoting standardization and rule-making initiatives with the aim of contributing to the design of systems that enhance the sustainability of society as a whole by applying the knowledge and expertise it has cultivated through research, manufacturing, and development.

In fact, we participated in the ISO-led rule-making process for the standardization of buildings aimed at achieving a net-zero balance of primary energy consumption, known as Zero Energy Buildings (ZEBs). Using these technical specifications, we engage in activities to promote ZEB in emerging countries in Asia.

### GHG emissions reduction

## Low carbonization of architectural glass products

The AGC Group proactively utilizes cullet (waste glass) as a substitute for virgin raw materials such as silica sand in the manufacture of flat glass. This initiative aims to reduce CO<sub>2</sub> emissions associated with raw material extraction, refining, and transportation, thereby contributing to the reduction of Scope 1, 2, and 3 GHG emissions.

Using 1 ton of cullet is estimated to reduce the use of virgin raw material by about 1.2 tons and reduce GHG emissions by 0.5 to 0.7 tons (Scope 1, 2, and 3). The reuse of cullet which would otherwise be landfilled in Japan, also contributes to conserving natural resources and promoting a circular economy\*.

\* 自社推定値

#### Collaboration with Other Companies: VOLTA Project

The AGC Group is developing technology for a hybrid furnace that uses both electricity and oxygen combustion with the aim of significantly reducing GHG emissions in flat glass manufacturing.

Traditionally, air combustion using heavy oil or natural gas has been the main heat source in flat glass manufacturing. However, this initiative employs a method in which 50% of the heat source is provided by electric melting, with the remaining 50% supplied by oxygen combustion using natural gas. This is expected to reduce nitrogen oxides (NOx) in combustion exhaust gases and significantly reduce GHG emissions.

In Europe, AGC Glass Europe inaugurated the world's first industrial-scale hybrid furnace, the "VOLTA" production line, at its Barevka Plant in the Czech Republic.

## For more information on the project, please click here.

## Scope 3 Emissions Reduction

## Category 1: Reduction of CO<sub>2</sub> emissions associated with purchased products and services

Supplier engagement: We have conducted engagement with 73 suppliers, accounting for 70% of Scope 3 Category 1 and Category 3 emissions, by sending a questionnaire on their climate change initiatives from the Procurement Division. Through this communication, we are encouraging the suppliers targeted by the survey to set GHG reduction targets based on scientific evidence (i.e., targets in accordance with the SBT initiative).

According to the results of a supplier questionnaire conducted in 2024, 33 out of 73 suppliers (45%) have set Scope 1 and 2 GHG emissions reduction targets. Of these, six companies have obtained SBT certification, and 21 companies are considering obtaining SBT certification, accounting for 37% of the companies surveyed through the questionnaire. Please refer to P.43 of this Data Book for the amount of GHG emissions reduction achieved by reducing the use of virgin raw materials such as silica sand through the reuse of cullet (waste glass).

## Category 4: Reduction of CO<sub>2</sub> Emissions from Upstream Transportation and Distribution

At the Kashima Plant, AGC attached RFID tags to approximately 20,000 dedicated pallets for transporting sodium bicarbonate, leading to an increase in recovery rates from customers. This decreased opportunity loss in pallets and eliminated the GHG emissions that would have occurred from producing replacement pallets. At the same time, it has helped to reduce GHG emissions by increasing efficiency in transportation through the use of more accurate position information.

In addition, AGC Architectural Glass Europe & Americas Company is working on green logistics throughout the entire process, from manufacturing and processing to transportation of finished products, in collaboration with its logistics business partner in Europe. We are working to reduce GHG emissions through innovative initiatives such as streamlining transportation

during processing and introducing low-emission vehicles. In 2023, we succeeded in switching the diesel fuel used for transportation in Italy to hydrotreated vegetable oil (HVO) fuel produced from 100% renewable raw materials.

## Contribution to International Decarbonization Through the JCM (Joint Crediting Mechanism)

The AGC Group is actively participating in the Joint Crediting Mechanism (JCM) led by the Japanese government, with the aim of climate change mitigation and achieving sustainable growth.

The JCM is a system that achieves reductions in greenhouse gas emissions through cooperation with partner countries and shares the results with both countries, serving as an important framework for achieving international net-zero emissions.

The AGC Group endorses the principles of this system and is contributing to the transition to decarbonization in various countries through businesses that utilize its low-carbon

Partner country	Adoption year	Project name	Assumed GHG emissions reduction (tCO <sub>2</sub> / year)
Indonesia	2024	Energy-saving project in the automotive glass manufacturing process	10,715
Indonesia	2023	Improvement of combustion methods and furnace configuration in the flat glass manufacturing process	5,747
Thailand	2022	Installation of ORC waste heat recovery power generation equipment at a flat glass manufacturing plant facility	7,845
Thailand	2016	Introduction of high-efficiency ion- exchange membrane electrolyzers cells in caustic soda manufacturing plants	2,591

## For more information on the project contributing to JCM, click here.

## Use of Carbon Credits

In 2024, the entire group retired carbon credits equivalent to about 493 GWh. However, in accordance with the GHG Protocol and SBTi (Science Based Targets initiative) standards, we have not offset any GHG emissions from Scope 1, Scope 2, or Scope 3 reported in this Data Book.

## Contribution through our products

## **Products of the Glass Business**

#### Low-E insulated glass

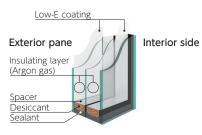
#### Product Introduction

Glass with an insulating layer created by sealing dry gas (air, argon, etc.) between the glass panes to improve the thermal insulation performance of the glass. Low-E film on the glass further enhances thermal insulation and heat shielding performance. Preventing heat from entering or escaping through windows not only keeps rooms comfortable, but also improves the efficiency of heating and cooling, contributing to electricity savings.

### **Environmental Considerations**

According to an estimate by the Flat Glass Manufacturers Association of Japan, replacing single-pane window glass in homes with Low-E insulated glass can reduce operational carbon emissions by 160 kg per square meter of window over a 20-year period\*.

\* Flat Glass Manufacturers Association of Japan. "Digest Version of the Report by the Special Committee for Reevaluation of CO<sub>2</sub> Emissions and Reduction Effectiveness Indicators, Whole Life Carbon Subcommittee, Sustainability Special Committee." Flat Glass Manufacturers Association of Japan. Cited from https://www.itakyo.or.jp/upload/digest\_1p.pdf



Click here for more detailed product information(Japanese article only)

## Low-E coated glass for automotive panoramic roofs

## Product Introduction

Low-E glass products designed for automotive applications Environmental Considerations

Roof glass with a special metal coating is designed to prevent heat from entering from outside the vehicle while minimizing heat loss from inside. This helps achieve comfortable cabin temperatures while reducing environmental impact.

## Conventional Panoramic roof with panoramic roofs Low-E coating Cool in summer (Heat-shielding) ecial metal coating Reduces radiant heat from heated glass to approx. 1/5\* Conventional Panoramic roof with Low-E coating panoramic roofs Warm in winter (Heat-insulating) pecial metal coating Reduces heat dissipation

from the glass to about

Click here for detailed product information

\* These are our values measured by the Company, and are not guaranteed values.

#### ATTOCH™ MadoMado™

### Product Introduction

ATTOCH™ is a glass product that is mainly used to retrofit existing glass in buildings and other structures from the inside with Low-E double-glazed glass. MadoMado™ is a high-performance interior window product mainly installed on the inside of residential windows. Both products contribute to energy savings by improving the heat shielding and insulation performance of existing buildings without having to replace sashes or glass. Another feature is that they are installed from the inside, eliminating the need to install external scaffolding around buildings, and thus reducing installation time and costs for customers.

#### **Environmental Considerations**

In addition to saving energy in existing buildings, they also contribute to the effective use of resources by eliminating waste.

#### ATTOCH™ Retrofitted Low-E glass for current installations



Anti-condensation

By retrofitting windows with Low-E glass (insulating glass) from the inside, it is possible to install double-glazing glass with high energy conservation properties.

Double-glazing window for comfortable environments

Insulation

Heat shielding

Anti-condensation

MadoMado™

This product is retrofitted to existing window frames and glass by attaching an additional sheet of high-performance glass on the inside.

⊕ Click here for detailed product information (ATTOCH™) (MadoMado™)

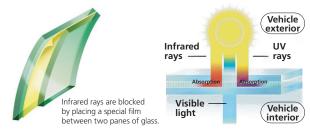
### Cool Verre™

#### **Product Introduction**

Cool Verre<sup>TM</sup> is automotive glass that, in addition to providing puncture resistance, shatter resistance, and UV protection of laminated glass, features infrared (IR) protection to reduce skin discomfort from the sun's rays.

#### **Environmental Considerations**

By suppressing the rise in cabin temperature and improving cooling efficiency, it contributes to extending the cruising range of EVs and reducing CO<sub>2</sub> emissions.



Click here for detailed product information

#### Low-carbon glass

## **Product Introduction**

This product has the same appearance, quality, and performance as conventional float glass, but with a lower carbon footprint. Harnessing the technologies of Architectural Glass Europe & Americas Company, it is manufactured using sustainable raw materials, highly energy-efficient melting furnaces, renewable energy, and efficient transportation.

#### **Environmental Considerations**

It reduces the carbon footprint to approximately 40% of that of conventional products, contributing to the reduction of embodied carbon in buildings.

Click here for detailed product information

### **Chemicals Business Products**

#### AMOLEA™ Series (1234v. 1224vd. AS-300)

#### Product Introduction

This is a series of an HFO-based next-generation refrigerants and solvents. It is used in a variety of applications, such as foaming agents for automotive refrigerants and refrigerator materials, and as a solvent for cleaning precision equipment.

#### **Environmental Considerations**

While the global warming potential (GWP) of HFCs is approximately hundreds to thousands of times that of CO<sub>2</sub>, the GWP of all products in this series is equal to or less than that of CO<sub>2</sub>, and switching to these products is expected to contribute to the mitigation of global warming. By replacing conventional products with the AMOLEA<sup>TM</sup> Series, it is possible to reduce the LCA environmental impact to around 1/10. This has the benefit of reducing greenhouse gas emissions by the equivalent of more than 10 million tons of CO<sub>2</sub> per year in Japan alone\*.

\* Estimated amount when all HFC134a and HFC245fa supplied in Japan are replaced with AGC's HFO product range (AMOLEA™ 1234yf, AMOLEA™ 1224yd)



Click here for detailed product information

### FORBLUE™FLEMION™

## Product Introduction

This is an ion-exchange membrane for brine electrolysis. It is used in the production of caustic soda, caustic potash, chlorine, and hydrogen.

#### **Environmental Considerations**

We have reduced electricity use and improved carbon emissions efficiency during the production of chlor-alkali products.



Click here for detailed product information

## **Ceramics Business Products**

## THERMOTECT WALL<sup>TM</sup>

### Product Introduction

THERMOTECT WALL<sup>TM</sup> is a furnace wall material made of multiple layers of THERMOTECT<sup>TM</sup> monolithic refractories. By applying several types of THERMOTECT<sup>TM</sup> with high thermal insulation performance, we construct ceramic furnace walls that combine heat resistance in high temperature ranges up to 1,700° C and high thermal insulation performance for industrial furnaces.

## **Environmental Considerations**

THERMOTECT WALL<sup>TM</sup> enables the application of industrial furnaces in various industries by thinning the furnace walls, and contributes to reducing heat loads and improving energy efficiency in high-temperature facilities due to its high thermal insulation properties.

Furthermore, since it does not contain any RCF\* (refractory ceramic fiber), impacts on human health and the environment during construction can be reduced.

\*RCF is designated as a Class II substance (special controls).



Click here for detailed product information

## Effective Use of Resources



## Fundamental Approach

The AGC Group has identified "effective use of resources" as one of its long-term social issues (materiality) and is working to strengthen sustainable resource use in preparation for medium- to long-term risks such as resource depletion and rising and fluctuating raw material prices. Furthermore, advanced resource utilization is one of the key pillars for realizing the AGC Group's social value of "Blue planet."

Initiatives to pursue resource circulation from the manufacturing stage to the end of life, such as the reuse of glass cullet, effective utilization of by-products, and introduction of renewable energy, contribute not only to strengthening resilience against supply constraints but also to improving cost structure flexibility. We believe that such initiatives, combined with the development of products with low environmental impact, will lead the transition to a circular economy and strengthen the AGC Group's medium to long-term competitive advantage.

# Overall Picture of Activities (Risks and Opportunities)

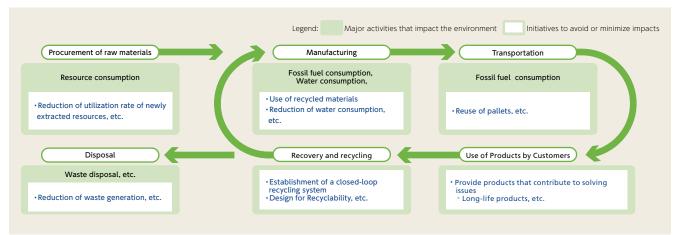
The "Global Resources Outlook 2024"\* published by the International Resource Panel in 2024 points out that increasing resource use is a major driver of the triple planetary crisis of climate change, biodiversity loss, and pollution and waste. Furthermore, over the past 50 years, the world's population has doubled and GDP has quadrupled. As a result, the extraction and processing of material resources for human economic activities has increased tripled, causing more than 90% of biodiversity loss and water stress, and more than 55% of greenhouse gas emissions, according to the report. With global demand for resources expected to continue growing, there are concerns that the impact on corporate business activities will become more severe.

\* Global Resources Outlook 2024 | Resource Panel

## Risks Associated with Resource Depletion

The AGC Group depends on natural and water resources in many of its business activities, such as the manufacture of glass and chemicals, and the sustainable use of these resources is a prerequisite for the continuity of its business. If the demand for resources increases in the future, leading to higher procurement costs and stricter regulations on their use, it will inevitably affect the cost structure and supply stability of our

▶ Value Chain Impact and Initiatives (from the perspective of "effective use of resources")



business. Further, excessive use of resources increases the burden on local communities and the global environment, which in turn impacts corporate trust and reputation. Recognizing the impact of its activities on the social infrastructure, the AGC Group strives to minimize risks through the efficient and responsible use of resources, including optimizing resource input, minimizing waste generation, and maximizing recycling rates.

### Opportunities Related to Resource Utilization

The sustainable use of resources reduces environmental impact and creates new growth opportunities for the AGC Group as a material manufacturer. In addition to its ongoing efforts to recycle waste glass and fluorinated products, the AGC Group is focusing on developing products and solutions that contribute to the realization of a circular economy. Furthermore, we are creating new value that goes beyond regulatory compliance through initiatives to improve resource efficiency in collaboration with stakeholders. Taking resource constraints as an opportunity, we are striving to address social demands while producing economic outcomes by enhancing our eco-friendly business models and our ability to respond to customer needs.



## Effective Use of Natural Resources

## Policy and Approach

Effective use of resources contributes to the realization of a sustainable society and plays an important role in the continued growth and evolution of the AGC Group.

By reducing the utilization ratio of new extracted resources, we can make effective use of limited resources and suppress energy consumption and environmental impact associated with mining and processing. In addition, promoting waste reduction contributes to reducing land use and the environmental impact associated with landfills.

### Targets

Reduce utilization of newly extracted resources (monitoring indicator)

Considering the diversity of our Group's businesses and products, we identify raw materials that can be reused by each in-house company, set targets, and strive to improve performance. For example, in the Glass Business, we monitor the reuse rate of waste glass.

Based on the results of monitoring at each in-house company, we will consider setting targets in the future.

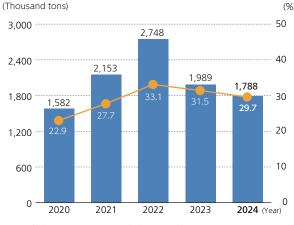
• Introduction of non-fossil-derived materials such as biomass materials

From 2020 to 2025, we aim to promote the introduction of non-fossil-derived materials such as biomass materials.

## Achievements

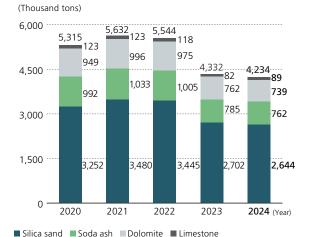
· Reduction in use of newly extracted resources

## ▶ Amount and Ratio of Recycled Materials Used as Glass Inputs



- Recycled amount —— Recycled ratio (right)
- \* Recycled amount ÷ (Recycled amount + newly extracted resources) Recycled resources: Recycled cullet and collected salt cake

## ▶ Resource Input for Main Raw Materials for Glass



See P.53 for the calculation conditions for this data.

## Initiatives

## Raw materials

The AGC Group reduces the use of virgin raw materials by recycling waste glass generated in glass manufacturing and processing. In addition, calcium fluoride (fluorite), which is a raw material for fluorine-based products, is a limited natural resource, and we are promoting the collection and recycling of fluorocarbons and fluorinated film products. These initiatives also contribute to sustainable raw materials use.

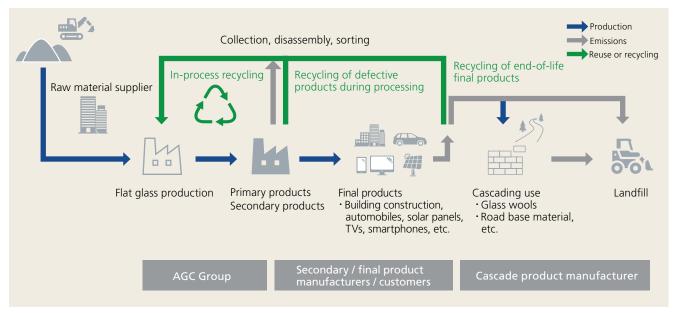
## Manufacturing

## Utilization of Cullet (Waste Glass) as Raw Materials

The AGC Group has made effective use of cullet and glass scraps generated in the glass manufacturing and processing steps.

We use natural resources such as silica sand, dolomite, and soda ash as raw materials in the glass manufacturing process. Even if glass breaks and becomes waste (cullet), heat can be applied to melt it down and remake glass with the same performance as the original glass. The use of cullet reduces the use of virgin raw materials while also reducing CO<sub>2</sub> emissions derived from the

### Glass Cullet Collection Flow



decomposition of carbonate raw materials such as dolomite and soda ash. Also, GHG emissions can also be reduced in the raw material refining process and during transportation of raw materials from overseas. Using 1 ton of cullet can reduce the use of virgin raw materials by 1.2 tons and GHG emission volume (Scope 1–3) by 0.5 to 0.7 tons in CO<sub>2</sub> equivalent, and 1.0 ton of landfill industrial waste\*.

\* AGC's own estimate

## Automotive Window Glass

The Automotive Company is promoting the recycling of automotive window glass. Automotive windows are made of laminated glass, consisting of two layers of glass and an intermediate plastic film. We have started an initiative to collect laminated glass, separate the glass from the intermediate film, and return it to the glass furnaces as cullet.

At the same time, we have also started to recycle the intermediate film. Offcuts of intermediate film generated during manufacturing are collected and returned to the manufacturer for recycling as raw materials in the production of films.

## Glass for Smartphones

Further, the Group makes effective use of glass cullet as a raw material for smartphone glass, which must be of particularly high quality. Most types of smartphone glass are coated, and cullet generated from coated glass is generally difficult to utilize as a glass input because the coating material affects the quality of the glass. Nonetheless, based on strict quality control, the AGC Group uses cullet generated from coated glass as a recycled resource. Also, labeling that shows the percentages of recycled materials in our products is in accordance with ISO 14021 and has acquired certification from third-party organizations.

## Recycling Waste Salt from Chemical Strengthening as Fertilizer Raw Material

AGC Display Glass Yonezawa Co., Ltd. in partnership with Euglena Co., Ltd. has succeeded for the first time in Japan in recycling waste salt generated from the chemical strengthening process of cover glass for automotive displays as a fertilizer raw material. The company chemically strengthens glass using molten salt mainly composed of potassium nitrate. Until now, the salt used in this process has been disposed of by incineration or landfill, causing environmental impact. In addition, nitrogen and potassium contained in waste salt are part of the three essential elements of

fertilizers. Since Japan relies on imports for most of its fertilizer raw materials containing these elements, there were concerns about the stability of supply. This initiative will reduce waste and environmental impact, while also contributing to the stable supply of nitrogen and potassium in Japan. Going forward, the AGC Group will work as one in aiming to recycle waste salt.

## Collection and Recycling of Waste in the Fluorinated Product Manufacturing Process

The Chemicals Company collects and recycles calcium fluoride from waste fluid generated in the manufacturing process for fluorinated products. Furthermore, after customers use hydrofluoric acid in the wastewater treatment process, the company also collects and recycles the waste calcium fluoride generated. We also utilize the offcut materials generated within the fluorinated film manufacturing process as raw materials.

## Transportation

## Reusable Packaging and Transportation Pallets

For many years in Europe, we have been implementing measures for glass transportation pallets and packaging boxes pursuant to European Directive 94/62/EC, which stipulates packaging waste. Traditionally, wooden pallets were used for transporting flat glass. However, we began using iron pallets at an early stage as an effective use of resources. These easy-to-handle and sturdy pallets are retrieved from our customers for reuse. Our reuse rate in Belgium has reached 98%.

#### Product Usage

## Launch of Retrofit-type Photovoltaic Glass Test Sales

From December 2024, AGC has started test sales of a retrofit version of BIPV.

Retrofit Type is a BIPV glass product designed for installation in existing buildings. In the case of general BIPV glass, installation in existing buildings required large-scale renovation work, such as window replacement. Retrofit BIPV can be installed from the interior side of the window glass, so existing sashes and glass can be used as is without replacement, eliminating waste. As another advantage, it can be introduced at a low cost and within a short time frame, and maintenance, repair, and replacement after installation are easy.

## Collection and Recycling

## Recycling of Cover Glass for Solar Panels

The service life of solar panels, which are the main source of renewable energy, is estimated to be 20–30 years, and the recycling of cover glass, which accounts for more than 60% of the weight of the panels, is considered a key challenge. The AGC Group is promoting initiatives for recycling cover glass in Japan and Europe. AGC communicated its commitment toward promoting glass recycling at the Japan Pavilion organized by Japan's Ministry of the Environment at the 29th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP29), held in Baku, Azerbaijan, from November 11 to 22, 2024.

#### Japan

Hundreds of thousands of tons of used solar panels are expected to be disposed of annually from the late 2030s. In 2023, AGC collaborated with a panel recycling operator to overcome technical challenges through a special heat treatment process, successfully utilizing approximately 24 tons of cover glass from solar panels as raw material for flat-figured glass for the first time in Japan. In 2024, we succeeded in a demonstration test for recycling cover glass into float glass, which had been considered technically difficult to achieve.

#### Europe

In Europe, the introduction of feed-in tariff (FIT) schemes in the 2000s led to the widespread adoption of solar panels, a trend that is expected to continue in the future. As a result, it is anticipated that the amount of solar panel waste will increase in the future, similar to Japan. AGC Glass Europe has entered into a strategic partnership with ROSI, a developer and holder of solar panel recycling technology, to promote the resource recycling of solar panel cover glass and is advancing initiatives toward recycling.

## Recycling of Waste Glass from Buildings

In Japan, most window glass used in buildings is either used as roadbed material or disposed of in landfills after demolition. In Japan and Europe, the AGC Group is working to establish a system for closed-loop recycling of waste glass generated from building demolition sites, sorting it appropriately, and melting it.

#### Japan

It is estimated that several hundred thousand tons of waste glass originating from buildings are generated annually in Japan. However, recycling it has been considered difficult until now due to challenges such as ensuring the quality of cullet, establishing cost-effective construction methods, and reducing the collection costs for waste glass.

The AGC Architectural Glass Asia Pacific Company has begun closed-loop recycling of waste glass generated from building demolition sites and renovation of housing complexes, in collaboration with major general contractors and various business partners in the venous industry. In 2023, we carried out horizontal recycling of more than 200 tons of waste glass, reducing the use of virgin raw materials derived from natural resources by approximately 240 tons and leading to a GHG emission reduction (Scope 1–3) of approximately 120 tons. In the future, we aim to expand this scheme by promoting further participation of partner companies.

## Recycling of Waste Glass from Store Equipment

In 2024, we successfully recycled approximately 4 tons of discarded shelf glass (equivalent to approximately 30 stores) collected from aging equipment at 7-Eleven stores and used the recycled glass as raw material to produce new flat glass. This flat glass was then reused as components in new store construction, marking the first successful glass resource circulation for store equipment in Japan. In this collaboration, flat glass made partly from discarded shelf glass is used as a glass materials for refrigerated display cases in 7-Eleven stores.

#### Europe

The AGC Architectural Glass Europe & Americas Company is also promoting efforts to recycle waste glass during building demolition.

For details and project examples, please visit AGC Glass Europe's website.

## Recycling of Fluorine Products

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

Since 1997, the AGC Group (Japan) has been recovering used fluorocarbon products from customers and then destruction and recycling them at the AGC Chiba Plant. The volume has been rising in recent years, and in 2024, fluorocarbons equivalent to approximately 1.02 million tons of CO<sub>2</sub> were collected, and the calcium fluoride obtained through the destruction process was chemically recycled as raw material.

We are also working on material recycling of fluorinated film. As for used ethylene tetrafluoroethylene (ETFE) films, such as the F-Clean<sup>TM</sup> ETFE film for agricultural greenhouses, used fluoropolymer resin films from customers are retrieved in special bags, then cleaned, crushed, and recycled into fluoropolymer resin molded products such as waterproofing films.

## Reuse of Refractory Materials

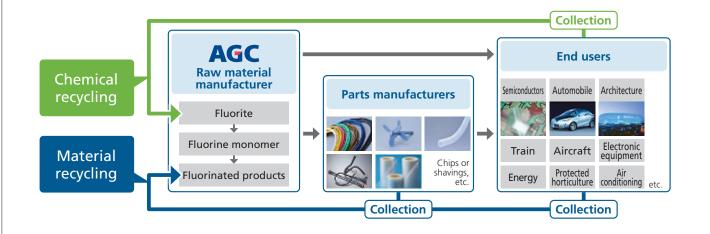
AGC Plibrico Co., Ltd. provides monolithic refractories for use in steelmaking processes, such as in blast furnaces at steelworks, and engages in activities to recycle and reuse used refractories.

Furthermore, AGC Ceramics Co., Ltd. undertakes research and pilot testing related to the recycling and reuse of refractories for glass kilns.

## **Initiatives with Stakeholders**

## Full-scale Launch of a Regional Co-creation Project to Promote Resource Recycling of Glass

AGC launched a full-scale regional collaboration project in 2023 to realize a resource circulation system for glass, utilizing a glass melting furnace located in SUWA Glass Village in Suwa City, Nagano Prefecture. Opened in April 2023, the Suwa Glass Open Lab within the SUWA Glass Village has been conducting various glass-based demonstration experiments in collaboration with local companies in Suwa City. Demonstration experiments are being conducted to melt all types of glass waste from the community and create new glass. Additionally, it provides a venue for visitors to learn about issues related to glass recycling and resource circulation.



## Participation in the WorldGBC APN Resources and **Circularity Readiness Framework**

## ❖ WorldGBC APN

⊕ WorldGBC APN Official Website | Top Page

Overview: An international organization that connects Green Building Councils (GBCs) around the world with the aim of realizing a sustainable building and construction sector.

Purpose of participation: As a provider of building materials and solutions, we are participating in initiatives to improve the sustainability of the building and construction sector from the perspectives of decarbonization, resource efficiency, and health throughout the entire supply chain.

Achievements: AGC Asia Pacific Pte. Ltd. participates as a partner in the WorldGBC Asia Pacific Network, supporting the regional rollout of global programs such as Advancing Net Zero, Better Places for People, and Circularity Accelerator, and promoting the creation of a sustainable building and construction market.



## Participation in Initiatives for Effective Use of Resources

### Circular Partners

⊕ Circular Partners Official Website | Top Page

Overview: A public-private partnership established by the Ministry of Economy, Trade and Industry to promote collaboration among industry, government, and academia with the aim of realizing a circular economy in Japan by promoting the efficient and circular use of resources and maximizing added value.

Purpose of participation: In order to further promote initiatives for using resources effectively, it is necessary to establish a supply chain in collaboration with many stakeholders, in addition to verifying quality, cost, and technology. Therefore, we participate in the initiative as an opportunity to explore new business partners and share our own initiatives.

Achievements: We participated as an observer in the domainspecific working group of the Vision Roadmap Review Working Group and provided opinions on the discussions as appropriate. We also communicate our goals and initiatives.



