

# Welcome to your CDP Climate Change Questionnaire 2019

## C0. Introduction

### C0.1

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

AngloGold Ashanti is a multinational gold mining company with a geographically diverse portfolio of operations and projects. Headquartered in Johannesburg, South Africa, AngloGold Ashanti is the third largest gold mining company in the world, measured by production. AngloGold Ashanti produced 3.4 million ounces of gold in 2018 - an estimated 2.8% of global production - making it the third largest gold producer in the world. In 2018, AngloGold Ashanti operated 14 gold-producing operations located in 8 countries on three continents, and a group of greenfield projects in Colombia and is supported by a focused exploration programme. These comprise mid to long-life, relatively low-cost assets with differing ore body types located in key gold-producing regions. AngloGold Ashanti currently operates in South Africa, Argentina, Australia, Brazil, Ghana, the Republic of Guinea, Mali and Tanzania. Several of these assets are strongly leveraged to energy costs and currencies. In addition, AngloGold Ashanti holds a material interest in 2 non-managed mines which were operated by Randgold Resources in 2018. We work across the full spectrum of the mining value chain and are mindful of the impact of our activities on the varied and many communities and environments in which we operate. Our goal is to create sustainable value for our shareholders, employees, and social partners through safe and responsible mining practices and capital discipline. AngloGold Ashanti's primary listing is on the Johannesburg Stock Exchange (ANG) and is also listed on the following securities exchanges: New York (AU), Australia (AGG) and Ghana (AGA).

### C0.2

**(C0.2) State the start and end date of the year for which you are reporting data.**

	Start date	End date	Indicate if you are providing emissions data for past reporting years
Row 1	January 1, 2018	December 31, 2018	No

### C0.3

**(C0.3) Select the countries/regions for which you will be supplying data.**

- Argentina
- Australia
- Brazil

Ghana  
Guinea  
Mali  
South Africa

## 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 consolidation approach to your Scope 1 and Scope 2 greenhouse gas inventory.**

Financial control

## C-MM0.7

**(C-MM0.7) Which part of the metals and mining value chain does your organization operate in?**

Row 1

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**Mining**

Gold

**Processing metals**

Gold

## 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(s)	Please explain
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<p>Other, please specify</p> <p>Board Social, Ethics and Sustainability</p>	<p>The Board Social, Ethics and Sustainability Committee has this responsibility. It has an overview of sustainability policy and strategy, including Climate Change.</p> <p>The committee is one of five committees that assist the Board in discharging its responsibilities. The functioning of the committees is guided by their terms of reference which are approved by the Board and reviewed annually or as required. During 2018 all Board committees were chaired by independent non-executive directors.</p>
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## 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	Please explain
Scheduled – all meetings	<p>Reviewing and guiding strategy</p> <p>Setting performance objectives</p> <p>Monitoring implementation and performance of objectives</p> <p>Monitoring and overseeing progress against goals and targets for addressing climate-related issues</p>	<p>Energy and Emissions performance data for the company and operating regions, as well as important developments in the sphere of Climate Change (such as legislation in the countries of operation) are standard content in the reports tabled before the Board Social, Ethics and Sustainability Committee.</p> <p>The reports outline the rationale for observed trends in performance data and discuss any developments in the climate change sphere that may impact on the company, including management’s planned response.</p> <p>The Committee may in its review of the information presented and its deliberations, direct the company along a course of action.</p>

## C1.2

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

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
<p>Other committee, please specify</p> <p>Executive Committee</p> <p>☺<sub>1</sub></p>	<p>Both assessing and managing climate-related risks and opportunities</p>	<p>As important matters arise</p>

1The Board Social, Ethics and Sustainability Committee has this responsibility. It has an overview of sustainability policy and strategy, including Climate Change.

The committee is one of five committees that assist the Board in discharging its responsibilities. The functioning of the committees is guided by their terms of reference which are approved by the Board and reviewed annually or as required. During 2017 all Board committees were chaired by independent non-executive directors.

## C1.2a

**(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).**

The company's Executive Committee is the top tier of management and are accountable to the Board of Directors. Executive Committee members include the CEO, the CFO and the Executives Vice Presidents (EVPs) responsible for Operations (COOs), Sustainability, Technical matters, Human Resources, Strategy & Business Development and Legal & Governance. Some EVPs have more direct accountability for tracking and/or managing climate change-related issues such as implementing projects to meet GHG emission reduction targets and/or tracking legislation or other developments and shaping the company strategies to mitigate climate change risk, including adaptation strategies.

## C1.3

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

Yes

## 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).**

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**Who is entitled to benefit from these incentives?**

Other, please specify

Off-mine staff & on-mine Snr Mgt upwards

**Types of incentives**

Monetary reward

**Activity incentivized**

Emissions reduction target

**Comment**

A series of continual improvement GHG emission intensity reduction targets are in place across the company. Each mine site has its own target and these 'roll' upwards to regional and a group target. As of 2018, these targets form part of the annual Bonus and Deferred Share Plan scheme.

**Who is entitled to benefit from these incentives?**

All employees

**Types of incentives**

Monetary reward

**Activity incentivized**

Other, please specify  
 Bonus linked to cost targets.

**Comment**

Energy consumption accounts for a significant proportion of cost to the business at approximately 18% of direct costs. Although energy consumption, due to the associated cost impact, has been a constant focus area in the company's bonus systems across all organisational levels given the gold price collapse since 2013, this has been further emphasized.

## C2. Risks and opportunities

### C2.1

**(C2.1) Describe what your organization considers to be short-, medium- and long-term horizons.**

	From (years)	To (years)	Comment
Short-term	1	3	These are aligned with business and mine planning time horizons at the group level. Note that some operations' life of mine can be beyond 10 years.
Medium-term	3	5	These are aligned with business and mine planning time horizons at the group level. Note that some operations' life of mine can be beyond 10 years.
Long-term	5	10	These are aligned with business and mine planning time horizons at the group level. Note that some operations' life of mine can be beyond 10 years.

## C2.2

**(C2.2) Select the option that best describes how your organization's processes for identifying, assessing, and managing climate-related issues are integrated into your overall risk management.**

Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes

### C2.2a

**(C2.2a) Select the options that best describe your organization's frequency and time horizon for identifying and assessing climate-related risks.**

	Frequency of monitoring	How far into the future are risks considered?	Comment
Row 1	Six-monthly or more frequently	>6 years	The time range of various risk impacts are considered from the short term (1 year) to risks well beyond 6 years ; for example the potential impacts of altered rainfall patterns on rehabilitation performance at the time of mine closure).

### C2.2b

**(C2.2b) Provide further details on your organization's process(es) for identifying and assessing climate-related risks.**

AGA's risk and opportunity system applies to all levels of the organisation. Its uses a 6 x 6 matrix of consequence and likelihood factors to classify each risk and opportunity, resulting in a range of potential risk index ratings from 1 to 36. Once identified, risks are entered onto a software tool that spans the whole organisation. They are captured at the level at which they manifest and can be most effectively managed, including; individual mine, country/regional or at the group level. Pertinent information on progress with risks rated above an index of 31 are typically communicated to the relevant Board Subcommittees on a quarterly basis. Downside risks or upside risks (opportunities) are identified through a variety of processes that include: business improvement projects, regulatory compliance tracking, major project development processes and corporate governance reviews led by regional or group functional specialists. In the system, risks are organised by function and subcategory such as regulatory, financial, community, environmental, business interruption and security of resource supply (which includes energy and water). E.g.; the 2009 work on assessing the business case for the company's response to climate change was captured and managed by the Environmental function at the corporate level. Opportunities arising from that study's findings e.g. the compressed air project for underground mines, were then continued by the South African Region Energy managers.

