

## Welcome to your CDP Climate Change Questionnaire 2023

### C0. Introduction

#### C0.1

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

Sibanye-Stillwater Limited (Sibanye-Stillwater or the Group) is a multinational mining and metals Group with a diverse portfolio of mining and processing operations and projects and investments across five continents. The Group is also one of the foremost global platinum group metals (PGM) autocatalytic recyclers and has interests in leading mine tailings retreatment operations. Sibanye-Stillwater is listed on the Johannesburg Stock Exchange (JSE) in South Africa and the New York Stock Exchange (NYSE).

Sibanye-Stillwater has established itself as one of the world's largest primary producers of platinum, palladium, and rhodium and is a top-tier gold producer. It also produces and refines iridium and ruthenium, nickel, chrome, copper and cobalt. The Group has recently begun to build and diversify its asset portfolio into battery metals mining and processing and is increasing its presence in the circular economy by growing and diversifying its recycling and tailings reprocessing operations globally. Accordingly, a green metals strategy has been implemented, advancing with four acquisitions to date. These include an investment in a lithium hydroxide project in Finland in 2021, followed by acquisitions in nickel processing (Sandouville refinery in France), lithium tailings retreatment (Rhyolite Ridge project in the US) and a zinc tailings retreatment facility (New Century, in Australia). These recent acquisitions are part of our strategy to enter the battery metals market.

Our strategic vision positions the Group as a progressive participant in the global resources sector, specializing in green metals and energy solutions. This is supported by a three-dimensional approach: strategic foundation, essentials and differentiators. The strategic foundation encompasses our purpose, vision, values, and core principles, including a strong commitment to ESG excellence and shared value. Sustainability is a primary focus, aligned with our dedication to the SDGs. Sibanye-Stillwater acknowledges the reality of global warming and climate change, and is committed to

responsible strategies outlined in our ESG policy, climate change and energy and decarbonisation position statements. We have set a Group 2040 carbon neutrality emissions target, accompanied by interim reduction targets tied to executive remuneration.

Sibanye-Stillwater's primary operations are organised in three following segments.

**US PGM segment:**

The East Boulder and the Stillwater (including Blitz) mines are located in Montana. The Columbus Metallurgical Complex, also located in Montana, which smelts the material mined to produce PGM-rich filter cake, also recycles PGMs from auto catalysts. The US PGM operations primarily produce palladium and platinum (78% palladium and 22% platinum). The PGM-bearing ore mined is processed and smelted to produce a PGM-rich filter cake. A third party refines the filter cake.

**Southern Africa PGM segment:**

The Kroondal (50% stake), Marikana operation (95.3% stake) and Rustenburg operations are located on the western limb of the Bushveld Complex in South Africa, while the Mimosa (50% joint venture) is situated on the southern portion of the Great Dyke in Zimbabwe. Platinum Mile (91.7% stake) is a retreatment facility, which reprocesses tailings arisings from Rustenburg. The primary PGMs produced at the operations in South Africa and Zimbabwe are platinum, palladium, rhodium and gold. The PGM-bearing ore is processed to produce PGMs-in-concentrate, which is processed and refined both by Sibanye-Stillwater's Marikana smelter and Brakpan Precious Metal Refinery and by third parties.

**South Africa gold segment:**

The Driefontein, Kloof and Cooke surface operations and associated processing facilities are located on the West Rand of the Witwatersrand Basin, while Beatrix is in the southern Free State goldfields. Sibanye-Stillwater also has an interest in surface tailings retreatment facilities located from the East Rand to the West Rand through a 50.1% stake in DRDGOLD Limited.

Sibanye-Stillwater mines, extracts and processes gold-bearing ore at its South African gold operations to produce a beneficiated product, doré, which is then refined at Rand Refinery Pty Ltd into gold bars with a purity of at least 99.5% in accordance with the London Bullion Market Association's standards of Good Delivery. Sibanye-Stillwater holds a 33.1% interest in Rand Refinery, one of the largest refiners of gold globally, and the largest in Africa. Rand Refinery markets and sells refined gold on international markets to customers around the world. DRDGOLD holds an 11.3% share in Rand Refinery.

## C0.2

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

**Reporting year**

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**Start date**

January 1, 2022

**End date**

December 31, 2022

**Indicate if you are providing emissions data for past reporting years**

No

**C0.3**

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

France

South Africa

United States of America

**C0.4**

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

ZAR

**C0.5**

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

Operational control

**C-MM0.7**

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



**Row 1**

**Mining**

- Copper
- Gold
- Platinum group metals
- Zinc
- Other mining, please specify  
Lithium, Chrome, Cobalt

**Processing metals**

- Nickel

**C0.8**

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

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	ZAE000259701

**C1. Governance**

**C1.1**

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

Yes



## C1.1a

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

Position of individual or committee	Responsibilities for climate-related issues
Board-level committee	<p>Sibanye-Stillwater considers climate change to be the most pressing global environmental challenge of our time, a challenge which is inextricably linked to all other environmental challenges we face, be it water scarcity, land degradation including erosion, pollution or biodiversity loss. At Sibanye-Stillwater the board comprises of two board level committees as well as the CEO. The Risk Committee and the Social, Ethics and Sustainability Committee (SES) are responsible for the oversight and reporting on sustainable development and associated commitments, particularly relating to climate change.</p> <p>The SES Committee is a statutory committee which assists the Board in guiding and monitoring the Group’s performance in relation to corporate citizenship, environmental, social and governance factors, the Sustainable Development Goals and sustainability and ethics, which includes climate-related issues. The Environmental, Social and Governance Committee, constituted in 2019, is dedicated to reviewing sustainability issues.</p> <p>The Risk Committee plays a crucial role in climate-related decisions within an organization. As part of its responsibilities, the committee is responsible for ensuring that effective risk management policies and strategies are in place to address climate-related risks and opportunities. The committee reviews and approves the company's risk appetite and tolerance in relation to climate-related factors, such as transitioning to a low-carbon economy, physical climate risks, and regulatory changes. It assesses the parameters of the company's risk/reward strategy, considering the impact of climate-related risks on the company's objectives.</p> <p>Each year, the Risk Committee reviews the Group strategic risk register which is inclusive of impact relating to climate change. Climate-related issues and impacts are integrated as part of the risk management and opportunity identification processes. We are cognisant that climate change is impacting on environmental conditions at our operating sites to an increasingly greater extent.</p>

	Additionally, the Board actively engages in an annual strategy session, during which the Group's strategy, assessed risks, and opportunities are thoroughly deliberated and considered.
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## C1.1b

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – all meetings	<p>Overseeing major capital expenditures</p> <p>Reviewing and guiding strategy</p> <p>Overseeing the setting of corporate targets</p> <p>Monitoring progress towards corporate targets</p> <p>Reviewing and guiding the risk management process</p> <p>Other, please specify</p> <p style="padding-left: 20px;">The Board contributes to and approves the mission, vision and strategy of the company, Reviewing and guiding major plans of action.</p>	<p>The Board is responsible for evaluating, determining and ensuring the implementation of corporate strategy and policy. The Board defines the strategic policy intent and objectives of the Company as a business enterprise as well as its values and approves the mission, vision and strategy of the company.</p> <p>The Board participates in an annual strategy session, in which the Group strategy, assessed risks and opportunities are deliberated. This supports the environmental, social and governance (ESG) strategy as well as the business strategy of operating a portfolio of green metals and related technologies. This strategy was progressed in 2022, as the Board approved of a capital expenditure of EUR 588 million for the Keliber lithium hydroxide project based in Finland. The selected technology is based on soda leaching technology, which is expected to be more energy efficient, with a lower environmental impact than alternative processes.</p> <p>The Social, Ethics and Sustainability Committee (SES) Committee meets on a quarterly basis and reports directly to the Board. The quarterly Social and Ethics Report and the ESG Board Report include climate change risks and opportunities affecting the company, major climate-related management plans and performance on objectives and targets. These matters are standing items on the board meeting agendas. The committee's publicly available work plan for 2023 was updated to have an in-depth</p>



		<p>discussion on climate related disclosures.</p> <p>An example of governance oversight on climate change matters includes the commitment to a Group target of carbon neutrality by 2040 (scope 1 and 2) and to reduce absolute scope 1 and 2 GHG emissions by 27% by 2025 from a 2010 base year. In 2019, the SBTi approved the Group target, demonstrating that our emissions reduction targets conform to the required science-based calculation methodology. In the reporting year, the board also approved plans to investigate applying for an updated SBTi and scope 3 emissions target. Work is ongoing in this regard.</p> <p>Additional examples of the Boards governance oversight include a recent suite of policy statements related to climate change and Sibanye-Stillwater’s approach to sustainability. These include the Climate Change, Biological Diversity, Energy and Decarbonation and the Water Conservation and Water Demand Management position statements.</p>
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### C1.1d

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

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues
Row 1	Yes	<p>The Board is Sibanye-Stillwater’s highest governing body and has an appropriate balance of relevant diversity in gender, culture, age, fields of knowledge, skills and experience in areas appropriate to Sibanye-Stillwater’s business. Environmental, social and governance (ESG) matters, notably climate change and sustainability, are considered material matters for the group.</p> <p>The criteria used to assess competence of board members on climate-related issues includes the requirement for</p>



		<p>strong competencies related to managing ESG matters as a way to ensure that our ESG goals are met. Eight out of our eleven independent non-executive directors are listed as having climate change and sustainability expertise. Climate competence for Sibanye-Stillwater's board members entails having sufficient knowledge about climate change and its potential impacts on the business.</p> <p>This includes considerations of climate change risks and opportunities, incorporating a long-term perspective into strategic planning, overseeing the decarbonization roadmap aimed at achieving carbon neutrality by 2040, and linking executive remuneration to climate change objectives.</p> <p>To keep abreast of climate related aspects, the board receives periodic training sessions on climate change. The board members have also undergone a sustainability competence review as per the Global Industry Standard for Tailings Management (GISTM) and TCFD recommendations.</p>
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## C1.2

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

### **Position or committee**

Chief Sustainability Officer (CSO)

### **Climate-related responsibilities of this position**

Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)

Integrating climate-related issues into the strategy

Setting climate-related corporate targets

Monitoring progress against climate-related corporate targets

### **Coverage of responsibilities**

### **Reporting line**



CEO reporting line

**Frequency of reporting to the board on climate-related issues via this reporting line**

Quarterly

**Please explain**

The Chief Sustainability Officer (CSO) holds the responsibility for group strategic oversight, providing guidance and support to the regions within our leading global mining Group to meet global standards and codes. The CSO, along with the entire Group, operates under the guidance of our Group sustainability strategy, which is overseen by the Social, Ethics and Sustainability Committee (SES).

One of the duties of the SES Committee is to assist in developing a climate change resilient business. One such example is the Group's goal to be carbon neutral by 2040 and carbon zero by 2050. One part of this goal is to invest R12 billion in renewable energy for our own operation, funded by third party power purchase agreements.

Accountability for social performance lies with the CSO, who reports directly to the CEO. The Senior Vice President (SVP) for Sustainability and ESG as well as the Vice President for Environment and Climate Change also report directly to the CSO.

It is the CSO's role to develop an ESG strategy and operating framework that includes clear performance targets and objectives. Continuous improvement in ESG performance is incentivized within the organization. The CSO chairs the ESG Committee, which meets quarterly, and covers matter such as strategic matters related to climate change, progress against sustainability targets as well as the ESG scorecard which informs the Long-term Incentive Plan.

The Risk Committee also plays a significant role in supporting the CSO and Group sustainability efforts. They evaluate and oversee the implementation of efficient risk management processes and controls to identify, monitor, and mitigate risks, while also seizing opportunities that arise.

Together, the CSO, supported by the Risk Committee, ensures that the Group operates in alignment with our sustainability goals and commitments, adhering to global standards and codes, and striving for continuous improvement in ESG performance.



### C1.3

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

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	ESG performance targets and measures have been included as part of our long-term incentive scheme applicable to senior management, which aims to align interests and actions across the Group. Targets included in the ESG scorecard that forms part of the long-term incentives (LTI) performance conditions, as well as all other sustainability-related targets (internal and external targets), are reviewed on a quarterly basis and reported to the Social, Ethics and Sustainability Committee.

### C1.3a

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

**Entitled to incentive**

Corporate executive team

**Type of incentive**

Monetary reward

**Incentive(s)**

Shares

Profit share

**Performance indicator(s)**

Achievement of climate transition plan KPI  
Progress towards a climate-related target  
Achievement of a climate-related target  
Implementation of an emissions reduction initiative  
Reduction in emissions intensity  
Energy efficiency improvement  
Increased share of renewable energy in total energy consumption

**Incentive plan(s) this incentive is linked to**

Both Short-Term and Long-Term Incentive Plan

**Further details of incentive(s)**

Sibanye-Stillwater utilizes three scorecards to assess organizational and executive performance. The first two scorecards focus on short-term performance, evaluating the delivery of business plans, personal key performance indicators (KPIs), and strategic priorities. The third scorecard, "Sustainable Shareholder Value Delivery," measures shareholder value over a three-year period and includes key leading indicators, including ESG performance.

The Long-Term Incentive (LTI) awards are linked to the share price and follow the senior management incentive plan. The value of the award is determined by multiplying an award function with factors such as personal performance. ESG performance contributes 20% to the scorecard, which was refined in 2022 to include a sustainability scorecard with 12 indicators representing key priorities like GHG emissions reduction, water use reduction, and nature stewardship.

Each indicator is assessed on a continuum and assigned a score ranging from 0 to 250%. The results are weighted and aggregated to determine the overall ESG performance condition for the LTI. This annual result is combined with trailing-year and prospective-year results for an overall outcome.

**Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan**

The compensation structure at Sibanye-Stillwater includes two types of performance-based rewards. The first is an immediate recognition for exceptional performance throughout the year, primarily based on key performance indicators (KPIs) within the control of management. This

reward aims to provide immediate recognition and motivation for superior performance.

The second type of reward is a deferred performance-based incentive, designed for retention purposes. It incorporates a partial alignment with the delivery of value to shareholders over the medium term through exposure to share price movement. This reward encourages long-term commitment and aligns the interests of management with the interests of shareholders, emphasizing sustained delivery of superior shareholder value.

## C2. Risks and opportunities

### C2.1

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

Yes

#### C2.1a

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

	From (years)	To (years)	Comment
Short-term	0	5	We define our short-term horizon regarding climate change risks and opportunities based on the timeframes utilized in our TCFD scenario-analysis. Aligning our definition with the group's timeframes employed in the TCFD scenario-analysis and low carbon plan ensures consistency throughout these processes. This shared timeframe significantly influences our risk and opportunity assessment process.
Medium-term	5	10	At Sibanye-Stillwater, our definition of the medium-term horizon, concerning climate change risks and opportunities, is in line with the timeframes we utilize in our TCFD scenario-analysis and the development of our low carbon plan. This timeframe was employed in the mentioned processes and forms the basis for our risk and opportunity assessment.



Long-term	10	15	At Sibanye-Stillwater, our definition of the long-term horizon, in relation to climate change risks and opportunities, aligns with the timeframes we utilize in our TCFD scenario-analysis and the development of our low carbon plan. This timeframe was employed in the mentioned processes and serves as a foundation for our risk and opportunity assessment.
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## C2.1b

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

Sibanye-Stillwater defines substantive financial or strategic impact in alignment with the concept of "materiality" as outlined in the company's mainstream filings. These impacts or matters are deemed significant and can greatly influence the financial, economic, reputational, and legal aspects of our business. In the context of integrated reporting, substantive impacts are those that have the potential to affect the group's ability to create value in the short, medium, and long term. They are also factors that inform stakeholders' assessments and decisions regarding our business. Substantive impacts can be both quantitative, such as financial, market, capitalization, and production volume effects, as well as qualitative, such as reputation. Sibanye-Stillwater has a well-defined risk management process supported by a governance structure comprising experienced and skilled teams dedicated to achieving our strategic objectives. Material issues are identified through materiality workshops, which involve research, analysis of internal and external environments, and stakeholder feedback. These workshops are conducted biennially to review our risk register. Additionally, ongoing business review processes and workshops, along with the involvement of an independent third party for a materiality workshop, help identify and assess material issues. We contracted Deloitte – as an independent party – to facilitate a materiality workshop in the last quarter of 2022, which included the C-Suite, senior executives, and operational and functional specialists. The materiality process adheres to international guidelines such as the International Integrated Reporting Framework, King IV, and GRI, and includes participation from senior executives and operational and functional specialists.

Sibanye-Stillwater defines strategic or substantive financial impact based on two metrics. Firstly, any risk or opportunity related to earnings or capital that exceeds a value of R1,3 billion is considered substantive. Quantifiable indicators related to the income statement (revenues and expenditures) and the balance sheet (assets, liabilities, and capital) are used to determine the financial impact. Therefore, any climate-related occurrence that has an impact of R1,3 billion or more on the company's income statement or balance sheet is considered substantive. Secondly, climate change risks or opportunities that have the potential for strategic impacts, such as market-related risks or opportunities, are also considered substantive. These definitions of substantive financial impact are applicable to the entire Sibanye-Stillwater group, encompassing all business units.

Furthermore, a crucial factor in assessing material or substantive financial impacts is their alignment with our business strategy. We evaluate material issues in the context of the company's purpose, vision, and values, which form the foundation of our materiality process. Significant attention is given to

environmental, social, and governance (ESG) issues, including aspects related to climate change, as embedding ESG excellence is central to our strategy. Internal stakeholder perspectives and benchmarks are also used as validation processes to identify material risks. Example of substantive impact: Climate change, particularly water security, poses a significant risk with a substantive impact on Sibanye-Stillwater's South African operations. As water is essential to our operations, any scarcity or disruptions could adversely affect production and revenue, with potential losses exceeding R1,3 billion. To mitigate this risk, we are actively working to reduce our reliance on water resources through strategies focused on water security and independence. Our environmental planning processes, spanning from early feasibility to post-mining and closure, incorporate considerations for water scarcity and quality. This approach ensures the sustainability of our operations, benefits our host communities, and protects ecosystems.

## C2.2

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

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**Value chain stage(s) covered**

Direct operations

**Risk management process**

Integrated into multi-disciplinary company-wide risk management process

**Frequency of assessment**

More than once a year

**Time horizon(s) covered**

Short-term

Medium-term

Long-term

**Description of process**

The Board sets the tone for risk governance and oversees the entire risk management process. We maintain a low risk tolerance level for environmental, social and governance (ESG) performance risks, including safety, health, environmental, regulatory, and legal compliance. The

Risk Committee, appointed with delegated powers from the Board, assists in the risk management process. Our framework undergoes independent annual reviews and is based on internationally recognized standards such as ISO 31000, COSO, and King IV. We maintain a Group Strategic Risk Register that lists our major strategic risks and provides details on triggers, vulnerabilities, consequences, and mitigating strategies. Each operating segment maintains a segment strategic risk register that identifies key risks. We also have a Group Environmental Risk Register, which incorporates inputs from the Group Environmental Specialist and Compliance teams, utilizing both environmental and operational data.

Frequency of assessment: the register is updated on a quarterly basis (more than once a year) by the Environmental and Risk Management teams.

The process to identify, assess and respond to climate-related risks and/or opportunities:

Sibanye-Stillwater has a five-step risk management process. The process begins with establishing the context, which involves reviewing and updating strategic and operational goals, considering the operating environment and its impact on the business, and setting and approving risk tolerance levels.

The next step is identification, which involves identifying threats that may impact strategic goals, conducting ongoing scans of the internal and external business and operating environment to identify emerging risks, and compiling and maintaining the risk register.

The third step is analysis and evaluation, which involves thoroughly examining risks to understand their root causes and consequences, particularly in relation to strategic focus areas, assessing the severity and likelihood of risks, ranking risks based on their severity and likelihood, and assessing and prioritizing mitigation strategies.

The fourth step is assessment and treatment, which involves identifying existing controls in place to address identified risks, developing enhancement plans and implementing necessary controls, and continuously monitoring the adequacy and effectiveness of controls.

The final step is review, report, and monitor, which involves overall risk governance, managing and monitoring the success of controls and mitigation plans, and ensuring risks remain within the limits of our risk appetite.

Through this risk and opportunity management process, Sibanye-Stillwater has identified and assessed various climate change-related risks and opportunities under different climatic scenarios. As a response, we have updated our Climate Change Position Statement, which recognizes the key risks identified through scenario analysis and outlines objectives aimed at effectively managing these risks.

#### Physical Risk Case study – Direct operations

Sibanye-Stillwater is facing a long term physical risk from climate change, as hotter and drier conditions could impact water supply. This could

have a substantive impact on the company's operations, resulting in lost production and revenues. Sibanye-Stillwater is managing this risk by conducting regular environmental audits and inspections.

#### Transitional Opportunity Case study – Direct operations

Sibanye-Stillwater is taking advantage of a transitional opportunity by developing renewable energy projects. These projects will help the company reduce its emissions and contribute to a low-carbon future. The projects are expected to be profitable and will offset indirect carbon tax liabilities. This will materialise in the short term but will have positive long term effects.

#### Physical Risk Case study – upstream

Sibanye-Stillwater has assessed the physical risks to the production of mining timber and concluded that they are low. The company will continue to monitor the risks and engage with our timber supplier in the short term.

#### Transitional Risk Case study – upstream

Changes in carbon pricing instruments in South Africa could lead to an increase in the cost of electricity for Sibanye-Stillwater. The company is developing projects to substitute a minimum of 20% of its total electricity requirements with renewable energy by 2025. By following our rigorous risk and opportunity management processes, we proactively address climate-related risks and capitalize on opportunities in the upstream sector. This approach enhances our resilience, enables us to adapt to changing environmental conditions, and positions us as a responsible contributor to a long term sustainable future.

#### Transitional Opportunity Case study – downstream

Sibanye-Stillwater is focusing on the “green metals” market to seize opportunities in the global decarbonization trend. The company has made strategic partnerships to acquire stakes in green metal projects for the long term.

#### Physical Risk Case study – downstream

Sibanye-Stillwater is assessing the risks of physical climate impacts on mine closures in South Africa. The outcomes are not yet known, but they are expected to have substantive impacts on the group's balance sheet in the short term.



