

**Module: Introduction****Page: Introduction**

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**CC0.1****Introduction**

Please give a general description and introduction to your organization.

AngloGold Ashanti is a global gold mining company with a geographically diverse, world-class 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 4.4 million ounces of gold in 2014 - an estimated 4% of global production - making it the third largest gold producer in the world. AngloGold Ashanti has 20 operations located in 10 countries on four continents, and a group of greenfield projects in Colombia is supported by a focused exploration programme. It comprises 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, the DRC, Ghana, the Republic of Guinea, Mali, Tanzania and the United States. Several of these assets are strongly leveraged to energy costs and currencies. We work across the full spectrum of the mining value chain and are concerned with 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. Headquartered in Johannesburg, South Africa, AngloGold Ashanti's primary listing is on the Johannesburg Stock Exchange (ANG). It is also listed on the following securities exchanges: New York (AU), Australia (AGG) and Ghana (AGA).

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**CC0.2****Reporting Year**

Please state the start and end date of the year for which you are reporting data.

The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first.

We request data for more than one reporting period for some emission accounting questions. Please provide data for the three years prior to the current reporting year if you have not provided this information before, or if this is the first time you have answered a CDP information request. (This does not apply if you have been offered and selected the option of answering the shorter questionnaire). If you are going to provide additional years of data, please give the dates of those reporting periods here. Work backwards from the most recent reporting year.

Please enter dates in following format: day(DD)/month(MM)/year(YYYY) (i.e. 31/01/2001).

**Enter Periods that will be disclosed**

Wed 01 Jan 2014 - Wed 31 Dec 2014

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**CC0.3**

**Country list configuration**

Please select the countries for which you will be supplying data. If you are responding to the Electric Utilities module, this selection will be carried forward to assist you in completing your response.

Select country
Argentina
Australia
Brazil
Ghana
Guinea
Mali
South Africa
Tanzania
United States of America

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**CC0.4**

**Currency selection**

Please select the currency in which you would like to submit your response. All financial information contained in the response should be in this currency.

USD(\$)

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**CC0.6****Modules**

As part of the request for information on behalf of investors, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sub-industries, companies in the oil and gas sub-industries, companies in the information technology and telecommunications sectors and companies in the food, beverage and tobacco industry group should complete supplementary questions in addition to the main questionnaire.

If you are in these sector groupings (according to the Global Industry Classification Standard (GICS)), the corresponding sector modules will not appear below but will automatically appear in the navigation bar when you save this page. If you want to query your classification, please email [respond@cdp.net](mailto:respond@cdp.net).

If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below. If you wish to view the questions first, please see <https://www.cdp.net/en-US/Programmes/Pages/More-questionnaires.aspx>.

**Module: Management****Page: CC1. Governance**

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**CC1.1****Where is the highest level of direct responsibility for climate change within your organization?**

Board or individual/sub-set of the Board or other committee appointed by the Board

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**CC1.1a****Please identify the position of the individual or name of the committee with this responsibility**

The 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 2014, all Board committees were chaired by independent non-executive directors.

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**CC1.2**

**Do you provide incentives for the management of climate change issues, including the attainment of targets?**

Yes

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**CC1.2a**

**Please provide further details on the incentives provided for the management of climate change issues**

<b>Who is entitled to benefit from these incentives?</b>	<b>The type of incentives</b>	<b>Incentivized performance indicator</b>	<b>Comment</b>
Corporate executive team	Recognition (non-monetary)	Emissions reduction target Energy reduction target	The executive team is responsible for focusing strategic attention of all business units on improving climate change performance.
Energy managers	Monetary reward	Efficiency project Efficiency target	Efficiency targets focus attention on emissions mitigation because our emissions are directly proportional to our energy consumption.
Chief Operating Officer (COO)	Monetary reward	Efficiency target	Efficiency targets focus attention on emissions mitigation because our emissions are directly proportional to our energy consumption.
All employees	Monetary reward	Other: Performance bonus linked to achievement of cost targets.	Energy consumption accounts for approximately 20% of costs.

**Page: CC2. Strategy**

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**CC2.1**

**Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities**

Integrated into multi-disciplinary company-wide risk management processes

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**CC2.1a**

**Please provide further details on your risk management procedures with regard to climate change risks and opportunities**

Frequency of monitoring	To whom are results reported?	Geographical areas considered	How far into the future are risks considered?	Comment
Six-monthly or more frequently	Board or individual/sub-set of the Board or committee appointed by the Board	All operating countries: South Africa, Ghana, Australia, Brazil, Mali, Guinea, Tanzania, USA and Argentina.	1 to 3 years	The Board committee concerned is the Social, Ethics and Sustainability Committee.

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**CC2.1b**

**Please describe how your risk and opportunity identification processes are applied at both company and asset level**

The risk management system applies to all levels of the corporation, from operating and exploration sites to regions and the corporation as a whole. Any risk that can impact the business is included, from regulatory to financial, reputational, community implications, business interruption including weather events, environmental impacts and security of supply, including energy and water. Recently acquired businesses have twelve months from the date of acquisition in which to adopt and conform. The board reviews and approves the risk strategy and policies formulated by executive directors and senior management. The risk management and reporting systems have been developed in line with the Turnbull Guidelines. This system also complies with the requirements of the King III code on corporate governance, International Standard ISO/DIS 31000 for risk management, and the Sarbanes-Oxley Act of 2002 (USA). The risk management system is central to the group's strategic management processes and is the system whereby risks associated with group activities are methodically mitigated. The Chief Financial Officer and the CEO are both required by SOX to certify on Form 20-F that the group financial statements present a true and fair view of the group financial position, cash flows and operational results, in accordance with the US GAAP. All key components of the 'Enterprise Risk Management –Integrated Framework' issued by the Committee of Sponsoring Organisations of the Treadway Commission (COSO) are incorporated into the group's process to comply with SOX section 404. The risk management commitments are approved by the Board Audit and Risk Committee and a full review of the risk, control and disclosure processes is undertaken annually to ensure that all additional requirements are incorporated into the system in the future. The highest ranked risks are reviewed quarterly and reported to the Board Audit and Risk Committee.

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**CC2.1c**

**How do you prioritize the risks and opportunities identified?**

We have categorised our risks in terms of their expected time horizons. Those with an imminent (short-term) horizon are more likely to occur within around 12 months. Those categorised as medium-term risks are considered to have a one- to three-year time horizon. The cumulative impact of a number of these and other risks, should they materialise simultaneously or in succession, as well as the possible magnitude and velocity of the risks, is of major concern.

In conducting its annual review of the effectiveness of risk management, the board considers the key findings from the ongoing monitoring and reporting process, management assertions and independent assurance reports. All key risks (threats and opportunities), including those of climate change, that have the potential to impact the objectives of the AngloGold Ashanti group, are covered by the policy and are identified and communicated. Management is accountable to the board and has established a system of internal controls to manage significant risks. This system assists the board in discharging its responsibility to ensure that the wide range of risks associated with the group's global operations are effectively managed in support of the goal to create and preserve shareholder wealth. Risk exposure at operational level is consolidated at company level using the processes outlined above using a customised electronic information management system called AuRisk, which is monitored and audited.

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## CC2.2

### Is climate change integrated into your business strategy?

Yes

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## CC2.2a

### Please describe the process of how climate change is integrated into your business strategy and any outcomes of this process

The numbering below reflects the points listed in the guidance notes.

- i. The greatest influence on the business strategy has been the international climate change negotiations and government responses to these. Exposure to these international processes has primarily been through the International Council on Mining and Metals. Specific regulatory processes to introduce carbon prices and other activities to address climate change in the jurisdictions in which we operate have had a great impact on the business strategy. An awareness of the company's role in society and our vision of being "the leading mining company" have also been drivers. A better informed understanding of our climate change related risks and exposures has played an important role - a major study was carried out in 2008/9. This informed the climate change strategy adopted by the Board. Climate change data (GHG emissions and energy consumption) and risks are reported to the Board Social, Ethics and Sustainability Committee each quarter at its request.
- ii. The risk of increased costs from carbon taxes and/or cap-and-trade schemes is the biggest current risk and influence on the business strategy. A better understanding of the available global and national carbon budgets has focused our attention on the scale of emissions reductions likely to be required. Observation of climatic changes - particularly storm-related stoppages in Australia and reduced water availability as a result of droughts in the USA and Brazil - and the need to safeguard infrastructure are demonstrating the importance of adaptation. Adaptation is likely to be a challenge for our operations and our host communities. Anticipation of an improved uranium price as a result of demand for low-carbon baseload electricity led to a significant investment in uranium production capacity.
- iii. The most important components of the short-term business strategy that have been influenced by climate change are: investment in uranium production capacity (see point ii), energy efficiency and reducing absolute energy consumption, engaging governments, particularly the South African government, on national climate change response strategies. A company with significant uranium production capacity was acquired in 2012. Energy efficiency improvements have already been achieved in South Africa in line with our energy efficiency target. Significant resources have been given to collaboration with like-minded companies and engagement with government agencies in climate change policy processes. In South Africa and Ghana particularly, there has been increased focus on integrated

water management and water use efficiency in response to varying rainfall patterns. A review of critical supply chain risks showed the need to assess the potential impact of a carbon tax in South Africa on our supply chain.