At present, the identification of Climate Change risks and opportunities is integrated into the environmental risk focus areas. For example, the risk of contaminated water release due to

inadequately sized pollution control dams considers the projected impact of climate change on the design of those facilities .

## C2.2c

### (C2.2c) Which of the following risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	For example the Safeguard Mechanism legislation applicable to our operating mines in Western Australia.
Emerging regulation	Relevant, always included	For example, the publication of the 2019 Carbon Tax Act (1 June 2019) and the Climate Change Bill (June 2018) in South Africa.
Technology	Relevant, sometimes included	Technological developments that drive down the costs of energy generation and/or energy use are considered as opportunities, rather than risks within the company risk management processes. Examples have included active consideration of lower cost renewable energy in on-site hybrid power plants for 2 remote mines in Africa. Additionally, a fuel switching project in Australia (diesel to gas), has delivered reduced costs and GHG emissions.
Legal	Not relevant, included	The company considers that climate-related litigation claims will, in the first instance, manifest as complaints of potentially controllable events, such as flooding from undersized storm water conveyances, overflows and spills from contact water containment systems, etc.
Market	Relevant, sometimes included	Forecasts of increased renewable energy use in national grids and fairly static levels of nuclear energy use, contributed in part to the divestment of uranium oxide-producing assets in South Africa.
Reputation	Relevant, sometimes included	An example was the strong support provided within an international mining association for an initiative to collaborate with heavy mining equipment OEMs in reducing or eliminating fossil fuel use. The company rationale was that this offers a material GHG emission mitigation option and would contribute positively to a lower-carbon economy.
Acute physical	Relevant, sometimes included	This is sometimes considered in the engineering design of new facilities, e.g. marginally upsizing storm water diversion conveyances located above new mine infrastructure to avoid flooding.
Chronic physical	Relevant, always included	Using climate predictions from the ICMM's MiCA (Mining Climate Assessment) tool in the sensitivity analysis of sizing contact water containment infrastructure during the design of a new TSF in the South African Region.

Upstream	Relevant, sometimes included	Consideration of the business impact of the carbon tax legislation on the supplier's pricing of commodities and raw materials purchased by operations in South Africa.
Downstream	Relevant, not included	Our primary product is gold bullion which is limited to no climate-related risk, however some downstream services the company makes use of such as the treatment and disposal of general and /or hazardous waste materials may be impacted by climate change-related risks. These have however generally not yet been included in risk assessments as they are perceived lower impact and priority than potential upstream impacts.

## C2.2d

### (C2.2d) Describe your process(es) for managing climate-related risks and opportunities.

AGA's risk and opportunity system applies to all levels of the organisation. Its uses a 6 x 6 matrix of consequence and likelihood factors to classify each risk and opportunity, resulting in a range of potential risk index ratings from 1 to 36.

Once identified, risks are entered onto a software tool that spans the whole organisation. They are captured at the level at which they manifest and can be most effectively managed, including; individual mine, country/regional or at the group level. Pertinent information on progress with risks rated above an index of 31 are typically communicated to the relevant Board Subcommittees on a quarterly basis.

Downside risks or upside risks (opportunities) are identified through a variety of processes that include: business improvement projects, regulatory compliance tracking, major project development processes and corporate governance reviews led by regional or group functional specialists.

In the system, risks are organised by function and subcategory such as regulatory, financial, community, environmental, business interruption and security of resource supply (which includes energy and water). E.g.; the 2009 work on assessing the business case for the company's response to climate change was captured and managed by the Environmental function at the corporate level. Opportunities arising from that study's findings e.g. the compressed air project for underground mines, were then continued by the South African Region Energy managers.

At present, the identification of Climate Change risks and opportunities is integrated into the environmental risk focus areas. For example, the risk of contaminated water release due to inadequately sized pollution control dams considers the projected impact of climate change on the design of those facilities.

## 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.**

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**Identifier**

Risk 1

**Where in the value chain does the risk driver occur?**

Supply chain

**Risk type**

Transition risk

**Primary climate-related risk driver**

Policy and legal: Increased pricing of GHG emissions

**Type of financial impact**

Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

**Company- specific description**

AngloGold Ashanti (AGA) emits greenhouse gases (GHGs) directly by its operations, and indirectly via the external utilities from which it purchases power. Currently, a major international measure to address or limit GHG emissions, is the 2015 Paris Agreement. For the first time, developed and developing countries have committed to reduce their GHG Emissions in an effort to cap warming at 1.5 Degrees Celsius. The Agreement translates into nationally determined commitments which are to start in 2020 and signals the end of Business as Usual for the energy industry. As countries define and roll out their commitments in future, this could require AngloGold Ashanti to reduce its direct GHG emissions or energy use or to incur significant costs for GHG emissions permits or taxes or have these costs passed on by electricity utilities which supply the company, and also through purchased consumables in those countries.

**Time horizon**

Medium-term

**Likelihood**

Very likely

**Magnitude of impact**

Unknown

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

Indirect carbon taxes of up to US\$ 205,000 per annum from 2020 onwards are expected in South Africa, however there are not currently information available regarding initiatives to wards the Paris goals in other countries of operation.

**Management method**

Management is focused on 2 primary activities: reducing GHG emissions and engaging with the international negotiations through industry associations. In all countries in which it operates, the company is focused on reducing its greenhouse gas emissions footprint. Because more than 95% of the company's emissions are derived from fossil fuel use, reducing energy costs has an immediate and direct impact both on our bottom line and on our GHG emissions profile. AngloGold Ashanti engages with the international negotiations via government agencies and through international and national industry associations to advocate regulatory provisions that are not detrimental to business and the mining industry in particular. These associations also keep the company updated on policy and regulatory trends.

**Cost of management**

20,000

**Comment**

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**Identifier**

Risk 2

**Where in the value chain does the risk driver occur?**

Supply chain

**Risk type**

Transition risk

**Primary climate-related risk driver**

Policy and legal: Increased pricing of GHG emissions

**Type of financial impact**

Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

**Company- specific description**

During June 2019, the South African Carbon Tax Act was published. This confirmed the tax rate of R120 per tonne of CO2 equivalent. The material impact of the Carbon tax

through electricity pricing is going to manifest only from 2023, however from 2020, carbon taxes on fuels and other non-electricity sources will be passed through to the company by South African-based suppliers, increasing their prices to offset costs associated with the carbon taxes.

**Time horizon**

Short-term

**Likelihood**

Virtually certain

**Magnitude of impact**

Low

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

192,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

Indirect carbon taxes of up to US\$ 192,000 per annum through increased supply chain costs and after full implementation of the Carbon Tax in its current form.

**Management method**

Management is focused on 2 primary activities: reducing GHG emissions and engaging with the national-level negotiations through industry associations. Because more than 95% of the company's emissions are derived from fossil fuel use, reducing energy costs has an immediate and direct impact both on our bottom line and on our GHG emissions profile. Direct and indirect emissions efficiency improvements of over 30% have been achieved in South Africa as at 2018 compared to a 2007 base year. AngloGold Ashanti engages with the government agencies through national industry associations to advocate regulatory provisions that are not detrimental to business and the mining industry in particular. These associations also keep the company updated on policy and regulatory trends.