## C2.2a

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	<p>Compliance with current legislation is of utmost importance and non-negotiable in our climate-related risk assessments. All operations of Sibanye-Stillwater are subject to environmental, health, and safety laws and regulations that impose various obligations on our mines. These regulations also grant authorities the power to close or suspend operations in cases of non-compliance.</p> <p>The following is an example of a regulatory risk:                      Situation: Changes in carbon pricing instruments within the South African operating environment present regulatory risks. Increases in the South African carbon tax rate can result in higher costs for key upstream products such as cement, lime, explosives, and electricity. Sibanye-Stillwater's mature South African mines, which are inherently energy-intensive, rely on upstream carbon-intensive power from the national power utility, Eskom, without viable alternatives.</p> <p>Task: Assess the financial and strategic impact of these risks and determine their priority levels.                      Action: Sibanye-Stillwater followed its risk assessment process to evaluate whether increases in the cost of commodities due to higher South African carbon tax rates could have significant financial impacts.</p> <p>Result: Eskom, currently exempt from carbon taxation, is expected to be taxed starting from 2026 and will pass its carbon tax liability on to consumers. Based on projected 2026 consumption, electricity costs could rise between approximately R280 million (in a low-cost scenario) and R953 million (in a high-cost scenario at R308 tCO<sub>2</sub>e). By 2030, these scenarios could range from R209 million to R1.4 billion if the carbon tax is increased to R462 /tCO<sub>2</sub>e as suggested by the South African Finance Minister. These cost impacts surpass the current material threshold of R1.3 billion by 2030, thus classifying this risk as significant. As a proactive measure, Sibanye-Stillwater is actively developing projects to replace a minimum of 20% of the Group's total electricity requirements with renewable energy by 2025.</p>

<p>Emerging regulation</p>	<p>Relevant, always included</p>	<p>When conducting climate-related risk assessments, we always consider emerging regulations, which are also considered in the TCFD scenario analysis. These regulations present both financial and transitional risks to our company. Considering emerging regulations provides us with an opportunity to actively influence the legislative process and align our practices and processes to proactively manage such risks.</p> <p>Example of an emerging regulatory risk:                  Situation: The European Union (EU) is in the process of establishing rules and regulations for its carbon border adjustment mechanism (CBAM), aimed at preventing carbon leakage and encouraging partner countries to implement carbon pricing policies in the fight against climate change. The CBAM covers certain imported products, including cement, iron and steel, aluminium, fertilizers, and electricity. Over time, the list of products will be expanded to include indirect emissions associated with the production of covered products. This expansion could potentially impact Sibanye-Stillwater's products in the future, potentially leading to price adjustments.</p> <p>Task: Assess the financial and strategic impact of these risks and determine their priority levels as CBAM will enter into force in its transitional phase as of 1 October 2023.                  Action: Sibanye-Stillwater will follow its risk assessment process to evaluate whether there are significant risks related to the transitional climate change impacts associated with the EU CBAM.</p> <p>Result: The specific outcomes are currently unknown, but it is anticipated that they will have substantive impacts in terms of transitional risks and costs that will affect the group's markets and balance sheet. These impacts are expected to be material and require careful consideration as part of our risk management approach. We will closely monitor the developments regarding the EU CBAM and adapt our strategies accordingly.</p>
<p>Technology</p>	<p>Relevant, always included</p>	<p>Sibanye-Stillwater ensures that technology is always included in its climate-related risk assessments to stay up-to-date with the latest developments. Technology is recognized as a crucial enabler of our energy and decarbonization strategy. Therefore, our strategy emphasizes the exploration, evaluation, and implementation of technological solutions to address operational challenges and seize opportunities.</p> <p>An example of a technology risk:                  Situation: As the world's largest producer of Platinum Group Metals (PGMs), technological advancements in the automotive sector, such as the phasing out of internal combustion vehicles (which rely on PGM inputs) and the increased adoption of</p>



		<p>low-carbon automotive technologies, can significantly impact Sibanye-Stillwater's revenue stream.</p> <p>Task: Assess the financial and strategic impact of this risk to determine its priority level.</p> <p>Action: Sibanye-Stillwater follows its risk assessment process to evaluate whether there are substantial impacts associated with the risks arising from the phasing out of internal combustion vehicles and the potential replacement with electric vehicles and other low-carbon alternatives.</p> <p>Result: The assessments indicate that the core demand for PGMs used in auto catalysts is likely to be significantly affected in the long term. This technology risk is therefore considered substantial, as it has a strategic, negative impact on the PGM market. However, the Group is well-positioned to cater to the commodity demands of emerging battery and fuel cell drivetrains. Sibanye-Stillwater's "Refreshed Strategy" of 2021 aims to position the company as a provider of a comprehensive range of strategic commodities and energy solutions essential for the emerging global clean energy economy. To achieve this, the Group is building a "green metals" portfolio and has made significant progress in securing involvement in battery metals. Recent investments include an initial 30% stake in the Keliber lithium project in Finland, which Sibanye-Stillwater has since increased to 85%, and 100% acquisition of Sandouville, a nickel hydrometallurgical processing facility in France. These interests have augmented our exposure to the circular economy and battery metals, thus advancing our pivot into green metals and energy solutions.</p>
Legal	Relevant, always included	<p>Legal aspects, including regulations and legal liabilities, are integral components of Sibanye-Stillwater's climate-related risk assessments. Compliance with legal requirements is considered non-negotiable, and we actively strive to ensure adherence to climate change legislation as well as the membership requirements of relevant voluntary industry bodies and programs.</p> <p>An example of a legal risk:                  Situation: Our PGM operations in South Africa are subject to various water license conditions. One specific legal liability pertains to the maintenance of storage facilities, where any infrastructure breach, such as the failure of a tailings storage facility, can lead to legal action. Non-compliance with these conditions carries legal, financial, and reputational risks.</p> <p>Task: We have assessed the financial and strategic impact of this risk to determine its priority level.</p> <p>Action: Sibanye-Stillwater has followed its risk assessment process to ascertain the potential impacts associated with non-</p>



		<p>compliance with water use licenses in South Africa.</p> <p>Result: Our company maintains a zero-tolerance approach to environmental regulatory non-compliance. Our assessments have indicated that the financial impacts of such risks are highly likely to be significant. Non-compliance with water license conditions poses strategic, negative impacts on our legal standing and social license to operate. Consequently, at our South African operations, we have enhanced water balance management practices. This includes real-time monitoring of dam levels, cleaning of silted dams during the dry season to increase storage capacity, and improving return pump capacities. To ensure compliance with all legal requirements, we have integrated an electronic legal aspect register into the systems at our South African gold and PGM operations, aligning with our commitments to ISO 14001 and ISO 45001 standards.</p> <p>Sibanye-Stillwater takes pride in surpassing mere legal requirements to safeguard the immediate and surrounding environment. As an example, we have established the Good Neighbor Agreement, an innovative framework unique within the mining industry in the United States. This agreement sets forth certain commitments that legally bind us and hold us to a higher standard than what is mandated by federal and state regulatory processes. Through initiatives like this, we actively promote responsible economic development while prioritizing the protection of the natural environment.</p>
Market	Relevant, always included	<p>There is increasing global demand for cleaner and lower-emission intensity products. Assessment of Sibanye-Stillwater's markets are therefore always included in the group risk assessments.</p> <p>An example of a market risk:                  Situation: The automotive market is of utmost importance to Sibanye-Stillwater. As part of our scenario analysis, we have examined the potential impact of climate change on this market and the utilization of our primary and secondary PGM products across various scenarios, including a 2°C pathway. Among these scenarios, the most concerning outcome for Sibanye-Stillwater would be a disruptive market shift resulting from the rapid adoption of battery electric vehicles. These vehicles require fewer PGMs compared to internal combustion or fuel cell technologies, which could significantly impact our revenue stream.</p> <p>Task: We have assessed the financial and strategic impact of this risk to determine its priority level.                  Action: Sibanye-Stillwater has followed its risk assessment process to investigate whether there are substantial impacts associated with climate change's influence on the PGM-automotive market.</p>



		<p>Result: Our assessments have revealed that the fundamental demand for PGMs used in autocatalysts is likely to be significantly affected in the long term. This risk holds strategic importance due to its negative impact on PGM demand. However, the Group is well positioned to meet the commodity requirements for emerging battery and fuel cell drivetrains. Our "Refreshed Strategy" of 2021 positions us as a provider of a comprehensive range of strategic commodities and energy solutions vital for the emerging global clean energy economy. For instance, we are actively developing a "green metals" portfolio.</p> <p>The Group has made significant progress in securing involvement in battery metals. Recent investments included an initial 30% stake in the Keliber lithium project in Finland, which Sibanye-Stillwater has since increased to 85%, and 100% acquisition of Sandouville, a nickel hydrometallurgical processing facility in France. These interests have augmented our exposure to the circular economy and battery metals, thus advancing our pivot into green metals and energy solutions.</p>
<p>Reputation</p>	<p>Relevant, always included</p>	<p>In Sibanye-Stillwater's comprehensive risk approach, reputation risks are given significant consideration. These risks are viewed as transitional in nature, arising from the company's response to the physical risks associated with climate change. As stakeholders increasingly hold companies accountable to stringent standards for responsible mining and business conduct, and responsible investment in low-carbon technologies continues to rise, Sibanye-Stillwater aims to leverage these trends to bolster its brand reputation and tap into the growing spectrum of responsible investment funds and low-carbon technologies.</p> <p>Example of a reputational risk:                  Situation: Sibanye-Stillwater's C-suite and Board conducted a comprehensive review of the group's purpose, vision, and strategy, resulting in a refreshed purpose statement: "To safeguard global sustainability through our metals and energy solutions," and a renewed vision: "To be a leader in delivering superior shared value for all stakeholders." Sibanye-Stillwater places great importance on ensuring that its land rehabilitation and management practices meet or exceed these elevated standards.</p> <p>Task: The financial and strategic impact of this reputational risk has been thoroughly assessed to determine its priority level.                  Action: Sibanye-Stillwater follows a rigorous risk assessment process to evaluate the potential substantive impacts related</p>

		<p>to reputational risks associated with land rehabilitation and management practices.</p> <p>Result: The assessments have highlighted the crucial consideration of biodiversity, encompassing both biotic and abiotic components, in Sibanye-Stillwater's operations. The management of biodiversity holds significant implications for the group's strategy, finances, and reputation, particularly in relation to our mining operations. Environmental impacts have the potential to negatively affect our reputation, posing a threat to our legal and social licenses to operate. Therefore, reputational risks in this context are deemed material, given their strategic, negative impact on our shareholders and host communities. To address this, Sibanye-Stillwater has planned the implementation of appropriate and value-adding nature-based solutions to support land rehabilitation and post-mine closure initiatives, while also proactively offsetting carbon emissions. This approach aligns with our expanding role in fostering a cleaner, more sustainable environment.</p>
<p>Acute physical</p>	<p>Relevant, always included</p>	<p>Acute physical risks are a fundamental component of Sibanye-Stillwater's climate-related risk assessments, as they possess the potential to significantly impact operational performance and revenue streams. Moreover, these risks can also affect our host communities, thereby intensifying their reliance on our mining operations for support.</p> <p>Example of an acute physical risk:</p> <p>Situation: The likelihood of both increased rainfall variability and increased intensity of storms, in the areas where Sibanye-Stillwater operates, have been assessed as part of our TCFD scenario-analysis. This risk type materialised in June 2022, where a significant '500-year flood' event severely affected Sibanye-Stillwater's two PGM operations in Montana. This occurred due to flooding of numerous rivers in the region, following a warm spell which led to a rapid melt of accumulated snow in the mountains and associated runoff, which was exacerbated by heavy rainfall. The floods did not impact the Stillwater Mine itself, but did wipe out parts of Montana Highway 419, a highway heavily used by the mining operations. Several bridges in the vicinity of our Stillwater mine were damaged and sections of the primary access road from Nye to the Stillwater mine have been severely eroded, restricting access to the mine and requiring rerouting of water, tailings and other piping. The impact was downtime of about 7 weeks, severely impacting production and revenues.</p> <p>Task: Emergencies are governed at Sibanye-Stillwater's operations by procedures and protocols to address any eventuality that may arise, including major or high potential scenarios such as floods.</p> <p>Action: An emergency response is triggered through on-site control rooms that are manned 24/7 and which follow protocols</p>

		<p>to inform relevant emergency services, senior management, and proto teams when necessary. Management has been trained in emergency control and who are able to coordinate and track any responses to incidents.</p> <p>Result: We track environmental incidents such as severe storm events as prescribed by our emergency response and TSF management plans. We highlight the remedial action to be taken to address any environmental incident to ensure that the appropriate lessons are learnt.</p>
<p>Chronic physical</p>	<p>Relevant, always included</p>	<p>Chronic physical risks are consistently incorporated into Sibanye-Stillwater's climate change risk assessments due to their potential to adversely affect operational performance and revenue generation.</p> <p>Example of a chronic physical risk:                  Situation: Sibanye-Stillwater's climate impact and scenario assessments have highlighted that climate change impacts in South Africa are projected to result in rising temperatures, prolonged droughts, and water scarcity.</p> <p>Task: A comprehensive evaluation of the financial and strategic implications of this risk has been conducted to determine its priority level.                  Action: Sibanye-Stillwater has diligently followed its established risk assessment process to determine the substantive impacts associated with chronic water risks at its South African operations.                  Result: The assessments have revealed that water stresses and scarcity can disrupt our operations and production, leading to decreased outputs and revenue. These risks hold the potential to be significant, as a week ( 7 days) of lost production would translate to revenue losses exceeding R1.3 billion. To adapt to the potential climatic effects of drought and water scarcity, we have developed our Water Health Management Position Statement and Water Stewardship Position Statement. These initiatives aim to implement a comprehensive water strategy across our operations, preserving and safeguarding water resources through the following key initiatives:</p> <ul style="list-style-type: none"> <li>• Responsible use of water resources to maintain our environmental and social license to operate;</li> <li>• Encouraging sound management of water systems and promoting efficient water use;</li> <li>• Reducing our impact on water resources;</li> <li>• Promoting environmental consciousness through awareness, stewardship, and effective communication on environmental matters.</li> </ul>



		<p>Furthermore, we are considering the implications of potential variations in environmental conditions and temperatures for post-closure economic activities in the regions where we operate in South Africa. This consideration, for instance, influences our selection of vegetation species for concurrent rehabilitation efforts. We also provide comprehensive reporting on the climatic conditions of our operations in our annual Mineral Resources and Reserves Report, ensuring transparency and accountability regarding our approach to addressing climate-related risks and their potential impacts.</p>
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## C2.3

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

Yes

## C2.3a

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

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**Identifier**

Risk 1

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

Upstream

**Risk type & Primary climate-related risk driver**

Chronic physical

Water scarcity

**Primary potential financial impact**

Decreased revenues due to reduced production capacity

**Company-specific description**



The operations of Sibanye-Stillwater rely on electricity as a critical input. The South African region is projected to face chronic physical climate change impacts, including rising temperatures and prolonged droughts. El Niño, known for its global weather influence, has historically been associated with extreme heat and droughts in the summer rainfall regions of southern Africa.

Meteorologists have identified signs indicating the development of a strong El Niño in 2023, resulting in potentially higher temperatures and reduced rainfall during the upcoming summer. These chronic climate risks are anticipated to cause severe water scarcity in the region across various climate scenarios.

Specific to our company: Water plays a crucial role in generating the main supply of electricity for the region. Therefore, water scarcity could disrupt the provision of electricity to our gold and PGM mining operations in Southern Africa. Our South-African mines, due to their maturity and depth, are particularly energy intensive. For regulatory, and policy reasons, our operations rely primarily on coal-fired electricity supplied by Eskom, the South African national utility. Eskom's coal-fired power stations consume significant amounts of water for operation. Prolonged droughts and temperature increases will exacerbate water scarcity in the region, impacting the ability of Eskom's power stations to generate electricity.

If Eskom cannot meet national electricity demand, Sibanye-Stillwater's operations receive a load curtailment instruction from Eskom where large energy users are asked to reduce their power usage from the national grid. Load curtailment has four levels – stage 1 and 2 takes 10% of power, stage 3 takes 15% and stage 4 takes 20%. There is also load shedding which is a controlled way of rotating the available electricity between all Eskom customers. The load shedding stages range between that range between 1,000 MW (Stages 1) where Eskom must reduce electricity consumption (shed) by 1,000MW (megawatts) to balance the national power grid, and 4000 MW (Stage 4), with 5000MW (Stage 5) and 6,000 MW (Stage 6) recently implemented,.. The operational losses resulting from load curtailment or grid failure events can have substantial financial implications for Sibanye-Stillwater's operations in Southern Africa, which constitute a significant portion of the group's production capacity. Decreased production in this region will consequently lead to reduced revenues.

**Time horizon**

Medium-term

**Likelihood**

Very likely

**Magnitude of impact**

High

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

Yes, a single figure estimate

**Potential financial impact figure (currency)**

1,440,000,000

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

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

**Explanation of financial impact figure**

The potential financial ramifications of drought and water scarcity on Sibanye-Stillwater's electricity supply were evaluated by estimating the impact of a single day's lost revenue at the gold and PGM operations in Southern Africa. It was determined that a single day of revenue loss at these operations amounts to slightly over ZAR 240 million, assuming the mines operate for 350 days per year (with 96% uptime throughout the year). Consequently, if there is a downtime of 6 days, the resulting loss in production and revenue would reach approximately R1.44 billion. This figure surpasses Sibanye-Stillwater's threshold for considering impacts as substantial financial losses. Thus, the magnitude of the impact is deemed to be significant.

**Cost of response to risk**

13,000,000,000

**Description of response and explanation of cost calculation**

Sibanye-Stillwaters response to the risk entails the following:

Situation: Sibanye-Stillwater's operations in South-Africa face vulnerability to electricity supply disruptions caused by chronic climate risks, specifically water scarcity resulting from drought.

Task: The financial and strategic impacts of these risks were assessed to determine their priority levels.

Action: Sibanye-Stillwater conducted a comprehensive risk assessment to evaluate the potential for material/significant financial impacts due to electricity supply disruptions caused by chronic climate impacts.

Result: The assessments revealed that such disruptions could have substantial financial implications. To mitigate this risk, Sibanye-Stillwater has implemented plans to reduce its reliance on Eskom, the primary energy supplier in South Africa. By decreasing the purchase of Eskom electricity, the company aims to minimize emissions associated with coal-based electricity generation.



Case Study: Sibanye-Stillwater is developing a portfolio of renewable energy projects with a total capacity of 557MW. Once all projects are operational, expected by 2025, they will reduce the company's dependence on Eskom electricity in Southern Africa by over 20% and decrease Scope 2 emissions by 25%.

The estimated total capital cost for the renewable projects is estimated at R13 billion (an upper range estimate). Anticipated savings include a 30% to 50% discount on solar projects and a 20% to 30% discount on wind projects. These initiatives will partially mitigate the risk associated with reliance on Eskom, resulting in significant financial impacts that align with the company's threshold criteria.

2022 Status of the Renewable Energy Project Pipeline (557 MW):

- SA Gold 50 MW solar photovoltaic (PV) project: Construction was initially planned for 2022, with an operational date in 2023. However, the project faced delays due to land claims over the permitted site. Through legal processes and investigations, the issues have been resolved, but significant delays were experienced.
- SA PGM 175 MW solar PV projects: Progress remains on track in 2022, with completion projected for the first half of 2025.
- SA 328 MW wind projects: The projects mostly remained on track, although the Eskom grid access process and additional environmental permits caused a delay in financial close, now expected in the first half of 2023. The project remains on schedule for commercial operation in late 2024 or early 2025.

**Comment**

None

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**Identifier**

Risk 2

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

Direct operations

**Risk type & Primary climate-related risk driver**

Chronic physical

Water scarcity



**Primary potential financial impact**

Decreased revenues due to reduced production capacity

**Company-specific description**

Sibanye-Stillwater’s operations are dependent on water for drilling, blasting, milling, processing, cooling of equipment, and for hydraulic tailings re-mining. Our employees and surrounding communities also depend on our water. Water plays a crucial role in our direct operations, primarily used for mineral processing, dust suppression, slurry transport, and meeting the needs of our employees.

Climate models indicate that the South African region is expected to face chronic physical climate change impacts, including rising temperatures and droughts. These long-term climate risks will result in severe water scarcity throughout the region, as predicted by various climate scenarios.

Company-specific description:

Water scarcity creates a shared challenge as competition for this vital resource intensifies, leading to water stresses. Our South African PGM operations, located in Rustenburg, Kroondal, and Marikana, experience particularly high water stress. These operations have limited access to ground and surface water sources, relying on third-party utilities for approximately 63% of their water needs in the reporting year. The primary water source for these operations is the Vaal River System, which also supplies water to some of South Africa's major economic centres.

In 2022, the industrial usage at our SA PGM operations accounted for (23,462 ML) water consumption. Given the growing demands of the city, the Rand Water Board struggles to meet the city's water requirements. This situation poses a significant risk to the availability of water for our operations, necessitating proactive management to ensure water availability and supply security. Insufficient water supplies or compromised water quality could lead to operational downtime or closures, ultimately resulting in decreased revenues.

Additional risks associated with water availability and quality include the potential for water restrictions and increased water costs imposed by municipalities, as water scarcity becomes more pronounced.

**Time horizon**

Short-term

**Likelihood**

Very likely

**Magnitude of impact**

Medium

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

Yes, a single figure estimate

**Potential financial impact figure (currency)**

1,430,000,000

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

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

**Explanation of financial impact figure**

The potential financial impact of drought/water scarcity on Sibanye-Stillwater's direct operations in the South African PGM segment was calculated by assuming the impact of one day's lost revenue at the South African PGM operations. One day's loss of 2022 revenue at Sibanye's PGM operations in South Africa equates to about ZAR 205 million, assuming the mine operates 350 days per year (96% uptime during the year). Therefore, downtime of one week (7 days) would equate to approximately R1.43 billion in lost production and revenues, which exceeds Sibanye-Stillwater's threshold of substantive financial impacts. The magnitude of the impact is therefore considered to be high.

**Cost of response to risk**

21,180,000

**Description of response and explanation of cost calculation**

Sibanye-Stillwater's response to the risk entails the following:

Situation: Our operations rely heavily on water for essential activities such as drilling, blasting, milling, processing, equipment cooling, and hydraulic tailings re-mining. Both our employees and the surrounding communities depend on the availability of water. The South African PGM operations, in particular, face significant water stresses due to water scarcity. These operations rely on third-party water supplies, accounting for 63% of the total water supply, primarily sourced from the Vaal River System.

Task: The financial and strategic impact of water scarcity at the SA PGM operations was assessed to determine its priority level.

Action: Sibanye-Stillwater followed its risk assessment process to evaluate the potential financial impacts of water scarcity resulting from chronic climate change impacts at the SA PGM operations and to evaluate the best way to respond to mitigate the risk.

Result: The assessments revealed that water scarcity at the SA PGM operations poses substantive risks. To proactively address potential disruptions caused by acute climate change impacts on water supply, we have implemented an active water consumption reduction program. This program enables us to operate in a more water-scarce environment. In 2022, our goal was to reduce dependence on the Vaal River System by 15% compared to the 2020 baseline. We achieved this by returning 23 million litres per day to the Integrated Vaal River System, which serves communities in the West Rand of Johannesburg.

In addition, our initiatives to manage the impact of water restrictions include:

- Investigate alternative groundwater sources
- Optimise water recovery from TSFs
- Integrate Marikana with the Kroondal-Rustenburg footprint, thus balancing water requirements across the footprint. Integrating Marikana allows us to transfer water from water-rich areas during the wet season to storage and to drier parts, noting that the Pandora pipeline supplies 6MI/day to our Karee operations
- Continued desilting of water containment facilities

Our reliance on purchased potable water at our SA PGM operations reduced by 321MI (3%), against a targeted reduction of 3% compared to 2020 (2022: 12,051MI; 2021: 12,027MI; 2020: 12,372MI).

The costs associated with these actions, in addition to dams, pipelines, studies and metering projects came to more than R21.18 million. There will be future costs associated with these projects going forward.

### Comment

None

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### Identifier

Risk 3

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

Upstream

### Risk type & Primary climate-related risk driver

Emerging regulation

Carbon pricing mechanisms

### **Primary potential financial impact**

Increased direct costs

### **Company-specific description**

Sibanye-Stillwater is a multinational mining and metals group with a diverse portfolio of mining and processing operations and projects. Various South African companies, including Sibanye-Stillwater, are required to pay carbon tax in South Africa on an annual basis. As of 2022, the South African carbon tax rate stood at R144 per tonne of CO<sub>2</sub>e (carbon dioxide equivalent). The carbon tax price and annual escalations were determined only for phase 1 of the carbon tax under the South African Carbon Tax Act. The South African government recently extended the first phase, which now concludes on 31 December 2025. Moreover, the government has gazetted future carbon tax rates, targeting R308 per tonne of CO<sub>2</sub>e by 2026 and R462 per tonne of CO<sub>2</sub>e by 2030.

Accordingly, our operations rely on various upstream inputs which currently are or will be subject to South African carbon tax. Electricity is a crucial input to our operations, which could be subject to carbon tax in the near future. The implementation of phase 2 of the carbon tax is scheduled to commence in 2026, wherein Eskom, the national utility, is expected to become liable to pay carbon tax. Eskom will pass on these costs to consumers. This impact is relevant to Sibanye-Stillwater's SA Gold and SA PGM operations, which are expected to experience increased electricity costs that are directly proportional to the price increases associated with the carbon tax.

However, the final tax rate and start date for the taxation of electricity generation in South Africa have yet to be determined and written into law. Given the lack of clarity regarding this forthcoming regulation, the estimated cost pass-throughs on electricity are anticipated to commence in 2026, based on the latest carbon tax rates proposed by the government. These projected cost increases associated with the carbon tax on electricity have been modelled for the medium to long-term and are expected to have substantive financial impacts

### **Time horizon**

Short-term

### **Likelihood**

Very likely

### **Magnitude of impact**

High

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

Yes, an estimated range

**Potential financial impact figure (currency)**

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

280,000,000

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

1,400,000,000

**Explanation of financial impact figure**

The financial impact has been calculated as the expected South African electricity cost increases by 2030, due to the passthrough of carbon tax liabilities on electricity generation.