## Contribution through our products

**Glass Business Products** 

### Thermocline™

### **Product Introduction**

This double-glazing glass replaces the spacer, moisture-absorbing material, and sealing material that normally make up doubleglazed glass with a single-layer resin spacer developed independently by AGC. The simple structure creates high durability and high thermal insulation. Compared to conventional insulating glass, fewer components are used, and its separable structure facilitates recycling. It also features a longer service life.

### **Environmental Considerations**

The long service life of this double-glazing glass contributes to reducing resource consumption and waste generation throughout the entire life cycle of buildings, thereby helping to reduce environmental impact from an LCA perspective.



Simple structure of Thermocline™

Click here for detailed product information (Japanese article only)

## **Chemicals Business Products**

#### F-CLEAN™

### **Product Introduction**

F-CLEAN™ is a fluoropolymer resin film for greenhouses.

### **Environmental Considerations**

While ordinary agricultural film has a life span of between three and five years, F-CLEAN™ lasts for over 30 years with almost no deterioration, thereby helping reduce plastic waste. In addition, as described on P.50, we are promoting resource recycling by collecting and recycling used products after use.

Click here for detailed product information

#### LUMIFLON™

#### Product Introduction

This is a solvent-soluble fluoropolymer resin used as a raw material for various paints and coating agents for anti-corrosion and construction applications.

#### **Environmental Considerations**

These paints offer high weather resistance and corrosion protection, eliminating the need for repainting for several decades, and they also reduce opportunities for the emission of volatile harmful substances associated with painting.

Click here for detailed product information

## Effective Use of Water Resources

## Fundamental Approach: Water as a Shared

The AGC Group draws on approximately 80 million cubic meters of water annually for its business activities, including for polishing in glass manufacturing and as raw material for the Chlor-Alkali Business. In addition, approximately 850,000,000 (850 million) m<sup>3</sup> of seawater is withdrawn for use in cooling facilities and other purposes. We view water as not only a crucial resource for the AGC Group, but it is also a precious resource for companies and citizens in the entire water basin. Therefore, we will also work to achieve "efficient use of resources" specific to materiality in relation to water resources. To address effective management of water resources and water depletion risks, we are working to minimize environmental impact by monitoring water withdrawal, recycled volume, amount of wastewater, quality, and consumption, while striving to use water efficiently.

The AGC Group has always endeavored to use water resources efficiently and reduce pollutants in all phases of the value chain in accordance with its Group Environmental Policy. In addition to develop technologies for water resource use and purification in its own production activities, the AGC Group will continue to actively developing products that can reduce water resource consumption and water pollution around the world.

## Targets

We set targets for each in-house company and site based on the characteristics of their businesses and locations. For example, we have set the following as our representative in-house company goals. These in-house companies have high-risk locations in the water risk assessment described below.

## Architectural Glass Europe & Americas Company

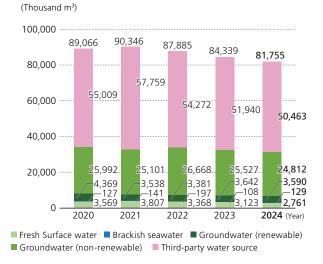
• We aim to reduce water withdrawal per square meter of glass production by 15% by 2030 compared to the 2020 level.

## **Automotive Company**

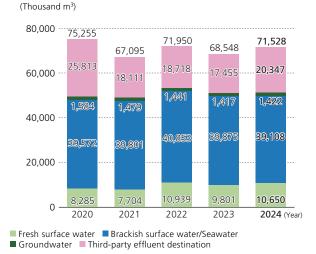
 We set water withdrawal targets per square meter of glass production by 2030, compared to the 2019 level, for each region and we have been making progress.

## Achievements

► Water Intake by Source (excluding seawater for cooling on-site power generation facilities utilized by the Chemicals Company)



► Waste Water Discharge by Destination (excluding seawater for cooling on-site power generation facilities utilized by the Chemicals Company)



See P.53 for the calculation conditions for this data.

## Initiatives

## Assessing the Impact of the Use of Water Resources

The AGC Group recognizes the need for sustainable use of water resources in its business activities, and commits to the appropriate utilization and discharge of these water resources in the future. Given the regional variability of environmental impacts due to water usage and water quality contamination, it is crucial to evaluate water usage at the location of each site.

In 2022, the AGC Group conducted evaluations of water resource usability at each site where its bases are located using three indicators: Baseline Water Stress from the Aqueduct Water Risk Atlas provided by the WRI, as well as the Baseline Water Depletion and Blue Water Scarcity from the Water Risk Filter offered by the World Wildlife Fund (WWF). For each of these indicators, we scored each one on a five-point scale and assigned the highest score from the three evaluations as the final water resource utilization risk for each site. Out of approximately 200 sites, 25 sites received the highest score of 5. By 2027, we will analyze the relationship between water usage and local water stress at 25 high-risk sites and establish activity targets accordingly.

## ► Water Stress Assessment Survey Results (by level, number of sites)

Water stress level	No. of sites
5···High	25
4···Medium to high	29
3···Medium to high	63
2···Low to medium	52
1···Low	20

Note: The evaluation was conducted in 2021. There were 189 manufacturing sites at that time. All 189 manufacturing sites were subject to the evaluation.

## ► Water Stress Assessment: Number of Sites and Water Withdrawal Trends by Level

(Thousand m<sup>3</sup>)

Water stress level	2024	Percentage of total
5···High	2,069	3%
4···Medium to high	11,340	14%
3···Medium	49,304	60%
2···Medium to low	18,189	22%
1···Low	614	1%

## Assessing the Risk of Future Water Scarcity

In 2022, AGC Group also evaluated the risk of water scarcity. We first gathered current information on drought risk at each site from the WRI's Aqueduct Water Risk Atlas and graded risk from A to E. To predict the future impact of climate change on the outcome of this baseline evaluation, two scenarios were used: the IPCC AR5 Atlas of Global and Regional Climate Projection Supplementary Material's RCP 2.6 and RCP 8.5 scenarios. On this basis, we categorized and identified the rate of change in future annual precipitation by 2055 and 2090, giving four distinct cases in total. This evaluation revealed relatively low risks that could not be completely negated in Japan and the Americas. On the other hand, the evaluation identified relatively high risks associated with climate change, mainly in Europe and the Middle East.

Given the possibility of higher water resource prices, the introduction of water resource taxes and the implementation of water extraction regulations that could result in operational stoppages, the AGC Group is implementing region-specific measures, such as the promotion of water-saving initiatives and the installation of water storage tanks at sites where water shortage risks have been identified. Furthermore, to reduce water extraction, we are reusing water used for cooling chemical facilities in a cascading manner while managing water quality.

## **Initiatives at Manufacturing Sites**

## Equipment Support by the Production Technology Division

The Production Technology Division, which is responsible for equipment maintenance and utility management at Group plants across business units, supports the reduction of water usage by improving equipment efficiency.

### Water Shortage Measures

In southern Taiwan, where the manufacturing base of the Electronics Company is located, there is a risk of water shortages due to frequent reductions in dam water levels caused by droughts and other factors, resulting in water restrictions. Therefore, measures are being taken against water shortages.

For example, we have been promoting the reuse of water used for cleaning glass, etc., but in 2024, we focused on process improvement activities to achieve a significant reduction in water consumption and reduce our dependence on water resources. In addition, we have mitigated the risk of business interruption in the event of a drought by installing water storage tanks and establishing a system to transport the necessary water above ground.

### Reduction of Water Consumption

AGC Pharma Chemicals Europe S.L.U. (APCE), one of the Life Science Company's sites, is located in Catalonia, Spain. A drought hit Catalonia, and companies were ordered to reduce their water consumption by 25% compared to 2020–2022 levels. Therefore, APCE has promoted awareness-raising activities to encourage employees to reduce water consumption and has implemented measures such as reviewing the operation of cooling towers and water treatment facilities that consume large amounts of water within its facilities, achieving a 40% reduction in water consumption.

### **Initiatives with Stakeholders**

## Implementation of Water Purification Project in India

AGC Inc. and AGC Engineering Co., Ltd. are conducting a demonstration project in Gurgaon, Maharashtra State to promote the spread of an electrodialysis water purification system for supplying safe drinking water to rural areas, as part of a JICA-supported initiative. This initiative aims to contribute to local residents' access to safe water by introducing an electrodialysis purification system using ion exchange membranes powered by solar power in the area, where groundwater contamination by nitrates is a problem.

## Contribution through our products

## FORBLUE™ SELEMION™

#### Product Introduction

This is a hydrocarbon-based ion-exchange membrane. Desalination (salt removal) or concentration (salt recovery) is used to treat wastewater containing salt and to recover and refine valuable resources.

#### **Environmental Considerations**

Through the provision of electrodialysis processes, we contribute to securing potable water from saline sources and reusing water by desalinating industrial wastewater.

Click here for detailed product information

## Reliability of Resource-related Data Calculations

- Scope: AGC Inc. and its affiliates (excluding associated companies and equity method affiliates) are included in the scope of calculation based on the concept of the financial control standards. However, for small sites (small sales offices, offices, etc.) with less than 50 employees and no environmental risk, calculation is optional. The sites in scope are a total of 119 in total, including manufacturing and non-manufacturing sites of Group companies, including AGC Inc.
- Activity volume: Values reported by the AGC Group's environmental database system in fiscal 2024 (January 1 to December 31, 2024).
- Other detailed calculation conditions are in accordance with the AGC Group's Environmental Performance Data Guidance.

## Considering Relationships with Local Communities and the Environment



## Fundamental Approach

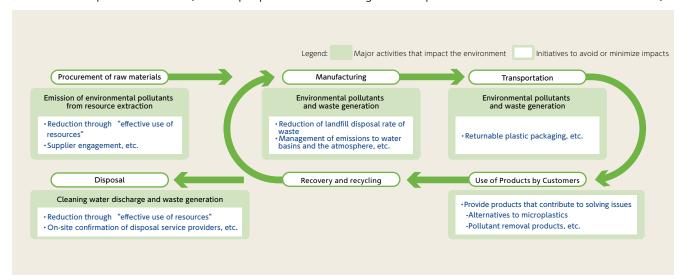
The AGC Group has identified "Considering relationships with local communities and the environment" as one of its long-term social issues (materiality). We recognize that our Group's business activities are built on the foundation of local communities and the environment, and we believe it is essential to ensure that this foundation is not compromised by emissions of environmental pollutants or the generation of waste. For this reason, each manufacturing site has been working to reduce environmental impact by setting voluntary standards that are more rigorous than legally mandated limits for emissions of environmental pollutants and reducing waste generation. Going forward, we will continue to reduce environmental impact throughout all phases of the value chain, from raw materials to product usage and disposal, in accordance with the AGC Group Environmental Policy, in order to realize the social value of "Blue planet," which is one of the cornerstones of the AGC Group's sustainability management.



## Overall Picture of Activities (Risks and Opportunities)

The AGC Group's Glass and Chemicals Businesses require a great deal of energy. Currently, most of this energy is dependent on fossil fuels, so their manufacturing processes generate air pollutants and water pollutants. Various chemicals are used in the manufacturing process, and a large amount of secondary materials, such as plastic, are also used, resulting in a certain amount of waste. The generation and use of these environmentally hazardous substances ultimately lead to air pollution, water pollution, and soil contamination, damaging the foundations of society. We recognize the impact of the Group's business activities on the social infrastructure and strive to minimize that impact while contributing to the resolution of social issues through our solutions.

## ▶ Value Chain Impact and Initiatives (from the perspective of "Considering relationships with local communities and the environment")



## Waste Reduction

## **Policy and Approach**

Waste generated during the manufacturing process is examined for potential reuse or recycling, and is utilized effectively to the extent possible. Any remaining waste is disposed of as industrial waste in accordance with established procedures. The continuous generation of industrial waste may lead to strained treatment facilities, a rise in future treatment costs, stricter regulations, and other issues, which could pose risks to the Group.

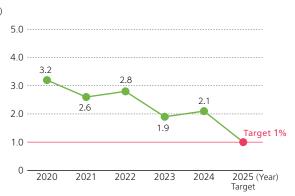
Therefore, we believe we must continue reducing waste generation in order to mitigate future risks.

## Targets and Monitoring Indicators

• Landfill disposal rate of less than 1% for the AGC Group in 2025

#### Achievements

## ► Changes in Landfill Percentage



The actual rate for 2024 was 2.1%. After setting the target, initiatives to reduce final waste at each stage of the value chain progressed, but recycling proved difficult due to legal regulations in the countries where our sites are located and the progress of recycling infrastructure development, resulting in the overall target not being achieved. The conditions for data calculation are explained on P.58.

## Initiatives

## **Initiatives in Manufacturing**

We are promoting the reuse of important resources in each business, such as the reuse of cullet in the Glass Business and of fluorite in the Chemicals Business, with the aim of reducing waste. (P.48).

For example, AGC Display Glass Yonezawa Co., Ltd. has launched a business to convert waste salt, which was previously disposed of as waste, into fertilizer raw materials. (P.49). Also, AGC Display Glass (Kunshan) Inc. has been selected by Kunshan City as an excellent "Zero-Waste Factory" because of its high solid waste recycling rate, among other Group companies promoting waste reduction initiatives.

## On-site Inspection of Disposal Service Providers

AGC Group conducts on-site inspections of waste disposal contractors in accordance with the laws and regulations of each country and region.

Additionally, even in cases where there are no specific laws, regulations, or ordinances in place, we voluntarily conduct on-site inspections of waste disposal contractors. For example, at the Yokohama Technical Center, on-site inspections are conducted approximately every three years. At PT Asahimas Chemical in Indonesia, inspections are conducted every one to two years based on the volume of waste processed. At other facilities, we comply with applicable laws and regulations and conduct on-site inspections in accordance with the inspection targets and frequencies established by each facility, setting inspection items tailored to the type of waste disposal services provided by the contractors.

## Initiatives to Reduce Hazardous Waste

AGC's Kashima Plant is significantly reducing specially controlled industrial waste by using boilers to combust waste oil that contains hazardous oxidizing agents. Moreover, exhaust heat from this process is recovered and used as a source of energy.



## Management of Effluent Discharge into Water Basins

## Policy and Approach

The AGC Group's manufacturing processes use large amounts of water. The wastewater from the manufacturing process contains chemicals used in the process, which are treated appropriately in accordance with the laws and regulations of each country and region.

We believe that deterioration in water quality has a significant impact not only on the surrounding communities and the environment, but also on the Group's business activities (for example, glass polishing and raw water for the Chlor-Alkali Business). In addition, we believe that it is important to properly manage wastewater quality due to concerns that stricter wastewater discharge regulations and the addition of new regulated substances may lead to an increase in our purification costs and the costs of wastewater treatment outsourced to third parties.

## Targets and Monitoring Indicators

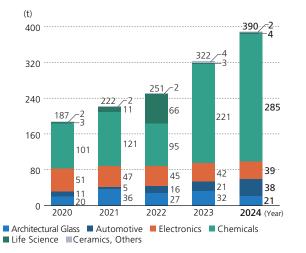
We do not set a uniform Group target for the management of substances discharged into water basins, but rather set and manage targets for each in-house company and manufacturing site. This is because the AGC Group's businesses and products are diverse, and the substances that require priority management and their target values differ from site to site.

Each manufacturing site establishes its own management standards based on in-house and company-wide policies and Environmental Policy, as well as local government regulations, and runs a PDCA cycle to achieve its goals based on its management system. The Company-wide status is confirmed and monitored by the corporate division's EHSQ General Division during the EHSQ Management Review.

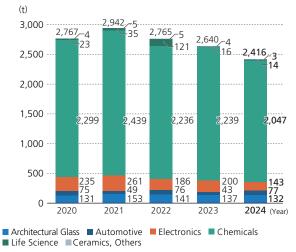
#### Achievements

The AGC Group's overall emissions of major water pollutants are disclosed annually in this Data Book.

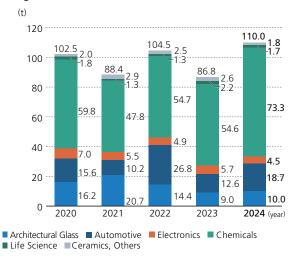
## ▶ Emissions of Water Pollutants (Biochemical Oxygen Demand) by Business Segment



## ▶ Emissions of Water Pollutants (Chemical Oxygen Demand) by Business Segment



## ▶ Emissions of Water Pollutants (Nitrogen) by Business Segment



See P.58 for the calculation conditions for this data.

## Initiatives

### **Initiatives in Manufacturing**

AGC Display Glass (Shenzhen) Inc. has been working toward becoming a "zero wastewater factory" since 2021, promoting wastewater recovery and reuse, and achieved its target recovery rate of 88% in 2023.

In addition, the AGC Group as a whole is promoting the conversion of energy sources used in glass melting furnaces away from heavy oil with the aim of reducing GHG emissions (P.38). By promoting fuel conversion from heavy oil to natural gas, the introduction of ammonia and hydrogen combustion, and the introduction of electric melting furnaces currently undergoing research and development, we expect to reduce air pollutants associated with furnace operation and, as a result, reduce the discharge of pollutants into water basins.

## Contribution through our products

### Sodium Hypochlorite

#### Product Introduction

Sodium hypochlorite is a product widely used in pulp bleaching, swimming pool disinfection, and water and sewage system purification as well as a household disinfectant, sanitizer, and bleach.

### **Environmental Considerations**

We disinfect and sterilize water and sewage systems to support a healthy water infrastructure.

Click here for detailed product information

# Management of Discharge to the Atmosphere

## Policy and Approach

The AGC Group's Glass and Chemicals Businesses both require a large amount of energy in their manufacturing processes. Currently, most of the energy used in this manufacturing comes from fossil fuels. Exhaust gases from the combustion of fossil fuels contain high levels of nitrogen oxides, sulfur oxides, VOCs, and soot and dust, but these are treated appropriately in accordance with laws and regulations in each country and region.

Deterioration of air quality not only affects the surrounding community and environment, but if not properly managed also impacts our business activities, including the health of our employees. In addition, if we are unable to respond appropriately to stricter regulations or the addition of new regulated substances, this could lead to risks such as increased processing costs.

### Targets and Monitoring Indicators

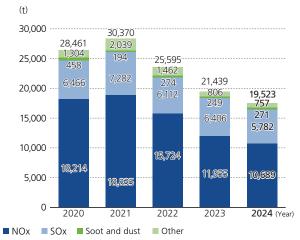
As with the management of effluent discharges, we do not set a uniform Group target, but rather set and manage targets for each in-house company and manufacturing site. This is because the AGC Group's businesses and products are diverse, and the substances that require priority management and their target values differ from site to site.

We have established voluntary management standards based on laws and regulations at each manufacturing site, and monitor the status of management through the environmental management system and EHSQ Management Review at each site.

## Achievements

The Group's overall emissions of major air pollutants are disclosed annually in this Data Book.

## ▶ Air Pollutant Emissions of the AGC Group



Note: "Other" includes HAP, VOC, etc.

See P.58 for the calculation conditions for this data.

### Initiatives

## **Initiatives in Manufacturing**

The AGC Group as a whole is promoting the conversion in energy sources in glass melting with the aim of reducing GHG emissions (P.38). The conversion from heavy oil to natural gas, as well as the ongoing research and development of electric melting and ammonia combustion and hydrogen combustion are expected to reduce GHG emissions and suppress air pollutants.

## Contribution through our products

#### ACLESIA

## **Product Introduction**

This is a highly reactive neutralizing agent for exhaust gas treatment that removes acidic components from exhaust gas.

### **Environmental Considerations**

ACLESIA neutralizes hazardous compounds in the exhaust gases of waste incinerators, thereby significantly eliminating a cause of air pollution. The product also helps curb fly ash and reduces the environmental impact of final disposal.

Click here for detailed product information



## Chemical Substance Management

## Policy and Approach

The AGC Group's manufacturing processes use large amounts of chemical substances. Furthermore, due to the nature of the materials industry, we also believe it is necessary to consider the environmental impact of chemical substances contained in products and chemical substances as products themselves. We recognize that the environmental impact of chemical substances can affect the health and safety of our employees, people living in the vicinity of our sites, and our customers, and that this poses a significant risk that could significantly damage trust in the Company.

Therefore, the AGC Group is committed to establishing risk management practices that address environmental impacts of chemical substances across the entire value chain and to providing safe and reliable products.

## Targets and Monitoring Indicators

Chemical substance risk management is implemented at each stage of the value chain.

#### **Initiatives**

## Development

We are working to reduce hazardous chemical substances used in manufacturing processes and included in products. The status of our initiatives is monitored through the Monitoring Working Group as stipulated in the AGC Group Chemicals in Products (CiP) Management Standards.

#### Procurement

We have established the AGC Group Integrated Green Procurement Guidelines and share the policy of procuring raw materials, parts, and products with less environmental impact throughout the Company. We have also established transaction requirements such as requiring business partners to comply with environmental laws and regulations and to obtain environmental management certification.

For more information on supply chain initiatives, please see here (P.89).

## Manufacturing

For chemical substances during manufacturing, we not only comply with laws and regulations but also follow voluntary quidelines: the AGC Group Environmental Management Working Rules and AGC Group Chemical Substance Management Regulation Guidelines. Based on these guidelines, we manage chemical substances used, assign chemical substance managers, and conduct chemical substance risk assessments. The status of management is monitored through the environmental management system and EHSQ Management Review at each site.

### Transportation

At the transportation stage, Yellow Cards are used at AGC Group sites within Japan to share information about emergency procedures that should be taken when transporting our products in accordance with the characteristics of chemical substances and products loaded on trucks and other means of transportation. In addition, industrial waste, including harmful substances, emitted during the manufacturing process is noted on Waste Data Sheets (WDS), which contain information about the properties of the industrial waste and are provided to collection and transportation companies and waste management companies.

## Use and Disposal

To avoid the impact of chemical substances during the usage and disposal stages, we have established the AGC Group Chemicals in Products (CiP) Management Standards, which stipulate that information on restricted substances based on legal regulations and customer requirements, such as customer green procurement standards, shall be identified and reflected in development and manufacturing. In addition, we work to provide appropriate chemical substance data through the provision of Safety Data Sheets (SDS) and responses to customer environment surveys. The status of management is monitored through the environmental management system and EHSQ Management Review at each site, while more detailed monitoring is conducted by the Monitoring Subcommittee as stipulated in the AGC Group Chemicals in Products (CiP) Management Standards.

## **Plastic Emissions**

## Policy and Approach

The AGC Group contributes to the development of society through the manufacture of high-performance plastic products, such as fluoropolymer resins and polyvinyl chloride, and their raw materials. We also make appropriate use of plastic in packaging materials and cushioning materials from the viewpoint of functionality and safety. At the same time, we recognize the

impact that improper disposal and management of plastics can have on the environment, and we are working to reduce our environmental impact by minimizing usage, promoting reuse, and ensuring proper waste management.

Currently, the AGC Group is closely monitoring domestic and international laws and regulations related to plastics, as well as international trends, while also analyzing risks and opportunities. We are taking necessary action to ensure business sustainability and to fulfill our social responsibilities.

## Initiatives

## Material Recycling of Fluoropolymer Film (P.50) Returnable Plastic Packaging Materials

AGC Automotive Philippines Inc. has replaced single-use plastic sheets used in the packaging of conventional glass with reusable wrapping materials, thereby reducing plastic waste through repeated use.

## Contribution through our products

#### RESIFA™

#### Product Introduction

Under an unified brand, this series of silica products is suitable for a variety of applications, including cosmetics, industry, and medicine.

#### **Environmental Considerations**

Silica, a material that exists in various forms in nature, is expected to become an alternative to microplastics, which have had a concerning impact on ecosystems due to outflow into oceans.

© Click here for detailed product information

### Participation in Initiatives

## ❖ Japan Clean Ocean Material Alliance (CLOMA)

### ⊕ CLOMA Official Site | Top Page

**Overview**: A collaborative organization of companies addressing marine plastic waste (microplastics) issues.

**Purpose of participation**: We are participating with the intention of developing and promoting activities for the recycling of plastics through collaboration with other member companies.

Achievements: Through CLOMA, RESIFA™ naturally derived silica beads have been featured in the Ministry of the Environment's "Good Practices for Reducing Microplastics (2024 Edition)."





## Prevention of Environmental Accidents

## Policy and Approach

The AGC Group's businesses are energy-intensive and involve large-scale facilities, which means that there is a relatively high potential risk of environmental accidents. We recognize that environmental accidents not only have a direct or indirect impact on our assets, but also, depending on the scale of the accident and the initial response, may affect the health and safety of our employees and people living in the vicinity of our sites, and that this poses a significant risk that could significantly damage trust in the Company.

Therefore, we recognize that prevention of environmental accidents is an important management indicator for "Considering relationships with local communities and the environment."

## Targets and Monitoring Indicators

• Serious environmental accidents: 0

### Achievements

In 2024, there were no major environmental accidents\*.

\* For the definition of a major environmental accident, please refer to P.87

### Initiatives

The AGC Group has established a reporting system for accidents and disasters related to EHSQ Management based on the AGC Group Reporting Standards on EHSQ Incidents. In the event of an EHSQ incident as defined above, prompt response and reporting is required in accordance with the AGC Group Reporting Standards on EHSQ Incidents and the AGC Group Crisis Management Guidelines. We note that "EHSQ Incidents" include not only industrial safety and security accidents such as fires, explosions, and leaks, but also environmental accidents and legal violations that exceed standards specified by laws and regulations regarding energy, air quality, water quality, waste, hazardous substances, and so forth.

As a Groupwide initiative, the Environmental Accident Prevention Project has been launched under the AGC Group EHS Committee, with the EHSQ General Division at the AGC head office and the environmental departments of each in-house company and SBU taking the lead in promoting activities to prevent environmental accidents and legal violations. In this project, we are strengthening management systems to prevent leakage accidents and ensure compliance with legal and regulatory values, as well as implementing risk management and software and hardware measures in collaboration with the manufacturing and production technology divisions. In the unlikely event of a serious accident, we have established a system through this project to quickly share information about the accident and deploy preventive measures globally.

At each site, the AGC Group assesses the risks and impacts of environmental incidents based on ISO 14001, and in addition to creating manuals and procedures for leak prevention and troubleshooting and conducting regular drills, it implements physical measures such as installing liquid containment barriers, alarms, and telemeters.



## Reliability of Relevant Data

- Scope: AGC Inc. and its affiliates (excluding associated companies and equity method affiliates) are included in the scope of calculation based on the concept of the financial control standards. However, for small sites (small sales offices, offices, etc.) with less than 50 employees and no environmental risk, calculation is optional.
- Activity volume: Values reported by the AGC Group's environmental database system in fiscal 2024 (January 1 to December 31, 2024)
- Other detailed calculation conditions are in accordance with the AGC Group's Environmental Performance Data Guidance.

# Stakeholder Communication, Including Environmental Compliance



## Fundamental Approach

The AGC Group has established a global environmental management system and strives to ensure compliance with applicable laws and regulations and customer requirements as well as to thoroughly commit to compliance and continuously improve environmental activities.

We recognize that communication with diverse stakeholders is essential in order to contribute to the realization of a sustainable society, based on compliance with laws and regulations at each of our business sites around the world. We endeavor to build relationships of trust with all stakeholders through appropriate information disclosure and transparent communication, while enhancing the guality of our environmental activities.



# AGC Group's Environmental Compliance Structure

The AGC Group operates its management system under the AGC Group EHSQ Policy, which was established based on the Group philosophy "Look Beyond" and the common understanding that "safety, the environment, quality, and compliance are remains to be the fundamental premises underlying the Group's business activities."

In the environmental field, the AGC Group Environmental Policy, which sets forth the AGC Group's approach and philosophy toward the environment based on the AGC Group EHSQ Policy, clearly stipulates compliance with environmental laws and regulations and internal rules from various perspectives, and the Group has established a compliance program throughout the entire organization. Through these efforts, we are contributing to the realization of decarbonization, a circular economy, and harmony with nature, while minimizing environmental risks and striving for continuous improvement.

## Environmental Management in Accordance with ISO 14001

## Classification of Sites According to the Environmental Management Working Rules

The AGC Group has established an environmental management system based on ISO 14001 with the CEO in charge as the environmental management officer. The AGC Group Environmental Management Working Rules establish three environmental activity levels for all AGC Group sites according to their environmental impact, assigning environmental activities to

them based on their respective level.

The main implementation items for each category are as follows.

- Level 1 sites, which have relatively high-environmental risks, are required to obtain ISO 14001 or other environmental management certification.
- Small-scale manufacturing sites without facilities with high environmental impact, such as glass melting furnaces or exhaust gas treatment facilities, are classified as Level 2 sites and recognized as having moderate risk. They are required to record activities and environmental performance data in accordance with ISO 14001.
- For Level 3 sites with significantly low environmental risk, such as sales offices, it is mandatory to report environmental accidents to the head office.

