Standard Bank Group

Climate-related financial disclosures report 2022

Standard Bank
Also trading as Stanbic Bank

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Purpose of this report

This report focuses on the Standard Bank Group's climate strategy and how we are managing climate-related opportunities and risks. Its content is informed by the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD). More comprehensive information about the group's ESG performance and risk management, together with details of our climate policy (March 2022) and climate strategy and implementation plan (March 2023), can be found in other parts of our reporting suite.

SBG ESG report | SBG climate strategy and implementation plan | SBG climate policy

Scope

This report pertains to the Standard Bank Group (SBG) excluding Liberty Holdings Limited, unless otherwise specified. This report pertains to the 2022 Financial Year.

Our climate journey

Our climate journey starts with our group purpose: *Africa is our home, we drive her growth*. We aim to bank Africa's just energy transition and to be a market leader in sustainable finance across the continent. As such, we are committed to achieving net zero by 2050.

In 2022, the group invested considerable time in refining our approach to climate change. We understand our climate-related opportunities and risks through a double materiality lens. Our approach is underpinned by two interconnected pillars: climate strategy and climate risk.

Climate strategy is led by our client segments and integrates climate-related opportunities and risks into their strategies. This pillar addresses the impact that the group has on climate change through setting climate mitigation targets and commitments.

Climate risk management is led by our group risk function and integrates climate-related risks into the group's overall risk management framework. This pillar addresses the impact that climate change has on the group.

Africa is disproportionately impacted by climate change: the continent is already experiencing above average temperature increases, prolonged and severe droughts, frequent flooding, and coastal erosion. Yet Africa's contribution to global GHG emissions is less than 4%. Furthermore, the achievement of the UN Sustainable Development Goals (SDGs) is constrained by energy poverty: 600 million Africans have no access to electricity. Energy use per capita in Africa remains one-third of the global average. Africa's demand for electricity is expected to increase by 75% by 2030. As such, climate change and the energy transition present a significant opportunity and a material risk to the group.

Our approach to understanding climate-related risks and opportunities in Africa is founded on the principle of common but differentiated responsibility for climate mitigation and lowering GHG emissions that is enshrined in the Paris Agreement. This principle allows developing countries a longer time to transition to net zero, beyond 2050. Many of these countries, such as Angola, Ghana, Mozambique and Nigeria, are heavily dependent on the oil and gas sectors to generate foreign currency, government revenue, and employment. It is not tenable to simply stop financing such activity, particularly as the impact on global GHG emissions will be marginal.

In South Africa, there is an immediate need to resolve the ongoing energy crisis which the South African Reserve Bank (SARB) estimates costs the economy between R204 million and R899 million per day. In 2022, the country experienced over 200 days of load shedding, ranging from stage 2 to stage 6. This is likely to be a regular occurrence for at least the next two years. It is further estimated that the power cuts reduced potential real GDP growth by five percentage points in 2022, and that this cost the country around 600 000 potential jobs. The broader impacts of loadshedding include weaker consumer and business confidence, and an impediment to foreign investment.

This energy challenge similarly poses a significant opportunity driven by the increased demand from households and businesses for off-the-grid and alternative energy solutions.

The total value of renewable-energy projects in Africa is thought to be in the region of USD35 billion, including 104 wind projects and over 1 000 solar projects. South Africa has committed to increasing the share of renewable energy in its energy mix from 11% to 41% by 2030 and the government has set a target to deploy 11.8GW of large-scale renewable energy capacity by 2030.* While South Africa currently accounts for just over half of installed and upcoming wind power in the region, countries such as Kenya, Tanzania, Ghana and Ethiopia are also expanding wind developments and the increasing power demand and efforts to expand electrification in countries like Madagascar, Zambia and Zimbabwe are long-term drivers of the market for renewable energy.

Despite global finance investment flows reaching record highs in 2021, investment to support the energy transitions of African countries remains extremely limited. The World Economic Forum has

* Department of Mineral Resources and Energy (DMRE)_Renewable Energy Independent Power Producer Procurement Programme (REIPPPP), 2021

estimated that South Africa would need at least $250 billion over the next three decades to diversify away from coal fired power to a more renewable oriented economy*. Of this, at least US$10 billion should be allocated toward 'climate justice outcomes' to support workers and communities in the transition, including compensation, retraining, relocation, and rehabilitation of regions and communities. African governments called for $1.3 trillion per annum to be invested in the continent's climate mitigation and adaptation at COP26 in 2021.

For Africa to make progress towards the SDGs there are sectors that will continue to need financing despite their carbon-intensity. Indeed, certain activities will require higher levels of investment. Agricultural and food manufacturing are essential for food security and employment. Mining for copper, cobalt and lithium is core to the global energy transition. Steel and cement are needed for infrastructure development across the continent. We place these sectors and activities under the umbrella of transition finance. We will continue to finance them while also supporting efforts to ensure they have credible plans to transition to net zero.

In our view this approach is preferable to disinvestment and disorderly energy transitions. Africa will also play a critical role in global climate mitigation efforts as it serves as a significant carbon sink with its equatorial forests absorbing more carbon than the continent generates. We are working to unlock the opportunities that Africa holds to support global decarbonisation efforts and not just focusing on Africa's decarbonisation.

Our climate commitments are integrated into our group strategy. Our client segments are leading the development of climate targets and commitments across the various economic sectors that we bank. The needs of our clients are at the forefront of this work, and we are working with them to support their energy transitions. We are working to support a Just Energy Transition for Africa and the goals of the Paris Agreement by decarbonising our own operations, aligning financing with the Paris Agreement, providing climate-related solutions to clients, deploying capital to scale renewable energy solutions, and mobilising capital for a sustainable energy transition.

We do business across 20 African countries and multiple economic sectors. Various factors shape our differentiated approach to setting climate targets and commitments across these different countries and sectors. These factors include government policy and regulatory frameworks, sector transition pathways, and technology. A one-size-fits-all approach is neither possible nor appropriate. For this reason, we are following a phased approach to developing and implementing our climate strategy. We are interrogating the climate-related opportunities and risks in different sectors to inform our targets. We started with those sectors that have a greater exposure to these opportunities and risks and which also comprise a significant part of our portfolio.

Climate targets and commitments were published in March 2022 for sectors in phase one of this work: renewable energy, sustainable finance, thermal coal, coal-fired power, oil, natural gas, and agriculture.

In March 2023, we published targets and commitments for sectors in phase two: residential and commercial real estate, short-term insurance, and further commitments in the agricultural sector. We continue to develop targets and commitments in respect of our phase three sectors, namely transport, and long-term insurance and asset management. We are also undertaking further work in the oil and natural gas sector. We will expand our work on voluntary carbon markets and green hydrogen in 2023. Looking beyond 2023, we will expand our climate strategy to include hard-to-abate sectors such as metallurgical coal, steel, and cement, which are important to meet Africa's infrastructure needs.

The financial system has a role to play as a driver of the net zero transition. But it is not the only role player. There are limits to the degree to which banks can control or

* Blended Finance Taskforce, Making Climate Capital Work, 2022

influence real economy decarbonisation. Our ability to support climate mitigation depends on numerous external factors including our clients' preferences and transition pathways. Yet, transition planning by real economy firms – such as retailers, mining companies, manufacturers, telco firms – is still in its infancy, even in developed economies. The CDP* estimates that as of February 2023, less than one percent of the 16 000 firms making carbon emissions disclosures had credible climate transition plans. This makes it difficult for banks to measure their financed emissions and performance against climate targets based on financed emissions. The reliance on information from clients needs to be appropriately considered in sequencing the target-setting and disclosure requirements for banks.

We welcome policy and regulatory changes that provide more certainty and incentives for the real economy to implement transition plans, such as South Africa's Just Energy Transition Plan and Nigeria's Energy Transition Plan. The absence of policy guidance and transition pathways represents a major impediment to the ability of banks to set climate targets and undertake climate risk management. As the Institute of International Finance notes: *"This can prove to be especially challenging for financial institutions with a large emerging market (EM) client base, where data gaps for key climate and sustainability-related information can be particularly large across both the private and public sectors."* The Financial Stability Board and the Network for Greening the Financial System have also flagged the challenge of data availability from banks' clients.