Due to the uncertainty regarding the emerging regulations regarding the carbon tax price increases, the financial impacts were modelled on two scenarios: low cost and high-cost scenarios. Electricity costs could increase by 2030 between approximately R280 million (low cost scenario) and R1.4 billion (high cost scenario) excluding any other additional tariff increases. The high cost scenario exceeds our current substantive threshold.

**Cost of response to risk**

13,000,000,000

**Description of response and explanation of cost calculation**

Sibanye-Stillwater's response to the risk entails the following:

- Situation: Electricity costs at our South African (SA) operations are expected to increase substantively by 2030 as a result of the carbon tax passthrough costs on electricity.
- Task: The financial and strategic impact of this risk was assessed, with a view to assessing its priority levels.
- Action: Our risk assessment process was followed, to establish whether increases in direct electricity costs due to carbon tax passthroughs have the potential for material/ significant financial impacts and evaluate how to respond to the risk.



- Result: The assessments revealed that the modelled electricity cost increases that SA operations can expect to pay by 2030, have significant financial impacts. We therefore implemented plans to reduce this risk by reducing our reliance on electricity supplied by Eskom, the SA utility that dominates the electricity market. Reductions in the purchase of Eskom electricity will also reduce the emissions associated with consuming electricity generated by the utility's predominant coal-based fleet.

Case study: we are developing a portfolio of 557MW of renewable energy projects. Once they are all operational (within 2025), these projects will reduce our reliance on Eskom electricity in SA by more than 20% and will also reduce our Scope 2 emissions by 25%.

The estimated total capital cost for the renewable projects is estimated at R13 bn (upper range estimate). Anticipated savings include a 30% to 50% discount on solar projects and a 20% to 30% discount on wind projects. These initiatives will partially mitigate the risk associated with reliance on Eskom, resulting in significant financial impacts that align with the company's threshold criteria.

2022 Status of the Renewable Energy Project Pipeline:

- SA Gold 50 MW solar photovoltaic (PV) project: The project faced delays due to land claims over the permitted site. Through legal processes and investigations, the issues have been resolved, but significant delays were experienced.
- SA PGM 175 MW solar PV projects. Progress remains on track in 2022, with completion projected for the first half of 2025.
- SA 328 MW wind projects: In 2022, the projects mostly remained on track, although the Eskom grid access process and additional environmental permits caused a delay in financial close, now expected in the first half of 2023. The project remains on schedule for commercial operation in late 2024 or early 2025.

### **Comment**

None

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### **Identifier**

Risk 4

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

Downstream

**Risk type & Primary climate-related risk driver**

Market  
Changing customer behavior

**Primary potential financial impact**

Decreased revenues due to reduced demand for products and services

**Company-specific description**

Sibanye-Stillwater is a multinational mining and metals group with a diverse portfolio of mining and processing operations and projects. The platinum group of metals (PGMs) mined by the South African and US operations accounted for the majority (85%) of Sibanye-Stillwater's revenues in 2022. The main market for PGMs is the internal combustion market, where PGMs are a core component of autocatalysts used in vehicles. Recent market research indicates that PGM demand is largely driven by autocatalysts, accounting for approximately 40% of platinum demand.

The demand for PGMs in autocatalysts is at risk of changing consumer preferences and regulation, motivated by the demand for cleaner and less emission intensive automotives. Accordingly, there is a shift towards demand for battery electric vehicles, particularly in the Chinese and European markets. The latest edition of the IEA's annual Global Electric Vehicle Outlook shows that more than 10 million electric cars were sold worldwide in 2022 and that sales are expected to grow by another 35% in 2023, to reach 14 million. This trend is expected to continue, as there is increasing pressure to move away from internal combustion engines to support air quality, noise reduction and to link transport greenhouse gas emission to that of the national electricity grid, as the grid provides greater potential for decarbonisation through renewable energy generation.

The phasing out of internal combustion vehicles represents a transitional climate change risk that will result in the reduction of demand and therefore price of PGMs. As the world's largest producer of PGMs, technological changes in the automotive sector, such as the phasing out of internal combustion vehicles (which require PGMs as inputs) and the increased uptake of low-carbon automotive technologies can have a significant impact on Sibanye-Stillwater's revenue stream.

**Time horizon**

Long-term

**Likelihood**

Very likely

**Magnitude of impact**

High

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

Yes, an estimated range

**Potential financial impact figure (currency)**

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

592,000,000

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

2,400,000,000

**Explanation of financial impact figure**

The financial impact has been calculated as the minimum substantive decrease in the total Sibanye-Stillwater revenues that may arise as the global automotive market shifts from internal combustion engines, which require PGMs as inputs, to electric vehicles. Sibanye-Stillwater's group PGM revenues (from its South African and US operations) amounted to R117 billion in 2022.

The financial impact range was calculated as follows:

Minimum: A slight decrease in this revenue of 0.503% would result in a PGM revenue loss of approximately R592 million.

Maximum: If the group's PGM revenues were to decline by 2%, then PGM revenues could decrease by just under R 2.4 billion.

This upper range of potential financial impacts breaches Sibanye-Stillwater substantive financial impact value of R1,3 billion. In addition, these impacts are considered substantive, as outlined in question C2.1b, because the climate related risk associated with changing market preferences has the potential for strategic impacts on our PGM business segment, which contributed 85% of our total group revenue in 2022.

**Cost of response to risk**

1,132,000,000

### **Description of response and explanation of cost calculation**

Sibanye-Stillwater's response to the risk entails the following:

**Situation:** There is a global shift in demand for battery electric vehicles (EVs) due to consumer preferences for cleaner and lower-emission vehicles, leading to a decrease in demand for internal combustion engines (ICEs). As autocatalysts are a key component of ICEs, this shift results in reduced demand for precious group metals (PGMs). Since PGMs contribute significantly to our revenue, the market transition to EVs poses a strategic risk to the long-term sustainability of our business.

**Task:** We have assessed the financial and strategic impact of this risk to determine its priority level.

**Action:** Our risk assessment process involved evaluating the substantive impacts associated with the phasing out of ICEs and the adoption of battery and fuel cell EVs, which rely on PGMs as well as the appropriate response to the risk.

**Result:** The assessments indicate that the core demand for PGMs used in autocatalysts will be significantly affected in the long term. This technology and market risk is considered substantive due to its strategic, negative impact on the PGM market. However, our company is well-positioned to meet the commodity requirements for emerging battery and fuel cell drivetrains. We are actively building a "green metals" portfolio, which includes investments in a lithium hydroxide project, nickel processing, lithium and zinc tailings retreatment assets, and exploration of copper opportunities. Additionally, we are exploring the application of platinum and minor PGM elements in the growing areas of the green hydrogen economy and fuel cells.

The cost of this response is therefore related to our most recent investments in 2022, the reporting year, related to securing involvement in battery metals. Recent investments included an initial 30% stake in the Keliber lithium project in Finland, which Sibanye-Stillwater has since increased to 85%, and 100% acquisition of Sandouville, a nickel hydrometallurgical processing facility in France. These interests have augmented our exposure to the circular economy and battery metals, thus advancing our pivot into green metals and energy solutions. The cost of this response in 2022 therefore amounted to R1.132 billion, which was used to acquire Sandouville and Keliber. These costs are for the period up to December 2022. Further costs are anticipated in this regard in the short term.

### **Comment**

None

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### **Identifier**

Risk 5

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

Upstream

**Risk type & Primary climate-related risk driver**

Acute physical

Flood (coastal, fluvial, pluvial, groundwater)

**Primary potential financial impact**

Decreased revenues due to reduced production capacity

**Company-specific description**

Sibanye-Stillwater is a multinational mining and metals group with a diverse portfolio of mining and processing operations and projects across the globe.

Climate change is anticipated to heighten the occurrence of extreme weather events, including floods, over most of the central interior of the United States. The likelihood of both increased rainfall variability and increased intensity of storms, in the areas where Sibanye-Stillwater operates, have been assessed as part of our TCFD scenario-analysis.

This risk type materialised in June 2022, where a significant '500-year flood' event severely affected Sibanye-Stillwater's two PGM operations in Montana. This occurred due to flooding of numerous rivers in the region, following a warm spell which led to a rapid melt of accumulated snow in the mountains and associated runoff, which was exacerbated by heavy rainfall. The floods did not impact the Stillwater Mine itself, but did wipe out parts of Montana Highway 419, a highway heavily used by the mining operations. Several bridges in the vicinity of our Stillwater mine were damaged and sections of the primary access road from Nye to the Stillwater mine have been severely eroded, restricting access to the mine and requiring rerouting of water, tailings and other piping.

Access to the Stillwater mine was restricted, and the event resulted in a 7-week downtime of operations. Our employees at the Stillwater mine site provided refuge and support to campers arriving from the nearby Woodbine campground. We collaborated with all stakeholders in the area, including landowners, community members, and local and state authorities.

**Time horizon**

Short-term

**Likelihood**

Very likely

**Magnitude of impact**

High

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

Yes, a single figure estimate

**Potential financial impact figure (currency)**

1,800,000,000

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

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

**Explanation of financial impact figure**

The impact figure related to acute flooding on the US PGM segment was calculated according to revenue losses due to the downtime of the operations over approximately seven weeks. Sibanye-Stillwater reported revenue losses of more than \$100 million (source: <https://me.smenet.org/webContent.cfm?context=1&webarticleid=4082>) during the unplanned shutdown, which equates currently to R1.8 billion. The production suspension had an estimated impact of 60,000 PGM ounces for 2022. The lower mined production also impacted recycling feed rates at the company's recycling facility, because production from the mine is needed for blending with high grade autocatalyst feedstock. The value of this impact exceeds Sibanye-Stillwater's threshold of substantive financial impacts. The magnitude of the impact is therefore considered to be high.

**Cost of response to risk**

0

**Description of response and explanation of cost calculation**

Sibanye-Stillwater's operations were impacted for seven weeks due to the disastrous flooding in Montana. The roads and infrastructure impacted were public roads and the costs were borne by third-parties, hence the value of zero as the cost of the response. There was little that could be done to reduce the downtime, and our efforts were focused on increased support and engagement with surrounding communities who were affected. Our employees at the Stillwater mine site provided refuge and support to campers arriving from

the nearby Woodbine campground. We collaborated with all stakeholders in the area, including landowners, community members, and local and state authorities to effectively restore infrastructure and services. This does not directly contribute to water-related SDGs but assists in alleviating the human impact from the disaster.

We recognise the flooding is closely linked to climate change and we are on an ongoing journey to reduce our own GHG emissions as a corporate entity. In the interim, we need to ensure flood and other disaster responses are able to cope as best they can with natural hazards. Furthermore, Sibanye has embarked on a TCFD analysis that will assist us in planning for climate risks and their associated impacts like the flooding. This will enable us to minimise the impact of events such as flooding on our operations.

**Comment**

None

## C2.4

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

Yes

### C2.4a

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

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**Identifier**

Opp1

**Where in the value chain does the opportunity occur?**

Upstream

**Opportunity type**

Products and services

**Primary climate-related opportunity driver**

Development of new products or services through R&D and innovation

**Primary potential financial impact**

Increased revenues through access to new and emerging markets

**Company-specific description**

Sibanye-Stillwater is a multinational mining and metals group with a diverse portfolio of mining and processing operations and projects. The urgent need for global decarbonization is gaining momentum as the devastating effects of global warming on humanity become increasingly evident. The world is transitioning to a lower-carbon energy mix, and we anticipate a rapid acceleration of this change in the coming years, with significant transformations in energy and transportation.

Company-specific opportunity:

Platinum, Iridium, and Ruthenium play a crucial role in the global transportation system's transition to a low-carbon future. Sibanye-Stillwater is well positioned to seize opportunities in this context, as the platinum group of metals (PGMs) extracted from our South African and US operations accounted for the majority (85%) of our revenues in 2022. The PGMs we produce already contribute to air pollutant reduction in internal combustion vehicles' exhaust systems, and they are expected to play a vital role in the future hydrogen economy. Specifically, PGMs have promising applications in the green hydrogen economy, including electrolyzers and fuel cells, making them essential in efforts to limit global warming to below 1.5°C. Through our research and development efforts, we have reached the following conclusions that are expected to drive the demand for PGMs in the future:

- Green hydrogen produced by electrolyzers using renewable energy sources such as solar and wind power will be instrumental in decarbonizing heavy industries and everyday activities.
- PGM-based PEM (proton exchange membrane) technology is well-suited to utilize intermittent renewable energy inputs.
- PGM-based PEM fuel cells are the most suitable technology for the transport sector.

The growing adoption of platinum and palladium substitution in gasoline autocatalysts, along with increasing interest in the hydrogen economy, has led to platinum being the best precious metals performer of 2022. Demand for platinum in automotive applications has increased by 17% year-on-year to 2.8 million ounces due to higher auto production and the substitution of palladium with platinum in gasoline autocatalysts in



2022. We anticipate that the platinum price will continue to remain well supported and potentially experience further growth over the next five years.

**Time horizon**

Long-term

**Likelihood**

Very likely

**Magnitude of impact**

High

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

Yes, a single figure estimate

**Potential financial impact figure (currency)**

3,300,000,000

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

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

**Explanation of financial impact figure**

The potential financial impact figure is based on potential incremental demand for platinum in the green hydrogen sector.

The demand for platinum in electrolyzers and fuel cell catalysts is conservatively anticipated to grow to approximately 190,000oz in 2025 and approximately 1,000,000oz in 2030. Given Sibanye-Stillwater's current approximately 19% market share of global primary platinum supply, it is anticipated that Sibanye-Stillwater could expect incremental demand of approximately 190,000oz of platinum from this segment by 2030. The value of this at the average platinum price in 2022 (~US\$964/oz) and an average exchange rate Rand/ dollar exchange rate of ZAR18/\$ results in a potential opportunity impact figure of ZAR 3.3 billion. This assumes supply doesn't change significantly leading up to 2030.

### **Cost to realize opportunity**

809,000,000

### **Strategy to realize opportunity and explanation of cost calculation**

Sibanye-Stillwater's strategy to realise the opportunity entails the following:

- Situation: the global decarbonisation imperative is increasing demand for radical transformation of the global transportation system. We can contribute by pursuing R&D opportunities related to green hydrogen, including (1) R&D in PEM electrolyser catalysts to produce economically competitive catalysts that use sustainable metal volumes, (2) R&D in fuel cell catalysts for stationary and/or transport applications and (3) R&D into novel and cost effective green hydrogen refuelling systems. These would enable further adoption of green hydrogen and fuel cells use in vehicles, such as cars, buses and trains, representing a clean alternative to traditional petrol and diesel engines, which are GHG emission intensive fuels.
- Task: Identify opportunities to diversify our products and markets and undertake the required R&D.
- Action: The assessment process described in the text above was followed, to establish whether there are substantive opportunities related to developing the green hydrogen market.
- Result: The assessments found that the opportunities to provide metals for cleaner mobility supplies have substantive potential financial and strategic impacts. In particular, R&D work is ongoing to ensure that the Group remains well positioned to participate in the commodity requirements for the emerging fuel cell and electrolyser markets. The opportunities in the green hydrogen economy i.e., fuel cells and electrolysers represent an attractive new application area for platinum and the minor PGM elements.

The costs, to date, to realise these opportunities amounts to approximately R809 million. This includes:

- in 2019, acquisition of SFA Oxford, a metals market consulting firm and world authority on PGMs and battery metals: R192 million
- In 2021, Sibanye-Stillwater invested in the "BioniCCubE" initiative, aimed at promoting research and development of innovative technologies and market development, with a specific focus on green hydrogen applications. Sibanye-Stillwater is fully financing the BioniCCubE project, with a budget of up to R617 million allocated for 2023. This budget represents 1.5% of the company's EBITDA for the year 2022.

### **Comment**

None

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### **Identifier**

Opp2

**Where in the value chain does the opportunity occur?**

Downstream

**Opportunity type**

Markets

**Primary climate-related opportunity driver**

Access to new markets

**Primary potential financial impact**

Increased revenues resulting from increased demand for products and services

**Company-specific description**

Sibanye-Stillwater is a multinational mining and metals group that operates a diverse portfolio of mining and processing operations and projects. The urgent need for global decarbonization is gaining momentum as the threats of global warming and their impact on humanity become increasingly apparent. As the world transitions toward a lower-carbon energy mix, we anticipate a rapid acceleration in the transformation of energy and transportation systems in the coming years. For instance, according to an International Monetary Fund working paper, meeting the net-zero target by 2050 will require addressing a two-thirds supply gap for graphite, cobalt, vanadium, and nickel, as well as a 30-40% supply gap for copper, lithium, and platinum. These resources, often referred to as "green metals," play a vital role in shaping a global low-carbon future.

Within our company, we recognize the immense opportunities presented by the "green metals" market. Pursuing these opportunities aligns with our strategic objective of building a climate-change-resilient business and enables further international growth through the acquisition of high-quality strategic assets that are poised to deliver substantial future value and diversify our earnings. As a result, we anticipate that engaging in these new and emerging markets will have significant financial and strategic implications for our company

**Time horizon**

Medium-term

**Likelihood**

Virtually certain

**Magnitude of impact**

High

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

Yes, a single figure estimate

**Potential financial impact figure (currency)**

5,300,000,000

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

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

**Explanation of financial impact figure**

We are increasingly diversifying our product mix to realise opportunities associated with 'green metal' markets. In 2021 the group entered the battery metals industry by investing in a lithium hydroxide project, followed by investments in nickel processing, lithium and zinc tailings retreatments assets.

The potential financial impact of revenues from the increased demand for green metals is expected to be approx. R5.3 billion in the medium term future. This impact includes the following expected financial impacts related to platinum and lithium.

Platinum: The demand for platinum in electrolyzers and fuel cell catalysts is conservatively anticipated to grow to approximately 190,000oz in 2025 and approximately 1,000,000oz in 2030. Given Sibanye-Stillwater's current approximately 19% market share of global primary platinum supply, it is anticipated that Sibanye-Stillwater could expect incremental demand of approximately 190,000oz of platinum from this segment by 2030. The value of this at the average platinum price in 2022 (~US\$964/oz) and an average exchange rate Rand/ dollar exchange rate of ZAR18/\$ results in a potential opportunity impact figure of ZAR 3.3 billion. This assumes supply doesn't change significantly leading up to 2030.

Lithium: The Keliber lithium project is expected to reach its full run rate of 15,000 t ore/year by 2025 and produce cash flows with an annual EBITDA up to €120 m. At an 85% stake and exchange rate of ZAR18/ € for 2022, this equates to just over ZAR 2 billion by 2025.

### **Cost to realize opportunity**

5,000,000,000

### **Strategy to realize opportunity and explanation of cost calculation**

Sibanye-Stillwater's strategy to realise the opportunity entails the following:

-Situation: global decarbonisation is increasing in momentum as the existential threat of global warming and the impacts of humanity become increasingly evident. We expect the pace of change to accelerate dramatically with radical transformation of energy and transportation in forthcoming years. We can contribute by pursuing opportunities in 'green metals' markets.

-Task: Identify opportunities to diversify our products and markets. An example is the 'strategic refresh' to green metals by management in 2021.

-Action: Our assessment process was followed to establish whether there are substantive opportunities related to 'green metals'. The increase of stakes to 85% of holdings in the Keliber lithium project in 2022, 100% stake in the Sandouville nickel hydrometallurgical processing facility, the investment in Loneer and their Lithium-Boron project, and the 19.99% stake in the New Century Resources Ltd (zinc tailings retreatment) are key examples, which were assessed to have potential for material/ significant financial impacts. These assessments spanned years of careful market analysis and engagement.

-Result: Opportunities to provide metals for cleaner mobility and cleaner energy supplies have substantive potential financial and strategic impacts. Work is ongoing to ensure that the Group remains well positioned to participate in the commodity requirements for the emerging battery and fuel cell drivetrains. The group is building a 'green metals' portfolio and we are exploring mining copper and opportunities in the green hydrogen economy linkage of fuel cells, which represents an attractive new application area for platinum and minor PGM elements.

The cost of the response thus far comprises just under R5 billion, comprising the following acquisitions:

- Acquisition in 2019 of SFA Oxford, a metals market consulting firm and world authority on PGMs and battery metals: R192 million
- 19.99% stake in New Century Resources Limited (Australian tailings reprocessing business) in 2021: just under R1.5 billion
- 85% stake in Keliber (lithium hydroxide project in Finland) in 2022: R1.749 billion
- 100% stake in the Sandouville nickel hydrometallurgical processing facility (France) in 2022: R1.501 billion

In addition, we are continuing development of the Rhyolite Ridge Lithium-Boron JV Project with Loneer (US), where we expect to contribute US\$490 million for a 50% interest in the JV.

### **Comment**

None

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**Identifier**

Opp3

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

Energy source

**Primary climate-related opportunity driver**

Use of lower-emission sources of energy

**Primary potential financial impact**

Other, please specify

Other: improve low-emission energy security

**Company-specific description**

Sibanye-Stillwater is a multinational mining and metals group that operates a diverse range of mining and processing operations and projects. Electricity is a crucial input for our operations, and historically, regulatory barriers in South Africa have hindered the development of large-scale renewable energy facilities by the private sector. These barriers have contributed to electricity supply constraints in the country.

However, recent regulatory developments have created an opportunity for Sibanye-Stillwater to significantly increase the use of renewable energy at our South African operations. The regulatory environment now supports self-generation energy projects with no cap on the installed capacity for licensing. This favourable regulatory framework enables Sibanye-Stillwater to develop large-scale renewable energy projects at our South African Gold and Platinum Group Metals (PGM) operations.

Implementing these renewable energy projects will not only help us secure alternative electricity supplies, but also enhance the security of electricity in South Africa by enabling decentralized low-emission energy generation directly at our various operations. Currently, our operations

heavily rely on national electricity supplies, which are vulnerable to disruptions and load-shedding challenges faced by the national utility, Eskom. Such disruptions can have a negative impact on our production in the South African Gold and PGM divisions, affecting our revenues. Moreover, reducing our dependence on Eskom's electricity supply will contribute to the decarbonization of our operations. As the majority of Eskom's supply is generated by coal-fired power fleets, shifting to renewable energy sources aligns with our strategy to achieve our 2040 net-neutral target, improve our Environmental, Social, and Governance (ESG) performance, and enhance the attractiveness of the commodities we produce. Additionally, these renewable energy projects will reduce our exposure to electricity cost increases in South Africa associated with the expected carbon tax pass-through costs that Eskom may impose once the utility is required to pay carbon tax (expected in 2026).

**Time horizon**

Short-term

**Likelihood**

Virtually certain

**Magnitude of impact**

Medium-high

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

Yes, a single figure estimate

**Potential financial impact figure (currency)**

4,000,000,000

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

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

**Explanation of financial impact figure**

The solar and wind plant projects present an excellent opportunity for Sibanye-Stillwater to achieve multiple benefits. Firstly, these projects will lead to a significant reduction in Scope 2 emissions, contributing to our sustainability goals. Additionally, they offer the potential for substantial

cost savings in electricity expenditure, as the Power Purchase Agreement (PPA) tariff is expected to be 20-50% lower than the current electricity rates we pay.

The lifting of self-generation thresholds for renewable energy generation, supported by favourable policies, creates an enabling environment for the development of these projects, which were previously hindered by regulatory barriers. Based on comprehensive modelling that considers expected Eskom escalations, PPA tariffs, and carbon tax savings, it is estimated that the electricity cost and carbon tax savings from procuring electricity from renewable energy projects could have a net present value of up to R4 billion.

It's important to note that this estimated financial impact does not account for additional benefits associated with the photovoltaic (PV) project. These benefits include diversifying our energy supplies, thereby reducing the risk of downtime caused by power shortages in South Africa. Furthermore, decarbonizing our value chains and commodities will enhance our overall sustainability and competitiveness, aligning with our commitment to environmental stewardship.