For all of Level 1, 2, and 3, the Group stipulates that sites carry out fundamental activities—such as raising awareness of and thoroughly implementing the AGC Group Environmental Policy, adhering to legal requirements, the AGC Group's standards, and other regulations—and monitors such activities periodically.

## **Monitoring Framework**

The results of our initiatives are evaluated through internal and external audits. The results are monitored by the business divisions (in-house companies and SBU headquarters) responsible for the sites and the EHSQ General Division at the AGC head office, and are used to promote the PDCA cycle both at the business division level and for the AGC Group as a whole. Results are also reported to senior management personnel through the AGC Group EHS Committee, the Sustainability Committee, and the EHSQ Management Review. Internal audits verify compliance with standard requirements, conformity with Group policies, environmental objectives, and annual targets, operation in accordance with regulations, conformity with objectives, targets, and implementation plans, and improvement of environmental performance.

## AGC Group SingleCertificated Environmental Management System

The AGC Group Single Certificated Environmental Management System (Single Certificated EMS) has been in operation for AGC and its affiliated companies since 2003. Organizations participating in the Single certificated EMS have obtained a single certification as a result of being audited by the same external audit agency globally under identical standards. The Environmental Manual, the operational standard for the Single certificated EMS, stipulates that the Single certificated EMS Secretariat and all divisions undergo internal audits on a periodic basis. In addition,

we have set common focus areas (areas to be particularly scrutinized during audits) for external and internal audits, and monitor priority issues in these areas. In 2024, we adopted "EMS operation to meet legal and regulatory requirements compliance obligations" to confirm the status of various measures for legal compliance at each business site.

### **Environmental Management System Certification Status**

In 2024, out of our global Level 1 manufacturing sites that are obligated to obtain environmental management system standard certification under the AGC Group Environmental Management Working Rules, 110 sites, or 92%, had already obtained certification, and the remaining five sites were working to obtain certification. Including the facilities in Level 2 and 3, as of the end of 2024, AGC Inc. and its subsidiaries had obtained ISO 14001 certification at 78 sites in Japan and 106 sites overseas, comprising 83 legal entities.

# Number of Companies That Have Obtained ISO 14001 Certification in Fiscal 2024 (including small-scale nonmanufacturing sites)

AGC Group (Japan)	20 companies
Overseas, excluding Japan	63 companies
Total	83 companies

## Compliance Initiatives in Each Domain Legal Compliance Framework at Business Sites

Environmental legal requirements vary widely depending on the facilities held by the site, the chemicals used, the processes involved, and the characteristics of the local region. The AGC Group has established the AGC Group Environmental Management Working Rules, which require all Group companies to identify and comply with legal requirements and establish frameworks for compliance with laws and regulations in each country and region. We have also set voluntary standards at sites where legal standards are applicable that are more rigorous than those legal standards to ensure compliance.

We believe that various types of monitoring tailored to specific purposes are essential to accurately capture changes and ensure compliance with legal requirements. Therefore, in addition to external and internal audits, we also conduct comprehensive audits focused on confirming compliance with laws and

regulations. This initiative was first launched in China and has been rolled out globally since fiscal 2024.

## **Legal Compliance Framework for Products and Services**

We have established the AGC Group Chemicals in Products (CiP) Management Standards for compliance with laws and regulations related to our products and services. These standards mandate compliance with laws and regulations, response to customer requirements, identification of substances subject to management, and management and improvement of performance. The status is monitored within a liaison system for the management of chemical substances in products, which is led by the EHSQ General Division's Environment Department, Quality Department, and Procurement & Logistics Division, with the General Manager of EHSQ General Division as the person in charge of environmental management.

## **Environmental Compliance Frameworks by Country and Region**

To implement more timely and substantial environmental activities in accordance with the legal systems and customs of the countries and regions where it operates, the AGC Group has established organizations that provide support for activities at subsidiaries in each region.

## Example in China

Our regional environmental office in Shanghai, which we established in 2019, determines the impact of Chinese government policies—such as rapidly changing environmental laws and regulations—on the AGC Group, building a crossorganizational backup system that allows subsidiaries to devise necessary countermeasures in a timely manner to comply with laws and regulations.

In many cases, regulations are set not only at the national level, but also at the provincial level or the city level that has jurisdiction over each business site. To ensure strict compliance with regulations, we are focusing on disseminating regulatory information and conducting on-site reviews of the management conditions at each location. This initiative, which began in 2019 primarily at our manufacturing bases in China, supports the stable operation of production by ensuring compliance with laws and regulations.

## Compliance for Regulated Substance Management (Example in Japan)

We comply with international conventions and regulations on

specified substances in each country. Here is an example from Japan.

## Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes

Equipment containing PCBs are stored according to the relevant legislation and their treatment, which is entrusted to the Japan Environmental Storage & Safety Corporation (JESCO), has been progressing. Furthermore, the AGC Group will continue to systematically dispose of low-concentration PCBs.

## Air Pollution Control Law (Asbestos)

The AGC Group completed the removal of friable asbestos from its Japanese business sites in 2008. The Group also disposes of non-friable asbestos in an appropriate manner.

## Act on Preventing Environmental Pollution of Mercury

We store mercury securely in accordance with laws and regulations, and then entrust its treatment to a specialized contractor. Even in cases where the use of mercury is permitted, such as in fluorescent lamps, we comply with laws and regulations and replace them with LED alternatives whenever possible.

### Plastic Resource Circulation Act

The following three companies are large volume generators of plastic as defined by the Plastic Resource Circulation Act. The plastic emissions and waste plastic disposal methods of these companies for fiscal 2024 are as follows.

#### ▶ Plastics waste generated (2024)

		AGC		AGC Glass Products Co., Ltd.		AGC Display Glass Yonezawa Co., Ltd.	
		Weight (t)	Ratio (%)	Weight (t)	Ratio (%)	Weight (t)	Ratio (%)
	al amount of plastic ste generated	4,633	100	595	100	332	100
Break	Plastic waste sold for reuse or recycling	3,274	70.7	1.7	0.3	59	17.7
reuse or recycling disposed as industrial waste		1,359	29.3	593	99.7	273	82.3

## ► Waste Plastic Processing Methods (2024)

Method of treating waste plastics	AGC	AGC Glass Products Co., Ltd.	AGC Display Glass Yonezawa Co., Ltd.
		Ratio (%)	
Recycling*1	35.0	15.1	1.3
Energy recovery*2	45.8	79.1	98.7
Incineration without energy recovery	6.9	3.2	0
Landfilling	12.3	2.7	0

- \*1 Chemical or material recycling
- \*2 Conversion to RPF (Refuse-derived Paper and Plastics Fuel), use as cement raw materials or fuel, or waste-to-energy incineration



## **External Communication**

The AGC Group's environmental information is always available in Japanese and English through the AGC website, the Integrated Report, and this Sustainability Data Book.

We also communicate with stakeholders in various ways based on the concept described in "Stakeholder Engagement" on P.9 of this Data Book. Here we highlight noteworthy points regarding the environment.

## Communication with Local Communities, Social Contributions

We communicate with local residents at each business site as appropriate.

In addition, in accordance with the AGC Group Social Contribution Basic Policy described on P.98 of this Data Book, each business site conducts environmental contribution activities such as cleaning up areas around plants and planting trees.

## Awards from Various External Organizations

Many business sites of the AGC Group have received awards from local governments and environmental groups for their outstanding environmental initiatives. Awards received in 2024 are listed in the table "Environmental Awards in 2024."

## Disseminating Information about PFAS

Our website discloses our approach to PFAS, together with essential background information on these substances.

⊕ What are PFAS? – Types, applications, restrictions, etc. | AGC



## Training

The AGC Group incorporates environmental education into rank-specific training programs organized by the Human Resources Division, providing appropriate education tailored to employees' respective responsibilities. Furthermore, we provide a variety of elective training programs for environmental personnel to support their professional development. Also, as a mechanism to encourage the acquisition of qualifications and expertise, we operate a system that provides additions to bonuses to those appointed to specific legal roles.

Additionally, we are working to develop human resources with skills in environmental management and raise the level of environmental management at our business sites under the CNA program by leveraging a skills map, the AGC Group's own human resource database. In recent years, we have been actively exchanging information on environmental sustainability themes.

## Awareness

We are broadcasting original animated content and disseminating this Sustainability Data Book to raise awareness among Group employees and improve their knowledge of the environment and sustainability. These materials and publications are produced in multiple languages, mainly Japanese, English, and Chinese.

In addition, starting in 2023, the AGC Group introduced an award system for exemplary environmental activities. This system provides incentives and recognizes outstanding environmental efforts across various activity units within the AGC Group, and shares these best practices with all employees.

## ▶ Environmental Awards in 2024

Country / Region	Company	Outline of Environmental Awards in 2024			
Japan	AGC Micro Glass Co., Ltd.	Onojo City Social Merit Award (Environmental Conservation and Beautification Activities)			
China	AGC Display Glass (Kunshan) Inc.	"Zero-Waste Factory" designated by Office of the further battle to prevent and control pollution in Kunshan			
Taiwan	AGC Display Glass Taiwan Inc.	Sixth National Corporate Environmental Protection Award - Bronze Award Taiwan Corporate Sustainability Award - Taiwan Sustainable Foreign-Capital Enterprise Award			
Thailand	AGC Vinythai Public Company Limited	Environmental Good Governance Award 2024 Green Industry Level 4 award ,Green Culture Sustainability Disclosure Recognition 2024 ECO Factory Award			
	AGC Automotive (Thailand) Co., Ltd.	Toyota Co-Operation Club Environment Activity 2024 AMATA Best Waste Management Awards 2024			
Indonesia	PT Asahimas Flat Glass Tbk	Green Rating, PROPER Award Green Industry Award The best CO <sub>2</sub> Reduction activity			
	PT Asahimas Chemical	Green Rating, PROPER Award National Energy Efficiency Award			
United States	AGC Electronics America	Certificate of Excellence, Clean Water Services Strategic Energy Management SEMmy Awards 2024, energy Trust of Oregon			
	AGC Biologics, Inc.	The Gold Award, King County Industrial Waste			
Mexico	AGC Automotive Mexico S.de R.L. de C.V	Recognition for the donation			

## ▶ Environmental Training in the AGC Group

Category		Target	Training Content				
		All Group employees	C				
General environmental training	All parties in scope	Business partners	General environmental training	General environmental training conducted at each business site			
		AGC employees	Rank-specific training	Training for all levels from new joiners to executives			
			Internal auditor training	Knowledge of ISO 14001 and environmental laws, internal audit skills			
Training for environmental officers	Selective program	Environmental officers	Training related to environmental laws and regulations	Environmental law training, PRTR Law training, chemical substance manager training, and other practical legal compliance training tailored to the Group's operations			
Other ad hoc training	Selective program	Environmental and sustainability officers	Environmental seminars	Seminars with invited guest speakers on selected topics based on topical trends 2024 "International Trends in Biodiversity and Business Activities" and "Chemical Substances in Products"			
		,	CNA activities	Communication and mutual learning among persons with environmental skills			
Education for Group	All parties in	Business partner employees	Environmental and safety seminars	Seminars on environmental safety and compliance (once a year)			
stakeholders	scope	Suppliers	Dissemination of environmental and safety information	Environmental safety lectures at networking events for the Company and suppliers			

## **Verification Statement**

The AGC Group has received third-party assurance from SGS Japan Inc. for the environmental performance data for 2024, as listed in the table in the following section.

### **Environment-Related Data Covered under This Assurance:**

- Energy consumption
- GHG emissions (Scope 1, 2, and 3)
- Water withdrawal
- · Amount of wastewater
- · Data on waste volumes, including valuable materials

## Scope of Environment-related Data Collection:

In principle, data is collected from business sites that are classified as "Level 1" or "Level 2" as defined in the AGC Group Environmental Management Working Rules. Small sites (Level 3) with minimal environmental impact are excluded from environmental performance data collection. We have confirmed that the impact of GHG emissions from the activities of Level 3 sites on the overall GHG emissions is minimal, at less than 1%.

Detailed calculation conditions for each data item are explained in the relevant chapters.

## **Independent Assurance Report**



## Translation

13 June 2025 Opinion No : SGS25/110

Mr. Yoshinori Hirai Representative Director, President and CEO

1-5-1, Marunouchi, Chiyoda-ku, Tokyo

SGS Japan Inc. (hereinafter referred to as "SGS") has conducted a limited assurance engagement on the GHG emissions and environmental performance data for the fiscal year 2024 indicated with ★ (hereinafter referred to as "the Statement") in AGC Integrated Report 2025 AGC Sustainability Data Book 2025 (hereinafter referred to as " Integrated Report 2025") prepared by AGC Inc. (hereinafter referred to as "the Organization") based on their request.

#### The Organization's Responsibility

The Organization is responsible for preparing the Statement in conformance with the calculation and reporting standards (hereinafter referred to as "the Organization's Criteria," described in Integrated Report 2025) adopted by the Organization. The calculation of GHG emissions is inherently uncertain due to the incomplete scientific knowledge required to determine emission factors and the numerical data, for combining emissions of different gases.

#### Our Independence and Quality Control

SGS has complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which includes independence and other requirements based on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality, and professional behavior.

In accordance with International Standard on Quality Control 1-8, 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.

#### Our Responsibility

Our responsibility is to express a limited assurance conclusion on the Statement based on the procedures performed and the evidence obtained.

SGS has performed the limited assurance engagement in accordance with International Standard on Assurance Engagements (ISAE) 3000 "Assurance Engagements Other than Audits or Reviews of Historical Financial Information" and ISAE 3410 "Assurance Engagements on Greenhouse Gas Statements."

The procedures performed by SGS are based on our professional judgment and include the following:

- Evaluation of the appropriateness and inquiries regarding the Organization's Criteria used to measure, aggregate, calculate, and report the Statement.
- Verification that the Statement and the underlying records are consistent.
- Inquiring about the calculation method and the status of internal controls over the Statement.
- Analytical procedures and inquiries regarding quantitative data.
- On-site inspection of AGC Display Glass Yonezawa Co., Ltd. and AGC Electronics Co., Ltd. Head Office.
- Assessment of the Organization's Criteria to develop estimates were appropriate and consistently applied.
   (This does not include testing the data underlying the estimate or developing independent estimates to evaluate the estimate.)

The procedures performed in a limited assurance engagement vary in nature from and are less in scope than, those performed in a reasonable assurance engagement.

As a result, the level of assurance obtained in a limited assurance engagement is lower than what would have been obtained if a reasonable assurance engagement had been performed.

#### Limited Assurance Conclusion

Based on the procedures performed and evidence obtained by us, nothing has come to our attention that causes us to believe that the Statement in Integrated Report 2025 is not prepared in conformance with the Organization's Criteria in all material respects.

## For and on behalf of SGS Japan Inc.

Yokohama business Park North Square I 134, Godo-cho, Hodogaya-ku, Yokohama Business Assurance Head of Certification/Accreditation Yuji Takeuchi

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/terms\_and\_conditions.htm.
Altention is drawn to the limitation of liability, indemnification and ujurisdiction is sues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings as the time of its intervention only and within the limits of Clients instruction, if, any. The Company's sole responsibility is to Client and this document does not exonerate parties to transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or fasilication of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the listed extent of the source.

/ 1

## GHG Emissions and Environmental Performance Data Report (January 1, 2024 - December 31, 2024)

	Calculation targets	Scope of calculation	Values	5	Calculation method/ Definitions of calculation targets	*
Energy cons	sumption	306 Group sites	110,449	TJ	Calculated by multiplying the amount of fuel including renewable energy, electricity (excluding on-site generation from fuel combustion), and heat consumed by the respective calorific values, based on the higher heating value (HHV) standard.	*
Scope1		298 Group sites	5,781,404	t-CO <sub>2</sub>	Direct GHG emissions are calculated for corporate activities as defined in the GHG Protocol.	*
Canal	Location-based method	306 Group sites	4,395,249	t-CO <sub>2</sub>	Indirect GHG emissions are calculated by multiplying the activity data from corporate activities, as defined in the GHG Protocol, by the location-based emission factor.	*
Scope2	Market-based method	306 Group sites	4,131,848	t-CO <sub>2</sub>	Indirect GHG emissions are calculated by multiplying the activity data from corporate activities, as defined in the GHG Protocol, by the market-based emission factor.	*
	Category 1	109 Group sites	3,737,772	t-CO <sub>2</sub>	Direct procurement: The volume of resources used in conjunction with producing products multiplied by the emissions intensity* per resource. Indirect procurement: Calculated by multiplying the amount of goods and services purchased that are not directly related to the manufacture of products by the emissions intensity* for each procured item.	er ★
	Category 2	390 Group sites	725,090	t-CO <sub>2</sub>	The amount of investment in capital goods is calculated by multiplying by the emissions intensity* per investment amount.	*
	Category 3	306 Group sites	1,059,771	t-CO <sub>2</sub>	The amount of fuel and energy used multiplied by the emissions intensity* for each type of fuel and energy.	*
	Category 4	149 Group sites	939,601	t-CO <sub>2</sub>	It is calculated by multiplying the amount of resources used in product manufacturing (such as materials and parts procurement) and product transportation by the transport ton-kilometer data, which is the transportation distance multiplied by the number of products transported, and then multiplying that by the emissions intensity*.	*
	Category 5	255 Group sites	37,512	t-CO <sub>2</sub>	Volume of waste generated in operations that is processed by external service providers (not including valuable materials) multiplied by emissions intensity* per processing method.	*
	Category 6	390 Group sites	76,707	t-CO <sub>2</sub>	Global emissions are calculated based on the result of multiplying AGC business travel expenses by the emissions intensity* per transportation method, using estimates based on employee composition ratios.	*
	Category 7	390 Group sites	31,969	t-CO <sub>2</sub>	Global emissions are calculated based on the result of multiplying AGC commuting expenses by the emissions intensity* per transportation method, using estimates based on employee composition ratios.	*
Scope3	Category 8	Not subject to calculation	-	t-CO <sub>2</sub>	Emissions from leased properties and leased vehicle fuel are calculated using Scope 1 and 2, so Category 8 is excluded.	
	Category 9	Not subject to calculation	-	t-CO <sub>2</sub>	Transportation of products from the company's production plant to the material processing plant is included, but because all transportation costs are borne by the company, it is accounted for in Category 4 but not included in Category 9.	
	Category 10	Among the products of the AGC Group in the relevant category, architectural glass (sales in Europe and North America only), chemicals (fluorinated gases)	483,456	t-CO <sub>2</sub>	Weight of sold products multiplied by the emissions intensity* per product.	*
	Category 11	Among the products of the AGC Group in the relevant category, chemicals (fluorine gas, SF6, sodium bicarbonate, potassium carbonate)	1,470,509	t-CO <sub>2</sub>	GHG emitted directly through the use of products sold at sales outlets multiplied by emissions intensity* per weight of products sold, based on assumed use conditions.	*
	Category 12	Products that were sold by the AGC Group	1,168,300	t-CO <sub>2</sub>	The weight of products sold multiplied by the basic unit per type of waste matter. For a portion of products, it is calculated by determining the volume of leakage from the weight sold and multiplying the figure by their global warming potential.	*
	Category 13	8 Group companies	145,728	t-CO <sub>2</sub>	Leased floor space in a building multiplied by basic unit of floor space and emissions intensity.*	*
	Category 14	Not subject to calculation	-	t-CO <sub>2</sub>	Not applicable as the AGC Group does not operate franchises.	
	Category 15	11 investee companies including Group companies	131,923	t-CO <sub>2</sub>	Calculated by multiplying the Scope 1 and 2 emissions of investee companies by the investment rate.	*
	water withdrawal	240 Group sites	849,708,031	m³	The amount of water withdrawal associated with corporate activities.	*
Water	water withdrawal (excluding seawater for cooling)	240 Group sites	81,755,447	m³	The amount of seawater used for cooling is deducted from the amount of water withdrawal for corporate activities.	*
vvaler	Amount of wastewater	208 Group sites	836,108,055	m³	The amount of wastewater generated by corporate activities.	*
	Amount of wastewater (excluding seawater for cooling)	208 Group sites	71,528,072	m³	The amount of seawater used for cooling is subtracted from the amount of wastewater generated by corporate activities.	*
Waste	Amount of valuable materials generated	255 Group sites	167,038	t	The amount of valuable materials generated by corporate activities (including a portion of internal Group transactions).	*
	Amount of waste generated	255 Group sites	531,934	t	The amount of waste generated by corporate activities (including the amount of general waste generated).	*

<sup>\*</sup> Figures marked with ★ have received third-party verification.

<sup>•</sup> Scope 3 Categories 10, 11, and 12 include some non-energy derived GHG emissions other than the seven gases such as HCFCs and HFOs.

<sup>·</sup> As stated under "Operational Boundary" in the "Scope 1 and 2 GHG Emissions Calculation Conditions" section of this Sustainability Data Book, greenhouse gases other than CO2 are also included in the calculations.

<sup>\*</sup> Emissions intensity calculations are based on the Sustainable Management Promotion Organization's LCA inventory database IDEA (Ver. 3.4), the Ministry of the Environment's database (Ver. 3.4), and MCL (formerly Gabi) (2024).

## Respecting Human Rights



## Fundamental Approach

In 2011, the United Nations Human Rights Council (UNHRC) announced its Guiding Principles on Business and Human Rights ("Guiding Principles"). Among the stated principles is "the responsibility of companies to respect human rights." The AGC Group has stipulated "Respect for People" in the AGC Group Charter of Corporate Behavior and the AGC Group Human Rights Policy, and acts in accordance with this Guiding Principles and other internationally recognized human rights standards. As part of our corporate responsibility to respect human rights, we have included the concept of human rights in the AGC Group Purchasing Policy, which specifies items that we will work on in cooperation with our business partners, in order to promote human rights-conscious business activities not only within the AGC Group but also throughout our supply chain, and we ask for their cooperation in this regard. We comply with the laws and regulations of each country and region and respects the rights to freedom of association and collective bargaining. Furthermore, we will not engage in forced labor or child labor and will not tolerate infringements of human rights.

- AGC Group Charter of Corporate Behavior
- AGC Group Human Rights Policy

We also analyzed and evaluated the characteristics of our business areas, business activities, and value chains, and our stakeholders, and identified the 14 items below as human rights issues to consider. From these, we identified the salient issues that have a particularly significant impact on human rights and on which the AGC Group should focus its efforts to reduce potential risks. The AGC Group mitigates risks related to these salient human rights issues by implementing human rights due diligence. The AGC Group will continually conduct risk assessments and review its salient human rights issues in response to changes in social conditions and business activities.

## Human Rights Issues for the AGC Group to Consider (14 items)

Salient Human Rights Issues: 5 items

- 1. Worker's health and safety
- 2. Rights of local people
- 3. Conflict minerals (responsible mineral procurement)
- 4. Procurement of raw materials

5. Discrimination and harassment in the workplace and employment

## Other Human Rights Issues to Consider: 9 items

- 1. Consumers' health and safety
- 2. Forced labor
- 3. Child labor
- 4. Freedom of association and collective bargaining
- 5. Adequate working hours
- 6. Decent wages
- 7. Rights of foreign and migrant workers
- 8. Right to privacy
- 9. Corruption



## **Management Structure**

In accordance with the AGC Group Human Rights Policy, the AGC Group conducts human rights-related initiatives in collaboration with relevant divisions. The Sustainability Committee, which meets four times a year and is attended by the CEO, CFO, CTO, Audit & Supervisory Board members, and all division heads, discusses initiatives to address human rights issues, such as responsible mineral sourcing. The discussions of the Sustainability Committee are reported to the Board of Directors twice a year. In 2024, the AGC Group also established the "human rights issue response liaison system," comprising of divisions responsible for addressing human rights issues for AGC Group to consider. Meetings of this system are held twice a year, chaired by the General Manager of the Sustainability Division, to share information on human rights issues relevant to the AGC Group. Based on the AGC Group Human Rights Policy, we are working to build and maintain a system of respect for human rights that meets international standards.



## **Group-wide Initiatives**

Making efforts to spread awareness of human rights throughout the AGC Group and to promote initiatives related to human rights and labor practices, we carry out in cooperation with relevant divisions as part of daily operations. We are working to prevent, mitigate, and remedy the negative impacts on each salient human rights issue identified through human rights impact assessments. For example, The Human Resources Division conducts education on human rights and implements voluntary inspections in relation

to human rights and labor practices. Meanwhile, the Procurement & Logistics Division is responsible for a questionnaire survey on sustainable procurement, which covers the status of and initiatives in relation to human rights and labor practices in supply chains. In addition, the Human Resources Division and the Compliance Division have established internal and external consultation contact channels (harassment consultation desks, helplines, etc.) in a manner that takes into consideration those seeking consultation, including employees, customers, and business partners. The Procurement & Logistics Division also has a compliance consultation desk for procurement activities.

The salient human rights issues for the AGC Group	Prevention and mitigation measures and initiatives		
Worker's health and safety	• In order to foster a culture of safety in the workplace, we are identifying weaknesses in our organization through assessments by third-party experts and prioritizing improvements. P.84 • When building, expanding, or modifying facilities, the AGC Group conducts risk assessments based on its Prior Safety Assessment System and verifies that the facilities are safe. P.85 • Through network meetings, we review health and productivity management and work styles, explain measures, and exchange opinions, working as a unified group to improve the working environment and create a comfortable workplace. P.78		
Rights of local people	• The AGC Group has identified "considering relationships with local communities" as one of its long-term social issues (materiality) and is committed to two-way communication. The AGC Group engages in regular dialogue with residents living near its domestic plants and members of neighborhood associations. We provide information on the current status of the plant and hold discussions in advance to explain any matters that may affect the surrounding community. A total of 83 dialogue meetings were held in 2024 (AGC Inc.).		
Conflict minerals (responsible mineral procurement)	The AGC Group's business is based on cooperation with many business partners, and it is implementing various initiatives that are integrated with the supply chain.  At the AGC Annual Suppliers Meeting, attended by our CEO, we disseminate our Purchasing Policy,		
Procurement of raw materials	which stipulates respect for human rights, etc. P.90 To identify potential risks and make improvements, we conduct a questionnaire survey on sustainable procurement for our business partners and encourage them to make improvements if any issues are identified. P.89		

Discrimination and harassment in the workplace and employment

- We have conducted employee engagement surveys every three years to improve employee engagement by better understanding the current situation facing individual employees, the Company, and workplaces. P.74
- The Group organizes various training programs for its business partners to promote manufacturing and human resource development with an awareness of the entire supply chain. P.91
- Harassment prevention and compliance training programs and endeavors are conducted to ensure a healthy work environment free from discrimination and harassment. P.65

## Responding to Issues Regarding Human Rights and Labor Relations

In the event that it becomes clear that the Group's business activities have caused or contributed to any negative impact on human rights, the AGC Group will take appropriate remedial measures and strive to take corrective and preventive measures. Specifically, the Human Resources Division, Compliance Division, and the relevant workplaces will work together to respond to each case.

## Regular Self-Assessments of Human Rights and Labor Practices

The AGC Group is updating its checklist based on human rights issues for the Group to consider. In 2024, 176 AGC Group companies were surveyed, and any cases requiring correction have been promptly addressed. The AGC Group does not tolerate any labor practices that violate the laws of the countries and regions in which it operates. We conduct regular self-assessments to prevent forced labor and child labor, and ensure that there are no violations. We pay appropriate wages that exceed the legal minimum wage to ensure the livelihood and safety of our employees. 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.

## Support for the UK Modern Slavery Act 2015

AGC Chemicals Europe, Ltd. released the following official statement in accordance with the UK Modern Slavery Act 2015. Please refer to the following (link) for disclosure details.

Modern Slavery & Human Trafficking Statement

## Strengthening complaint processing mechanisms

To strengthen its complaint processing mechanisms, in September 2024, the AGC Group joined the Japan Center for Engagement and Remedy on Business and Human Rights (JaCER), a General Incorporated Association, while also operating its existing hotlines. In this way, we will accept human rights complaints from all stakeholders and, from a professional standpoint, ensure the legitimacy of the complaint processing mechanism while improving the effectiveness and efficiency of the complaint processing. Furthermore, through the operation of such third-party hotlines, we not only ensure the anonymity of whistleblowers and the confidentiality of reported information, but also maintain fairness and transparency in complaint processing.

## AGC's Initiatives

## Measures to Deal with Human Rights Issues and Harassment

AGC conducts harassment prevention and compliance training programs and endeavors to ensure a healthy work environment free from discrimination and harassment. We educate employees on various forms of harassment, such as sexual and power harassment, through rank-specific training and other means to prevent the occurrence of such harassment. If harassment occurs, we take corrective measures to prevent recurrence, which include reeducation of the individual at fault. To facilitate early detection of problems, AGC has established internal and external consultation contact channels (harassment counselling staff, internal helplines, external consultation desks, etc.) in a manner that takes into consideration those seeking consultation, including employees, customers, and business partners. Through these contact channels, we expedite the provision of consultations to employees with concerns, address problems, and prevent their occurrence. Moreover, the internal reporting helpline managed by the Compliance Division is available not only to AGC employees but to all Group employees.