We are taking steps to tackle the challenge of climate-related data. These steps include becoming a member of the Partnership for Carbon Accounting Financials (PCAF), procuring data from appropriate third-party providers, learning from peer networks, and working with our clients. The absence of local regulation, multiple methodologies, and the evolving global standard setting process for climate-related disclosures slows the pace of this work. We would support 'safe harbour' provisions for specific information considered high priority for disclosure but difficult to provide accurately at this time. Our current approach is to use credible proxy indicators while we build our financed emissions methodologies and datasets. We currently report our climate targets and performance metrics in terms of credit exposure concentrations to the sectors that we have prioritised in phase one of our climate policy.

The group's insurance and asset management business has started to identify climate-related opportunities and risks. The insurance industry plays a crucial role in the transition to net zero as risk managers, risk carriers and investors. Our short-term insurance business has made initial climate commitments.

The development of standardised methodologies to measure and disclose the GHG emissions associated with insurance and underwriting is in its infancy globally. PCAF published the first scoping document for calculating 'Insurance-Associated Emissions' in 2022. We will monitor these developments and seek to adopt the relevant measurement methods for this segment of our group. The climate-related financial disclosures of Liberty Holdings will be incorporated into the group's disclosures from 2024.

This report outlines the group's work to understand the opportunities and risks arising from climate change. It provides an overview of the work undertaken to develop climate targets and commitments and to manage climate-related risks. We recognise that this set of disclosures reflects work-in-progress and that we have much more work to do in the years ahead.

* Formerly the Carbon Disclosure Project

"There's no serious doubt that climate change is already causing immense damage worldwide and in Africa, and that it will place many – probably most – Africans at serious risk. But an exclusive focus on costs and risks can be paralysing. Africa is blessed with all the right resources to enable us to supply our own needs for sustainable energy – and export energy to the rest of the world. We're just as rich in sunlight, wind and carbon sinks as we are in oil, gas, and coal. We're also blessed with the rare earth and other minerals, such as copper and lithium, that are needed to build the infrastructure of sustainable energy production and distribution. There are huge opportunities for African countries as exporters of transitional and renewable energy. Growing our transition and renewable energy capacity will increase African countries' fiscal headroom – which is essential for effective sovereignty. And it will enable us to move deeper into global supply chains, which is very helpful to broader industrialisation. For all these reasons, the people and businesses of Africa can do very well out of the energy transition – and we should say so with pride and confidence."

Sim Tshabalala, SBG Chief executive, SBG Climate Summit, October 2022

Milestones in our climate journey

Prior to 2019

- Mature E&S Risk Management practices in place
- Development of a commercial approach to sustainability and positive impact

2019

- New restrictions on financing thermal coal mining and coal-fired power generation
- Joined UNEPFI's TCFD Pilot Programme for banks
- Started interrogating how to apply TCFD principles to the group's approach
- Established a new Sustainable Finance business to leverage climate-related opportunities
- Launched OneFarm as a pilot in Uganda

2020

- New restrictions on financing fossil fuels
- First climate-related disclosures published
- Published SBG Sustainable Bond Framework
- Issued inaugural US$200 million green bond with the IFC
- Board training on climate change

2021

- Business undertakes climate target—setting work in priority sectors
- First Climate Change Summit held for clients
- First bespoke climate-focused executive development programme implemented with SOAS
- Launched PowerPulse, providing solar PV solutions for businesses and homeowners
- Launched OneFarmShare in South Africa
- Launched the Green Home initiative for Standard Insurance Limited clients

2022

- Group climate policy published, including phase one climate targets and commitments
- Net zero by 2050 commitment
- Phase two sectors commence target-setting work
- Joined PCAF to enable measurement of financed emissions
- Subsidiary boards training on climate change

2023

- Phase two climate targets and commitments published
- Development and implementation of climate risk scenario analysis and stress testing
- Publication of progress made in measuring financed emissions for oil and natural gas
- First review of climate targets
- Phase three (2024) and Phase four (2025) sectors to be determined. These may be subject to change depending on availability of data, sector transition pathways, and market dynamics.

Governance

There was a notable increase in the time that both the board and management invested in assessing and monitoring climate-related issues in 2022. We expect this trend to continue into 2023 and beyond.

Board level oversight and guidance

SBG board

The board is responsible for overseeing climate-related risk management and progress against our climate policy and targets. This also applies to the boards of subsidiaries.

This responsibility is delegated to the group risk and capital management committee (GRCMC) and the group social and ethics committee (GSEC). These committees meet quarterly and provide feedback to the full board.

Group social and ethics committee (GSEC)

This committee has oversight of the group's climate policy, climate targets and commitments. In 2022, it considered a report on progress against the group's phase one climate targets. It also discussed and approved the group's phase two targets and commitments.

Management tabled the group's climate strategy, targets and commitments to GSEC in Q3 and Q4 2022 and continues to provide quarterly updates in 2023.

Group risk and capital management committee (GRCMC)

This committee is expanding its role in the oversight of climate risk management. In 2022, it considered a detailed report on evolving our climate risk management practices, regulatory requirements, and the work being led by group risk to understand the group's exposure to climate risk.

Management tabled a climate risk management report to GRCMC in Q4 2022.

Management level oversight

Group leadership council

The group leadership council drives the implementation of the group's climate strategy and adherence to the group climate policy. Throughout the year it received progress reports on the target-setting work underway in client segments.

This committee is chaired by the SBG chief executive.

GLC received quarterly progress reports starting from Q3 2022.

Social and ethics management committee

This committee has oversight of the group's climate policy, climate targets and commitments. In 2022, it considered a report on progress against the group's phase one climate targets. It also discussed and approved the group's phase two targets and commitments.

This committee is chaired by the SBSA chief executive.

Client segments tabled climate strategy, targets and commitments to GSEC in Q4 2022, and will continue to do so on an annual basis, at a minimum.

Group risk oversight committee

This committee is developing its role in the oversight of climate risk management. In 2022, it considered a detailed report on evolving climate risk management practices, regulatory requirements, and the work being led by group risk to understand the group's exposure to climate risk.

This committee is chaired by the group chief risk officer.

GROC reports to the group risk and capital management committee (GRCMC).

Client segments

Client segments have strategy and governance committees that oversee climate work in their respective business units, and which recommend climate targets and commitments to group-wide governance committees for approval.

These committees are chaired by the client segment chief executives

Management's role in assessing and managing climate-related risks and opportunities

We have adopted a double materiality approach to our climate journey

How the group impacts climate change

Climate strategy, opportunities, targets and commitments

- This work is led by the group's client segments who are accountable for setting and meeting climate targets and commitments in line with the group climate policy.
- Group real estate services is responsible for managing and reducing our direct operational footprint in line with the group climate policy by implementing efficient energy solutions, including solar photovoltaic (PV) solutions for key buildings.

How climate change impacts the group

Climate risk management

- This work is led by the group chief risk officer.
- Chief risk officers in each business segment are responsible for implementing the emerging climate risk management framework in their business.
- Group environmental & social risk is responsible for ensuring the group's lending activities align with group environmental and social risk policies, as well as international standards of best practice, and works with business and credit teams to assess and monitor climate risks.

In keeping with the group's operating model, client segments take the lead in assessing and monitoring climate-related issues relevant to their specific businesses. Each segment has identified an appropriate executive to drive climate-related work in their business, ensuring that the climate strategy work takes place as close to our clients as possible. This means for example that the executives leading the group's agriculture business monitor climate-related issues relevant to the agriculture sector, while executives leading the group's residential real estate business monitor issues pertinent to home loans.

In addition, executives in various corporate functions support climate related risk management at group level. For example,

- Investor relations keeps track of investor sentiment in respect to climate-related matters.
- Country risk focuses on climate change in relation to sovereign risk.
- Group corporate citizenship collates and synthesizes relevant developments for different audiences across the group, including the group risk strategy committee, group leadership council, and the board.
- Certain group subsidiaries have dedicated roles related to ESG and climate change, including SBG Securities and Melville Douglas.