iv. As part of its strategy to ensure that AngloGold Ashanti can continue to operate deep level mines, the company initiated several years ago a long-term research programme into more efficient underground mining practices which incorporates a significant reduction in energy consumption and thus GHG emissions as a primary requirement. These changes will not have commercial application for at least another 5 years, and probably more. They will affect how we operate in South Africa and potentially elsewhere for decades to come. The company has assessed long-term energy and water security risks and revises its response plans on an annual basis. These include assessing low-emissions energy options, including natural gas, biomass, biofuels, solar, wind and hydropower. We are also assessing local climate change adaptation risks. In addition, we benchmark our energy and water performance for all aspects of our operations against international best practice.

v. We were amongst the first companies in the industry to focus on energy efficiency as a core business risk, long before energy efficiency came into vogue. As a result we were able to negotiate favourable terms with electricity utilities, including security of supply. The assessment of the impact of the South African carbon tax on our supply chain (see iii) puts us in a strong negotiating position with our suppliers while also enabling us to anticipate potential alternative sources.

vi. The most substantial business decision has been to invest in a uranium business in anticipation of increased demand for low-carbon baseload electricity. Another key decision was to invest significant management time in determining the potential impact of a carbon price on our South African and Australian operations and then to alter our business plans going forward, including revising energy efficiency targets. Mine expansion and merger and acquisition decisions have been subjected to stringent energy and water reviews.

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#### **CC2.2c**

**Does your company use an internal price of carbon?**

Yes

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#### **CC2.2d**

**Please provide details and examples of how your company uses an internal price of carbon**

In South Africa, where a carbon tax is due to be applied from 2016, our business planning incorporates the best information available on the level of the tax and how it will be applied. At current exchange rates, this amounts to a price of USD4/ton of CO<sub>2</sub>e.

CC2.3

**Do you engage in activities that could either directly or indirectly influence public policy on climate change through any of the following? (tick all that apply)**

- Direct engagement with policy makers
- Trade associations
- Funding research organizations

CC2.3a

**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, though the government has removed these. Requirements in South Africa are under development and we are engaging on the details to prevent duplication and an unnecessary reporting burden. Government has been receptive to our recommendations.
Carbon tax	Support with major 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. We are concerned that the carbon tax proposed 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 ahead of its emissions targets. The electricity price already incorporates substantial funding for renewable energy as well as a levy on electricity produced from fossil fuels. Thus we argue that a carbon tax is already effectively in place.
Energy efficiency	Support	The company engaged in South Africa with the Department of Energy and Eskom specifically on concerns of energy security, and has demonstrated its commitment by implementing energy efficiency projects that have reduced the power consumption of its operations in the South Africa Region. In addition, AngloGold Ashanti became the 49th partner in Eskom's 49M electricity saving campaign in July 2012. Endorsed by government and business partners, this initiative is intended to include 49 million South Africans.	The 49M campaign aims to encourage individuals to embrace energy saving as a part of the national culture and to join the global journey towards a sustainable future. The call to action is for every citizen to "lift a finger" because "all it takes is to switch off a light". The purpose of the campaign is to realise a 10% energy saving in order to maintain security of electricity supply over the next five years while Eskom boosts energy infrastructure and capacity.

CC2.3b

Are you on the Board of any trade associations or provide funding beyond membership?

Yes

CC2.3c

Please enter the details of those trade associations that are likely to take a position on climate change legislation

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
International Council of Mining and Metals (ICMM)	Consistent	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.	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 continuing to address climate change proactively.
Business Leadership	Consistent	BLSA does not have a formal position on climate change but engages with the South African government on all issues that	The company is a member of the BLSA Board and participates actively in Board meetings and BLSA

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
South Africa (BLSA)		impact business, including climate change legislation and policy positions.	engagements with government.
Industry Task Team on Climate Change (ITTCC)	Consistent	<p>Principles of climate policy:</p> <ul style="list-style-type: none"> <li>•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.</li> <li>•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.</li> <li>•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.</li> <li>•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.</li> <li>•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.</li> <li>•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.</li> <li>•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.</li> <li>•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.</li> <li>•Climate ready: Include adaptation</li> </ul>	AngloGold Ashanti was a founder member of the organisation and is an active member of the ITTCC Council. We argued successfully for a position consistent with the ICMM position.

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
		measures to mitigate the adverse physical impacts of climate change such as severe weather, drought and floods and rising sea levels.	
Colorado Association of Commerce and Industry	Consistent	CACI opposes legislation to aggressively reduce carbon emissions (i.e., "carbon tax," "cap and trade") without an accurate assessment of cost and benefits as well as consideration of technological capabilities for mitigating the impact on carbon-intensive industries, which will have a negative impact by driving up energy costs to all consumers, discouraging economic growth in Colorado and driving jobs to other states.	The company is a member of the association's board and executive committee.
Minerals Council of Australia	Consistent	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.	The company is a member of the association's board.

**CC2.3d**

**Do you publicly disclose a list of all the research organizations that you fund?**

Yes

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**CC2.3e**

**Do you fund any research organizations to produce or disseminate public work on climate change?**

No

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**CC2.3h**

**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 an annual 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.

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**CC2.4**

**Would your organization's board of directors support an international agreement between governments on climate change, which seeks to limit global temperature rise to under two degree Celsius from pre-industrial levels in line with IPCC scenarios such as RCP2.6?**

Yes

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**CC2.4a**

**Please describe your board's position on what an effective agreement would mean for your organization and activities that you are undertaking to help deliver this agreement at the 2015 United Nations Climate Change Conference in Paris (COP 21)**

As a company which has most of its operations in developing countries, we note the following:

- the potential impacts of a 2 degree world
- the fact that the bulk of GHGs in the earth's atmosphere have not been emitted by developing countries. The principle of common but differentiated responsibilities is thus critically important.
- some developing countries, notably China and India, are emitting significant, and growing, volumes of GHGs
- the global economy is fragile and many developing countries will not be able to bear a sharp rise in energy prices.

Creative solutions must thus be found to address this "wicked problem". They will likely entail some or all of the following:

- a continued focus on energy efficiency by energy-intensive companies
- continued research into technological solutions, including improved batteries and energy efficiency
- removal of subsidies that promote fossil fuel consumption
- well-designed incentives for energy efficiency, renewable energy and low emission baseload electricity (we declare our self-interest as a uranium producer)
- assistance from developed to developing countries
- better protection of forests and other natural stores of carbon dioxide.

**Page: CC3. Targets and Initiatives**

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**CC3.1**

**Did you have an emissions reduction target that was active (ongoing or reached completion) in the reporting year?**

Intensity target

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**CC3.1b**

**Please provide details of your intensity target**

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions	Target year	Comment
Int1	Scope 1+2	100%	30%	metric tonnes CO2e per ounce of gold	2007	0.77	2022	Because gold grades are reducing over time, an intensity target has the effect of reducing absolute emissions over time.

**CC3.1c**

Please also indicate what change in absolute emissions this intensity target reflects

ID	Direction of change anticipated in absolute Scope 1+2 emissions at target completion?	% change anticipated in absolute Scope 1+2 emissions	Direction of change anticipated in absolute Scope 3 emissions at target completion?	% change anticipated in absolute Scope 3 emissions	Comment
Int1	Decrease	32			The variation in emissions is calculated using publicly available production forecasts. The target set is only for Scope 1 & 2 emissions.

**CC3.1d**

For all of your targets, please provide details on the progress made in the reporting year

ID	% complete (time)	% complete (emissions)	Comment
Int1	47%	0%	The company's GHG emissions per ounce increased to 2012 and have since been decreasing. They are still higher than those in the base year. Mining methods are becoming increasingly energy intensive as mine depth, complexity and haulage distances increase at our maturing mines. An acquisition in 2012 and opening a new mine in 2013 have helped to reverse the trend, in addition to concerted energy efficiency initiatives.

**CC3.2**

Does the use of your goods and/or services directly enable GHG emissions to be avoided by a third party?

Yes

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**CC3.2a****Please provide details of how the use of your goods and/or services directly enable GHG emissions to be avoided by a third party**

AngloGold Ashanti produced 1.3 Mlb of uranium oxide in 2014. It is sold to nuclear energy producers in developed countries. By producing electricity using uranium rather than fossil fuels such as coal, GHG emissions are avoided.