## 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 negotiations between management and labor, each side respects the other position and logic, and tries to solve problems through discussion. The labor union negotiates with management

on working and other conditions for its members. The union managers and top management of AGC have meetings that are focused on management of the entire business at least twice a year.

### ▶Data about the Labor Union (AGC)

Year	Number of members*	Average age	Average length of service
2020	4,386	39.6	15 year and 2 months
2021	4,526	39.7	15 year and 3 months
2022	4,535	40.0	15 year and 6 months
2023	4,574	40.2	15 year and 7 months
2024	4,685	39.9	15 year and 5 months

<sup>\*</sup> AGC adopts a union shop system under its labor agreement.

## Human Resource Management

## Fu

## Fundamental Approach

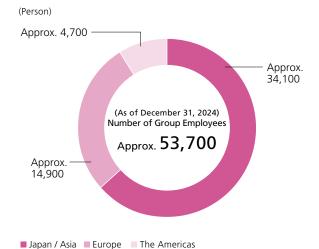
To continuously evolve as a truly global enterprise, the AGC Group has set out the "7 Key Principles for People," which are aimed at realizing progressive human resource management.

## Management Structure

In the AGC Group, the Human Resources Division takes the initiative in conducting human resource management in line with the "7 Key Principles for People".

Taking into account the labor laws and practices in each country and region, as well as employee awareness, we are working on various measures in collaboration with Human Resources representatives in each in-house company and region.

## ▶ Number of Employees by Region (AGC Group)



## 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 four Shared Values of the Group Philosophy **"Look Beyond"**.

### **Diversity for Organizational Competitiveness**

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

### Development and Growth

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

### Job Satisfaction and Pride

The 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

The AGC Group provides a safe and healthy work environment.

### Open Communication

The 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**

### Developing group management talents

In the AGC Group, in order to develop group management talents, we select key management positions globally, successor candidates are recognized as a talent pool, and systematic assignment and training are implemented.

Development of global-level management talents is carried out from the three perspectives of growth through work, mentorship and coaching, and training, by formulating and implementing the necessary plans for each individual.

The candidates are strategically assigned to important cross-divisional or cross-regional positions. In addition, we conduct 360-degree appraisals to support personnel growth and carry out mentorship and coaching in line with the needs of individual personnel. In addition, to enhance the effectiveness of training, we encourage employees to participate in various selective training programs to gain the experience and knowledge necessary for management talents.

## **Establishment of HR Committee**

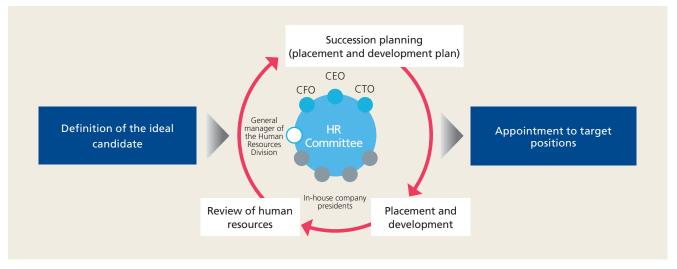
In February 2025, the HR Committee has been established as an advisory body to the President & CEO, to deliberate important matters related to human capital in the AGC Group. It has an organizational rank equivalent to that of the Management Committee, and is held seven times a year, in principle with the President & CEO, CFO, CTO, and General Manager of the Human Resources Division, and Presidents of in-house companies attending its meetings. The details of those meetings are reported to the Board of Directors every year. This Committee deliberates themes such as the selection and development of management personnel for the Group and the promotion of diversity, thus promoting human capital management in the AGC Group.

The HR Committee is involved in the group management talents development cycle, and independent directors give lectures at training programs. The management directly participates in identifying and developing the next-generation of leadership talent.

## ▶AGC Group Management Talents Development Program System



## ▶ Group Management Talents Development Cycle





## AGC's Initiatives

## Human Resource Management System

AGC manages employees fairly in consideration of their abilities and performance. The Company pays appropriate wages that exceed the legal minimum wage and living wage, and 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 end of December 2024, excluding those dispatched from other Group companies

Classification		Male	Female	Total	Percentage of female employees
Managers		2,646	261	2,907	9%
Non- managers	Career- track positions	838	262	1,100	24%
J	Shop-floor workers	3,179	170	3,349	5%
	Clerical positions	12	542	554	98%
	Subtotal	4,029	974	5,003	19%
Total	Total		1,235	7,910	16%

## ▶Employee-Related Data for AGC

As of end of December, 2024

Item	Male	Female	Total
Average age	42.9	41.9	42.8
Average length of service	17.4	13.2	16.8
Average overtime working hours	18.9 hours/month (labor union member average)		
Paid leave acquisition rate	93.9% (labor union member average)		

## ▶Number of Employees Retiring (AGC)

Period: April 2024 to March 2025 Excludes employees retiring upon reaching the mandatory retirement age

ltem	Number of employees / year	
Number of employees retiring	193	
Average length of service for retirees	13.0	

## ▶ Retention Rate of New Career-Track Employees (AGC)

As of end of March, 2025

Year of recruitment	Number of employees	Retained employees	Retention rate
2022	122	113	92.6%
2023	140	138	98.6%
2024	157	157	100%

## ▶ Percentage of mid-career hires among Career-Track Employees

Year of recruitment	Percentage of mid-career hires	
2022	57.9%	
2023	58.8%	
2024	45.3%	

## Global Promotion of Diversity



## Fundamental Approach

Diversity is one of the four values of the Group philosophy "Look Beyond" and is the foundation of the AGC Group as well as a source of competitive advantage. Our business management encourages innovation and value creation by providing opportunities for diverse people to realize their full potential. The AGC Group values diversity in terms of not only gender, age, race, nationality, disability status, sexual orientation and gender identity, religious beliefs and creeds, and values, but also in terms of career paths, experiences, and work styles. We strive to convert this diversity into strength by emphasizing equity and inclusion while creating systems and environments that facilitate work by our diverse personnel.

## AGC's Definition of DE & I

[Diversity] Diversity refers to the respect and appreciation of individual differences. It acknowledges diversity in age, gender, ethnicity, religion, disabilities or illnesses, gender identity or expression, sexual orientation, education, and nationality. The emphasis is on empowering individuals by valuing and leveraging these differences.

[Equity] Equity is about providing each member with unique support to help them succeed and grow.

[Inclusion] Inclusion is a proactive initiative to incorporate each member's ideas, knowledge, styles, approaches, and perspectives to maximize the success of the business and the well-being of its members.



## **Management Structure**

In order to create an environment where diverse talent can fully utilize their abilities, the AGC Group established the Diversity Council in 2022, chaired by the CEO. This council meets semiannually to share information and discuss cross-divisional issues, and advances concrete measures based on four key approaches: fostering a supportive culture, recruitment, human resource development, and creating a conducive work environment.



## Groupwide Initiatives

## **Hiring Diverse Personnel**

The AGC Group has developed an Employee Value Proposition (EVP) to strengthen its global recruitment branding. Under the common phrase "Make Your Mark Every Day" and based on its concept, the Group is delivering a consistent recruitment brand

Furthermore, in the Asia-Pacific, a key region in our business strategy, we established a regional headquarters company, AGC Asia Pacific Pte. Ltd. in Singapore in 2013 to accelerate the development of new businesses and markets. We employ highly motivated and capable talents from within and outside the region, regardless of country of origin.

### **Empowering Women**

The AGC Group has set "One Team with Diversity" as one of Our Shared Values in the Group philosophy "Look Beyond," and aims to manage our organization without regard to gender. In addition, the AGC Group Charter of Corporate Behavior states the aim to create a comfortable workplace free of discrimination, regardless of gender or other factors, and promotes the advancement of female employees, taking into account discussions at Board of Directors meetings.

### ▶ Percentage of female managers

AGC Group As of end of September, 2024

Year	Percentage of female employees	
2024	12.6%	

## ▶ Percentage of full-time employees by age bracket

AGC Group As of end of September, 2024

Age classification	Male	Female
0~14	_	_
15~24	4.2%	1.4%
25~34	19.6%	5.6%
35~44	23.6%	6.5%
45~54	20.5%	5.1%
Over 55	11.4%	2.1%
Total	79.3%	20.7%

## ▶ Percentage of full-time employees by length of service

AGC Group As of end of September, 2024

Add dioup As of end of september,		
Length of service classification	Male	Female
Less than 1 year	5.4%	2.2%
More than 1 year but less than 5 years	17.3%	6.0%
More than 5 years but less than 10 years	13.1%	3.8%
More than 10 years but less than 20 years	21.8%	5.3%
More than 20 years but less than 30 years	12.2%	2.0%
More than 30 years	9.5%	1.4%
Total	79.3%	20.7%

## **Employment of People with Disabilities**

The AGC Group (Japan) is expanding employment opportunities for people with disabilities.

#### Employment rate of persons with disabilities

AGC Group (Japan) for companies obligated to employ people with disabilities As of end of October, 2024

Year	Number of people with disabilities (actual number)	Employment rate
2024	276	2.33%



## AGC's Initiatives

## **Hiring Diverse Personnel**

Since 2010, AGC has boosted efforts to hire new graduates for career-track positions, including Japanese and non-Japanese students graduating from overseas universities as well as international students coming to Japan.

## ▶ Non-Japanese Nationals Hired during New Graduate Recruitment for Career-Track Positions (AGC)

Year of recruitment	Exchange students in Japan	Graduates of overseas universities
2020	2	9
2021	2	0
2022	6	1
2023	10	1
2024	7	4

### **Empowering Women**

To create an environment that encourages the active participation of women, AGC has established a registration system for leavers who wish to be rehired. Under this system, leavers who wish to be rehired in the future are registered and given priority prior to being hired from the external human resources market. We have also introduced the mentorship system where senior female employees provide support to junior female employees. In addition, we have introduced a system allowing employees to take up to three years off when accompanying their spouse on a job transfer, supporting a flexible work-life balance.

## Support for Raising Children

AGC provides support through a cross-departmental network of female employees for raising children, examples of which include the introduction of the Nursery Use Support System for external nurseries registered as AGC corporate bodies, participation in support for use of babysitters, the creation and distribution of handbooks for employees and their managers who are expecting or raising children; the holding of meetings by the Women's Activity Secretariat or female employees (both before taking childcare leave and after returning); and the holding of career design seminars after returning to work.

## Promotion of Female Employees to Management Positions

In July 2021, AGC endorsed the goal of "30% by 2030" that the Japanese Trade Union Confederation is encouraging companies to achieve. Accordingly, to provide society with value through the realization of diversity that empowers talented personnel regardless of gender, AGC aims for women to account for 30% of its directors and Audit & Supervisory Board members and 20% of its executive officers by 2030. Further, women accounted for 6.0% of AGC's managers (division manager or higher) as of the end of December 2024. Also, we have appointed one female outside director and two female Audit & Supervisory Board members, and internally promoted three female employees to the position of Executive Officer.

Going forward, our initiatives will focus on stepping up the recruitment of talented women, actively promoting female employees through assignment and development, and creating an environment that empowers female employees (the introduction of required systems). Our goal is to raise the percentage of women in management positions (division manager or higher) to approximately 8.0% by 2030.

## ▶ Trends in Percentages of Female Managers (Division Manager or Higher)

Year	Percentage of female employees		
2020	3.6%		
2021	3.9%		
2022	4.8%		
2023	5.4%		
2024	6.0%		

## ▶ Trends in Percentages of Female Managers (General Supervisor or Higher)

As of December 31 of each year (excluding those who have retired from their positions)

Year	Percentage of female employees		
2020	5.9%		
2021	6.8%		
2022	7.0%		
2023	7.9%		
2024	8.4%		

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

Year	Number of new female graduates	Total new graduates	Percentage of female employees
2020	30	120	25.0%
2021	17	111	15.3%
2022	23	122	18.9%
2023	40	140	28.6%
2024	52	157	33.1%

## ► Wage Gap Between Men and Women

Year	Management positions (division manager or higher)	Non-management positions
2022	98.7%	81.1%
2023	93.9%	81.6%
2024	93.9%	80.5%

<sup>\*</sup> Gap when dividing regular employees into management and non-management categories

## Employment of People Who Have Reached Retirement Age

AGC has been gradually increasing its retirement age from 60 to 65 since 2015, and employees who reach the age of 60 after 2021 have a retirement age of 65.

### **Employment of People with Disabilities**

The AGC Group is expanding employment opportunities for people 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 of People with Disabilities

Year	Number of people with disabilities (actual number)	Employment rate
2020	137	2.32%
2021	144	2.36%
2022	145	2.32%
2023	157	2.41%
2024	170	2.54%

## Special Subsidiary, AGC Sunsmile

AGC Sunsmile,Inc. is a special subsidiary established in 2002 with a view to increasing the employment of people with intellectual disabilities. In cooperation with welfare institutions for persons with disabilities, etc., the Company strives to provide a better work environment for highly motivated employees. Duties consist mainly of cleaning the Company offices and dormitories, and they are also in charge of greening activities. In addition, depending on the needs of divisions at business sites, AGC Sunsmile employees also engage in the conversion of documents into portable document format (PDF) and supplementary work related to manufacturing processes. We are working to create opportunities for AGC Sunsmile employees to thrive through the expansion of their job roles

Previously, the company operated in the Keihin, Sagami, and Kansai areas, but in 2023, it established a new Tokyo office within AGC's headquarters. This office aims to contribute to improving operational efficiency within the company by focusing intensively on administrative support tasks extracted from various divisions within the headquarters.

## Creating a Vibrant Workplace for LGBTQ People

Under the shared value "One Team with Diversity," AGC is committed to creating an environment where diverse human resources can demonstrate their abilities and individuality, regardless of sexual orientation, gender identity, or gender expression. As part of these efforts, we are promoting the development of a workplace environment where LGBTQ people can work with peace of mind, and are developing internal measures in terms of both institutional and cultural aspects.

With regard to institutional measures, we operate consultation desks for LGBTQ people and recognize same-sex common-law partners as spouses. In terms of cultural measures, we promote internal understanding by holding seminars and expanding the number of ALLY members who understand and support LGBTQ. To increase the visibility of ALLY, we produce ALLY stickers and T-shirts, and volunteer members from within the Company participate in cheering along the Tokyo Rainbow Pride Parade.

For LGBTQ people, ALLYs who have accurate knowledge and a willingness to respect others are a reassuring support. Therefore, we will continue to promote internal understanding and expand the number of ALLY members, while also working to enhance internal systems so that LGBTQ people can feel comfortable and supported in their workplace.





AGC's LGBTQ ALLY sticker

Awarded PRIDE Index 2024 Gold



Cheering along the route of the 2024 Tokyo Rainbow Pride Parade

# **Employee Education**



## Fundamental Approach

The AGC Group outlined its policy on Development and Growth in the "7 Key Principles for People," which aim to realize progressive human resource management.

The AGC Group aims to become a company that puts into practice its human resource management slogan—"AGC People: Driving our Growth!"—and we believe that human resources are the driving force for the growth of the Group's business operations. The AGC Group has established a variety of training programs, such as technology and skills training provided alongside rank-specific training to further support employee growth.



## Management Structure

The AGC Group organizes an educational system, chiefly through the Human Resources Division, in cooperation with the personnel officers of each in-house company and region. In addition, the training systems and methods are continuously reviewed and improved.



## Group-wide Initiatives

#### AGC MONOZUKURI Training Center

The AGC MONOZUKURI Training Center is an in-house educational facility designed to effectively develop the AGC Group personnel. The training center comprises two areas, one for training and one for practical application, and it provides online and video-streamed training on over 120 (business and technical) topics, principally for AGC Group employees in Japan. In terms of practical training, technical education is designed around the concept of "GENBA (real place), GENBUTSU (real product), and GENJITSU (reality)." The training center, equipped with the same machines and equipment as those used in the AGC Group plants, provides trainees with practical, hands-on learning opportunities. Training is also provided to business partners to boost the standard of manufacturing excellence and support for the next generation throughout the supply chain.



Training and education building

### **Training Programs**

The AGC Group continuously works to develop human resources by implementing rank-specific training programs, from new employees up to the management level. In addition, the Group enhances and carries out many types of selective training in various specializations and for improving business skills.

#### **Improvement of Training Environment**

The AGC Group has been offering employee training online as part of its "learn anytime, anywhere" work-place-building initiative and promoting web-based and video-based training since 2014. In addition to face-to-face training, which brings participants together, we are working to diversify learning by combining training held online and via video distribution and promoting individual autonomy in reskilling. Going forward, we will continue to consider various training methods and expand content to create an environment where employees can easily learn.

#### **2024 Training Participation Results**

The number of participants and the number of hours of training\* at AGC and its Group companies are as follows.

#### ▶ 2024 Training Participation Results

	Number of participants	Hours	
AGC	3,370	75,115	22.3
Group meeting	1,797	23,494	13.1
Total	5,167	98,609	19.1

<sup>\*</sup> Training results (face-to-face training, online training, e-learning) operated by the AGC MONOZUKURI Training Center. Does not include training conducted independently by individual divisions or Group companies.

## Human Resource Development to Create Digital Innovation

Promoting AGC Group Improvement and Innovation Activities The AGC Group promotes improvement and innovation activities in order to raise the productivity of the entire Group. In addition to increasing productivity throughout the supply chain, the Group is actively expanding the scope of activities to non-manufacturing divisions, such as sales and marketing and back office sections. In recent years, by simulating optimal productivity when new businesses and products are about to be launched, the Group has been raising the likelihood of success in its business ventures. In addition, we have begun new activities to build rewarding work environments and improve employee engagement by systematically identifying and promoting the resolution of issues in organizations.

#### Kaizen Manager Development Program

The AGC Group develops core personnel who are able to drive innovation for business improvement. Through practical instruction based on each participant's own business challenge themes, they learn problem-solving methods that lead to digital transformation by combining the design approach of industrial engineering with the latest data analysis techniques. More than 270 people have completed the program to date, and they are leading improvement and innovation efforts at sites around the world.

#### Development of Dual-Skilled Personnel

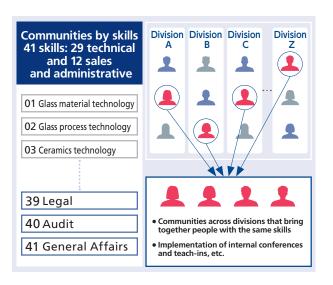
To develop the human resources essential for the acceleration of digital transformation, we are focusing on fostering dual-skilled personnel who possess expertise in their particular business fields as well as digital technology skills. To this end, we are independently evolving a multi-layered training curriculum tailored to each employee's job. The Data Science Plus program aims to develop data scientists through a comprehensive training system encompassing three levels: introductory, basic/applied, and advanced. and is also being rolled out to overseas sites. At the end of 2024, we had trained over 90 employees at the advanced level, with the target to train 100 employees by 2025 . Further, we offer the Digital Transformation Training for Managers, which targets the senior managers of in-house companies, and the Data Utilization Training for Plant Technicians.

#### **CNA: Cross-Divisional Network Activities**

In the CNA program, which aims to improve employees' specialized skills, employees can register their own skills\* and engage in cross-divisional activities with other employees who have the same skills. Each community, organized around a skill, is led by a skill leader and includes various workshops, in-house conferences, and study sessions on technology-related matters, human resource development, and exchange activities. Recently, there has been an increase in cases where employees register skills they wish to learn, in addition to their area of expertise, as desired skills for participation, and apply them to their relearning efforts. In fiscal 2023, the number of activity participants exceeded 10,000 globally. These activities in the CNA program provide valuable opportunities for employees to get to know members from other organizations based on skills and gain a wealth of ideas and stimulation. Such experiences allow employees to feel that they are contributing to the company's value and competitiveness. Building on these experiences, we will continue to utilize internal networks to support the provision of "spaces for spontaneous" learning" for individual learning and growth. These spaces serve as a "third place" (i.e., not at home or the workplace) where participants can enjoy a comfortable environment that fosters constructive exchanges. AGC aims to further develop and evolve this unique organizational culture that connects diversity and

#### generates value.

\* AGC's original 41 specialized skills which comprised of 29 technical categories and 12 sales and administrative categories, used as a skill map.



#### ▶ Cross-Divisional Network Activity



## AGC's Initiatives

## **Career Development Support**

AGC has introduced the "Challenge Career System" to encourage employees to apply for the jobs of their choice. 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 been adopted in order to appropriately evaluate and manage those with highly specialized expertise or advanced technological skills.

#### Challenge Career System

- An in-house voluntary recruitment system, under which employees apply to job offers publicly posted by each division once a month (a total of 251 employees to date)
- An in-house free agent system, under which employees register for the jobs that they wish to perform at other divisions and undergo screening individually for job consideration (a total of 126 employees to date)
- Job Challenge (in-house side jobs)
   A system that lets employees apply to internal job postings in any division and work a side job (started in 2023)

### Professional System

A system under which manager-level employees, who have extremely high practical knowledge, skills, or behavioral traits regarding technical skills and expertise vital to the AGC Group and can exercise them to a great extent, are certified as professionals, and treated with adequate conditions (68 managers).

#### Meister System

A system under which technicians, who have outstanding technical skills and knowledge vital to the continuous development of the AGC Group and can exercise them to a great extent and who are responsible for the training and guidance of their successors, are certified as meisters, and treated with adequate conditions (5 employees)

Note: Current numbers are as of December 31, 2024. The number listed for the Challenge Career System is the total number of users since 1999.

# Improving Employee Engagement

## Fundamental Approach

The AGC Group is committed to fostering an organizational culture where diverse individuals can demonstrate their potential and contribute to enhancing the Company's value through high engagement. Employee Engagement is about nurturing an environment where motivated individuals and a company striving for a better organizational culture mutually grow and uplift each other. To this end, employees, managers, and members of the senior management team all consider ways to solve problems and find appropriate measures through dialogue. The Group also strives to make these approaches and activities part of its employees' daily work.

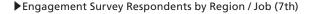
## **Group-wide Initiatives**

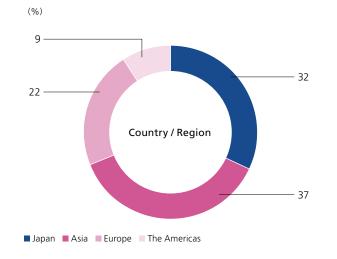
Since 2005, every three years the AGC Group has conducted engagement surveys targeting Group-wide employees both inside and outside Japan, with the aim of improving overall engagement. Based on the results of these surveys, the Group formulates and executes necessary policies at individual divisions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

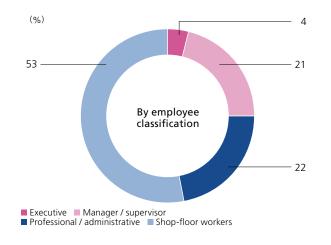
Most recently, in September 2022, the Group conducted its seventh survey, in 24 languages targeting approximately 50,000 individuals. The positive response rate increased compared with the previous survey in 2019, and the effect of measures taken by each division and workplace was evident. Based on the results of the 2022 survey, we have been discussing workplace issues and developing additional measures to resolve them. The effectiveness of the measures is confirmed through a simplified annual survey, while we are committed to ongoing activities to improve engagement.

Employee Engagement Survey 2022 Details

# AGC Integrated Report P81 Employee Engagement Survey 2022







### ▶ 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%
Sixth survey (conducted in September 2019)	47,533	41,897	88%
Seventh survey (conducted in September 2022)	49,468	42,656	86%

### ▶ Engagement Survey Topics

Employee	Employee	Change from Previous
Engagement	Enablement	Iterations
<ol> <li>Clear and promising direction</li> <li>Leadership</li> <li>Quality and customer focus</li> <li>Respect and recognition</li> <li>Development opportunities</li> </ol>	1. Performance management and compensation 2. Authority and empowerment 3. Resources 4. Collaboration 5. Work efficiency	Understanding and practice of "Look Beyond"

### AGC Group CEO Awards

The AGC Group has set up the annual AGC Group CEO Awards with the goal of creating a positive corporate culture where employees respect each other and commend each other's success and efforts. Nominations are received from around the world, out of which up to 43 projects that embody AGC's four key values will receive the AGC Group CEO Award (43 projects in fiscal 2024), and the "Look Beyond" Award will be presented to the most outstanding initiative among them. Information on the award-winning activities is shared via intranet website, and award ceremonies are held in each region of Japan / Asia, Europe, and the Americas. To maintain a high level of motivation among our employees, the Group regularly reviews ways to acknowledge and commend their contributions.

#### Commendations Awarded across the AGC Group in Fiscal 2024

Division	Number
Architectural Glass Asia Pacific Company	4
Architectural Glass Europe & Americas Company	5
Automotive Company	8
Electronics Company	8
Chemicals Company	6
Life Science Company	3
AGC Ceramics Co., Ltd.	2
CTO Office*1	5
CFO Office*2 and Internal Auditing	2
Total 43	

<sup>\*1</sup> Digital & Innovation Promotion Division, Business Development Division, Intellectual Property Division, EHSQ General Division, and Technology General Division

## Maximizing Employee Potential through Diverse Workstyles

The AGC Group has set out its long-term management strategy, Vision 2030. To put this strategy into practice, since 2016 the Group has been reviewing workstyles that allow all employees to work to their full potential and work environments that allow Group employees to work creatively. For example, AGC is focusing on initiatives for promoting more flexible and diverse workstyles. These include the introduction of a system giving employees time off in the case of their spouse transferring jobs, and another system that provides teleworking options that are not only limited to cases of childcare or nursing care. Other initiatives include the enhancement of the reemployment registration system, which envisions potential life stage changes for once-retired employees, the introduction of a system providing support for employees undergoing medical treatment that encourages striking a balance between treatment and work, and the implementation of a system offering paid leave in one-hour increments. We will promote the expansion and establishment of these systems to advance AGC People: Driving our Growth!

In addition, to draw out their potential, it is crucial to guarantee the physical and mental well-being of all employees, which directly leads to increased employee activity, satisfaction, and productivity. This is the foundation of "AGC People: Driving our Growth!" To this end, the Group actively conducts health management initiatives applicable to the AGC Group as a whole.

<sup>\*2</sup> Corporate Planning General Division, General Affairs Division, Corporate Communications and IR Division, Legal Division, Human Resources Division, Finance & Control Division, Procurement & Logistics Division, and Information Systems Division

# **Ensuring Work-Life Balance**



## Fundamental Approach

The AGC Group outlined its policy on Work Environment and Conditions in the "7 Key Principles for People," which aim to maintain a workplace environment where employees can work with peace of mind. Based on this concept, we are continuously working to ensure and maintain a workplace environment in which employees can work with vigor and enthusiasm. 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. We set and pay appropriate wages that exceed the legal minimum wage to ensure the livelihood and safety of our employees.



## **Management Structure**

The Human Resources Division is the main body in the AGC Group working to ensure a quality work-life balance for all Group employees. Based on the laws and practices of each country and region in which it operates, the Group takes a work-life balance on a company-by-company basis, in light of the nature of business conducted by individual companies.



## **AGC's Initiatives**

AGC is improving its work 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. As part of this effort, we have established work-life balance-related systems that enable employees to work in harmony with their jobs and personal lives. We are also working to create a corporate culture that makes it easier for employees to take advantage of these systems.

## Support for 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. In 2012, AGC has introduced a flexible work-from-home system that eliminates commuting times 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, 2015, and 2019 AGC was certified by the Tokyo Labor Bureau of the Ministry of Health, Labour and Welfare as a

general employer who receives certification of conformity, 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 (fiscal 2019 and fiscal 2020).