The group ESG Community of Practice meets monthly and shares knowledge about climate-related matters. Relevant insights are also shared through bespoke training sessions to different audiences within the group.

Strategy

Our climate policy and commitment to net zero by 2050 is integrated into our group strategy, which aims to deliver sustainable growth and value for all our stakeholders. Our strategy is underpinned by integrated thinking, connecting the emerging trends effecting our business and the issues that impact how we execute our strategy and create value. This is reflected in our six strategic value drivers. Our climate strategy is reflected in each value driver.

Our strategic value drivers

Client focus
Our clients sit at the heart of our climate strategy. We are partnering with our clients supporting their transition and adaptation plans with relevant solutions.

Employee engagement
We are investing in our employee's capabilities to understand climate-related opportunities and risks to better partner our clients.

Risk and conduct
We aim to prudently manage climate risk in line with our group risk appetite, risk management framework, and regulatory expectations.

Operational excellence
We are managing our direct operational footprint across our offices, branches, and ATMs to reduce our direct GHG emissions.

Financial outcomes
Implementing our climate strategy to support Africa's transition will generate revenue for the group.

Social, economic and environmental impact
Our climate policy will make a positive contribution to economic growth and human development in Africa, while helping to minimise and mitigate climate-related risk. Our approach supports SDGs 7, 8 and 13.

The climate strategy work led by client segments considers various internal and external factors including:

- NGFS climate scenarios
- Transition pathways where available
- Market dynamics
- Client needs
- Geography/countries of operation
- Exposure to physical and transition risk
- Credit risk appetite
- Sector strategies
- Products and services
- Technological developments
- Financial targets
- Social risk
- Economic forecasts
- Climate-related regulatory requirements and government policies
- Prudential regulatory requirements

Phased approach to publishing climate targets and commitments

Phase one (2022)	Phase two (2023)	Phase three (2024)	Phase four (2025)*
Sustainable finance	Residential real estate	Downstream oil	Mining
Renewable energy	Commercial real estate	Downstream natural gas	Metallurgical coal and steel
Thermal coal	Short-term insurance	Long-term insurance	Cement and construction
Coal-fired power generation		Asset management	
Oil		Transportation	
Natural gas			
Agriculture			
Direct operational footprint			

* The specific sectors earmarked for 2025 are subject to change depending on availability of data, sector transition pathways, and market dynamics.

Sector climate strategies are summarised in the table below:

Segment and sector climate strategies	
Sustainable Finance	Our strategy is to deliver both product innovation and thought leadership to capitalise on the opportunities related to sustainable finance that exist across Africa. We engage with clients to support their transition to net zero through a range of sustainable finance solutions including 'use-of-proceeds-based products', performance-based products such as sustainability-linked loans and bonds and transition finance that specifically targets support for decarbonisation.
Renewable energy	Our strategy recognises the critical role of renewable energy in decarbonising the power sector in Africa and we have placed ourselves at the forefront of the Just Energy Transition. With Africa being home to 60% of the world's highest quality solar resources but only 1% of the installed capacity, supporting the development of the continent's renewable energy potential presents clear opportunities.
Thermal coal	Currently, our exposure to thermal coal extraction for power generation purposes is predominantly in Southern Africa. While the country's reliance on coal for power generation is expected to fall, according to South Africa's Integrated Resource Plan, it will remain significant in the medium-term. The transition away from coal is likely to be protracted in Southern Africa and energy security in the region will remain dependent on coal-fired power. This is aligned with the net zero 2050 scenario published by the NGFS.
Coal-fired power generation	Our strategy is centred on a transition away from finance for coal-fired power, including a commitment to no further financing for the construction of new coal-fired power plants or for the further expansion of generating capacity of existing coal-fired power plants. We have committed to reducing exposure to existing power sector clients generating power predominantly from coal and we require that such clients provide comprehensive carbon emissions reduction strategies in advance of financing. Financing the refurbishment of existing coal-fired power stations with the specific purpose of improving efficiency and reducing their emissions as part of a clearly defined decarbonisation plan aligned to net zero by 2050.
Oil	We recognise the need to actively manage and reduce our exposures to oil in an orderly fashion over time as part of a broader transition to net zero. We do however have a responsibility to support and prioritise social and economic development in Africa, and we recognise the importance of balancing this need with our support for a just transition away from non-renewable energy sources including oil. Our strategy is further informed by the NGFS net zero 2050 scenario which shows oil demand in Africa peaking in 2040. We have restrictions on financing specific activities in upstream oil, such as upstream flaring and tar sands, while we do not finance the exploration or production of tight oil reserves.
Natural gas	Our strategy considers natural gas as a transition fuel for Africa. Natural gas will play an important role in the transition from the use of carbon-intensive energy sources like wood and coal to more efficient energy sources for households and companies like LPG and natural gas. The NGFS net zero 2050 scenario shows demand for gas in Africa continuing to grow until 2050. As such, the group will continue to finance gas over the medium- to long-term subject to conditions outlined in our group climate policy.
Agriculture	Our strategy recognises that while agriculture is a generator of GHG emissions it is also a carbon sink that captures and stores carbon. We also recognise the importance of the sector for Africa's food security and its role as a large employer across the continent. We also understand that climate risk poses a material risk to this sector. Our strategy is to be a leader in financing sustainable agriculture across the continent and to allocate capital to supporting clients who are introducing climate-smart practices and seeking to decarbonise. As such, we will - ▪ Invest in research and development to support climate-smart agriculture ▪ Support academic research on sustainable agriculture ▪ Introduce new products and services ▪ Engage our clients about their energy transitions ▪ Invest in climate-related data to establish our financed emissions in this sector

Segment and sector climate strategies (continued)	
Residential real estate	Our strategy is to remain the leading home loans provider in South Africa and to work with our clients to provide sustainable and affordable homes. We aim to balance the pressing need for housing with the need to reduce GHG emissions and support the sector's resilience to climate risk. Our approach is to avoid "green-lining" whereby housing becomes increasingly unaffordable due to physical and transition risks. We will participate in sector-wide engagement to develop GHG emissions measurement and certification and a national transition pathway for residential real estate. We have introduced new offerings to our clients to enable them to improve the energy efficiency of their homes. Currently our residential real estate exposure is concentrated predominantly in South Africa.
Commercial real estate (CRE)	Our strategy recognises that understanding and mitigating climate risk is crucial to the longevity of the built environment to avoid premature obsolescence and ensure resilience. As such, we will support our clients on their journey towards net zero and partner with them in mitigating their physical and transition risks through assisting with the funding thereof. Short-term targets have been set to provide financing for ▪ The reduction of GHG emissions of buildings (through energy consumption, water efficiency and waste management) ▪ Renewable energy, particularly through solar photovoltaic (PV) solutions ▪ Refurbishments, retrofitting and repurposing Currently, our CRE exposure is concentrated predominantly in South Africa at around 86% of the total book. Reducing reliance on the national grid and investing in resilient adaptation measures to mitigate the physical risk impacts of climate change, is also a central part of our strategy in this sector.
Short-term insurance	Our strategy is to support an orderly transition to net zero through innovative product and solutions that target both decarbonisation technologies for our clients, and protection from increasing physical risk impacts. We will align the risks underwritten and the premiums set, with our understanding of how climate-related risks impact our customers. The opportunities that we have identified for supporting the transition include smart geyser solutions and emissions measurements tools, and we will continue to develop solutions that support the group's climate commitments and targets as defined in the climate policy. We expect that our partnership with Underwriting Management Agencies will help expand our suite of insurance offerings. Likewise, our partnering with leading geo-coding service providers will assist us in setting appropriate climate risk exposure limits based on location-specific physical risk assessments.