**Cost of management**

7,000

**Comment**

**Identifier**

Risk 3

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type**

Transition risk

**Primary climate-related risk driver**

Policy and legal: Increased pricing of GHG emissions

**Type of financial impact**

Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

**Company- specific description**

In all jurisdictions where we operate, fuel taxes apply. Other energy taxes and regulations apply in Australia, Brazil and South Africa already. The possibility of increased regulation poses the risk of the unknown cost and economic impact on our business and on individual national economies. Government tax regimes could also impact on fuel and energy availability and supply chains.

**Time horizon**

Current

**Likelihood**

Virtually certain

**Magnitude of impact**

Low

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

11,500

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

During June 2019, the South Africa Carbon Tax Act was published. This confirmed the tax rate of R120 per tonne of CO2 equivalent. The material impact of the Carbon tax through fuel pricing is going to manifest from 2020. South African-based suppliers are expected to increase their prices to include carbon taxes and other carbon pricing mechanisms and to pass on other costs associated with mitigating risks associated with

climate change.

### **Management method**

AngloGold Ashanti engages with governments agencies directly and through industry associations to advocate regulatory provisions that are not detrimental to business and the mining industry in particular, or to limit their effect. These associations also keep the company updated on policy and regulatory trends. The impact of fossil fuels energy taxes are managed through energy efficiency improvement programmes. These are also supported by cost reduction and efficiency drives in remuneration systems.

### **Cost of management**

7,000

### **Comment**

No additional comments..

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### **Identifier**

Risk 4

### **Where in the value chain does the risk driver occur?**

Direct operations

### **Risk type**

Transition risk

### **Primary climate-related risk driver**

Policy and legal: Increased pricing of GHG emissions

### **Type of financial impact**

### **Company- specific description**

In Australia, the government introduced the carbon emissions safeguard mechanism, aimed at limiting future growth in greenhouse gas (GHG) emissions after setting baseline emission thresholds, the safeguard mechanism requires that companies submit carbon credits or potentially pay penalties for excess emissions.

### **Time horizon**

Short-term

### **Likelihood**

Virtually certain

### **Magnitude of impact**

Unknown

### **Are you able to provide a potential financial impact figure?**

**Potential financial impact figure (currency)**

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

The potential financial implications cannot be determined at present as the potential civil penalties sought through courts would be on a case by case basis.

**Management method**

Our Sunrise Dam mine and Tropicana mine were granted baseline emissions in accordance with the regulatory scheme's default mechanism. Both sites were below the baseline emissions for the reporting year.

NB: Both calculated baselines and benchmark baselines are determined using forecasts of production, and can be replaced with a production-adjusted baseline that reflects actual production from the facility. A facility must exceed the 100,000t CO<sub>2</sub>-e threshold to be covered by the safeguard mechanism. A baseline cannot be set below this level.

**Cost of management**

0

**Comment**

At present, no additional operational costs are being incurred in relation to the Australian Safeguard Mechanism. Baselines have and are being calculated using internal staff.

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**Identifier**

Risk 5

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type**

Transition risk

**Primary climate-related risk driver**

Policy and legal: Increased pricing of GHG emissions

**Type of financial impact**

Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

**Company- specific description**

During June 2019, the South African Carbon Tax Act was published. This confirmed the tax rate of R120 per tonne of CO<sub>2</sub> equivalent. The material impact of the Carbon tax through electricity pricing is going to manifest in 2023. The carbon tax rate through electricity pricing will vary from R6/ton to R48/ton, owing to a system of rebates. In addition, South African-based suppliers are expected to increase their prices to offset electricity-based carbon taxes.

**Time horizon**

Short-term

**Likelihood**

Virtually certain

**Magnitude of impact**

Medium-high

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

4,100,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

Indirect carbon taxes of approximately US\$ 4 million per annum through increased electricity prices chain costs after full implementation of the Carbon Tax in its current form (from 2023 ).

**Management method**

Because more than 95% of the company's South African asset emissions are derived from fossil fuel use, reducing energy costs has an immediate and direct impact both on our bottom line and on our GHG emissions profile.

**Cost of management**

0

**Comment**

The most significant electrical energy, and therefore, GHG emissions reduction initiatives have been put in place over the past decade. All that remains is energy switching to lower carbon source(s) e.g. increasing the extent of renewable energy in use, however this would require a trade-off analysis.

## 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, we have identified opportunities but are unable to realize them

### C2.4b

**(C2.4b) Why do you not consider your organization to have climate-related opportunities?**

	Primary reason	Please explain
Row 1	Opportunities exist, we are unable to realize them	<p>The need to replace 2 ageing fossil fuel-based power plants in two off-grid mines in Tanzania and Guinea triggered consideration of independently operated hybrid power plants, utilizing a material component of renewable energy. This could however not be progressed owing to a combination the security risk (theft) and competition for suitable land, which clashed with the need for agricultural land to meet local food security needs.</p> <p>A third potential project is being considered in South Africa, using photovoltaic panels to offset expensive electricity supplies from the local utility company. Unfortunately this opportunity has also not been pursued owing to security concerns for the infrastructure, but also due to current restrictions on Independent Power Producers in South Africa.</p>

## C2.5

**(C2.5) Describe where and how the identified risks and opportunities have impacted your business.**

	Impact	Description
Products and services	Not impacted	We do not anticipate that there will be a material risk from climate change on the demand for our primary product - gold bullion.
Supply chain and/or value chain	Not yet impacted	Upstream supplier price risk in South Africa owing to the recent carbon tax legislation which is to be passed through in purchased commodity, electricity and fuels.
Adaptation and mitigation activities	Not yet impacted	We anticipate that there will be a need at a point in future to ensure that employed technologies, such as underground mine cooling and ventilation systems can continue to perform at required levels. This may require additional investment.
Investment in R&D	Not yet impacted	We have not yet set aside funds to specifically pursue climate change-related opportunities, other than where we



		co-fund exploratory projects with industry peers e.g. the Mining3 innovation project.
Operations	Impacted	In recent years we have observed, signs of greater variation in climate events in some parts of the company. In some cases this has affected operations owing to reduced water resource availability e.g. drought in Tanzania and Brazil. In South Africa some investment has gone into investigating the feasibility of producing biofuels to replace fossil fuels that are used to provide high temperature heat in sections of the gold processing plant.
Other, please specify	We have not identified any risks or opportunities	No further areas of risk or opportunity have recently been identified.

## C2.6

**(C2.6) Describe where and how the identified risks and opportunities have been factored into your financial planning process.**

	Relevance	Description
Revenues	Not yet impacted	There has been no discernible impact from climate change on company revenues. Where there has been some curtailment in production due to constrained water availability (drought), it has not been possible to conclude that is not within the natural variations in local weather cycles.
Operating costs	Impacted	E.g. South African Carbon Tax was promulgated in June 2019.
Capital expenditures / capital allocation	Not impacted	The company has not allocated capital exclusively to mitigate climate change risk, nor to pursue a climate change opportunity. We have not considered capital investments undertaken to realise energy efficiency opportunities as these would have continued on their own merit i.e. based on cost savings. An example is the fuel switching project in Australia (from diesel to gas).
Acquisitions and divestments	Impacted	The divestment and closure of several fossil energy-intensive underground mines in South Africa have materially reduced the absolute emissions profile of the company, as well as the emissions intensity profile.
Access to capital	We have not identified any risks or opportunities	We have not discerned any risks or opportunities in this financial area of the business.
Assets	We have not identified any	We have not discerned any risks or opportunities in this financial area of the business.

	risks or opportunities	
Liabilities	We have not identified any risks or opportunities	We have not discerned any risks or opportunities in this financial area of the business.
Other	Not evaluated	Not applicable.