### ▶Employees Taking Childcare / Family Care Leave

Year	Number of employees who took childcare leave	Number of employees who took family care leave
2020	109 (including 49 male employees)	2
2021	132 (including 61 male employees)	3
2022	205 (including 129 male employees)	11
2023	221 (including 129 male employees)	13
2024	308 (including 228 male employees)	18

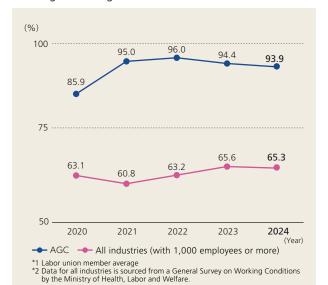
### ▶AGC's Systems

System	Details
Childcare leave	Available until the child becomes two years old
Childcare leave at birth	Possible to take up to four weeks of leave within eight weeks from the date of birth
Shortened working hours for childcare	Working hours can be shortened by up to two and a half 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 latenight work	Overtime, holiday, and late-night working hours may be capped or exempted until the child completes third grade at elementary school
Childcare nursing leave	Five days allowed per child each year until the child completes the third grade of elementary school Possible to take leave in one-hour installments
Support for nursery use	Nurseries that AGC is affiliated with may be used in areas of high need (Tokyo and Kanagawa)
Support for use of babysitters	Utilizing Japan Childcare Service Association's babysitting support program, a portion of babysitting fees will be subsidized
Working from home	Working from home is possible without regard to reasons, such as raising children or nursing care (no limit on number of days)
Flextime	Flextime without core working hours is possible without regard to reasons, such as raising children or nursing care
Paid leave in one-hour increments	Employees may take a maximum of five days of their allotted annual paid leave in one-hour increments
Expired annual leave accumulation system (life support leave)	Possible to accumulate unused expired annual paid leave and use it for childcare, nursing care, etc.
Leave of absence during spouse's job transfer	Leave of absence is possible if required to accompany spouse on new job transfer (maximum three years)
Registration for reemployment of retirees	Possible to register for reemployment for those who quit the company for personal reasons

## Promoting Annual Paid Leave (AGC)

In 2024, AGC employees took 93.9% of their leave (average for labor union members). Annual paid leave can be taken in half-day or hourly increments.

## ▶ Average Percentage of Annual Paid Leave Used



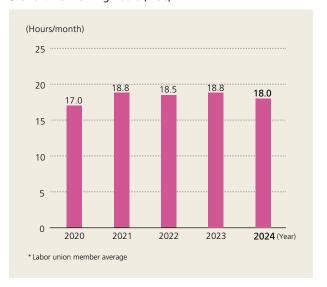
## **Reducing Overtime Working Hours**

AGC strives for the proper management of its employees' working hours. Currently, based on the principles of striving to reduce overtime and holiday work through efficient and well-balanced working methods, ensuring that unpaid overtime does not occur, and, in principle, limiting overtime to 45 hours per month except under special circumstances, AGC manages daily work through sufficient communication between administrators and their subordinates, implements agreements with the labor union based on the Labor Standards Act, and promotes appropriate management of working hours using data recorded by ID card readers and PC logs.

To prevent health complications caused by overworking, 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, the sharing of case studies is promoted so that human resource managers at each AGC Group company in Japan can discover activities that promote the effective management of working hours.

#### Overtime Working Hours (AGC)



# Creating a Comfortable Workplace



## Fundamental Approach

Through occupational health and safety activities, the AGC Group promotes the creation of a comfortable workplace environment based on the AGC Group Occupational Health and Safety Policy. Further, we have established the AGC Health Declaration, and we are pursuing initiatives aimed at maintaining and enhancing employee health.

#### AGC Health Declaration

With our Group philosophy "Look Beyond" as our motto, we will maintain and improve the health of employees so that we can continue creating value worldwide.



## Health, the Foundation of Everything

Employees are one of the AGC Group's most important assets, and health is one of the most important foundations of employees' daily lives.



#### Support from the Group

The AGC Group will actively implement measures to maintain and improve the mental and physical health of employees. In this way, we will enable employees to fully realize their potential and thereby become the drivers of corporate advancement. Moreover, we will support employees in enriching their interests of corporate and the control of the contro



#### Employee Autonomy

Employees' awareness of health is essential in maintaining and improving health. Mindful of protecting their own health, employees shall take the initiative to manage their own health.

Note: Initially, AGC will rigorously inform its employees about and implement measures based on the AGC Health Declaration. In the future, the Company will consider adopting the same approach with respect to the employees of Group companies in Japan and overseas.



## Management Structure

## Occupational Health Management through Divisional Cooperation

The AGC Group, based on the AGC Group Occupational Health and Safety Policy and the AGC Health Declaration, promotes the creation of a comfortable working environment through health and productivity management. The Representative Director & Senior Executive Vice President serves as the Chief Promotion Officer, and a chief occupational physician is appointed and assigned to oversee the initiative, which is promoted through collaboration among relevant departments. Additionally, since fiscal 2020, we have been regularly holding "labor-management health communication meetings" with the labor union, to identify and discuss issues related to employee occupational health and well-being.

## Group-wide Initiatives

#### AGC Group General Affairs and HR Personnel Network Conference (AGC Group (Japan))

The AGC Group holds regular conferences for GA and HR personnel from each Group company in Japan. Outside lecturers are invited to speak, providing a chance for such personnel to deepen their understanding on the latest trends in labor laws. Through discussion, participants also review health management, workstyles, and Group policies on matters including harassment prevention.

In addition to the conferences, the Group regularly checks employee working hours and the status of responses to legal changes, thus aiming to enhance collaboration within the AGC Group. 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 the Group.

Furthermore, in 2020, we expanded the scope of participation in "AGC Walk," a walking event that started in 2019, to Group companies in Japan, positioning it as a core event to promote health and productivity management as a group.



AGC Walk

### ► Management Structure

Chief Promotion Officer: Representative Director & Senior Executive Vice President
Promotion Officer: Senior Executive Officer & General Manager of the Human Resources Division

Head Office

EHSQ General Division

Human Resources
Division

+ Appointed as designated party for all occupational safety and health issues

Healthcare Center

AGC Health Insurance Association

Individual Plants

General Affairs Group

Healthcare Center

Environment & Safety Department



## **AGC's Initiatives**

### **Promoting Health and Productivity Management**

- This is a strategic initiative to ensure that all employees working at the AGC Group can continue to maximize their potential.
- Maintaining and improving the physical and mental health of every employee improves employees' vitality and productivity and is a fundamental element in promoting the human resource management slogan—"AGC People: Driving our Growth!"
- Continuously maintaining and promoting health By looking after their health, AGC employees are encouraged to continue to work actively as they get older.
- Improving productivity and job satisfaction AGC employees are encouraged to work productively by utilizing diverse and flexible workstyles and improving their physical and mental conditions.

Employees are encouraged to make the most of their potential and derive satisfaction from their work.

• Enabling fulfillment in 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.



Through maximizing the potential of its human resources, the Company becomes stronger as a whole as depicted in its health and productivity management strategy map.

#### The Focuses of AGC's Initiatives

While advancing the following initiatives to maintain and enhance health in accordance with the AGC Health Declaration, the Group will further develop its Health and Productivity Strategy Management Map, establish key performance indicators (KPIs), and proceed through PDCA cycles.

### ▶Aim of health and productivity management

AGC People: Driving our Growth!

Maximizing every employee's capacity

## Improving vitality and productivity

Continuously maintaining and promoting health

Improving productivity and iob satisfaction

Enabling fulfillment in public and private life

Maintaining and improving the physical and mental health of every employee

### ▶ Health and Productivity Management Strategy Map

## Take Health Measures

#### Enhancing lifestyles and health awareness

- · Medical checkups
- · Smoking cessation measures
- · AGC Walk
- · AGC Health Points Plan
- · Health Support App
- · Health seminars (lifestyle, women, elderly, etc.)

### Improving and enhancing organizational conditions

- ·Stress checkups
- Workplace improvement
- · Mental health training
- · Management of working hours,

#### Change Employee Awareness and Béhavior

#### Increasing the number of employees leading healthy lifestyles

Percentage of employees who have abnormalities detected, hypertension, body mass index, percentage of employees who receive secondary health checkups, specific health guidance consultation, etc.

#### **Enhancing lifestyles**

Use of Health Support App, participation in AGC Walk, participation in seminars, etc.

#### Reducing the number of employees with mental health issues

Number of high-stress workplaces. percentage of highly stressed employees, percentage of employees with mental health issues, etc.

#### Increasing number of non-smokers

Number of participants in smoking cessation programs, percentage of smokers, etc.

## Set Health Goals

## Personal health

Improving health and labor productivity



Organization health

Improving the performance of organizations

#### Accomplish Management Goals

AGC People: Driving our Growth!

Aim of health and productivity management

Continuously maintaining and promoting health

and job satisfaction

Enabling fulfillment in public and private life

Improving productivity

## ▶ Progress of Activities to Maintain and Enhance Health

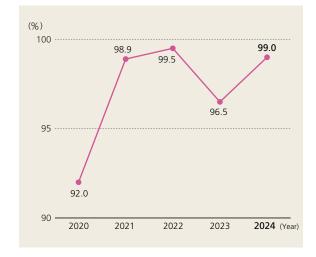
ltem	Description	Indicators	2022 Results	2023 Results	2024 Results	2025 Targets
		Percentage of employees receiving regular health checkups	100%	100%	100%	100%
	AGC is committed to activities that support the health of employees who have abnormalities detected,	Percentage of employees receiving secondary health checkups	99.5%	96.5%	99.0%	100%
employees who have abnormalities	recommending they get secondary health checkups and helping with medical costs (i.e., the entire cost of the	Percentage of employees who have abnormalities detected	18.4%	18.4%	18.6%	16%
detected during physical examinations secondary health checkup is borne by the Company).		Health guidance implementation ratio	83.2%	75.7%	90.4%	100%
Preventing mental health issues	We support mental health based on the four types of care ((1) self-care, (2) line care, (3) care by occupational health staff, and (4) care by external resources) by implementing EAP, return-to-work support program, e-learning, and	Percentage of employees receiving stress checkups	96.6%	95.0%	96.9%	100%
reventing mental nearth issues	self-checks.	Percentage of high-stress employees	10.9%	10.4%	10.8%	8%
Ensuring that employees are not exposed to secondhand smoke and reducing the employee smoking rate	Smoking prohibition during working hours started in 2023.	Smoking rate	22.4%	21.7%	20.5%	Less than 20%
Establishing exercise habits	AGC, the AGC labor union, and the AGC Health Insurance Association jointly hold the AGC Walk, a health promotion event, twice a year in spring and fall.	Participation rate in AGC Walk	47.1%	47.4%	51.5%	
Raising awareness of health	In 2021, we introduced the AGC Health Points Plan as an incentive for all employees to engage in healthy activities, and our Health Support App, a tool for individuals to management. These initiatives are part of our efforts to support employee health and well-being. (investment amount: ¥50 million).	App installation rate	46.6%	49.5%	51.5%	
	A state where employee productivity worsens due to sub-optimal health. Calculated using SPQ (University of Tokyo's first version)	Presenteeism	16.4%	17.2%	21.8%	
Health and productivity indicators	All-employee average of total number of days taken off and long-term absences due to illness	Absenteeism	2.9day	2.2day	2.3day	
reacti and productivity indicators	The employee survey measured the statements "I can engage positively with my work" and "I find my work fulfilling." The responses are averaged across all employees, using a scale where 1 means "Not at all," 2 means "Hardly ever," 3 means "Sometimes," and 4 means "Very much."	Work engagement	3.0points	2.7points	2.7points	
Status of leave due to injury or illness	The percentage of employees who have been absent from work for three months or more due to injury or illness	Sick/Injury leave rate	2.3%	2.4%	2.4%	
	We hold annual seminars focused on women's health and provide access to outsourced healthcare support	Seminar attendance rate	2.6%	2.3%	5.0%	Í
Addressing women's health issues	services, including coupons for medical institutions specializing in obstetrics and gynecology, infertility treatment, and breast health.	Gynecological cancer screening rate (biennial)	_	68.6%	_	
Employee satisfaction with various	Employee survey measures employee satisfaction with various health management initiatives overall (satisfied to slightly satisfied)	Satisfaction rate with overall health and productivity management measures	_	91.7%	90.9%	
nealth management initiatives	Employee survey measures satisfaction with health seminars (very informative to informative)	Satisfaction rate with health seminars	_	94.5%	96.8%	j
tatus of employee health literacy	Employee survey measures understanding of the AGC Health Declaration (understand to a little understand)	Percentage of understanding health literacy	_	84.9%	87.3%	ĺ

## Prevention and management of global health issues

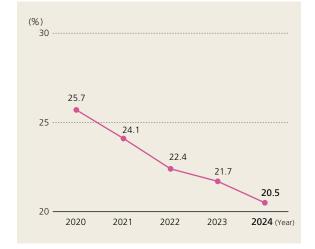
## Infectious diseases around the world

To protect the health and safety of employees and their families working globally, we provide necessary support by offering up-to-date information on the occurrence and spread of infectious diseases such as malaria, tuberculosis, and HIV in various countries, as well as the latest information on local medical facilities. AGC also offers vaccinations to employees and their families for various infectious diseases, such as polio, tetanus, rabies, and typhoid.

## ▶ Percentage of Employees Who Received a Second Health Checkup



## ▶Trends of Employee Smoking Rates





Health Support App

# Occupational Health and Safety

## Fund

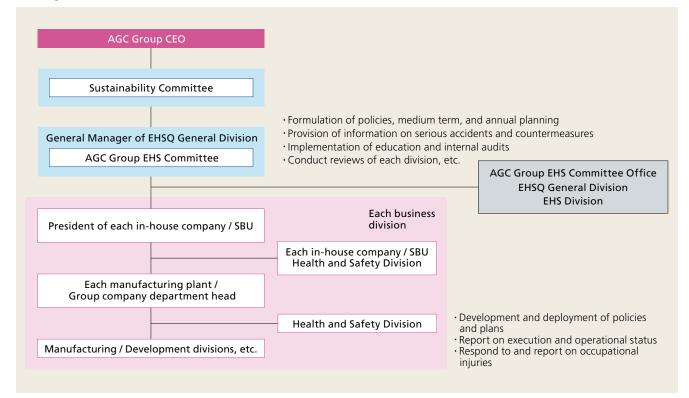
## Fundamental Approach

The AGC Group has established the AGC Group EHSQ Policy and the AGC Group Occupational Health and Safety Policy to contribute to the realization of a sustainable society while pursuing the Group philosophy "Look Beyond" for continuous growth and evolution. We are committed to EHSQ (Environment, Industrial Safety & Security, Occupational Health & Safety, Quality) as a prerequisite for our business activities.

## AGC Group's Occupational Health and Safety Management Initiatives

The policies and measures regarding occupational health and safety in the AGC Group are deliberated and decided upon by the Sustainability Committee, chaired by the AGC Group CEO, after being reviewed by the AGC Group EHS Committee, which is chaired by the Senior Executive Officer and the General Manager of the EHSQ General Division. The findings of the Sustainability Committee are reported to the Board of Directors. Further, important matters based on risks and opportunities (material issues) that are crucial for the AGC Group's contribution to solving long-term social issues faced by the world and for achieving the AGC Group's sustainable growth are deliberated and decided by the Sustainability Committee and then deliberated and resolved by the Board of Directors.

#### ► Management Structure Chart



#### **Excerpts from AGC Group EHSQ Policy**

(Established on January 1st, 2023, and revised on January 1st, 2025)

To realize a sustainable society and to grow and evolve continuously, the AGC Group pursues the Group philosophy **"Look Beyond"** and engage in EHSQ (Environment, Industrial Safety & Security, Occupational Health & Safety, Quality) as a prerequisite of our business activities.

## AGC Group Occupational Health and Safety Policy

(Established on February 9th, 2001, revised on January 1st, 2023)

Our motto is "No Production without assurance of safety." We are committed to sharing and demonstrating this motto with all workers\* of the AGC Group.

- 1. We comply with OHS-related laws and other requirements.
- 2. We set objectives and strive to achieve them to continuously improve the OHS Management System.
- 3. We create a safe and healthy workplace through continuous risk assessment.
- 4. We foster a safety culture in the AGC Group through all the workers' participation in the OHS activities.

<sup>\*&</sup>quot;All workers of the AGC Group" include contractors and other stakeholders.



## 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 fiscal 2013, the Group has been using the EHSQ Management System to manage EHSQ (Environment, Industrial Safety & Security, Occupational Health & Safety, Quality) across the entire Group. In addition, based on the approach of ISO 45001\*, the AGC Group Occupational Health and Safety Working Rules have been established and are applied globally at each in-house company and SBU.

Additionally, each business site rolls out activities based on the OHSMS framework. Since 2021, we have introduced the OHSMS self-assessment system (Audit Module) to monitor the establishment and operation status of OHSMS and continuous improvements. Furthermore, the Group strives to improve the level of occupational health and safety management through audits conducted by the corporate divisions and each business division.

We are promoting the acquisition of third-party OHSMS certification for organizations and sites with significant occupational health and safety risks.

Each business division examines its policies and measures, reports the progress at EHSQ management reviews and other occasions, and continuously conducts improvement activities.

## ▶ Number of Plants Obtaining OHSMS Third-Party Certification

As of end of April, 2025 (per site)

Coverage	Number of certified plants
Japan	7
Asia (excluding Japan)	21
Europe	47
The Americas	4
Total	79



## Group-wide Initiatives

## **Developing a System to Collect Global Work-related Accident Data**

In 2021, the AGC Group introduced the "Incident Module," a global system for collecting and sharing all work-related accident information, including those involving business partners operating in our sites. This system allows us to collect and analyze past accident data in order to prevent their recurrence and similar accident in the future. We have also established and are working to achieve occupational health and safety targets that should be achieved by 2030.

Over the long term, the total number of work-related accidents has been on a downward trend, but in recent years it has leveled off or even increased in some areas. Therefore, in 2019, we launched the "Occupational Health and Safety and Industrial Safety and Security Project," and over the past five years, Group divisions have worked together to create systems and frameworks for ensuring workplace safety and security. Based on the results, the project was dissolved in 2024, and its function will be taken over as subcommittee activities, with the EHSQ General Division and each division collaborating to solve issues on an ongoing basis.

We will continue to ensure workplace safety and security globally and foster a safety culture at AGC.

## Number of Work-related Accidents (AGC Group, Including Business Partners)

In 2024, the AGC Group experienced one fatal accident involving our employee. This accident occurred when a glass transport vehicle was transporting large sheets of glass. The defect in a vehicle component caused the vehicle to overturn along with the victim who was the driver. An accident investigation revealed that the drive component of this vehicle had potential risks due to long-term use, and the vehicles of the same manufacturer were suspended from use and scrapped. In addition, we are confirming the soundness of glass transport vehicles of other manufacturers and establishing maintenance management standards such as inspection details and frequency.

Occupational Health and Safety is a top priority for the AGC Group, and we are committed to preventing recurrence and ensuring safety.

### Occupational Health and Safety Targets and Results

KPIs	Scope	Targets	2020	2021	2022	2023	2024
Number of fatalities	AGC Group employees (including contract and temporary employees)	0	0	0	0	1	1
(persons)	Business partners employees	0	0	0	0	0	0
Number of fatalities and injuries caused by serious accidents, including partial loss of bodily functions*1	AGC Group employees (including contract and temporary employees)	0	2	0	1	0	0
	Business partners employees	0	0	0	0	0	0
Lost Time Injury Frequency Rate (LTIFR)*2	AGC Group employees (including business partners)	0.38(2030)	0.98	0.77	0.83*3	0.68	0.62

<sup>\*1</sup> Serious accidents such as partial loss of bodily functions are accidents involving injuries or illnesses of Levels 1 to 7 of the physical disability grades specified by the Ministry of Health, Labour and Welfare.

<sup>\*</sup> ISO 45001 is an international standard for occupational health and safety management systems issued in March 2018 by the International Organization for Standardization (ISO), a non-governmental organization that issues international standards.

<sup>\*2 &</sup>quot;LTIFR" refers to the rate of fatalities or injuries requiring one or more days of leave, as instructed by a physician, per one million total working hours.

<sup>\*3</sup> Lost Time Injury Frequency Rate in 2022 was corrected from 0.79 to 0.83 in the Sustainability Data Book issued in 2023 (P.82) due to a correction to the number of injuries at overseas sites.

#### **Number of Loss Time Injuries**

In 2024, there were 105 loss time injuries among the AGC Group employees and business partners. Regarding the types of accidents, there has been a tendency for a higher occurrence of accidents involving overexertion or strenuous movements, falls, cuts or abrasions, flying or falling objects, and slips or falls.

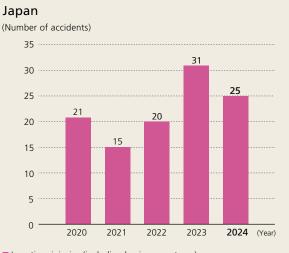
The AGC Group continuously implements measures to prevent the recurrence of past accidents and to prevent accidents proactively, including the installation of safe production machinery and safety operations and the establishment of a chemical substance management system.

These revisions were made from the figures in Sustainability Data Book 2023 (P.83).

- Japan: Revised from 19 cases to 20 cases in 2022 (due to recognition in later years of work-related accidents)
- Asia: Revised from 13 cases to 14 cases in 2021 (due to recognition in later years of work-related accidents)
- Europe: Revised from 83 cases to 88 cases in 2022 (based on the revised reporting of the number of accidents)

  These revisions were made from the figures in Sustainability

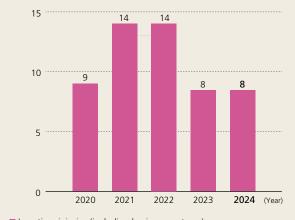
  Data Book 2024 (P.76).
- Japan: Revised from 31 cases to 32 cases in 2023 (due to rejected recognition in later years of work-related accidents)



■ Loss time injuries (including business partners)

#### Asia

(Number of accidents)



■ Loss time injuries (including business partners)

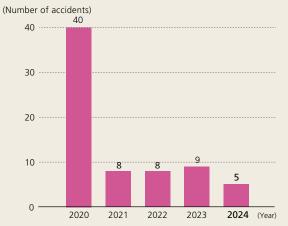
### Europe

(Number of accidents)



■ Loss time injuries (including business partners)

## The Americas



■ Loss time injuries (including business partners)

- \*1 Lost time injury (LTI) refers to work-related accidents results in the victim being unable to work for at least one day, as directed by a physician or other medical professional. However, cases where the absence is solely due to hospitalization for medical examinations are excluded.
- \*2 The final determination of whether an injury qualifies as a LTI or not is made by physicians, which may result in differences between regions such as Japan/Asia, Europe, and the Americas. However, the number of cases is managed based on the physician's judgment.

### ▶ Lost Time Injury Frequency Rate (AGC and business partners)

	2020	2021	2022	2023	2024
AGC overall	0.29	0.13	0.36	0.39	0.39
AGC employees	0.41	0.08	0.26	0.49	0.42
AGC business partners	0.17	0.19	0.54	0.21	0.33
Parent member companies of the Japan Chemical Industry Association	0.28	0.41	0.43	0.47	0.47
Manufacturing industry overall	1.21	1.31	1.25	1.29	1.30

<sup>\*1 &</sup>quot;LTIFR" refers to the rate of fatalities or injuries requiring one or more days of leave, as instructed by a physician, per one million total working hours.

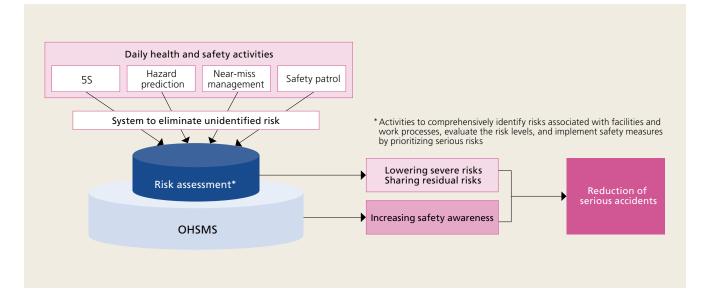
Health, Labour and Welfare of Japan.

### ▶ Severity Rate(AGC and business partners)

	2020	2021	2022	2023	2024
AGC overall	0.23	0.01	0.01	0.35	0.01
AGC employees	0.47	0.01	0.01	0.55	0
AGC business partners	0	0.03	0.01	0.01	0.02
Parent member companies of the Japan Chemical Industry Association	0.11	0.01	0.07	0.04	0.05
Manufacturing industry overall	0.07	0.06	0.08	0.08	0.06

<sup>\*1 &</sup>quot;Severity Rate" refers to the severity of accidents as the number of days lost per 1,000

#### ▶The AGC Group's Health and Safety Management Initiatives



## Improving the Level of Safety Management (Safety Culture Assessment Activities)

The AGC Group has been conducting safety culture assessments with Niigata University since April 2020 with the aim of improving the level of safety management. This initiative is being scaled up not only to sites in Japan and Asia, but also to European sites from 2023 and in the Americas from 2024.

The AGC Group is working to improve its safety management level by enhancing the strengths and improving the weaknesses identified from the results of its safety culture assessment.

Since July 2021, as part of our joint research with Niigata University, we have been engaged in industry-academia collaborative activities, including training of highly specialized human resources for safety management and cooperation in education at undergraduate and graduate schools.

## Promoting Safety Activity-Related Information Sharing That Transcends National and Business **Division Boundaries**

Every year, the AGC Group holds a safety meeting where health and safety managers and personnel in charge of health and safety at divisions and sites gather to share issues that need to be addressed and examples of improvements for a safe and healthy workplace environment, and to work together to improve their capabilities.

Since 2023, we have been holding a Global OHS Conference with the main themes of "Mindset, Top Message, Recognition, and Praise." In 2024, "Improving Safety Awareness" was added as a new theme. Messages from the CEO, in-house company presidents, and the General Manager of the EHSQ General Division were conveyed. Outstanding practices from each in-house company were presented and awarded in a ceremony. Through this event, we celebrate outstanding health and safety practices and promote their expansion to other locations.

In addition, we share videos of activities at multiple global locations. Such activities contribute to the sharing of information and strengthening of cooperation around the world, thereby raising health and safety awareness throughout the AGC Group and helping to create safer and healthier workplaces.

In addition, regional OHS meetings were held in China, Thailand, Europe and the United States, bringing together health and safety officers and persons in charge of health and safety from across divisions and regions, with consideration given to the differences in the laws and culture of each country. These meetings provide an opportunity to share region-specific challenges and best practices and to deepen each other's knowledge.

<sup>\*2 &</sup>quot;AGC overall" includes AGC Inc. (Japan) employees and employees of AGC business partners. \*3 The calculation method for LTIFR is based on the calculation method set by the Ministry of

<sup>\*2 &</sup>quot;AGC overall" includes AGC Inc. (Japan) employees and employees of AGC business partners.

<sup>\*3</sup> The calculation method for severity rate is based on the calculation method of the Ministry of Health, Labour and Welfare of Japan.



Second Global OHS Conference



Regional OHS Conference (Thailand)

We also have established an awards system for health and safety activities as an opportunity for recognition and praise. As for the Outstanding Safety Activity Award, which recognizes outstanding health and safety activities, 24 awards were given globally in 2024. In addition, we also present awards for continuous safety, recognizing sites that have achieved zero accidents for a year and sites that have achieved zero accidents for a certain period of time.

#### Continuing to Advance Risk Assessments

The AGC Group is taking steps to improve its risk assessments with an initiative to reduce the risk of work-related accidents. The AGC Group (Japan) trains managers and supervisors and implements routine training for employees who conduct risk assessments at manufacturing sites. In addition, the Group began safety enhancement activities in 2009, selecting qualified individuals from those in charge of development, manufacturing, facility, or other key departments at each manufacturing site and employees of business partners. This initiative includes intensive education on risk assessments and traditional health and safety activities such as 5S (Sort, Set in order, Shine, Standardize, Sustain), hazard prediction, near-miss management, and safety patrols as well as machinery safety training. In 2024, 28 employees completed the program, and they are playing active roles at the various sites as key personnel in promoting risk reduction activities in the workplace as core safety personnel. There are more than 470 core safety personnel working at the various sites.



Results reporting meeting by core safety personnel

## Installation of Safe Production Machinery and Operations

Reducing risks associated with manufacturing machinery is essential for realizing safe production workplaces. In addition to reducing risks associated with existing equipment through conventional risk assessment methods, the AGC Group is also implementing initiatives to introduce safer manufacturing machinery and operations. This includes making risk assessments at the design stage through prior safety reviews for new business activities or projects.

In Europe, risk-reduced facilities were introduced based on the local law-enforced system of CE marking\*<sup>1</sup>. The crucial role of risk assessments by facility users is also stipulated in the European Union framework.

The AGC Group (Japan/Asia) promotes the acquisition of certifications under the Safety Assessor and Safety Basic Assessor Qualification System\*2 to establish a framework where personnel can design and introduce equipment in compliance with international safety standards. The number of qualified individuals is steadily increasing, and they are actively engaged in risk assessment and verification.

- \*1 Products with the CE mark are certified as meeting the standards set by all member states of the European Union.
- \*2 "Safety Assessor Certification" is awarded for understanding and possessing the 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. Safety Basic Assessor certification is a third-party certification designed for individuals involved in machinery operation, verifying that they possess fundamental knowledge of machinery safety.





2024 Machine Safety Training (Indonesia, China)

## Establishment of a Chemical Substance Management System

The AGC Group strives to prevent adverse health effects, fires, and explosions from occurring by managing chemical substances used at each site by appointing experienced chemical substance managers, conducting appropriate risk assessments, implementing risk-reduction measures, and training personnel who handle chemical substances.