Use of climate scenarios

In developing our sector-level climate strategies we referenced the transition pathways defined in climate scenarios published by the Network for Greening the Financial System (NGFS). The NGFS is a coalition of central banks and supervisors set up to contribute to climate and environment related risk management for the financial sector, including the development of climate scenarios for use by central banks, supervisors, and the financial sector at large. We referenced the NGFS scenarios for our strategy work because they have become the most common source for scenario testing by commercial banks and because they combine climate variables for transition and physical risk with regular macroeconomic and financial variables. This combination of climate and other variables is needed for quantifying climate risks and by extension credit-related risks. The table below outlines the scenarios used and how these were applied in developing our climate targets and commitments.

Scenario	Why this scenario	Application to setting our targets and commitments
Net zero 2050 An orderly transition scenario that limits global warming to 1.5°C through stringent climate policies and innovation, reaching global net zero CO_2 emissions around 2050.	This scenario is consistent with pathways for transition that aim to meet net zero by 2050 commitments	Climate policy targets for lending concentrations to higher risk sectors such as oil & gas and non-renewable energy, have been made with reference to the transition pathways of this scenario and our own net zero commitment.
Delayed Transition A disorderly transition scenario that reaches net zero by 2050 but does so by allowing for higher emissions until 2030.	The scenario assumes that annual emissions do not decline in the short to medium term up to 2030, but has stringent policy action thereafter to meet warming targets	A pathway to decarbonisation that assumes later (i.e., medium to long term) implementation of policy directives and higher carbon prices allows for factoring in gas as a transition fuel for African energy application.
Divergent Net zero A disorderly transition scenario that reaches net zero around 2050 but with higher costs due to divergent policies introduced across sectors leading to a quicker phase out of oil use.	The impact on carbon-related assets of more immediate higher transition risks can support strategic adjustments away from more vulnerable exposures over the medium to long term	This scenario was used when considering pathways that put high emitting assets at risk of being stranded in the medium term.

Unlocking opportunities

We have identified significant opportunities arising from Africa's Just Energy Transition and from climate mitigation and adaptation efforts more generally. Unlocking these opportunities and partnering with our clients is at the heart of our climate strategy.

Unlocking climate-related opportunities involves:

- Engaging clients on their energy transitions
- Partnering with multilateral development banks
- Working with Export Credit Agencies
- Talking to governments
- Leveraging blended finance
- Issuing green bonds
- Exploring new technology

Specific opportunities are being explored in:

- Renewable energy
- Decentralised energy
- Natural gas as a transition fuel
- Green hydrogen
- Critical minerals
- Less carbon-intensive transportation
- Digital solutions for energy management
- Climate-smart agriculture
- Voluntary carbon markets
- Energy efficient real estate

Advocating for Africa and engaging with stakeholders

Addressing climate change is a systemic challenge requiring partnerships and dialogue with multiple stakeholders. Our climate strategy includes advocating for Africa in different alliances and initiatives to put forward the specific opportunities and risks related to climate change across the continent. We also seek to influence global standard-setting initiatives such that the realities confronting banks in Africa are taken into consideration. Too often these voluntary standards and frameworks reflect conditions in developed economies with a more established climate-related regulatory framework and cannot easily be applied in emerging markets. In 2022, we participated in multiple discussions on this topic as well as advocating for greater flows of climate finance to Africa including:

- National pavilions of Namibia, South Africa, and Zambia at COP27
- Banking Board of the United Nations Environment Programme Finance Initiative
- Board of the Institute for International Finance
- Banking Association of South Africa

We presented our group climate policy to our regulators, investors, and civil society organisations. Our SBSA: CE was appointed to South Africa's Presidential Climate Commission to represent the views of South African banks. We also participated in the National Business Initiative's Just Transitions Project which is mapping national transition pathways for carbon-intensive sectors in South Africa.

Investing in our capabilities

Achieving our climate ambition requires an investment in our capabilities. In 2022 we focused this investment into two specific areas: building the climate-related expertise of our people and enhancing our climate-related data. In 2022, a refreshed ESG learning framework was implemented in our CIB business segment. This learning framework incorporates climate-related subject matter. The aim is to empower our management teams and our client relationship managers with the knowledge and skills needed to partner our clients on their transition journeys. The framework includes modules for introductory, intermediary, advanced, and specialist knowledge. In 2022, more than 400 employees completed the introductory module. Work has also started on the development of a specific learning pathway as well as a formal advanced programme. We are working with the Gordon Institute of Business Science and the Cambridge Institute of Sustainability Leadership. Throughout 2022 we held numerous workshops and seminars for staff members across the group on climate change and related ESG topics.

Examples of development of sector strategies

Developing a strategy to manage climate-related opportunities and risks in the agriculture sector: Group agribusiness climate policy

The group recognises the dual role played by agriculture: it is a sector that contributes to GHG emissions but, through carbon sequestration, also acts as a carbon sink for emissions generated by other sectors.

In Africa, the agriculture sector ensures food security and employment for a large proportion of middle- and lower-income households. The NGFS Net zero 2050 scenario shows agricultural demand in Africa increasing by approximately 80% by 2050.

We continue to back this vital sector with a drive to support sustainable agricultural practices that promote reduced carbon emissions and enhance its resilience to climate risk.

"Sustainable agriculture" comprises all those farming systems that conserve land, water, and biological resources, do not degrade the environment, and are technologically appropriate, economically viable and socially acceptable.

Our ambition is to become the thought leader on the continent for sustainable agriculture and to play a leading role in developing solutions that enable a just transition to climate-smart agriculture across the entire agribusiness value chain.

This is based on our conviction that:

- A just transition is required to ensure we support food security, employment, and sustainable livelihoods on the continent
- Agriculture is a business opportunity
- Climate change is a material threat to the sector
- Agriculture is also a carbon sink and supporting sustainable agriculture contributes to building natural carbon sinks to absorb emissions from the atmosphere

We support our clients to transition to more sustainable agriculture thereby supporting enhanced food security and rural livelihoods and actions to strengthen the climate resilience of our food systems. We have taken note of our clients' concerns in relation to:

- Carbon credit markets for the agribusiness sector
- Support for developing their climate plans
- Support in measuring their GHG emissions (especially smaller farmers and agribusinesses)
- Bespoke financial products that support their climate mitigation and adaptation plans

We have identified several climate-related opportunities that we can finance such as the increased use of solar and biomass energy sources, smart water management, the use of no-till and precision farming equipment, climate smart practices such as regenerative agriculture, conservation agriculture and planting drought resistant cultivars. We are also using digital platforms to assist small-holder farms, such as the group's OneFarm platform. This platform supports access to markets and trade, food rescue and reducing food waste, access to finance, innovation, and data transparency.

We are engaging with industry bodies to formulate a national climate transition pathway for the sector in South Africa.

Given the lack of available emissions data from clients and limited availability of industry data for the regions where we operate, we are partnering with researchers and experts to measure our financed emissions in this sector. Once this is complete, we will set financed emissions targets for high-emission sub-sectors. We are working towards finalising these initial targets by 2025.

An agribusiness climate working group is in place to steer and monitor this work. Members of this working group include senior executives from CIB, BCC and credit risk.

Banking Africa's just energy transition: energy and infrastructure opportunities

The development of Africa's energy infrastructure represents a significant opportunity. Approximately $14 trillion in capital investment is required by 2030 to support Africa's energy transition goals. Approximately $110 billion is needed annually to support electricity provision across the continent by 2030. With Africa's population expected to double by 2050, growth rates for energy sources over the same time-period are expected to be highest for renewable energy. Non-renewable energy sources will continue to be a core part of the primary energy mix.

Our clients are seeing energy more holistically. International energy companies remain the largest providers of energy and have become increasingly active in the electricity and renewable energy sectors. Collectively, these companies have allocated $70 billion to the energy transition. This capital is largely invested outside of Africa. We will work with clients and other partners to increase the flow of capital finance to the continent. To this end we have a created an integrated energy and energy-infrastructure offering to better support their transition strategies. This new approach better aligns our business strategy with our group climate policy. It provides a stronger base from which to provide climate-related products and services to our clients and we are expecting to see revenue growth as a result.