## C3. Business Strategy

### C3.1

**(C3.1) Are climate-related issues integrated into your business strategy?**

Yes

#### C3.1a

**(C3.1a) Does your organization use climate-related scenario analysis to inform your business strategy?**

No, but we anticipate doing so in the next two years

#### C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b

**(C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b) Indicate whether your organization has developed a low-carbon transition plan to support the long-term business strategy.**

No, we do not have a low-carbon transition plan

#### C3.1c

**(C3.1c) Explain how climate-related issues are integrated into your business objectives and strategy.**

AngloGold Ashanti's six business values guide the company's behaviour and link its business activities to its social performance. The espoused value of "Respect the Environment" includes a commitment to improve our carbon efficiency and to develop solutions to mitigate climate risks. The business values intrinsically contribute to shaping the company's business objectives and strategies.

The company's core business strategy is centred on 5 key business objectives. These are: (1) a focus on people, safety and sustainability; (2) ensure financial flexibility is maintained; (3) optimise overhead, costs and capital expenditure; (4) improving the portfolio quality and (5) maintaining long-term optionality of the portfolio of assets. Company and asset-level decisions

in support of these key objectives are made annually during aligned cyclical business planning processes such as setting of the annual budget, reviewing life of mine plans for the operational asset portfolio or defining key capital projects which include the construction of new mines or major expansions of existing operations. In each of these decision making processes, short, medium and long term factors likely to impact on the ability to deliver the projected earnings and business objectives are considered by technical and business specialists. While also being guided by the business values, these specialists use the knowledge and information collected, including actual or anticipated risks and opportunities offered by climate change, to determine their financial and reputational impact on the company and ultimately influence these strategic decisions-making processes.

Aside from the Business Planning process described above, the reduction of energy costs in the production of gold is an inherent objective of the company's business strategy. The primary driver being the high costs of fossil energy and the anticipated impact of carbon taxes, but the knock-on benefit of reduced carbon emissions is also recognized as a vital contribution by the company to climate change mitigation. Energy and GHG emissions targets have been set and are monitored to aid in driving down both energy costs and emissions. These are further supported by an ongoing and dedicated operational excellence program that seeks to invest in projects which support reduced costs of operation including through energy saving or energy switching initiatives.

## C3.1g

### **(C3.1g) Why does your organization not use climate-related scenario analysis to inform your business strategy?**

The company is aware of the TCFD recommendations and has been evaluating the rationale for undertaking a climate-related scenario analysis, given where it is in the current business cycle and the context of the assets it currently holds namely; gold bullion producing mines.

## C4. Targets and performance

### C4.1

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

Intensity target

#### C4.1b

#### **(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).**

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**Target reference number**

Int 1

**Scope**

Scope 1+2 (location-based)

**% emissions in Scope**

100

**Targeted % reduction from base year**

30

**Metric**

Metric tons CO<sub>2</sub>e per metric ton of ore processed

**Base year**

2007

**Start year**

2008

**Normalized base year emissions covered by target (metric tons CO<sub>2</sub>e)**

0.05896

**Target year**

2022

**Is this a science-based target?**

No, and we do not anticipate setting one in the next 2 years

**% of target achieved**

100

**Target status**

Achieved

**Please explain**

While incremental improvements werer made over the prior 10 years, the closure of energy intensive underground South African assets in early 2018, provided a step change in the company's emission intensity profile, dropping it to ~46% below the 2007 base year, or 146 percent of the targetted improvement off the base year.

**% change anticipated in absolute Scope 1+2 emissions**

15

**% change anticipated in absolute Scope 3 emissions**

0

## **C4.2**

**(C4.2) Provide details of other key climate-related targets not already reported in question C4.1/a/b.**

## 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.**

No

## C4.3d

**(C4.3d) Why did you not have any emissions reduction initiatives active during the reporting year?**

## C4.5

**(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?**

No

## C5. Emissions methodology

### C5.1

**(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).**

#### Scope 1

---

**Base year start**

January 1, 2007

**Base year end**

December 31, 2007

**Base year emissions (metric tons CO<sub>2</sub>e)**

1,088,000

**Comment**

#### Scope 2 (location-based)

---

**Base year start**

January 1, 2007

**Base year end**

December 31, 2007

**Base year emissions (metric tons CO<sub>2</sub>e)**

3,423,000

**Comment**

### **Scope 2 (market-based)**

---

**Base year start**

January 1, 2007

**Base year end**

December 31, 2007

**Base year emissions (metric tons CO<sub>2</sub>e)**

0

**Comment**

## **C5.2**

**(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.**

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

## **C6. Emissions data**

### **C6.1**

**(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO<sub>2</sub>e?**

**Reporting year**

---

**Gross global Scope 1 emissions (metric tons CO<sub>2</sub>e)**

1,146,632

**Start date**

**End date**

**Comment**

## 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**

**Comment**

## C6.3

**(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO<sub>2</sub>e?**

Reporting year

---

**Scope 2, location-based**

1,423,957

**Start date**

**End date**

**Comment**

## C6.4

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

---

**Source**

Land clearance

**Relevance of Scope 1 emissions from this source**

Emissions are relevant but not yet calculated

**Relevance of location-based Scope 2 emissions from this source**

No emissions excluded

**Relevance of market-based Scope 2 emissions from this source (if applicable)**

No emissions from this source

**Explain why this source is excluded**

Land clearance has been excluded from all operations because of the scientific uncertainty around measurement and the non-material contribution of land clearance to AGA's carbon footprint.

---

**Source**

Process Emissions

**Relevance of Scope 1 emissions from this source**

Emissions are not evaluated

**Relevance of location-based Scope 2 emissions from this source**

No emissions excluded

**Relevance of market-based Scope 2 emissions from this source (if applicable)**

No emissions from this source

**Explain why this source is excluded**

AGA does not have material process emissions.

---

**Source**

Scope 2 emissions of some regional offices.

**Relevance of Scope 1 emissions from this source**

No emissions from this source

**Relevance of location-based Scope 2 emissions from this source**

Emissions are not evaluated

**Relevance of market-based Scope 2 emissions from this source (if applicable)**

No emissions from this source

**Explain why this source is excluded**

A detailed assessment of all Scope 1-3 emissions found that emissions from regional offices were not material. Our efforts are focussed on collecting material emissions data.



## C6.5

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

### **Purchased goods and services**

---

#### **Evaluation status**

Relevant, calculated

#### **Metric tonnes CO<sub>2</sub>e**

108,926

#### **Emissions calculation methodology**

In early 2019, a 2014 study undertaken to assess the pass-through carbon tax implications in the South African Region was updated. The average data method was used, whereby secondary emission factors for the manufacture of key carbon-intensive process chemicals were used to determine the indirect carbon taxes likely to flow through by virtue purchasing these commodities. Carbon costs in unit of local currency (ZAR per tonne of CO<sub>2</sub>-e) were determined for each of the commodity, based on the actual 2018 expenditure on these products. Thereafter the product of these carbon costs and the annual value spent on each, provides a good estimate of the total indirect carbon emissions from the purchase of these key commodities.

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

0

#### **Explanation**

The 2018 assessment included the following key commodities: Ammonia, Lime, Caustic Soda, Activated Carbon, Explosives, Sodium Cyanide, steel grinding media and Services. The figures reported here are for goods and services procured in South Africa only, which remains a material proportion of the AGA spend on similar goods and services. We used industry averages and worked from our extensive knowledge of our suppliers' activities. Given the high carbon footprint of the South African electrical grid (owing to coal-fired power stations), the data cannot be used to calculate equivalent carbon emissions in our other countries of operations, particularly in those countries with a high level of hydropower in the national energy mix, such as Brazil.