The World Nuclear Association provides a methodology for calculating the CO<sub>2</sub>e emissions saved using uranium rather than coal at <http://www.world-nuclear.org/info/Energy-and-Environment/Uranium,-Electricity-and-Climate-Change/>. Applying this methodology as described below, one calculates that AngloGold Ashanti's uranium saved 23 Mt of CO<sub>2</sub>e in calendar 2014. This is 5 times the company's combined scope 1 and 2 emissions.

In 2014, AGA produced 1.3 Mlb of uranium oxide concentrate (U<sub>3</sub>O<sub>8</sub>).  
1.3 Mlb = 590 t uranium oxide concentrate  
590 t uranium oxide concentrate comprises 590\*0.848 = 500 t uranium  
500 t uranium saves 500/22 = 23 Mt CO<sub>2</sub> generated from coal.

The assumptions are provided on the WNA web page above: A 1,000 megawatt electrical (MWe) coal-fired power station burning coal has a typical fuel requirement of almost 3.2 million tonnes\* of black coal a year, assuming coal yielding 24 MJ/kg and plant operating at 80% capacity. A nuclear power reactor of the same capacity (after its initial fuel loading of uranium) has an annual requirement of around 27 tonnes of fuel. Producing this amount of uranium fuel requires the mining of 45-70,000 tonnes of typical Australian uranium ore. This yields about 200 tonnes of uranium oxide concentrate. The uranium oxide is enriched to yield the 27 tonnes of actual fuel. Each year the 1000 MWe coal-fired power station produces about 7 million tonnes of carbon dioxide. Every 22 tonnes of uranium used avoids the emission of one million tonnes of carbon dioxide, relative to coal.

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**CC3.3****Did you have emissions reduction initiatives that were active within the reporting year (this can include those in the planning and/or implementation phases)**

Yes

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**CC3.3a****Please identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO<sub>2</sub>e savings**

Stage of development	Number of projects	Total estimated annual CO <sub>2</sub> e savings in metric tonnes CO <sub>2</sub> e (only for rows marked *)
Under investigation	2	
To be implemented*	5	25000

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Implementation commenced*		
Implemented*	3	3515
Not to be implemented		

### CC3.3b

For those initiatives implemented in the reporting year, please provide details in the table below

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency: Processes	VSD's installed on the potable water distribution pumps in Vaal River district of South Africa operations. Improves pump control and thus reduces energy required.	705	Scope 2	Voluntary	44000	45000	<1 year	11-15 years	Further control improvement is being investigated.
Energy efficiency: Processes	Energy meter upgrade, additional meters and real time consumption monitoring	2700	Scope 2	Voluntary	170000	540000	1-3 years	Ongoing	This project was primarily done to improve control in electricity supply emergency situations but also has an impact on energy reductions as actual consumption can be monitored in real time against planned consumption.
Energy efficiency:	In order to treat underground water and enhance the	110	Scope 2	Voluntary	700000	170000	<1 year	16-20 years	In addition to the energy savings, with the

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Processes	sustainability of the underground operation by reducing pumping costs, as well as make production at deeper levels feasible, an Effluent Treatment Plant was built at a depth of 800 metres underground. Reduced pumping, because water did not have to be pumped to the surface for treatment, resulted in energy consumption and thus GHG emissions being reduced.								commissioning of the new plant, there has been a 40% reduction in the volume of water pumped through the shaft system, with a further reduction anticipated in 2015. Fresh water abstraction has been reduced by more than 30%.

### CC3.3c

#### What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Compliance with regulatory requirements/standards	All of AngloGold Ashanti's operating standards require regulatory compliance as a minimum. Regular internal and external reviews ensure that regulatory compliance is maintained.
Dedicated budget for energy efficiency	All of AngloGold Ashanti's operations have dedicated energy efficiency budgets. At our South African mines, which accounted for 36% of our total global energy consumption in 2013 but was responsible for 65% of our global carbon emissions, annual absolute and energy efficiency performance improvement targets are set and a dedicated budget provided.
Marginal abatement cost curve	In both Australia and South Africa, where carbon pricing is or was in place, we have constructed marginal abatement cost curves for each affected mine and use these curves to prioritise emissions reduction activities. These are updated annually.
Other	The Technology Innovation Consortium for our deep underground mines in South Africa is investigating opportunities for significantly improved energy efficiency, with a concomitant impact on GHG emissions.
Internal price of carbon	All planning at our South African operations uses the latest information on the proposed carbon tax.

## Page: CC4. Communication

### CC4.1

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	Status	Page/Section reference	Attach the document
In mainstream financial reports but have not used the CDSB Framework	Complete	1(3)	<a href="https://www.cdp.net/sites/2015/79/779/Climate%20Change%202015/Shared%20Documents/Attachments/CC4.1/AGA-AFS14.pdf">https://www.cdp.net/sites/2015/79/779/Climate Change 2015/Shared Documents/Attachments/CC4.1/AGA-AFS14.pdf</a>
In other regulatory filings	Complete	1(3)	<a href="https://www.cdp.net/sites/2015/79/779/Climate%20Change%202015/Shared%20Documents/Attachments/CC4.1/AGA-IR14%20Ir.pdf">https://www.cdp.net/sites/2015/79/779/Climate Change 2015/Shared Documents/Attachments/CC4.1/AGA-IR14 Ir.pdf</a>
In other regulatory filings	Complete	22(23), 26(27)-27(28), 73(74)	<a href="https://www.cdp.net/sites/2015/79/779/Climate%20Change%202015/Shared%20Documents/Attachments/CC4.1/2014Form20F.pdf">https://www.cdp.net/sites/2015/79/779/Climate Change 2015/Shared Documents/Attachments/CC4.1/2014Form20F.pdf</a>
In voluntary communications	Complete	1(3), 26(28)	<a href="https://www.cdp.net/sites/2015/79/779/Climate%20Change%202015/Shared%20Documents/Attachments/CC4.1/Sustainability%20Report%202014%20Ir.pdf">https://www.cdp.net/sites/2015/79/779/Climate Change 2015/Shared Documents/Attachments/CC4.1/Sustainability Report 2014 Ir.pdf</a>

### Further Information

Additional information is provided in our online report at <http://www.aga-reports.com/14/sdr/material-issues/environmental-stewardship/energy>.

## Module: Risks and Opportunities

### Page: CC5. Climate Change Risks

### CC5.1

Have you identified any inherent climate change risks that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

- Risks driven by changes in regulation
- Risks driven by changes in physical climate parameters
- Risks driven by changes in other climate-related developments

