C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Ardagh Glass Packaging Holdings SARL (“AGP”) is a leading, global supplier of value-added, infinitely recyclable glass packaging solutions for the world’s leading brand owners.

AGP has a truly global presence. AGP operates 41 glass production facilities in 12 countries, employing about 14,600 people with recorded revenues of $4.3 billion in 2022.

Market-leading innovation, quality, and customer service, backed by investment in customers, suppliers, our people and processes, are the hallmarks of our operating strategy. We are firmly focused on continuous improvement in all aspects of our business to deliver long-term, sustainable success for our stakeholders.

As well as offering a choice of numerous colour options, we have the resources and expertise to create distinctive, innovative glass packaging that creates brand differentiation. Glass protects its contents perfectly, is transparent, has a strong shelf appeal and can be designed to express a brand’s personality.

The glass packaging AGP manufactures is an inherently environmentally friendly product, characterised by being infinitely-recyclable, meaning glass can be recycled repeatedly without loss of quality. AGP builds off these natural environmental advantages of glass by clearly supporting our customer’s sustainability platforms, reducing our impact on the environment, and improving the communities we do business in. It is a strategy that leverages the unique capabilities and expertise of our entire global team as we organise such actions as material, energy, waste, and water reductions and charitable actions according to our three strategy pillars:

• Emissions – reduce our greenhouse gas (GHG) and Nitrogen oxides (NOx) emissions

• Ecology – minimise our impact on the environment

• Social - safe, diverse and inclusive team focussing on customer satisfaction and supporting the communities we do business in.

This document contains data confirming our sustainability strategy advancements, complete with greenhouse gas emission results from our production facilities and locations. To note, the data included herein has been externally verified.

For additional information please visit, www.ardaghgroup.com

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date
January 1 2022

End date
December 31 2022

Indicate if you are providing emissions data for past reporting years
No

Select the number of past reporting years you will be providing Scope 1 emissions data for
<Not Applicable>

Select the number of past reporting years you will be providing Scope 2 emissions data for
<Not Applicable>

Select the number of past reporting years you will be providing Scope 3 emissions data for
<Not Applicable>

C0.3

(C0.3) Select the countries/areas in which you operate.

Denmark
Ethiopia
Germany
Italy
Kenya
Netherlands
Nigeria
Poland
South Africa
Sweden
United Kingdom of Great Britain and Northern Ireland
United States of America

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
No	<Not Applicable>

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual or committee	Responsibilities for climate-related issues
Board-level committee	The board of directors of AGSA (the "Board") has established a sustainability committee (the "Sustainability Committee") that has oversight over climate-related issues that is chaired by the AGP CEO. The Sustainability Committee has full oversight and decision-making capabilities and consists of high-level executives within the organisation and a non-executive director of AGSA. The Sustainability Committee includes the following members: the AGP CEO; the AGSA Chief Financial Officer; the AGP Chief Sustainability Officer; and a non-executive director of AGSA. The meetings of the Sustainability Committee are also attended by the CEO of AGP Europe, Americas, and Africa as well as the Corporate Development and Investor Relations Director, the AGSA Chief Risk Officer, and the AGP Chief People Officer. EXPLANATION OF HOW THE INDIVIDUAL'S RESPONSIBILITY IS RELATED TO CLIMATE ISSUES: The Sustainability Committee's objectives include: - Assisting the Board in fulfilling its oversight responsibility for the AGSA's environmental and social sustainability objectives, including climate-related objectives; - Making recommendations to the Board relating to environmental, climate, and social sustainability matters. - Developing and overseeing the implementation of AGP's sustainability strategy to deliver on its Emission, Ecology, and Social objectives. As an example of decision-making authority, in 2021, the Sustainability Committee approved a 10-year action plan for AGP that outlines the actions and investmentsAGP aims to make to try to achieve the 1.5-degree Celsius pathway and associated alignment with the Science Based Target initiative ("SBTi"), which approved our targets and strategies. As a consequence of the latest acquisition of AGP's Africa operations in 2022, the Sustainability Committee approved the renewal of our SBTi targets with recalculated base years. This process is currently ongoing and we assume that this will not impact our aim to reduce total Scope 1 & 2 emissions by -42% and our Scope 3 emissions by -12.3% by 2030.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – all meetings	Overseeing major capital expenditures Reviewing and guiding strategy Overseeing and guiding the development of a transition plan Monitoring the implementation of a transition plan Overseeing the setting of corporate targets Monitoring progress towards corporate targets Other, please specify (Reviewing and guiding major plans of action; Monitoring implementation and performance of objectives; Monitoring and overseeing progress against goals and targets for addressing climate-related issues)	<Not Applicable>	The Sustainability Committee has responsibility for the oversight of climate-related issues and oversees the execution of AGP's sustainability strategy. The Sustainability Committee meetings are held 5 times a year, in which progress toward achieving AGP's sustainability objectives are presented, addressing any issues, while identifying any obstacles and/or leadership needs to ensure achievement of AGP's sustainability objectives remains on schedule. All major risks, including climate-related, are covered by the Enterprise Risk Management (ERM) Policy and Framework. An AGP sustainability team meeting is conducted on a bi weekly basis, reporting on climate-related issues and environmental performance. This includes latest needs of customers, suppliers and the industry on climate-related topics.

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues	Primary reason for no board-level competence on climate-related issues	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1	Yes	One member of the Sustainability Committee has climate related and ESG experience. Following criteria were used to assess competence: • Familiarity with existing and developing climate regulations and standards • Regular engagement with outside experts to further understanding climate-related risks and their impact on the business • Understanding of climate-related risks and opportunities, and specifically how they relate to the industry and the business • Understanding the importance of integrating climate change into an organisation's decision-making and risk framework • Interaction with outside investors on climate issues to ensure that climate action is central to stewardship • Experience in tackling climate-related issues in related industries, including executive-level experience championing sustainability issues and helping to formulate strategy with a sustainability consideration • Promotion of sustainability as part of people development within the organisation • Consideration of climate-related expertise in nominating members of the Sustainability Committee	<Not Applicable>	<Not Applicable>

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Position or committee
Sustainability committee

Climate-related responsibilities of this position
Developing a climate transition plan
Implementing a climate transition plan
Integrating climate-related issues into the strategy
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Assessing climate-related risks and opportunities

Coverage of responsibilities
<Not Applicable>

Reporting line
Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line
More frequently than quarterly

Please explain
AGSA has a Sustainability Committee that has oversight over climate-related issues that is chaired by the AGP CEO.. The Sustainability Committee has full oversight and decision-making capabilities and consists of high-level executives within the organisation and a non-executive director of AGSA.
The Sustainability Committee includes the following members: the AGP CEO; the AGSA Chief Financial Officer; the AGP Chief Sustainability Officer; and a non-executive director of AGSA.
The meetings of the Sustainability Committee are also attended by the CEO of AGP Europe, Americas, and Africa as well as the Corporate Development and Investor Relations Director, the AGSA Chief Risk Officer, and the AGP Chief People Officer.The Sustainability Committee objectives include:
The Sustainability Committee's objectives include:
- Assisting the Board in fulfilling its oversight responsibility for the AGSA's environmental and social sustainability objectives, including climate-related objectives;
- Making recommendations to the Board relating to environmental, climate, and social sustainability matters.
- Developing and overseeing the implementation of AGP's sustainability strategy to deliver on its Emission, Ecology, and Social objectives.

An AGP Sustainability team meeting is conducted on a bi-weekly basis, reporting on climate-related issues and environmental performance in AGP. This includes latest needs of customers, suppliers and the industry on climate-related topics. A review of environmental compliance and sustainability related topics is conducted monthly and annually as part of an internal global environmental conference to monitor progress of projects and targets for addressing climate-related issues.

The AGP CSO is a member of the AGP leadership team chaired by the AGP CEO. The AGP CSO's team includes sustainability directors in Europe, North America and Africa, all working closely with operations to identify opportunities and share best practices to progress climate-related objectives.
AGP closely monitors climate-related results across our locations through our engineering and manufacturing performance data, certified through third-party organisations. We also utilise the GoGreen Index (GGI), an internal index indicator which integrates long-term compliance objectives and the achievement of the AGP's long-term targets with real-time environmental KPIs. Its aim is to provide facility and line management with one aggregated performance number to monitor facilities' progress in environmental management and set priorities for annual programmes. Improvement of a facility's GGI number indicates positive environmental development. The GoGreen Index is communicated as a management report on our internal "intranet." The underlying environmental data is also reported through ARMS (Ardagh Risk Management System) on a monthly basis.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	The GoGreen Index (GGI) is the leading indicator for environmental progress. Herein we have included different targets for the reduction of emissions, waste, water, etc. As these reductions positively influence our EBITDA and cashflow, and our management is incentivised by EBITDA and cashflow performance, there is a clear link between environmental performance and incentives.

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive
Chief Executive Officer (CEO)

Type of incentive
Monetary reward

Incentive(s)
Bonus – set figure

Performance indicator(s)
Energy efficiency improvement
Reduction in total energy consumption

Incentive plan(s) this incentive is linked to
Short-Term Incentive Plan

Further details of incentive(s)
Lower energy and carbon costs due to less consumption improve AGP's cost base and lead to higher EBITDA and cash flow which is the basis for the management bonus.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan
Absolute energy reduction and also intensity improvements are key pillars to our Scope 1+2 near-term science-based target, which forms part of our climate transition plan.

Entitled to incentive
Chief Sustainability Officer (CSO)

Type of incentive
Monetary reward

Incentive(s)
Bonus - % of salary

Performance indicator(s)
Energy efficiency improvement
Reduction in total energy consumption

Incentive plan(s) this incentive is linked to
Short-Term Incentive Plan

Further details of incentive(s)
Lower energy and carbon costs due to less consumption improve AGP's cost base and lead to higher EBITDA and cash flow which is the basis for the management bonus.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan
Absolute energy reduction and also intensity improvements are key pillars to our Scope 1+2 near-term science-based target, which forms part of our climate transition plan.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?
Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	1	3	Short-term climate-related risks and opportunities are those present in the current and following year, especially impacts of relevant environmental aspects in our day-to-day operations. Climate-related risks are covered with the AGSA ERM supported by AGP's Business Continuity Management Programme.
Medium-term	3	5	Medium-term climate-related risks and opportunities are those which are expected to be present in the next 3-5 years. These risks and opportunities are addressed in our planning and strategies. Climate-related risks are covered with the AGSA ERM supported by AGP's Business Continuity Management Programme.
Long-term	5	10	Long-term climate-related risks and opportunities are those which are expected to be present in 5-10 plus years. These risks and opportunities are crucial, require extensive planning, and are discussed and addressed in annual long-term strategy discussions. Climate-related risks are covered within the AGSA ERM supported by AGP's Business Continuity Management Programme.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

We define risk as having a substantive financial impact if the identified risk within operations and supply chain could generate any significant change in AGP's businesses, operations, revenue or expenditure. We operate an ERMFramework, governed by the AGSA ERM management committee ('ERM Committee'). The ERM Committee is a sub-committee to the Audit Committee of the Board, and provides regular reports to it on all material risks. Currently, the ERM Framework has identified over 60 material risks broadly spread across different risk categories of environmental, operational, financial and market risks. Of these material risks, several are either directly or indirectly related to physical climate change. Furthermore, physical climate change risks, including actual severe weather related events, that impact our operations and supply chain are assessed according to the indicators and criteria defined in AGSA's Business Continuity Management (BCM) Programme. The purpose of the BCM Programme (which includes AGP) is to identify potential disruptions to critical business processes, and to develop appropriate mitigation, response and recovery planning to drive overall business resilience against a variety of risks including physical climate change events that impact our sites and operations.

We rank the risks using a risk matrix of financial impacts (from Low to Catastrophic) and likelihood (from Low to Almost Certain) by applying an impact scale. This is relevant for risks such as physical, regulatory, and reputational. Any financial impact higher than $45 million EBITDA is deemed to be a Substantive negative impact. AGSA defines thresholds for "Low," "Significant," "Critical," and "Catastrophic" financial impacts as well. Impacts lower than $15m EBITDA are considered as "Low" financial impacts and any impact higher than $110m EBITDA is considered as a "Catastrophic" Impact.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered
Direct operations
Upstream
Downstream

Risk management process
Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment
More than once a year

Time horizon(s) covered
Short-term
Medium-term
Long-term

Description of process
Climate-related risk management is integrated into the multi-disciplinary ERM process. AGSA has established an ERM Committee, which is responsible for providing oversight of the company-wide risk management activities. Main activities of this committee are policy setting, information gathering and communication to the management and its Board regarding material risks (including climate-related) to the company. The ERM Committee is a cross-company of senior executives that includes the Chief Financial Officer (as the committee chairperson), Chief Executive Officer, Chief Risk Officer, Chief Sustainability Officer, executive heads of various shared service functions (e.g. Procurement, IT, Legal, Human Resources) in addition to regional business unit Chief Operating Officers and Chief Executive Officers.

The ERM Committee meets four times a year, the key points of which are then summarised via a quarterly Risk Report to the Audit Committee of the Board. The ERM Committee validates the key findings of the annual company-wide Risk Assessment exercise that is led by Group Risk. This Risk Assessment exercise identifies key risks in terms of impact/likelihood/current risk controls effectiveness and opportunities/necessity to enhance risk controls to reduce unacceptably high residual risk exposures.

DESCRIPTION OF THE PROCESS to identify, assess and respond to climate-related risks and/or opportunities:
All enterprise risks and opportunities (including climate-related) are identified, reported, and assessed on a business unit level. Enterprise risk is defined as any significant event or circumstance which could materially impact the achievement of the company's business objectives such as strategy and market environment, operational, human capital, legal and regulatory, financial, information flows and systems, and reputational risks.
Identified risks and opportunities are categorised according to the expected financial impact and likelihood, as well as according to their criticality and improvement potential. While risks with an expected impact lower than $15 million EBITDA are classified as low risks, risks with an expected impact of more than $110 million EBITDA are classified as catastrophic. There are also classifications for significant and critical risks. Regarding the likelihood, it is distinguished between unlikely, rare, possible and almost certain.
All reported risks are managed with the third-party risk management software "ARENGIBOX." The software enables AGP to separate different risk categories, and "climate-related risks" is one of these categories. Each risk is dedicated to a risk owner, who is responsible for keeping all related information (description of risk, impact, likelihood, room for improvement, control activities, evaluations, etc.) up-to-date, and for the development, implementation and documentation of measures to mitigate the risk. All risk owners are required to update all information, including the progress of risk mitigation, within the tool at least three times a year. The progress of the risk mitigation processes is then discussed by the ERM committee.
A second software, the Ardagh Risk Management System (ARMS), is used to report impacts of different risks which had an effect for the business, like droughts, flood events, etc. Information from both systems is combined for risk categorisation and the implementation of risk mitigation measures.
The process described above is applied for short-, medium- and long-term risks related to direct operations and related to upstream and downstream processes.
Opportunities are generally treated in the same way as the risks, although they are not managed in the above-mentioned software systems. Nevertheless, opportunities are discussed on a regular basis by the ERM committee, and dedicated people (opportunity owners) are responsible for managing opportunities to get the maximum benefit out of them.