### **Cost to realize opportunity**

13,000,000,000

### **Strategy to realize opportunity and explanation of cost calculation**

Sibanye-Stillwater's strategy to realise the opportunity entails the following:

- Situation: Updates to the South African (SA) regulatory environment have opened possibilities for the development of privately owned, large scale renewable energy generation in SA.
- Task: The financial and strategic impact of these opportunities was assessed, with a view to assessing their priority levels.
- Action: Our risk assessment process was followed, to establish whether large scale renewable energy opportunities have the potential for material/ significant financial impacts and how we are able to apply the opportunity in a successful manner.
- Result: The assessments revealed that the development of embedded large scale renewable energy facilities could have significant financial impacts. We have therefore implemented plans to reduce this realise this opportunity by reducing our reliance on Eskom as our key energy supplier in SA. Reductions in the purchase of Eskom electricity will also reduce the emissions associated with consuming electricity generated by the utility's predominant coal-based fleet. These capital costs will be third-party funded through IPPs who will build, own and operate the facilities and sell the electricity generated through PPA. This value is subject to a number of assumptions and ultimate approval of the renewable energy projects and execution of associated agreements.





The estimated total capital cost for the renewable projects is estimated at R13 billion. Anticipated savings include a 30% to 50% discount on solar projects and a 20% to 30% discount on wind projects.

2022 Status of the Renewable Energy Project Pipeline:

- SA Gold 50 MW solar photovoltaic (PV) project: The project faced delays due to land claims over the permitted site. Through legal processes and investigations, the issues have been resolved, but significant delays were experienced.
- SA PGM 175 MW solar PV projects. Progress remains on track in 2022, with completion projected for the first half of 2025.
- SA 328 MW wind projects: In 2022, the projects mostly remained on track, although the Eskom grid access process and additional environmental permits caused a delay in financial close, now expected in the first half of 2023. The project remains on schedule for commercial operation in late 2024 or early 2025.

**Comment**

None

## C3. Business Strategy

### C3.1

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

Row 1

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**Climate transition plan**

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

**Publicly available climate transition plan**

Yes

**Mechanism by which feedback is collected from shareholders on your climate transition plan**

We have a different feedback mechanism in place



**Description of feedback mechanism**

We actively collect feedback from our shareholders on our climate transition plan through various engagement channels. One important avenue is our Investor Day series, where shareholders are invited to participate and discuss our ESG initiatives and carbon neutrality plan. During these events, a dedicated section is allocated to present and discuss the climate transition plan, allowing shareholders to ask questions and provide feedback.

Our transition/decarbonisation plans were presented at our AGM where stakeholders have the opportunity to comment. Additionally, we regularly share updates on our climate transition plan and its progress during our quarterly results presentations. This provides an opportunity for shareholders to ask questions and provide feedback on our efforts. We also conduct conference calls specifically focused on ESG matters and our carbon neutrality goals, enabling shareholders to actively participate and share their perspectives.

We utilize corporate and regulatory announcements to communicate important updates related to our climate transition plan. Shareholders are encouraged to provide feedback through the designated communication channels specified in these announcements. We actively participate in conferences and arrange one-on-one and group investor meetings. In these meetings we engage with shareholders to discuss our climate transition plan and gather feedback.

By leveraging these mechanisms, we ensure ongoing and direct engagement with our shareholders and customers, facilitating the collection of their valuable feedback. This helps us address their climate change concerns, align our transitional plan with their needs and expectations, and foster a collaborative approach towards achieving our carbon neutrality goals.

**Frequency of feedback collection**

More frequently than annually

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

 ssw-climate-change-position-statement-june-2021.pdf

**C3.2**

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

	Use of climate-related scenario analysis to inform strategy
Row 1	Yes, qualitative and quantitative

### C3.2a

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

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Physical climate scenarios RCP 2.6	Company-wide		<p>Parameters: Sibanye-Stillwater considers the RCP 2.6 scenario in both the short and long term, with greater changes expected in the long term. The business areas analysed include chromium, copper, and platinum.</p> <p>Assumptions: The RCP2.6 scenario assumes that the international community takes sufficient action to limit greenhouse gas emissions to a level that will stabilise the global average temperature increase at 2°C. The scenario is based on the assumption that the international community uses the ratchet mechanism in the Paris Agreement effectively to ensure that the 2°C target can be reached. In terms of this mechanism countries will increase their ambitions for emission reduction from 2020 to 2025. Within the RCP 2.6 scenario, short-term projections indicate increased temperatures and variability in rainfall patterns.</p> <p>Analytical choices: The climate change impact in the RCP 2.6 scenario in the short term is taken in the context of the already observed impacts. The impacts in the long term are taken as being slightly increased, but significantly less than that in the case of the RCP 8.5 and the NDC scenarios. The regulatory impact of the RCP 2.6 scenario will be high in the short term as there will be significantly more stringent regulatory pressure. The risk assessment framework used in these reports are taken from the Recommendations of the Task Force on Climate-related Financial Disclosures of June 2017. The scenario analysis is largely qualitative.</p>
Physical climate	Company-wide		<p>Parameters: Sibanye-Stillwater considers the RCP 4.5 scenario. The business areas analysed include chromium, copper, and platinum. The current NDCs is considered and leads to warming in the range of</p>



<p>scenarios RCP 4.5</p>			<p>2.7 to 3.7°C. In the case of South Africa, the NDC pledges are consistent with the country’s long-term goal to constrain its emissions to follow a peak-plateau-decline (PPD) trajectory. Based on this, South Africa’s emissions should peak between 2020 and 2025. This scenario also considers the risk of a carbon tax from 2019 onwards as well as risk of Carbon budgets and Pollution prevention Plans to be mandatory for the mining industry from 2021 onwards.</p> <p>Assumptions: The Limited-mitigation scenario assumes that countries do not fully meet their mitigation targets and rely on fossil fuel reserves. RCP 4.5 is considered the most likely baseline scenario, considering the limited implementation of climate policies and the finite nature of non-renewable fuels. The climate change impact for the Limited-mitigation scenario was however taken for the aggregate global impact of all the NDC in terms of the Paris Agreement (excluding the USA). This is because the contributions of all the countries collectively will determine the climate change outcome. The current NDCs lead to warming in the range of 2.7 to 3.7°C.</p> <p>Analytical choices: The analysis considered the IPCC's RCP 4.5 scenario, which represents an intermediate trajectory where emissions are expected to peak around 2040 before declining. Sibanye-Stillwater considers the RCP 4.5 scenario in the short, medium, and long term. The scenario analysis is qualitative and quantitative as projections was made on graphs to show the impact of the scenario. To support our climate change response program, we have established strategic objectives that include implementing TCFD recommendations. This involves aligning our governance, strategy, risk management, metrics, targets, and disclosures with TCFD guidelines.</p> <p>In early 2023, following the recommendation of the ESG committee, the SVP: Sustainability and ESG initiated a TCFD alignment project. This project focuses on assessing climate-related risks, considering different climate-related scenarios (beyond the previous 2019 analysis), and enhancing our resilience to climate change.</p>
<p>Physical climate</p>	<p>Company-wide</p>		<p>Parameters: In 2019, Sibanye-Stillwater conducted climate change scenario analyses in line with the TCFD recommendations. This assessment encompassed the effects on our direct operations, value chain, and the broader community. The No-mitigation scenario is a high emission scenario is consistent</p>



<p>scenarios RCP 8.5</p>			<p>with the IPCC’s RCP 8.5 scenario, in which the global greenhouse gas emissions leads to a radiative forcing of 8.5 W/m2 by the end of the century. The focus was on Sibanye’s operating environments. Assumptions: This scenario assumes that no greenhouse gas mitigation is done by countries The relevance of the RCP 8.5 scenario to Sibanye-Stillwater lies in the physical risks associated with projected climate changes in both the USA and South Africa. These risks could significantly disrupt our operations, such as power and water supply disruptions, equipment failures, flooding of shafts, or transportation difficulties. The scenario helps identify potential risks under "worst-case" conditions.</p> <p>Analytical choices: The selected scenario for analysis was the IPCC's RCP 8.5, representing a high-emission trajectory where global greenhouse gas emissions result in a temperature increase of 4°C or more by the end of the century.</p> <p>Sibanye-Stillwater considers the RCP 8.5 scenario across short, medium, and long-term timeframes. The time horizons include short term (within the next 5 years) Medium term is 5-10 years and long term is 10+ years While the physical risks are currently low, they are expected to increase over time due to global warming, becoming high in the long term. Critical aspects, such as the availability of electricity and water supplies, have been analysed within our company as part of the scenario analysis. In this scenario concentrations of greenhouse gasses in the atmosphere accelerate and reach 950 ppm by 2100 and continue increasing for another 100 years.</p> <p>Transitional risks associated with the RCP 8.5 scenario in South Africa and Montana are deemed low. However, it is important to note that climate change may contribute to increased geopolitical uncertainty in a no-mitigation scenario, potentially impacting the price of gold. While this may benefit our group, it needs to be carefully weighed against the physical risks that climate change poses to our operational efficiency.</p> <p>The analysis was both quantitative and qualitative as modelling indications was used to project temperatures for the future in the operating environments.</p>
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## C3.2b

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

### Row 1

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#### **Focal questions**

Sibanye-Stillwater conducted climate change scenario analyses aligned with the TCFD recommendations in 2019. The aim was to assess the potential financial impact of climate change-related risks and opportunities on our business. The following focal questions were investigated during the scenario analysis:

- **Physical Effects:** What are the physical effects of climate change on our operations in different jurisdictions? The scenario analysis examined the specific impacts of climate change, such as extreme weather events, sea-level rise, and changing precipitation patterns, on our operations.
- **Transitional Risks:** What would be the transitional risks to our business due to climate change? In particular, how will our markets shift due to climate change, and what effect will these changes have on our operations and business? The scenario analysis explored changing consumer behaviour, regulatory shifts, evolving technologies, and market demand related to climate change.
- **Mitigation by Countries:** How will various levels of mitigation by countries affect our operations? The scenario analysis considered the potential impacts of different national and international mitigation actions, such as carbon pricing, emissions reduction targets, and renewable energy incentives, on our business activities.
- **Market Adaptation:** How can we adapt to changes in the market due to changes caused by climate change? The scenario analysis focused on strategies to respond to market shifts driven by climate-related factors. This included identifying opportunities for innovation, adjusting business models, diversifying product offerings, and enhancing resilience.

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

RCP 2.6 Scenario:

Applying the RCP 2.6 scenario and considering transitional risks, Sibanye-Stillwater foresees an increased demand for cleaner energy, leading to a rise in the demand for metals like copper, chromium, and PGMs (Platinum Group Metals). The electric vehicle market is expected to expand, potentially reducing the need for PGMs in autocatalysts. However, the majority of growth in the "new vehicle tech" sector is projected to come from hybrid vehicles. The demand for copper in electric and hybrid vehicle motors is expected to significantly increase as these vehicles require up to three times more copper. Moreover, there may be a surge in the demand for platinum used in fuel cell vehicles and the hydrogen

economy.

How the results have informed at decision/ actions: Influence on Strategy and Financial Planning

Based on these findings, Sibanye-Stillwater is strategically pivoting toward the green metals market. In 2019, the company acquired SFA Oxford, a globally recognized authority on PGMs, which provides valuable market intelligence on battery materials and precious metals. This acquisition accelerates Sibanye-Stillwater's objective of diversifying into battery metals as a hedge against potential fluctuations in the PGMs market. Additionally, the company has made investments in various battery metals projects, including a lithium hydroxide project in Finland, followed by ventures in nickel processing, lithium, and zinc tailings retreatment. Sibanye-Stillwater is also actively exploring copper mining opportunities and assessing prospects in the green hydrogen economy, particularly in fuel cell applications, which represent a promising new area for platinum and other minor PGM elements.

RCP 4.5 and 8.5 Scenarios:

The scenario analyses conducted under both the RCP 4.5 and 8.5 scenarios indicate heightened physical risks, with RCP 8.5 exacerbating the identified risks. Electricity generation in South Africa is particularly vulnerable to physical impacts such as water shortages, while the country's electricity distribution infrastructure is at risk due to extreme weather events. Maintaining uninterrupted power supply is crucial for Sibanye-Stillwater's safe operations. Additionally, as our operations require substantial water resources, rising temperatures and droughts pose a significant threat to water security.

How the results have informed at decision/ actions: Influence on Strategy and Financial Planning

In response to these results, Sibanye-Stillwater has implemented measures to manage the highlighted physical risks. The company is actively pursuing initiatives to mitigate these risks, such as reducing dependence on municipal water in South Africa to minimize water disruptions caused by dry spells and droughts. Furthermore, Sibanye-Stillwater is proactively investing in the development of renewable energy facilities, with a total capacity of 557 MW, to mitigate electricity-supply risks.

### **C3.3**

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



	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	<p>Our strategic purpose is 'to safeguard global sustainability through our metals' and our vision is 'to be a leader in superior shared value for all stakeholders.' Climate-related risks and opportunities have significantly influenced our strategy in terms of our products and services.</p> <p>Our short and long-term strategies are guided by climate-scenario analysis, risk assessments, and monitoring of climate change developments. This allows us to identify market shifts, particularly in the automotive and energy sectors.</p> <p>Our business strategy centres around building a unique portfolio of green metals and energy solutions to lower the carbon intensity of the global economy. Acquisitions and partnerships, such as Keliber, Sandouville, and New Century, demonstrate our commitment to capitalizing on these opportunities.</p> <p>To address the evolving transportation systems and regulations in response to climate change, we have expanded our commodity portfolio to focus on 'green metals.' Sibanye-Stillwater has established itself as one of the world's largest primary producers of platinum, palladium, and rhodium, and is a top-tier gold producer. We also produce and refine iridium and ruthenium, nickel, chrome, copper, and cobalt. Additionally, we have entered the battery metals mining and processing sector and are growing our presence in the circular economy through recycling and tailings reprocessing operations.</p> <p>Recognizing the role of Platinum Group Metals (PGMs) in the low-carbon transition, we are developing a Hydrogen Strategy to understand PGM demand, participate in the hydrogen value chain, and accelerate hydrogen adoption.</p> <p>We also emphasize diversification of commodities and jurisdictions within Africa as a meaningful contributor to our green metals strategy.</p>





		<p>Overall, climate-related risks and opportunities have influenced our strategy, aligning us with a global climate change solution. Leveraging our portfolio of green metals, adopting innovative technologies, while simultaneously mitigating climate change impacts by reducing emissions, and transitioning to a low-carbon future, which are key to our vision and strategic objectives</p>
<p>Supply chain and/or value chain</p>	<p>Yes</p>	<p>Climate-related risks and opportunities have significantly influenced our strategy in terms of our supply chain and value chain. We recognize that climate impacts have the potential to disrupt the supply of critical inputs along our value chain, which could have negative consequences for our operations, revenues, and long-term sustainability.</p> <p>To address these risks and opportunities, our short-term and long-term business strategies are guided by climate-scenario analysis, risk assessments, and monitoring of climate change developments. This enables us to proactively identify and react to potential impacts along our supply chain and value chain.</p> <p>A case study of our South Africa operations highlights our approach. We have categorized our suppliers and contractors into strategic, tactical, and local groups. Through this process, we have identified critical suppliers and engage with them regularly on climate-related issues. This collaborative engagement allows us to jointly address risks and opportunities in our supply chain.</p> <p>For example, coal-based grid electricity in South Africa is dependent on adequate water supplies, which are expected to become scarce or stressed due to climate change impacts. To mitigate such risks, we have implemented short and medium-term strategies to adapt to climate change impacts. We have made significant decisions influenced by these climate-related risks. One notable decision is the development and approval of a range of renewable energy projects with a total capacity of 557 MW. These projects include solar PV and wind energy installations at our operations in South Africa. By investing in renewable energy, we aim to adapt to climate change impacts while simultaneously mitigating climate change impacts by reducing our carbon footprint, enhancing energy efficiency, and ensuring a more sustainable supply of energy for our operations.</p> <p>Overall, climate-related risks and opportunities have prompted us to prioritize the resilience and</p>



		<p>sustainability of our supply chain and value chain. By actively addressing these risks, embracing renewable energy solutions, and collaborating with critical suppliers, we are positioning ourselves to mitigate potential disruptions and create long-term value while contributing to a greener and more sustainable future.</p>
<p>Investment in R&amp;D</p>	<p>Yes</p>	<p>Sibanye-Stillwater recognizes the crucial role of green metals in future low-carbon technologies. This presents an opportunity to position ourself as a supplier of minerals essential for addressing climate change challenges. In the short-to-medium term, we leverage our strategic intelligence to meet the growing demand for minerals in low-carbon technologies. Our focus on recycling operations enables us to produce minerals with a lower carbon footprint.</p> <p>Climate-related risks and opportunities shape our R&amp;D strategy. Our short-term (0-5 year) and long-term (5-10 year) business strategies are guided by climate-scenario analysis, risk assessments, and monitoring of national and international climate change developments. This allows us to identify areas for R&amp;D investment.</p> <p>For instance, We entered into a partnership with Heraeus to develop and commercialise novel electrolyser catalysts for the production of green hydrogen. We also We invested in Enhywhere, a French startup that has developed a novel hydrogen refuelling technology for all vehicles.</p> <p>We are committed to the transition to a low-carbon future and invest in green metals, which are crucial for renewable energy, batteries, and hydrogen. Our strategic differentiator is a unique global portfolio of green metals and energy solutions that contribute to reversing climate change. Additionally, we actively research utility-scale storage and hydrogen technologies to accelerate decarbonization in our operations. Furthermore, we are developing and implementing battery electric mining machinery, such as semi-autonomous battery electric load haul dumpers (LHDs), at our operations.</p> <p>Our R&amp;D initiatives focus on improving water quality, reducing operational water-related costs, and developing sustainable water solutions for post-mining. In 2022, we allocated R3.01 million to R&amp;D projects in these areas. We have also initiated research and development work to recover rare earth</p>



		elements from solid waste generated by these projects, contributing to the sustainability of our water treatment program for mine closure.
Operations	Yes	<p>Our operational strategies, both short-term (0-5 years) and long-term (5-10 years), have been shaped by climate-related risks and opportunities.</p> <p>We have taken note of the Draft Mine Closure Strategy published by the Department of Mineral Resources and Energy in South Africa, which mandates the consideration of climate change in mine closure plans under certain circumstances. Proactively, Sibanye-Stillwater has decided to implement nature-based solutions as part of our mine closure activities to offset carbon emissions and adapt to these climate-related regulatory requirements. This may include options like carbon capture and storage/sequestration, aligning with our strategic objective of achieving a carbon-neutral position by 2040. Our energy and decarbonization strategy plays a vital role in executing this objective and driving toward net-zero emissions by 2050.</p> <p>The recent Taxation Amendment Act 20 of 2022, gazetted by the Government on 5 January 2023, establishes effective carbon tax rates until 2030. We anticipate a significant increase in carbon tax liabilities from 2026 onwards. Sibanye-Stillwater has integrated future carbon tax projections based on production data, GHG emission forecasts, and other indicators into our financial planning.</p> <p>Additionally, we have identified the Section 12L of the Income Tax, which offers low carbon tax incentives in the form of rebates, as an opportunity provided by the South African government to mitigate climate change impacts. Through this incentive, businesses can deduct taxes on energy consumption savings. We recognize this as a climate-related opportunity to research and develop innovative energy efficiency and greenhouse gas mitigation projects, benefiting our operations and generating additional revenue. Consequently, our operating strategy emphasizes a stronger focus on long-term energy efficiency improvements, leading to reduced operational emissions. Deploying renewable energy and energy efficiency projects forms a significant strategic decision aligned with this opportunity.</p> <p>Looking ahead, our future plans involve the exploration and evaluation of large-scale storage and green</p>

		hydrogen technologies to enable higher integration of renewables into our energy mix. This reflects our commitment to leverage new technologies, such as electrification, digitalization, and automation in our operations.
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### C3.4

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

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Capital allocation Acquisitions and divestments Access to capital Liabilities	<p>Undertaking the TCFD scenario analysis assists with financial planning to manage climate change risks and opportunities. We are committed to our climate change response program, which includes regular reviews and updates on climate change risks and opportunities. Recognizing the positive correlation between sustainability, ESG credentials, and superior financial returns, we have integrated climate-related considerations into our short-medium-to-long-term financial planning. Market shifts, driven by climate-related opportunities, have influenced our strategic decision-making and resource allocation. Our investments in 'green metals' and other sectors align with the projected demand for critical minerals used in EVs, battery storage, fuel cells, and other clean energy technologies as elaborated on in 2.4a opportunity 2. These investments are expected to contribute to revenue growth in the medium-to-long term, with estimated potential financial impacts of approximately R3.9 billion.</p> <p>Example of how we plan to finance and resource our climate transition plan:                      Access to credit is critical in our financial planning to support major investments in infrastructure related to climate-related opportunities and risk mitigation. Our equity and debt providers have expressed clear expectations regarding climate change targets and meaningful decarbonization efforts throughout our value chains. We actively engage with shareholders and debt providers on climate change and decarbonization topics, positioning ourselves as a green metal producer to access new markets and secure low-cost 'green' finance. Furthermore, complying with the recommendations of the TCFD enhances our resilience to climate change impacts.</p> <p>Time horizons this planning covers: short, medium and long-term.</p>

	<p><b>Acquisitions and Divestments:</b>                  Our strategic acquisitions and divestments have strengthened our portfolio for a low-carbon economy. We acquired interests in green metal projects and operations, including the Keliber lithium project in Finland, nickel processing, and lithium and zinc tailings retreatment assets. These acquisitions provide us with long-term growth and revenue opportunities in low-emission and renewable technologies. Battery metal prices remained at elevated levels throughout the year, and a move by other industry peers toward diversifying into the battery metals space was evident. In 2022, the Group further diversified its portfolio, both geographically and by commodity, with several significant acquisitions of interests in green metal projects and operations, which are housed in the Group's European region.                  Time horizons this planning covers: medium to long-term.</p> <p><b>Access to Capital: Liabilities</b>                  Access to capital and liabilities are vital considerations in our financial planning. To ensure access to credit and meet stakeholder expectations, we actively engage with shareholders and debt providers on climate change and decarbonization topics. We understand that failure to set climate change targets and demonstrate meaningful decarbonization could result in divestment by shareholders and restricted access to debt finance. By positioning ourselves as a green metal producer and seeking low-cost "green" finance, we aim to mitigate these risks and secure necessary funding for infrastructure investments.                  Time horizons this planning covers: long-term.</p> <p><b>Capital Allocation:</b>                  Our capital allocation takes into account the growing demand for critical minerals in electric vehicles and battery storage. With the projected growth of lithium demand by over 40 times by 2040, and the rapid growth of hydrogen as an energy carrier, we have made strategic investments in these metals. These investments strengthen our balance sheet and equip us to seize opportunities in the low-carbon economy. Our partnership with Keliber positions us as a key player in battery technologies and the renewables sector, with a focus on long-term sustainability.                  Time horizons this planning covers: long-term.</p> <p><b>Direct Costs:</b>                  We regularly factor climate impacts in consideration of our direct costs. For example, the introduction of the carbon tax in</p>
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		<p>South Africa, based on a polluter-pays principle, has direct cost implications. Currently, we have carbon tax liabilities payable to the South African Revenue Service. These costs are considered in our medium-to-long-term financial planning. Phase 1 of the Carbon Tax has been extended by three years to 31 December 2025. The Carbon Tax Rate increases from R144/tonne CO2e in 2022 to R159/tonne CO2e from 1 January 2023. We actively manage these direct costs and evaluate strategies to minimize our carbon tax liability while striving for operational sustainability. This is also further discussed in C2.3a Risk 3.</p> <p>Time horizons this planning covers: short-medium term.</p>
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### C3.5

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

Identification of spending/revenue that is aligned with your organization’s climate transition	
Row 1	Yes, we identify alignment with our climate transition plan

### C3.5a

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

**Financial Metric**

Revenue/Turnover

**Type of alignment being reported for this financial metric**

Alignment with our climate transition plan

**Taxonomy under which information is being reported**

**Objective under which alignment is being reported**

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

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

77

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

5

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

10

**Describe the methodology used to identify spending/revenue that is aligned**

77% of our revenues is considered 'green revenue'. This is defined by FTSE Russell as the percentage of revenue that is derived from products that have a positive environmental utility which help prevent, restore and/or adapt to issues deriving from climate change, natural resource limitations and environmental degradation.

Based on the criteria developed by FTSE Russell, Sibanye-Stillwater utilised revenue from the following operations in determining our FTSE Russell green revenue factor: SA gold (limited to the Cooke operation); SA PGMs (excluding Mimoso and Kroondal); and US PGMs (including recycling).