## Please describe your inherent risks that are driven by changes in regulation

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
International agreements	AngloGold Ashanti (AGA) emits greenhouse gases (GHGs) directly by its operations, and indirectly via the external utilities from which it purchases power. Currently, a number of international and national measures to address or limit GHG emissions, including the Durban Platform, are in various phases of discussion or implementation in the countries in which the company operates. In particular, the Durban Platform commits all parties to develop a global mitigation regime which could take effect in 2020, with the specific terms of that legally binding accord,	Increased operational cost	1 to 3 years	Direct	Virtually certain	Medium-high	Indirect carbon taxes of up to USD17 million per annum.	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 focussed on reducing its greenhouse gas emissions footprint as quickly as possible. 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. Energy efficiency improvements of over 15% have	Our mitigation spend exceeded US\$30M in 2014. Our government influencing budget in 2014 exceeded US\$3M.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>including individual targets, to be finalized in 2015. These, or future, measures 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 or taxes passed on by electricity utilities which supply the company.</p>							<p>been achieved in South Africa, which accounts for 65% of our GHG emissions and efforts are ongoing, as described elsewhere in this submission. The energy efficiency focus was initially in South Africa, but has in recent years spread to other jurisdictions in which we operate. 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</p>	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								and regulatory trends.	
Cap and trade schemes	Australia had a regulatory framework that consisted of a reporting mechanism (National Greenhouse and Energy Reporting Act 2007, NGER, repealed in 2014) and a cap and trade system (Clean Energy Future legislation). At its core was a carbon pricing mechanism that started in July 2012 and was ended in June 2014. If such a scheme were to be revived it could pose a risk to AGA of increased operational costs.	Increased operational cost	Unknown	Direct	Unlikely	Medium	Because no proposals have been made it is impossible to estimate the potential costs.	Management is focused on 2 primary activities: reducing GHG emissions and engaging with the government through industry associations. AGA is focussed on reducing its greenhouse gas emissions footprint in Australia, although increasing the number of operations from one to two has resulted in increased absolute emissions. 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.	Our mitigation spend exceeded US\$30M in 2014. Our government influencing budget in 2014 exceeded US\$3M.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								AngloGold Ashanti engages with the state and federal governments via government agencies directly and through state and federal 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.	
Carbon taxes	The South African Finance Minister repeated during his 2015 Budget Speech in parliament his plan to introduce a carbon tax on 1 January 2016, adopting the proposed a tax rate of R120 per tonne of CO2 equivalent, with an initial tax-free exemption	Increased operational cost	1 to 3 years	Indirect (Supply chain)	Virtually certain	Medium-high	Indirect carbon taxes of up to USD17 million per annum through increased electricity and supply chain costs. The company's electricity bill is expected to rise by approximately USD12 million in the first year. The potential increase in the cost of major	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 focussed on reducing its	Our mitigation spend exceeded US\$30M in 2014. Our government influencing budget in 2014 exceeded US\$3M.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>threshold of 60%. This might cause AGA's costs to increase substantially, although the precise impact on the company's operations cannot yet be determined because some important details have not yet been provided by the government. Suppliers are expected to increase their prices to offset carbon taxes and other carbon pricing mechanisms and to pass on other costs associated with mitigating risks associated with climate change.</p>						<p>consumables was assessed for our South African operations, based on the information available from the government. The impact of the proposed carbon tax on goods purchased in South Africa is estimated to be USD5 million in the first year.</p>	<p>greenhouse gas emissions footprint as quickly as possible. 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. Energy efficiency improvements of over 15% have been achieved in South Africa, which accounts for 65% of our GHG emissions and efforts are ongoing, as described elsewhere in this submission. The energy efficiency focus was initially in South Africa, but has in recent years spread to other jurisdictions in which we operate. AngloGold Ashanti engages</p>	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								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.	
Cap and trade schemes	Jurisdictions including Brazil and Colorado (United States of America) are considering GHG trading schemes and/or other regulation of GHG emissions, though the precise impact on AGA's operations cannot yet be determined.	Increased operational cost	3 to 6 years	Indirect (Supply chain)	Likely	Medium-high	Because no proposals have been made it is impossible to estimate the potential costs.	Management is focused on 2 primary activities: reducing GHG emissions and engaging with the government through industry associations. AGA is focussed on reducing its greenhouse gas emissions footprint in Brazil and the USA. AngloGold Ashanti engages	Our mitigation spend exceeded US\$30M in 2014. Our government influencing budget in 2014 exceeded US\$3M.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								with the state and federal governments via government agencies directly and through state and federal 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.	
Emission reporting obligations	In the USA, Brazil and South Africa, legislation has already been introduced or is under consideration for emissions reporting. AGA has good records of emissions that are being refined progressively. There is some risk associated with the quality of emissions data	Increased operational cost	1 to 3 years	Direct	Virtually certain	Low	Until reporting requirements have been defined it will not be possible to estimate the costs; however they are unlikely to be substantial given the voluntary reporting the company carries out already.	AngloGold Ashanti has robust internal GHG reporting systems in place. AngloGold Ashanti engages with governments via government agencies directly and through industry associations to advocate regulatory provisions that are not detrimental to	Reporting requires significant management time. GHG reporting is part of the suite of sustainability reporting carried out by the company and it is not possible to quantify it separately.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	where there are significant technological challenges in measurement, e.g. low concentrations of methane in underground operations.							business and the mining industry in particular. These associations also keep the company updated on policy and regulatory trends.	
Fuel/energy taxes and regulations	In all jurisdictions where we operate, fuel taxes apply. Other energy taxes and regulations apply in Australia, USA, Brazil and South Africa. 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.	Increased operational cost	Up to 1 year	Direct	Virtually certain	Low-medium	The risks relate to uncertainty in regard to potential legislation or regulation and to changes to current legislation and regulation. By its very nature the financial implications of these uncertainties cannot be determined. Uncertainty itself imposes a cost as a result of delays, exploration of alternatives and government advocacy activities.	AngloGold Ashanti engages with governments via government agencies directly and through 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.	Our government influencing budget in 2014 exceeded US\$3M.
General environmental regulations, including planning	The company must comply with a host of environmental regulations in each of the countries in which it operates.	Increased operational cost	Up to 1 year	Direct	Virtually certain	Low-medium	The risks relate to uncertainty in regard to potential legislation or regulation and to changes to current	AngloGold Ashanti engages with governments via government agencies directly and through	Our government influencing budget in 2014 exceeded US\$3M.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	These regulations are constantly changing, especially in South Africa, Australia and Brazil, usually imposing even more stringent requirements. Requirements for environmental impact assessments, biodiversity protection and mine closure, in particular, increase amongst others, adaptation risks.						legislation and regulation. By its very nature the financial implications of these uncertainties cannot be determined. Uncertainty itself imposes a cost as a result of delays, exploration of alternatives and government advocacy activities.	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.	
Uncertainty surrounding new regulation	Uncertainty surrounding expected legislation and regulations on emissions mitigation and carbon pricing especially in South Africa, Brazil, USA and Australia causes delay to investment decisions and variations to operational focus as alternative measures are floated for	Increased capital cost	1 to 3 years	Direct	Virtually certain	High	Uncertainty imposes a cost as a result of delays, exploration of alternatives and government advocacy activities.	AngloGold Ashanti engages with governments via government agencies directly and through 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	Our government influencing budget in 2014 exceeded US\$3M.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	discussion. We also need to devote significant time to government influencing activities to ensure practical outcomes for business and the environment.							trends.	
Lack of regulation	In South Africa particularly, deregulation of the electricity market is proceeding slowly with many of the requisite regulations on for example, transmission costs, access for Independent Power Producers to the national grid, etc. not yet finalised.	Increased operational cost	Up to 1 year	Direct	Virtually certain	Medium-high	Uncertainty imposes a cost as a result of delays, exploration of alternatives and government advocacy activities.	AngloGold Ashanti engages with the government via government agencies directly and through 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.	Our government influencing budget in 2014 exceeded US\$3M.
Other regulatory drivers	To fully address climate change, a full policy suite is required. where national governments choose to implement only	Increased operational cost	Up to 1 year	Direct	Very likely	Medium-high	Uncertainty imposes a cost as a result of delays, exploration of alternatives and government advocacy activities.	AngloGold Ashanti engages with governments via government agencies directly and through industry associations to	Our government influencing budget in 2014 exceeded US\$3M.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	some aspects of the policy suite, government intervention can potentially introduce bias and unintended consequences for business, including incentivising perverse actions. This risk is present in all jurisdictions in which we operate.							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.	
Renewable energy regulation	Eskom, the South African electricity utility, is required to include a percentage of energy from renewable sources in its mix. This is more expensive than the established coal-based infrastructure, which increases the cost of electricity. South Africa also imposes a levy on electricity generated from non-renewable sources and is considering raising this further in 2015.	Increased operational cost	Up to 1 year	Indirect (Supply chain)	Virtually certain	Low-medium	The electricity levy is currently ZAR0.035/kWh. The company paid approximately USD8 million in 2014 for this levy alone. Uncertainty imposes a cost as a result of delays, exploration of alternatives and government advocacy activities.	AngloGold Ashanti engages with the government via government agencies directly and through 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.	Our government influencing budget in 2014 exceeded US\$3M.

CC5.1b

Please describe your inherent risks that are driven by change in physical climate parameters

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in mean (average) temperature	Increased temperatures can cause adverse operating impacts on major plant and equipment. In some cases, ambient temperatures may exceed cooling equipment operating parameters, requiring it to be replaced. Higher temperatures can also hinder rehabilitation efforts and result in a number of health and safety risks, including an increased risk of wildfires.	Increased operational cost	>6 years	Direct	Virtually certain	Medium-high	Increased temperatures will require increased underground cooling capacity: the cost of upgrading or replacing machines is significant. Higher temperatures may affect the effectiveness of rehabilitation programmes, developed at great cost. Additional research will be costly. Providing air conditioning for longer hot seasons and measures to prevent or combat fires also be costly. We are still investigating the likely impacts on operational infrastructure, performance and associated costs.	Mines are long-term investments, with the result that mine planning, operation, and closure processes already incorporate management of extreme climate events. We have assessed the climate exposure risks for all of our operations in a detailed study carried out in 2008/9 using external consultants. We are now assessing the adaptation requirements for those operations identified as being at greatest risk.	The scoping study is expected to cost ~ZAR350k. Adaptation and remediation interventions are yet to be costed.
Change in	Extreme weather	Reduction/disruption	Up to 1	Direct	Very likely	Medium-	High rainfall	Mines are long-	The scoping