CASE STUDIES for the process used to determine which climate-related R/Os could have a substantive financial or strategic impact:

Our production facilities were assessed externally for both physical and transitional climate-related risks. Results show that physical climate-related risks are relatively low, while we could be at risk of transition risks, e.g. due to carbon pricing.

PHYSICAL RISK: In a 4°C scenario, where physical climate events are expected to be more severe and more frequent, the projected exposure of our assets to physical climate hazards is greater. However, the financial uplift even in the 4°C scenario is not significant. For example, site damage due to physical climate hazards to our Germersheim facility is estimated to be around $2.9 million in the 1.5°C scenario and around $3.3 million in the 4°C scenario by 2050 which are not classified as a substantive financial impact (based on 2021 data).

TRANSITIONAL RISKS AND OPPORTUNITIES: Under a 1.5°C scenario and if AGP "does nothing", the total carbon cost impact could be approximately $380m in 2030 and $2.4b in 2040 (based on 2021 data), which are classified as a substantive financial impact. However, by a successful decarbonisation strategy such as the transition to 100% renewable electricity and pushing the boundaries on recycled content, AGP can achieve upside benefits across Capex, Opex, and revenue. For example, AGP's transition to 100% renewable electricity has been estimated to reduce $2.1 billion in Opex and to increase $1.4 billion in revenue under a 1.5°C scenario by 2050 (based on 2021 data).

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	EXAMPLE OF RISK TYPE: AGP operations are subject to some climate-related international, national, provincial, regional, and local regulatory requirements. For example, our operations in Europe have been already affected by the EU Emissions Trading Scheme (ETS). This scheme and any future changes to it and any additional measures to control the GHG emissions that may apply to AGP operations could have a material adverse effect on our business, financial condition, and results of operations via higher compliance costs. Therefore, we closely monitor and assess risks associated with any regulatory changes through our ERM process as well as external assessments.
Emerging regulation	Relevant, always included	EXAMPLE OF RISK TYPE: Emerging regulations such as Carbon Tax, Cap and Trade are some of the emerging regulations that could potentially have impacts on our business. For example, any future changes to the EU Emissions Trading Scheme (ETS) and any additional measures to control the GHG emissions that may apply to AGP's operations could have a material adverse effect on our business, financial condition, and results of operations via higher compliance costs. We estimate the risk related to emerging carbon pricing regulation between $203 million - $380 million by 2030, in a future 1.5°C scenario. We continually monitor, review, and assess proposed and incoming regulatory changes as part of our ERM framework as an "Adverse regulatory change" indicator with the aim of being in front of any upcoming regulatory risks.
Technology	Relevant, always included	EXAMPLE OF RISK TYPE: Technology change potentially could have financial implications by means of having to invest in alternative technologies (Best Available Technique) or having to adapt existing products to different technologies, which requires research and development efforts. For example, emerging technologies such as E-Mobility or hydrogen fuel cells could lead us to invest in the transition from fossil fuel-based logistics to a low-carbon logistic alternative technology. In most of AGP's operation processes, constant parameters in production are crucial to maintain our product quality to continuously fulfill customer and market demand. We refrain from using fossil fuel operated equipment provided we have an economically viable alternative.
Legal	Relevant, always included	EXAMPLE OF RISK TYPE: For any organisation, risks related to legal and regulations must be effectively managed and therefore are included in our ERM. Risks related to current regulations are our permit-to-operate, national rules and regulations, customer obligations, environmental pollution limits, renewable energy regulations, and other specific legal regulations that are identified and managed as part of our businesses. For example, we estimated that any failure to comply with the current and future climate-related obligations in our European business may have a significant material adverse effect on our business, financial condition, and results of operations. Furthermore, if we violate or fail to comply with climate-related regulations or our permits, we could be subject to criminal, civil, and administrative sanctions and liabilities, including substantial fines and orders.
Market	Relevant, always included	EXAMPLE OF RISK TYPE: Recent studies reveal that consumers have become 'greener' in their purchasing and the market demand grows for environmentally friendly alternatives. Shifting consumer preferences to more sustainable and environmentally friendly packaging creates a risk if consumers are unaware of the inherent permanent material properties of glass. Our glass packaging solutions contribute to the Circular Economy because they are infinitely and 100% recyclable. For example, some of our glass production facilities operate furnaces that use up to 86% recycled glass. We optimise the use of recycled glass in production as this enables other raw materials to melt at lower temperatures, thereby lowering our energy costs and carbon emissions and prolonging furnace life. The upside of a more sustainability focused consumer is that also other stakeholder are interested in our raw materials and other supplies which could leads to a risk of increasing Capex and OPEX cost for us.
Reputation	Relevant, always included	EXAMPLE OF RISK TYPE: Glass production is often perceived as an energy-intensive process, without realising the full benefit of reuse and recycling potential. Consumers are faced with large amounts of information which sometimes do not always reflect the true properties and characteristics of packaging materials. These types of risks can lead to loss of brand loyalty and brand trust and our reputation due to failure to manage our impact on society including climate change. Furthermore, there is a risk of adverse media attention which could affect demand. AGP is committed to supporting sustainable consumption and we want to contribute by providing accurate information to customers and consumers with the aim of ensuring that ethical, social, economic and environmental factors are considered. We offer customers socially and environmentally friendly products and services considering the full life cycle of the product, to reduce adverse impacts on society and the environment. It is our aim to support initiatives that enable customers and consumers to be well-informed, conscious of their rights and responsibilities and to be able to make knowledgeable purchasing decisions. AGP is committed to supporting consumer education regarding making responsible decisions on sustainable packaging via trade associations. Furthermore, exceeding our budgeted emissions is one of the climate-related risks that would impact our reputation. Our aim is to reduce negative environmental impact whilst remaining economically sustainable and socially responsible. We will refrain from using fossil fuel-operated equipment provided we have an economically viable alternative. Our operations are subject to extensive international, national, provincial, regional, and local laws, ordinances, regulations, and other legal requirements relating to environmental protection. If we violate or fail to comply with these laws and regulations or our permits, we could be subject to criminal, civil, and administrative sanctions and liabilities, including substantial fines and orders.
Acute physical	Relevant, always included	EXAMPLE OF RISK TYPE: Climate change is expected to increase the magnitude and frequency of natural hazards in some regions. AGP has Emergency Response Plans and Environmental Control Standards in place at all locations to control and mitigate climate-related risks. It is the responsibility of the Environmental, Health and Safety (EHS) teams alongside our ERM to assess and manage current and future acute physical risks. AGSA's Property Loss Control Standards also outline prevention and reduction of occurrence and losses related to natural events such as Flood Risk Management, Earthquake Risk Management, Freeze Protection, Windstorm Emergency Response Plan, etc., which could be relevant to the location of production facilities. Our production facilities have also been externally assessed for climate-related natural hazards under different climate change scenarios. The exposure of our production facilities to acute physical risks is classified as low risk. For example, we identified that the site damage due to physical climate hazards to our Germersheim facility was estimated to be $2.9 million in the 1.5°C scenario and $3.3 million in the 4°C scenario by 2050. The outcome of the risk assessment is used to develop prevention and mitigation plans to ensure zero or minimal disruption to the business.
Chronic physical	Relevant, always included	EXAMPLE OF RISK TYPE: Natural resources, in particular fresh water, are treasured and crucial to AGP's businesses. The physical risk related to availability of natural resources are recognised. For example, we identified that our Madera facility in California (USA) is located in a water stress area. However, we do not estimate the risk to have a substantive financial impact on our business. We aim to reduce our negative environmental impact and reduce our water consumption while remaining economically sustainable and socially responsible through increasing the efficiency of material used in our manufacturing processes. Another chronic physical climate related risk example is from extreme temperatures which could have impacts on our employees' health. To mitigate this risk, AGP provides free water and air-conditioned common rooms for employees, particularly those working in our manufacturing operations. These mitigation techniques will require additional costs to maintain comfort cooling in production facilities located in warm (and warming) climates to ensure the ongoing safety of our employees. Reporting mechanisms, prevention systems, training and awareness-raising programmes were implemented as part of AGP's "Bsafe!" Health and Safety programme.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier
Risk 1

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation	Carbon pricing mechanisms

Primary potential financial impact
Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
DESCRIPTION: Many of the countries where AGP's production facilities are located have introduced or will introduce carbon taxes. Therefore, AGP is at potential risk of being exposed to carbon tax due to energy-intensive manufacturing processes.
EFFECT ON AGP: AGP's total energy consumption comes from natural gas and purchased electricity and about 25% of AGP's EU's total operation spend is on energy. Therefore, any taxes related to fossil fuel-based energy sources will impact our business operations, revenue, or expenditures. We carried out a climate scenario analysis to identify the likely impact of the increasing cost of carbon on AGP under a 1.5°C scenario. The result revealed that AGP could be at risk of significant carbon costs by 2050. The potential financial impact figure of identified risk can be found below as an estimated range.

Time horizon
Long-term

Likelihood
Likely

Magnitude of impact
High

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
204000000

Potential financial impact figure – maximum (currency)
380000000

Explanation of financial impact figure
We estimate the carbon price for 2030 under a 1.5°C scenario as $117 in Europe and $107 in North America. These estimations are based on an Integrated Assessment Model ("IAM") which broadly aligns with the Network for Greening the Financial System (NGFS) orderly transition scenario.
Considering AGP's growth rate, in a "do nothing" scenario (potential maximum financial impact) our total projected Scope 1&2 emissions in 2030 would be 1838667 tCO2e in Europe and 1546765 tCO2e in North America. If our 2030 Scope 1&2 emissions were subject to a carbon price, AGP's total carbon cost in 2030 would be approx. $380,000,000: [1,838,667tCO2e * $117] + [1,546,765tCO2e * $107].
If AGP meets its SBTi targets (potential minimum financial impact), our total Scope 1&2 emissions in 2030 would be 1,041,317tCO2e in Europe and 770,396tCO2e in North America. Therefore, AGP's total carbon cost in meeting targets scenario would be approx.$204,000,000: [1,041,317tCO2e * $117] + [770,396tCO2e * $107] in 2030.

Cost of response to risk
2900000

Description of response and explanation of cost calculation
AGP is working on reducing its CO2 emissions to reduce the risk of increased pricing of GHG emissions. CASE STUDY: We reduce our CO2 emissions by using furnace repairs to equip our production facilities with the best available technologies, including emissions abatement installations, to improve our environmental performance. We seek to optimise the use of recycled glass in our manufacturing processes as this enables the other raw materials to melt at lower temperatures, thereby lowering our energy costs and carbon emissions and prolonging furnace life. Moreover, all production facilities have in place energy reduction projects and are constantly identifying opportunities to save energy and reduce CO2 emissions. In addition to applying energy-efficient technologies and implementing emission reduction initiatives, AGP decided to continually increase the share of renewable energy sources. We do this to reduce our emissions and avoid increasing costs.

FOR EXAMPLE, in our production facilities in the United States in Burlington and Madera, we installed a new Furnace Control System, in 2021. As a result of this technology, energy consumption has been reduced by approximately 1,100 tons of CO2. However, to manage the remaining risk, AGP is constantly reviewing and analysing political changes in its operating countries through key trade associations. In 2022, as in all years, we had representatives from all operating businesses regularly attending all meetings with all local and international trade associations, constantly communicating or exchanging information with different countries to stay updated on issues. The information gathered was communicated to relevant responsible individuals (e.g. legal, compliance, operations, etc.) and representatives within the different countries to allow for updates on changes with respect to all emissions-related issues.

COST EXPLANATION: We work together with the Federation of European Manufacturers of glass containers for food and beverage (FEVE) to stay up to date on European Emission Trading Scheme (EU ETS). Trade association fees are approximately $2.9 million per year. Trade associations support us in reviewing and analysing regulatory and political changes.

Comment
This risk is based on an assumed calculation. This is a calculation based on assumptions and shall not reflect any final strategic decisions made within AGP at this time.

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?
Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier
Opp1

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Energy source

Primary climate-related opportunity driver
Use of new technologies

Primary potential financial impact
Reduced indirect (operating) costs

Company-specific description
AGP has plans to significantly reduce GHG emissions from glass manufacturing. One major breakthrough is the development of the hybrid NextGen Furnace at our Obernkirchen production facility in Germany. This is a ground-breaking new oxyfuel, hybrid technology that will reduce glass packaging CO2 emissions by up to 60% in the glass melting furnace, and 50% on the entire production line, by replacing the majority of fossil fuel energy with renewable electricity.
Using electrodes for direct electrical heating, the furnace technology replaces the conventional melting energy input of 80% gas and 20% electricity, with 80% renewable electricity and 20% gas, to dramatically reduce carbon emissions. In phase 2 of the furnace development, the main aim is to replace the remaining gas energy with hydrogen, to further reduce GHG emissions, by up to 80%.

We have committed to the Science Based Target initiative (SBTi) and have a near-term (2030) approved SBTi target. Therefore, the NextGen Furnace could play a strategic role in our pathway towards decarbonisation.

Time horizon
Short-term

Likelihood
Very likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
27524610

Potential financial impact figure – maximum (currency)
33771330

Explanation of financial impact figure
A 2023 modelled Life Cycle Analysis of a glass bottle produced in the NextGen Furnace compared to one produced in a conventional furnace at AGPs location in Obernkirchen shows that a glass bottle produced in a conventional furnace emits 131.5g of CO2 compared with one produced in the NextGen Furnace emits 44.3g of CO2 indicating a reduction of 88g of CO2 per 330ml bottle. Over one year, the NextGen Furnace can produce about 470 million 330ml bottles, which is a saving of 41,360 tonnes of carbon every year, compared to a conventional furnace.

Scope 1 emissions from fossil fuel consumption will decrease by -82% (-19,521t/a) based on our project assumptions once we reach the full project target.

Accumulated Scope 1 emissions reduction potential in the period of 2023-2033 (10 years): 195,210 tCO2

Currently, we purchase EU ETS credit for our Scope 1 emissions in the EU. The EU-ETS price through 2030 and beyond is estimated to be in the range of around 130 EUR ($141) to 160 EUR ($173) (Source: 2022, M. Pahle, J. Sitarz, S. Osorio (PIK), B. Görlach https://ariadneprojekt.de/media/2023/01/AriadneDocumentation_ETSWorkshopBruessel_December2022.pdf)

Therefore, we estimate the accumulated potential financial impact of this opportunity in the period of 2023-2033 (10 years = est. lifetime) would be in the range around $27,524,610 (195,210 tCO2 X $141) to $33,771,330 (195,210 tCO2 X $173).