In particular, Sibanye-Stillwater considers the development and growth of the green-hydrogen economy as the key activities to which the group's PGM revenues are aligned to a 1.5°C world. Based on our life of mine models and forecasts for hydrogen electrolyser and fuel cell demand (as a portion of global PGM demand), we conservatively estimate that 10% of revenues generated by 2030 will be aligned to a 1.5°C world.

In addition, Sibanye-Stillwater's 'green metals' portfolio has contributed to the increase in such revenues that are aligned with a 1.5°C world. These include metals required as components in renewable energy plants, such as copper, as well as nickel, lithium and other PGMs required for the battery storage markets that are needed to support renewable energy generation in the future.



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**Financial Metric**

Other, please specify  
Investment spend

**Type of alignment being reported for this financial metric**

Alignment with our climate transition plan

**Taxonomy under which information is being reported**

**Objective under which alignment is being reported**

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

34,273,000,000

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

0

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

0

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

0

**Describe the methodology used to identify spending/revenue that is aligned**

Sibanye-Stillwater employs a comprehensive methodology to identify investment spending aligned with our organization's climate transition. Our commitment is to support the Paris Agreement's goal of limiting global warming to below 2 degrees Celsius, preferably 1.5 degrees Celsius. We recognize the importance of reducing emissions in our mining operations.

The criteria used to determine the alignment of the spending with our organization's climate transition include investments that have a positive



environmental utility which help prevent, restore and/or adapt to issues deriving from climate change, natural resource limitations and environmental degradation.

A key aspect of our climate transition alignment is therefore our strategic focus on green metals and energy solutions. We have successfully entered the battery metal space through acquisitions of stakes in lithium projects in Finland and the USA. Additionally, we have taken a controlling position in New Century, a leading Australian mine tailings management and economic rehabilitation company. By reprocessing negative legacy base metal tailings, New Century produces zinc. Our move into battery metals was preceded by extensive planning, and we acquired SFA Oxford, a leading thought provider in both PGMs and battery metals. These efforts have allowed us to build up our battery metal portfolio.

These endeavours, support our transition into the hydrogen economy and position our company for the future green energy environment. We aim to contribute to the reversal of climate change through our strategic differentiator of building a unique global portfolio of green metals and energy solutions.

In addition to our focus on green metals, we actively participate in planning and trialling large-scale storage and green hydrogen technologies. These initiatives aim to facilitate a higher penetration of renewables in our energy mix, aligning with the global trend of reduced greenhouse gas emissions and the shift towards nuclear power, green hydrogen, wind, solar renewables, and the electrification of mobility.

Furthermore, our significant investments in renewable energy projects, totalling 553MW, are expected to become operational by 2025. These projects will reduce our scope 2 emissions by 25% and surpass our commitment of 20% renewable energy penetration by 2030.

In summary, Sibanye-Stillwater employs a comprehensive methodology to identify spending and revenue aligned with our climate transition. We focus on green metals and energy solutions, including our entry into the battery metal space, strategic acquisitions, and collaborations with thought leaders. We actively explore and invest in large-scale storage and green hydrogen technologies while making significant investments in renewable energy projects. These efforts collectively contribute to our alignment with a 1.5°C world and support the global transition to a sustainable and low-carbon future.

## C4. Targets and performance

### C4.1

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

Absolute target

### C4.1a

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

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**Target reference number**

Abs 1

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

Yes, and this target has been approved by the Science Based Targets initiative

**Target ambition**

2°C aligned

**Year target was set**

2018

**Target coverage**

Company-wide

**Scope(s)**

Scope 1

Scope 2

**Scope 2 accounting method**

Market-based

**Scope 3 category(ies)**

**Base year**

2010

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

1,069,687

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

6,739,005

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

**Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)**

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

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

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

**Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)**

**Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)**

**Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)**

**Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)**

**Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)**

**Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)**

**Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)**

**Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)**

**Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)**

**Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)**

**Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)**

**Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)**

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

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

7,808,692

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

100

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

100

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

**Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)**

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

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

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

**Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)**

**Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)**

**Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)**

**Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)**

**Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)**

**Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)**

**Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)**

**Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)**



**Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)**

**Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)**

**Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)**

**Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)**

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

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

100

**Target year**

2025

**Targeted reduction from base year (%)**

27

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

5,700,345.16

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

417,745

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

4,830,785

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

**Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)**

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

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

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

**Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)**

**Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)**

**Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)**

**Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)**



**Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)**

**Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)**

**Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)**

**Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)**

**Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)**

**Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)**

**Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)**

**Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)**

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

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

5,248,530

**Does this target cover any land-related emissions?**

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

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

121.4298307768

**Target status in reporting year**

Achieved

**Please explain target coverage and identify any exclusions**

This target was set in 2018. This target is made up of all Sibanye-Stillwater operations at the time. Notably, Sibanye-Stillwater has since acquired the Marikana operations (ex Lonmin) and the Sandouville Refinery in France. Restatements of the base year and the target are planned for 2023. We also plan on updating our SBTi target to include Marikana and Sandouville. Setting a Group Scope 3 baseline and target is scheduled for 2024.

With regards to the current SBTi target, the bulk of the emissions are from the operations in South Africa, comprising more than 95% of emissions. Accordingly, the South African national emissions trajectory, the sectoral decarbonisation approach methodology and the CDP criteria of 2.1% reduction have been considered in setting this target. This target was approved by the SBTi in 2019.

The scope 2 emissions of the South African operations are made up of emissions from purchased electricity from Eskom

The US operations also purchase electricity from more than one source (market-based). According to the GHG protocol, if a multi-regional company has any operations within the corporate inventory where the market-based method applies, then a market-based method total shall be calculated for the entire corporate inventory to ensure completeness and consistency. For any individual operations in the corporate inventory where market-based method data on the hierarchy is not applicable or available, data from the location-based method should be used to represent the emissions from the facility. For these operations, the scope 2 emissions, calculated according to the market-based method, will be identical to the location-based emissions.

When comparing the target to the base year (excluding the Marikana Lonmin operations), Sibanye-Stillwater has achieved a 33% reduction in our Scope 1 and 2 emissions therefore the target (27%) has been achieved.

## **Plan for achieving target, and progress made to the end of the reporting year**

### **List the emissions reduction initiatives which contributed most to achieving this target**

Process optimisation programmes resulted in the most emission reductions in the reporting year. These programmes involved various aspects including digitisation and effective energy management at our operations. Further reductions were achieved through improvements in our compressed air and refrigeration systems resulting in improved energy efficiency.

## **C4.2**

### **(C4.2) Did you have any other climate-related targets that were active in the reporting year?**

Net-zero target(s)

## **C4.2c**

### **(C4.2c) Provide details of your net-zero target(s).**

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#### **Target reference number**

NZ1

#### **Target coverage**

Company-wide

#### **Absolute/intensity emission target(s) linked to this net-zero target**

Abs1

#### **Target year for achieving net zero**

2040

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

No, but we anticipate setting one in the next two years

**Please explain target coverage and identify any exclusions**

Sibanye-Stillwater is committed to ESG excellence and continual improvement. In 2020, we conducted an assessment and identified a tough but viable pathway to carbon neutrality by 2040. We have also publicly endorsed the International Council for Metals and Mining commitment to carbon neutral by 2050 as a member of the organisation. Therefore, we have adopted a carbon neutral by 2040 target.

The adoption of the SBTi Net Zero standard is being considered, with plans to update the SBTi target to include both the Marikana and Sandouville operations. However, we consider this target to be Paris aligned already.

Sibanye-Stillwater is committed to ESG excellence and continual improvement. Our Umdoni tree is at the heart of our strategic foundation and represents our fundamental approach to business.

**Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?**

Yes

**Planned milestones and/or near-term investments for neutralization at target year**

The majority of our emissions are from purchased electricity, largely at our South African operations. We are therefore planning various energy measures, such as the development and rollout of a suite of 557 MW of renewable energy generation facilities in South Africa, where commercial operations are expected from late 2024 onwards. We plan to abate approximately 100% of our emissions through abatement measures, by 2040. At present our definitive plans are in place up to 2025.

There are no near-term investments or milestones planned to accomplish neutralization in the target year.

Direct and energy indirect emissions that cannot be abated will be offset through emission removal projects and/or the purchase of quality carbon credits, in order to achieve our net zero target by 2040.

**Planned actions to mitigate emissions beyond your value chain (optional)**

Sibanye-Stillwater intends to formulate a comprehensive scope 3 emissions reduction strategy that takes into consideration the latest climate science, historical emission trends, peer emissions, global standards and stakeholder expectations.



### C4.3

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

Yes

### C4.3a

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

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	21	218
To be implemented*	20	24,694
Implementation commenced*	29	45,998
Implemented*	31	139,718
Not to be implemented	14	9,326

### C4.3b

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

**Initiative category & Initiative type**

Energy efficiency in production processes

Other, please specify

Ventilation network and surface fans (VSD, IGVs and Energy management)

**Estimated annual CO2e savings (metric tonnes CO2e)**

19,664

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

24,437,881

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

4,558,765

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

11-15 years

**Comment**

Energy Management Initiatives. The duration of the projects are expected to be the equivalent of the remaining life of the mines. All savings independently measured and verified.

The ventilation projects involve the control of the fan speeds with variable speed drives as well as the installation inlet guide vanes. Both technologies are used to improve the fan's control and to enhance efficiency of the system by matching the ventilation needs with precise supply.

Driefontein: Installation of variable speed drives (VSD) and inlet guide vane control (IGV)

Kloof: K4 VSD installation, K4 surface seasonal control of the bulk-air-cooling (BAC) system and K3 load clipping on surface vent fans

Beatrix: BAC use optimisation and ventilation fan combination optimisation

Marikana: Ventilation optimisation

RPM: Ventilation optimisation

Implementation of SA Gold energy efficiency projects was affected by the labour strike in 2022.

---

**Initiative category & Initiative type**

Energy efficiency in production processes  
Process optimization

**Estimated annual CO2e savings (metric tonnes CO2e)**

47,204

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

93,733,017

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

26,220,000

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

11-15 years

**Comment**

Energy Management Initiatives. The duration of the projects are expected to be the equivalent of the remaining life of the mines. All savings independently measured and verified.

Savings reported only include Q1, Q3 & Q4 due to no savings being reported for Q2 due to strike.

- Digitization
- Energy management systems
- Maintenance systems
- Communication systems
- Awareness campaigns
- Reporting structures improvements
- Technology implementation

Rollout of SA Gold energy efficiency projects was affected by the labour strike in 2022.

---

**Initiative category & Initiative type**

Energy efficiency in production processes

Other, please specify

Pumping system and water consumption optimization (Energy management, efficient cooling and water re-use)

**Estimated annual CO2e savings (metric tonnes CO2e)**

12,048

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

16,136,795

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

0



**Payback period**

1-3 years

**Estimated lifetime of the initiative**

11-15 years

**Comment**

Energy Management Initiatives. The duration of the projects are expected to be the equivalent of the remaining life of the mines. All savings independently measured and verified. Our mines require constant dewatering, thus pumping is a significant energy consumer. Opportunities to reduce pumping energy consumption are constantly investigated and implemented.

Kloof:- - Closed loop water reduction - K4

- Chilled water valve control on working levels - K7

Beatrix:- Leak audit, reporting and repair

- Inactive area auditing reporting and blank off

- Pump selection optimisation

- Underground BAC optimisation

Driefontein: Leak audit, reporting and repair

- Inactive area auditing reporting and blank off

- Pump selection optimisation

- Underground BAC optimisation

Implementation of SA Gold energy efficiency projects was affected by the labour strike in 2022.

---

**Initiative category & Initiative type**

Energy efficiency in production processes

Compressed air

**Estimated annual CO2e savings (metric tonnes CO2e)**

44,461

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

58,782,508

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

5,309,130

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

11-15 years

**Comment**

Energy Management Initiatives. The duration of the projects are expected to be the equivalent of the remaining life of the mines. All savings independently measured and verified. Compressed air is used extensively underground to power drills and machinery.

Kloof: - Improved control on compressed air control valves (K138 ring - Surface)

- Inefficiency audits followed by reporting and repairs - K1, K3, K4, K7 & K8

- Compressor setpoint optimisation - K1, K3 & K7

- Improved compressor combination - K138 ring

- Level compressed air control valve setpoint schedule optimisation

- Reducing column for K3

Beatrix: - - Dynamic demand side control valve optimisation

- Dynamic supply side compressor control optimisation

- Leak audit, reporting and repair

- Inactive area auditing reporting and blank off

- Misuse elimination
  - Crack valve installation on refuge bays
- Marikana and RPM : Compressor stoppage
- Several shaft and concentrator compressor control philosophy and optimisation initiatives through stoppages, surge curve mapping, set points, valve control, etc.

Implementation of SA Gold energy efficiency projects was affected by the labour strike in 2022.

---

**Initiative category & Initiative type**

Energy efficiency in production processes  
Cooling technology

**Estimated annual CO2e savings (metric tonnes CO2e)**

16,062

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

18,842,302

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

0

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

11-15 years

**Comment**

Energy Management Initiatives. The duration of the projects are expected to be the equivalent of the remaining life of the mines. All savings independently measured and verified. Refrigeration plants supply cooling for our deep-level underground operations.

Kloof: - Maric cooling car valves - K1 & K7

- BAC installation without increased water consumption - K1

- Unnecessary cooling car removal and repairs of underperforming cars - K1 & K4

- Inefficiency audits followed by reporting and repairs - K1, K3, K4, K7 & K8

- Refrigeration plant control optimisation - K1 reduction of pre-cooling

- Level water control valve setpoint schedule optimisation - K1 & K7

- Reverting of fissure water for additional cooling - K1 21L Cooling towers

Beatrix:--Heat load recalculated and optimised

-Dynamic demand side control, configuration and equipment optimisation

-Efficiency auditing and reporting

RPM: Simphumelele refrigeration plant optimisation and weekly and seasonal control philosophies.

Implementation of SA Gold energy efficiency projects was affected by the labour strike in 2022.

---

**Initiative category & Initiative type**

Low-carbon energy consumption

Liquid biofuels

**Estimated annual CO2e savings (metric tonnes CO2e)**

279

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 1

**Voluntary/Mandatory**



Voluntary

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

0

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

0

**Payback period**

No payback

**Estimated lifetime of the initiative**

16-20 years

**Comment**

Fuel efficiency improvements within our operations. Use of biodiesel to offset normal diesel consumption at our US East Boulder mine in order to reduce GHG emissions and diesel particulate matter. The use of biofuels reduced emissions by 143tCO<sub>2</sub>e in 2022.

**C4.3c**

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

Method	Comment
Compliance with regulatory requirements/standards	Some of Sibanye-Stillwater operations undertake prescribed activities that require mandatory greenhouse gas reporting in accordance with South Africa’s National Greenhouse Gas Emissions Reporting Regulations. All of these operations have budgeted for reporting in accordance with this regulation. Furthermore, these operations therefore are required to pay carbon tax to remain in compliance with South Africa’s Carbon Tax Act. The carbon tax is budgeted for by operations and helps drive emission reduction initiatives in order to reduce the tax paid.
Dedicated budget for energy efficiency	Our climate change and energy and decarbonisation position statements require carbon management considerations to be included into the decision making processes of the company’s’ various functions. Sibanye-Stillwater is committed to designing and implementing strategies that seek to improve our energy efficiency and pursue any potential opportunities

	<p>where feasible. For example, the South African operations’ Engineering Department annually incorporate 2-3% energy efficiency improvements in their operational planning and dedicated budgets for energy efficiency projects which in turn reduce our scope 2 emissions. A recent project in this regard is the optimisation projects for compressed air at Kloof, Beatrix, Marikana and RPM.</p> <p>Other departments such as the Energy and Decarbonisation Department have dedicated budgets for new technology and research and development which also seek to achieve energy efficiency. Our Transport Department has dedicated budgets for fleet maintenance and replacements which enables optimised performance (fuel consumption – thereby minimising emissions).</p>
<p>Dedicated budget for other emissions reduction activities</p>	<p>The Sibanye-Stillwater climate change and energy and decarbonisation position statements require carbon management considerations to be included into the decision-making processes of the company’s’ various functions. To this effect, the company is committed to designing and implementing strategies that seek to reduce the carbon emissions of the company and to pursue any potential opportunities and utilise carbon friendly technologies where feasible. To achieve this, emission reduction activities are integrated within the various disciplines. For example, dedicated resources were assigned to revise the energy and decarbonisation strategy in 2020. The strategy identified initiatives and projects which would allow Sibanye-Stillwater to achieve carbon neutrality by 2040. These include increasing the renewables of part of our energy mix, improving energy efficiency, reconfiguring mining operations, improving mining processes, electrification of fixed and mobile machinery, fuel switching (biofuel and hydrogen), methane capture, addressing indirect value chain emissions (scope 3), decarbonisation of our investments (scope 3), advocating for decarbonisation of external processing (scope 3), supply chain policy and partnership interventions (scope 3), technology R&amp;D and strategic partnerships, carbon offsets, carbon credits trading, carbon capture and storage and nature-based solutions. Dedicated financial and human resources have now been allocated to investigate, formalise and implement these initiatives.</p>
<p>Employee engagement</p>	<p>The Sibanye-Stillwater climate change and energy and decarbonisation position statements require carbon management considerations to be included into the decision-making processes of the company’s’ various functions. Emission reduction activities are integrated within the various disciplines. Employee engagements on climate change and decarbonisation take place through formal Group communication channels with the intent to raise awareness on the impacts of climate change and the need for decarbonisation through our value chains. These communiques are in the form of email and poster communications, podcasts, video conferences and in-person engagement through formal management scripts. Within the operations, monthly energy awareness and performance communiques are distributed to</p>

	<p>relevant personal via WhatsApp messages and email. Individual employee behaviour is also shaped through awareness, reward and induction programmes.</p> <p>In 2021, Sibanye-Stillwater ran a Group-wide decarbonisation innovation challenge. We leveraged our idea management platform, IdeaDrop, to support the decarbonisation of our current operations through demand-side management ideation. Senior leadership championed a campaign to improve efficiency in six areas: pumping, compressed-air usage, fixed machinery, mobile machinery, general logistics and digital interventions for demand-side management. With our goal to become carbon neutral by 2040, the organisation has developed an energy and decarbonisation strategy supported by specific operational interventions. As such the campaign, across the six challenges, prioritised the following objectives: To improve energy efficiency year-on- year by 3% and to eliminate the use of diesel. The campaign was administered over a six-month period, concluding in November 2021. Over 100 solutions put forward by the organisation will be further reviewed and consolidated for implementation in 2022/2023.</p>
<p>Financial optimization calculations</p>	<p>The Sibanye-Stillwater climate change and energy and decarbonisation position statements require carbon management considerations to be included into the decision-making processes of the company’s’ various functions. Emission reduction activities are integrated within the various disciplines. Projects are motivated as business cases using financial calculations to demonstrate return on investment (payback periods, net present value and internal rate of return). Optimisation evaluation is built into the process where opportunities to improve the economics and strategic value (e.g. decarbonisation) are assessed. For example, when contemplating new mining projects, such as our approved Burnstone and K4 mining projects, opportunities to improve energy use and efficiency, increase electrification, use of lower carbon fuels, incorporate renewable energy, reduce carbon tax liabilities, etc. were formally evaluated as part of the feasibility studies.</p>
<p>Internal price on carbon</p>	<p>Sibanye-Stillwater’s GHG inventory is dominated by electricity purchased from the South African utility, Eskom, which contributes about 93% of total Scope 1 and 2 emissions. At the SA operations, an environmental levy is applied on purchased electricity from Eskom. This environmental levy is used as a proxy for carbon pricing and is applied to Sibanye-Stillwater’s Scope 2 emissions arising from its South African operations. The environmental levy of R 0.035/kWh amounted to an equivalent cost of about R197 million for 2022, based on 5,652,482 MWh of electricity purchased (5,652,482 MWh x R35/MWh). The CO<sub>2</sub>e emissions from purchased electricity, using a grid emission factor of 1.04 tonnes CO<sub>2</sub>e/ MWh is 5,955,550 tonnes CO<sub>2</sub>e. The equivalent Rand value of R33 per tonne CO<sub>2</sub>e was a cost to the company during 2022.</p>

	<p>Recent years have seen a rise in the global significance of carbon pricing, and governments, investors, and industry stakeholders are increasingly in agreement on the crucial role that it will play in the shift to a low-carbon economy. In addition to applying a carbon price to emissions associated with existing operations, Sibanye-Stillwater routinely considers the environmental and financial impacts of planned projects, particularly those related to future carbon pricing. The cost of carbon is also a key factor in the group's due diligence processes, which are used to make investment decisions across our various jurisdictions.</p> <p>The new South African PGM projects, Marikana K4 and E3, as well as the South African gold Burnstone project, are three examples of projects where frequent evaluations of the carbon price related to the individual projects were incorporated into project planning and feasibility assessments. Establishing the impact of the carbon price helps project managers budget for and put emission control and mitigation measures in place throughout the project's lifespan.</p>
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## C4.5

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

No

## C5. Emissions methodology

### C5.1

**(C5.1) Is this your first year of reporting emissions data to CDP?**

No

### C5.1a

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





**Row 1**

**Has there been a structural change?**

Yes, an acquisition

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

Sandouville Refinery

**Details of structural change(s), including completion dates**

Sibanye-Stillwater concluded the transaction to acquire the Sandouville hydrometallurgical nickel refinery, from Eramet SA, in February 2022. Sibanye now has 100% control over the operation and therefore includes the emissions from this operation in their inventory.

**C5.1b**

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

	Change(s) in methodology, boundary, and/or reporting year definition?
Row 1	No

**C5.1c**

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

	Base year recalculation	Base year emissions recalculation policy, including significance threshold	Past years’ recalculation
Row 1	No, because the impact does not meet our significance threshold		

**C5.2**

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

## Scope 1

---

### Base year start

January 1, 2010

### Base year end

December 31, 2010

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

1,086,490

### Comment

The base year emissions exclude the Lonmin Marikana operation (acquired in FY2019) and the Sandouville refinery, acquired in the reporting year. We plan to update the base year and emissions as part of the update process or our new SBTi emissions target that we are pursuing.

## Scope 2 (location-based)

---

### Base year start

January 1, 2010

### Base year end

December 31, 2010

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

5,002,404

### Comment

The base year emissions exclude the Lonmin Marikana operation (acquired in FY2019) and the Sandouville refinery, acquired in the reporting year. We plan to update the base year and emissions as part of the update process or our new SBTi emissions target that we are pursuing.

## Scope 2 (market-based)

---

### Base year start



January 1, 2010

**Base year end**

December 31, 2010

**Base year emissions (metric tons CO2e)**

95,084

**Comment**

The base year emissions exclude the Lonmin Marikana operation (acquired in FY2019) and the Sandouville refinery, acquired in the reporting. We plan to update the base year and emissions as part of the update process or our new SBTi emissions target that we are pursuing.

**Scope 3 category 1: Purchased goods and services**

---

**Base year start**

January 1, 2010

**Base year end**

December 31, 2010

**Base year emissions (metric tons CO2e)**

260,439

**Comment**

These emissions account for the production of goods and services purchased by Sibanye-Stillwater.

**Scope 3 category 2: Capital goods**

---

**Base year start**

January 1, 2010

**Base year end**

December 31, 2010

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

1,138

**Comment**

These emissions account for the production emissions for capital goods purchased by Sibanye-Stillwater.

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

---

**Base year start**

January 1, 2010

**Base year end**

December 31, 2010

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

587,098

**Comment**

These emissions account for the production of fuels purchased by Sibanye-Stillwater as well as the transmission and distribution losses related to its electricity purchases.

**Scope 3 category 4: Upstream transportation and distribution**

---

**Base year start**

January 1, 2010

**Base year end**

December 31, 2010

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

21,351

**Comment**

These emissions account for the upstream transport of goods to Sibanye operations.

### **Scope 3 category 5: Waste generated in operations**

---

**Base year start**

January 1, 2010

**Base year end**

December 31, 2010

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

6,391

**Comment**

These emissions account for the downstream emissions related to waste generated at Sibanye-Stillwater operations.

### **Scope 3 category 6: Business travel**

---

**Base year start**

January 1, 2010

**Base year end**

December 31, 2010

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

1,381

**Comment**

These emissions account for business travel emissions from Sibanye-Stillwater's employees.