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
precipitation extremes and droughts	events have the potential to cause significant damage to livelihoods and property, and thus be costly to the company. In the recent past, floods and droughts have disrupted the operations at some of AngloGold Ashanti's mines. For example, unprecedented heavy rains in February and March 2011 in Australia flooded the Sunrise Dam Gold Mine and forced a temporary shutdown of operations. The flood event reduced underground production for four months and open-pit production for six months, and full costs were incurred despite the shutdown and	in production capacity	year			high	events can lead to flooding and disruption of mining and transport operations, amongst other consequences. Droughts have longer-lasting impacts and are more difficult to prepare for. AGA is still investigating the likely impacts on operational infrastructure, performance and costs.	term investments, with the result that mine planning, operation, and closure processes already incorporate management of extreme climate events. We have assessed the climate exposure risks for all of our operations. We are now assessing the adaptation requirements for those operations identified as being at greatest risk. Water availability at our mine in the USA is being enhanced through the purchase of additional water rights, while short-term water supply constraints at	study is expected to cost ~ZAR350k. Adaptation and remediation interventions are yet to be costed.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	slow-down. Operations at our Cripple Creek & Victor Gold Mine in Colorado, USA were affected in 2010-2013 by a severe drought in the Colorado River Basin. The lack of water reduced percolation through the heap leach pad, curtailing production and productivity. In Brazil, severe water shortages from low rainfall have been experienced in 2014 and 2015, adversely affecting hydro-electrical power generation.							the Tropicana Mine in Australia are being addressed through the expansion of borehole infrastructure, increasing capacity.	
Induced changes in natural resources	The adverse impacts of climate change on communities in close proximity to AngloGold Ashanti's operations could cause significant distress,	Wider social disadvantages	>6 years	Direct	Very likely	Low-medium	Adverse climate change impacts are likely to impact severely on adjacent communities, especially in developing countries. In particular,	Mines are long-term investments, with the result that mine planning, operation, and closure processes already	The scoping study is expected to cost ~ZAR350k. Adaptation and remediation interventions are yet to be

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>especially in developing countries and particularly the poorest countries in which AngloGold Ashanti operates. Specifically, competition for scarce water resources could mean further emphasis on providing water to communities and even on the company's ability to access sufficient water. Food and energy security are likely to be increasing challenges as well. Risk exposure due to increased disease prevalence in communities is not necessarily limited to a specific population, and has the potential to have a direct bearing on the wellbeing of company</p>						<p>competition for scarce water resources could require extensive investment in infrastructure. We are still investigating likely impacts on specific communities and expected costs of adaptation and remediation activities.</p>	<p>incorporate management of extreme climate events. We have assessed the climate exposure risks for all of our operations. We are now assessing the adaptation requirements for those operations identified as being at greatest risk.</p>	<p>costed.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	workforce, site staff and their families.								
Change in mean (average) precipitation	In Ghana, AGA's operations depend on hydroelectric power supplied by the state-controlled Volta River Authority (VRA). During periods of below average inflows from the Volta reservoir, electricity supplies from the Akosombo Dam, the VRA's primary generation source, may be curtailed. This has occurred in previous years (2006 and the first half of 2007). This can result in intermittent or no electricity supply and increased costs, either as a result of the VRA seeking additional, more costly sources, or AGA generating	Increased operational cost	3 to 6 years	Indirect (Supply chain)	More likely than not	Medium-high	During periods of limited electricity availability in Ghana, the grid is subject to disturbances and voltage fluctuations which can damage equipment. Increased power prices negatively impact operating costs and cash flow.	Mines are long-term investments, with the result that mine planning, operation, and closure processes already incorporate management of extreme climate events. We have assessed the climate exposure risks for all of our operations. We are now assessing the adaptation requirements for those operations identified as being at greatest risk.	The scoping study is expected to cost ~ZAR350k. Adaptation and remediation interventions are yet to be costed.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	its own power.								
Change in precipitation pattern	Altered rainfall patterns potentially affect the company's operations as water containment measures have generally been built in line with historic climatic patterns.	Increased operational cost	Unknown	Direct	More likely than not	Medium-high	Alteration of structures to accommodate changed rainfall patterns is potentially costly.	Mines are long-term investments, with the result that mine planning, operation, and closure processes already incorporate management of extreme climate events. We have assessed the climate exposure risks for all of our operations. We are now assessing the adaptation requirements for those operations identified as being at greatest risk.	The scoping study is expected to cost ~ZAR350k. Adaptation and remediation interventions are yet to be costed.
Other physical climate drivers	Mining operations and projects are vulnerable to supply chain disruption. AngloGold Ashanti's supply chain will potentially be	Increased operational cost	>6 years	Indirect (Supply chain)	Likely	Low-medium	It is not yet possible to estimate the impacts on the company's supply chain. There will be some options to change to lower-cost, lower-	We maintain strong relationships with our suppliers and use an external provider for market information.	We actively manage our supply chain risks and relationships with our suppliers.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>directly impacted by climate change as a result of sea level rise, increased storm intensities and other impacts that affect the transportation of equipment and stores to remote sites. The company's operations and development projects could be adversely affected by both shortages and long lead times to deliver strategic spares, critical consumables, mining equipment and metallurgical plant. Such goods include cement, oil, refrigerants and chemical reagents. These are supplied by industries that are vulnerable to climate change.</p>						risk suppliers.	<p>Anticipating price changes enables us to negotiate from a position of strength. This requires that we understand the climate change policy framework, which we ensure through direct engagement with government officials and through active participation in industry associations.</p>	

Please describe your inherent risks that are driven by changes in other climate-related developments

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Increasing humanitarian demands	Increased pressure from neighbouring communities struggling with disease, crop failure and the depletion of natural resources.	Wider social disadvantages	Unknown	Indirect (Supply chain)	Very likely	Low-medium	A changing climate is likely to impact severely on adjacent communities, especially in developing countries. Our mines are often the major source of income over a very large area. In particular, competition for scarce water resources could require extensive investment in infrastructure. We are still investigating likely impacts on specific communities and expected costs of adaptation and remediation activities.	AngloGold Ashanti developed in 2013 a new Sustainability Strategy that has a core requirement to work together with host communities to jointly build sustainable futures. A major project was carried out during 2008/9 to identify and, where possible, quantify, all of the company's climate change-related risks. This has helped the company to understand the risks it faces, as well as the opportunities it has, and these are now being communicated as the opportunity arises. Increasingly detailed footprint data is being published in the interests of transparency and to demonstrate that	We have not yet costed management action associated with addressing these risks.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								the company has a good understanding of its contribution to global climate change.	
Other drivers	There is pressure from investors and lenders to reduce the company's exposure to regulatory measures and to reduce its direct and indirect carbon emissions. It is possible that the company's market valuation could be impacted based on its perceived exposure to climate change-related risks.	Reduced stock price (market valuation)	Unknown	Direct	More likely than not	High	Investor interest in climate change is growing and broadening. If this changes to pressure to make operational changes, the costs are potentially very high.	AngloGold Ashanti developed in 2013 a new Sustainability Strategy that has a core requirement to work together with host communities to jointly build sustainable futures. A major project was carried out during 2008/9 to identify and, where possible, quantify, all of the company's climate change-related risks. This has helped the company to understand the risks it faces, as well as the opportunities it has, and these are now being communicated as the opportunity arises. Increasingly detailed footprint data is being published in the interests of transparency and to	Our government influencing budget in 2014 exceeded US\$3M.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								demonstrate that the company has a good understanding of its contribution to global climate change. In all countries in which it operates, AGA is focussed on reducing its greenhouse gas emissions footprint as quickly as possible. 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. The energy efficiency focus was initially in South Africa, but has in recent years spread to other jurisdictions in which we operate.	
Reputation	If the company is perceived to be ignoring climate change risks this is likely to impact	Inability to do business	>6 years	Direct	Unlikely	Low-medium	AGA has worked hard to build a reputation as being a proactive, constructive	AngloGold Ashanti developed in 2013 a new Sustainability Strategy that has a core requirement to	The company's reputation is built through a host of

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>its reputation. If the mining industry as a whole is perceived to be a poor performer, the company's reputation will be also be affected, though to a lesser extent.</p>						<p>contributor to the climate change response debate, pushing for ambitious yet realistic targets. This is expected to stand its reputation in good stead.</p>	<p>work together with host communities to jointly build sustainable futures. A major project was carried out during 2008/9 to identify and, where possible, quantify, all of the company's climate change-related risks. This has helped the company to understand the risks it faces, as well as the opportunities it has, and these are now being communicated as the opportunity arises. Increasingly detailed footprint data is being published in the interests of transparency and to demonstrate that the company has a good understanding of its contribution to global climate change.</p>	<p>actions, only some of which can be costed.</p>

CC6.1

Have you identified any inherent climate change opportunities that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

- Opportunities driven by changes in regulation
- Opportunities driven by changes in physical climate parameters
- Opportunities driven by changes in other climate-related developments

CC6.1a

Please describe your inherent opportunities that are driven by changes in regulation