We have identified opportunities across several African countries including:

- Decentralised energy in Ghana, Nigeria, South Africa, and Zimbabwe
- Green hydrogen in Namibia and South Africa
- Minerals critical for renewable energy in the Democratic Republic of the Congo, South Africa, and Zambia
- Gas in Angola, Mozambique, Namibia, Nigeria, South Africa, and Tanzania

Our specific climate targets and commitments in the energy sector take into consideration:

- Energy supply and demand across the continent
- Government policies for the energy sector
- Government climate policies and nationally determined contributions to reducing GHG emissions
- Transition pathways and client transition plans
- Technical and financial feasibility of different energy sources for power generation
- Local regulatory requirements and applicable voluntary standards (such as the Equator Principles)
- Group policies, standards, and exclusions

Risk management

Climate risk was a priority for the group's risk function in 2022 and considerable time was dedicated to this complex topic. Senior members of the risk function, led by the group chief risk officer, participated in workshops and strategy sessions to examine emerging regulatory requirements, climate scenario analysis and stress testing, climate-related risk appetite, and climate-related data. The work to develop and implement a new group climate risk management framework and operating model continues in 2023. The group chief risk officer leads this work programme and reports to the group risk and capital management committee of the board.

Risk management in banking is subject to extensive regulation and risk management practices are well-established for a variety of risk types. As far as possible, our approach is to apply these existing practices to identifying, assessing, and managing climate-related risks which will promote the integration of these risks into the group's overall risk management framework. In 2022 in South Africa, we had regular engagement with our prudential supervisor – the South African Prudential Authority – to discuss their expectations of climate risk management by banks and this informs our work.

TCFD guidance recommends that banks describe the existing and emerging regulatory requirements related to climate change that are considered in identifying and assessing climate-related risks.

In 2022, numerous policies, regulations, taxonomies, recommendations, and frameworks related to climate were taken into consideration.

Prudential regulation	The group monitors regulatory developments related to climate risk from local banking supervisory authorities, authorities in other jurisdictions, the Basel Committee on Banking Supervision and the Financial Stability Board. These include: ▪ A climate change modelling framework for financial stress testing in Southern Africa (SARB, 2022) ▪ Principles for the effective management and supervision of climate-related financial risks (BCBS, 2022) ▪ Supervisory and regulatory approaches to climate-related risks (FSB, 2022) ▪ Guide on climate-related and environmental risks: supervisory expectations relating to risk management and disclosure (ECB, 2020) ▪ Enhancing banks' and insurers' approaches to managing the financial risks from climate change (PRA, 2019) ▪ Communication: Climate related risks (PA, 2022) ▪ Guideline on climate-related and environmental financial risk management (Bank of Mauritius, 2022)
Conduct regulation	▪ Enhancing climate-related disclosures by standard listed companies (FCA, 2021) ▪ Sustainability of investments and assets in the context of a retirement fund's investment policy statement (FSCA, 2019)
Taxation and tariff policies	▪ Carbon Tax Act (SARS, 2019, as amended 2022) ▪ Carbon border adjustment mechanism (EU, 2022)
Emissions reporting regulation	▪ National greenhouse gas emission reporting regulations (DFFE, 2020)
Government climate policies and commitments	▪ Just energy transition investment plan 2023-2027 (Presidential Climate Commission, SA, 2022)
Green and sustainable finance taxonomies	▪ National green finance taxonomy (NT, 2022) ▪ EU taxonomy for sustainable activities (EU, 2022) ▪ ICMA and LMA voluntary guidelines for sustainable and sustainability linked financing instruments
Disclosure standards	▪ JSE Sustainability and Climate Change Disclosure Guidance (JSE, 2022) ▪ Proposed enhancement and standardisation of climate-related disclosures (SEC, 2022) ▪ IFRS S1: Sustainability Disclosure Standards (ISSB, 2022) ▪ IFRS S2: Climate related disclosures (ISSB, 2023)

Integration of climate-related risks into overall risk management

Our enterprise risk management framework provides the umbrella for how we manage climate risk across the group. The group's **Risk and Capital Management Report** provides a comprehensive picture of the group's risk management. Our existing policies and standards for risk identification, assessment, management, and mitigation are being applied to climate risk. The group's enterprise risk management team conducts an annual process to identify and assess top risks and emerging risks to the group informed. Climate-related risks have emerged as a material risk to the group and consequently there has been heightened attention given to understanding and managing these risks in 2022.

Climate risk is a financial and non-financial risk

We define climate risk as exposure to the physical and transition risks associated with climate change both in respect of our own activities and operations, but more materially through the transmission of climate risks into credit, market, reputational and other risk exposures from lending to, investing in and otherwise transacting with our clients and counterparties.

We recognise that climate risk has two distinct drivers which are the primary source of risk across all our presence countries and operations, with varying levels of intensity.

Firstly, the risk of financial loss arising through increasing severity and frequency of physical climate risk drivers. This may include more frequent and extreme climate change related weather events such as storms, wildfires, droughts and other physical hazards, all of which are evident in the presence countries in which the group operates. It may also include chronic longer-term changes in climate, such as changing precipitation patterns, rising sea levels and average temperature rises.

Secondly, the risk of financial loss arising through transition risk drivers, being changes associated with microeconomic (individual and corporate level) and macroeconomic (economy and country level) adjustments made in transitioning to a lower carbon emissions economy and business operating model. Such drivers include climate related changes in policies, legislation and regulations, changes due to technology improvements that support transition to a lower carbon economy, changes in market demand for products and services that support the transition, and reputational risks associated with changing customer preferences.

The climate metrics table further in this report quantifies our exposure concentrations to the carbon-related lending assets where we have identified material levels of climate risk. The table immediately here below describes how these risks present for the clients in our lending portfolio, with examples for each.

Physical risk	Transition risk
Acute Clients that operate in areas more prone to more extreme climate change driven weather events, may experience destruction of their operating assets and impacts in their business continuity. Our residential housing portfolio in the east of South Africa is a portfolio we've identified as being particularly at risk for more frequent and extreme floods attributed to climate change.	**Policy** Clients that are exposed to higher risks of rapid policy changes such as carbon taxes, are more exposed to transition risks related to a decarbonised operating model. The group's clients that have a high dependence on exports to the European Union, such as in the automobile, fertilizer, plastics and other manufacturing sectors, are at risk from the EU's policy on high levies for imports of carbon-related products, the Carbon Border Adjustment Mechanism.
Chronic Clients that are relatively more exposed to the longer-term shifts in climate patterns, arising largely from higher climate changed induced average temperatures, are vulnerable to chronic physical risk impacts. Clients of the group that have a high dependence on hydropower in parts of East Africa are thus more at risk from the expected increase in water stress and drought in that region.	**Technology** Clients exposed to new and disruptive technologies may incur higher production costs to ensure competitiveness. The group's exposure to clients in non-renewable energy generation-based sectors are including costs to adapt and deploy new practices to respond to the threat of new rival technologies.
	Market Clients that are experiencing changing demand for their products and services, driven by preferences for greener lower carbon-related alternatives, are more at risk of market related transition risk impacts. The group's understanding of the emerging demand for alternatives to meat as food source, and to petrol and diesel-fueled vehicles, is shaping strategic thinking in our agriculture and transport sectors.

We understand the transmission of climate risk has both financial and non-financial elements, and that climate risk-related events have implications for other risk types faced by the group. This table below provides examples of how climate-related risks transmit to the financial and non-financial risk types within our enterprise-wide risk management framework.

Financial risks		
Credit risk	The risk of financial loss due to failure of a borrower to settle obligations when due	Credit counterparties in high transition risk sectors, such as our coal-fired power generation and oil and gas sectors, are expected to have to incur higher taxes on their emissions in the short to medium term, potentially impacting the credit quality of our exposures.
Market risk	The risk of change in market value, earnings or future cash flows from a financial instrument held, caused by adverse moves in market variables	Financial instruments such as bonds and equities held on the group's trading book, issued by counterparties in sectors with high transition risk due to carbon intensive business models, may be at risk of value erosion in a disorderly transition that impacts market prices.
Liquidity risk	The risk of the bank generating insufficient cash resources to meet payment obligations when they fall due	The potential for the group to be impacted through climate-risk related events or conditions, that results in an inability to access sufficient funding to meet liquidity reserving requirements, has not been fully examined as yet.