This calculation is based on only one furnace, and it is likely to use this technology in other production facilities as a best practice which implies having even higher potential financial impact on our business.

Cost to realize opportunity
13900000

Strategy to realize opportunity and explanation of cost calculation
Decarbonisation is a key priority for our business and our customers. The NextGen Furnace represents a significant investment in creating a sustainable future for glass packaging, and we intend first to build, operate and monitor the furnace in one location until the technology has been proven. If/When the furnace technology is proven, we will consider expanding NextGen across other AGP production facilities in the coming years. We are grateful for the grant support of $ 13.9 mio (see cost to realise opportunity) provided by BMWK Bundesministerium fur Wirtschaft und Klimaschutz (Federal Ministry for Economic Affairs and Climate Action) and KEI (Kompetenzzentrum Klimaschutz in energieintensiven Industrien (Competence Centre on Climate Change Mitigation in Energy-Intensive Industries) which is helping to realise the benefits of this

new technology.
We saw substantial progress in our renewable energy programme during the period with the announcement of three on-site solar installations in the Netherlands. These will supply renewable electricity to our Dongen and Moerdijk production facilities as part of AGP's strategy to use 100% renewable electricity by 2030. The Netherlands is the first country in which we will supply all production facilities with on-site generated sustainable energy via large-scale solar energy installations.

Comment
This opportunity is based on an assumed calculation. This is a calculation based on assumptions and shall not reflect any final strategic decisions made within AGP at this time.

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a climate transition plan that aligns with a 1.5°C world?

Row 1

Climate transition plan
Yes, we have a climate transition plan which aligns with a 1.5°C world

Publicly available climate transition plan
No

Mechanism by which feedback is collected from shareholders on your climate transition plan
We have a different feedback mechanism in place

Description of feedback mechanism
We do have feedback mechanisms in place. While our sustainability strategy/transition plan to a 1.5°C world is visible on our corporate website for our stakeholders (of which we address questions throughout the year), we regularly discuss targets and advancements with our customers, articulate and engage on our commitments with legislators through trade associations and answer direct questions from investors during each quarterly results call. Specifically, our sales and sustainability teams directly discuss our efforts to strengthen our own sustainability platform which in turn strengthens customer's platforms. We also provide our stakeholders with annual progress on our sustainability strategies with an annual AGP Sustainability Report which consistently serves as a basis for discussions and feedback.
Our full sustainability strategy and targets are on our website and are published, complete with progress updates, in our annual sustainability report

Frequency of feedback collection
More frequently than annually

Attach any relevant documents which detail your climate transition plan (optional)

Explain why your organization does not have a climate transition plan that aligns with a 1.5°C world and any plans to develop one in the future
<Not Applicable>

Explain why climate-related risks and opportunities have not influenced your strategy
<Not Applicable>

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy	Primary reason why your organization does not use climate-related scenario analysis to inform its strategy	Explain why your organization does not use climate-related scenario analysis to inform its strategy and any plans to use it in the future
Row 1	Yes, qualitative and quantitative	<Not Applicable>	<Not Applicable>

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Transition scenarios: Bespoke transition scenario	Company-wide	1.5ºC	We assessed the potential impact of "Decarbonisation" and "Innovation" Risks and Opportunities (ROs) on AGP's business under two temperature pathways, 1.5°C ("Paris-aligned") and 4°C ("Business-as-usual"), with reference to four levers: Carbon emissions, Capex, Opex and/or Revenue. These four levers provide a comprehensive understanding of the potential impact of each RO. Identified ROs for "Decarbonisation" include carbon pricing, failure of technology investments, and potential impacts of AGP's energy mix on energy costs and revenue at risk dependent on whether its sustainability targets are achieved or not. Identified ROs for "Innovation" include light-weighting, increase recycled content in products, disruptive product innovation including hybrid melting (see our NexGen Project), hydrogen technologies, refilling, raw material mix, or green financing. Following data inputs and documentation was used to inform the analysis of climate-related impacts for "Decarbonisation" and "Innovation" ROs: •SBTi targets •Regional growth rates •Top 5 customer revenue per region •Renewable and conventional electricity mix •Procurement data including raw material prices •Light-weighting ambitions •Capex estimates for decarbonisation •Cost of capital. Both 4C and 1.5C scenarios use the Shared Socioeconomic Pathways (SSP2) published by the International Panel on Climate Change (IPCC) as a basis and use MAGICC earth system model to map the relationship between CO2 and temperature change in an Integrated Assessment Model ("IAM"). Our model is broadly aligned to the Network for Greening the Financial System (NGFS) orderly transition scenario and outputs are benchmarked against NGFS outputs. However, the model has been developed with a greater sectoral split than NGFS outputs, allowing for more bespoke analysis. The potential financial impacts were assessed under each of the selected scenarios by combining AGP's baseline financial performance and future growth rate with potential transition impacts over time. Under each scenario, projected changes to various macroeconomic variables are applied to baseline financials to assess how this performance might be impacted over time.
Physical climate scenarios: RCP 4.5	Company-wide	<Not Applicable>	We assessed AGP's production facilities and transport hubs exposure to physical climate hazards under two temperature pathways, 1.5°C ("Paris-aligned") and 4°C ("Business-as-usual"). In order to quantify AGP's physical risks, we screened AGP's sites to identify those that are particularly at risk of potential climate-related physical risks. We performed a light touch physical risk assessment across AGP's production facilities. These sites were: • Identified by AGP stakeholders for existing physical risks, • Demonstrating a high-risk rating in the initial screening, • Financially material for AGP, and/or • Demonstrated high water usage. The screening process generated an overall Maximum site Value At Risk (MVAR)% score and failure probability % value per site, which were aggregated for individual hazards to a point in time e.g. 2030, 2050. The MVAR% score indicates whether a site is at risk from at least one of the hazards. The key physical hazards include soil subsidence, surface water flooding riverine flooding, extreme wind, forest fire, extreme heat, and water stress. Each site has been assessed for the risk of physical damage to the asset and the risk of business interruption at the site. The results of this hazard assessment are then integrated with information on a site's strategic relevance and its operational data to generate a final shortlist of sites. The overall approach to risk assessment of climate hazards aligns with IPCC AR5/6 definitions and approaches to risk assessment.

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

LIST OUR FOCAL QUESTIONS:
• What would be the impact of climate change on our business?
• How does physical and transition climate risks affect our company, business units, and production facilities?
• How does climate change affect our supply chain?
• What type of opportunities climate change can create for our business?
• What should we do, and when?

RATIONALE FOR SELECTING THE SCENARIOS: Climate change analysis requires a longer-term view than many traditional business risks. This introduces intractable uncertainty about government and consumer decisions, economic trends, as well as resulting physical climate impacts. Using scenarios is a way of bounding this uncertainty and asking 'what if' questions about risks and opportunities. Using more than one scenario allows us to consider multiple possible futures and therefore evaluate the resilience of a strategy or business model. 4°C and 1.5°C scenario pathways are used to represent a "Business-as-usual" pathway and a "Paris-aligned" trajectory, respectively.

Results of the climate-related scenario analysis with respect to the focal questions

SUMMARY OF RESULTS:
The result of climate-related scenario analysis revealed that whilst AGP is not exposed to significant physical risk, decarbonisation represents both a risk and an opportunity. Effective and targeted action to mitigate alternative threats, diversify through supply chains and decarbonise production could have a significant positive impact on AGP.
Future physical hazards are sea level rise and riverine flooding although in general these are considered relatively low risk relative to other hazards and locations globally. If AGP 'does nothing,' the carbon cost impact under a 1.5°C scenario could be in the range of $380m in 2030 and $2.4b in 2040 (based on 2021 assessment)..

HOW THE RESULTS HAVE INFORMED OUR DECISIONS AND ACTIONS, WITH RESPECT TO THE FOCAL QUESTIONS:

• Setting an internal carbon price and embedding throughout AGP's strategic planning would allow AGP to integrate potential carbon price risk and decarbonisation throughout the business.
• Increased use of cullet could significantly reduce AGP's carbon impact particularly if AGP continue to push beyond current technical limits and recycling rates increase globally.
• Sustainable packaging innovations could ensure AGP remains ahead of the curve, including by exploring new market opportunities.
•Continued light-weighting remains a 'quick win' if we succeed in achieving our ambitions.
• Development of the hybrid NextGen Furnace which will reduce glass packaging CO2 emissions by up to 60% in the glass melting furnace, and up to 50% on the entire production line, by replacing the majority of fossil fuel energy with renewable electricity. We reported this new technology in C2.4a as an opportunity.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	Climate-related risks (e.g. regulatory and legal, physical, and technological risks) and opportunities (e.g., resource efficiency) have influenced our MEDIUM-TERM (3 – 5 years) and LONG-TERM (more than 5 years) strategies for products we offer to our customers. In order to tackle upcoming climate-related risks, AGP is working towards decarbonising manufacturing processes by implementing new technologies such as the hybrid NextGen Furnace in Germany (https://www.ardaghgroup.com/news-centre/ardagh-glass-packaging-builds-breakthrough-nextgen-furnace-in-germany), the highly sustainable 'Efficient Furnace' in the UK that will minimise greenhouse gas emissions (https://www.ardaghgroup.com/news-centre/ardagh-glass-packaging-builds-sustainable-efficient-furnace-technology), or our Hydrogen electrolyser pilot planned in Sweden in partnership with a customer(https://www.ardaghgroup.com/news-centre/ardagh-group-and-absolut-vodka-co-invest-in-hydrogen-fired-glass-furnace-in-a-global-industry-first), converting to renewable energy sources, lightweighting, and heat recovery projects. For example, risks resulting from the depletion of natural resources, a consequence of climate change, may create a stronger demand for lightweight products. Furthermore, lightweight products/containers require less energy and raw materials and therefore provide a reduction of GHG emissions per container. In addition, lighter-weight containers could potentially allow for more containers on a truck reducing the GHG emissions in logistics. Identified risks from potential stricter emission regulations and customer requirements (transition risks) have also driven opportunities for improvement. Solvents in products are replaced by water-based, high solids or solvent-free alternatives (mid-term, continuously ongoing). R&D leads the ongoing progress in lightweight and product substitution of coating-solvent to water-based, high solids or solvent-free alternatives. Opportunities are captured in our cullet management programme, covering the entire value chain, where we have on average 52% post-consumer recycled content (across all colours) in our European made bottles. We optimise the use of recycled glass in our manufacturing processes to enable the other raw materials to melt at lower temperatures, lowering energy costs and carbon emissions while prolonging furnace life.
Supply chain and/or value chain	Yes	Climate-related risks and opportunities have influenced our short-term, medium-term, and long-term strategy for the management of our supply and value chain. Supplying materials temporarily can be interrupted due to extreme weather events. In order to mitigate risks of material unavailability, our business strategy is to conduct business directly with the origin or source suppliers and manufacturers, whenever possible, to achieve maximum commercial benefit and to ensure corporate and sustainable responsibility criteria are met. Furthermore, the risks related to the price of oil and its products due to carbon taxes have impacted all our businesses e.g., increased material and logistics costs from packaging suppliers. We experience a significant increase in suppliers' operating costs when energy costs and carbon taxes increase. For example, in Europe, we assume that a 10% increase in energy cost would roughly result in an additional 2% increase in AGP's total operating cost. Our strategy to address these risks is through Responsible Procurement principles. By means of a Supplier Assessment, a supplier risk profile is plotted to assess environmental risks (internal and external risk assessment elements). Where insufficient controls are identified, AGP is committed to working with suppliers to resolve deficiencies. We encourage suppliers to implement reduction projects for energy, CO2, water, and waste. As a result, we ask our suppliers with major carbon emissions to have emission reduction projects in place. This strategy is set with a long-term focus and is continuously ongoing. Additionally, in order to reduce logistical impacts, we aim to minimise transport distances and optimise packing and configurations where feasible and viable. Therefore, we strive to deliver to our customers from the closest location as a preferred production facility and have ranked the alternatives with the same criteria.
Investment in R&D	Yes	Influenced by climate-related risks (e.g. regulatory and legal, physical, and technological risks) and opportunities (e.g., resource efficiency), AGP invests in R&D to improve the resource efficiency of our production facilities and packaging. Furthermore, potential climate-related risks from the depletion of natural resources motivated us to continuously invest in R&D to develop new technologies/design to produce lightweight products. Lightweight products result in a reduction of emissions and energy usage due to less material input and fuel for transport. Also, our pioneering, large-scale hybrid electric furnace i.e., NextGen, which will be the first of its kind that can run predominantly on renewable electricity and a small amount of gas. Our planned hydrogen electrolyser project in Sweden is another good example. Another example would include the online model predictive controls units which continuously optimise furnace combustion based on multiple process data points.
Operations	Yes	Climate-related risks and opportunities have influenced our medium-term and long-term strategy for our operations. Our production facilities are regulated by the EU Industrial Emissions Directive, US Clean Air Act and the South Africa carbon tax. Since higher energy cost results in higher operation cost, we intend to invest more in our affected operations to comply. We are also influenced by climate-related opportunities such as "energy efficient furnace with regenerative heat recovery." AGP will take advantage of new technologies, like the NextGen furnace, to cut its direct furnace carbon emissions by up to 60%. The NextGen Furnace represents a strategic milestone in securing the future of the European glass industry in a circular and climate-neutral European economy. It will be built in Oberkirchen, Germany in 2023, with an assessment of initial results planned for 2024. We have also several operational excellence programmes in place aimed at driving continuous improvement in our energy consumption levels.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Indirect costs Assets	INDIRECT COSTS: AGP's financial planning process has been influenced by climate-related regulatory risks. The EU Emissions Trading Scheme (ETS) is the main regulatory framework that poses a risk to the European industry. We estimate the carbon cost around $214 million by 2030 (under a 1.5°C scenario) due to the possible continuous tightening of the EU ETS. However, the impact will be significantly reduced by meeting our climate targets. In addition, production costs are sensitive to gas and electricity costs which have been volatile in recent years. Volatility in the price of electricity is caused e.g. by the German Renewable Energy policy, the phasing out of nuclear generating capacity, fluctuations in the price of gas e.g., due to the Ukraine war, or the influence of CO2 costs on electricity prices. We have energy pass-through clauses included in sales contracts, and we have developed an active hedging strategy to fix energy costs through contractual arrangements with suppliers. Where pass-through contracts do not exist, our policy is to purchase natural gas and electricity by entering into forward price-fixing arrangements with suppliers for the bulk of our anticipated requirements for the year ahead. Such contracts are used exclusively to obtain delivery of our anticipated energy supplies. We do not net settle, nor do we sell within a short period of time after taking delivery. These contracts are treated as executory contracts. At AGP we typically build up these contractual positions in tranches of approximately 10% of the anticipated volumes. Any gas and electricity which is not purchased under forward price-fixing arrangements are purchased under index tracking contracts or at spot prices. The magnitude of impact from operating costs could impact all AGP in all regions. --- ASSETS: Climate-related risks can have significant ramifications for our operations, particularly concerning damage to our equipment and production facilities. Such damages can lead to undesirable downtime, disrupt our production capabilities, and ultimately impact the company's financial performance. However, AGP has taken proactive measures to address these risks effectively. AGP has secured comprehensive coverage through property damage and business interruption insurance policies, providing us with a safety net against potential losses resulting from climate-related events. Additionally, our Property Loss Control Standards have been carefully developed to mitigate the occurrence and severity of damages caused by natural events, such as Flood Risk Management, Earthquake Risk Management, Freeze Protection, and Windstorm Emergency Response Plan. These measures are tailored to the specific locations of our production facilities, ensuring they are well-equipped to handle potential climate-related challenges. To maintain a robust risk management framework, our Chief Risk Officer oversees the implementation of various systems and programs throughout the organization. These initiatives aim to ensure that climate-related risks are diligently managed, and the organization's risk-bearing capacity and resources are adequate to guarantee business resilience in the face of potential adverse impacts. It is important to emphasize that the magnitude of these risks can affect AGP in all regions. Therefore, our continued focus on proactive risk mitigation and resilience planning remains of utmost importance. By remaining vigilant and proactive in our approach, AGP can confidently navigate potential climate-related challenges and safeguard the company's long-term stability and success.