### **Scope 3 category 7: Employee commuting**

---

**Base year start**



January 1, 2010

**Base year end**

December 31, 2010

**Base year emissions (metric tons CO2e)**

168,183

**Comment**

These emissions account for the day to day commuting emissions from Sibanye-Stillwater's employees.

**Scope 3 category 8: Upstream leased assets**

---

**Base year start**

January 1, 2010

**Base year end**

December 31, 2010

**Base year emissions (metric tons CO2e)**

1,539

**Comment**

These emissions account for the use of Sibanye-Stillwater's upstream leased assets.

**Scope 3 category 9: Downstream transportation and distribution**

---

**Base year start**

January 1, 2010

**Base year end**

December 31, 2010



**Base year emissions (metric tons CO2e)**

731

**Comment**

These emissions account for the transport emissions of Sibanye-Stillwater's products.

**Scope 3 category 10: Processing of sold products**

---

**Base year start**

January 1, 2010

**Base year end**

December 31, 2010

**Base year emissions (metric tons CO2e)**

502,766

**Comment**

These emissions account for the processing of the concentrate sold.

**Scope 3 category 11: Use of sold products**

---

**Base year start**

January 1, 2010

**Base year end**

December 31, 2010

**Base year emissions (metric tons CO2e)**

896

**Comment**

These emissions account for the use of sold products.

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

---

**Base year start**

January 1, 2010

**Base year end**

December 31, 2010

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

1

**Comment**

These emissions account for the processing of products at their end of life.

### **Scope 3 category 13: Downstream leased assets**

---

**Base year start**

January 1, 2010

**Base year end**

December 31, 2010

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

39,498

**Comment**

These emissions account for the use of downstream leased assets.

### **Scope 3 category 14: Franchises**

---

**Base year start**





**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

**Scope 3 category 15: Investments**

---

**Base year start**

January 1, 2010

**Base year end**

December 31, 2010

**Base year emissions (metric tons CO2e)**

285,402

**Comment**

These emissions account for the emissions related to the investments made by the Sibanye-Stillwater group.

**Scope 3: Other (upstream)**

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

**Scope 3: Other (downstream)**

---

**Base year start**

**Base year end**

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

**Comment**

## **C5.3**

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

IPCC Guidelines for National Greenhouse Gas Inventories, 2006

ISO 14064-1

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

## **C6. Emissions data**

### **C6.1**

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

**Reporting year**

---



**Gross global Scope 1 emissions (metric tons CO2e)**

495,247

**Comment**

Sibanye-Stillwater scope 1 emissions are determined in accordance with the operational control consolidation approach.

**C6.2**

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

**Row 1**

---

**Scope 2, location-based**

We are reporting a Scope 2, location-based figure

**Scope 2, market-based**

We are reporting a Scope 2, market-based figure

**Comment**

At the South African operations, we acquire electricity from a single source, Eskom. Electricity procurement at the US PGM operations follows two distinct schemes due to nuances in Montana’s electricity regulation laws. The Stillwater mine and Columbus Metallurgical Complex can purchase power on the wholesale market as a “choice” customer. The East Boulder mine is required to procure power from a local rural electricity co-operative. In July 2018, the Stillwater mine and Columbus Metallurgical Complex signed a new contract to purchase power from a Montana Native American tribe, Energy Keepers, Inc. Energy Keepers supplies power from its owned hydroelectric facility and from other sources.

The US PGM operations are also exploring additional self-generation of renewable power to add to the existing solar array at the Metallurgical Complex, and are also exploring supply opportunities within the rural electric cooperative framework.

**C6.3**

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

**Reporting year**

---

**Scope 2, location-based**

6,157,749

**Scope 2, market-based (if applicable)**

6,191,402

**Comment**

Electricity procurement at the US PGM operations follows two distinct schemes due to nuances in Montana’s electricity regulation laws. The Stillwater mine and Columbus Metallurgical Complex can purchase power on the wholesale market as a “choice” customer. The East Boulder mine is required to procure power from a local rural electricity co-operative. In July 2018, the Stillwater mine and Columbus Metallurgical Complex signed a new contract to purchase power from a Montana Native American tribe, Energy Keepers, Inc. Energy Keepers supplies power from its owned hydroelectric facility and from other sources. The US PGM operations are also exploring additional self-generation of renewable power to add to the existing solar array at the Metallurgical Complex; and are also exploring supply opportunities within the rural electric cooperative framework.

**C6.4**

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

No

**C6.5**

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

**Purchased goods and services**

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO<sub>2</sub>e)**

127,447

**Emissions calculation methodology**

Hybrid method

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

100

**Please explain**

The emissions in this category relate to the production of goods purchased by Sibanye-Stillwater in the reporting year. The goods reported on include Water, Timber, Cyanide, HCl, Lime, Cement, Caustic Soda, Oils and Greases.

Boundary: the calculation covered all upstream emissions from these purchased goods and services (cradle to gate).

The hybrid method was used to calculate the emissions associated with these goods. If supplier specific information was not available, then the mass of the purchased goods was multiplied by the average emission factor sourced from DEFRA.

For purchased water at the South African operations, a supplier specific emission factor from Rand Water was used.

For purchased Lime, an emission factor from Carbon Solutions was used, while an emission factor for purchased HCL was acquired from the South End Process Selection Report.

**Capital goods**

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

There were no capital goods purchased in the reporting year.

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

---



**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO2e)**

162,451

**Emissions calculation methodology**

Average data method

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

100

**Please explain**

The average data method was used to calculate the emissions related to fuel and energy activities. The emissions were calculated by multiplying the fuel consumption by the industry average emission factors sourced from DEFRA.

Boundary: the cradle-to-gate emissions of purchased fuels were included in the calculation. The T&D losses emissions were calculated on a cradle-to-gate basis.

There may be some inaccuracy in the emission factors relating to fuel production as the DEFRA emission factors are specific to the UK.

**Upstream transportation and distribution**

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO2e)**

9,670

**Emissions calculation methodology**

Distance-based method



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

100

**Please explain**

The emissions in this category relate to the upstream transportation of goods by Sibanye-Stillwater in the reporting year. The goods reported on include Timber, Cyanide, HCl, Hydrated, Limestone, Pebble Lime, Bulk Limestone, Cement, Caustic Soda, Oils, Greases, Shotcrete and Oxygen. The distance-based method was used to calculate emissions. The emissions were calculated by multiplying the total mass and distance travelled by the emission factor from DEFRA.

Boundary: The scope 1 emissions of transportation were included in the calculation.

Emissions are reported on a Tank-to-Well basis.

**Waste generated in operations**

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO2e)**

24,628

**Emissions calculation methodology**

Average data method

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

100

**Please explain**

The emissions in this category relate to the disposal of waste, such as municipal waste, wastewater treatment and hazardous waste. The average data method was used to calculate the emissions related to waste disposal activities. The emissions were calculated by multiplying the waste mass, distance travelled, and the industry average emission factors sourced from DEFRA.

Boundary: The Scope 1 and 2 emissions of the waste service providers were included.

## Business travel

---

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO<sub>2</sub>e)

287

### Emissions calculation methodology

Distance-based method

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

50

### Please explain

The emissions in this category are related to business car hire, air travel and employee travel claims.

The distance-based method was used to calculate the emissions related to car hire, air travel and employee claims. The distance travelled was multiplied by emission factor associated with the mode of transport sourced from DEFRA 2022

Boundary: The Scope 1 and 2 emissions from the use of vehicles were included.

Emissions are reported on a Tank to Wheel basis.

## Employee commuting

---

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO<sub>2</sub>e)



11,082

**Emissions calculation methodology**

Average data method

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

25

**Please explain**

The distance-based method was used to calculate both car hire and air travel emissions. The distance travelled was multiplied by emission factor associated with the mode of transport from DEFRA.

Boundary: The Scope 1 and 2 emissions from the use of vehicles were included.

Emissions are reported on a Tank to Wheel basis.

**Upstream leased assets**

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

There are no upstream leased assets at Sibanye-Stillwater.

**Downstream transportation and distribution**

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO<sub>2</sub>e)**

12,916

**Emissions calculation methodology**

Distance-based method

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

50

**Please explain**

The emissions in this category relate to the upstream transportation of goods by Sibanye-Stillwater in the reporting year. The goods reported on include Nickel, Copper and PGM Filter Cake. The distance-based method was used to calculate emissions. The emissions were calculated by multiplying the total mass and distance travelled by the appropriate emission factor from DEFRA.

Boundary: The scope 1 emissions of transportation were included in the calculation.

Emissions are reported on a Tank to Wheel basis.

**Processing of sold products**

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO2e)**

466,092

**Emissions calculation methodology**

Average data method

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

100

**Please explain**

The emissions in this category are related to the waste generated from processing sold products from operations. The average-data method was used to calculate emissions, with the mass of sold products being multiplied by the appropriate emission factor.

Boundary: The scope 1 and 2 emissions from the processing of our product was included in the calculation.

The average-data method calculated the emissions relating to the smelting and refining of PGMs in the South African operations. It was used to calculate the emissions relating to the refining of gold at the South African Rand Refinery, as well as the refining of PGMs and production of stainless steel at the US operations.

## Use of sold products

---

### Evaluation status

Not relevant, explanation provided

### Please explain

The emissions associated with the use of sold gold and platinum group metal products are estimated to be insignificant. Only processing and end of life treatment of sold products are expected to have a significant amount of emissions.

## End of life treatment of sold products

---

### Evaluation status

Not relevant, calculated

### Emissions in reporting year (metric tons CO<sub>2</sub>e)

474

### Emissions calculation methodology

Waste-type-specific method

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

100

### Please explain

The emissions in this category are related to the melting process of metals within the reporting year. The metals reported on include Gold, Platinum, Nickel and Copper. The waste-type specific method was used to calculate the emissions, by multiplying the total mass of sold

products by the average waste treatment specific emission based upon all waste disposal types.

Boundary: The scope and 2 emissions from the end of life treatment for our products were included in the calculation.

### Downstream leased assets

---

#### Evaluation status

Relevant, calculated

#### Emissions in reporting year (metric tons CO<sub>2</sub>e)

23,436

#### Emissions calculation methodology

Asset-specific method

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

100

#### Please explain

The emissions in this category relate to downstream leased assets within the reporting year. The asset (site) specific method was used to calculate the emissions. The emissions from employee commuting using own vehicles were divided by the percentage of rent going towards electricity (sourced from Numbeo), then multiplied by sum of the emission factors for the South African Grid and related transmission and distribution losses was acquired from Eskom 2021 Integrated Annual Report,

Boundary: Scope 1 and 2 emissions of the lessee were included in the calculation.

### Franchises

---

#### Evaluation status

Not relevant, explanation provided

#### Please explain

There are no franchises at Sibanye-Stillwater.

## Investments

---

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO<sub>2</sub>e)

299,208

### Emissions calculation methodology

Investment-specific method

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

100

### Please explain

The emissions for the investment category were calculated by multiplying the sum of scope 1 and 2 emissions by the Investment Advisor Representative (%). This was done for all operations where Investment Advisor Representative (%) was less than 100% (i.e. Living Gold, Rand Refinery, DRD Gold, Blue Ridge, Mimososa and Platinum Mile).

Boundary: Scope 1 and 2 emissions from our investments not included under Sibanye's Scope 1 and 2 emissions directly.

## Other (upstream)

---

### Evaluation status

Not relevant, explanation provided

### Please explain

Sibanye-Stillwater does not have other upstream emission sources.

## Other (downstream)

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

Sibanye-Stillwater does not have other downstream emission sources.

**C6.7**

**(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?**

No

**C6.10**

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

---

**Intensity figure**

0.0000484

**Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO<sub>2</sub>e)**

6,686,649

**Metric denominator**

unit total revenue

**Metric denominator: Unit total**

138,288,000,000

**Scope 2 figure used**

Market-based

**% change from previous year**

14

**Direction of change**

Increased

**Reason(s) for change**

Other emissions reduction activities

Change in revenue

**Please explain**

Revenue decreased by 20% to R138,288 million in 2022 from R172,194 million in 2021, contributing to the increase in the intensity. Revenue is derived from 100% of the Sibanye-Stillwater facilities under operational control.

Note: The total group scope 1 and 2 market-based emissions have been used in the calculation. Group Scope 1 and 2 carbon emissions decreased by 8% as a result of emission reduction initiatives mentioned in C4.1a.

Examples of emission reduction initiatives included ventilation projects involving the control of the fan speeds with variable speed drives as well as the installation inlet guide vanes. These initiatives reduce grid electricity consumption and therefore reduce scope 2 emissions.

---

**Intensity figure**

0.09

**Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO<sub>2</sub>e)**

6,686,649

**Metric denominator**

metric ton of ore processed

**Metric denominator: Unit total**

73,970,000



**Scope 2 figure used**

Market-based

**% change from previous year**

1

**Direction of change**

Increased

**Reason(s) for change**

Other emissions reduction activities  
Change in output

**Please explain**

Total tonnes ore processed is used in this calculation (i.e. 100% of the Sibanye-Stillwater facilities under operational control). Tonnes decreased by 9% to 73,970,000 in 2022 from 81,688,154 in 2021.

Note: The total group scope 1 and 2 market-based emissions have been used in the calculation. Group Scope 1 and 2 carbon emissions decreased by 8% as a result of emission reduction initiatives mentioned in C4.1a.

Examples of emission reduction initiatives included ventilation projects involving the control of the fan speeds with variable speed drives as well as the installation inlet guide vanes. These initiatives reduce grid electricity consumption and therefore reduce scope 2 emissions.

## C7. Emissions breakdowns

### C7.1

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

Yes



## C7.1a

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

Greenhouse gas	Scope 1 emissions (metric tons of CO <sub>2</sub> e)	GWP Reference
CO <sub>2</sub>	166,846	IPCC Third Assessment Report (TAR - 100 year)
CH <sub>4</sub>	287,711	IPCC Third Assessment Report (TAR - 100 year)
N <sub>2</sub> O	13,285	IPCC Third Assessment Report (TAR - 100 year)
HFCs	12,155	IPCC Third Assessment Report (TAR - 100 year)

## C7.2

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

Country/area/region	Scope 1 emissions (metric tons CO <sub>2</sub> e)
South Africa	440,310
United States of America	49,574
France	5,363

## C7.3

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

- By business division
- By facility
- By activity

## C7.3a

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

Business division	Scope 1 emissions (metric ton CO <sub>2</sub> e)
SA Gold Segment	311,285
SA Platinum Segment	129,002
US Platinum Segment	49,574
Corporate	23
Europe	5,363

## C7.3b

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

Facility	Scope 1 emissions (metric tons CO <sub>2</sub> e)	Latitude	Longitude
Beatrix	287,039	-28.258209	26.784375
Burnstone	1,206	-26.651626	28.671646
Cooke 1,2,3	4	-26.217323	27.726253
Cooke 4	17	-26.35542	27.711957
Driefontein	17,646	-26.387645	27.49445
Kloof	5,372	-26.390355	26.597354
Kroondal	33,267	-25.72449	27.30428
Marikana (ex. Aquarius)	0	-25.726334	27.431385
Rustenburg Platinum Mines	19,815	-25.679776	27.30501
Stillwater	32,465	45.389303	-109.874989

East Boulder	10,009	45.504744	-110.086756
Metallurgical Complex	7,100	45.631431	-109.234889
Marikana (ex. Lonmin)	72,139	-25.685603	27.521649
Precious Metal Refinery (PMR)	3,762	-26.26585	28.388236
Messina	20	-24.350563	29.44769
Corporate	23	-26.354274	27.608722
Sandouville	5,363		

### C7.3c

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

Activity	Scope 1 emissions (metric tons CO2e)
Gold production	311,285
PGM production	178,576
Corporate	23
Nickel Production	5,363

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

**(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.**

	Gross Scope 1 emissions, metric tons CO2e	Comment
Metals and mining production activities	495,247	These emissions are the gross total Scope 1 emissions as all of Sibanye-Stillwater's operations are involved in metal and mining production activities

## C7.5

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

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
South Africa	5,955,550	5,955,550
United States of America	201,111	234,764
France	1,088	1,088

## C7.6

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

By business division

By facility

By activity

### C7.6a

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

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
SA Gold Segment	2,961,453	2,961,453
SA Platinum Segment	2,994,097	2,994,097
USA Platinum Segment	201,111	234,764
Corporate	0	0
Europe	1,088	1,088

## C7.6b

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

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Beatrix	438,236	438,236
Burnstone	19,903	19,903
Cooke 1,2,3	146,175	146,175
Cooke 4	204,635	204,635
Driefontein	1,009,047	1,009,047
Kloof	1,143,457	1,143,457
Kroondal	360,698	360,698
Marikana (ex. Aquarius)	2,548	2,548
Rustenburg Platinum Mines (RPM)	1,117,836	1,117,836
Stillwater	114,821	140,022
East Boulder	46,419	46,418
Metallurgical Complex	39,870	48,323
Marikana (ex. Lonmin)	1,359,529	1,359,529
Precious Metal Refinery (PMR)	14,265	14,265
Messina	62,252	62,252
Corporate	0	0
Platinum Mile	76,970	76,970
Sandouville	1,088	1,088

## C7.6c

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

Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Gold production	2,961,453	2,961,453
PGM production	3,195,208	3,228,861
Corporate	0	0
Nickel production	1,088	1,088

## C7.7

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

Yes

## C7.7a

**(C7.7a) Break down your gross Scope 1 and Scope 2 emissions by subsidiary.**

**Subsidiary name**

Sibanye Gold Ltd

**Primary activity**

Precious metals & minerals mining

**Select the unique identifier(s) you are able to provide for this subsidiary**

No unique identifier

**ISIN code – bond**

**ISIN code – equity**

**CUSIP number**

**Ticker symbol**

**SEDOL code**

**LEI number**

**Other unique identifier**

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

310,057

**Scope 2, location-based emissions (metric tons CO<sub>2</sub>e)**

2,590,740

**Scope 2, market-based emissions (metric tons CO<sub>2</sub>e)**

2,590,740

**Comment**

Facilities included based on shareholding and control approach from the GHG Inventory



**Subsidiary name**

Rand Uranium (Pty) Ltd

**Primary activity**

Precious metals & minerals mining

**Select the unique identifier(s) you are able to provide for this subsidiary**

No unique identifier

**ISIN code – bond**

**ISIN code – equity**

**CUSIP number**

**Ticker symbol**

**SEDOL code**

**LEI number**

**Other unique identifier**

**Scope 1 emissions (metric tons CO2e)**

4





**Scope 2, location-based emissions (metric tons CO2e)**

146,175

**Scope 2, market-based emissions (metric tons CO2e)**

146,175

**Comment**

Facilities included based on shareholding and control approach from the GHG Inventory

---

**Subsidiary name**

Ezulwini Mining Company (Pty) Ltd

**Primary activity**

Precious metals & minerals mining

**Select the unique identifier(s) you are able to provide for this subsidiary**

No unique identifier

**ISIN code – bond**

**ISIN code – equity**

**CUSIP number**

**Ticker symbol**

**SEDOL code**

**LEI number**

**Other unique identifier**

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

17

**Scope 2, location-based emissions (metric tons CO<sub>2</sub>e)**

204,635

**Scope 2, market-based emissions (metric tons CO<sub>2</sub>e)**

204,635

**Comment**

Facilities included based on shareholding and control approach from the GHG Inventory

---

**Subsidiary name**

Kroondal Operations (Pty) Ltd

**Primary activity**

Precious metals & minerals mining

**Select the unique identifier(s) you are able to provide for this subsidiary**

No unique identifier

**ISIN code – bond**



**ISIN code – equity**

**CUSIP number**

**Ticker symbol**

**SEDOL code**

**LEI number**

**Other unique identifier**

**Scope 1 emissions (metric tons CO2e)**

33,267

**Scope 2, location-based emissions (metric tons CO2e)**

363,246

**Scope 2, market-based emissions (metric tons CO2e)**

363,246

**Comment**

Facilities included based on shareholding and control approach from the GHG Inventory

---

**Subsidiary name**

Sibanye Rustenburg Platinum Mines Ltd

**Primary activity**

Precious metals & minerals mining

**Select the unique identifier(s) you are able to provide for this subsidiary**

No unique identifier

**ISIN code – bond**

**ISIN code – equity**

**CUSIP number**

**Ticker symbol**

**SEDOL code**

**LEI number**

**Other unique identifier**

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

19,815

**Scope 2, location-based emissions (metric tons CO<sub>2</sub>e)**

1,117,836

**Scope 2, market-based emissions (metric tons CO<sub>2</sub>e)**

1,117,836

**Comment**

Facilities included based on shareholding and control approach from the GHG Inventory

---

**Subsidiary name**

Sibanye Gold Eastern Operations (Pty) Ltd

**Primary activity**

Precious metals & minerals mining

**Select the unique identifier(s) you are able to provide for this subsidiary**

No unique identifier

**ISIN code – bond**

**ISIN code – equity**

**CUSIP number**

**Ticker symbol**

**SEDOL code**



**LEI number**

**Other unique identifier**

**Scope 1 emissions (metric tons CO2e)**

1,206

**Scope 2, location-based emissions (metric tons CO2e)**

96,873

**Scope 2, market-based emissions (metric tons CO2e)**

96,873

**Comment**

Facilities included based on shareholding and control approach from the GHG Inventory

---

**Subsidiary name**

Corporate

**Primary activity**

Precious metals & minerals mining

**Select the unique identifier(s) you are able to provide for this subsidiary**

No unique identifier

**ISIN code – bond**

**ISIN code – equity**



**CUSIP number**

**Ticker symbol**

**SEDOL code**

**LEI number**

**Other unique identifier**

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

54,960

**Scope 2, location-based emissions (metric tons CO<sub>2</sub>e)**

202,198

**Scope 2, market-based emissions (metric tons CO<sub>2</sub>e)**

235,951

**Comment**

Facilities included based on shareholding and control approach from the GHG Inventory

---

**Subsidiary name**

Eastern Platinum Limited

**Primary activity**

Precious metals & minerals mining

**Select the unique identifier(s) you are able to provide for this subsidiary**

No unique identifier

**ISIN code – bond**

**ISIN code – equity**

**CUSIP number**

**Ticker symbol**

**SEDOL code**

**LEI number**

**Other unique identifier**

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

72,139

**Scope 2, location-based emissions (metric tons CO<sub>2</sub>e)**

1,359,529



**Scope 2, market-based emissions (metric tons CO<sub>2</sub>e)**

1,359,529

**Comment**

Facilities included based on shareholding and control approach from the GHG Inventory

---

**Subsidiary name**

Western Platinum Limited

**Primary activity**

Precious metals & minerals mining

**Select the unique identifier(s) you are able to provide for this subsidiary**

No unique identifier

**ISIN code – bond**

**ISIN code – equity**

**CUSIP number**

**Ticker symbol**

**SEDOL code**

**LEI number**

**Other unique identifier**

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

3,762

**Scope 2, location-based emissions (metric tons CO<sub>2</sub>e)**

14,265

**Scope 2, market-based emissions (metric tons CO<sub>2</sub>e)**

14,265

**Comment**

Facilities included based on shareholding and control approach from the GHG Inventory

---

**Subsidiary name**

Messina Platinum Mines Limited

**Primary activity**

Precious metals & minerals mining

**Select the unique identifier(s) you are able to provide for this subsidiary**

No unique identifier

**ISIN code – bond**

**ISIN code – equity**



**CUSIP number**

**Ticker symbol**

**SEDOL code**

**LEI number**

**Other unique identifier**

**Scope 1 emissions (metric tons CO2e)**

20

**Scope 2, location-based emissions (metric tons CO2e)**

62,252

**Scope 2, market-based emissions (metric tons CO2e)**

62,252

**Comment**

Facilities included based on shareholding and control approach from the GHG Inventory

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

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



	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Metals and mining production activities	6,157,749	6,191,402	Electricity is procured at our US PGM operations from two schemes: - The Stillwater mine and Columbus Metallurgical Complex purchase power on the wholesale market from a local Native American tribe. The US PGM operations are also exploring additional self-generation of renewable power to add to the existing solar array at the Metallurgical Complex; and are also exploring supply opportunities within the rural electric cooperative framework. - The East Boulder mine procures its power from a local rural electricity co-operative framework

### C7.9

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

Decreased

### C7.9a

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

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption				

Other emissions reduction activities	139,718	Decreased	1.9	As a result of our emission reduction initiatives listed in C4.3a, our gross Scope 1 and 2 emissions reduced by 139 718tCO2e. This is therefore a 4.6% decrease calculated as follows: -139 718/7 309 220*100=-1.9%
Divestment				
Acquisitions				
Mergers				
Change in output	482,853	Decreased	6.6	Our production output in the reporting year decreased resulting in our gross Scope 1 and 2 emissions decreasing by 482 853 tCO2e. This equates to an 6.6% increased, calculated as follows: -482 853/7 309 220*100=-6.6%
Change in methodology				
Change in boundary				
Change in physical operating conditions				
Unidentified				
Other				

### C7.9b

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

Market-based

## C8. Energy

### C8.1

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

More than 10% but less than or equal to 15%

### C8.2

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

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

### C8.2a

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

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	3,742	747,245	750,987



Consumption of purchased or acquired electricity		70	6,060,277	6,060,347
Consumption of self-generated non-fuel renewable energy		0		0
Total energy consumption		3,812	6,807,522	6,811,334

### C-MM8.2a

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

	Heating value	Total MWh
Consumption of fuel (excluding feedstocks)	LHV (lower heating value)	750,987
Consumption of purchased or acquired electricity		6,060,347
Consumption of self-generated non-fuel renewable energy		0
Total energy consumption		6,811,334

### C8.2b

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

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

## C8.2c

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

### Sustainable biomass

---

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

0

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

0

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

0

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

0

**Comment**

This source is not relevant

### Other biomass

---

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

0

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



0

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

0

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

0

**Comment**

This source is not relevant

**Other renewable fuels (e.g. renewable hydrogen)**

---

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

3,743

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

0

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

3,743

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

0

**Comment**

Biodiesel is used at several operations for mobile machinery at our US operations.