### **Capital goods**

---

#### **Evaluation status**

Relevant, not yet calculated

#### **Explanation**

As the company's Scope 1 and 2 emissions are high (2.57 Mt in 2018), given our 2007 and 2008 carbon footprint exercise, it is expected that the relative scope 3 emissions

from capital goods purchases will be very small by comparison and do not justify the effort and expense of assessing them. However this has not been verified.

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

---

#### **Evaluation status**

Relevant, calculated

#### **Metric tonnes CO<sub>2</sub>e**

1,600

#### **Emissions calculation methodology**

These activities comprise motorcycle, petrol and diesel van, heavy goods diesel vehicle and air freight deliveries. A detailed external assessment was carried of the 2007 and 2008 deliveries across the company. Invoices were reviewed to calculate distances travelled. The WBCSD/WRI Protocol was followed. Because the emissions were small relative to the company's combined Scope 1 and 2 GHG footprint at the time (4.6 Mt), they were deemed to be immaterial and subsequent assessments have not been made. For 2018, this subcategory of Scope 3 emissions has been estimated from the 2018 combined Scope 2 and 2 emissions, in the same proportions as in 2007. This is conservative since the company's operations were scaled back significantly from 2013, owing to decreased production and a number of divestments and operational closures have taken place.

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

0

#### **Explanation**

Note that the 2007 and 2008 carbon footprint exercise, off which 2018 emissions are estimated, utilised value chain partner information. In the estimate, the divestment of 3 mining operations and closure of another 2, has been ignored.

### **Upstream transportation and distribution**

---

#### **Evaluation status**

Not relevant, explanation provided

#### **Explanation**

These emissions have been included in the section: Fuel-and-energy-related activities (not included in Scope 1 or 2).

### **Waste generated in operations**

---

#### **Evaluation status**

Relevant, calculated

#### **Metric tonnes CO<sub>2</sub>e**

6,270

### **Emissions calculation methodology**

A detailed external assessment was carried of the 2007 and 2008 waste generated across the company. Delivery notes and manifests were inspected and the results tallied. The WBCSD/WRI Protocol was followed. Because the emissions were small relative to the company's combined Scope 1 and 2 GHG footprint at the time (4.6 Mt), they were deemed to be immaterial and subsequent assessments have not been made. For 2018, this subcategory of Scope 3 emissions has been estimated from the 2018 combined Scope 2 and 2 emissions, in the same proportions as in 2007. This is conservative since the company's operations were scaled back significantly from 2013, owing to decreased production and a number of divestments and operational closures have taken place.

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

0

### **Explanation**

Note that the 2007 and 2008 carbon footprint exercise, off which 2018 emissions are estimated, utilised value chain partner information. In the estimate, the divestment of 3 mining operations and closure of another 2, has been ignored.

## **Business travel**

---

### **Evaluation status**

Relevant, calculated

### **Metric tonnes CO<sub>2</sub>e**

2,140

### **Emissions calculation methodology**

Business travel calculations comprise flights and hotel stays. A detailed external assessment was carried of 2007 and 2008 business travel across the company. Data on flights and hotel stays was collected from the company's travel agents and analysed to calculate the emissions. The WBCSD/WRI Protocol was followed. Because the emissions were small relative to the company's combined Scope 1 and 2 GHG footprint at the time (4.6 Mt), they were deemed to be immaterial and subsequent assessments have not been made. For 2018, this subcategory of Scope 3 emissions has been estimated from the 2018 combined Scope 2 and 2 emissions, in the same proportions as in 2007. This is conservative since the company's operations were scaled back significantly from 2013, owing to decreased production and a number of divestments and operational closures have taken place.

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

0

### **Explanation**

Note that the 2007 and 2008 carbon footprint exercise, off which 2018 emissions are estimated, utilised value chain partner information. In the estimate, the divestment of 3 mining operations and closure of another 2, has been ignored.

### Employee commuting

---

#### Evaluation status

Relevant, not yet calculated

#### Explanation

As the company's Scope 1 and 2 emissions are high (2.57 Mt in 2018) it is expected that scope 3 emissions from employee commuting will be very small by comparison and do not justify the effort and expense of assessing them. However this has not been verified.

### Upstream leased assets

---

#### Evaluation status

Not relevant, explanation provided

#### Explanation

The company's operating model is to own and operate assets. Leased assets are insignificant.

### Downstream transportation and distribution

---

#### Evaluation status

Relevant, not yet calculated

#### Explanation

Gold is a low volume, high value product. AngloGold Ashanti produced 3.4 Moz of gold, against revenue of \$4.05bn. Transportation and distribution of this mass of product would result in insignificant emissions compared to our Scope 1 and 2 emissions of 2.57 Mt and does not justify the effort and expense of assessing them. However this has not been verified.

### Processing of sold products

---

#### Evaluation status

Relevant, not yet calculated

#### Explanation

Except for our Brazilian operations, the gold dore produced by AngloGold Ashanti is refined by third parties. We refine the dore we produce in Brazil ourselves. Refining of dore and fabrication of jewellery and coins are not energy-intensive, unlike mining, milling and smelting. It is anticipated that GHG emissions from these activities would be very small compared to our Scope 1 and 2 emissions of 2.57 Mt and does not justify the effort and expense of assessing them. However this has not been verified.

### Use of sold products

---

### **Evaluation status**

Not relevant, explanation provided

### **Explanation**

Gold produced in 2018 was used in jewellery (51%), investment products - bars and coins (26.5%), central bank reserves (14.9) and technological applications (7.6%). None of these use types demand the consumption of energy for the product itself, so emissions are irrelevant

## **End of life treatment of sold products**

---

### **Evaluation status**

Not relevant, explanation provided

### **Explanation**

is estimated that, because of its value, 99% of the world's gold ever produced is still in circulation. Gold is recycled not disposed of. It may be recycled infinitely. Global refined gold production in 2018 was 4.67 kt. Of this, 25. was from gold recycling sources. The emissions from future recycling of our produced gold is not deemed material.

## **Downstream leased assets**

---

### **Evaluation status**

Not relevant, explanation provided

### **Explanation**

The company's operating model is to own and operate assets. Leased assets are insignificant.

## **Franchises**

---

### **Evaluation status**

Not relevant, explanation provided

### **Explanation**

The company does not have any franchises.

## **Investments**

---

### **Evaluation status**

Relevant, calculated

### **Metric tonnes CO2e**

132,984

### **Emissions calculation methodology**

Sourced from Randgold Resources 2018 CDP submissions and adjusted in proportion to the percentage that AGA holds in each asset.

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

100

**Explanation**

AngloGold Ashanti has 2 joint ventures that it does not operate, Kibali Mine in the DRC and Morila mine in Mali

**Other (upstream)**

---

**Evaluation status**

Not relevant, explanation provided

**Explanation**

None considered relevant beyond those already covered.

**Other (downstream)**

---

**Evaluation status**

Not relevant, explanation provided

**Explanation**

None considered relevant beyond those already covered.