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition	Indicate the level at which you identify the alignment of your spending/revenue with a sustainable finance taxonomy
Row 1	Yes, we identify alignment with both our climate transition plan and a sustainable finance taxonomy	At the company level only

C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's climate transition.

Financial Metric
Other, please specify (Percentage share of total electricity spent aligned with a 1.5°C world in the reporting year (%))

Type of alignment being reported for this financial metric
Alignment with our climate transition plan

Taxonomy under which information is being reported
<Not Applicable>

Objective under which alignment is being reported
<Not Applicable>

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)

Percentage share of selected financial metric aligned in the reporting year (%)
16

Percentage share of selected financial metric planned to align in 2025 (%)

Percentage share of selected financial metric planned to align in 2030 (%)
100

Describe the methodology used to identify spending/revenue that is aligned
The method to quantify alignment with a 1.5 C world, is spent on renewable electricity as a percentage of our total electricity spent. We assume that our organisation will be aligned with a 1.5°C world when a) we transition our Scope 2 to 100% renewable electricity, b) partially electrify our thermal processes with renewable electricity, and c) use green hydrogen.

Example on Progress made in 2022:
We saw substantial progress in our renewable energy programme during the period with the announcement of three on-site solar installations in the Netherlands. These will supply renewable electricity to our Dongen and Moerdijk production facilities as part of AGP's strategy to use 100% renewable electricity by 2030. The Netherlands is the first country in which we will supply all production facilities with on-site generated sustainable energy via large-scale solar energy installations.

C3.5c

(C3.5c) Provide any additional contextual and/or verification/assurance information relevant to your organization's taxonomy alignment.

Open Item – not scored

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?
Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number
Abs 1

Is this a science-based target?
Yes, and this target has been approved by the Science Based Targets initiative

Target ambition
1.5°C aligned

Year target was set
2021

Target coverage
Company-wide

Scope(s)
Scope 1
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Base year
2020

Base year Scope 1 emissions covered by target (metric tons CO2e)
2770758

Base year Scope 2 emissions covered by target (metric tons CO2e)
1294966

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e)
<Not Applicable>

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
4065724

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
100

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
<Not Applicable>

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
100

Target year
2030

Targeted reduction from base year (%)
42

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]
2358119.92

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
2866237

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
1262007

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
4128244

Does this target cover any land-related emissions?
No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]
-3.66127024011327

Target status in reporting year
Underway

Please explain target coverage and identify any exclusions
Due to a recent acquisition, we are reporting the recalculated base year and 2022 Scope 1+2 emissions.
We are in the process of resubmitting our Science Based Targets (“SBT”) as required by material changes in our business i.e., the acquisition of the Consol business in Africa. As a result, we are required to recalculate our base year data, however we expect to retain our current targets i.e., 42% absolute reduction of Scope 1 emissions and 12.3% absolute reduction of Scope 3 emissions.

Although our total Scope 1 and 2 emissions increased by 62,520 tCO2e in 2022 compared to our 2020 base year (4,128,244 tCO2e), due primarily to our business growth in Africa, we achieved a 5% reduction on an intensity basis in the same time period. While we are reporting an increase in emissions, we have made strides in maintaining and improving our energy efficiency across our operations making progress to achieve our 2030 Scope 1 and 2 reduction targets

Our target covers 100% of our total Scope 1 and 2 emissions in the operational boundary, and there are no exclusions.

Plan for achieving target, and progress made to the end of the reporting year
In 2021, the Sustainability Committee approved a 10-year action plan for AGSA including AGP that outlines the targets, actions, and investments the company will make to achieve 1.5 degree Celsius pathway, ultimately delivering on the SBTs for all scopes by 2030. In our 2030 target, we aim to achieve a 42% reduction in our total Scope 1 and 2 emissions compared to 2020.

Primary activities to reduce scope 1 GHG emissions across our operations will focus on the implementation of best practices and innovative technologies, such as our NextGen hybrid furnace in Obernkirchen, Germany, , hydrogen-based, or full electric melting. Also, we will be making investments to lightweight our products and decrease virgin raw material usage over the period of this target.
For scope 2 GHG emission reductions, priority will be placed on meeting our 100% renewable electricity procurement target as well as improvements in electricity efficiency across our operations

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

Target reference number
Abs 2

Is this a science-based target?
Yes, and this target has been approved by the Science Based Targets initiative

Target ambition
2°C aligned

Year target was set
2021

Target coverage
Company-wide

Scope(s)
Scope 3

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
Category 1: Purchased goods and services
Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)
Category 4: Upstream transportation and distribution
Category 5: Waste generated in operations

Base year
2020

Base year Scope 1 emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 2 emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)
1149453

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)
554421

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)
495450

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)
40292

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e)
2239617

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
2239617

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
<Not Applicable>

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
<Not Applicable>

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)
51

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)
25

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)
22

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)
2

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
83

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
83

Target year
2030

Targeted reduction from base year (%)
12.6

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]
1957425.258

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)
1079987

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)
600052

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
580167

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)
33079

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)
2293285

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
2293285

Does this target cover any land-related emissions?
No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]
-19.0182744610578

Target status in reporting year
Underway

Please explain target coverage and identify any exclusions
The Sustainability Committee approved a 10-year action plan that outlines the targets, actions, and investments the company will make to achieve the 1.5 degree Celsius pathway, ultimately delivering on the SBTi for all scopes by 2030. In our near-term 2030 target, we aim to achieve a 12.3% absolute reduction in our total Scope 3 emissions compared to 2020.
We are in the process of resubmitting our Science Based Targets (“SBT”) as required by material changes in our business i.e., the acquisition of the Consol business in Africa. As a result, we are required to recalculate our base year data, however we expect to retain our current targets i.e., 42% absolute reduction of Scope 1 emissions and 12.3% absolute reduction of Scope 3 emissions.

Our target covers 100% of our calculated total Scope 3 emissions in the operational boundary and there are no exclusions to what we identified as relevant.

Plan for achieving target, and progress made to the end of the reporting year
Immediate priority to reduce our Scope 3 emissions will continue to focus on engaging with our suppliers, industry associations, and peers as part of our

roadmap for increasing recycling rates, recycled content, and low-carbon raw materials. Furthermore, we are investigating in zero waste to landfill and waste generation reduction opportunities on a global scale as well as transitioning to renewable electricity.

The rate of progress toward the target is anticipated to change from year to year.

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?
Target(s) to increase low-carbon energy consumption or production

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number
Low 1

Year target was set
2021

Target coverage
Company-wide

Target type: energy carrier
Electricity

Target type: activity
Consumption

Target type: energy source
Renewable energy source(s) only

Base year
2020

Consumption or production of selected energy carrier in base year (MWh)
375604

% share of low-carbon or renewable energy in base year
13

Target year
2030

% share of low-carbon or renewable energy in target year
100

% share of low-carbon or renewable energy in reporting year
16

% of target achieved relative to base year [auto-calculated]
3.44827586206896

Target status in reporting year
Underway

Is this target part of an emissions target?
Yes, it is a part of our 2030 Science Based Target initiative targets for Scope 2 .

Is this target part of an overarching initiative?
Science Based Targets initiative

Please explain target coverage and identify any exclusions
We progressed about 3.45% towards our renewable energy target in the reporting year compared to the base year.
Progress toward the goal was primarily driven by procuring additional green electricity e.g., tarries and unbundled credits.

There are no exclusions.

Plan for achieving target, and progress made to the end of the reporting year
Several on-site, near-site, and off-site projects in different development stages are underway globally. Over the past year, we implemented several renewable contracts (e.g. for all our UK locations or Sweden) or and also our near-site (e.g. in Bridgeton (USA) and on-site projects are making progress towards more contribution.
The rate of progress towards the target is anticipated to change from year to year.

List the actions which contributed most to achieving this target
<Not Applicable>

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.
Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation		
To be implemented*	1	1
Implementation commenced*	1	1
Implemented*	6	3495
Not to be implemented		

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Energy efficiency in production processes	Automation

Estimated annual CO2e savings (metric tonnes CO2e)
234

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 1
Scope 3 category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
36259

Investment required (unit currency – as specified in C0.4)
105000

Payback period
1-3 years

Estimated lifetime of the initiative
6-10 years

Comment
ES3 Furnace F4 and Feeder line 41, 42 and 43

Initiative category & Initiative type

Energy efficiency in production processes	Compressed air

Estimated annual CO2e savings (metric tonnes CO2e)
1092

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (location-based)
Scope 2 (market-based)
Scope 3 category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
423540

Investment required (unit currency – as specified in C0.4)
1635430

Payback period
1-3 years

Estimated lifetime of the initiative
16-20 years

Comment
Replace 7-bar system
Optimising lp network / exchange compressors Step 1
New high pressure compressor with VSD and heat recovery
LP Compressor Upgrade

Initiative category & Initiative type

Energy efficiency in production processes	Machine/equipment replacement

Estimated annual CO2e savings (metric tonnes CO2e)
387

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (location-based)
Scope 2 (market-based)
Scope 3 category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
301738

Investment required (unit currency – as specified in C0.4)
1044276

Payback period
1-3 years

Estimated lifetime of the initiative
16-20 years

Comment
Vacuum Pump with inverter
Vacuum Pump Upgrade

Initiative category & Initiative type

Energy efficiency in production processes	Motors and drives

Estimated annual CO2e savings (metric tonnes CO2e)
264

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (location-based)
Scope 2 (market-based)
Scope 3 category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
99130

Investment required (unit currency – as specified in C0.4)
379155

Payback period
1-3 years

Estimated lifetime of the initiative
11-15 years

Comment
Replace the motors and inverters for IS- machines F1 (lines 11, 12)

Initiative category & Initiative type

Energy efficiency in production processes	Waste heat recovery

Estimated annual CO2e savings (metric tonnes CO2e)
1494

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 1
Scope 3 category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
1553200

Investment required (unit currency – as specified in C0.4)
4678000

Payback period
1-3 years

Estimated lifetime of the initiative
16-20 years

Comment
Heat recovery from compressors
Batch Pre-Heater Gostyn

Initiative category & Initiative type

Energy efficiency in buildings	Lighting

Estimated annual CO2e savings (metric tonnes CO2e)
23

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (location-based)
Scope 2 (market-based)
Scope 3 category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
12500

Investment required (unit currency – as specified in C0.4)
35000

Payback period
1-3 years

Estimated lifetime of the initiative
11-15 years

Comment
Exchange Lightning to LED in Warehouses

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Compliance with regulatory requirements/standards	As part of our Environmental Management Systems, all production facilities undergo compliance checks. 40 out of 41 production facilities are ISO 14001 certified. Additionally, all production facilities are audited on a frequent basis against AGSA Environmental Control Standards. These standards also address the environmental compliance of the production facilities.
Employee engagement	We have implemented environmental management systems, internal KPI reports and programmes to raise awareness on all levels of the business.
Dedicated budget for low-carbon product R&D	AGP is continuously working on the reduction of the weight of its products. Lightweight products/containers result in a reduction of GHG emissions and energy usage due to less material input. In addition, fuel is saved during transport, and fewer emissions are generated when less virgin raw material is used.
Dedicated budget for other emissions reduction activities	At our organisation, environmental and sustainability considerations are pivotal components of our strategic planning process. Within our investment and cost plans, we thoroughly incorporate initiatives focused on energy and emissions reduction. This deliberate integration reflects our commitment to responsible resource management and aligns our efforts with environmentally conscious practices. When it comes to major projects, such as furnace repairs, we place great importance on integrating energy reduction measures directly into the project budget. By doing so, we ensure that awareness and accountability for sustainable practices rest within our executive management team, as opposed to relying on separate budgets owned by other corporate functions. This approach underscores our dedication to promoting a culture of responsibility throughout the organization. To facilitate the implementation of best practices, we have established operational excellence programs with dedicated budgets. These programs are specifically designed to drive the adoption of efficient and sustainable operational methods across our operations. This program also provides guidance to our leadership to make sound and efficient investments in energy-related projects. This comprehensive approach provides valuable insights and oversight of energy-related endeavours undertaken at the group level, wherever feasible.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?
Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation
Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon
Other, please specify (We used Instant LCA PackagingTM tool version 2020 which is based on EU industry average data and compared our Eco series with the standard product on the market for the same fill volumes (ISO 14067))

Type of product(s) or service(s)

Other	Other, please specify (Wine bottle (Oneway Glass - fill volume of 750ml))

Description of product(s) or service(s)
The adoption of light- or right-weighting techniques for glass packaging represents a proactive approach to reducing the glass sector's GHG impact. We can effectively curtail emissions in key stages, including raw material sourcing, bottle manufacturing and transportation. Over the past 15 years, we achieved approx. 40% weight reduction of a typical glass container.
Through the utilization of cutting-edge design software and precise manufacturing processes we have successfully developed lightweight bottles for diverse markets. AGP-North Americas' Eco Series is a prime example of lightweight solutions. These Eco Series bottle (750ml) effectively reduce glass weight by approx. 100g per bottle compared to standard counterparts.
We assess the environmental impact of our products using the Instant LCA PackagingTM tool (version 2020). According to our estimations, AGP's Eco Series demonstrates a substantial reduction of approx. 88g CO2eq per bottle (Cradle-to-gate + end-of-life stage) when compared to a standard wine bottle.
The success of our Eco Series has been further reflected in its market acceptance, by accounting for approx. 8.5% of our total sales in North America during 2022. This signifies the growing recognition and preference for sustainable packaging solutions among our customers.
By continuously driving innovations like the Eco Series and investing in sustainable practices, we are making notable strides in reducing our footprint while delivering high-quality products.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)
Yes

Methodology used to calculate avoided emissions
Other, please specify (Ardagh Instant LCA PackagingTM tool version 2020)

Life cycle stage(s) covered for the low-carbon product(s) or services(s)
Cradle-to-gate + end-of-life stage

Functional unit used
Eco Series wine bottle with average weight of 430g (Oneway Glass - fill volume of 750ml)

Reference product/service or baseline scenario used
Standard wine bottle with average weight of 539g (Oneway Glass - fill volume of 750ml)

Life cycle stage(s) covered for the reference product/service or baseline scenario
Cradle-to-gate + end-of-life stage

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario
0.000088

Explain your calculation of avoided emissions, including any assumptions
The avoided emissions were estimated using a mass-based allocation for the standard wine bottle with average and AGP's Eco Series reduced weight by ~100g for the same fill volume of 750ml. Based on our Instant LCA Tool which is based on EU industry average data, avoided CO2eq emissions are reduced by 88g per Eco Series bottle vs. standard bottle. Our Eco Series tonnage sold in 2022 was about 145,000 tonnes which resulted in a saving of approx. 36,400 tonnes of overall glass quantity. Therefore, we estimate avoided emissions of about 29,500 tCO2eq in 2022 through the sale of our Eco Series products instead of standard wine bottles. Eco Series wine bottles generated about 8.5 % of our total sales in North America in 2022.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year
8.5

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?
No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?