**Coal**

---

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

101,816

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

0

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

49,802

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

52,014

**Comment**

Coal is used for the smelting processes and in steam generating boilers.

**Oil**

---

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

515,717

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

4,312

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

511,405

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

0

**Comment**

Oil based product such as diesel, petrol, HFO, paraffin, LPG, Propane and aviation fuel are used at our operations in various applications

**Gas**

---

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

72,818

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

0

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

23,165

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

49,653

**Comment**

Natural gas is used in stationary sources for heating buildings, firing the portal heaters, boilers and water heaters; firing the smelter rotary kilns and used in the concentrate and matte dryers.

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

---

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

56,894

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

0

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

458

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

56,436

**Comment**

Acetylene is used for metal cutting and methane mixtures are used in meter calibration.

**Total fuel**

---

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

750,987

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

4,312

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

588,573

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

158,102

**Comment**

## C8.2d

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

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	12,047	12,047	70	70
Heat	588,573	588,573	0	0
Steam	158,102	158,102	0	0
Cooling	0	0	0	0

## C-MM8.2d

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

	Total gross generation (MWh) inside metals and mining sector boundary	Generation that is consumed (MWh) inside metals and mining sector boundary
Electricity	12,047	12,047
Heat	588,573	588,573
Steam	158,102	158,102
Cooling	0	0

## C8.2e

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

---

**Country/area of low-carbon energy consumption**

United States of America

**Sourcing method**

Direct line to an off-site generator owned by a third party with no grid transfers (direct line PPA)

**Energy carrier**

Electricity

**Low-carbon technology type**

Low-carbon energy mix, please specify  
Hydropower; Solar

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

70

**Tracking instrument used**

Contract

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

United States of America

**Are you able to report the commissioning or re-powering year of the energy generation facility?**

Yes

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

2021

**Comment**

The Stillwater Mine and the Columbus Metallurgical Complex at Sibanye-Stillwater's US operations obtain electricity through an agreement which provides a mix of renewable energy. The agreement is for a mix of several generation sources of renewable energy, such as hydropower,

which is in addition to the existing solar array at the Metallurgical Complex. This agreement forms part of our supply agreements within the rural electric cooperative framework.

## C8.2g

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

---

**Country/area**

South Africa

**Consumption of purchased electricity (MWh)**

5,652,482

**Consumption of self-generated electricity (MWh)**

0

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

0

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

0

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

5,652,482

---

**Country/area**

United States of America



**Consumption of purchased electricity (MWh)**

365,725

**Consumption of self-generated electricity (MWh)**

0

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

0

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

0

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

365,725

---

**Country/area**

France

**Consumption of purchased electricity (MWh)**

42,140

**Consumption of self-generated electricity (MWh)**

0

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

0

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

0



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

42,140

## C9. Additional metrics

### C9.1

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

---

**Description**

Energy usage

**Metric value**

0.09

**Metric numerator**

6811334

**Metric denominator (intensity metric only)**

73970000

**% change from previous year**

5

**Direction of change**

Increased

**Please explain**

Sibanye-Stillwater's energy usage per tonne processed increased in the reporting year, 2022, compared to the previous year, 2021.

This represents a 5% increase  $(0.092-0.088) / 0.088 * 100$  from the 2021 intensity.

The increase in intensity is primarily due to the decrease in ore milled outweighing the decrease in energy usage. The energy usage decreased by 5% due to various energy efficiency initiatives while the ore milled decreased by 9% due to decreases in production.

## C-MM9.3a

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

---

**Output product**

Gold

**Capacity, metric tons**

52.4

**Production, metric tons**

19.3

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

0.13

**Scope 1 emissions**

311,285

**Scope 2 emissions**

2,961,453

## Scope 2 emissions approach

Market-based

## Pricing methodology for copper-equivalent figure

The copper equivalent for gold production was determined by multiplying the tonnes of gold produced in 2022 (19.3 tonnes) by the price of gold on 31 December 2022 (R946 /tonne), divided by the price of copper on 31 December 2022 (R139,964/tonne).

## Comment

The capacity (metric tons) was determined by the sum of the individual gold mines processing plants milling capacities, multiplied by the average mineral reserve grades, multiplied by the plant recovery percentages.

---

## Output product

Platinum group metals

## Capacity, metric tons

103.1

## Production, metric tons

64.96

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

0.36

## Scope 1 emissions

178,576

## Scope 2 emissions

3,228,861



### Scope 2 emissions approach

Market-based

### Pricing methodology for copper-equivalent figure

The copper equivalent for platinum group metals production was determined by the sum of the 4E production and 2E production (64.96 tonnes) where 4E encompasses platinum (Pt), palladium (Pd), rhodium (Rh) and gold (Au) and 2E encompasses palladium (Pd) platinum (Pt).

The copper equivalent was determined by multiplying the tonnes of PGM produced (64.96 tonnes) in 2022 by the average price of PGM in 2022 (R772/tonne), divided by the average price of copper in 2021 (R139,964/tonne).

### Comment

The capacity (metric tons) was determined by the sum of the individual platinum operations processing plants milling capacities, multiplied by the average mineral reserve grades, multiplied by the plant recovery percentages.

## C-MM9.3b

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

---

### Output product

Nickel

### Capacity (metric tons)

16,600

### Production (metric tons)

6,842

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

22,418



**Scope 1 emissions (metric tons CO2e)**

5,363

**Scope 2 emissions (metric tons CO2e)**

1,088

**Scope 2 emissions approach**

Market-based

**Pricing methodology for-copper equivalent figure**

The copper equivalent for nickel production was determined by multiplying the tonnes of nickel produced in 2022 (6,842 tonnes) by the price of nickel on 31 December 2022 (R458,585 /tonne), divided by the price of copper on 31 December 2022 (R139,964/tonne).

**Comment**

The output capacity is the production capacity of the refinery of 12,000 tonnes of high-purity nickel metal, 4,000 tonnes of high-purity nickel salts and 600 tonnes of cobalt chloride.

**C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6**

**(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?**

	Investment in low-carbon R&D	Comment
Row 1	Yes	<p>We have several investments in low-carbon R&amp;D in the PGM sector. For example, our investments into Verkor SA have resulted in increased value by providing entry into the battery market.</p> <p>In FY22, we entered into a partnership with Heraeus Precious Metals to develop a novel electrocatalyst for Proton Exchange Membrane electrolyzers for green hydrogen production.</p>

## C-MM9.6a

**(C-MM9.6a) Provide details of your organization's investments in low-carbon R&D for metals and mining production activities over the last three years.**

---

**Technology area**

Alternative fuels

**Stage of development in the reporting year**

Applied research and development

**Average % of total R&D investment over the last 3 years**

0

**R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)**

**Average % of total R&D investment planned over the next 5 years**

0

**Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan**

In the reporting year, Sibanye-Stillwater entered into a partnership with Heraeus Precious Metals. This partnership aims to develop a novel electrocatalyst containing PGMs to be used in Proton Exchange Membrane electrolyzers. These electrolyzers are used in the production of Green Hydrogen which can result in significant reductions in Sibanye's Scope 1 emissions if a switch to this fuel is conducted.

The percentage of total R&D investment cannot be obtained as yet.

---

**Technology area**

Other, please specify  
Green Metals

**Stage of development in the reporting year**

Applied research and development

**Average % of total R&D investment over the last 3 years**

0

**R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)**

**Average % of total R&D investment planned over the next 5 years**

0

**Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan**

During 2021, Sibanye-Stillwater approved the funding of the “BioniCCubE” to foster research and development of innovation /technologies and market development, by investing in and leveraging strategic partnerships. Sibanye-Stillwater is fully financing BioniCCubE, with a capital budget of up to 1.5% per annum of Group adjusted EBITDA for appropriate investments.

Two initial investments have accordingly been made by the Group: Glint Pay Ltd. and Verkor S.A. Regarding the latter, this strategic investment will facilitate further technical and commercial cooperation between the Group and Verkor that will help Sibanye-Stillwater in becoming a climate change-resilient business, as a leading supplier of green metals and energy solutions.

The percentage of total R&D investment cannot be obtained as yet.

---

**Technology area**

Metal recycling



**Stage of development in the reporting year**

Small scale commercial deployment

**Average % of total R&D investment over the last 3 years**

0

**R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)**

**Average % of total R&D investment planned over the next 5 years**

0

**Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan**

Sibanye-Stillwater’s Columbus Metallurgical Complex recycles 3E PGMs at its operations. The recycling process is less energy intensive and water demanding than primary production, emitting 6 times less CO2 and uses 63 times less water. The recycled metals at the operation are Platinum, Palladium and Rhodium. A total of 421,133 ounces were recycled in the reporting year. This is in the implementation stage of the R&D process.

The percentage of total R&D investment cannot be obtained as yet.

## C10. Verification

### C10.1

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

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



Scope 3

Third-party verification or assurance process in place

## C10.1a

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

### Verification or assurance cycle in place

Annual process

### Status in the current reporting year

Complete

### Type of verification or assurance

Limited assurance

### Attach the statement

 Statement of Assurance.pdf

### Page/ section reference

All pages uploaded. Statement of assurance is on page 281 in the Integrated Report 2022.

### Relevant standard

ISAE3000

### Proportion of reported emissions verified (%)

100

## C10.1b

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

---

**Scope 2 approach**

Scope 2 location-based

**Verification or assurance cycle in place**

Annual process


**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 Statement of Assurance.pdf

**Page/ section reference**

All pages uploaded. Statement of assurance is on page 281 in the Integrated Report 2022.

**Relevant standard**

ISAE3000

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

100

---

**Scope 2 approach**

Scope 2 market-based

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 Statement of Assurance.pdf

**Page/ section reference**

All pages uploaded. Statement of assurance is on page 281 in the Integrated Report 2022.

**Relevant standard**

ISAE3000

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

100

## C10.1c

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

---

**Scope 3 category**

- Scope 3: Purchased goods and services
- Scope 3: Capital goods
- Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
- Scope 3: Upstream transportation and distribution
- Scope 3: Waste generated in operations
- Scope 3: Business travel
- Scope 3: Employee commuting
- Scope 3: Investments
- Scope 3: Downstream transportation and distribution
- Scope 3: Processing of sold products
- Scope 3: End-of-life treatment of sold products
- Scope 3: Downstream leased assets

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 Statement of Assurance.pdf

**Page/section reference**

All pages uploaded. Statement of assurance is on page 281 in the Integrated Report 2022.



**Relevant standard**

ISAE3000

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

100

**C10.2**

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

Yes

**C10.2a**

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

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C8. Energy	Energy consumption	Limited assurance provided in accordance with ISAE3000	Verified as part of the verification of the greenhouse gas emissions in the carbon footprint of Sibanye Stillwater. Limited assurance was provided for the electricity and diesel consumed at Sibanye Stillwater's operations. The verification was conducted in accordance with ISAE3000. The verification covered organization wide energy consumption and is conducted annually.

**C11. Carbon pricing**

**C11.1**

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

Yes

## C11.1a

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

South Africa carbon tax

## C11.1c

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

### South Africa carbon tax

---

**Period start date**

January 1, 2022

**Period end date**

December 31, 2022

**% of total Scope 1 emissions covered by tax**

5

**Total cost of tax paid**

1,900,000

**Comment**

The South African Carbon Tax was implemented on 1 June 2019. Taxable entities are liable for payment on an annual basis, related to specified direct emissions in a calendar year. The carbon tax liability for 2022 is R1.9 million.

Sibanye-Stillwater's final carbon tax liability is determined by its gross GHG emission output as reported on in terms of the GHG reporting regulations and the extent to which it is able to make use of the full suite of allowances that are built into the carbon tax design.

## C11.1d

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

Sibanye's South African operations are currently regulated by the South African Carbon Tax Act, which was promulgated in July 2019. The scope of the Carbon Tax is limited to direct emission sources. The Carbon Tax Offset Regulations also allow carbon taxable entities to offset between 5%-10% of their carbon tax liabilities with verified carbon offsets, that meet the eligibility criteria contained in the regulations.

Our strategy is aligned with South Africa's national goal of proactively transitioning to a low carbon economy. Accordingly, Sibanye-Stillwater published a Group-wide 2040 net-neutral target, articulated in the Group's Climate Change Position Statement, endorsed by the CEO in 2021. The position statement also commits the Group to ensuring compliance with the requirements of the carbon tax system and any other regulatory instruments implemented by government. Sibanye-Stillwater pays carbon tax related to activities that combust of coal and paraffin in stationary equipment such as boilers and burners. Sibanye-Stillwater's strategy for complying with the South African carbon tax system includes:

- designing and implementing strategies that seek to reduce the carbon footprint of the Company, improve our energy efficiency, pursue potential opportunities and utilise carbon friendly technologies where feasible
- determining the risks that climate change may present to the company and assigning appropriate actions to mitigate such risks
- accurately determining our carbon footprint and providing comprehensive disclosure on carbon related issues
- complying with applicable legal requirements and with other requirements to which the organisation subscribes, that relate to carbon management,
- investigations into the development or purchase of carbon offsets to reduce our carbon tax liability and stimulate the green economy, and
- encouraging business partners and suppliers to adopt similar principles to minimise carbon emissions.

Sibanye-Stillwater's Energy and Decarbonisation position statement is a further key mechanism that supports our strategy for compliance with the South African carbon tax system, within the broader context of reducing our climate and environmental footprints.

Case study of how the strategy has been applied:

Carbon tax liability for 2022 was approximately R1.9 million. We have processes in place to continually reduce our carbon emissions as part of our low carbon transition plan. We have voluntarily implemented a vast number of projects that have reduced emissions over time and which have also reduced the potential tax liability as far as practicable. These include the replacement of the coal boilers at the Beatrix mine with an electro-boiler, resulting in a 26.4% reduction in coal usage. This project reduced scope 1 emissions by ~35 000 tCO<sub>2</sub>e while also reducing operating cost. Following the Beatrix example, we are currently reviewing replacement of coal boilers at the Marikana operations with natural gas or diesel and are also investigating compressed natural gas alternatives in the Free State where natural gas is readily available.

We also have two Clean Development Mechanism projects to generate carbon credits to offset a portion of the carbon tax. Nearly 90,000tCO<sub>2</sub>e have been issued in the 1st and 2nd verifications of the Beatrix CDM methane project. The 3rd batch of CERs is currently being verified. The Beatrix project destroys methane and produces clean electricity from methane trapped within mine shafts. The carbon credits generated by the Beatrix methane project may be used to offset Sibanye-Stillwater's carbon tax liability, pending the finalisation of the relevant contractual arrangements.

## C11.2

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

No

## C11.3

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

Yes

## C11.3a

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

---

**Type of internal carbon price**

Shadow price

**How the price is determined**

Alignment with the price of a carbon tax

**Objective(s) for implementing this internal carbon price**

Change internal behavior

Drive energy efficiency

Drive low-carbon investment



Identify and seize low-carbon opportunities  
Navigate GHG regulations  
Stakeholder expectations  
Stress test investments  
Reduce supply chain emissions  
Set a carbon offset budget

**Scope(s) covered**

Scope 1  
Scope 2

**Pricing approach used – spatial variance**

Uniform

**Pricing approach used – temporal variance**

Evolutionary

**Indicate how you expect the price to change over time**

The price of carbon evolves over time (evolutionary pricing). The South African carbon tax rate for the 2021 calendar year was R134/tCO<sub>2</sub>e. The rate was set at R120/tCO<sub>2</sub>e in 2019, and was escalated annually at CPI +2% until 31 December 2022, where the rate was set at R144/tCO<sub>2</sub>e.

The rate of tax will be increased thereafter, as determined by government. Government has already published proposed carbon tax rate increases as follows:

- By 2026: ZAR 308
- By 2030: ZAR 462

Pricing past 2030 has not been confirmed yet.

**Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO<sub>2</sub>e)**

144

**Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO<sub>2</sub>e)**

462

**Business decision-making processes this internal carbon price is applied to**

- Capital expenditure
- Operations
- Risk management
- Opportunity management
- Value chain engagement
- Public policy engagement

**Mandatory enforcement of this internal carbon price within these business decision-making processes**

No

**Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan**

Contribution to the implementation of Sibanye- Stillwater's climate commitments: Sibanye-Stillwater uses the carbon tax rate to manage the risks and opportunities associated with operational costs such as direct tax and indirect carbon tax passthrough costs. Accordingly, the internal carbon price has impacted Sibanye-Stillwater's business because it has revealed opportunities to reduce the company's direct and indirect carbon tax exposure. Sibanye-Stillwater was able to anticipate our carbon tax liability, prior to the promulgation of the South African Carbon Tax Act, through adequate awareness and planning. We are actively pursuing opportunities to reduce our direct and indirect carbon tax, as described in detail in sections 2.3a and 2.4a. For example, to mitigate risks associated with the emerging carbon tax regulations – which will likely result in substantive carbon tax passthroughs on electricity, Sibanye-Stillwater is developing a fleet of 557 MW of renewable energy plants which will mitigate increases in operating costs. A further example is the installation of variable speed drives at the Driefontein mine in South Africa. This initiative has resulted in a 62% energy reduction, which will also have a direct reduction in scope 2 emissions at the mine.

The shadow pricing has therefore allowed Sibanye-Stillwater to evaluate the business case for renewable/clean energy and energy efficiency projects, based on estimated cost savings and reduced payback periods which consequently impact the investment decision.

## C12. Engagement

### C12.1

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

Yes, our suppliers

Yes, our customers/clients

Yes, other partners in the value chain

### C12.1a

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

---

**Type of engagement**

Information collection (understanding supplier behavior)

**Details of engagement**

Collect other climate related information at least annually from suppliers

**% of suppliers by number**

100

**% total procurement spend (direct and indirect)**

80

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

80

**Rationale for the coverage of your engagement**



Sibanye-Stillwater maintains a vast network of suppliers, totalling over 3,050. To enhance our understanding of their environmental impact, we have implemented a supplier portal for our South African (SA) operations. Through this portal, we request suppliers to provide information on their carbon emissions. Approximately 72% of our total group suppliers, representing 1,928 suppliers, responded to our ESG questionnaire.

The rationale behind engaging this group of suppliers specifically, is their contribution to the Group's scope 3 emissions. Collectively, SA suppliers contribute more than 80% to our scope 3 emissions. Given that these suppliers possess climate change impacts that entail various risks and opportunities affecting our operations, it was imperative to target all SA suppliers in this engagement. By doing so, we aim to gather adequate data to effectively mitigate operational risks.

Our priority engagements are with SA suppliers of electricity, blasting agents, cyanide, lime, water, timber, diesel, hydrochloric acid, caustic soda, LPG, and cement. Critical suppliers have been identified and are sensitised to climate change impacts so that they can proactively position themselves to implement more climate resilient processes. Additionally, we employ a risk-based approach to prioritize key climate engagements. Our criteria for prioritization are based on assessments of the products supplied, their vulnerability to climate change, and supply demand and availability considerations.

We classify our suppliers into two categories: strategic suppliers and tactical suppliers. Strategic suppliers provide critical services and products that significantly impact our operations, such as reagents and underground support. Engagements with these suppliers are interactive and governed by contractual agreements to minimize potential risks while ensuring compliance with health and safety requirements and maintaining production levels. On the other hand, tactical suppliers are responsible for supplying the daily goods and services required for production. Our supplier engagements align with the Stakeholder Engagement Policy and primarily occur at an operational level, with any issues managed through the supply chain. Our focus on local suppliers emphasizes community participation, offering both financial and non-financial assistance when needed.

### **Impact of engagement, including measures of success**

Description of measures of success: The success of these interactions is measured implicitly by how much they assist Sibanye-Stillwater in identifying supplier-related risks (and opportunities) and in informing our strategy for the future. This engagement has assisted Sibanye-Stillwater in identifying several key supplier related climate change risks.

Company-specific examples: Firstly, water supply concerns have been identified as critical operational risks in our South African operations. In response, Sibanye-Stillwater has engaged with Rand Water, the local utility responsible for water supply, through various channels such as

water forums hosted by the utility. This engagement has prompted us to take action to reduce our reliance on external suppliers like Rand Water, thereby mitigating water security risks. By exploring potential groundwater sources, we aim to reduce our reliance on traditional water sources and ensure a more sustainable water supply. Secondly, our operations heavily rely on inputs such as gypsum and cement. Engagements with South African suppliers of these products have revealed a viable solution for reducing greenhouse gas (GHG) emissions using gypsum as a partial replacement for clinker in cement production, leading to reduced emissions.

**Comment**

None

## C12.1b

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

---

**Type of engagement & Details of engagement**

Collaboration & innovation

Other, please specify

Run an engagement campaign to educate customers about your climate change performance and strategy

**% of customers by number**

46

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

41

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

Our climate-related engagement strategy with our customers primarily focuses on the automotive industry, which represents our main customer category for Platinum Group Metals (PGMs). These customers have shown increasing concern about the ESG credentials of their suppliers and value chain sustainability.

The automotive industry, particularly our core PGM market segment customers, plays a significant role in the global demand for PGMs. We

have specifically selected these customers due to their material scope 3 emissions related to the processing of the products they purchase. Moreover, the emissions from our PGM operations contribute significantly to our overall emissions inventory, making it imperative to engage with these customers.

Our engagements with automotive customers revolve around developing strategies to reduce the climate change impacts associated with the PGM products we provide. These customers are highly attentive to ESG matters, with a specific focus on climate change and its potential effects on value chains and their own products. Climate change presents both risks and opportunities for our PGM products, and we actively collaborate with our customers to navigate these challenges.

In the reporting year Sibanye-Stillwater had specific climate/decarbonisation-related engagements with some of our largest clients that bring in a significant percentage of revenue. The rationale was to engage on our GHG emissions, our metrics and targets, our decarbonisation plans, and opportunities for mutual collaboration in decarbonising our value chain.

Some customers and potential customers engage with us annually or more frequently to gain insights into our sustainability audits and the results we achieve. This allows them to assess our sustainability practices and verify our commitment to responsible operations.

Although we sell our gold to banks for investment purposes and have limited direct engagement with them, we are a member of the World Gold Council. As part of our involvement, we participate in discussions on climate change and address the climate-related needs and concerns of our customers.

### **Impact of engagement, including measures of success**

Engaging with our customers allows us to gain deeper insights into their needs and understand the impact of climate change and global decarbonization on our respective commodity markets. It also presents opportunities to cater to emerging commodity demands, such as battery metals.

The success of our customer engagements can be measured by the quality of customer relationships, customer retention, sales performance, and the establishment of customer partnerships. As one of the largest PGM recyclers globally, Sibanye-Stillwater's US PGM operations benefit from these engagements by gaining a better understanding of the potential for further recycling initiatives and the market value of recycled metals.