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Carbon taxes	Carbon offsets present an opportunity to AngloGold Ashanti with the anticipated introduction of a carbon tax to South Africa. AGA could generate offsets.	Reduced operational costs	1 to 3 years	Direct	Unlikely	Low	We were anticipating that energy efficiency initiatives or the adoption of renewables at our operations in South Africa or from other operations in Africa would provide offset opportunities but these are excluded from the current proposal published by National Treasury. As currently proposed, offsets would probably be	Opportunities to generate carbon credits will be investigated once the requirements have been finalised. If an identified project has potential to earn carbon credits it will be investigated further. Owing to the complexity of the proposals as drafted, this component will be outsourced to specialist consultants.	The cost to the company of carbon credit generation has been <ZAR10M to date.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							too expensive to develop.		
Fuel/energy taxes and regulations	In 2010 AngloGold Ashanti commenced a large technology innovation project that aimed at safer, more productive and energy efficient deep underground mining. This project is expected to provide extensive energy and cost benefits (these will be quantified as the projects are specified in more detail).	Reduced operational costs	>6 years	Direct	Likely	High	The potential energy savings are substantial. With electricity prices in South Africa rising at well above the inflation rate, the benefits are compounded.	The company is partnering with a consortium of worldwide development partners with global reach, who will mutually benefit from project success. The project is staged to ensure that progress can be measured and benefits accrued.	The Technology Innovation Consortium project cost USD8m in 2014.
Cap and trade schemes	In July 2012 the Australian Government introduced a fixed price cap and trade scheme, with the intention of moving towards full market pricing in 2015, however the scheme was	Reduced operational costs	1 to 3 years	Direct	Unlikely	Low-medium	On 1 July 2015, the carbon price was supposed to transition to a fully flexible price under an emissions trading scheme. A study was conducted where carbon trading opportunities were assessed on seven parameters.	All possibilities for generating carbon credits from our worldwide operations will be considered once there is certainty that the scheme will proceed or if the global carbon price improves.	Costs are yet to be incurred.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	abolished in 2014. AGA was hoping to gain benefits from carbon offsets from this market. We have						If an internal project met the criteria, the intention was to trade verified credits within the company, however this will now only be possible if the Australian ETS is revived. In addition, there are opportunities to sell credits to companies based in Europe and elsewhere, though the carbon price does not currently make the project economics work.		

**CC6.1b**

Please describe the inherent opportunities that are driven by changes in physical climate parameters

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in mean (average) temperature	AngloGold Ashanti has operations in the southern part of Argentina, where the average annual temperature at its	Reduced operational costs	3 to 6 years	Direct	Likely	Low-medium	The predicted temperature increase will reduce the energy required for heating and hence operational	The opportunity is managed by adapting equipment operating protocols on the	No additional costs would be incurred, except for minor control system adjustments.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	operations is below 10°C. The predicted increase in temperature in Argentine Patagonia will reduce heating costs at the company's mine operations.						costs. The cost savings will increase as average temperatures increase but will depend on the extent of the rise.	basis of prevailing weather conditions.	

#### CC6.1c

Please describe the inherent opportunities that are driven by changes in other climate-related developments

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Changing consumer behaviour	Uranium is a by-product of some of AngloGold Ashanti's operations in South Africa. Increased demand for nuclear power as a substitute for carbon-based electricity presents an opportunity.	Increased demand for existing products/services	3 to 6 years	Direct	Very likely	Medium-high	AngloGold Ashanti produces uranium oxide concentrates as a by-product. The company considers that nuclear power has a good outlook in the medium- to long-term and the financial implication of this opportunity lies in a positive influence that uranium prices	AngloGold Ashanti is the largest uranium producer in South Africa and because of the expected demand for nuclear fuel, AGA will explore opportunities to increase its uranium production, especially in South Africa. This strategy includes	The 2011 transaction cost ZAR205M/ US\$30M. The 2012 transaction cost US\$335M. In respect of new opportunities, full project assessment methodologies are applied to each acquisition opportunity.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							will rise. In 2011, AGA invested in a company with significant uranium production potential, and acquired the company completely in 2012. Uranium income represented 0.9% of revenue in 2014 and it is expected that this proportion will rise.	acquisition of refining assets and other production opportunities.	
Increasing humanitarian demands	Enhanced relationships with key stakeholders as grass-roots adaptation projects are developed, and working with host governments and industry to develop wide-ranging adaptive capacities and technology changes.	Wider social benefits	>6 years	Indirect (Supply chain)	More likely than not	Low-medium	Equalising relationships with local communities has reputation and longevity benefits for our mining operations. However, these are difficult to quantify financially.	The opportunities driven by humanitarian demand are being approached with respect for our host communities to maintain long-lasting relationships.	Costs will vary according to the nature of joint initiative.

## Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

### Page: CC7. Emissions Methodology

#### CC7.1

Please provide your base year and base year emissions (Scopes 1 and 2)

Scope	Base year	Base year emissions (metric tonnes CO2e)
Scope 1	Mon 01 Jan 2007 - Wed 31 Jan 2007	1088000
Scope 2	Mon 01 Jan 2007 - Wed 31 Jan 2007	3423000

#### CC7.2

Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

Please select the published methodologies that you use

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

#### CC7.3

Please give the source for the global warming potentials you have used

Gas	Reference
HFCs	IPCC Fourth Assessment Report (AR4 - 100 year)
Other: CFC-11	IPCC Third Assessment Report (TAR - 100 year)
CO2	IPCC Fourth Assessment Report (AR4 - 100 year)

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**CC7.4**

Please give the emissions factors you have applied and their origin; alternatively, please attach an Excel spreadsheet with this data at the bottom of this page

Fuel/Material/Energy	Emission Factor	Unit	Reference
Aviation gasoline	2.54	metric tonnes CO2e per m3	NGA Factors 2008
Bituminous coal	2.47	metric tonnes CO2e per metric tonne	IPCC2006
Distillate fuel oil No 6	3.35	metric tonnes CO2e per m3	IPCC2006
Diesel/Gas oil	2.93	metric tonnes CO2e per m3	IPCC2006
Liquefied petroleum gas (LPG)	2.97	metric tonnes CO2e per metric tonne	NGA Factors 2008
Natural gas	2.56	metric tonnes CO2e per m3	IPCC2006
Lubricants	2.81	metric tonnes CO2e per m3	IPCC2006
Motor gasoline	2.5	metric tonnes CO2e per m3	IPCC2006

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**Further Information**

**Page: CC8. Emissions Data - (1 Jan 2014 - 31 Dec 2014)**

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**CC8.1**

Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory

Operational control

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**CC8.2**

Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e

1425200

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**CC8.3**

Please provide your gross global Scope 2 emissions figures in metric tonnes CO<sub>2</sub>e

3148400

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**CC8.4**

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

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**CC8.4a**

Please 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	Relevance of Scope 1 emissions from this source	Relevance of Scope 2 emissions excluded from this source	Explain why the source is excluded
Land Clearance	Emissions are relevant but not yet calculated		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.
Explosives	Emissions are not evaluated		Explosives are excluded to avoid double accounting because we include emissions from explosives' source materials.
Process Emissions	Emissions are not evaluated		AGA does not have material process emissions.
Scope 2 emissions of some regional offices		Emissions are not evaluated	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.

**CC8.5**

**Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations**

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	More than 2% but less than or equal to 5%	Data Gaps Metering/ Measurement Constraints Other: Published Emission Factors	With a number of operations in remote locations, it is difficult to ensure that full disclosure is occurring. However, a rigorous internal audit program is progressively removing shortfalls in approach. There is some uncertainty as to whether the emissions factors used for fuels in the different countries of operation are the most current. Emissions from land clearance and explosives were determined in a comprehensive GHG emissions study carried out in 2008/9 and were found to be immaterial. The quantification of direct emissions from land clearance activities is under review.
Scope 2	Less than or equal to 2%	Data Gaps Assumptions Metering/ Measurement Constraints	Where isolated instances of immaterial emissions exist, eg with respect to regional office buildings, these emissions are not included. AGA relies on advice from regulators in countries with national electricity grids to provide conversion factors between quantity of electricity consumed and resultant emissions. AGA reports on a calendar year basis and sometimes, regulators do not provide latest information in time for reporting. (In these instances, data will be restated in subsequent years.) AGA has real time check metering installed at most but not all grid supply points.