Yes, an acquisition

Name of organization(s) acquired, divested from, or merged with

AGSA completed its acquisition of Consol Holdings Proprietary Limited, the leading producer of glass packaging on the African continent, at the end of April 2022. AGP's glass facilities in Africa operate as Ardagh Glass Packaging–Africa.

Details of structural change(s), including completion dates

AGSA completed its acquisition of Consol Holdings Proprietary Limited in April 2022. Known now as Ardagh Glass Packaging-Africa (AGP-A). Headquartered in Johannesburg, AGP-A is the market leader in South Africa, operating four well-invested glass production facilities located in South Africa. In addition, there are plants in Nigeria (1 plant), Kenya (1 plant) and Ethiopia (1 plant). AGP-A serves a broad range of leading international, regional and domestic customers, principally in the beer, wine, spirits, food and non-alcoholic beverage sectors.

AGP-A will apply the same accounting and reporting methodologies as the existing business.
Subject matter experts from various functions support the African colleagues to adjust their systems and reporting since the acquisition has been completed and we have operational control.
The standalone CDP reporting of AGP-A will not be continued as they are now part of AGP´s reporting.

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	Yes, a change in boundary	Due to the acquisition of AGP-A as mentioned in Chapter C5.1a, we have added 7 production facilities located in South Africa (4 plants), Nigeria (1 plant), Kenya (1 plant), and Ethiopia (1 plant) to our reporting. This has happened still with the criterium of operational control.

C5.1c

(C5.1c) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in C5.1a and/or C5.1b?

	Base year recalculation	Scope(s) recalculated	Base year emissions recalculation policy, including significance threshold	Past years' recalculation
Row 1	Yes	Scope 1 Scope 2, market-based Scope 3	Companies calculating carbon footprints according to the GHG Protocol shall develop a base-year emissions recalculation policy, and clearly articulate the basis and context for any recalculations. In addition, a "significance threshold" has to be determined, defining a significant change that requires a recalculation of the base year and, if applicable, other historically calculated carbon footprints. A recalculation of the base year shall only be conducted if there is a significant change related to the amount of emissions which cannot be explained by: A) the organic growth of the company, leading to a capacity growth of the production facilities, B) natural circumstances like a very hard winter, leading to an increased demand of heating or C) the implementation of reduction measures, incl. a change to green electricity. As an example, opening new sites or closing existing sites would not lead to a recalculation of the base year, as this would be the result of organic growth or diminution related to the company's activities. Instead, the following reasons may require recalculating the base year: Structural changes, changes in methodology, or the discovery of significant errors. For AGSA, a significance threshold of 10% is defined. This means that if all changes according to the above categories together cause a deviation of at least 10% in relation to the complete carbon footprint, a recalculation of the base year becomes necessary. The threshold must be applied to the total carbon footprint, including Scope 1, 2, and 3 emissions.	Yes

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start

January 1 2020

Base year end

December 31 2020

Base year emissions (metric tons CO2e)

2770758

Comment

We are reporting the base year (2020) of AGP Sustainability Targets 2030. The provided figure is newly calculated,as highlighted in C5.1c, as required by our significance threshold trigger. the acquisition of AGP-A
The provided figure is newly calculated, as highlighted in C5.1c, and as required by our significance threshold trigger.

Scope 2 (location-based)

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
1317386

Comment
We are reporting the base year (2020) of AGP Sustainability Targets 2030. T
The provided figure is newly calculated, as highlighted in C5.1c, and as required by our significance threshold trigger.

Scope 2 (market-based)

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
1294966

Comment
We are reporting the base year (2020) of AGP Sustainability Targets 2030.
The provided figure is newly calculated, as highlighted in C5.1c, and as required by our significance threshold trigger.

Scope 3 category 1: Purchased goods and services

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
1149453

Comment
We are reporting the base year (2020) of AGP Sustainability Targets 2030.
The provided figure is newly calculated, as highlighted in C5.1c, and as required by our significance threshold trigger.

Scope 3 category 2: Capital goods

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
554421

Comment
We are reporting the base year (2020) of AGP Sustainability Targets 2030.
The provided figure is newly calculated, as highlighted in C5.1c, and as required by our significance threshold trigger.

Scope 3 category 4: Upstream transportation and distribution

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
495450

Comment
We are reporting the base year (2020) of AGP Sustainability Targets 2030.
The provided figure is newly calculated, as highlighted in C5.1c, and as required by our significance threshold trigger.

Scope 3 category 5: Waste generated in operations

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
40292

Comment
We are reporting the base year (2020) of AGP Sustainability Targets 2030.
The provided figure is newly calculated, as highlighted in C5.1c, and as required by our significance threshold trigger.

Scope 3 category 6: Business travel

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 7: Employee commuting

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 8: Upstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 9: Downstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 10: Processing of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 11: Use of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 12: End of life treatment of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 15: Investments

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
The Greenhouse Gas Protocol: Scope 2 Guidance
The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Standard

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
2866237

Start date
<Not Applicable>

End date
<Not Applicable>

Comment
The figure includes emissions from our acquisition AGP-Africa as well.

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based
We are reporting a Scope 2, location-based figure

Scope 2, market-based
We are reporting a Scope 2, market-based figure

Comment

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based
1332790

Scope 2, market-based (if applicable)
1262007

Start date
<Not Applicable>

End date
<Not Applicable>

Comment
The figures include emissions from our acquisition AGP-Africa as well.

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?
Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1, Scope 2, or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source of excluded emissions
We exclude stand-alone office buildings/spaces including research & development (R&D)-only locations and 1 AGP subsidiary (Heye International).

Scope(s) or Scope 3 category(ies)
Scope 1
Scope 2 (location-based)
Scope 2 (market-based)
Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)

Relevance of Scope 1 emissions from this source
Emissions are relevant and calculated, but not disclosed

Relevance of location-based Scope 2 emissions from this source
Emissions are relevant but not yet calculated

Relevance of market-based Scope 2 emissions from this source
Emissions are relevant and calculated, but not disclosed

Relevance of Scope 3 emissions from this source
Emissions are relevant and calculated, but not disclosed

Date of completion of acquisition or merger
<Not Applicable>

Estimated percentage of total Scope 1+2 emissions this excluded source represents
0.1

Estimated percentage of total Scope 3 emissions this excluded source represents
0.1

Explain why this source is excluded
A Scope 1+2 screening has been performed, and emissions from AGP´s stand-alone office buildings/spaces and the subsidiary were calculated with less than 1% of the total Scope 1+2 emissions. Therefore, according to GHG protocol, it is optional to consider these sources of emissions in our corporate carbon footprint.

Explain how you estimated the percentage of emissions this excluded source represents
Using an estimation methodology these stand-alone office buildings/spaces and subsidiaries would account for less than 1% of our scope 1+2 GHG emission inventory and scope 3 GHG emission inventory. This has been estimated based on utility invoices for the largest office building/space i.e., our R&D facility in Marion, Indiana (USA), and extrapolated to account for other locations considering electricity and fossil fuel usage.

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
1079987

Emissions calculation methodology
Supplier-specific method
Average product method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
22

Please explain
Emissions calculated based on the type and mass of purchased goods and relevant emission factors (EF) where available EF sourced from supplier.
Emissions from purchased goods have been calculated based on activity data (total mass of each material) and obtaining appropriate emission factors.
Regarding the emissions factors applied for the calculation, some suppliers shared their products carbon footprints with us. They use EPDs based on Life-cycle assessment calculations according to ISO 14025. For the rest, emission factors obtained from commercial data providers which reflect industry specific average emission factors for a specific country/region.

Capital goods

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
A scope 3 screening has been performed, capital goods is not considered relevant as it is about 8% from the total emissions

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
600052

Emissions calculation methodology
Supplier-specific method
Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
For fuels-related Scope 3 indirect emissions, no data from suppliers was collected. Electricity data related to the composition of electricity was collected and calculated based on relevant emission factors from different sources e.g. Defra or Ecoinvent.

Upstream transportation and distribution

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
580167

Emissions calculation methodology
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
It was calculated based on the distance, type of vehicles, type of consumed fuel, and volume (litres) of consumed fuel where available. Emission factors for type of transport per km, tkm or litres of fuel has been considered from different sources e.g. Defra or Ecoinvent.

Waste generated in operations

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
33079

Emissions calculation methodology
Waste-type-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
Emission factors for recycling, incineration and/or landfill regarding 16 main waste fractions as well as for wastewater emissions have been considered.

Business travel

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
A scope 3 screening has been performed; business travel is not considered relevant as it is less than 3% of the total emissions.

Employee commuting

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
A scope 3 screening has been performed; employee commuting is not considered relevant as it is less than 1% from the total CO2 emissions.

Upstream leased assets

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
A scope 3 screening has been performed; upstream leased assets is not considered relevant as it is less than 3% of the total emissions.

Downstream transportation and distribution

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
A scope 3 screening has been performed; downstream transportation and distribution is not considered relevant as it is less than 3% of the total emissions.

Processing of sold products

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
A scope 3 screening has been performed; processing of sold products is not considered relevant as it is less than 2% of the total emissions.

Use of sold products

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
A scope 3 screening has been performed; use of sold products is not considered relevant as it is less than 1% of the total emissions.

End of life treatment of sold products

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
A scope 3 screening has been performed; end of life treatment of sold products is not considered relevant as it is less than 7% of the total emissions.

Downstream leased assets

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
A scope 3 screening has been performed; downstream leased assets is not considered relevant as it is less than 1% of the total emissions.

Franchises

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
A scope 3 screening has been performed; franchises is not considered relevant as it is not applicable.

Investments

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
A scope 3 screening has been performed; investments is not considered relevant as it is less than 1% of the total emissions.

Other (upstream)

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
A scope 3 screening has been performed; other (upstream) is not considered relevant as it is less than 1% of the total emissions.

Other (downstream)

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
A scope 3 screening has been performed; other (downstream) is not considered relevant as it is less than 1% of the total emissions.

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?
No

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure
0.00096

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
4128244

Metric denominator
unit total revenue

Metric denominator: Unit total
4300000000

Scope 2 figure used
Market-based

% change from previous year
10

Direction of change
Increased

Reason(s) for change
Acquisitions
Change in output
Change in revenue

Please explain
The previous reporting year's (2021) total revenue intensity figure ($/Gross global combined Scope 1 and 2 emissions, metric tons CO2e) was 0.00087 which increased to 0.00096. This indicates a 10% increase compared to the previous ((0.00087- 0.00096)/ 0.00087) * 100).

The increased intensity figure for combined Scope 1 and 2 emissions is the result of the acquisition of AGP-A and its subsequent influence on the overall data.

Intensity figure
283

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
4128244

Metric denominator
full time equivalent (FTE) employee

Metric denominator: Unit total
14600

Scope 2 figure used
Market-based

% change from previous year
30

Direction of change
Increased

Reason(s) for change
Acquisitions
Change in output
Change in revenue

Please explain
The previous reporting year's (2021) FTE intensity figure (Employee/Gross global combined Scope 1 and 2 emissions, metric tons CO2e) was 265 which increased to 283 in 2022. This indicates a 7% increase compared to the previous ((265-344)/344) * 100).

The increased intensity figure is the result of the acquisition of our African business and their subsequent influence to the overall data.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?
No

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/area/region.

Country/area/region	Scope 1 emissions (metric tons CO2e)
United Kingdom of Great Britain and Northern Ireland	415817
United States of America	1087662
EU27	820124
Africa	542635

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By business division

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO2e)
AGP Europe	1235941
AGP North America	1087662
AGP Africa	542635

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/area/region.

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
United Kingdom of Great Britain and Northern Ireland	71945	0
United States of America	531617	425951
EU27	287488	341038
Africa	441741	495018

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By business division

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
AGP Europe	359432	341038
AGP North America	531617	425951
AGP Africa	441741	495018

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

No

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Increased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	2291	Decreased	0.05	Our previous reporting year's recalculated renewable energy number is 460,338.31 MWh, whereas the value for 2022 is 465,792MWh, resulting in a Scope 2 emissions reduction of 2,291 CO2e, compared to 2021.
Other emissions reduction activities		<Not Applicable>		
Divestment		<Not Applicable>		
Acquisitions	1037653	Increased	33.6	The acquisition of seven African plants in 2022 yielded an increase in total Scope 1 & 2 emissions. The emission numbers were recalculated for the past reporting years, including the recalculation of the base year (2020). That led to a 33.6% increase in 2022 (vs 2021 S1+S2 excluding Africa) including African plants (4,128,244.33- 3,083,779.53)/ 3,083,779.53=33.6 %.
Mergers		<Not Applicable>		
Change in output		<Not Applicable>		
Change in methodology		<Not Applicable>		
Change in boundary		<Not Applicable>		
Change in physical operating conditions		<Not Applicable>		
Unidentified		<Not Applicable>		
Other	12687	Increased	0.3	Scope 2 emissions data for the Houston production facility was subsequently included for all three years - 2020, 2021, and 2022. The base year and the following years were recalculated accordingly. Scope 2 emissions for the Houston production facility were 12686.59 in 2022. This increased Scope 1 + 2 by 0.3% (vs 2021 excl. Houston).

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 20% but less than or equal to 25%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	No

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	0	10970191	10970191
Consumption of purchased or acquired electricity	<Not Applicable>	465792	2481911	2947704
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Total energy consumption	<Not Applicable>	465792	13452102	13917895

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	No
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
<Not Applicable>

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
We do not consume this fuel.