Non-Financial risks		
ESG risk	The risk to SBG's ability to achieve its strategy arising from the management of the Group's environmental, social and governance risks. This includes the management of the direct and indirect impacts of the Group's business activities on the environment and society in which it operates.	Direct and indirect detrimental impact to SBG arising when the inter-connected risks of environment, social and governance are not managed. As examples: not managing the connectedness of climate-change risks and other forms of environmental risks (such as biodiversity), and climate change risks and social risks such as child labour, or human rights violations. Likely to lead to an increase in economic pressure on SBG due to economic downturns, loss of investor confidence, and loss of stakeholder trust.
Operational risk/ business resilience	The risk of loss suffered as a result of the inadequacy of, or failure in, internal processes, people and/or systems or from external events.	Arising from the negative direct and indirect impact to physical infrastructure and to people which leads to additional financial cost required for business continuity plans.
Conduct risk	The risk that detriment is caused to the Group's clients, the markets, of the group itself because of inappropriate execution of business activities.	Arising from projects, products and services which have a poor impact on our client's ability to manage, mitigate and adapt to climate-change impacts. This includes the detrimental impact of greenwashing, such as green bond mislabeling and misstatement of data and impacts. Associated with a decrease in revenue through non-client centric solutions required for climate management. Also associated with increased regulatory scrutiny and legal risk.
Legal risk	The risk of financial or reputational loss that can result from lack of awareness or misunderstanding of, ambiguity in, or reckless indifference to, the way law and regulation apply to your business, its relationships, processes, products and services.	Increased potential for climate-related litigation, driven by evolving legislative frameworks, could lead to higher third-party risk (such as for settlement of claims for environmental damages), associated increase in costs and a reduced demand for products and services resulting from fines and penalties.
Reputational risk	The risk of potential or actual damage to SBG's reputation which may impair the profitability and/or sustainability of its business. Such damage may result from a breakdown of trust, confidence or business and can adversely affect the Group's ability to maintain existing or generate new business relationships and continued access to sources of funding.	Arising from negative stakeholder sentiment and negative media coverage related to support of projects or activities with negative impacts on the climate, including oil and gas related infrastructure projects. Elevated levels of reputational risks could have financial consequences for vulnerable sectors, leading to higher credit losses where the group has exposures.

Climate risk primarily transmits as credit risk

As introduced in the table above, our focus on climate risk management has to this point been on how it transmits **primarily as a financial risk** that arises through our credit-related exposures to our clients and counterparties. Physical and transition Risks will impact the creditworthiness of our lending customers and their ability to repay outstanding exposures. The table below reflects the credit risk-related climate risks that we have identified for the sectors that we have targeted for climate risk measurement.

The credit risk related impacts include potential increases in impairments, decline in collateral valuations or adjustments in credit ratings. These credit risk impacts are informed by our work this year on assessing the effects of potential future transition pathways as well as extreme and chronic physical risk events on the financial performance some of our counterparties.

The table on the next page sets out the observations we've made from the initial scenario testing that we've done on a sample of counterparties across various sectors.

Material risk sector

Transition risk drivers	Transmission to Credit Risk
	Thermal coal
High emissions intensity sector subject to elevated levels of transition risk as demand shifts to renewable alternatives	Net zero 2050 scenarios indicate sharp decline in demand for coal for thermal power purposes over the medium to long term, leading to credit downgrades for coal monolines.
	Non-renewable power generation
Non-renewable (coal, oil and gas-fired) sources of baseload power are becoming uncompetitive as the price of renewables continues to decline. The role of gas as a transition fuel in the medium term remains.	Increasing policy pressure to cut emissions, coupled with higher carbon taxes over time and overall increasing regulation of operations, could render some assets stranded over the long term, impacting collateral recoveries in the event of a default.
	Oil
A major driver of global emissions where the level of emissions drives vulnerability to significant decreases in future earnings.	Oil counterparties that have less diversified revenue streams may be more impacted by higher carbon prices, higher production costs and lower demand in the long term, potentially impacting credit quality of the group's exposures.
	Natural gas
A high driver of global emissions but with some taxonomic recognition as a bridging fuel pending scaled renewables technology development. Earnings impacted less in short and medium term relative to oil.	Increases in demand for natural gas, for example due to external geopolitical factors to ensure energy security as well as to bridge energy supply gaps while lower emissions technologies are scaled, could benefit gas producers in the short to medium term. However, over the longer term, expected carbon price increases and drop off in demand could compress profitability and transmit to lower credit quality.

Physical risk drivers	Transmission to Credit Risk
	Agriculture
Highly vulnerable to reliance on natural resources, reflecting its dependency on the availability and quality of water and land.	Scenario testing on a sample of the group's agriculture clients in 2022 confirmed that more frequent and intense droughts are expected to impact operations in the west of South Africa relatively more under a high physical risk scenario such as the Delayed 2°C scenario. This could lead to profitability concerns and impacts on recoverability of loans to such clients.
	Real estate
Demand for property, including residential property, is sensitive to extreme climate-related events such as wildfires, floods and storms.	Recent floods in southern Africa have highlighted the vulnerabilities in certain sections of the group's residential housing portfolio to more frequent and more extreme events of a similar nature. The potential adjustments in insurance and reinsurance cover under such scenarios could require reassessment of potential credit losses in the event of large-scale defaults in the future.

Materiality of climate-related risks

In assessing where material climate-related credit exposures reside in our portfolio, we leveraged internal expert knowledge on the inherent risks in the sectors and industries that our counterparties operate in, in order to build a climate-sensitive sector inventory. We supplemented that with external advisory recommendations, references to peers and links to standard industry classification codes. The value of our outstanding credit exposure to each sector and industry relative to the total portfolio, the geographies in which our exposures are concentrated, as well as the sector-specific strategies we have in place, were also all considerations taken in determining materiality of our climate-related risks and opportunities.

When assessing climate-related risks we align with our phased target-setting approach which defines the following timescales for short, medium, and long term:

- Short term 0 – 5 years
- Medium term 5 – 10 years
- Long term more than 10 years

Country and sovereign risk

Climate change can have a material impact on sovereign risk through direct and indirect effects on public finances. It can raise the cost of capital of climate-vulnerable countries and threaten debt sustainability. While African sovereigns are responding to the economic impact of the pandemic, inflation, tight global financial conditions and elevated debt distress, it is imperative that their policy responses are cognisant of future climate change impacts on their economies. If not, they potentially face an ever-worsening spiral of climate vulnerability and unsustainable debt burdens.

Within Country and Sovereign Risk Management, we monitor transmission channels through which climate change can amplify sovereign risk, reduce sovereign flexibility and increase their vulnerability to shocks from extreme weather events. These transmission channels are the fiscal impacts of climate-related natural disasters, the fiscal consequences of mitigation and adaptation policies, and the macroeconomic impacts of climate change. We note that these transmissions channels are not independent of each other and that the consequent social cohesion, political and security concerns are important factors in shaping the resilience-building policy options available to a government. Assessing a sovereign's energy transition plan under conditions of local energy insecurity, energy poverty, limited energy access, and geopolitical shifts effecting energy markets would be an example of this.

Setting climate risk appetite

Central to the integration of climate risk management is the development of a risk appetite framework within which these risks can be measured and monitored. Our group risk appetite defines the nature and magnitude of risk that we are willing to take in support of our financial and strategic objectives. It reflects our capacity to sustain losses and continue to meet our obligations as they fall due, both under normal and stressed conditions. We acknowledge that in the case of climate-related risks, there are multiple dimensions around which risk appetite needs to be set such as a sector's, or country's exposure to climate risk.

Our group climate policy is one form of expression of our appetite for lending to sectors we've identified as being sensitive to climate-related risks. The targets set for exposure concentration to these sectors reflect our intentions to align to our net zero commitments, and to contribute to mitigating the effects of climate change through limiting our lending to high emitting sectors. This forms the basis for our initial views on portfolio level appetite setting. Further work will be done on setting sector specific metrics for portfolio level appetite monitoring.