## C6.7

**(C6.7) Are carbon dioxide emissions from biologically sequestered 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 CO<sub>2</sub>e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.**

---

**Intensity figure**

0.0463

**Metric numerator (Gross global combined Scope 1 and 2 emissions)**

2,570,589

**Metric denominator**

metric ton of ore processed

**Metric denominator: Unit total**

80,071,000

**Scope 2 figure used**

Location-based

**% change from previous year**

**Direction of change**

**Reason for change**

The primary driver for the intensity change was continued improvement energy use efficiency in South Africa, where the power grid relies heavily on emissions-intensive coal-fired energy. Some of the improvement noted was also due to the winding down and partial closure of 2 loss making shafts in South Africa in the fourth quarter of 2017 as well the sale of gold plants and a shaft in early 2018.

## C7. Emissions breakdowns

### C7.1

**(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?**

Yes

### C7.1a

**(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).**

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
Other, please specify R134a refrigerant gas	2,431	IPCC Fourth Assessment Report (AR4 - 100 year)

### C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
Australia	394,954
South Africa	17,266
Brazil	46,244
Ghana	74,983
Mali	89,332

Guinea	155,718
Argentina	101,663
Other, please specify Tanzania	266,472

## C7.3

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

By business division

By facility

### C7.3a

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

Business division	Scope 1 emissions (metric ton CO <sub>2</sub> e)
Americas Region	147,907
Australia Region	394,954
Continent Africa Region	586,505
South Africa Region	17,266

### C7.3b

**(C7.3b) Break down your total gross global Scope 1 emissions by business facility.**

Facility	Scope 1 emissions (metric tons CO <sub>2</sub> e)	Latitude	Longitude
Vaal River	2,173	-26.967366	26.771278
West Wits	5,370	-26.338961	27.495003
Mine Waste Solutions	9,724	-26.96859	26.769562
Obuasi	1,490	6.192225	-1.670909
Iduapriem	73,493	5.309766	-2.005005
Siguiri	155,718	11.428374	-9.18457
Sadiola	89,332	13.890411	-11.70318
Yatela	0	14.105944	-11.78421
Geita	266,472	-2.880123	15.765638
Sunrise Dam	139,500	-29.075375	122.415161
Tropicana	255,454	-29.308227	124.698994
Corrego do Sitio Mineracao	32,223	-19.987304	-43.84635
Mineracao Serra Grande	14,020	-14.55833	-49.972
Cerro Vanguardia	101,663	-49.30621	-67.729168



## C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO<sub>2</sub>e.

	Gross Scope 1 emissions, metric tons CO <sub>2</sub> e	Comment
Metals and mining production activities	1,146,632	Direct GHG Emissions Tonnes CO <sub>2</sub> -e.

## C7.5

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

Country/Region	Scope 2, location-based (metric tons CO <sub>2</sub> e)	Scope 2, market-based (metric tons CO <sub>2</sub> e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
Brazil	19,391			
Ghana	90,210			
South Africa	1,314,356			

## C7.6

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

By business division

By facility

## C7.6a

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

Business division	Scope 2, location-based emissions (metric tons CO <sub>2</sub> e)	Scope 2, market-based emissions (metric tons CO <sub>2</sub> e)
Americas Region	19,391	
Continental Africa Region	90,210	
South Africa Region	1,314,356	

## C7.6b

**(C7.6b) Break down your total gross global Scope 2 emissions by business facility.**

Facility	Scope 2 location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Vaal River Operations	314,864	
West Wits Operations	799,705	
Mine Waste Solutions	199,788	
Iduapriem Gold Mine	60,967	
Obuasi Gold Mine	29,243	
Corrego do Sitio Mineracao	12,533	
Mineracao Serra Grande	6,857	

## C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7

**(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Break down your organization's total gross global Scope 2 emissions by sector production activity in metric tons CO2e.**

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Metals and mining production activities	1,423,957		

## 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?**

Decreased

## 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	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	0	There were no newly commissioned, nor decommissioned renewable energy sources in the reporting year compared with the prior period.
Other emissions reduction activities	0	No change	0	Not relevant for the reporting year.
Divestment	485,000	Decreased	26	South Africa's GHG emissions have decreased by 485 kilotonnes in 2018 (due to the divestments in the South Africa Region operations).
Acquisitions	0	No change	0	There were no asset acquisitions concluded in 2018.
Mergers	0	No change	0	There were no mergers concluded in 2018.
Change in output	925,000	Decreased	62	South Africa's GHG emissions have decreased by 925 kilotonnes in 2018 (due to the closure of assets in the South Africa Region operations).
Change in methodology	0	No change	0	Not relevant for the reporting year.
Change in boundary	0	No change	0	Not relevant for the reporting year.
Change in physical operating conditions	0	No change	0	Not relevant for the reporting year.
Unidentified	0	No change	0	Not relevant for the reporting year.
Other	0	No change	0	Not relevant for the reporting year.

## 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?**

Location-based

## C8. Energy

### C8.1

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

More than 15% but less than or equal to 20%

### C8.2

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

	Indicate whether your organization undertakes this energy-related activity
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	Yes

### 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 MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	5,022,718	5,022,718

Consumption of purchased or acquired electricity		0	0	0
Consumption of self-generated non-fuel renewable energy		121,722		121,722
Total energy consumption		121,722	5,022,718	5,144,440

## C-MM8.2a

**(C-MM8.2a) Report your organization's energy consumption totals (excluding feedstocks) for metals and mining production activities in MWh.**

	Heating value	Total MWh
Consumption of fuel (excluding feedstocks)		5,022,718
Consumption of purchased or acquired electricity		0
Consumption of self-generated non-fuel renewable energy		121,722
Total energy consumption		5,144,440

## 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	Yes
Consumption of fuel for the generation of heat	No
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.**

### Fuels (excluding feedstocks)

Diesel

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

3,193,660

**MWh fuel consumed for self-generation of electricity**

865,893

**MWh fuel consumed for self-generation of heat**

0

**Comment**

---

**Fuels (excluding feedstocks)**

Fuel Oil Number 6

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

323,471

**MWh fuel consumed for self-generation of electricity**

323,471

**MWh fuel consumed for self-generation of heat**

**Comment**

---

**Fuels (excluding feedstocks)**

Liquefied Petroleum Gas (LPG)

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

7,588

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

**Comment**

---

**Fuels (excluding feedstocks)**

Natural Gas

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

1,477,427

**MWh fuel consumed for self-generation of electricity**

1,388,377

**MWh fuel consumed for self-generation of heat**

**Comment**

---

**Fuels (excluding feedstocks)**

Petrol

**Heating value**

**Total fuel MWh consumed by the organization**

4,865

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

**Comment**

---

**Fuels (excluding feedstocks)**

Aviation Gasoline

**Heating value**

**Total fuel MWh consumed by the organization**

3,104

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

**Comment**

---

**Fuels (excluding feedstocks)**

Other, please specify

Light Burning Fuel

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

36,226

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

**Comment**

## **C8.2d**

**(C8.2d) List the average emission factors of the fuels reported in C8.2c.**

**Aviation Gasoline**

---

**Emission factor**

2.20935

**Unit**

metric tons CO<sub>2</sub>e per m<sup>3</sup>

**Emission factor source**

NGA Factors 2008.

**Comment**

None.

**Diesel**

---



**Emission factor**

2.71083

**Unit**

metric tons CO<sub>2</sub>e per m<sup>3</sup>

**Emission factor source**

IPCC 2006.

**Comment**

None.

**Fuel Oil Number 6**

---

**Emission factor**

2.94857

**Unit**

metric tons CO<sub>2</sub>e per m<sup>3</sup>

**Emission factor source**

IPCC 2006.

**Comment**

None.

**Liquefied Petroleum Gas (LPG)**

---

**Emission factor**

0.00294

**Unit**

metric tons CO<sub>2</sub>e per m<sup>3</sup>

**Emission factor source**

NGA Factors 2008.