Other biomass

Heating value

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
<Not Applicable>

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
We do not consume this fuel.

Other renewable fuels (e.g. renewable hydrogen)

Heating value

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
<Not Applicable>

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
We do not consume this fuel.

Coal

Heating value

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
<Not Applicable>

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
We do not consume this fuel.

Oil

Heating value
LHV

Total fuel MWh consumed by the organization
712097

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
<Not Applicable>

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
Heavy Fuel Oil + Diesel

Gas

Heating value
LHV

Total fuel MWh consumed by the organization
10258094

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
<Not Applicable>

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
Natural Gas + Liquefied Petroleum Gas (LPG)

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value
Please select

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
<Not Applicable>

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
We do not consume this fuel.

Total fuel

Heating value
LHV

Total fuel MWh consumed by the organization
10970191

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
<Not Applicable>

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in C6.3.

Country/area of low-carbon energy consumption
United Kingdom of Great Britain and Northern Ireland

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Mix of wind, solar, hydro power)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
342594

Tracking instrument used
Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute
United Kingdom of Great Britain and Northern Ireland

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment

Country/area of low-carbon energy consumption
Sweden

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Hydropower (capacity unknown)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
64250

Tracking instrument used
Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute
Sweden

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area
Other, please specify (EU27)

Consumption of purchased electricity (MWh)
762651

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
762651

Country/area
Other, please specify (Africa)

Consumption of purchased electricity (MWh)
512360

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
512360

Country/area
United Kingdom of Great Britain and Northern Ireland

Consumption of purchased electricity (MWh)
342594

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
342594

Country/area
United States of America

Consumption of purchased electricity (MWh)
68210

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
68210

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Reasonable assurance

Attach the statement
Ardagh Glass Limited - Ardagh Glass - Wheatley - 2022 AE Final VOS - 20230324.pdf
UK - Irvine AEM 2022.pdf
303_14250-0015_EmB2022_1_0.pdf
301_14250-0016_EmB2022_1_0 (1).pdf
0745P4_Inst_AER_PL_pl_UJS_2022.pdf
0757P4_Inst_AER_PL_pl_GOS 2022.pdf
CO2_Rapport.pdf
307_14250-0021_EmB2022_1_0.pdf
308_14250-0072_EmB2022_1_0.pdf
20230329 Verificatierapport MRD_SGS.pdf
302_14250-0017_EmB2022_1_0.pdf
309_14250-0071_EmB2022_1_0.pdf
413 VR VNR 2022 Ardagh Glass 20230321_sign.pdf
Ardagh Glass Limited - Barnsley - 2022 AE Final VOS - 20230322.pdf
20230329 Verificatierapport DNG_SGS.pdf
Ardagh Glass Limited - Ardagh Glass - Headlands 2022 AE Final VOS 20230328.pdf
CER-F-020_EU ETS_Ardagh Glass Italy_2022.pdf
304_14250-0018_EmB2022_1_0.pdf
305_14250-0023_EmB2022_1_0.pdf
0758P4_Inst_AER_PL_pl_WYS_2022.pdf

Page/ section reference
All Pages

Relevant standard
European Union Emissions Trading System (EU ETS)

Proportion of reported emissions verified (%)
50

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Independent Assurance Statement - AGP.pdf

Page/ section reference
All Pages

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach
Scope 2 market-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Independent Assurance Statement - AGP.pdf

Page/ section reference
Al pages

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category
Scope 3: Purchased goods and services
Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
Scope 3: Upstream transportation and distribution
Scope 3: Waste generated in operations

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Independent Assurance Statement - AGP.pdf

Page/section reference
All pages

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?
Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C4. Targets and performance	Progress against emissions reduction target	On an annual basis, this data undergoes limited assurance, relevant standard ISAE 3000	As part of our commitment to the Science-based Target Initiative (SBTi) we have our progress against emission reduction targets annually assured by a third-party. AGPLUX001OFFTargetApprovalCertificate (2).pdf
C6. Emissions data	Year on year change in emissions (Scope 1)	On an annual basis, this data undergoes limited assurance, relevant standard ISAE 3000	Independent Assurance Statement - AGP.pdf
C6. Emissions data	Year on year change in emissions (Scope 2)	On an annual basis, this data undergoes limited assurance, relevant standard ISAE 3000	Independent Assurance Statement - AGP.pdf
C6. Emissions data	Year on year change in emissions (Scope 3)	On an annual basis, this data undergoes limited assurance, relevant standard ISAE 3000	Independent Assurance Statement - AGP.pdf
C7. Emissions breakdown	Year on year change in emissions (Scope 1)	On an annual basis, this data undergoes limited assurance, relevant standard ISAE 3000	Independent Assurance Statement - AGP.pdf
C7. Emissions breakdown	Year on year change in emissions (Scope 2)	On an annual basis, this data undergoes limited assurance, relevant standard ISAE 3000	Independent Assurance Statement - AGP.pdf
C7. Emissions breakdown	Year on year change in emissions (Scope 3)	On an annual basis, this data undergoes limited assurance, relevant standard ISAE 3000	Independent Assurance Statement - AGP.pdf
C11. Carbon pricing	Year on year change in emissions (Scope 1 and 2)	Verification under the EU Emissions Trading Scheme (EU ETS) Directive and EU ETS related national implementation laws.	Ardagh Glass Limited - Ardagh Glass - Wheatley - 2022 AE Final VOS - 20230324.pdf UK - Irvine AEM 2022.pdf 303_14250-0015_EmB2022_1_0.pdf 301_14250-0016_EmB2022_1_0 (1).pdf 0745P4_Inst_AER_PL_pl_UJS_2022.pdf 0757P4_Inst_AER_PL_pl_GOS 2022.pdf CO2_Rapport.pdf 307_14250-0021_EmB2022_1_0.pdf 308_14250-0072_EmB2022_1_0.pdf 20230329 Verificatierapport MRD_SGS.pdf 302_14250-0017_EmB2022_1_0.pdf 309_14250-0071_EmB2022_1_0.pdf 413 VR VNR 2022 Ardagh Glass 20230321_sign.pdf Ardagh Glass Limited - Barnsley - 2022 AE Final VOS - 20230322.pdf 20230329 Verificatierapport DNG_SGS.pdf Ardagh Glass Limited - Ardagh Glass - Headlands 2022 AE Final VOS 20230328.pdf CER-F-020_EU ETS_Ardagh Glass Italy_2022.pdf 304_14250-0018_EmB2022_1_0.pdf 305_14250-0023_EmB2022_1_0.pdf 0758P4_Inst_AER_PL_pl_WYS_2022.pdf

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.

California CaT - ETS
EU ETS
South Africa carbon tax

C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

California CaT - ETS

% of Scope 1 emissions covered by the ETS
7.3

% of Scope 2 emissions covered by the ETS
0

Period start date
January 1 2021

Period end date
December 31 2023

Allowances allocated
61594

Allowances purchased
0

Verified Scope 1 emissions in metric tons CO2e
76583.6

Verified Scope 2 emissions in metric tons CO2e
0

Details of ownership
Facilities we own and operate

Comment

EU ETS

% of Scope 1 emissions covered by the ETS
52.6

% of Scope 2 emissions covered by the ETS
0

Period start date
January 1 2021

Period end date
December 31 2021

Allowances allocated
866240

Allowances purchased
301110

Verified Scope 1 emissions in metric tons CO2e
1193447

Verified Scope 2 emissions in metric tons CO2e
0

Details of ownership
Facilities we own and operate

Comment

C11.1c

(C11.1c) Complete the following table for each of the tax systems you are regulated by.

South Africa carbon tax

Period start date
January 1 2022

Period end date
December 31 2022

% of total Scope 1 emissions covered by tax
82.4

Total cost of tax paid
797993

Comment
Tax was paid on 447,394 t CO2e

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

A DESCRIPTION OF STRATEGY for complying with the system in which you anticipate participating in:

To comply with the listed emissions trading systems, AGP´s strategy is to keep sufficient allowances as much as possible and if our own allowances do not meet the requirements under regulatory national calculation, we will explore buying additional allowances. Our divisions are committed to reducing GHG emissions through various material and energy reduction and efficiency projects.

Apart from strategies to improve energy efficiency, our Sustainability Targets 2030 were introduced in 2021 to strategically transform our business to become more climate friendly. We are also committed to the Science Based Targets initiative (SBTi). We consider the scenario of limiting Global warming to 1.5°C for developing our long-term targets Through the different initiatives to increase energy efficiency in our production facilities, we aim to continually reduce our CO2 emissions and hence work on complying with the trading schemes. The GoGreen Index (GGI) is an internal indicator designed to integrate the most critical – with regards to long-term compliance and achievement of our long-term targets – environmental KPIs into one figure. Its aim is to provide facility and territorial line management with one aggregated KPI to monitor facilities' progress in environmental management and set priorities for annual programs. The main drivers of the GGI are CO2 emissions, water consumption, waste management, etc. Through the ambitious target setting, monitoring, and reporting of these indicators we aim for compliance with the trading schemes.

At AGP, we strive to be transparent in setting and achieving our sustainability goals, targets and initiatives. For example, defined energy-saving, raw material and process efficiency strategies are cornerstones of our climate strategy.

We have implemented several projects across different levels in the organisation. To note, waste heat from the manufacturing processes is used for batch preheating and de-icing cullet. Furnace repairs are being implemented with state-of-the-art techniques to achieve energy reduction or potentially the furnace will be rebuilt with our Hybrid furnace technology as currently planned in Obernkirchen. Also, we have committed to further understanding the combustion of hydrogen in the glass making process as a potential future technology to further aid in our decarbonization efforts. And, as cited, all European glass facilities (except one) are ISO 50001 certified to ensure continual efforts in improving energy efficiency. AGP-NA remains a glass container manufacturer which earned ENERGY STAR® Plant Certification at its production facilities in North America. These production facilities have demonstrated best-in-class energy performance and perform within the top 25% nationwide for energy efficiency when compared to similar production facilities across the country.

IDENTIFICATION OF WHEN YOU ANTICIPATE BEING REGULATED: We are consistently regulated and are fully compliant.

Our AGP-E production facilities are regulated under the EU ETS, now in its fourth phase which runs until December 31, 2030, after which we will receive the next allocation. California has enacted a similar greenhouse gas reduction scheme that works on a cap-and-trade basis which is applicable to our Madera facility. And our AGP-A locations are already subject to South Africa carbon tax scheme.

CASE STUDY: AGP's strategy for decarbonization, and compliance with emissions trading systems, includes increasing energy efficiency and the consideration of low-carbon furnace technologies . We are now in the early implementation stage of installing a new hybrid melting furnace at our Obernkirchen (Germany) production facilities, which has the potential to reduce CO2 emissions by up to 60%.

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?

No

C11.3

(C11.3) Does your organization use an internal price on carbon?

No, and we do not currently anticipate doing so in the next two years

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers
Yes, our customers/clients
Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement
Information collection (understanding supplier behavior)

Details of engagement
Collect GHG emissions data at least annually from suppliers
Collect other climate related information at least annually from suppliers

% of suppliers by number
5.92

% total procurement spend (direct and indirect)
51

% of supplier-related Scope 3 emissions as reported in C6.5
100

Rationale for the coverage of your engagement
We define the basic principles in our Responsible Procurement Policy to ensure that all suppliers are engaged in our GHG emission reduction efforts. However, it is not feasible to assess all suppliers due to the complexity of data gathering among all supply chains. Therefore, these suppliers were selected based on strategic importance and our critical category. In 2022, 100% of critical category suppliers have completed the survey, which accounts for 51% of procurement spend.

We are committed to achieving stated emission reduction targets by 2030 across all operations and our supply chain. In fact, we are targeting to reduce our Scope 1 and 2 GHG emissions by 42% and Scope 3 GHG emissions by 12.3% by 2030 from a 2020 baseline. These targets have been approved by the SBTi. This aligns with the GHG Protocol, the Paris Climate Agreement of 2015, under which governments mutually pledged to limit the increase in global warming temperatures to 1.5 degrees Celsius. To achieve our near-term emission reduction targets, we have chosen to address the highest carbon emitting industries within our supply chain. Our Soda Ash suppliers will be required to provide their carbon emission data annually. Each year, we send a survey to a subgroup of suppliers. The survey covers Environmental management: EMS and Policy; Reduction Programme (CO2, water, etc.) topics outlined in our Responsible Procurement Policy.

All suppliers who have completed the survey will be surveyed again on a rotational basis, with a new group of suppliers being added annually as deemed appropriate by Risk and Procurement. We conduct an annual desktop risk assessment of suppliers who completed the survey. We also rely on other sources of information, e.g., the supplier's internet presence and country risk indices. This allows us to comprehensively assess our suppliers and their performance across multiple topics. Annually a section of suppliers is required to undergo an onsite assessment. Initially, high-moderate risk suppliers will take priority for assessments. However low risk suppliers will also be assessed. The purpose of these assessments is to manage potential risks and identify improvement opportunities across our supply chain

Impact of engagement, including measures of success
IMPACT OF CLIMATE-RELATED SUPPLIER ENGAGEMENT:
The results of the risk assessments are reviewed by Procurement and Sustainability. Any significant performance gap is communicated to the supplier with the aim to improve. Suppliers are assigned to one of four risk profiles: High, Moderate-High; Moderate-Low; Low. We have successfully risk mapped key suppliers across 14 critical categories. The results of this procedure have helped us identify and mitigate potential risks across the supply chain. It has also helped us consistently identify our high-performing suppliers and benchmark best practices.

The supplier survey showed a high-level overview of reduction programmes undertaken by our suppliers. It also helps us communicate our expectations of continuous improvement. 65% of the suppliers surveyed have at least one reduction programme in place with the majority having more than one focus. Supplier onsite assessments cover environmental management in detail including discussing reduction and community involvement programmes and initiatives. Only desktop assessments are undertaken during 2022 to minimise travel and contact. We have learned from suppliers and received positive feedback through raised awareness and have encouraged them to implement or review new areas within their operation.
WE MEASURE SUCCESS by the response rate of selected suppliers in each risk category. In 2022, 100% of critical category suppliers have completed the survey, which accounts for 51% of procurement spend.

Comment
Definition of supplier risk profile: High Risk - each supplier is typically required to undergo a 3rd party ethical audit - to identify if there is any immediate risk (e.g., SMETA 4 pillar). In some cases, we will conduct an initial onsite assessment and establish an improvement plan as needed. These suppliers will receive a survey annually so we can monitor their progress. Moderate - High and Moderate – Low Risk - suppliers within these categories will typically be required to undergo a 3rd party ethical audit (e.g., SMETA 4 pillar). The Moderate - High suppliers will receive a survey annually so we can monitor their progress. While Moderate – Low suppliers will receive a survey every two years. For Low Risk suppliers, we expect to focus on their self-improvement. Assessing low risk suppliers is vital as part of verifying our desktop assessment capabilities, and it provides us with a platform to start collaborative or shared learning discussions. These suppliers will receive a survey every three years.