For chemical substance risk assessments, the AGC Group created its own standardized assessment method and has made it known Groupwide by conducting in-house training at production sites and other worksites. Based on the Globally Harmonized System of Classification and Labeling of Chemicals (GHS), this 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. In addition, the AGC Group promotes the implementation of risk assessments at many work areas based on actual surveys of workplaces.

#### Improving Occupational Health Standards

To prevent health hazards associated with work processes involving noise, thermal environments, dust, and chemical exposure, and to create a comfortable working environment, the AGC Group has established its own global standards in addition to the laws and regulations of each country. Based on the global standards, we undertake various measures such as work environment measurements, risk assessments, risk reduction strategies, and health screenings.

Providing a safe and comfortable work environment will lead to the protection of the human rights of workers, and as a result, it will contribute to the improvement of engagement, so we are promoting improvement of occupational health as one of our priority issues. In addition, we are focusing on creating a system that will enable the horizontal expansion of best practices across the AGC Group to other locations facing similar challenges.

At the Yokohama Technical Center, as one aspect of activities to realize a safe workplace, we are focusing on preventing heatstroke and thoroughly implementing measures to reduce workloads

according to WBGT\* values. We implemented a WBGT value monitoring system in 2021 to prevent heatstroke by continuously measuring and monitoring the heat stroke index notifying managers with alerts. This system allows us to prevent heatstroke by taking appropriate actions and management measures according to the situation at each work site.

\*WBGT: Wet Bulb Globe Temperature

### Improving the Level of Safety Awareness

To enhance safety awareness among employees, the AGC Group conducts health and safety education tailored to different levels for new hires, newly appointed managers, mid-career recruits, and recently promoted workers.

Furthermore, to enhance the expertise of employees in charge of health and safety, we regularly hold specialized health and safety training sessions covering topics such as safety activities, laws and regulations, machinery safety, risk assessment, chemical substance management, internal audits, occupational hygiene, and hazard awareness training.

The Human Error Prevention Manual, among others, is a proprietary textbook that has been translated into multiple languages for use in training courses at each plant. The AGC Group conducts practical training for safety patrols in Asia, including Japan. This training aims to improve the skills needed to identify serious risks in the workplace while on safety patrols. As part of the training, participants conduct safety patrols from the perspective of machinery safety and relevant laws and regulations along a mock production line with more than 140 hazards. Through this patrol training, they can foster their ability to identify the risks caused by unsafe situations in facilities. Since fiscal 2012, this training has been conducted for managers throughout Japan, and several safety managers from the AGC Group companies outside of Japan have also received the training. At PT Asahimas Flat Glass Tbk in Indonesia, part of the training facilities to learn the safety patrol methods used at the training center in Japan has been implemented, and local management is being trained in these safety patrol techniques.

Furthermore, health and safety materials are made available on the AGC Group's intranet through the Safety Materials Library, so that they can be used for health and safety education and training at various sites.

### Implementing Hazard Awareness Training

The AGC Group conducts hazard simulation training that allows participants to experience various hazards, including being caught in machinery, falls from heights, electric shocks, cuts and abrasions, chemical burns, slips and trips, and the effects of reactionary movements (such as back pain). This training aims to increase hazard sensitivity and promote the avoidance of unsafe behaviors that could lead to work-related accidents. We are also working to increase the number of opportunities for employees to participate in the hazard awareness training organized by the EHSQ General Division, with the goal of 2,000 participants per year.

Currently, the AGC Group is equipping major domestic and international sites, including the AGC Group companies, with hazard awareness equipment that recreate site-specific dangers and VR content. The AGC Group also holds regular training sessions by instructors leading the hazard awareness training.



## **AGC's Initiatives**

## Labor Union Participation in Health and Safety Measures (AGC)

The labor union actively participates in AGC's health and safety measures. Based on collective labor agreements, labor unions' advice and guidance regarding health and safety are incorporated. Health and safety committees, which are held at each location (business site), consist of representatives from the business (management) side, representatives from the workers' side, health and safety managers, and occupational physicians to discuss workers' health and safety. We also share health and safety information with our business partners who work with us and encourage them to participate in health and safety activities at our sites. Furthermore, safety officers including senior management and employee representatives regularly exchange opinions, which are then reflected in various health and safety measures.



Awareness of being caught in a chain or belt



Awareness of being caught in a rotating



Awareness of a fall due to slipping and tripping



Learning from past accidents

# **Industrial Safety and Security**



## Fundamental Approach

The AGC Group, which develops its businesses in local communities, believes that ensuring safety and security is a major prerequisite for achieving sustainable growth. Based on this belief, the AGC Group has established the AGC Group Industrial Safety & Security Policy to promote various issues surrounding industrial safety and security.

### AGC Group Industrial Safety & Security Policy

(Established on February 7th, 2003, and revised on January 1st, 2023) We proactively engage in industrial safety and security activities based on the philosophy, "ensuring security is our fundamental obligation as a company operating business in local communities."

- 1. We comply with relevant laws, and internal and external rules concerning industrial safety and security.
- We develop and continuously improve management initiatives to prevent incidents associated with industrial safety and security.
- 3. We strive to proactively communicate with internal and external stakeholders.



## **Management Structure**

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

The Group promotes risk reduction and preventive measures in its business activities by applying a PDCA cycle. Each business division promotes fire prevention, countermeasures for industrial safety accidents, and risk assessments for natural disasters based on action plans drawn up for that year by the EHSQ General Division. In addition to these measures, the Group strives for continuous improvement through internal audits that monitor the extent to which the above measures have been carried out.

In the Chemicals Business, the Chiba Plant and the Kashima Plant have been certified to utilize high-pressure gas by the Ministry of Economy, Trade and Industry. To promote a higher level of voluntary safety at business sites certified to utilize high-pressure gas, AGC has established a safety management system headed by the CEO and with the General Manager of the EHSQ General Division and the in-house company presidents as the officers in charge of safety.



## Group-wide Initiatives

## Prevention of Accidents with Preliminary Assessments for New Facilities

When building, expanding, or modifying facilities deemed to be at risk, the AGC Group conducts risk assessments for safety and disaster prevention during the design, construction, and startup phases based on its Prior Safety Assessment System, and verifies that the facilities are truly safe. At chemical plants, if our safety assessments find an area that ranks high in terms of danger, we implement HAZOP, ESD-HAZOP, and procedural HAZOP risk assessments that test for accidents triggered by deviations in process equipment (pressure changes, valve malfunctions, etc.), unsteady operations, and procedural operation mistakes during emergencies (emergency shutdowns).

#### Measures to Address Key Risks

The AGC Group is continuously improving preventive activities to avoid serious security incidents at its domestic and overseas sites through environmental, industrial safety, and security preservation audits conducted by each business division and corporate division. In recent years, we have focused our risk reduction initiatives on themes that are potentially high risk due to the nature of our business, including reinforcing fundamental rules and re-examining countermeasures based on past internal incidents, particularly in response to fires, hazardous material leaks, and accidents in glass melting furnaces. We investigated and took priority action on the following themes, and in fiscal 2024, there were no serious environmental or security disaster prevention incidents\*<sup>1</sup> in the AGC Group. We will continue to reduce risk based on these results.

\*1: Leakage resulting in evacuation from a plant, production shutdown exceeding three months, incidents involving serious accidents, violations of laws and regulations resulting in serious penalties and quidance, etc.

#### Prevention of Fire

We have issued safety alerts, confirmed management conditions at our sites, shared best practices for fire prevention, and implemented cross-functional measures in response to a series of fires caused by ignition of flammable materials near work areas and equipment that handle fire or in high-temperature environments. This has resulted in a downtrend in the number of fires caused by the above factors.

• Prevention of Leakage of Hazardous Materials In response to the hydrochloric acid tank leak at the AGC Kashima Plant in 2022, we conducted inspections and surveys of tanks and storage facilities for hazardous and toxic substances at all of our domestic and overseas business sites. To date, investigations have been completed, and for facilities where potential risks have been identified, corrective action plans have been developed and implemented, and progress is being monitored as needed by the EHSQ General Division.

### Prevention of Accidents in Glass Kilns and Electric Melting Furnaces

We conducted a full investigation of the risk status of the relevant equipment and the compliance status of work procedures at all domestic and overseas locations and in all businesses. Additional measures have been implemented for equipment where potential risks were identified. We have completed all necessary responses to date.

### Measures Taken in Response to a Severe Warning under the High Pressure Gas Safety Act

In response to a severe warning received in 2023 from the Ministry of Economy, Trade and Industry under the High Pressure Gas Safety Act, we restructured the system for high-pressure gas certified sites and promoted measures to prevent recurrence. We completed our corrective actions in response to the severe warning by the end of 2024 and reported the matter to the Ministry of Economy, Trade and Industry.

## Initiatives to Improve Self-Managed Industrial Safety and Security Capabilities

The AGC Group is working to reduce risks related to industrial safety and security and strengthen its self-managed industrial safety and security capabilities. Under this policy, the Group continuously improves such capabilities by implementing third-party assessments and clarifying items for improvement based on assessment results. The assessments are as follows: (1) The Japan Industrial Safety Competency Center carries out assessments of self-managed industrial safety and security capabilities at designated worksites in Japan managed under the Act on the Prevention of Disaster in Petroleum Industrial Complexes and Other Petroleum Facilities; (2) the Group implements safety culture assessments (adoption of the questionnaire format mainly developed by Kenichi Takano, a former professor of Keio University, and Professor Akira Tose of Niigata University) at medium- and large-sized manufacturing plants in Japan, Asia, Europe and the Americas and (3) the Group conducts activities to improve industrial security capabilities at processing and assembly plants under the guidance of local fire departments. The activities are being implemented globally with the cooperation of each in-house company and SBU.

(1) Worksites designated under the Act on the Prevention of Disaster in Petroleum Industrial Complexes and Other Petroleum Facilities: Assessments of self-managed industrial safety and security capabilities by the Japan Industrial Safety Competency Center are carried out at

the Chiba Plant, Kashima Plant, Kansai Plant (Takasago Factory), AGC Ceramics Co., Ltd. (Takasago), and the AGC Yokohama Technical Center. The Group reconfirmed the problems with the safety foundations and safety culture at these plants that came to light through the safety assessments, drew up a three-year improvement plan, and is in the process of rolling out improvement activities. In addition to such assessments at manufacturing plants, AGC is promoting initiatives to improve comprehensive industrial safety capabilities, including those of headquarters, by carrying out interviews of executives based at headquarters (those in general manager positions at each in-house company) by an expert from the Japan Industrial Safety Competency Center. We believe that these new initiatives can also contribute to research efforts into the comprehensive safety capabilities of industry.

(2) Medium- and large-sized manufacturing plants: Safety culture assessments (adoption of the questionnaire format mainly developed by Kenichi Takano, a former professor of Keio University, and Professor Akira Tose of Niigata University)

The Group has concluded a joint research contract with Niigata University on safety culture assessments, under which it has been implementing assessments of more than 42,000 employees in Japan, Asia, Europe, and the Americas since 2020. The Group will implement improvement activities based on a three-year improvement plan that reflects the strengths and weaknesses revealed by the safety culture assessment and will monitor the effect of improvements by carrying out the second cycle of assessments in about three years' time.

In addition, in 2024, Niigata University, AGC, Nippon Telegraph and Telephone East Corporation, Mitsui Chemicals, Inc. jointly established the Consortium on the Safety Culture Assessment. The aim of the consortium is to contribute to the prevention of accidents and disasters by improving the safety culture of the participating companies. Through its activities, the consortium also aims for the evolution and development of the safety culture assessment, with a view to adapting it to diverse industries and building an educational system for sustainable diagnosis and research. We also plan to roll this out globally in the future.

#### ▶ 2024–2026 Assessment Implementation Plan

Year	Japan	Asia	Europe	The Americas	Number of plants assessed (implemented)
2024	7	18	26	2	53
2025	23	10	30	8	71
2026	11	2	11	3	27

(3) Processing and assembly plants: Activities to improve industrial security capabilities under the guidance of local fire departments. In these activities, processing and assembly plants conduct education and training focused on fire prevention with the cooperation of municipal fire departments. AGC Glass Products Co., Ltd. has already started activities at its Eniwa and Tosu plants.

#### **Education and Training for Security Incidents**

The AGC Group conducts planned education and training at its business sites with the objective of minimizing the impact on employees and local communities in the event of an industrial safety and security incident occurring. At the Chiba and Kashima plants, in particular, which are located in regions with industrial complexes, we implement the following education and training based on annual plans.

#### [Education]

- Industrial safety and security education (for employees and employees of business partners)
- Basic first-aid training courses (in-house)

### [Training]

- Indoor fire hydrant training (initial firefighting tournament)
- Training on the reporting of matters anomalous with the Act on the Prevention of Disaster in Petroleum Industrial Complexes and Other Petroleum Facilities (training on the emergency callup of divisional employees)
- Training on responding to natural disasters, including earthquakes (evacuation and safety confirmation drills)
- Safety confirmation training using the emergency call system (the AGC Group in Japan)
- Fire extinguisher handling training
- Training based on the International Convention for the Safety of Life at Sea (SOLAS)
- Combined disaster prevention training at industrial complexes
- Joint disaster prevention and reporting training at offshore industrial complexes
- Offshore disaster prevention training (oil fence extension training)
- External education and training

#### [Plant contests]

- Outdoor fire hydrant handling techniques contest
- Respirator application contest

In November 2023, at the Yokohama City Firefighting Technique Competition, a volunteer firefighting team formed mainly of young employees of the AGC Yokohama Technical Center participated as representatives of Tsurumi Ward in the indoor fire hydrant operation category. The women's team achieved excellent results, taking first place. We will continue to engage in steady training on a daily basis so that we can respond quickly in the event of an emergency.



Fire prevention training in combination with the fire department at the Kashima Plant



Outdoor fire hydrant handling techniques contest at the Chiba Plant



Yokohama City Firefighting Technique Fire prevention training in Competition at AGC Yokohama Technical Center



combination with the fire department at the Kashima Plant



Fire prevention training in combination with the fire department (AGC Glass Products' Eniwa Plant)



Respirator application contest at the Chiba Plant

# **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**

In the AGC Group, the Procurement & Logistics Division plays the main role in continuing the stable procurement of raw materials and other materials. The division also conducts initiatives to solve social issues involving human rights, labor practices, and 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 has made the policy available to business partners worldwide by posting it on the AGC Group official website and has asked them to understand and cooperate with the policy. We also presented the policy to participants at the AGC Annual Suppliers Meeting to encourage the awareness and understanding of our business partners on this content.

In accordance with the policy, from 2023 to 2024 we conducted a questionnaire on sustainable procurement, verified conditions at 430 companies based on the responses received from business partners, and identified the potential risks. Also, we requested that business partners make improvements in areas where they had low scores.



## **Group-wide Initiatives**

#### Procurement compliance consultation desk

The AGC Group works to ensure the transparency of purchasing transactions and the prevention of fraud. As part of these efforts, we have set up a procurement compliance consultation desk. The consultation desk can be used by business partners to point out problems related to the AGC Group employees' transactions by e-mail or regular mail, and the issues raised are kept strictly confidential and resolved promptly.

**®** Point of Contact for Compliance in Procurement Activities

#### **Regular Review of the Content of Contracts**

To promote appropriate 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**

(Established in 2009 and revised on January 1st, 2025)
AGC Group pursues values of the Group Philosophy

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

#### 1. Basic Purchasing Principles

- (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 and 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 sourcing through the adoption of smelters and refiners that have been certified as not using minerals associated with armed forces or injustice such as human rights violations.
- (3) Partnership with business partners AGC will establish a long-term, mutually beneficial partnership to produce a better product with our business partners. To this end, we will strive to maintain close
  - To this end, we will strive to maintain 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, Attention 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 that contributes to creating a sustainable society and constantly grow and evolve. In order to fulfill our social responsibility as the AGC Group to realize a sustainable society, 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.

- 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 benefits 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 sourcing through the adoption of smelters and refiners that have been certified as not using minerals associated with 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
- Make products that 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, marital status, 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 establish 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 business risk prevention system 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.

#### Initiatives in concert with our business partners

The AGC Group's business is based on cooperation with many business partners, and it is implementing various initiatives that are integrated with the supply chain.

#### Presentation of the AGC group policy

The AGC Group has been making presentation of the AGC group policy at the AGC Annual Suppliers Meeting since 1997. Through this, we deepen communications with our business partners and expand and unify our business activities across the supply chain.

At the 2025 Annual Suppliers Meeting, approximately 220 business partners from 150 companies in various industries in Japan and overseas attended the session. The business partners were presented with a letter of appreciation for their ongoing cooperation, and the AGC Group CEO Yoshinori Hirai gave a presentation on the Group's FY2024 financial results, progress in the medium-term management plan, and the updated Group Vision.

We also provided information on the AGC Group Purchasing Policy and deepened business partners' understanding of the policy. Following the meeting, a lively exchange of views took place among the business partners, the AGC Group executives, and the AGC Group business division heads.



Presentation of AGC Group Policy

#### **Promoting Green Procurement**

The Group has formulated the AGC Group Integrated Green Procurement Guideline, which provides a common approach for all business divisions. In 2025, minor revisions were made only to its terminology.Based on each business division's green procurement guideline, new and existing business partners' environmental management and the inclusion of chemical substances with high levels of environmental impact are checked and risk assessed by requesting the completion of prescribed forms and we engage in green procurement of raw materials and other materials suited to each business.

# AGC Group integrated Green Procurement Guidelines

## Initiatives Related to High-Risk Minerals (Conflict Minerals and Cobalt)

As part of its efforts to realize sustainable and responsible supply chains, the AGC Group ensures responsible minerals sourcing, in the procurement of minerals that could potentially be associated with conflicts (tantalum, tin, tungsten, and gold) and high-risk minerals such as cobalt, confirming whether there is any risk of the minerals being associated with human rights violations or support for the armed forces related to the mining, transportation, and trade of minerals in conflict-affected and high-risk areas (CAHRAS) and using smelters and refiners that are certified as not using minerals for which there are concerns in relation to the said issues. With the cooperation of related business partners, we identify risks through due diligence and take corrective action if a significant risk is found in a supply chain.

In 2021, we established the AGC Group Responsible Minerals Sourcing Policy, which we posted on the AGC Group official website to make it available to business partners worldwide. Further, we requested the cooperation of business partners in achieving this initiative for the responsible minerals sourcing.

As a result of a survey from 2023 to 2024 on the procurement of high-risk minerals and products containing high-risk minerals, covering the AGC Group business sites worldwide, the Group was able to identify 472 upstream refiners, of which 268 were certified by the Responsible Minerals Initiative. Going forward, we will continue to identify and take corrective actions to the risks.

## Hosting Workshops on the Environment, Safety, and Compliance

The AGC Group regularly hosts workshops on the environment, safety, and compliance for major business partners. The AGC Group also holds lectures on strategies and environmental targets in relation to its sustainability management, organizes gatherings aimed at information sharing on each company's activities, and conducts tours of outstanding plants.

Also, the Group organizes various training programs for its business partners with a view to promoting manufacturing and human resource development that is based on an awareness of the entire supply chain.

## Assessment of Business Partners' Satisfaction with the AGC Group

Since 2008, AGC has been conducting an annual survey of its major business partners to assess the level of satisfaction. The purpose of the survey is to build trusting relationships with these business partners to strive for mutual prosperity aiming to offer 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.

## **Fair Transactions**



## Fundamental Approach

The AGC Group stipulates that it will conduct appropriate transactions and its business in accordance with the principle of fair competition and all applicable laws and regulations in the AGC Group Charter of Corporate Behavior. We also strive to maintain sound relationships with politicians, governments, other organizations, and individuals and firmly confront anti-social forces as it aims to conduct fair transactions.



## **Management Structure**

Since 2006, the AGC Group has been implementing a global legal management system and strengthening monthly reporting on and monitoring of 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 and is promptly reported to senior management and the 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 management system.

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



## **Groupwide Initiatives**

### **Compliance with Antitrust Laws**

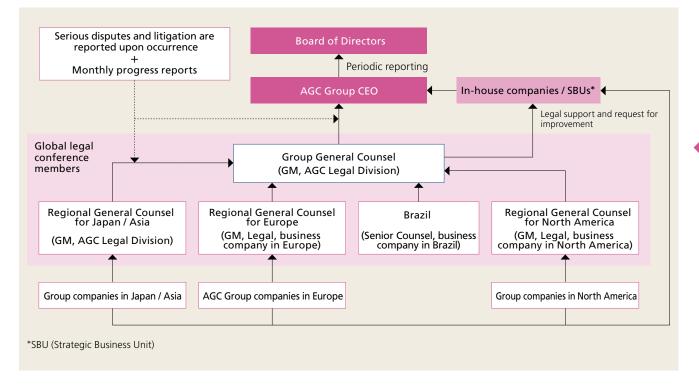
In addition to the AGC Group Code of Conduct that summarizes matters all employees must comply with in their work, the AGC Group has established and is operating global guidelines for compliance with antitrust laws. The guidelines state that, when meeting with a competing company, (1) the legality of 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 audits is "organization and procedure for compliance with antitrust laws." Audits of the status of compliance with these global guidelines are also implemented.

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

Year	Number of participants in e-learning	Number of internal audits
2024	Approx. 9,600	35

### ▶Global Legal Management System



### **Anti-Corruption Measures**

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

In addition, as regulations aimed at preventing corruption and other acts of corruption are being strengthened worldwide, we are implementing awareness and training programs for all employees. In addition to the AGC Group Anti-Bribery Rules for public officers, the Group established and is operating guidelines that provide specific procedures, approaches, and judgment criteria for high-risk countries and regions. These guidelines stipulate procedures such as the screening of bribery risks associated with newly appointed agents, consultants, representatives, and other third parties.

Further, in 2024 the AGC Group was not subject to any punitive measures issued by authorities in relation to corruption.

AGC complies with the Political Funds Control Act with regard to political donations, which require pre-approval with checks each time on their necessity. In fiscal 2024, political donations were ¥0.

## Compliance with Contractual Requirements and the Worker Dispatching Act

The AGC Group conducts business in collaboration with business partners through in-house contracting and temporary staffing. In addition, the Group conducts a survey every year on compliance with contractual requirements at AGC production plants and major Group companies in Japan and confirmed again in 2024 that compliance-related rules are being observed. The Group will continue to make efforts to disseminate and thoroughly comply with contractual requirements and the revised Worker Dispatching Act.

### Compliance with the Subcontract Act

At the AGC Group, we strive to rectify any transaction and business practices that impede the formation of partnerships with our business partners, while complying with criteria stipulated in the Act on the Promotion of Subcontracting Small and Mediumsized Enterprises, in accordance with our Partnership Building Declaration in December 2020, in light of the importance of creating a mutually beneficial environment and increasing value added throughout our supply chain.

As a part of these efforts, in February 2024, we shared

information with about 20 people, including managers in charge of managing outsourcing and procurement in each business division, about key points to be aware of when complying with the Act against Delay in Payment of Subcontract Proceeds, etc. to Subcontractors, including how to respond to the recent rise in raw material and fuel prices.

The AGC Group continues to train controllers and managers on best practices for compliance with this Act. Specifically, since 2009, we have been conducting e-learning training for employees at domestic Group companies affected by the Act (training was provided to approximately 11,000 employees in 2024).

#### 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. The AGC Group Code of Conduct clearly states that insider trading is forbidden. In addition, systems intended to prevent it are stipulated in the Outline of Establishment of the Information Management Council 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 to reconfirm the agreed-upon contents. Special training is implemented for directors, executive managers, and personnel in specific posts (Corporate Planning General Division, Finance & Control Division, Corporate Communications and IR Division, etc.).

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

# **Ensuring Quality**



## Fundamental Approach

The AGC Group pursues "Innovation & Operational Excellence," one of our shared values in Group philosophy, "Look Beyond," and declares in the "AGC Group Quality Policy" to continuously create the value that meets customer expectations. The AGC Group develops and provides products and services giving due consideration to safety and the environment, and works to improve the quality of our products and services in order to gain the satisfaction and trust of our customers.



## **Management Structure**

Under the "AGC Group Quality Policy," each division establishes a quality management system based on ISO 9001 and similar standards. Divisions conduct internal audits and reviews in a manner best suited to their business, and continuously improve the effectiveness and efficiency of their quality management system.

In addition, since 2013, based on the EHSQ Management System concept, the EHSQ General Division comprehensively covers the EHSQ (Environment, Industrial Safety & Security, Occupational Health & Safety, Quality) initiatives of the entire Group, establishing a structure that contributes to the entire group management activities relevant to EHSQ. In 2021, the AGC Group established the "AGC Group Quality Management Working Rules" to further improve our quality.

The AGC Group holds an annual "Quality Conference" gathering each business division's quality management representatives to share issues and relevant knowledge. In 2024, the conference featured a review of the previous fiscal year, confirming the issues that the AGC Group should cope with, sharing initiatives for efforts in improving the quality of each division.

### ▶ISO 9001 and IATF 16949\*1 Certification Status

As of end of December, 2024

Location	Number of certified organizations*2
Japan	26
Asia	27
Europe	23
North America and South America	7
Total	83

<sup>\*1</sup> Standards for quality management systems applied in the automotive industry, which requires compliance with the global procurement criteria for automotive parts.

#### The AGC Group Quality Policy

(Established on September 8th, 2004, and revised on January 1st, 2023)

Based on the principle of "incorporating Customer Satisfaction perspective into our daily work," we develop and provide products and services to continuously create the value that meets customer expectations.

- We provide our products and services in conformance with the requirements of laws, regulations, and customers.
- We ensure and improve the quality of our products and services, including safety and appropriate environmental consideration.
- We record necessary information related to our products and services on a factual basis, and appropriately control, report, and disclose such information.
- We together participate in the continual improvement of effectiveness and efficiency of our quality management, and strive to enhance the value of individual's work.
- 5. To ensure the above are materialized, we determine individual policy and targets, and facilitate them in the PDCA cycle.

<sup>\*2</sup> Single certification may include multiple sites and/or legal entities.



## Group-wide Initiatives

## Compliance with Legal and Regulatory Requirements regarding Products

Through risk management self-assessments, which are based on the AGC Group Enterprise Risk Management, the AGC Group annually checks the operational status related to compliance with laws and regulations on products at each business division and continuously pursues improvements.

#### **Ensuring Data Integrity in Inspections**

The AGC Group is working to maintain, reinforce, and systematize data governance in order to ensure data integrity in inspections.



## **Initiatives at Individual Companies**

## Improvement of the Reliability of Product Inspection Data

The AGC Group has introduced a system for quantitatively evaluating the reliability of inspection data. In addition to strengthening and improving management measures, we are promoting technological approaches that prevent human error, such as automating the acquisition of inspection data. We will continue to ensure the delivery of reliable quality data to customers.

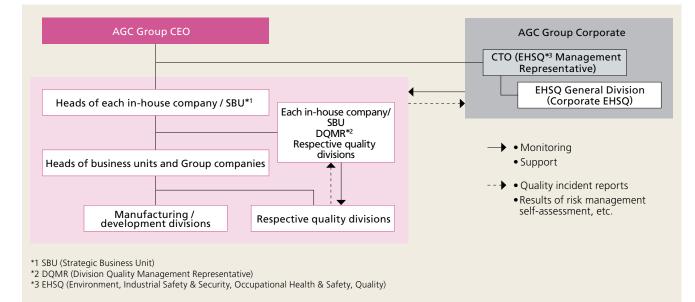


## Implementing Quality Education and Trainings

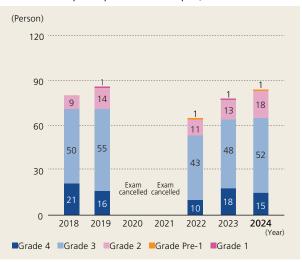
The AGC Group clarifies the competencies required for those who perform tasks affecting quality and provides quality education and training in each business division according to their respective needs. When necessary, we provide quality compliance education and study sessions for employees, using internal and external quality incident case studies, to maintain and raise quality awareness. Within the AGC Group companies in Japan, we encourage employees to take an official examination on quality control (QC KENTEI\*).

\* QC KENTEI: Quality Management and Quality Control Examination, a measure for assessing knowledge of quality management, quality control and Kaizen, administrated by Japanese Standards Association.

## ▶ Quality Management Structure



## ▶ Number of Employees that Passed the QC KENTEI (among the AGC Group Companies within Japan)



# **Product Safety Initiatives**



## Fundamental Approach

Under the AGC Group's management policy of "providing safety, security, and comfort to society," the Group conducts reviews, from the perspective of product safety, when moving from product development stage to prototyping and manufacturing. We ensure that our products do not cause any harm or danger to the customers. In addition, AGC Group ensures that appropriate information is disclosed so that our products are used safely.

For some of our products, we acquired local certification based on the country standard where the product is sold, to ensure product safety from the perspective of a third-party.