Success would be defined by accelerated decarbonisation through unlocking mutually beneficial opportunities and cross learning. Throughout 2022, Sibanye-Stillwater engaged with multiple customers regarding various PGM-related projects, investments, and partnerships.

While the specific details of these initiatives cannot be disclosed due to confidentiality considerations, it is worth noting that each of these endeavours, if successful, will contribute to mitigating climate change.

Ultimately, the development of new and low-emission markets for our PGM products plays a crucial role in ensuring the long-term sustainability of our PGM operations in South Africa, the US, and Europe. By actively engaging with customers and exploring innovative solutions, we strive to align our business with the evolving needs of a sustainable future.

## C12.1d

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

Our climate-related engagement strategy encompasses a wide range of stakeholders in the value chain, including suppliers, third-party processors, customers, and investment companies. Throughout 2022, we placed significant emphasis on engaging with these partners, actively discussing their emission targets, decarbonization plans, and exploring opportunities for collaboration. This proactive approach has yielded strong strategic relationships within the North American and European battery supply ecosystems, underscoring our steadfast commitment to fostering low-emission markets.

Ensuring responsible sourcing and maintaining supply chain integrity are core tenets of our strategy, implemented meticulously across all operational areas and diligently tracked. Our dedication to considering ESG factors extends throughout the value chain, encompassing mergers and acquisitions as well as closure processes. Recognizing the paramount importance of sustainable resource utilization, we are actively diversifying into recycling across all metal categories, bolstering our contribution to circular economy principles.

Strategic partnerships play an instrumental role in our approach, providing us with a unique vantage point as participants in emerging value chains that align with evolving market demands. Examples of such collaborations include the acquisition of majority stakes in Keliber and New Century Resources, alongside a joint venture with Ioneer to develop the Rhyolite Ridge project. By forging these partnerships and making strategic investments in energy solution businesses through our BioniCCubE portfolio, we leverage our expertise in green metals and contribute to market development endeavours.

At the heart of our engagement strategy lies our Stakeholder Engagement Policy, which serves as guidance for fostering open, constructive dialogue, participatory decision-making, and mutually beneficial outcomes. We prioritize understanding the needs, interests, and expectations of both internal and external stakeholders. To ensure effective engagement, we employ a wide range of communication methods, including regular meetings, comprehensive reports, timely email communications, and interactive platforms tailored to specific stakeholders.

As an example of our engagement with partners in the value chain, we continued working with the South African government through the industry associations to unlock and accelerate renewable energy projects. This has resulted in several positive policy and regulatory changes.

In addition, our battery metals strategy predominantly focuses on the US and EU regions, acknowledging the escalating demand for battery metals propelled by the transition to electrification within the automotive industries of these regions. We are pleased to highlight the support received from the US Department of Energy, signifying the significance of our endeavours in the battery metals space, particularly the development of the Rhyolite Ridge project. This endorsement underscores our dedication to meeting the evolving needs of these regions and contributing to their sustainable future.

## C12.2

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

Yes, suppliers have to meet climate-related requirements, but they are not included in our supplier contracts

## C12.2a

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

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#### **Climate-related requirement**

Climate-related disclosure through a non-public platform

#### **Description of this climate related requirement**

We have been actively engaged in soliciting responses from our suppliers regarding ESG-related matters. As part of our commitment to ESG practices, Sibanye-Stillwater requests suppliers to complete an ESG survey that includes specific questions related to climate change. We received a total of 1,928 responses to our 2022 questionnaire.

These questions are as follows:

Do you measure and disclose your greenhouse gas (GHG) emissions? If so, please provide the total GHG emissions in tonnes of scope 1 and 2 carbon dioxide equivalents (tCO<sub>2</sub>e) or GHG intensity per product or service supplied to Sibanye-Stillwater.

Has your company established an emission reduction target for scope 1 and 2 emissions? Is this reduction target endorsed by the Science





Based Targets Initiative (SBTi)? Additionally, could you provide a brief summary of your decarbonization initiatives?

Suppliers who respond affirmatively to these questions are considered compliant with our requirements. If a supplier indicates a negative response, they are categorized as non-compliant. However, it is important to note that non-compliance does not automatically result in the rejection of their products or services. Our goal is to engage with these suppliers and work collaboratively towards driving necessary changes over a reasonable timeframe, ultimately aiming to retain them as valued partners.

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

100

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

19

**Mechanisms for monitoring compliance with this climate-related requirement**

- Supplier self-assessment
- Off-site third-party verification
- On-site third-party verification
- Grievance mechanism/Whistleblowing hotline
- Supplier scorecard or rating

**Response to supplier non-compliance with this climate-related requirement**

Retain and engage

## C12.3

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

Row 1

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

Yes, we engage directly with policy makers

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

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

Yes

**Attach commitment or position statement(s)**

 ssw-climate-change-position-statement-june-2021.pdf

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

Sibanye-Stillwater has established processes to ensure that our external engagement activities align with our climate commitments and transition plan. These processes are designed to facilitate consistent and strategic engagement with relevant stakeholders. Overview of the steps:

Participation in industry bodies and regulatory engagements: We actively participate in discussions with industry bodies such as the Minerals Council South Africa (MCSA), Energy Intensive User Group, and Industrial Task Team on Climate Change. Through these engagements, we collaborate with government regulators, utilities, and other stakeholders to advocate for accelerated decarbonization and a just energy transition. These interactions help us gain insights into policy developments, such as the Phase 2 implementation of the Carbon Tax Act, and provide feedback to ensure alignment with our climate change strategy.

Representation and feedback loop: Our Chief Regional Officer: Southern Africa serves as a representative on the MCSA, allowing us to actively engage in climate change-related matters. We maintain a feedback loop with the MCSA, exchanging information on climate change issues and approaches. The MCSA's interactions with regulators and industry associations are shared within our organization for further interpretation and action as needed. This ensures consistency.

Direct inputs and policy engagement: Sibanye-Stillwater leverages opportunities to directly contribute to climate-related policy and legislation discussions. We provide inputs and comments on climate-related matters to environmental regulators such as the Department of Environment, Forestry and Fisheries and National Treasury. Additionally, we engage with relevant parliamentary committees or similar structures to offer our insights and perspectives. This involvement allows us to contribute to the development of impactful climate policies.

Responsibility and reporting structure: Within our organization, the Executive VP carries overall responsibility for climate-related aspects at our US PGM segment. Monitoring, measurement, and reporting are delegated to the environmental department, overseen by the VP - Legal, Environment, and Governmental Affairs. The Vice President reports to the Executive VP, who reports to the Social and Ethics Committee on a quarterly basis. This ensures oversight and facilitates informed decision-making based on climate-related data and performance assessments.

## C12.3a

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

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**Specify the policy, law, or regulation on which your organization is engaging with policy makers**

Sibanye-Stillwater has been engaging with the South African authorities on the framework and principles of the South Africa's Carbon Tax Act.

**Category of policy, law, or regulation that may impact the climate**

Carbon pricing, taxes, and subsidies

**Focus area of policy, law, or regulation that may impact the climate**

Carbon taxes

**Policy, law, or regulation geographic coverage**

National

**Country/area/region the policy, law, or regulation applies to**

South Africa

**Your organization's position on the policy, law, or regulation**

Support with no exceptions

**Description of engagement with policy makers**

Sibanye-Stillwater actively engages with policy makers to address the implications of the carbon tax, particularly concerning the inclusion of Scope 2 emissions from electricity generation in the tax net. We anticipate a significant increase in our carbon tax liability starting from 2026, as it may encompass emissions related to the national electricity utility and other suppliers of manufactured goods and services.

To better understand and potentially influence the proposed carbon tax regime for Phase 2, Sibanye-Stillwater actively collaborates with the Minerals Council South Africa (MCSA). Through our engagement with MCSA, we seek to gain a deeper understanding of the Phase 2 implementation of the Carbon Tax Act.

Additionally, we participate in discussions with the National Treasury. Our objective is to enhance our understanding of the Phase 2 implementation, ensuring that we are well-informed about the upcoming changes and can proactively manage our carbon tax obligations.

By actively engaging with policy makers and industry stakeholders, Sibanye-Stillwater aims to navigate the evolving carbon tax landscape effectively and contribute to the development of a fair and sustainable carbon tax regime.

**Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation**

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

Yes, we have evaluated, and it is aligned

**Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?**

Carbon tax is central to the achievement of our climate transition plan. It plays a crucial role in incentivizing and driving the reduction of greenhouse gas emissions within our operations and throughout the broader economy. The carbon tax creates a financial disincentive for carbon-intensive activities and encourages companies to adopt cleaner and more sustainable practices.

By incorporating the carbon tax into our climate transition plan, we recognize its significance in addressing climate change and transitioning to a low-carbon future. It aligns with our commitment to reduce our carbon footprint and contribute to global efforts to mitigate climate change.

The carbon tax serves as both a regulatory mechanism and an economic tool to internalize the cost of carbon emissions. It provides a

framework that guides our decision-making processes, investment strategies, and operational practices. The tax liability associated with our emissions serves as a financial signal to prioritize emission reduction measures and invest in cleaner technologies.

## C12.3b

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

---

### Trade association

Other, please specify

Minerals Council South Africa

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

Consistent

### Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

### Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

Sibanye-Stillwater's position on climate change is closely aligned with the Minerals Council South Africa's position, demonstrating a consistent approach towards addressing climate change and transitioning to a net-zero carbon economy. Both entities recognize the importance of reducing GHG emissions and supporting climate-resilient development. They also share a commitment to contribute to global climate change solutions, adopt innovative approaches, and pursue a measured transition to a low-carbon future in line with the Paris Agreement.

During 2022 the Minerals Council South Africa was an advisory and leadership entity within the mining industry. They advocate for members' needs, monitor progress, and provide support in addressing climate change challenges in terms of carbon pricing and climate policy. The Council has developed detailed guidelines to assist members in increasing their resilience to climate change and improving their performance in meeting climate change-related commitments. These guidelines involve analysing current emissions reduction status, conducting gap analyses,



and developing action plans based on the Council's position statement and recommendations. The Council also outlines a comprehensive framework that encompasses mitigation efforts, adaptation measures, and a just energy transition to address the various impacts of climate change in the mining industry.

Sibanye-Stillwater actively participates in industry engagements and discussions through its representation at the Minerals Council South Africa. By engaging in these forums, Sibanye-Stillwater plays a role in shaping the collective position of the MCSA and the mining industry and influencing the industry's approach to climate change. This active involvement demonstrates Sibanye-Stillwater's commitment to influencing and aligning with the Minerals Council's position on climate change.

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

**Describe the aim of your organization's funding**

**Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

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**Trade association**

International Council on Mining & Metals (ICMM)

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

Consistent

**Has your organization attempted to influence their position in the reporting year?**

No, we did not attempt to influence their position

**Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position**



Sibanye-Stillwater aligns its position on climate change closely with that of ICMM. They acknowledge that climate change is one of the critical global challenges of our time and recognize the interconnections between climate change, water, biodiversity, and socioeconomic development. They share ICMM's belief that action aligned with the goals of the Paris Agreement is crucial for achieving the Sustainable Development Goals.

As part of ICMM's commitments on climate change, ICMM asks its members to commit to specific actions by the end of 2023. These actions include setting targets for Scope 1 and 2 GHG emissions, accelerating efforts to address Scope 3 GHG emissions, covering all significant sources of emissions, prioritizing absolute reductions, employing robust methodologies, integrating climate change considerations into decision-making processes, advancing adaptation and mitigation solutions, supporting community resilience, and ensuring transparent reporting of progress.

In 2022, ICMM collaborated with original equipment manufacturers to promote operational and technological innovation. This collaboration aims to enable mining operations to adopt greenhouse gas-free surface mining vehicles by 2040. ICMM and its members are actively working to enhance the readiness of mine sites to adopt zero-emission solutions more rapidly. This involves developing the necessary infrastructure, building capacity, and procuring clean energy. To facilitate discussions and progress on promoting operational and technological innovations, ICMM has developed a Maturity Framework to assess the current and desired future status of mining operations.

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

3,969,000

**Describe the aim of your organization's funding**

By participating in climate discussions that are led by the ICMM, Sibanye-Stillwater aims to participate in and facilitate the just and fair transition to a low carbon economy.

**Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

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**Trade association**

Other, please specify

Energy Intensive User Group (EIUG)

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

Consistent

**Has your organization attempted to influence their position in the reporting year?**

Yes, we publicly promoted their current position

**Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position**

Sibanye-Stillwater and the EIUG (Energy Intensive Users Group) share alignment in their climate change positions, particularly concerning the Decarbonisation Agenda and Green Hydrogen initiatives. As Sibanye Stillwater have a Council Member and EIUG Director as part of the EIUG we play an influential role in shaping the energy and decarbonisation strategy within the organization. The EIUG, as a customer-led advocacy group, focuses on influencing energy, just energy transition, and climate change policies at the national level. Their vision is to be a trusted champion for energy reliability, affordability, and sustainability for their stakeholders.

The EIUG undertakes various projects, engagements, and research to address the evolving needs and priorities of its members. They actively participate in relevant public consultations, leveraging both internal expertise and external support to advocate for their members' interests. The organization's current focus projects in 2022 and activities include Just Energy Transition, Decarbonisation Agenda, Green Hydrogen, and Grid Emission Factor.

Through active participation, engagement, and leveraging their strategic roles within the organization, Sibanye-Stillwater takes actions to influence the EIUG's position. They provide expertise, insights, and leadership in the development and execution of the energy and decarbonisation strategy, ensuring that the trade association's position aligns with Sibanye-Stillwater's goals and priorities. This collaboration helps strengthen the collective efforts of the EIUG and its members in advocating for effective climate change policies and sustainable energy practices.

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

**Describe the aim of your organization's funding**



**Have you evaluated whether your organization’s engagement with this trade association is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

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**Trade association**

Other, please specify

Industry Task Team on Climate Change

**Is your organization’s position on climate change policy consistent with theirs?**

Consistent

**Has your organization attempted to influence their position in the reporting year?**

No, we did not attempt to influence their position

**Describe how your organization’s position is consistent with or differs from the trade association’s position, and any actions taken to influence their position**

The Industry Task Team on Climate Change (ITTCC) is a voluntary, non-profit association comprising several large companies that collectively have a significant impact on South Africa's carbon footprint.

In terms of our climate change position, we share the view that climate warming is undeniable, human influence is evident, and the physical impacts are already being felt. We recognize that climate change presents a complex challenge for global society, with varying response capabilities among countries. As responsible stakeholders, we believe in taking action and advocating for an integrated approach to climate change mitigation in South Africa, contributing to the global solution.

The ITTCC supports a gradual and predictable transition toward a lower carbon economy in South Africa. They aim to work collaboratively with government departments to develop integrated and sustainable policies for the country. In 2022, they engaged DNA Economics to develop



greenhouse gas pathways, which involve creating emissions scenarios for South Africa under different measures and policy scenarios, including without measures (WOM), with existing measures (WEM), and with additional measures (WAM).

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

**Describe the aim of your organization's funding**

**Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

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**Trade association**

Other, please specify

World Platinum Investment Council

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

Consistent

**Has your organization attempted to influence their position in the reporting year?**

No, we did not attempt to influence their position

**Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position**

The World Platinum Investment Council (WPIC) is a voluntary is a global market authority providing investors with platinum market intelligence. Their mission is to stimulate investor demand for physical platinum through both actionable insights and targeted development: providing investors with the information to support informed decisions regarding platinum and working with financial institutions and market participants to develop products and channels that investors need. Sibanye-Stillwater engages with the WPIC on carbon pricing and climate policy.

We recognize that climate change presents a complex challenge for global society, with varying response capabilities among countries. As

responsible stakeholders, we believe in taking action and advocating for an integrated approach to climate change mitigation in South Africa, contributing to the global solution.

The WPIC believes that Platinum's properties make it critical to reducing air pollution, in the construction of energy-efficient fiberglass and that Platinum's catalytic properties make it critical to cleaning up air pollution, producing renewable hydrogen and unleashing the power of hydrogen in fuel cells.

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

**Describe the aim of your organization's funding**

**Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

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**Trade association**

Other, please specify

Platinum Guild International

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

Consistent

**Has your organization attempted to influence their position in the reporting year?**

No, we did not attempt to influence their position

**Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position**

Platinum Guild International is a marketing organisation created in 1975 with the vision to develop the global platinum jewellery market as a new demand source for platinum. Their mission is to stimulate investor demand for physical platinum through both actionable insights and targeted development: providing investors with the information to support informed decisions regarding platinum and working with financial institutions and market participants to develop products and channels that investors need.

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

**Describe the aim of your organization's funding**

**Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

## **C12.4**

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

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**Publication**

In mainstream reports

**Status**

Complete

**Attach the document**

 ssw-IR22.pdf



**Page/Section reference**

Pg 19-30 32-35 37-67 184- 189 190 - 196

**Content elements**

- Governance
- Strategy
- Risks & opportunities
- Emissions figures
- Emission targets
- Other metrics

**Comment**

Disclosing emissions in our integrated report is of utmost importance for Sibanye-Stillwater in today's business landscape. Firstly, it enhances transparency and accountability, providing stakeholders with accurate and comprehensive information about our environmental impact. By disclosing our emissions data, we demonstrate our commitment to addressing climate change and taking responsibility for our carbon footprint. Secondly, it allows investors and stakeholders to assess our sustainability performance and make informed decisions. Emissions disclosure provides crucial insights into our risk exposure, potential regulatory compliance issues, and overall resilience in the face of climate-related challenges. Additionally, public disclosure of emissions data can foster trust and credibility among stakeholders, demonstrating our commitment to environmental stewardship and sustainable practices. Overall, emissions disclosure in our integrated report aligns with the growing demand for transparency, sustainability, and responsible business practices, enabling us to demonstrate our commitment to addressing climate change and driving positive environmental outcomes.

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**Publication**

In mainstream reports, incorporating the TCFD recommendations

**Status**

Complete

**Attach the document**

 ssw-FS22-climate-related-disclosure.pdf

### **Page/Section reference**

The whole document relates to climate change and GHG

### **Content elements**

Governance  
Strategy  
Risks & opportunities  
Emissions figures  
Emission targets  
Other metrics

### **Comment**

Including climate change-related disclosure as a separate report enhances transparency and accountability, providing stakeholders with comprehensive and detailed information about our approach to managing climate change risks and opportunities. By disclosing our climate change strategies, targets, and actions, we demonstrate our commitment to addressing this global challenge and taking responsibility for our environmental impact. Secondly, it allows investors and stakeholders to assess our climate change performance and preparedness. Climate change disclosure provides valuable insights into our greenhouse gas emissions, energy consumption, climate-related risks, and adaptation measures. This enables stakeholders to make informed decisions and evaluate our resilience in the face of climate-related challenges. Moreover, public disclosure of climate change-related information can enhance trust and credibility among stakeholders, showcasing our commitment to environmental stewardship and sustainable practices. Overall, the climate change-related disclosure report aligns with the growing demand for transparency, sustainability, and responsible business practices, enabling us to demonstrate our dedication to addressing climate change and driving positive environmental outcomes.

## **C12.5**

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



	Environmental collaborative framework, initiative and/or commitment	Describe your organization’s role within each framework, initiative and/or commitment
Row 1	<p>Climate Disclosure Standards Board (CDSB)</p> <p>Global Reporting Initiative (GRI) Community Member</p> <p>Pledge to Net Zero</p> <p>Task Force on Climate-related Financial Disclosures (TCFD)</p> <p>Other, please specify</p> <p>ISO 14001 and ISO 45001, UNFCCC (United Nations Framework Convention on Climate Change, JSE Sustainability Disclosure Guidance</p>	<p>We maintain ISO 14001 and ISO 45001 certifications throughout our entire business operations. We have already aligned with the disclosure requirements of GRI reporting, the UNGC communication on progress, and the ICMM. Additionally, we are working towards aligning with the SASB standard on Metals and Mining and Coal operations, which now falls under the Value Reporting Foundation. It is important to note that as of August 2022, the Value Reporting Foundation (VRF) and the Climate Disclosure Standards Board (CDSB) were consolidated into the IFRS Foundation, which established the International Sustainability Standards Board (ISSB) to consolidate ESG standards. Until the ISSB implements its standards, we are advised to align with SASB.</p> <p>Furthermore, we are aligning with the recently released JSE Sustainability Disclosure Guidance and JSE Climate Disclosure Guidance, which are largely in line with the global standards mentioned above. For our European operations, we will comply with the Corporate Sustainability Reporting Directive (CSRD) where applicable.</p> <p>Our position statements on climate change, energy, and decarbonization align with the climate change commitments of the ICMM, UN SDGs 7 and 13, and the UNFCCC (United Nations Framework Convention on Climate Change), which is the parent treaty of the 2015 Paris Agreement. Sibanye-Stillwater is among the 28 global mining and metals companies that have committed to the updated ICMM Climate Change Position Statement (2021), which includes a pledge to achieve net zero emissions by 2050.</p> <p>We contribute to the global response to climate change in two primary ways: by reducing our own carbon footprint and by providing essential commodities for carbon emissions mitigation.</p> <p>As part of our climate change response program, we have established the following strategic objectives:</p>



	<ul style="list-style-type: none"> <li>• Implement the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), including aligning our governance, strategy, risk management, metrics and targets, and disclosures.</li> <li>• Understand and proactively address the risks and opportunities associated with climate change.</li> <li>• Execute our energy and decarbonization strategy to achieve carbon neutrality by 2040 and net zero emissions by 2050.</li> <li>• Track our greenhouse gas (GHG) emissions (scope 1&amp;2) against targets approved by the Science Based Targets initiative (SBTi).</li> <li>• Enhance operational resilience to the impacts of climate change and support stakeholders affected by climate change, including our host communities.</li> </ul>
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## C15. Biodiversity

### C15.1

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

	<b>Board-level oversight and/or executive management-level responsibility for biodiversity-related issues</b>	<b>Description of oversight and objectives relating to biodiversity</b>
Row 1	Yes, both board-level oversight and executive management-level responsibility	<p>The Social, Ethics and Sustainability Committee and the Risk Committee, both Board-level committees, have a role in advising on responsible biodiversity management. The Committees provide strategic direction and oversight.</p> <p>The CTO reporting to the Chief Executive Officer (CEO), supports the CEO in key decision-making by ensuring that strategic biodiversity management objectives translate into operational targets and initiatives. This takes place in conjunction with the Senior Vice President (SVP): Sustainability and the SVP:</p>





		<p>Environment, who oversees the integration of sustainability and environmental considerations, respectively, across the business. The SVP: Sustainability oversees and drives overall sustainability within the Group, and therefore any strategic issues on biodiversity also fall within their mandate.</p> <p>The Risk Committee oversees risk management on behalf of the Board, and this includes risk management on any or all biodiversity related issues and risks.</p> <p>Thereafter, biodiversity related issues are disclosed and reported via the quarterly board note to the Executive and Board of Directors. The Executive approved the Biological Diversity Procedure.</p> <p>Further our risks, opportunities, actions, impacts and status are reported in our Integrated Annual Report Biodiversity Fact Sheet.</p>
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## C15.2

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

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Commitment to Net Positive Gain Commitment to No Net Loss Adoption of the mitigation hierarchy approach Commitment to not explore or develop in legally designated protected areas Commitment to respect legally designated protected areas	SDG Other, please specify ICMM, WGC

### C15.3

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

**Impacts on biodiversity**

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**Indicate whether your organization undertakes this type of assessment**

No, but we plan to within the next two years

**Dependencies on biodiversity**

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**Indicate whether your organization undertakes this type of assessment**

No, but we plan to within the next two years

### C15.4

**(C15.4) Does your organization have activities located in or near to biodiversity- sensitive areas in the reporting year?**

No

### C15.5

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

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

		Integrated catchment management, contributions to science and technology, implementation of the mitigation hierarchy, investment into renewable energy, waste reduction programs
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## C15.6

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

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	Yes, we use indicators	State and benefit indicators Pressure indicators Response indicators

## C15.7

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

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments Governance Impacts on biodiversity Details on biodiversity indicators	 1

 1 ssw-FS22-biodiversity-management.pdf



## C16. Signoff

### C-FI

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

### C16.1

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

	<b>Job title</b>	<b>Corresponding job category</b>
Row 1	Group Chief Financial Officer	Chief Financial Officer (CFO)