**CC8.6**

**Please indicate the verification/assurance status that applies to your reported Scope 1 emissions**

Third party verification or assurance complete

**CC8.6a**

**Please provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements**

Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
Reasonable assurance	<a href="https://www.cdp.net/sites/2015/79/779/Climate%20Change%202015/Shared%20Documents/Attachments/CC8.6a/assurance-report.pdf">https://www.cdp.net/sites/2015/79/779/Climate Change 2015/Shared Documents/Attachments/CC8.6a/assurance-report.pdf</a>	Page 2, 2nd bullet.	ISAE 3410	100

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**CC8.7**

Please indicate the verification/assurance status that applies to your reported Scope 2 emissions

Third party verification or assurance complete

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**CC8.7a**

Please provide further details of the verification/assurance undertaken for your Scope 2 emissions, and attach the relevant statements

Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
Reasonable assurance	<a href="https://www.cdp.net/sites/2015/79/779/Climate%20Change%202015/Shared%20Documents/Attachments/CC8.7a/assurance-report.pdf">https://www.cdp.net/sites/2015/79/779/Climate Change 2015/Shared Documents/Attachments/CC8.7a/assurance-report.pdf</a>	Page 2, 3rd bullet.	ISAE 3410	100

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**CC8.8**

Please identify if any data points have been verified as part of the third party verification work undertaken, other than the verification of emissions figures reported in CC8.6, CC8.7 and CC14.2

Additional data points verified	Comment
Other: Energy consumption	A host of additional data is verified, including energy consumption.

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**CC8.9**

Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

No

**CC9.1**

**Do you have Scope 1 emissions sources in more than one country?**

Yes

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**CC9.1a**

**Please break down your total gross global Scope 1 emissions by country/region**

Country/Region	Scope 1 metric tonnes CO2e
Argentina	117600
Australia	359300
Brazil	42300
Ghana	36800
Guinea	149800
Mali	124800
South Africa	158400
Tanzania	238000
United States of America	198000

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**CC9.2**

**Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)**

By business division

By facility

By GHG type

---

**CC9.2a**

Please break down your total gross global Scope 1 emissions by business division

Business division	Scope 1 emissions (metric tonnes CO2e)
Americas Region	357900
Australia Region	359300
Continental Africa Region	549600
South Africa Region	158400

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**CC9.2b**

Please break down your total gross global Scope 1 emissions by facility

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
Vaal River	92700	-26.967366	26.771278
West Wits	65600	-26.338961	27.495003
Mine Waste Solutions	100	-26.96859	26.769562
Obuasi	44500	6.192225	-1.670909
Iduapriem	14400	5.309766	-2.005005
Siguiri	149800	11.428374	-9.18457
Sadiola	107200	13.890411	-11.70318
Yatela	17600	14.105944	-11.78421
Geita	238000	-2.880123	15.765638
Sunrise Dam	134900	-29.075375	122.415161
Tropicana	224300	-29.308227	124.698994
Cripple Creek and Victor	238000	38.710379	-105.140061
Corrego do Sitio Mineração	30800	-19.987304	-43.84635
Mineração Serra Grande	11500	-14.55833	-49.972000
Cerro Vanguardia	30800	-49.30621	-67.729168

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**CC9.2c**

Please break down your total gross global Scope 1 emissions by GHG type

GHG type	Scope 1 emissions (metric tonnes CO2e)
CO2	1350000
HFCs	55200
Other: CFC (R11)	20000

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**Further Information**

The following should be noted when comparing prior year's emissions to 2014: 1. 2014 was the first full year of operations at the Tropicana gold mine that was commissioned in late 2013. 2. Emissions from the Navachab gold mine were excluded for the full 2014 period, having been disposed of by sale.

**Page: CC10. Scope 2 Emissions Breakdown - (1 Jan 2014 - 31 Dec 2014)**

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**CC10.1**

Do you have Scope 2 emissions sources in more than one country?

Yes

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**CC10.1a**

Please break down your total gross global Scope 2 emissions and energy consumption by country/region

Country/Region	Scope 2 metric tonnes CO2e	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted for in CC8.3 (MWh)
Brazil	7900	269900	269900
Ghana	235000	462400	
South Africa	2823000	2940600	
United States of America	82600	108500	

---

**CC10.2**

Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

By business division

By facility

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**CC10.2a**

Please break down your total gross global Scope 2 emissions by business division

Business division	Scope 2 emissions (metric tonnes CO2e)
Americas Region	90400
Continental Africa Region	235000
South Africa Region	2823000

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**CC10.2b**

Please break down your total gross global Scope 2 emissions by facility

Facility	Scope 2 emissions (metric tonnes CO2e)
Vaal River operations	1267600
West Wits operations	1354000
Mine Waste Solutions	201300
Iduapriem Gold Mine	59900
Obuasi Gold Mine	175100
Corrego do Sitio Mineracao	5300
Mineracao Serra Grande	2600
Cripple Creek & Victor operations	82600

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**Further Information**

The following should be noted when comparing prior year's emissions to 2014: 1. Emissions for the Navachab gold mine in Namibia were excluded from the reporting period, having been disposed of by sale during late 2013/ early 2014.

**Page: CC11. Energy**

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**CC11.1**

**What percentage of your total operational spend in the reporting year was on energy?**

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

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**CC11.2**

**Please state how much fuel, electricity, heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year**

Energy type	MWh
Fuel	4911500
Electricity	3924300
Heat	
Steam	
Cooling	

---

**CC11.3**

**Please complete the table by breaking down the total "Fuel" figure entered above by fuel type**

Fuels	MWh
Aviation gasoline	6500
Bituminous coal	375300
Diesel/Gas oil	3776900
Distillate fuel oil No 6	333600

Fuels	MWh
Kerosene	3000
Liquefied petroleum gas (LPG)	6500
Waste oils	3700
Natural gas	663700
Motor gasoline	13400

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#### CC11.4

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor in the Scope 2 figure reported in CC8.3

Basis for applying a low carbon emission factor	MWh associated with low carbon electricity, heat, steam or cooling	Comment
Supplier specific, not backed by instruments	269900	Hydropower sources utilised
Non-grid connected low carbon electricity generation owned by company, no instruments created	115000	Hydro-electric power generation facility owned by company.
Non-grid connected low carbon heat, steam or cooling, generation owned by company	27900	Gravity fed turbine hydropower generation.

#### Page: CC12. Emissions Performance

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#### CC12.1

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

Increased

CC12.1a

Please 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

Reason	Emissions value (percentage)	Direction of change	Comment
Emissions reduction activities	4.3	Decrease	As a consequence of emissions reduction activities related to Scope 2 energy sources (and adjusted for the Navachab gold mine divestment), indirect emissions decreased by 4.3% on 2013. 2013 Scope 2 emissions were 3290445 tCO <sub>2</sub> e. Navachab's 2013 Scope 2 emissions were 1420 tCO <sub>2</sub> e. 2014 Scope 2 emissions were 3148420 tCO <sub>2</sub> e. So the percentage change was $(3148420 - (3290445 - 1420)) / (3290445 - 1420) * 100 = -4.3\%$
Divestment	0.9	Decrease	The Navachab gold mine was sold in late 2013/ early 2014. Its emissions are omitted from the 2014 data. It had typically contributed 0.9% to the overall company emissions (Scope 1 and 2 combined). 2013 total emissions were 4566836 tCO <sub>2</sub> e. Navachab's 2013 total emissions were 43200 tCO <sub>2</sub> e. So the percentage contribution of Navachab to company emissions was $43200 / 4566836 * 100 = 0.9\%$ .
Acquisitions Mergers			
Change in output	3.8	Increase	The Tropicana gold mine delivered its first full year of production during 2014 and concomitantly its first whole year of contributing to the overall company GHG emission profile. This resulted in an increase of 3.8% on the company's overall 2013 emissions, excluding Tropicana's emissions from September 2013 onwards, when it came on stream. 2013 total emissions were 4566836 tCO <sub>2</sub> e. Tropicana's 2013 total emissions were 51000 tCO <sub>2</sub> e. Tropicana's 2014 total emissions were 224344 tCO <sub>2</sub> e. So the percentage increase in company emissions attributable to Tropicana was $(224344 - 51000) / (4553671 - 51000) * 100 = 3.8\%$ .
Change in methodology			
Change in boundary			
Change in physical operating conditions			
Unidentified			
Other	1.7	Increase	The accidental release of refrigerant gases (including non-Kyoto gases) during 2014 contributed an additional 1.2% on the 2013 emissions, a period during which no release of refrigerant gases was reported. 2014 refrigerant-related emissions were 55253 tCO <sub>2</sub> e. 2013 total emissions were 4566836 tCO <sub>2</sub> e. So the percentage increase in company emissions attributable to refrigerants was $55253 / 4566836 * 100 = 1.2\%$ .

**CC12.2**

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per unit currency total revenue

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
836	metric tonnes CO2e	unit total revenue	8.4	Increase	Ascribed to a marginal increase of 0.15% in overall emissions, while year on year revenue decreased by 7.6%.

**CC12.3**

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per full time equivalent (FTE) employee

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
78.78	metric tonnes CO2e	FTE employee	14.6	Increase	Ascribed to a marginal increase of 0.15% in overall emissions, while the year on year number of employees decreased by 12.6%.