## Management Structure

Within the AGC Group, each division establishes quality management system based on ISO 9001 and similar standards. Divisions conduct internal audits and reviews in a manner best suited to its business, and continuously improve the effectiveness and efficiency of its quality management system.



## **Group-wide Initiatives**

### Compliance with the Consumer Product Safety Act

In Japan, in the event of serious product accident, the AGC Group promptly reports to the Consumer Affairs Agency and takes organizational measures to prevent the spread of harm, which is taken in accordance with the "Safety Control and Product Accident Handling Standards for Compliance with the Consumer Products Safety Act" (enacted in 2014). We also work to prevent accidents by regularly confirming risk control-status according to the risk level set for each product.

Adding to these efforts, information on product accidents released by the Consumer Affairs Agency and the National Institute of Technology and Evaluation (NITE) is consolidated, categorized, and shared among the Group, so to be utilized as reference for the AGC Group's product safety initiatives.

Study sessions are held for the persons in charge at relevant

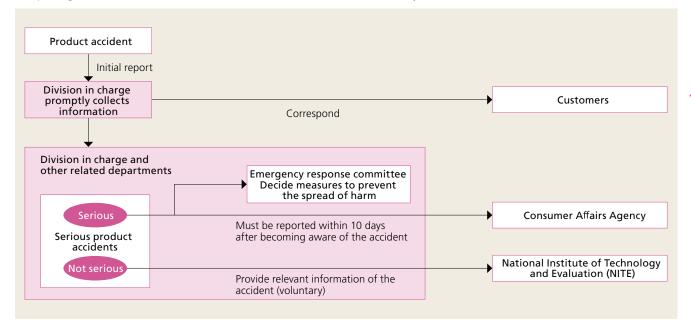
divisions, to maintain and update their knowledge.

There were no serious product accidents reported to the Consumer Affairs Agency in 2024.

## ▶the Number of Reported Serious Product Accidents (the AGC Group Companies in Japan)

Year	Number
2020	0
2021	1
2022	1
2023	0
2024	0

#### ▶ Reporting Flow for Serious Product Accidents under the Consumer Product Safety Act



# Pursuit of Customer Satisfaction (CS)



## Fundamental Approach

The AGC Group continuously strives to achieve customer satisfaction (CS). The Group defines customers as "people and organizations who receive the result (value) of one's work, such as the products (including services) and information." As such, the Group works to achieve CS of not only business customers but also between the employees within the Group.



## **Management Structure**

Under the quality management system of the AGC Group, in-house companies take various initiatives to enhance CS. CS trainings are implemented in training tailored to different levels, and the Group actively works to root the spirit of CS in the AGC Group's corporate culture.



## **Group-wide Initiatives**

#### Implementing CS Training

Based on the management policy of "creating new value and functions for customers and business partners and building trust with them," the employees of the AGC Group incorporate CS perspective into their daily activities as a fundamental approach to their work. To add further value for our customers, the Group provides specialized CS trainings and other types of trainings to the divisions based on their specific needs. Moreover, CS is an important theme in the Group's training tailored to different levels.

As of December 31, 2024, a total of 8,325 employees have taken CS training. (This number does not include training provided individually by the divisions).

#### **Customer Service**

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

The Architectural Glass Asia Pacific Company (Japan) operates a customer center for architectural glass to respond accurately to inquiries from customers in the building industry, as well as from individual customers (consumers). The Architectural Glass Europe & Americas Company (Europe) provides websites for customers in multiple languages to correspond to each local needs.

Additionally, the Chemicals Company offers inquiry forms on its website in 10 languages. It is organized to automatically forward inquiries to the appropriate person in charge, depending on the business, product, and region/country of the sender, so as to respond in a timely manner.

## Social Contribution Activities



## Fundamental Approach

Aln its AGC Group Charter of Corporate Behavior, the AGC Group declares under "Harmony with Society: A Trusted Corporate Citizen," it will "strive to be a trusted corporate citizen, fulfilling its responsibilities to the communities in which it does business."

Based the three priority areas of this charter—support for the next generation, harmony with local communities, and natural environment conservation—the AGC Group carries out social contribution activities throughout Japan and Asia, the Americas, and Europe under the AGC Group Social Contribution Basic Policy.

Social contribution activities at each base are positioned as an element of "consideration for relationships with local communities," which is recognized as a long-term social issue. By leveraging our diverse expertise and resources, we are fostering good relationships with local residents and governments in the areas around our operational sites, which also contributes to enhancing our brand image.

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

## **AGC Group Social Contribution Basic Policy**

(Established on February 10th, 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 goal, we conduct social contribution activities in three priority areas.

#### **Priority Areas**

- Support for the next generation
   We, as a creator of future value, support the development
   of children, who will carry the future, helping them live
   out their dreams.
- 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 resolution of global environmental problems.



## **Group-wide Initiatives**

### ▶Total Financial Expenditures (the AGC Group)

Year Amount	
2020	¥477 million
2021	¥373 million
2022	¥517 million
2023	¥572 million
2024	¥572 million

## ▶Total Number of Employees Participating in Social Contribution Activities (the AGC Group)

	Number of employees	
2020	11,543	
2021	9,648	
2022	14,848	
2023	18,848	
2024	21,381	

## ▶Total Expenditures by Field of Emphasis: 2024 (the AGC Group)

Priority Areas	Amount	Rate
Support for the next generation	¥199 million	35%
Harmony with local communities	¥177 million	31%
Natural environment conservation	¥60 million	10%
Other	¥136 million	24%

### ▶ Expenditures by Use: 2024 Results (the AGC Group)

Purpose of Use	Amount	Rate
Donations, material donations	¥343 million	60%
Employee participation and dispatch	¥133 million	23%
Voluntary programs	¥78 million	14%
Opening of facilities, acceptance of tours	¥18 million	3%



## AGC's Initiatives

#### Internal Systems

AGC has introduced the Volunteer Leave and Sabbatical System in order to support, as a company, the self-directed volunteer activities of individual employees.

## For volunteer activities that meet predetermined criteria

Volunteer Leave System: 5 days a year

Volunteer Sabbatical System: 3 to 30 months (up to two times within this timeframe)

#### Enlightening the Next Generation

Aiming to nurture the next generation, AGC conducts outreach classes and in-factory classes that provide an enjoyable learning experience with experiments and lectures using familiar materials. Through these classes, children will learn about the appeal and importance of materials and gain valuable opportunities to think about the possibilities for the future. In 2024, a total of 25 sessions were held at 10 schools and attended by a total of 1,129 children and students.







# **GRI Standards Index**

AGC refers to GRI Standards (GRI 1: Foundation 2021) and reports information based on the GRI content index for the period from January 1, 2024, to December 31, 2024.

## 1. The organization and its reporting practices

Universal Standards				Page listed
	2-1	Organizational details	a. report its legal name;     b. report its nature of ownership and legal form;     c. report the location of its headquarters;     d. report its countries of operation.	AGC Integrated Report 2025 (P.97) Corporate and Stock Information     Company Overview     Company Overview for Investors
GRI 2: General Disclosures 2021	2-2	Entities included in the organization's sustainability reporting	a. list all its entities included in its sustainability reporting; b. if the organization has audited consolidated financial statements or financial information filed on public record, specify the differences between the list of entities included in its financial reporting and the list included in its sustainability reporting; c. if the organization consists of multiple entities, explain the approach used for consolidating the information, including: i. whether the approach involves adjustments to information for minority interests; ii. how the approach takes into account mergers, acquisitions, and disposal of entities or parts of entities; iii. whether and how the approach differs across the disclosures in this Standard and across material topics.	AGC Sustainability Data Book 2025 (P.1) Scope of This Report     Financial Review 2024 (English only) (P.89-95)
	2-3	Reporting period, frequency and contact point	a. specify the reporting period for, and the frequency of, its sustainability reporting;     b. specify the reporting period for its financial reporting and, if it does not align with the period for its sustainability reporting, explain the reason for this;     c. report the publication date of the report or reported information;     d. specify the contact point for questions about the report or reported information.	AGC Integrated Report 2025 (P.2)     AGC Sustainability Data Book 2025 (P.1) Scope of This Report
	2-4	Restatements of information	a. report restatements of information made from previous reporting periods and explain: i. the reasons for the restatements; ii. the effect of the restatements.	AGC Sustainability Data Book 2025 (R32-) Addressing Climate Change (individual data)     AGC Sustainability Data Book 2025 (R47-) Effective Use of Resources (individual data)     AGC Sustainability Data Book 2025 (R54-) Considering Relationships with Local Communities and the Environment (individual data)     AGC Sustainability Data Book 2025 (R83) Occupational Health & Safety (Number of Loss Time Injuries)     AGC Sustainability Data Book 2025 (R80) Gynecological cancer screening rate
	2-5	External assurance	a. describe its policy and practice for seeking external assurance, including whether and how the highest governance body and senior executives are involved; b. if the organization's sustainability reporting has been externally assured: i. provide a link or reference to the external assurance report(s) or assurance statement(s); ii. describe what has been assured and on what basis, including the assurance standards used, the level of assurance obtained, and any limitations of the assurance process; iii. describe the relationship between the organization and the assur-ance provider.	AGC Sustainability Data Book 2025 (P62) Verification Statement     Financial Review 2024 (English only) (P89-95)

## 2. Activities and workers

Universal Standards			Requirements	Page listed
	2-6	Activities, value chain and other business relationships	a. report the sector(s) in which it is active; b. describe its value chain, including: i. the organization's activities, products, services, and markets served; ii. the organization's supply chain; iii. the entities downstream from the organization and their activities; c. report other relevant business relationships; d. describe significant changes in 2-6-a, 2-6-b, and 2-6-c compared to the previous reporting period.	AGC Integrated Report 2025 (P.42-58)     Business Overview     Company Overview for Investors     Products     Procurement Policy
GRI 2: General Disclosures 2021	2-7	Employees	a. report the total number of employees, and a breakdown of this total by gender and by region; b. report the total number of: i. permanent employees, and a breakdown by gender and by region; ii. temporary employees, and a breakdown by gender and by region; iii. temporary employees, and a breakdown by gender and by region; iii. non-guaranteed hours employees, and a breakdown by gender and by region; iv. full-time employees, and a breakdown by gender and by region; v. part-time employees, and a breakdown by gender and by region; c. describe the methodologies and assumptions used to compile the data, including whether the numbers are reported: i. in head count, full-time equivalent (FTE), or using another methodology; ii. at the end of the reporting period, or using another methodology; d. report contextual information necessary to understand the data reported under 2-7-a and 2-7-b; e. describe significant fluctuations in the number of employees during the reporting period and between reporting periods.	AGC Sustainability Data Book 2025 (P.66-68) Human Resources Management
	2-8	Workers who are not employees	a. report the total number of workers who are not employees and whose work is controlled by the organization and describe:  i. the most common types of worker and their contractual relationship with the organization;  ii. the type of work they perform;  b. describe the methodologies and assumptions used to compile the data, including whether the number of workers who are not employees is reported:  i. in head count, full-time equivalent (FTE), or using another methodology;  ii. at the end of the reporting period, as an average across the reporting period, or using another methodology;  c. describe significant fluctuations in the number of workers who are not employees during the reporting period and between reporting periods.	

## 3. Governance

Universal Standards				Page listed
	2-9	Governance structure and composition	a. describe its governance structure, including committees of the highest governance body; b. list the committees of the highest governance body that are responsible for decisionmaking on and overseeing the management of the organization's impacts on the economy, environment, and people; c. describe the composition of the highest governance body and its committees by: i. executive and non-executive members; ii. independence; iii. tenure of members on the governance body; iv. number of other significant positions and commitments held by each member, and the nature of the commitments; v. gender; vi. under-represented social groups; vii.competencies relevant to the impacts of the organization; viii.stakeholder representation.	AGC Integrated Report 2025 (R83-84)     AGC Sustainability Data Book 2025 (R10) Corporate Governance     Corporate Governance
GRI 2: General Disclosures 2021	2-10	Nomination and selection of the highest governance body	a. describe the nomination and selection processes for the highest governance body and its committees; b. describe the criteria used for nominating and selecting highest governance body members, including whether and how the following are taken into consideration: i. views of stakeholders (including shareholders); ii. diversity; iii. independence; iv. competencies relevant to the impacts of the organization.	• AGC Integrated Report 2025 (P.83-84)
	2-11	Chair of the highest governance body	a. report whether the chair of the highest governance body is also a senior executive in the organization;     b. if the chair is also a senior executive, explain their function within the organization's management,     the reasons for this arrangement, and how     conflicts of interest are prevented and mitigated.	AGC Integrated Report 2025 (P.78-79)     Corporate Governance
	2-12	Role of the highest governance body in overseeing the management of impacts	a. describe the role of the highest governance body and of senior executives in developing, approving, and updating the organization's purpose, value or mission statements, strategies, policies, and goals related to sustainable development; b. describe the role of the highest governance body in overseeing the organization's due diligence and other processes to identify and manage the organization's impacts on the economy, environment, and people, including: i. whether and how the highest governance body engages with stakeholders to support these processes; ii. how the highest governance body considers the outcomes of these processes; c. describe the role of the highest governance body in reviewing the effectiveness of the organization's processes as described in 2-12-b, and report the frequency of this review.	AGC Integrated Report 2025 (P.86)     AGC Sustainability Data Book 2025 (P.8) Sustainability Management System (P.24) Environmental Strategy for the Social Value 'Blue planet' (P.32) Addressing Climate Change     Sustainability Promotion System

	2-13	Delegation of responsibility for managing impacts	a. describe how the highest governance body delegates responsibility for managing the organization's impacts on the economy, environment, and people, including: i. whether it has appointed any senior executives with responsibility for the management of impacts; ii. whether it has delegated responsibility for the management of impacts to other employees; b. describe the process and frequency for senior executives or other employees to report back to the highest governance body on the management of the organization's impacts on the economy, environment, and people.	AGC Integrated Report 2025 (R33-86)     AGC Sustainability Data Book 2025 (R32) Addressing Climate Change     Sustainability Promotion System
	2-14	Role of the highest governance body in sustainability reporting	a. report whether the highest governance body is responsible for reviewing and approving the reported information, including the organization's material topics, and if so, describe the process for reviewing and approving the information; b. if the highest governance body is not responsible for reviewing and approving the reported information, including the organization's material topics, explain the reason for this.	
GRI 2: General Disclosures	2-15	Conflicts of interest	a. describe the processes for the highest governance body to ensure that conflicts of interest are prevented and mitigated; b. report whether conflicts of interest are disclosed to stakeholders, including, at a minimum, conflicts of interest relating to: i. cross-board membership; ii. cross-shareholding with suppliers and other stakeholders; iii. existence of controlling shareholders; iv. related parties, their relationships, transactions, and outstanding balances.	Corporate Governance Report
2021	2-16	Communication of critical concerns	a. describe whether and how critical concerns are communicated to the highest governance body;     b. report the total number and the nature of critical concerns that were communicated to the highest governance body during the reporting period.	Business Risks     AGC Sustainability Data Book 2025     (P.13-14) Risk Management     AGC Sustainability Data Book 2025     (P.15-16) Compliance
	2-17	Collective knowledge of the highest governance body	a. report measures taken to advance the collective knowledge, skills, and experience of the highest governance body on sustainable development.	AGC Integrated Report 2025 (P.90)
	2-18	Evaluation of the performance of the highest governance body	a. describe the processes for evaluating the performance of the highest governance body in overseeing the management of the organization's impacts on the economy, environment, and people; b. report whether the evaluations are independent or not, and the frequency of the evaluations; c. describe actions taken in response to the evaluations, including changes to the composition of the highest governance body and organizational practices.	AGC Integrated Report 2025 (P.85)     AGC Sustainability Data Book 2025 (P.32) Addressing Climate Change (Indicators for Evaluating Executive Compensation Related to Climate Change)
	2-19	Remuneration policies	a. describe the remuneration policies for members of the highest governance body and senior executives, including: i. fixed pay and variable pay; ii. sign-on bonuses or recruitment incentive payments; iii. termination payments; iv. clawbacks; v. retirement benefits; b. describe how the remuneration policies for members of the highest governance body and senior executives relate to their objectives and performance in relation to the management of the organization's impacts on the economy, environment, and people.	AGC Integrated Report 2025 (R87-88)     Corporate Governance     AGC Sustainability Data Book 2025 (R32) Addressing Climate Change (Indicators for Evaluating Executive Compensation Related to Climate Change)

Universal Standards			Requirements	Page listed
GRI 2: General Disclosures 2021	2-20	Process to determine remuneration	a. describe the process for designing its remuneration policies and for determining remuneration, including: i. whether independent highest governance body members or an independent remuneration committee oversees the process for determining remuneration; ii. how the views of stakeholders (including shareholders) regarding remuneration are sought and taken into consideration; iii. whether remuneration consultants are involved in determining remuneration and, if so, whether they are independent of the organization, its highest governance body and senior executives; b. report the results of votes of stakeholders (including shareholders) on remuneration policies and proposals, if applicable.	AGC Integrated Report 2025 (P.87-88)     Corporate Governance
	2-21	Annual total compensation ratio	a. report the ratio of the annual total compensation for the organization's highest-paid individual to the median annual total compensation for all employees (excluding the highest-paid individual); b. report the ratio of the percentage increase in annual total compensation for the organization's highest-paid individual to the median percentage increase in annual total compensation for all employees (excluding the highest-paid individual); c. report contextual information necessary to understand the data and how the data has been compiled.	

## 4. Strategy, policies and practices

Universal Standards				Page listed
	2-22	Statement on sustainable develop- ment strategy	report a statement from the highest governance body or most senior executive of the organization about the relevance of sustainable development to the organization and its strategy for contributing to sustainable development.	AGC Integrated Report 2025 (P.3-7) Message from the CEO     AGC Sustainability Data Book 2025 (P.2) Message from the CEO     Message from Top Management
GRI 2: General Disclosures 2021	2-23	Policy commitments	a. describe its policy commitments for responsible business conduct, including: i. the authoritative intergovernmental instruments that the commitments reference; ii. whether the commitments stipulate conducting due diligence; iii. whether the commitments stipulate applying the precautionary principle; iv. whether the commitments stipulate respecting human rights; b. describe its specific policy commitment to respect human rights, including: i. the internationally recognized human rights that the commitment covers; ii. the categories of stakeholders, including at-risk or vulnerable groups, that the organization gives particular attention to in the commitment; c. provide links to the policy commitments if publicly available, or, if the policy commitments if publicly available, or, if the policy commitments if publicly commitments was approved within the organization, including whether this is the most senior level; e. report the extent to which the policy commitments apply to the organization's activities and to its business relationships; f. describe how the policy commitments are communicated to workers, business partners, and other relevant parties.	AGC Sustainability Data Book 2025 (R64-65) Respecting Human Rights     AGC Group Charter of Corporate Behavior Standards     AGC Group Human Rights Policy     Sustainability-related policies, criteria, and guidelines

	2-24	Embedding policy commitments	a.describe how it embeds each of its policy commitments for responsible business conduct throughout its activities and business relationships, including: i. how it allocates responsibility to implement the commitments across different levels within the organization; ii. how it integrates the commitments into organizational strategies, operational policies, and operational procedures; iii. how it implements its commitments with and through its business relationships; iv. training that the organization provides on implementing the commitments.	AGC Sustainability Data Book 2029 (P3) Message from the GM of Sustainability Division AGC Sustainability Data Book 2029 (P8) Sustainability Management System AGC Sustainability Data Book 2029 (P64-65) Respecting Human Rights, (P89-91) Supply Chain Code of Conduct
GRI 2:	2-25	Processes to remediate negative impacts	a. describe its commitments to provide for or cooperate in the remediation of negative impacts that the organization identifies it has caused or contributed to; b. describe its approach to identify and address grievances, including the grievance mechanisms that the organization has established or participates in; c. describe other processes by which the organization provides for or cooperates in the remediation of negative impacts that it identifies it has caused or contributed to; d. describe how the stakeholders who are the intended users of the grievance mechanisms are involved in the design, review, operation, and improvement of these mechanisms; e. describe how the organization tracks the effectiveness of the grievance mechanisms and other remediation processes, and report examples of their effectiveness, including stakeholder feedback.	AGC Sustainability Data Book 202: (P.15-16) Compliance AGC Sustainability Data Book 202: (P.89) Point of Contact for Compliance in Procurement Activities AGC Sustainability Data Book 202: (P.65) Strengthening Complaint Processing Mechanisms Point of Contact for Compliance in Procurement Activities Compliance Hot Lines
General Disclosures 2021	2-26	Mechanisms for seeking advice and raising concerns	a. describe the mechanisms for individuals to: i. seek advice on implementing the organization's policies and practices for responsible business conduct; ii. raise concerns about the organization's business conduct.	AGC Sustainability Data Book 202 (P.15-16) Compliance AGC Sustainability Data Book 202 (P.65) Respecting Human Rights AGC Sustainability Data Book 202 (P.89) Supply Chain AGC Sustainability Data Book 202 (P.97) Pursuit of Customer Satisfactio (C.S)
	2-27	Compliance with laws and regulations	a. report the total number and the monetary value of fines for instances of noncompliance with laws and regulations that were paid during the reporting period, and a breakdown of this total by: i. instances for which fines were incurred; ii. instances for which non-monetary sanctions were incurred; b. report the total number and the monetary value of fines for instances of noncompliance with laws and regulations that were paid during the reporting period, and a breakdown of this total by: i. fines for instances of non-compliance with laws and regulations that occurred in the current reporting period; ii. fines for instances of non-compliance with laws and regulations that occurred in previous reporting periods; c. describe the significant instances of non-compliance; d. describe how it has determined significant instances of non-compliance.	Sustainability Data Book 2025 (P.58) Considering Relationships with Local Communities and the Environment
	2-28	Membership associations	a. report industry associations, other membership associations, and national or international advocacy organizations in which it participates in a significant role.	AGC Sustainability Data Book 202 (P.23) Environmental Strategy for the Social Value 'Blue planet'     AGC Sustainability Data Book 202 (P.37-38)Addressing Climate Change

## 5. Stakeholder engagement

Universal Standards			Requirements	Page listed
GRI 2:	2-29	Approach to stake- holder engagement	a. describe its approach to engaging with stakeholders, including: i. the categories of stakeholders it engages with, and how they are identified; ii. the purpose of the stakeholder engagement; iii. how the organization seeks to ensure meaningful engagement with stakeholders.	AGC Sustainability Data Book 2025 (P9) Stakeholders Engagement     AGC Sustainability Data Book 2025 (P60-61) Stakeholder Communication, Including Environmental Compliance
General Disclosures 2021	2-30	Collective bargaining agreements Material Topics	a. report the percentage of total employees covered by collective bargaining agreements;     b. for employees not covered by collective bargaining agreements, report whether the organization determines their working conditions and terms of employment based on collective bargaining agreements that cover its other employees or based on collective bargaining agreements from other organizations.	AGC Sustainability Data Book 2025 (P.65) Respecting Human Rights

## **Material Topics**

Universal Standards			Requirements	Page listed
	3-1	Process to determine material topics	a. describe the process it has followed to determine its material topics, including: i. how it has identified actual and potential, negative and positive impacts on the economy, environment, and people, including impacts on their human rights, across its activities and business relationships; ii. how it has prioritized the impacts for reporting based on their significance; b. specify the stakeholders and experts whose views have informed the process of determining its material topics.	AGC Integrated Report 2025 (P.18)     AGC Sustainability Data Book 2025 (P.5) Process for Identifying Long-Term Social Issues (Materiality)
	3-2	List of material topics	a. list its material topics;     b. report changes to the list of material topics compared to the previous reporting period.	AGC Integrated Report 2025 (P.18)     AGC Sustainability Data Book 2025 (P.6-7) The AGC Group's Recognition of Long-Term Social Issues (Materiality)     AGC Sustainability management
GRI 3: Material Topics 2021	3-3	Management of material topics	For each material topic reported under Disclosure 3-2, the organization shall: a. describe the actual and potential, negative and positive impacts on the economy, environment, and people, including impacts on their human rights; b. report whether the organization is involved with the negative impacts through its activities or as a result of its business relationships, and describe the activities or business relationships, and describe the activities or business relationships; c. describe its policies or commitments regarding the material topic; d. describe actions taken to manage the topic and related impacts, including; i. actions to prevent or mitigate potential negative impacts; iii. actions to address actual negative impacts, including actions to provide for or cooperate in their remediation; iii. actions to manage actual and potential positive impacts; e. report the following information about tracking the effectiveness of the actions taken: i. processes used to track the effectiveness of the actions; iii. goals, targets, and indicators used to evaluate progress; iiii. the effectiveness of the actions, including progress toward the goals and targets; iv. lessons learned and how these have been incorporated into the organization's operational policies and procedures; f. describe how engagement with stakeholders has informed whether the actions have been effective (3-3-e).	AGC Integrated Report 2025 (P.18) AGC Sustainability Data Book 2025 (P.6-8) The AGC Group's Recognition of Long-Term Social Issues (Materiality), Sustainability Management System AGC Sustainability Data Book 2025 (P.59) Stakeholder Communication, Including Environmental Compliance AGC Sustainability Data Book 2025 (P.64-65) Respecting Human Rights AGC Sustainability Data Book 2025 (P.81) Occupational Health & Safety AGC Sustainability Data Book 2025 (P.89) Supply Chain AGC Sustainability management

## 6. Economic

Universal Standards			Requirements	Page listed
	201-1	Direct economic value generated and distributed	a. Direct economic value generated and distributed (EVG&D) on an accruals basis, including the basic components for the organization's global operations as listed below. If data are presented on a cash basis, report the justification for this decision in addition to reporting the following basic components: i. Direct economic value generated: revenues; ii. Economic value distributed: operating costs, employee wages and benefits, payments to providers of capital, payments to government by country, and community investments; iii. Economic value retained: 'direct economic value generated' less' economic value distributed'. b. Where significant, report EVG&D separately at country, regional, or market levels, and the criteria used for defining significance.	AGC Integrated Report 2025 (P.91-92)     Financial Review 2024 (English only)
	201-2	Financial implications and other risks and opportunities due to climate change	a. Risks and opportunities posed by climate change that have the potential to generate substantive changes in operations, revenue, or expenditure, including: i. a description of the risk or opportunity and its classification as either physical, regulatory, or other; ii. a description of the impact associated with the risk or opportunity; iii. the financial implications of the risk or opportunity before action is taken; iv. the methods used to manage the risk or opportunity; v. the costs of actions taken to manage the risk or opportunity.	AGC Integrated Report 2025 (R65-74)     AGC Sustainability Data Book 2025 (R32-46) Addressing Climate Change
GRI 201: Economic Performance 2016	201-3	Defined benefit plan obligations and other retirement plans	a. If the plan's liabilities are met by the organization's general resources, the estimated value of those liabilities. b. If a separate fund exists to pay the plan's pension liabilities: i. the extent to which the scheme's liabilities are estimated to be covered by the assets that have been set aside to meet them; ii. the basis on which that estimate has been arrived at; iii. when that estimate was made.  C. If a fund set up to pay the plan's pension liabilities is not fully covered, explain the strategy, if any, adopted by the employer to work towards full coverage, and the timescale, if any, by which the employer hopes to achieve full coverage. d. Percentage of salary contributed by employee or employer. e. Level of participation in retirement plans, such as participation in mandatory or voluntary schemes, regional, or country-based schemes, or those with financial impact.	• Financial Review 2024 (English only) (P.47, P.84)
	201-4	Financial assistance received from government	a. Total monetary value of financial assistance received by the organization from any government during the reporting period, including: i. tax relief and tax credits; ii. subsidies; iii. investment grants, research and development grants, and other relevant types of grant; iv. awards; v. royalty holidays; vi. financial assistance from Export Credit Agencies (ECAs); viii. financial incentives; viii. other financial benefits received or receivable from any government for any operation. b. The information in 201-4-a by country. c. Whether, and the extent to which, any government is present in the shareholding structure.	