In terms of transaction level appetite for climate-related credit risk, we have begun embedding transactional level monitoring of adherence to the targets and commitments defined in the climate policy. This process complements our existing environmental and social risk screening process which already screens for high emissions sectors. The additional screening aims to test alignment of new and existing transactions with the framework for risk acceptance as set out in the policy. An example of the type of screening update applied is to determine whether the counterparty has a transition plan in place, and to what extent it defines commitments and targets for a credible transition.

Scenario analysis and stress testing

In 2022 we conducted an initial climate scenario analysis exercise. The objective was to better understand the nature and extent of the climate risks faced by our counterparties and to assess how these might translate to higher credit risk for the group, including for the possibility of stranded assets. We applied the NGFS scenarios for the same reason as we referenced them in the sector strategy work, being their application by central banks and the financial sector, as well as their integration of climate variables and economic variables that, notwithstanding data limitations, allows for credit risk estimations.

Scenario	Application in 2022	Findings*	Strategic implications*
Net zero 2050 An orderly transition scenario that limits global warming to 1.5°C through stringent climate policies and innovation, reaching global net zero CO_2 emissions around 2050.	Climate policy targets for lending concentrations to higher risk sectors reference the transition pathways of this scenario. Selected testing on a sample of material counterparties from high transition risk sectors to stress their financial performance under an orderly scenario.	Non-renewable energy producers are exposed to large increases in carbon costs which are not all recoverable with rising energy costs. Downgrades are possible before 2030. Sharp drop in demand for thermal coal by 2035, coupled with a halving of prices and potential downgrades before 2030.	Concentrations to non-renewable energy producers, particularly less diversified ones, need to be carefully managed in order to meet net zero targets and commitments.
Delayed transition A disorderly transition scenario that reaches net zero by 2050 but does so by allowing for higher emissions until 2030.	Selected testing on a sample of material counterparties from high transition risk sectors to stress their financial performance under a disorderly scenario where carbon price increases are low and delayed, leading to higher transition and physical risks than the net zero 2050 scenario.	Later transitions away from carbon-based energy sources could lead to delayed but more extreme downgrades (mid-2030s) for non-integrated oil and gas borrowers with undiversified revenue streams. They are more exposed than integrated companies that have revenue streams from other sources.	Credit quality in the oil and gas portfolio is potentially susceptible to delayed deterioration, requiring prudent credit portfolio management in the interim period.
Divergent net zero A disorderly transition scenario that reaches net zero around 2050 but with higher costs due to divergent policies introduced across sectors leading to a quicker phase out of oil use.	Selected testing on a sample of material counterparties from high transition risk sectors to stress their financial performance under a disorderly scenario where carbon price increases are the highest and earliest with assumptions of faster transitions away from non-renewables, achieved through higher carbon taxes. This results in the highest transition and lowest physical risk of the three scenarios assessed.	The fastest transition away from non-renewables leads to highest carbon prices and lowest demand for oil and gas. When combined with the highest rates of increase in production costs, this scenario has the highest impact on oil and gas and introduces higher risks of stranded assets in this sector over the medium to long term.	A close monitoring of the regulatory policy landscape, particularly for directives on carbon taxes, is required in order to assess potential increases in policy-related transition risks for vulnerable counterparties under this scenario.

* Findings and strategic implications are a function of the data availability at the time of scenario testing. They are further based on a sample of counterparties tested and are only indicative of potential risk appetite and strategy adjustments under uncertain future scenarios. Further testing using higher quality data and greater coverage of exposures and regions is required for more strategic insight.

Our work on scenario testing and climate risk management in general, particularly insofar as it transmits to credit risk implications, will be informed by our climate risk data work this year and beyond. We continue to refine the sector and industry classifications of our counterparties to better reflect the nature of their activities and their sensitivity to climate-related risks. We continue to engage with our clients to source more accurate and complete data on their emissions and we are exploring further options for externally provided climate data that will support our scenario analysis and stress testing work.

Targets and metrics

Our climate policy defines the following overall sustainable finance and lending concentration risk-based targets for the primary sectors that we have focused on, being those that we've identified as being exposed to material levels of climate-related risk. Our policy states that these targets will be reviewed regularly and in time will be re-baselined to reflect targets for absolute emissions contractions.

Sustainable finance and renewable energy targets and performance at 31 December 2022

Base Case Targets	Definition	Rbn	2022	2023	2024	2025	2026
Sustainable Finance mobilised	Arranging and lending activities in relation to eligible green, social, sustainable and sustainability-linked transactions	Base case targets	40	50	55	60	65
		Actual Performance	54.5				
Renewable energy Construction, generation or maintenance of renewable power from renewable sources	Use-of-proceeds committed financing for the construction of eligible new renewable energy power generation projects	Base case target	Finance of R50 billion for renewable energy power plants by 2024. Underwrite financing of a further R15bn of renewable energy power plants by 2024.				
		Actual Performance	18.2				

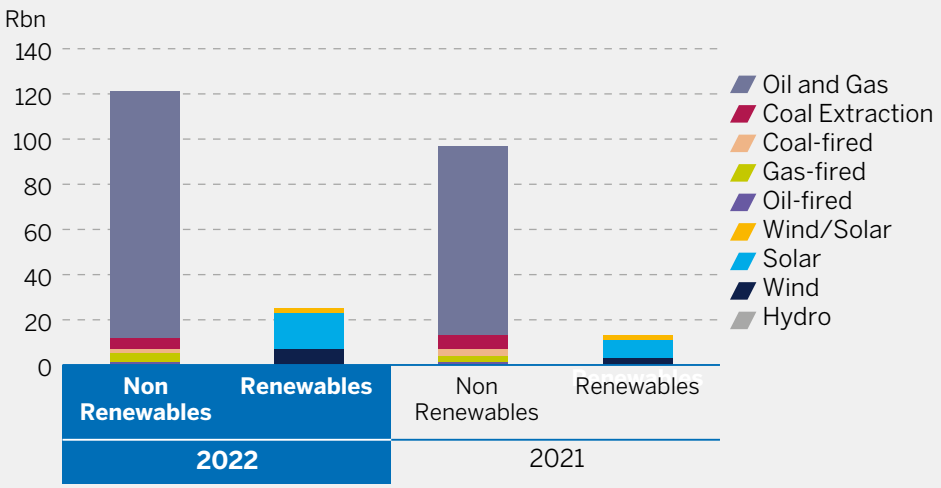
We exceeded our sustainable finance annual target for 2022, having mobilised R54.5 billion. This quantum comprises transactions in the group's corporate and investment banking division. It includes financing of new renewable energy projects to the value of R18.2 billion.

Targets: Group banking book sector concentration metrics

Level	Carbon-related assets	2030 %	2040 %	2050 %
Group	Thermal Coal	0.50	0.20	0.00
	Oil	0.53	0.23	0.09
	Gas	0.91	0.70	0.40

Power generation ratio	2022	2021
Group Banking Book Loans and Advances		
Renewable Power Generation (Rm)	**26 338**	14 305
Non-renewable Power Generation (Rm)	**5 999**	6 988
Renewable: Non renewable Ratio	**4.39**	2.05