**CC12.4**

Please provide an additional intensity (normalized) metric that is appropriate to your business operations

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
0.043	metric tonnes CO2e	tonne of ore processed	3.3	Decrease	Ascribed to a marginal increase of 0.15% in overall emissions, while the metric tonnes of ore processes increased by 3.6%.

**Page: CC13. Emissions Trading**

**CC13.1**

**Do you participate in any emissions trading schemes?**

No, and we do not currently anticipate doing so in the next 2 years

**CC13.2**

**Has your organization originated any project-based carbon credits or purchased any within the reporting period?**

No

**Page: CC14. Scope 3 Emissions**

**CC14.1**

**Please account for your organization's Scope 3 emissions, disclosing and explaining any exclusions**

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Purchased goods and services	Relevant, calculated	620000	Study 1. A study of the processes involved in the production of carbon-intensive commodities was undertaken to get an understanding of the following: a. The different tiers of suppliers involved in the production of the commodities b. Ascertain the pass through percentage (most likely) of carbon taxes from the lowest to the highest tier of suppliers until the production process is	0.00%	An assessment was carried out of the most carbon-intensive goods and services purchased in South Africa in order to determine the potential impact on the company's supply chain of the proposed carbon tax. The figures reported here are for goods and services procured in South Africa only. We used industry averages and worked from our extensive knowledge of our

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			<p>completed c. Determine the emissions from fuel inputs per ton (tCO<sub>2</sub> / ton = ton of carbon dioxide per ton) involved in the production of the commodities d. Determine the electricity consumption per ton (kWh / ton = kilowatt hour per ton) involved in the production of the commodities Indirect tax 2. The product of the result of the electricity consumption per ton (point 1.d.) and the grid emissions factor of 0.94 (tCO<sub>2</sub> / MWh = ton of carbon dioxide per megawatt hour) was calculated in order to arrive at the indirect emissions value. 3. The indirect emissions value in point 2 was thereafter multiplied by the carbon tax of ZAR120 / tCO<sub>2</sub> and the result of this product was multiplied by an effective tax rate of 40% in order to arrive at the indirect tax in ZAR per ton. 4. The indirect tax from the lower tiers of suppliers were now added to the indirect tax of the highest tier of supplier (point 3) in order to calculate the total indirect tax in ZAR per ton for the entire production process. Direct tax 5. The product of the emissions from fuel inputs per ton (tCO<sub>2</sub> / ton) per point (1.c.) and the carbon tax of R120 / tCO<sub>2</sub> was now calculated in order to arrive at the basic direct carbon tax in ZAR per ton. 6. The promulgated allowance applicable to the commodity was now applied to the result of the basic direct carbon tax in ZAR per ton (point 5) in order to arrive at the effective direct tax in ZAR per ton. Carbon cost 7. The sum of the total indirect tax in ZAR per ton (point 4) and the effective direct tax in ZAR per ton (point 6) was calculated in order to</p>		suppliers' activities.

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			determine the total carbon cost in ZAR per ton for the respective commodity. 8. The total carbon cost in ZAR per ton for the respective commodity (point 7) was now multiplied by the market price in ZAR per ton for the respective commodity and applied to the AGA spend per Region and the most likely pass through rate in order to determine the estimated carbon cost from suppliers for AGA under the most likely scenario.		
Capital goods	Relevant, not yet calculated				As the company's Scope 1 and 2 emissions are high (4.6 Mt in 2014) it is expected that 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)	Relevant, calculated	3500	These activities comprise motorcycle, petrol and diesel van, heavy goods diesel vehicle and air freight deliveries. A detailed external assessment was carried out in 2009 of 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 GHG footprint (4.6 Mt), these emissions were deemed to be immaterial and subsequent assessments have not been made. In previous years, the 2008 figure was escalated by 10% pa, but the 2008 figure is used again for 2013 and 2014 because the company's operations were scaled back significantly in 2013 and again in 2014.	0.00%	
Upstream	Not relevant,				These emissions have been included in the

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
transportation and distribution	explanation provided				section: Fuel-and-energy-related activities (not included in Scope 1 or 2).
Waste generated in operations	Relevant, calculated	10100	A detailed external assessment was carried out in 2009 of 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 (10.1 kt CO2e) were small relative to the company's GHG footprint, these emissions were deemed to be immaterial and subsequent assessments have not been made. In previous years, the 2008 figure was escalated by 10% pa, but the 2008 figure is used again for 2013 and 2014 because the company's operations were scaled back significantly in 2013 and again in 2014.	0.00%	
Business travel	Relevant, calculated	6400	Business travel calculations comprise flights and hotel stays. A detailed external assessment was carried out in 2009 of 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. Because the emissions were small relative to the company's GHG footprint, these emissions were deemed to be immaterial and subsequent assessments have not been made. In previous years, the 2008 figure was escalated by 10% pa, but the 2008 figure is used again for 2013 and 2014 because the company's operations were scaled back significantly in 2013 and again in 2014.	0.00%	
Employee	Relevant, not				As the company's Scope 1 and 2 emissions

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
commuting	yet calculated				are high (4.6 Mt in 2014) 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	Not relevant, explanation provided				The company's operating model is to own and operate assets. Leased assets are insignificant.
Downstream transportation and distribution	Relevant, not yet calculated				Gold is a low volume, high value product. AngloGold Ashanti produced 4.4 Moz, or 137 tonnes of gold, against revenue of \$5.2 bn. Transportation and distribution of this mass of product would result in insignificant emissions compared to our Scope 1 and 2 emissions of 4.6 Mt and do not justify the effort and expense of assessing them. However this has not been verified.
Processing of sold products	Relevant, not yet calculated				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 and smelting. It is anticipated that GHG emissions from these activities would be very small compared to our Scope 1 and 2 emissions of 4.6 Mt and do not justify the effort and expense of assessing them. However this has not been verified.
Use of sold products	Not relevant, explanation provided				Gold produced in 2014 was used in jewellery (53%), investment products - bars and coins (26%), central bank reserves (12%) and technological applications (10%). None of these is energy intensive so emissions are

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
					irrelevant.
End of life treatment of sold products	Not relevant, explanation provided				It 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. Refined gold in circulation is estimated to be 127 kt. Of this, 0.9% (1.1 kt) was recycled in 2014. The emissions from this are not material.
Downstream leased assets	Not relevant, explanation provided				The company's operating model is to own and operate assets. Leased assets are insignificant.
Franchises	Not relevant, explanation provided				The company does not have any franchises.
Investments	Relevant, calculated	107000			AngloGold Ashanti has one joint venture that it does not operate, Kibali Mine in the DRC. In its annual Sustainability Report, the operator, Randgold Resources, only publishes GHG emissions at company level, not site level. However site emissions are published in its CDP report. The amount given represents the GHG emissions of Kibali Mine in 2013.
Other (upstream)					
Other (downstream)					

**CC14.2**

**Please indicate the verification/assurance status that applies to your reported Scope 3 emissions**

No third party verification or assurance

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**CC14.3**

Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?

Yes

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**CC14.3a**

Please identify the reasons for any change in your Scope 3 emissions and for each of them specify how your emissions compare to the previous year

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Fuel- and energy-related activities (not included in Scopes 1 or 2)	Divestment	0	No change	Because of significant cost-cutting activities during 2014 it is estimated that these emissions decreased but because we prefer to apply a conservative approach we have reported unchanged emissions in 2014.
Waste generated in operations	Divestment	0	No change	Because of significant cost-cutting activities during 2014 it is estimated that these emissions decreased but because we prefer to apply a conservative approach we have reported unchanged emissions in 2014.
Business travel	Divestment	0	No change	Because of significant cost-cutting activities during 2014 it is estimated that these emissions decreased but because we prefer to apply a conservative approach we have reported unchanged emissions in 2014.
Investments	Change in output	287	Increase	Mining operations were increased significantly at Kibali Mine, hence the large increase in emissions.

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**CC14.4**

Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies? (Tick all that apply)

Yes, our customers

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**CC14.4a****Please give details of methods of engagement, your strategy for prioritizing engagements and measures of success**

One of our customers submitted CDP Supply Chain requests in 2010 - 2013 and a second customer did so in 2013 too and we responded to those. Our success indicator was that the companies (which bought sulphuric acid, not gold) said that they appreciated our responses and were satisfied with them.

All of the gold produced by AngloGold Ashanti is sold to bullion banks. In our engagements with our customers we provide GHG emissions data and climate change strategy information on request, though they do report that they obtain the primary information from our detailed annual Sustainability Reports and CDP reports. Our customers generally report that they are more than satisfied with our public reporting.

**Module: Sign Off****Page: CC15. Sign Off**

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**CC15.1****Please provide the following information for the person that has signed off (approved) your CDP climate change response**

Name	Job title	Corresponding job category
Andrew Parsons	Vice President: Group Environmental Systems and Integration	Environment/Sustainability manager