GRI 203: Indirect Economic Impacts 2016	203-1	Infrastructure investments and services supported	a. Extent of development of significant infrastructure investments and services supported.     b. Current or expected impacts on communities and local economies, including positive and negative impacts where relevant.     c. Whether these investments and services are commercial, in-kind, or pro bono engagements.	AGC Sustainability Data Book 2025 (P98) Social Contribution Activities
	203-2	Significant indirect economic impacts	a. Examples of significant identified indirect economic impacts of the organization, including positive and negative impacts.     b. Significance of the indirect economic impacts in the context of external benchmarks and stakeholder priorities, such as national and international standards, protocols, and policy agendas.	AGC Sustainability Data Book 2025 (P6-7) The AGC Group's Recognition of Long-Term Social Issues (Materiality)     AGC Sustainability Data Book 2025 (P21-31) Environmental Strategy for the Social Value 'Blue planet'

## 7. Environmental

	301-1	Materials used by weight or volume	a. Total weight or volume of materials that are used to produce and package the organization's primary products and services during the reporting period, by:     i. non-renewable materials used;     ii. renewable materials used.	AGC Sustainability Data Book 2025 (P.48) Effective Use of Resources
GRI 301: Materials 2016	301-2	Recycled input materials used	a. Percentage of recycled input materials used to manufacture the organization's primary products and services.	AGC Sustainability Data Book 2025 (P.47-50) Effective Use of Resources
	301-3	Reclaimed products and their packaging materials	a. Percentage of reclaimed products and their packaging materials for each product category.     b. How the data for this disclosure have been collected.	AGC Sustainability Data Book 2025 (P.47-50) Effective Use of Resources
GRI 302: Energy 2016	302-1	Energy consumption within the organization	a. Total fuel consumption within the organization from non-renewable sources, in joules or multiples, and including fuel types used. b. Total fuel consumption within the organization from renewable sources, in joules or multiples, and including fuel types used. c. In joules, watt-hours or multiples, the total: i. electricity consumption ii. heating consumption iii. cooling consumption iv. steam consumption d. In joules, watt-hours or multiples, the total: i. electricity sold iii. heating sold iii. cooling sold iv. steam sold e. Total energy consumption within the organization, in joules or multiples. f. Standards, methodologies, assumptions, and/or calculation tools used. g. Source of the conversion factors used.	AGC Sustainability Data Book 2025 (P63) GHG Emissions and Environmental Performance Data Report     ESG Information
	302-2	Energy consumption outside of the organization	a. Energy consumption outside of the organization, in joules or multiples.     b. Standards, methodologies, assumptions, and/or calculation tools used.     c. Source of the conversion factors used.	

Universal Standards			Requirements	Page listed
GRI 302: Energy 2016	302-3	Energy intensity	a. Energy intensity ratio for the organization.     b. Organization-specific metric (the denominator) chosen to calculate the ratio.     c. Types of energy included in the intensity ratio; whether fuel, electricity, heating, cooling, steam, or all.     d. Whether the ratio uses energy consumption within the organization, outside of it, or both.	
	302-4	Reduction of energy consumption	a. Amount of reductions in energy consumption achieved as a direct result of conservation and efficiency initiatives, in joules or multiples. b. Types of energy included in the reductions; whether fuel, electricity, heating, cooling, steam, or all. c. Basis for calculating reductions in energy consumption, such as base year or baseline, including the rationale for choosing it. d. Standards, methodologies, assumptions, and/or calculation tools used.	• AGC Sustainability Data Book 2025 (P.32-46) Addressing Climate Change
	302-5	Reductions in energy requirements of products and services	a. Reductions in energy requirements of sold products and services achieved during the reporting period, in joules or multiples.     b. Basis for calculating reductions in energy consumption, such as base year or baseline, including the rationale for choosing it.     c. Standards, methodologies, assumptions, and/or calculation tools used.	AGC Integrated Report 2025 (P27)     AGC Sustainability Data Book 2025 (P31) Environmental Strategy for the Social Value 'Blue planet'     AGC Sustainability Data Book 2025 (P42-46) Addressing Climate Change
GRI 303:Water and Effluents 2018	303-1	Interactions with water as a shared resource	a. A description of how the organization interacts with water, including how and where water is withdrawn, consumed, and discharged, and the water-related impacts caused or contributed to, or directly linked to the organization's activities, products or services by a business relationship (e.g., impacts caused by runoff).  A description of the approach used to identify water-related impacts, including the scope of assessments, their timeframe, and any tools or methodologies used.  C. A description of how water-related impacts are addressed, including how the organization works with stakeholders to steward water as a shared resource, and how it engages with suppliers or customers with significant water-related impacts.  d. An explanation of the process for setting any water-related goals and targets that are part of the organization's management approach, and how they relate to public policy and the local context of each area with water stress.	AGC Sustainability Data Book 2025 (P.51-53) Effective Use of Resources     AGC Sustainability Data Book 2025 (P.55-56) Considering Relationships with Local Communities and the Environment
	303-2	Management of water discharge- related impacts	a. A description of any minimum standards set for the quality of effluent discharge, and how these minimum standards were determined, including:     i. how standards for facilities operating in locations with no local discharge requirements were determined;     ii. any internally developed water quality standards or guidelines;     iii. any sector-specific standards considered;     iv. whether the profile of the receiving waterbody was considered.	AGC Sustainability Data Book 2025 (P.55-56) Considering Relationships with Local Communities and the Environment

	303-3	Water withdrawal	<ul> <li>a. Total water withdrawal from all areas in megaliters, and a breakdown of this total by the following sources, if applicable: <ol> <li>i. Surface water;</li> <li>ii. Groundwater;</li> <li>iii. Groundwater;</li> <li>iv. Produced water;</li> <li>v. Third-party water.</li> </ol> </li> <li>b. Total water withdrawal from all areas with water stress in megaliters, and a breakdown of this total by the following sources, if applicable: <ol> <li>i. Surface water;</li> <li>ii. Groundwater;</li> <li>iii. Groundwater;</li> <li>v. Third-party water, and a breakdown of this total by the withdrawal sources listed in i-iv.</li> </ol> </li> <li>c. A breakdown of total water withdrawal from each of the sources listed in Disclosures 303-3-a and 303-3-b in megaliters by the following categories: <ol> <li>i. Freshwater (≤1,000 mg/L Total Dissolved Solids);</li> <li>ii. Other water (&gt;1,000 mg/L Total Dissolved Solids).</li> <li>d. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.</li> <li>a. Total water discharge to all areas in megaliters, and</li> </ol> </li> </ul>	• AGC Sustainability Data Book 2025 (P.51-53) Effective Use of Resources
GRI 303: Water and Effluents 2018	303-4	Water discharge	a breakdown of this total by the following types of destination, if applicable: i. Surface water; ii. Groundwater; iii. Groundwater; iii. Seawater; iv. Third-party water, and the volume of this total sent for use to other organizations, if applicable. b. A breakdown of total water discharge to all areas in megaliters by the following categories: i. Freshwater (≤1,000 mg/L Total Dissolved Solids); ii. Other water (>1,000 mg/L Total Dissolved Solids). c. Total water discharge to all areas with water stress in megaliters, and a breakdown of this total by the following categories: i. Freshwater (≤1,000 mg/L Total Dissolved Solids); ii. Other water (>1,000 mg/L Total Dissolved Solids); ii. How priority substances of concern for which discharges are treated, including; i. how priority substances of concern were defined, and any international standard, authoritative list, or criteria used; ii. the approach for setting discharge limits for priority substances of concern; iii. number of incidents of non-compliance with discharge limits. e. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.	AGC Sustainability Data Book 2025 (P:51-53) Effective Use of Resources     Site Reports

Universal Standards			Page listed	
GRI 303: Water and Effluents 2018	303-5	Water consumption	a. Total water consumption from all areas in megaliters. b. Total water consumption from all areas with water stress in megaliters. c. Change in water storage in megaliters, if water storage has been identified as having a significant water-related impact. d. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used, including whether the information is calculated, estimated, modeled, or sourced from direct measurements, and the approach taken for this, such as the use of any sector-specific factors.	AGC Sustainability Data Book 2025 (P.51-53) Effective Use of Resources
GRI 304: Biodiversity 2016	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	a. For each operational site owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas, the following information: i. Geographic location; ii. Subsurface and underground land that may be owned, leased, or managed by the organization; iii. Position in relation to the protected area (in the area, adjacent to, or containing portions of the protected area) or the high biodiversity value area outside protected areas; iv. Type of operation (office, manufacturing or production, or extractive); v. Size of operational site in km² (or another unit, if appropriate); vi. Biodiversity value characterized by the attribute of the protected area or area of high biodiversity value outside the protected area (terrestrial, freshwater, or maritime ecosystem); vii. Biodiversity value characterized by listing of protected status (such as IUCN Protected Area Management Categories, Ramsar Convention, national legislation).	• AGC Sustainability Data Book 2025 (P.25-28) Addressing Climate Change
	304-2	Significant impacts of activities, products, and services on biodiversity	a. Nature of significant direct and indirect impacts on biodiversity with reference to one or more of the following:  i. Construction or use of manufacturing plants, mines, and transport infrastructure;  ii. Pollution (introduction of substances that do not naturally occur in the habitat from point and non-point sources);  iii. Introduction of invasive species, pests, and pathogens;  iv. Reduction of species;  v. Habitat conversion;  vi. Changes in ecological processes outside the natural range of variation (such as salinity or changes in groundwater level).  b. Significant direct and indirect positive and negative impacts with reference to the following:  i. Species affected;  ii. Extent of areas impacted;  iii. Duration of impacts;  v. Reversibility or irreversibility of the impacts.	AGC Sustainability Data Book 2025 (P27-30) Environmental Strategy for the Social Value 'Blue planet'
	304-3	Habitats protected or restored	a. Size and location of all habitat areas protected or restored, and whether the success of the restoration measure was or is approved by independent external professionals.  b. Whether partnerships exist with third parties to protect or restore habitat areas distinct from where the organization has overseen and implemented restoration or protection measures.  c. Status of each area based on its condition at the close of the reporting period.  d. Standards, methodologies, and assumptions used.	• AGC Sustainability Data Book 2025 (P25-31) Addressing Climate Change

GRI 304: Biodiversity 2016	304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	a. Total number of IUCN Red List species and national conservation list species with habitats in areas affected by the operations of the organization, by level of extinction risk: i. Critically endangered ii. Endangered iii. Vulnerable iv. Near threatened v. Least concern	AGC Sustainability Data Book 2025 (P.27) Addressing Climate Change
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	a. Gross direct (Scope 1) GHG emissions in metric tons of CO <sub>2</sub> equivalent. b. Gases included in the calculation; whether CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, HFCs, PFCs, SF <sub>6</sub> , NF <sub>3</sub> , or all. c. Biogenic CO <sub>2</sub> emissions in metric tons of CO <sub>2</sub> equivalent. d. Base year for the calculation, if applicable, including: i. the rationale for choosing it; ii. emissions in the base year; iii. the context for any significant changes in emissions that triggered recalculations of base year emissions. e. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source. f. Consolidation approach for emissions; whether equity share, financial control, or operational control. g. Standards, methodologies, assumptions, and/or calculation tools used.	AGC Integrated Report 2025 (P.74, P.93)     AGC Sustainability Data Book 2025 (P.41) Addressing Climate Change     AGC Sustainability Data Book 2025 (P.63) GHG Emissions and Environmental Performance Data Report
	305-2	Energy indirect (Scope 2) GHG emissions	a. Gross location-based energy indirect (Scope 2) GHG emissions in metric tons of CO <sub>2</sub> equivalent. b. If applicable, gross market-based energy indirect (Scope 2) GHG emissions in metric tons of CO <sub>2</sub> equivalent. c. If available, the gases included in the calculation; whether CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, HFCs, PFCs, SF <sub>6</sub> , NF <sub>3</sub> , or all. d. Base year for the calculation, if applicable, including: i. the rationale for choosing it; ii. emissions in the base year; iii. the context for any significant changes in emissions that triggered recalculations of base year emissions. e. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source. f. Consolidation approach for emissions; whether equity share, financial control, or operational control. g. Standards, methodologies, assumptions, and/or calculation tools used.	AGC Integrated Report 2025 (P.74, P.93)     AGC Sustainability Data Book 2025 (P.41)     Addressing Climate Change     AGC Sustainability Data Book 2025 (P.63) GHG Emissions and Environmental Performance Data Report
	305-3	Other indirect (Scope 3) GHG emissions	a. Gross other indirect (Scope 3) GHG emissions in metric tons of CO <sub>2</sub> equivalent. b. If available, the gases included in the calculation; whether CO <sub>2</sub> , CH <sub>a</sub> , N <sub>2</sub> O, HFCs, PFCs, SF <sub>6</sub> , NF <sub>3</sub> , or all. c. Biogenic CO <sub>2</sub> emissions in metric tons of CO <sub>2</sub> equivalent. d. Other indirect (Scope 3) GHG emissions categories and activities included in the calculation. e. Base year for the calculation, if applicable, including: i. the rationale for choosing it; ii. emissions in the base year; iii. the context for any significant changes in emissions that triggered recalculations of base year emissions. f. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source. g. Standards, methodologies, assumptions, and/or calculation tools used.	AGC Integrated Report 2025 (P.74)     AGC Sustainability Data Book 2025 (P.41) Addressing Climate Change     AGC Sustainability Data Book 2025 (P.63) GHG Emissions and Environmental Performance Data Report

Universal Standards	Requirements			Page listed
GRI 305: Emissions 2016	305-4	GHG emissions intensity	<ul> <li>a. GHG emissions intensity ratio for the organization.</li> <li>b. Organization-specific metric (the denominator) chosen to calculate the ratio.</li> <li>c. Types of GHG emissions included in the intensity ratio; whether direct (Scope 1), energy indirect (Scope 2), and/or other indirect (Scope 3).</li> <li>d. Gases included in the calculation; whether CO<sub>2</sub>, CH<sub>4</sub>, N<sub>5</sub>O, HFCs, PFCs, SF<sub>6</sub>, NF<sub>3</sub>, or all.</li> </ul>	AGC Integrated Report 2025 (P.93)     AGC Sustainability Data Book 2025 (P.41) Addressing Climate Change
	305-5	Reduction of GHG emissions	a. GHG emissions reduced as a direct result of reduction initiatives, in metric tons of CO <sub>2</sub> equivalent. b. Gases included in the calculation; whether CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, HFCs, PFCs, SF <sub>6</sub> , NF <sub>3</sub> , or all. c. Base year or baseline, including the rationale for choosing it. d. Scopes in which reductions took place; whether direct (Scope 1), energy indirect (Scope 2), and/or other indirect (Scope 3). e. Standards, methodologies, assumptions, and/or calculation tools used.	AGC Integrated Report 2025 (P.93)     AGC Sustainability Data Book 2025 (P.38-41) Addressing Climate Change
	305-6	Emissions of ozone- depleting substances (ODS)	a. Production, imports, and exports of ODS in metric tons of CFC-11 (trichlorofluoromethane) equivalent.     b. Substances included in the calculation.     c. Source of the emission factors used.     d. Standards, methodologies, assumptions, and/or calculation tools used.	• ESG Information
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	a. Significant air emissions, in kilograms or multiples, for each of the following: i. NOX ii. SOX iii. Persistent organic pollutants (POP) iv. Volatile organic compounds (VOC) v. Hazardous air pollutants (HAP) vi. Particulate matter (PM) vi. Other standard categories of air emissions identified in relevant regulations b. Source of the emission factors used. c. Standards, methodologies, assumptions, and/or calculation tools used.	AGC Sustainability Data Book 2025 (P.56) Considering Relationships with Local Communities and the Environment (Management of Emissions to the Atmosphere)     Site Reports
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts	For the organization's significant actual and potential waste-related impacts, a description of:     i. the inputs, activities, and outputs that lead or could lead to these impacts;     ii. whether these impacts relate to waste generated in the organization's own activities or to waste generated upstream or downstream in its value chain.	AGC Sustainability Data Book 2025 (P47-53) Effective Use of Resources, (P:54-55) Considering Relationships with Local Communities and the Environment
	306-2	Management of significant waste-related impacts	a. Actions, including circularity measures, taken to prevent waste generation in the organization's own activities and upstream and downstream in its value chain, and to manage significant impacts from waste generated.     b. If the waste generated by the organization in its own activities is managed by a third party, a description of the processes used to determine whether the third party manages the waste in line with contractual or legislative obligations.     c. The processes used to collect and monitor waste-related data.	AGC Sustainability Data Book 2025 (P.47-53) Effective Use of Resources     AGC Sustainability Data Book 2025 (P.54-55) Considering Relationships with Local Communities and the Environment
	306-3	Waste generated	a. Total weight of waste generated in metric tons, and a breakdown of this total by composition of the waste.     b. Contextual information necessary to understand the data and how the data has been compiled.	AGC Sustainability Data Book 2025 (P63) GHG Emissions and Environmental Performance Data Report

		306-4	Waste diverted from disposal	a. Total weight of waste diverted from disposal in metric tons, and a breakdown of this total by composition of the waste.  b. Total weight of hazardous waste diverted from disposal in metric tons, and a breakdown of this total by the following recovery operations:  i. Preparation for reuse; ii. Recycling; iii. Other recovery operations.  c. Total weight of non-hazardous waste diverted from disposal in metric tons, and a breakdown of this total by the following recovery operations: i. Preparation for reuse; ii. Recycling; iii. Other recovery operations. d. For each recovery operations. d. For each recovery operations. d. For each recovery operation listed in Disclosures 306-4-b and 306-4-c, a breakdown of the total weight in metric tons of hazardous waste and of non-hazardous waste diverted from disposal: i. onsite; ii. offsite. e. Contextual information necessary to understand the data and how the data has been compiled.	AGC Sustainability Data Book 2025 (P.47-53) Effective Use of Resources     AGC Sustainability Data Book 2025 (P.63) GHG Emissions and Environmental Performance Data Report
	GRI 306: Waste 2020	306-5	Waste directed to disposal	a. Total weight of waste directed to disposal in metric tons, and a break down of this total by composition of the waste.  b. Total weight of hazardous waste directed to disposal in metric tons, and a breakdown of this total by the following disposal operations: i. Incineration (with energy recovery); iii. Incineration (without energy recovery); iii. Landfilling; iv. Other disposal operations. c. Total weight of non-hazardous waste directed to disposal in metric tons, and a breakdown of this total by the following disposal operations: i. Incineration (with energy recovery); iii. Incineration (with energy recovery); iii. Landfilling; iv. Other disposal operations. d. For each disposal operations. d. For each disposal operation listed in Disclosures 306-5-b and 306-5-c, a breakdown of the total weight in metric tons of hazardous waste and of non-hazardous waste directed to disposal: i. onsite; ii. offsite: e. Contextual information necessary to understand the data and how the data has been compiled.	AGC Sustainability Data Book 2025 (P.54) Effective Use of Resources
Envi	307: ironmental npliance 2016	307-1	Non-compliance with environmental laws and regulations	a. Significant fines and non-monetary sanctions for non-compliance with environmental laws and/or regulations in terms of:     i. total monetary value of significant fines;     ii. total number of non-monetary sanctions;	AGC Sustainability Data Book 2025 (P58) Considering Relationships with Local Communities and the Environment
	RI 308: pplier vironmental sessment 2016	308-1	New suppliers that were screened using environmental criteria	a. Percentage of new suppliers that were screened using environmental criteria.	
Sup <sub> </sub> Envi		308-2	Negative environmental impacts in the supply chain and actions taken	a. Number of suppliers assessed for environmental impacts.     Number of suppliers identified as having significant actual and potential negative environmental impacts.     c. Significant actual and potential negative environmental impacts identified in the supply chain.     d. Percentage of suppliers identified as having significant actual and potential negative environmental impacts with which improvements were agreed upon as a result of assessment.     e. Percentage of suppliers identified as having significant actual and potential negative environmental impacts with which improvements with grid in the properties of suppliers identified as having significant actual and potential negative environmental impacts with which relationships were terminated as a result of assessment, and why.	AGC Sustainability Data Book 2025 (P.89-91) Supply Chain     Procurement Policy

## 8. Social

Universal Standards			Requirements	Page listed
	401-1	New employee hires and employee turnover	a. Total number and rate of new employee hires during the reporting period, by age group, gender and region.     b. Total number and rate of employee turnover during the reporting period, by age group, gender and region.	AGC Sustainability Data Book 2025 (P.68) Human Resource Management
GRI 401: Employment 2016	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	a. Benefits which are standard for full-time employees of the organization but are not provided to temporary or part-time employees, by significant locations of operation. These include, as a minimum: i. life insurance; iii. health care; iii. disability and invalidity coverage; iv. parental leave; v. retirement provision; vi. stock ownership; vii.others. b. The definition used for 'significant locations of operation'.	
	401-3	Parental leave	a. Total number of employees that were entitled to parental leave, by gender.     b. Total number of employees that took parental leave, by gender.     c. Total number of employees that returned to work in the reporting period after parental leave ended, by gender.     d. Total number of employees that returned to work after parental leave ended that were still employed 12 months after their return to work, by gender.     e. Return to work and retention rates of employees that took parental leave, by gender.	AGC Sustainability Data Book 2025 (P.76) Work-Life Balance
	403-1	Occupational health and safety management system	a. A statement of whether an occupational health and safety management system has been implemented, including whether: i. the system has been implemented because of legal requirements and, if so, a list of the requirements; ii. the system has been implemented based on recognized risk management and/or management and/or management system standards / guidelines and, if so, a list of the standards / guidelines. b. A description of the scope of workers, activities, and workplaces covered by the occupational health and safety management system, and an explanation of whether and, if so, why any workers, activities, or workplaces are not covered.	AGC Sustainability Data Book 2025 (P.81-86) Occupational Health & Safety
GRI 403: Occupational Health and Safety 2018	403-2	Hazard identification, risk assessment, and incident investigation	a. A description of the processes used to identify work-related hazards and assess risks on a routine and non-routine basis, and to apply the hierarchy of controls in order to eliminate hazards and minimize risks, including:  i. how the organization ensures the quality of these processes, including the competency of persons who carry them out;  ii. how the results of these processes are used to evaluate and continually improve the occupational health and safety management system.  b. A description of the processes for workers to report work-related hazards and hazardous situations, and an explanation of how workers are protected against reprisals.  c. A description of the policies and processes for workers to remove themselves from work situations that they believe could cause injury or ill health, and an explanation of how workers are protected against reprisals.  d. A description of the processes used to investigate work-related incidents, including the processes to identify hazards and assess risks relating to the incidents, to determine corrective actions using the hierarchy of controls, and to determine improvements needed in the occupational health and safety management system.	• AGC Sustainability Data Book 2025 (P81-86) Occupational Health & Safety

	403-3	Occupational health services	a. A description of the occupational health services' functions that contribute to the identification and elimination of hazards and minimization of risks, and an explanation of how the organization ensures the quality of these services and facilitates workers' access to them.	AGC Sustainability Data Book 2025 (P.81-86) Occupational Health & Safety
	403-4	Worker participation, consultation, and communication on occupational health and safety	A description of the processes for worker participation and consultation in the development, implementation, and evaluation of the occupational health and safety management system, and for providing access to and communicating relevant information on occupational health and safety to workers.      Where formal joint management—worker health and safety committees exist, a description of their responsibilities, meeting frequency, decision—making authority, and whether and, if so, why any workers are not represented by these committees.	AGC Sustainability Data Book 2025 (P81-86) Occupational Health & Safety
	403-5	Worker training on occupational health and safety	A description of any occupational health and safety training provided to workers, including generic training as well as training on specific work-related hazards, hazardous activities, or hazardous situations.	AGC Sustainability Data Book 2025 (P.81-86) Occupational Health & Safety
GRI 403: Occupational Health and Safety	403-6	Promotion of worker health	a. An explanation of how the organization facilitates workers' access to non-occupational medical and healthcare services, and the scope of access provided.     b. A description of any voluntary health promotion services and programs offered to workers to address major non-work-related health risks, including the specific health risks addressed, and how the organization facilitates workers' access to these services and programs.	AGC Sustainability Data Book 2025 (P.78-80) Creating a Comfortable Workplace
2018	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	a. A description of the organization's approach to preventing or mitigating significant negative occupational health and safety impacts that are directly linked to its operations, products or services by its business relationships, and the related hazards and risks.	AGC Sustainability Data Book 2025 (P.81-86) Occupational Health & Safety
	403-8	Workers covered by an occupational health and safety management system	a. If the organization has implemented an occupational health and safety management system based on legal requirements and/or recognized standards / guidelines: i. the number and percentage of all employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by such a system; ii. the number and percentage of all employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by such a system that has been internally audited; iii. the number and percentage of all employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by such a system that has been audited or certified by an external party. b. Whether and, if so, why any workers have been excluded from this disclosure, including the types of worker excluded. c. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.	• AGC Sustainability Data Book 2025 (P.81-86) Occupational Health & Safety

Universal Standards			Requirements	Page listed
GRI 403: Occupational Health and Safety 2018	403-9	Work-related injuries	a. For all employees: i. The number and rate of fatalities as a result of work-related injury; ii. The number and rate of high-consequence work-related injuries (excluding fatalities); iii. The number and rate of recordable work-related injuries; v. The main types of work-related injury; v. The number of hours worked. b. For all workers who are not employees but whose work and/or workplace is controlled by the organization: i. The number and rate of fatalities as a result of work-related injury; ii. The number and rate of fatalities as a result of work-related injury; ii. The number and rate of recordable work-related injuries (excluding fatalities); iii. The number and rate of recordable work-related injuries, iv. The main types of work-related injury; v. The number of hours worked. c. The work-related hazards that pose a risk of high-consequence injury, including; i. how these hazards have been determined; ii. which of these hazards have caused or contributed to high-consequence injury including; ii. actions taken or underway to eliminate these hazards and minimize risks using the hierarchy of controls. d. Any actions taken or underway to eliminate other work-related hazards and minimize risks using the hierarchy of controls. e. Whether the rates have been calculated based on 200,000 or 1,000,000 hours worked. f. Whether and, if so, why any workers have been excluded from this disclosure, including the types of worker excluded. g. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.	• AGC Sustainability Data Book 2025 (P.82-84) Occupational Health & Safety • Site Reports
	403-10	Work-related ill health	a. For all employees: i. The number of fatalities as a result of work-related ill health; ii. The number of cases of recordable work-related ill health; iii. The main types of work-related ill health. b. For all workers who are not employees but whose work and/or workplace is controlled by the organization: i. The number of fatalities as a result of work-related ill health; ii. The number of cases of recordable work-related ill health; iii. The main types of work-related ill health. c. The work-related hazards that pose a risk of ill health, including: i. how these hazards have been determined; ii. which of these hazards have caused or contributed to cases of ill health during the reporting period; iii. actions taken or underway to eliminate these hazards and minimize risks using the hierarchy of controls. d. Whether and, if so, why any workers have been excluded from this disclosure, including the types of worker excluded. e. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.	

	GRI 408: Child Labor 2016	408-1	Operations and suppliers at significant risk for incidents of child labor	a. Operations and suppliers considered to have significant risk for incidents of: i. child labor; ii. young workers exposed to hazardous work. b. Operations and suppliers considered to have significant risk for incidents of child labor either in terms of: i. type of operation (such as manufacturing plant) and supplier; ii. countries or geographic areas with operations and suppliers considered at risk. c. Measures taken by the organization in the reporting period intended to contribute to the effective abolition of child labor.	AGC Sustainability Data Book 2025 (P.64-65) Respecting Human Rights     AGC Sustainability Data Book 2025 (P.89-91) Supply Chain
	GRI 409: Forced or Compulsory Labor 2016	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	a. Operations and suppliers considered to have significant risk for incidents of forced or compulsory labor either in terms of:     i. type of operation (such as manufacturing plant) and supplier;     ii. countries or geographic areas with operations and suppliers considered at risk.     b. Measures taken by the organization in the reporting period intended to contribute to the elimination of all forms of forced or compulsory labor.	AGC Sustainability Data Book 2025 (R64) Respecting Human Rights     AGC Sustainability Data Book 2025 (R89-91) Supply Chain
	GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	a. Percentage of operations with implemented local community engagement, impact assessments, and/ or development programs, including the use of:         i. social impact assessments, including gender impact assessments, based on participatory processes;         ii. environmental impact assessments and ongoing monitoring;         iii. public disclosure of results of environmental and social impact assessments;         iv. local community development programs based on local communities' needs;         v. stakeholder engagement plans based on stakeholder mapping;         vi. broad based local community consultation committees and processes that include vulnerable groups;         vii. works councils, occupational health and safety committees and other worker representation bodies to deal with impacts;         viii. formal local community grievance processes.	
		413-2	Operations with significant actual and potential negative impacts on local communities	a. Operations with significant actual and potential negative impacts on local communities, including:     i. the location of the operations;     ii. the significant actual and potential negative impacts of operations.	
Supp		414-1	New suppliers that were screened using social criteria	a. Percentage of new suppliers that were screened using social criteria.	
	GRI 414: Supplier Social Assessment 2016	414-2	Negative social impacts in the supply chain and actions taken	a. Number of suppliers assessed for social impacts. b. Number of suppliers identified as having significant actual and potential negative social impacts. c. Significant actual and potential negative social impacts identified in the supply chain. d. Percentage of suppliers identified as having significant actual and potential negative social impacts with which improvements were agreed upon as a result of assessment. e. Percentage of suppliers identified as having significant actual and potential negative social impacts with which relationships were terminated as a result of assessment, and why.	AGC Sustainability Data Book 2025 (P.89-91) Supply Chain     Procurement Policy