**Comment**

None.

**Natural Gas**

---

**Emission factor**

0.01887

**Unit**

metric tons CO<sub>2</sub>e per m<sup>3</sup>

**Emission factor source**

IPCC 2006.

**Comment**

None.

**Petrol**

**Emission factor**

2.27975

**Unit**

metric tons CO2e per m3

**Emission factor source**

IPCC 2006.

**Comment**

None.

**Other**

**Emission factor**

**Unit**

**Emission factor source**

**Comment**

**C8.2e**

**(C8.2e) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.**

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	4,088,775	4,088,775	121,721,689	121,721,689
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

**C-MM8.2e**

**(C-MM8.2e) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed for metals and mining production activities.**

	Total gross generation (MWh) inside metals and mining sector boundary	Generation that is consumed (MWh) inside metals and mining sector boundary
Electricity	4,088,775	4,088,775
Heat	0	0
Steam	0	0
Cooling	0	0

## C8.2f

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

### Basis for applying a low-carbon emission factor

No purchases or generation of low-carbon electricity, heat, steam or cooling accounted with a low-carbon emission factor

### Low-carbon technology type

### Region of consumption of low-carbon electricity, heat, steam or cooling

### MWh consumed associated with low-carbon electricity, heat, steam or cooling

### Emission factor (in units of metric tons CO<sub>2</sub>e per MWh)

### Comment

## C9. Additional metrics

### C9.1

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

### Description

Energy usage

### Metric value

316

**Metric numerator**

MJ of Energy Consumed (Scope 1 + Scope 2)

**Metric denominator (intensity metric only)**

Metric Tonnes of Ore Treated

**% change from previous year**

9.3

**Direction of change**

Decreased

**Please explain**

Energy Intensity trends are tracked relative to GHG Emissions Intensity trends - both use the same denominator.

The energy intensity decreased 9.3%. In 2018, the closure of underground South African assets, provided a step change in the company's emission intensity profile. Energy efficiency gains in the South Africa region contributed much of the reductions achieved.

## C-MM9.3a

**(C-MM9.3a) Provide details on the commodities relevant to the mining production activities of your organization.**

---

**Output product**

Gold

**Capacity, metric tons**

**Production, metric tons**

78,537,000

**Production, copper-equivalent units (metric tons)**

**Scope 1 emissions**

1,146,632

**Scope 2 emissions**

1,423,957

**Scope 2 emissions approach**

Location-based

### **Pricing methodology for copper-equivalent figure**

We do not calculate nor publish copper-equivalent values for our gold ore, only gold bullion as we are a gold-focused company. We also do not have the base data in the form required to do so.

### **Comment**

We mine gold bearing ore and produce gold bullion. We have provided the mass of gold-bearing ore mined and then treated.

In addition, we do not publish our mine's operational capacities - this is dependent on a number of variables.

## **C-MM9.3b**

**(C-MM9.3b) Provide details on the commodities relevant to the metals production activities of your organization.**

---

### **Output product**

Gold

### **Capacity (metric tons)**

### **Production (metric tons)**

105.75

### **Annual production in copper-equivalent units (thousand tons)**

### **Scope 1 emissions (metric tons CO<sub>2</sub>e)**

1,146,632

### **Scope 2 emissions (metric tons CO<sub>2</sub>e)**

1,423,957

### **Scope 2 emissions approach**

Location-based

### **Pricing methodology for-copper equivalent figure**

We do calculate nor publish copper-equivalent values for our gold ore, not gold bullion as we are a gold-focused company. We also do not have the base data in the form required to do so.

### **Comment**

We mine gold bearing ore containing varying concentrations of gold per tonne and produce gold bullion. We have provided the mass of gold bullion produced for 2018. Additionally, we do not publish our mine's operational capacities - this is dependent on a number of variables.

## C-MM9.6

**(C-MM9.6) Disclose your organization’s low-carbon investments for metals and mining production activities.**

## 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	No third-party verification or assurance

### C10.1a

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

---

**Scope**

Scope 1

**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**

**Page/ section reference**

Appendix; Page 7.

**Relevant standard**

ISAE 3410

**Proportion of reported emissions verified (%)**

100

**Scope**

Scope 2 location-based

**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**

**Page/ section reference**

Appendix; Page 7.

**Relevant standard**

ISAE 3410

**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?**

 18\_AGA\_SAM\_C05\_Independent assurance report.pdf

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C8. Energy	Other, please specify All energy consumption data	ISAE3410	100 % of our energy consumption data is assured (Reasonable Assurance) in parallel with the GHG emissions assurance.

## 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.**

Australia ERF Safeguard Mechanism

### C11.1b

**(C11.1b) Complete the following table for each of the emissions trading systems in which you participate.**

#### Australia ERF Safeguard Mechanism

---

**% of Scope 1 emissions covered by the ETS**

100

**Period start date**

July 1, 2017

**Period end date**

June 30, 2018

**Allowances allocated**

**Allowances purchased**

**Verified emissions in metric tons CO<sub>2</sub>e**

**Details of ownership**

Facilities we own and operate

**Comment**

### C11.1d

**(C11.1d) What is your strategy for complying with the systems in which you participate or anticipate participating?**



In Australia, we are expecting to stay within the allocated baseline emissions levels of the Safeguard Mechanism. Where future production growth might require additional energy, we would consider the feasibility of meeting this demand with renewable energy.

## C11.2

**(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?**

## C11.3

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

Yes

## C11.3a

**(C11.3a) Provide details of how your organization uses an internal price on carbon.**

---

### **Objective for implementing an internal carbon price**

- Change internal behavior
- Drive energy efficiency
- Drive low-carbon investment
- Stress test investments
- Identify and seize low-carbon opportunities

### **GHG Scope**

- Scope 1
- Scope 2

### **Application**

In South Africa, carbon tax will be applied from 2020. Our business planning and major project evaluation processes incorporate the best information available on the level of the tax and how it will be applied, both as Scope 1 and Scope 2 taxes. This has helped to determine the break-even point for considering the trade-off of using or creating alternative energy sources to the national power utility (Eskom) for each project.

### **Actual price(s) used (Currency /metric ton)**

8

### **Variance of price(s) used**

The Carbon tax will escalate beyond 2020 with a factor equivalent to the Consumer Price Index (CPI)+ 2 percent. The effect of carbon pricing on South African projects has therefore been modeled with annual escalations based on South African CPI forecasts + 2 percent after 2020. The September 2019 Rand to US dollar (15:1 respectively) exchange rate was used to determine the current value of the carbon price.

### Type of internal carbon price

Other, please specify

Linked to SA Carbon Tax price per tonne

### Impact & implication

Scope 2 electricity purchases have the most material impact on business planning and project evaluations. The South African National Treasury have indicated that the carbon tax will be cost neutral via electricity pricing until 2020, therefore in financial models, the company uses carbon pricing for planning in South Africa beyond 2020.

The carbon pricing in South Africa has not impacted business decisions nor strategy materially - mostly because it will come at a time when the company's production and footprint in South Africa is winding down - due to ore depletion and divestment.

## C12. Engagement

### C12.1

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

Yes, other partners in the value chain

### C12.1c

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

In our engagements with some of our investors and financiers, we provide GHG emissions data and climate change approach information on request, though they often obtain the primary information from our detailed annual Sustainability Reports and CDP reports.