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Education/information sharing	Share information about your products and relevant certification schemes (i.e. Energy STAR)

% of customers by number

30

% of customer - related Scope 3 emissions as reported in C6.5

100

Please explain the rationale for selecting this group of customers and scope of engagement

By means of regular communication with key customers across standard quality and delivery commitment topics, we also address how we strengthen customer sustainability/emission reduction platforms through the environmental advantages of infinitely recyclable glass packaging and Ardagh's manufacturing improvement efforts.

THE GROUP OF CUSTOMERS SELECTED: We target select customers who have also communicated an alignment to the UN and Paris Climate Agreement of 2015 to achieve net zero emissions by 2050. All of our major customers have aligned in this direction. A key to delivering on our industry's emission commitments is to improve recycling. We play a leading role through our trade associations in lobbying for municipal recycling improvements and assure glass is recognised as a strong contributor to a circular economy.
Also, our website communicates information on the company and products, e.g., on our Permanent Materials initiatives. For example, to educate younger generations through the free online educational program, we feature "Captain Cullet" and "Little Gob o' Glass" to engage young audiences in our recycling messaging.

Engagement with customers is often customer-driven. As an energy-intensive industry, customers are very interested in our decarbonization efforts as they contribute significantly to their Scope 3 numbers. We meet regularly with customers who are sustainability-oriented to discuss progress to targets, our current portfolio of projects, roadblocks, potentially partnerships, etc.

Impact of engagement, including measures of success

IMPACT OF ENGAGEMENT: Concerning the communication of information on the company and products, we inform our customers that when they purchase our glass packaging, they are strengthening their own sustainability platform through the use of an infinitely recyclable product. This information influences decision-making. Our glass packaging is a Permanent Material. It contributes to the Circular Economy because glass can be used infinitely and is 100% recyclable. The concept of Permanent Material is explained further on our website as well.

MEASURES OF SUCCESS: We measure the success of our 'Education/information sharing' initiatives by the number of participants e.g., in our educational programs as well as through the number of hits on our sustainability homepage.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

EXPLANATION OF WHO OTHER PARTNERS IN THE VALUE CHAIN:

Other partners play a key role in our climate-related engagement strategy.

AGP, its peers, customers and stakeholders are committed to achieving a circular economy. We are committed to working collaboratively, including industry associations, to promote recycling rates in the regions in which we operate. We leverage our strong relationships with our industry associations to drive engagement For instance, AGP-A works with the Glass Recycling Company re-using 80% of waste material collected by their network. AGP-A also contributes to infrastructure and materials such as recycling bins and PPE equipment for waste operatives. FEVE, the European glass federation, has targeted an increase in glass recycling rates in the European Union (90% by 2030) through its Close the Glass Loop initiative. In addition, we have investments and partnerships in Europe to enhance our supply of cullet and are seeking to increase supply in the United States through the Glass Packaging Institute.

Another example of how AGP partners within the stakeholders is the new NextGen furnace in Obernkirchen, Germany where we are going to make information publicly available as part of the grand funding agreements.

One of AGP´s sustainability targets is to have at least one meaningful Community Involvement Project (CIP) annually per location. In general, the definition of a CIP is that it must create a positive and direct impact on our local community and should include the following:

· At least one external stakeholder (e.g., school, university, customer, supplier, or nearby business)

· Encouraging multiple employees to participate

· There must be a direct positive impact on the community

The negative impact of our manufacturing on communities is low. If, despite all the measures taken, any issue occurs, we immediately analyse the situation and rectify it, usually in consultation and cooperation with the communities involved. This features as part of our stakeholder engagement plan. The success of our long-term targets for 2030 is measured, reported, and verified by third-party organisations.

CASE STUDY STEM

In the first two years, AGSA has granted nearly $10 million to over 400 primary and secondary schools through PLTW, reaching an estimated 350 teachers and 75,000 students in 2021 and 2022. Our local U.S. employees are also engaging with these districts and schools through this investment, building relationships with teachers and students, volunteering time in PLTW classrooms, and highlighting career opportunities in STEM and with Ardagh. This investment and these employee engagement opportunities will continue to scale in the years to come.

In October 2022, AGSA announced a 10-year, €5 million commitment to deliver STEM education to primary and secondary schools in our 13 German communities in partnership with Wissensfabrik. It is expected that this partnership will benefit more than 200,000 students as well as deliver teacher training to more than 1,000 teachers across 300 schools in Ardagh's German communities. Initial outreach to by our local teams and schools in our communities commenced in late 2022 with an initial group of 30 schools that have committed to partner with Ardagh and the Wissensfabrik programme.

These investments in the U.S. and Germany, which align with Sustainable Development Goal 4 – Quality Education, are just the beginning. In summer 2023, we will announce a new 10-year, multi-million dollar STEM education investment in Brazil, with a goal of reaching more than 200,000 students and 2,500 teachers in 200 schools across our 4 Brazilian communities. Additionally, we will expand this programme into South Africa and other European regions in the future.

CASE STUDY AGP-Africa

Ardagh Glass Packaging - Africa (formerly Consol Glass) donated 10,000 Consol Solar Jars to learners in Thembisa on May 5, 2022. The donation is a continuation of Project Khanya, a CSI project launched by Consol in 2015 to bring free, rechargeable light to children who are battling with resources to do their homework at night. "The company recognises the challenges that our young people face but learning should not be one of them," says Thami Mkhuzangwe, Senior Executive: Human Resources and Corporate Affairs, Ardagh Glass Packaging - Africa. "We are proud to play a role in assisting eager young minds to grow and develop. "The versatile Solar Jars are an eco-friendly lighting solution, handmade in South Africa. The jar's longer lasting battery allows light to shine for up to 12 hours on a single charge. It also has a day/night switch that keeps the LED light off under adequate lighting conditions to conserve power until it is needed, a USB charging feature, and a useful 'find me' load shedding function which activates for 60 seconds when electricity is suddenly turned off. Project Khanya also aims to raise awareness about the importance of conserving energy and thus protecting the environment.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?

Yes, climate-related requirements are included in our supplier contracts

C12.2a

(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization's purchasing process and the compliance mechanisms in place.

Climate-related requirement
Complying with regulatory requirements

Description of this climate related requirement
We expect all suppliers to comply with all applicable regulatory requirements through our General Terms and Conditions of Purchase. We send surveys annually to suppliers, which cover topics outlined in our Responsible Procurement Policy including Environmental Management System and Policy; Reduction Programme (CO2, waste, water, etc.).

% suppliers by procurement spend that have to comply with this climate-related requirement
100

% suppliers by procurement spend in compliance with this climate-related requirement
100

Mechanisms for monitoring compliance with this climate-related requirement
Certification
Supplier self-assessment
First-party verification
Supplier scorecard or rating

Response to supplier non-compliance with this climate-related requirement
Retain and engage
AG-Responsible-Procurement-Policy-2023.pdf

Climate-related requirement
Setting a low-carbon energy target

Description of this climate related requirement
Using our data collection template, we have requested critical suppliers with the highest emission impact to share their emissions including product carbon footprint, emission reduction initiatives, and if they are setting science-based emission targets.

% suppliers by procurement spend that have to comply with this climate-related requirement
100

% suppliers by procurement spend in compliance with this climate-related requirement
100

Mechanisms for monitoring compliance with this climate-related requirement
Supplier self-assessment
First-party verification
Second-party verification
Supplier scorecard or rating

Response to supplier non-compliance with this climate-related requirement
Retain and engage
ArdaghClimateDataCollectionfromSupplierstemplate (4).pdf

Climate-related requirement
Product Carbon Footprint (PCF) reductions

Description of this climate related requirement
Using our data collection template, we have requested critical suppliers with the highest emission impact to share their emissions including product carbon footprint, emission reduction initiatives, and if they are setting science-based emission targets.

% suppliers by procurement spend that have to comply with this climate-related requirement
100

% suppliers by procurement spend in compliance with this climate-related requirement
100

Mechanisms for monitoring compliance with this climate-related requirement
Supplier self-assessment
First-party verification
Second-party verification
Supplier scorecard or rating

Response to supplier non-compliance with this climate-related requirement
Retain and engage
ArdaghClimateDataCollectionfromSupplierstemplate (4).pdf

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers

Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

No, but we plan to have one in the next two years

Attach commitment or position statement(s)

<Not Applicable>

Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan

We have numerous processes in place to make sure that our multiple climate engagement activities across our business are in line with our climate change strategy. In our Code of Conduct, we outline a guide for conducting our business in an honest and professional manner and this should be used in determining key business decisions and actions. Our Environmental Policy is included in our Code of Conduct, and it is part of our sustainability strategy, which supports the achievement of our sustainability targets, including climate-related targets.

Since we actively engage with trade associations, we ensure that all our concerns and aspirations, which are aligned in and with our climate change strategy, are identified and considered; and those governments and other authorities are provided with first-hand information relevant to the packaging sector. In this manner, we guarantee a high level of awareness with policy makers when deciding upon future policies, and we make sure that the glass industry remains competitive and innovative without being unnecessarily threatened by new regulation standards or legislative changes. Moreover, as members of these associations, we are provided with immediate updates regarding changes in technical standards, policies and news, helping us to react effectively in favour of our climate change strategy. These updates are communicated and implemented by means of our Code of Conduct and Environmental Policy, reviews, audits, training and reporting, assuring compliance by our global team

AGP communicates and makes its Environmental Policy as well as its objectives internally and externally available. Engagement with relevant stakeholders lead to active participation in achieving our sustainability targets. All employees of AGP must comply with the Environmental Policy. AGP provides the education and training to ensure adherence to environmental requirements in all aspects of work and business according to each employee's responsibilities. AGP also regularly communicates its environmental targets and performance to customers, employees, shareowners and other external stakeholders by publishing a biannual sustainability report. The report, as well as our consistent environmental progress announcements throughout the year, serve as a basis for regular discussions with such stakeholders on aligning our mutual efforts toward.

Primary reason for not engaging in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

Explain why your organization does not engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

Specify the policy, law, or regulation on which your organization is engaging with policy makers
Adaptation and/or resilience to climate change
Carbon tax
Circular economy
Climate-related targets
Electricity grid access for renewables
Emissions trading schemes
Low-carbon, non-renewable energy generation
Renewable energy generation
Subsidies for renewable energy projects

Category of policy, law, or regulation that may impact the climate
Carbon pricing, taxes, and subsidies

Focus area of policy, law, or regulation that may impact the climate
Carbon taxes
Emissions trading schemes
Subsidies for renewable energy projects
Subsidies for low-carbon, non-renewable energy projects
Subsidies on infrastructure

Policy, law, or regulation geographic coverage
Regional

Country/area/region the policy, law, or regulation applies to
United Kingdom of Great Britain and Northern Ireland
EU27

Your organization's position on the policy, law, or regulation
Support with no exceptions

Description of engagement with policy makers
We engage directly or via industry association with policy makers to explain the position taken by AGP or the glass industry at large. We organise meetings at our production facilities to create a better understanding of our industry and processes and present them our policy asks.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation
<Not Applicable>

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?
Goals are aligned as our carbon target is based on SBTI and this is aligned.
All engagement is towards complying with local and regional legislation.

C12.3b

(C12.3b) Provide details of the trade associations your organization is a member of, or engages with, which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association
Other, please specify (European Container Glass Federation (FEVE))

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
FEVE's members produce over 20 million tonnes of glass per year. The association has some 60 corporate members belonging to approximately 20 independent corporate groups. Manufacturing facilities are located across 23 European states and include major companies working for the world's biggest consumer brands. FEVE's Friends of Glass campaign is a community that supports glass packaging due to health, taste, and sustainability offered by glass packaging. The industry is also an important contributor to the European economy. Every year over $675 million is invested in energy efficiency, decarbonisation, and upgrades over the 160 manufacturing facilities across Europe, contributing to maintain a total of 125,000 direct and indirect jobs. Investments in innovation help to modernise manufacturing processes and to produce glass bottles that are 30% lighter than 20 years ago, while still maintaining their product preservation qualities, recyclability, and innovative design.

HOW WE ARE ATTEMPTING TO INFLUENCE THEIR POSITION:
We continue to drive innovation and sustainable growth in the glass packaging sector by supporting our industry in its efforts to drive technology advancement, energy efficiency and circular economy policies which are critical for Europe's future. We are part of the board of FEVE. Our Environmental Manager is involved in the association's Environmental Working Group; and our Regulatory Affairs Director works on FEVE´s Public Affairs. In support of our sustainability position, we have joined forces with FEVE to draw attention to the benefits of glass recycling in Europe. We communicate closely and often with representatives from each organisation and discusses its concerns and aspirations to assure we are favourably positioning our company and the glass products we produce across such stakeholders as customers, consumers and packaging legislation decision-makers.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Trade association
Other, please specify (Glass Packaging Institute (GPI))

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
Founded in 1919 as the Glass Container Association of America, the Glass Packaging Institute (GPI) is the trade association representing the North American glass container industry. On behalf of glass container manufacturers, GPI promotes glass as the optimal packaging choice, advances environmental and recycling policies, advocates industry standards, and educates packaging professionals. GPI serves its member companies through legislative, public relations, promotional and technical activities.

HOW WE ARE ATTEMPTING TO INFLUENCE THEIR POSITION:
The CEO of AGP -NA is on the Board of Trustees and is one of the Executive Committee members at GPI. The GPI Board of Trustees is the trade association's key decision-making body. At semi-annual Trustee meetings, the Board develops an agenda for GPI activities, approves budgets and sets the association's course for the future. The GPI is part of the U.S. Glass Recycling Coalition. Made up of members from across the entire glass supply chain – from glass manufacturers to consumer brands, waste haulers to recycling processors – this unique collaboration is the first of its kind in North America. As a member of the coalition, we play our part in working with other members to develop strategies to support municipalities with glass recycling decisions and establish a network of glass recycling resources. In support of our sustainability position, we have joined forces with GPI to draw attention to the benefits of glass recycling in North America. AGP communicates closely and often with representatives from each organisation and discusses its concerns and aspirations to assure we are favourably positioning our company and the glass products we produce across such stakeholders as customers, consumers and packaging legislation decision-makers.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Trade association
Other, please specify (The European Organisation for Packaging and the Environment (EUROPEN))

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
EUROPEN is an industry organisation presenting the opinion of the packaging supply chain in Europe on topics related to packaging and the environment, without favouring any specific packaging material or system. EUROPEN strives to improve environmental performance of packaging and packaged products based on life cycle thinking; secure the free flow of packaging and packaged goods throughout Europe; and promote harmonised European and national packaging and packaging waste regulations. EUROPEN promotes legislation that is transparent, effective, proportionate in relation to packaging and packaging waste and enables members to innovate, compete and operate in a resource efficient, competitive, and sustainable way. They take responsibility in continuously improving the environmental performance of their packaging and packaged products and are committed to contributing to supply chain resource efficiency as a crucial part of sustainable development as described in the Resource Efficiency Roadmap of EU. EUROPEN have announced joint recommendations, announced in view of the upcoming inter-institutional negotiations such as the European Green Deal.

HOW WE ARE ATTEMPTING TO INFLUENCE THEIR POSITION:
Our Regulatory Affairs Director is the company's representative on the Public Affairs committee in EUROPEN and became part of the board in early 2023. We are one of the 42 Corporate Members of EUROPEN. AGP communicates closely and often with representatives from each organisation and discusses its concerns and aspirations to assure we are favourably positioning our company and the glass products we produce across such stakeholders as customers, consumers and packaging legislation decision-makers.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication
In voluntary communications

Status
Underway – previous year attached

Attach the document
ArdaghGroupsustainabilityreportAG2021v4 (1).pdf

Page/Section reference
Please see all pages.

Content elements
Strategy
Risks & opportunities
Emissions figures
Emission targets

Comment
New sustainability report with 2022 data is due in October 2022

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row 1	UN Global Compact	In 2019, we become a signatory to UN Global Compact, which is focused on positive advancements in human rights, labour, the environment and anti-corruption. We are proud to be one of the only glass packaging suppliers who have made this commitment. We are dedicated to engaging in collaborative projects that advance the broader development goals of the UN, particularly the Sustainable Development Goals (SDGs). The SDGs are a set of goals to end poverty and protect the planet. They cover a broad range of social and economic development issues such as huger, education, climate change, water, energy and the environment. We track, monitor and measure our sustainability progress to ensure we deliver on our commitments including our GHG emission reduction targets, which have been approved by the Science-Based Targets Initiative (SBTi). Annually we complete a UN Global Compact Communication on Progress (COP) which is publicly available

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity	Scope of board-level oversight
Row 1	Yes, both board-level oversight and executive management-level responsibility	We have three pillars that comprise our sustainability objectives: Emissions, Ecology and Social all impact on biodiversity outcomes. Specific goals have been set to reduce our environmental impacts, including emission reductions, transitioning to 100% renewable electricity and zero waste to landfill across our production facilities. Furthermore, we are actively aligned with SDGs which are interlinked with the Aichi Biodiversity targets. In terms of managing our natural resources – for water management we are tracking ahead of plan in terms of reaching our 2030 target of a 26% intensity reduction in water use. Through the installation of closed loop water systems and working together with our suppliers on water efficiency projects, we have made steady progress to date. To date, approximately 38% % of all our production sites are now operating with zero waste to landfill. We have increased our efforts to protect and promote biodiversity and natural habitats surrounding our production facilities. Since our last review of manufacturing locations, only one of our European production facilities are located within a 100-meter radius of protected areas such as Natura 2000 and nationally designated sites. In the U.S. we have no production facilities close to areas which are covered under the U.S. Geological Survey. We will be reviewing all manufacturing locations regarding proximity to protected habitats and water stress areas before the publication of our next full sustainability report in 2025. Since 2020, we are expanding our community engagement programme with biodiversity via the honeybees we host onsite. We now support bees across six sites in Germany and two in the UK with a summer estimate population around 1.2million bees. While the honeybee is not an endangered species it is a familiar and beloved insect useful for engaging people with the complex topic of biodiversity. In 2022, our Bad Münder facility welcomed more than 150 preschool children from the nearby area, and we plan to extend similar opportunities to other locations in the upcoming months. We are also planting pollinator friendly plants across 9 production facilities. In Barnsley, the rich habitat created around the site has attracted nesting Peregrine falcons which now are monitored by a livestream wildlife camera. At our Dublin office, we are implementing no-mow meadows and slow-mow practices to support biodiversity and pollinators – with a native planting plan planned for 2023.	<Not Applicable>

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	No, but we plan to do so within the next 2 years	<Not Applicable>	<Not Applicable>

C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment
Yes

Value chain stage(s) covered
Direct operations

Portfolio activity
<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity
Other, please specify (As part of our environmental risk assessment, we maintain a list of production facilities and their distance to protected areas such as Natura 2000 and nationally designated site.)

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)
We are in full material compliance with environmental laws and regulations in the countries in which we operate. We are confident, per regulatory compliance and measurement, that our production facilities do not have a direct negative impact on biodiversity. Protecting and promoting biodiversity and natural habitats is an important part of our environmental management programme. Most of our production facilities are located in industrial or mixed-use areas; only a handful are adjacent to protected areas. As part of an environmental risk assessment, we maintain a list of production facilities that are located close to protected areas such as Natura 2000 and nationally designated sites
Our glass products are made from a permanent material. These material is not classified as scarce resources. As we move toward more sustainable production and consumption of our products, we are participating in multiple initiatives aimed at our own operations as well as evaluating potential environmental impacts from our suppliers and raising consumer awareness of how infinitely recyclable glass is and it´s an ideal example of a circular economy.

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment
No and we don't plan to within the next two years

Value chain stage(s) covered
<Not Applicable>

Portfolio activity
<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity
<Not Applicable>

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)
<Not Applicable>

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity- sensitive areas in the reporting year?
Not assessed

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water management Species management Education & awareness

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	No, we do not use indicators, but plan to within the next two years	Please select

C15.7

(C15.7) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communications	Governance Risks and opportunities Biodiversity strategy	Page 11 ArdaghGroupsustainabilityreportAG2021v4 (1).pdf

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Chief Sustainability Officer	Chief Sustainability Officer (CSO)

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

For AGP, we have calculated the supply chain allocation based on the number of products sold and the carbon footprint.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	4300000000

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

Requesting member
The Coca-Cola Company

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
22775

Uncertainty (±%)
25

Major sources of emissions
Energy and Fuel consumption in the manufacturing processes.

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions are calculated according to energy consumption.
Major limitations: Intricate customer information, per just AGP products, is not available. Most often our customers are also very large and diverse drastically affecting any ability to accurately track emissions at the customer level.

NOTE !! To see the entire answer, please see our 2022 CDP Climate Change report.

Requesting member
The Coca-Cola Company

Scope of emissions
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
6287

Uncertainty (±%)
25

Major sources of emissions
Electricity consumption

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions are calculated according to electricity consumption.
Major limitations: Intricate customer information, per just AGP products, is not available. Most often our customers are also very large and diverse drastically affecting any ability to accurately track emissions at the customer level.

NOTE !! To see the entire answer, please see our 2022 CDP Climate Change report.

Requesting member
Unilever plc

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
2714

Uncertainty (±%)
25

Major sources of emissions

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions are calculated according to energy consumption.
Major limitations: Intricate customer information, per just AGP products, is not available. Most often our customers are also very large and diverse drastically affecting any ability to accurately track emissions at the customer level.

NOTE !! To see the entire answer, please see our 2022 CDP Climate Change report.

Requesting member
Unilever plc

Scope of emissions
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
818

Uncertainty (±%)
25

Major sources of emissions
Electricity consumption

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions are calculated according to electricity consumption.
Major limitations: Intricate customer information, per just AGP products, is not available. Most often our customers are also very large and diverse drastically affecting any ability to accurately track emissions at the customer level.

NOTE !! To see the entire answer, please see our 2022 CDP Climate Change report.

Requesting member
PepsiCo, Inc.

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e
15298

Uncertainty (±%)
25

Major sources of emissions
Fuel consumption

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions are calculated according to energy consumption.
Major limitations: Intricate customer information, per just AGP products, is not available. Most often our customers are also very large and diverse drastically affecting any ability to accurately track emissions at the customer level.

NOTE !! To see the entire answer, please see our 2022 CDP Climate Change report.

Requesting member
PepsiCo, Inc.

Scope of emissions
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
5781

Uncertainty (±%)
25

Major sources of emissions
Electricity consumption

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions are calculated according to electricity consumption.
Major limitations: Intricate customer information, per just AGP products, is not available. Most often our customers are also very large and diverse drastically affecting any ability to accurately track emissions at the customer level.

NOTE !! To see the entire answer, please see our 2022 CDP Climate Change report.

Requesting member
Diageo Plc

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e
135995

Uncertainty (±%)
25

Major sources of emissions
Fuels consumption

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions are calculated according to energy consumption.
Major limitations: Intricate customer information, per just AGP products, is not available. Most often our customers are also very large and diverse drastically affecting any ability to accurately track emissions at the customer level.

NOTE !! To see the entire answer, please see our 2022 CDP Climate Change report.

Requesting member
Diageo Plc

Scope of emissions
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
42030

Uncertainty (±%)
25

Major sources of emissions
Electricity consumption

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions are calculated according to electricity consumption.
Major limitations: Intricate customer information, per just AGP products, is not available. Most often our customers are also very large and diverse drastically affecting any ability to accurately track emissions at the customer level.

NOTE !! To see the entire answer, please see our 2022 CDP Climate Change report.

Requesting member
Anheuser Busch InBev

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail

<Not Applicable>

Emissions in metric tonnes of CO2e
578985

Uncertainty (±%)
25

Major sources of emissions
Fuels consumption

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions are calculated according to energy consumption.
Major limitations: Intricate customer information, per just AGP products, is not available. Most often our customers are also very large and diverse drastically affecting any ability to accurately track emissions at the customer level.

NOTE !! To see the entire answer, please see our 2022 CDP Climate Change report.

Requesting member
Anheuser Busch InBev

Scope of emissions
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
269602

Uncertainty (±%)
25

Major sources of emissions
Electricity consumption

Verified
No

Allocation method
Allocation based on mass of products purchased

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
GHG emissions are calculated according to electricity consumption.
Major limitations: Intricate customer information, per just AGP products, is not available. Most often our customers are also very large and diverse drastically affecting any ability to accurately track emissions at the customer level.

NOTE !! To see the entire answer, please see our 2022 CDP Climate Change report.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

At the end of 2023, AGSA and its subsidiaries, which includes AGP will release its annual UN Global Compact Communication on Progress (UNGC CoP) and release an updated Sustainability Report covering progress for 2021 and 2022. The emissions allocated will be reported as emissions from energy consumption in the

manufacturing processes. The information is available to customers, upon request.

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
Diversity of product lines makes accurately accounting for each product/product line cost ineffective	Firstly, it is questionable whether a more exact allocation method is meaningful due to the numerous uncertainties along the supply chain (measurements, assumptions, transport, operational conditions, etc.). It requires tedious administrative work to calculate the emissions on customer level instead of location level. Secondly, the added value with regards to the aim of reducing carbon emissions along the supply chain. The total number of carbon emissions would not differ, only slightly to the allocation. To overcome these challenges, we would require more efficient methods and resources in place to calculate the emissions on product level instead of location level, to replace tedious administrative work that would need a lot of resource for very little meaningful gain.
Customer base is too large and diverse to accurately track emissions to the customer level	Firstly, it is questionable whether a more exact allocation method is meaningful due to the numerous uncertainties along the supply chain (measurements, assumptions, transport, operational conditions, etc.). It requires tedious administrative work to calculate the emissions on customer level instead of location level. Secondly, the added value with regards to the aim of reducing carbon emissions along the supply chain. The total number of carbon emissions would not differ, only slightly to the allocation. To overcome these challenges, we would require more efficient methods and resources in place to calculate the emissions on product level instead of location level, to replace tedious administrative work that would need time and energy for very little meaningful results.

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?
Yes

SC1.4a

(SC1.4a) Describe how you plan to develop your capabilities.

If customers are interested in a more precise allocation of emissions, we are open to initiate with our relevant associations a Life Cycle Assessment of the desired products.

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?
Yes

SC2.2a

(SC2.2a) Specify the requesting member(s) that have driven organizational-level emissions reduction initiatives, and provide information on the initiatives.

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?
Yes, I will provide data

SC4.1a

(SC4.1a) Give the overall percentage of total emissions, for all Scopes, that are covered by these products.

SC4.2a

(SC4.2a) Complete the following table for the goods/services for which you want to provide data.

Name of good/ service
Returnable Glass bottle 330 ml

Description of good/ service
Returnable Glass bottle 330ml

Type of product
Final

SKU (Stock Keeping Unit)

Total emissions in kg CO2e per unit
0.6

±% change from previous figure supplied
0

Date of previous figure supplied

Explanation of change
No changes from the figure supplied in the previous reporting year. (calculation based on new Instant LCA PackagingTM tool version 2020)

Methods used to estimate lifecycle emissions
Other, please specify (ISO 14067)

Name of good/ service
Oneway Glass bottle 750 ml

Description of good/ service
Oneway Glass bottle 750 ml

Type of product
Final

SKU (Stock Keeping Unit)

Total emissions in kg CO2e per unit
0.35

±% change from previous figure supplied
0

Date of previous figure supplied

Explanation of change
No changes from the figure supplied in the previous reporting year. (calculation based on new Instant LCA PackagingTM tool version 2020)

Methods used to estimate lifecycle emissions
Other, please specify (ISO 14067)

SC4.2b

(SC4.2b) Complete the following table with data for lifecycle stages of your goods and/or services.

Name of good/ service
Oneway Glass bottle 750

Please select the scope
Scope 1, 2 & 3

Please select the lifecycle stage
Cradle to gate

Emissions at the lifecycle stage in kg CO2e per unit
0.34

Is this stage under your ownership or control?
Yes

Type of data used
Primary and secondary

Data quality
For the calculation and evaluation of the environmental impacts of our products, AGP uses the InstantLCA Packaging tool version 2020. This tool allows us to build up a proper scenario and guarantees reliable results. The InstantLCA Packaging tool powered by FEVE is based on a full LCA model which encompasses all life cycle stages from the extraction of raw materials to the products end-of-life and include the manufacturing and transportation of the packaging. This model follows the principles and requirements of ISO 14067.

If you are verifying/assuring this product emission data, please tell us how
We are not verifying this data

SC4.2c

(SC4.2c) Please detail emissions reduction initiatives completed or planned for this product.

Name of good/ service	Initiative ID	Description of initiative	Completed or planned	Emission reductions in kg CO2e per unit
Glass	Initiative 1	Research and Development department leads ongoing progress in light weight products. We work continuously to increase the amount of cullet in the batch at each furnace. According to FEVE, on average, a 10% increase of cullet in the furnace decreases its energy use by 3% and CO2 emissions by 5%. Less CO2 is emitted as less energy is required for melting cullet. Cullet also replaces virgin materials, such as limestone (CaCO3) which naturally contain and release carbon dioxide when they are melted in the furnace while cullet does not.	Ongoing	0.34

SC4.2d

(SC4.2d) Have any of the initiatives described in SC4.2c been driven by requesting CDP Supply Chain members?

No

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below

I have read and accept the applicable Terms