### C12.3

#### (C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

Direct engagement with policy makers

Trade associations

### C12.3a

#### (C12.3a) On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Mandatory carbon reporting	Support	AngloGold Ashanti's engagement with policy makers takes place in response to public participation requests, as well as on the initiative of the company.	We supported requirements in Australia for mandatory reporting. We will also support the requirements for reporting in South Africa as of 2020 when it becomes mandatory.

Carbon tax	Support with minor exceptions	AngloGold Ashanti engages with government authorities at the relevant levels directly to understand government policies as they develop, and to communicate to regulators the company's views on impacts that carbon taxes may impose on companies. Our engagement focuses on addressing unknown factors and proposing constructive solutions.	We support in principle having a price on carbon. The carbon tax implementation in South Africa comes on the back of a period of sustained electricity price increases which have already resulted in decreased electricity consumption and therefore emissions. The country is below its emissions targets due to sustained energy savings initiatives as well as divestments in South Africa.
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### C12.3b

**(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?**

Yes

### C12.3c

**(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.**

**Trade association**

International Council of Mining and Metals (ICMM).

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

In 2010, ICMM members established a program of policy principles, leading practice and company commitments to contribute to working towards a low carbon economy: 1) an integrated set of seven principles for climate change policy design that build on those contained in the 2009 policy: •provide clear policies for a predictable, measured transition to a long term price on greenhouse gas emissions •apply climate change related revenues to manage a transition to a low carbon future •facilitate trade competitiveness across sectors •seek broad-based application •be predictable and gradual •be simple and effective •support low-emission base-load generation technology development. 2) three focus areas which address the climate change issues which are important to mining and metals companies: •national climate policies and competitiveness •land use and adaption to the impacts of climate change •measurement, reporting and verification of net greenhouse gas activities. 3) a set of ICMM member company commitments. As a minimum, ICMM members accept their responsibility to: •develop greenhouse gas emission reduction strategies and

implement economic emissions reductions opportunities •ensure efficient use of natural resources •support research and development of low greenhouse gas emission technologies that are appropriate to the industry •measure progress and report results.

**How have you influenced, or are you attempting to influence their position?**

AngloGold Ashanti argued for the need to have a proactive position on climate change and made extensive input into its design. This was done at Council and technical levels. We have supported moves to update the association's position in 2015 and continue to address climate change proactively. Over 2017 and 2018, we have been engaging as a collective membership with OEMs in the heavy mining equipment and energy generation equipment industry towards decarbonising the equipment's energy supply.

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**Trade association**

Industry Task Team on Climate Change (ITTCC)

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

Principles of climate policy: •Predictable and gradual: Be set out well in advance and the pace and progress of introduction of policies and abatement targets should be clearly laid out to reduce investment uncertainty and maximise the effectiveness of each policy by allowing businesses to transition efficiently to a low carbon economy. •Development focused: Be part of a coherent set of policies covering energy policy, industrial policy, economic growth policy and social welfare policies that reinforce South African development priorities: creating decent work, economic and social transformation and maintaining sustainable energy supply. •Broad based: Include a diverse selection of policy levers to effectively target the multiple, complex market failures within climate change thereby lowering the overall cost of emissions reduction. •Sending a clear price signal: Ensure that any carbon price signal is consistent, transparent and designed in a manner so that it influences producers and consumers, such that emissions and carbon consumption is reduced and the incentive to develop low carbon technologies is increased. •Revenue neutral: Focus on changing behaviour, not raising revenues – it must be a priority of government to return revenues raised by a carbon price to households and businesses through lump sum payments or tax reductions to reduce the negative impacts of climate change policies. •Trade competitive: Ensure local industries retain their international competitiveness in the absence of a global response to maintain environmental integrity, avoid carbon leakage, loss of competitiveness and adverse economic and welfare impacts. •Simple and effective: Include measures which effectively reduce emissions and are simple to implement and administer. Simple policies increase transparency; reducing opportunities to exploit loopholes and reducing administration costs. •Supportive of technology: Encourage investment in low carbon choices directly (e.g. with innovation incentives), to accelerate the development of new technologies, reducing the cost of abatement and promoting the growth of a 'green' sector. •Climate ready: Include adaptation measures to mitigate the adverse physical

impacts of climate change such as severe weather, drought and floods and rising sea levels.

**How have you influenced, or are you attempting to influence their position?**

AngloGold Ashanti was a founder member of the organisation and has been an active member of the ITTCC, albeit less active in 2017 and 2018. We argued successfully for a position consistent with the ICMM position.

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**Trade association**

Minerals Council of Australia.

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

The minerals industry acknowledges that sustained global action is required to reduce the scale of human induced climate change. A measured transition to a low emissions global economy will require the alignment of three key policy pillars: • a global agreement for greenhouse gas emission abatement that includes emissions reduction commitments from all major emitting nations; • market-based policy measures that promote the abatement of greenhouse gas emissions at the lowest cost, while minimising adverse social and economic impacts, including on the competitiveness of the internationally traded sector; • substantial investment in a broad range of low emissions technologies and adaptation measures. In the absence of a global agreement in the near term, the imperative for all nations is to sustainably reduce the production and consumption of greenhouse gas emissions without compromising international competitiveness, energy security and economic growth, improved living standards and poverty alleviation.

**How have you influenced, or are you attempting to influence their position?**

The company is a member of the association's board.

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**Trade association**

Energy Intensive Users Group of Southern Africa.

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

The EIUG seeks to influence the shape of the South African energy industry to ensure that reasonable and economically sound solutions are developed. The country must transition to a lower-carbon future; the EIUG aims to ensure that this is done in a manner and within a time-frame that protects and maintains the competitiveness of our economy.

**How have you influenced, or are you attempting to influence their position?**

AngloGold Ashanti advocates transition to a low carbon future, but in a manner and pace that ensuring protection of the fragile SA economy.

## C12.3f

**(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?**

The company climate change strategy was developed collaboratively, involving all parts of the business and all regions, ensuring their buy-in. It was approved by what is now the Board Social, Ethics and Sustainability Committee. There is regular communication between climate change lead people at the national and corporate levels to ensure that there is a common understanding of new developments and approaches to them. The primary forum is the Environmental Steering Committee (ESC). Corporate and regional sustainability leaders, including those tasked with climate change, meet at a biennial Sustainability Workshop, at which common challenges, including climate change are discussed and action plans agreed. Most of the national mining associations of which AGA is a member are members of the International Council on Mining and Metals (ICMM) and support its Climate Change Principles, which helps to ensure coherence between country positions. AGA has advocated inclusion of the Principles into national legislation, further supporting policy coherence. The company's position on key policy issues, such as the South African carbon tax, has been endorsed by the Board Social, Ethics and Sustainability Committee and communicated to employees who interact with government and trade associations.

## 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).**

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**Publication**

In voluntary sustainability report

**Status**

Complete

**Attach the document**

 AGA-SDR18.pdf

**Page/Section reference**

49-52

**Content elements**

Emissions figures  
Emission targets

**Comment**

We have also reported the more detailed emissions data in the detailed data tables online at: <http://www.aga-reports.com/18/sdr/material-issues/environment>

## C14. 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.**

### C14.1

**(C14.1) Provide details for the person that has signed off (approved) your CDP climate change response.**

	Job title	Corresponding job category
Row 1	Vice President: Environment, Group Sustainability.	Other, please specify Group Vice President /Head of Discipline

## Submit your response

**In which language are you submitting your response?**

English

**Please confirm how your response should be handled by CDP**

	Public or Non-Public Submission	I am submitting to
I am submitting my response	Public	Investors

**Please confirm below**

I have read and accept the applicable Terms