Total energy portfolio in the banking book



Sectors in the group credit portfolio with material levels of climate-related risks and opportunities

as at 31 December 2022

	Note	2022 Rm On balance Sheet	2022 Rm Off balance Sheet	2022 Rm Total	2022 %	△ in % conc.	2021 Rm On balance sheet	2021 Rm Off balance sheet	2021 Rm Total	2021 %
Exposures to climate-related opportunities										
Renewable power generation	1	**17 203**	**9 135**	**26 338**	**1.30**	**0.56**	**12 744**	**1 562**	**14 305**	**0.74**
Exposures to carbon-related assets										
Non-renewable power generation		**5 879**	**120**	**5 999**	**0.30**	**(0.07)**	**5 076**	**1 912**	**6 988**	**0.36**
Coal-fired power generation	2	1 586	22	1 608	0.08	(0.10)	1 668	1 796	3 464	0.18
Oil-fired power generation	3	498	98	596	0.03	(0.02)	784	97	881	0.05
Gas-fired power generation	4	3 795	0	3 795	0.19	0.05	2 624	19	2 643	0.14
Coal mining (extractors)	5	**1 604**	**3 041**	**4 645**	**0.23**	**(0.10)**	**2 642**	**3 659**	**6 301**	**0.33**
Total oil and gas	6	**66 857**	**41 901**	**108 758**	**5.39**	**1.00**	**46 064**	**38 244**	**84 308**	**4.39**
Oil and gas		**41 862**	**32 143**	**74 005**	**3.66**	**0.89**	**29 165**	**24 222**	**53 387**	**2.78**
Oil and gas (integrated)		11 179	5 619	16 798	0.83	0.03	7 431	7 918	15 349	0.80
Oil and gas (services)		1 479	7 902	9 381	0.46	0.19	692	4 554	5 246	0.27
Oil and gas (trading and retail)		29 204	18 622	47 826	2.37	0.66	21 042	11 750	32 792	1.71
Oil		**17 248**	**3 944**	**21 192**	**1.05**	**0.18**	**13 521**	**3 117**	**16 638**	**0.87**
Oil (exploration and production)		14 876	3 586	18 462	0.91	0.22	11 015	2 268	13 283	0.69
Oil (midstream)		2 372	358	2 730	0.14	(0.04)	2 506	849	3 355	0.17
Gas		**7 746**	**5 815**	**13 561**	**0.67**	**(0.07)**	**3 378**	**10 905**	**14 283**	**0.74**
Gas (midstream)		7 746	5 815	13 561	0.67	(0.07)	3 378	10 905	14 283	0.74
Agriculture	7	**61 052**	**18 615**	**79 667**	**3.95**	**0.17**	**54 438**	**18 101**	**72 539**	**3.77**
Commercial real estate		**106 029**	**7 288**	**113 317**	**5.61**	**0.07**	**98 666**	**7 803**	**106 469**	**5.54**

Metrics methodology

The metrics disclosed on page 23 reflect group credit exposure concentrations to carbon-related assets identified and measured to date, as at 31 December 2022, in sectors we consider to be sensitive to material levels of climate risks, or where we have identified opportunities for mitigation of non-renewable related energy emissions.

In identifying these metrics, we have applied the TCFD's recommendations for what 'carbon-related assets' are, namely exposures linked to the energy and utilities sectors that are associated with higher relative direct or indirect GHG emissions and related transition risk.

The metrics are stated for the latest and comparative financial periods in both absolute monetary values and concentration percentages of the total group banking book. The values disclosed represent on- and off- balance sheet lending exposures to the sectors concerned. On balance sheet exposure values are a group banking book aggregation of gross loans and advances.

These metrics have been prepared using standard industrial classification codes assigned to counterparties according to the nature of their business activities. The classifications continue to be refined as we gain more understanding of our client's actual exposures to climate-related risks.

- On balance sheet exposure values are a group banking book aggregation of gross (i.e. before deduction of impairments, the effects of hedging, collateral and risk transfers) loans and advances to customers. Trading book exposures are excluded.
- Off balance sheet exposure values are an aggregation of loan commitments (including all contractual unutilised limits of facilities and other commitments to extend credit), as well as guarantees and letters of credit.
- All metrics are expressed as a % of total banking book on balance sheet loans and advances plus off balance sheet loan commitments at 31 December 2022 of R2 019 357 million (2021: R1 921 885 million).
- Refinement of sector and industry classification to better reflect the nature of the activities of some counterparties, has necessitated a restatement of some comparable results.

Notes pertaining to the table on page 24

1. Loans and advances to solar, wind, hydro-power, geothermal and biomass power generation utilities and Independent Power Producers. The increase is in line with our climate policy commitments to support financing of more renewable energy plants.
2. Power utilities that own and operate coal-fired power plants. Decline in concentration is in line with forecasts and the climate policy which commits to limiting support for coal-fired energy generation.
3. Power utilities that own and operate oil-fired power plants. Decline in concentration is in line with forecasts and the climate policy which prohibits finance for the construction and expansion of new oil-fired power generating assets.
4. Power utilities that own and operate gas-fired power plants. The concentration and absolute levels of finance have increased in line with our commitment to responsibly support the use of natural gas as a transition fuel.
5. Owners and operators of thermal coal extractive assets, excluding bulk commodity and diversified mining counterparties that may have coal extractive assets and excluding suppliers and contractors that operate in the coal extractive sector. The decline in lending is in line with climate policy commitments to limit exposure to the sector.
6. While in the short-term the overall oil and gas exposure may have increased, all new financings were provided in line with the climate policy and our long-term support to clients committed to the energy transition, and we remain on track to meet the targets set out in the climate policy.
7. Primary agriculture, agri-processors, commodity traders, sugar and other commodities, forestry and related commodity services.

Progress against the 2022 shareholder resolution

The group's shareholders adopted a non-binding advisory resolution at the Annual General Meeting in May 2022 that recommended and requested that the group and its directors undertook certain work to measure financed emissions for the group's exposure to oil and natural gas, as well publishing targets for our financed emissions from these sectors.

"In order to promote the long-term success and sustainability of the Company, taking into account the significant risks and opportunities associated with climate change, and in accordance with the Company's stated support for the goals of the Paris Agreement, shareholders recommend and request that the Company and its Directors:"

Shareholder recommendation and request	Progress in 2022
By no later than 31 March 2023, provide shareholders with a report on the Company's progress, in relation to each relevant country of operation, in calculating its financed GHG emissions from its exposure to oil and gas	The table and comments below provide a progress report on the work undertaken to calculate the group's financed GHG emissions from its exposure to oil and gas in each relevant country of operation. The table explains the criteria used to decide the relevant countries of operation for measurement and reporting purposes. Measurement of emissions financed in our oil and gas portfolio has focused to date on the upstream sub-sector (20% of the portfolio), with an emphasis on longer dated (>12 months) loan exposures (making up 84% of the upstream book) managed in CIB's Investment Banking team. The countries were selected based on where our material exposures currently reside. As we progress with the work, we will include all other countries where we have, or will have, exposure. The investment strategy that we have for each country is and will be aligned to the Nationally Determined Contributions (NDC) emissions reductions commitments in each country. We continue to support clients and projects that meet our climate policy commitments and are able to demonstrate time-bound commitment to reducing emissions in line with an energy transition plan.

Key Market	Country-level NDC in place	% concentration of oil and gas exposure in CIB	% of exposures for which emissions have been estimated	Status of emissions measurement work
Nigeria	✓	10%	94%	On track – coverage to be extended and methodology reviewed
Angola	✓	4%	100%	
Ghana	✓	4%	94%	
Uganda	✓	>1%	–	
TOTAL			**81%**	

By no later than 31 March 2024, disclose the Company's baseline financed GHG emissions from its exposure to oil and gas	Work has commenced to provide shareholders with this disclosure by 31 March 2024. This work includes: ■ Categorising clients and counterparties appropriately to accurately reflect the nature of the financed activities ■ Define the scope of measurement ■ Making the consequential changes to all internal systems ■ Learning from peers further advanced in their climate-related disclosures ■ Client engagement ■ Bringing together business, risk, and finance teams to review data and ensure consistency in approach across financial, risk and climate reporting ■ Building a credible database from which to calculate financed emissions: – Validating internal data – Procuring external data sets – Verifying external data with PCAF ■ Calculating the baseline financed emissions: – Working with PCAF to identify and apply the optimal method – Documenting and testing assumptions – Applying proxy calculations
By no later than 31 March 2025, update the Company's March 2022 climate policy to include short-, medium-, and long-term targets for the Company's financed GHG emissions from oil and gas, aligned with the Paris Agreement goal of limiting the global temperature increase to 1.5 degrees Celsius above pre-industrial levels	Work has commenced to provide shareholders with these targets by 31 March 2025. In addition to the steps described above, this work involves: ■ Review exposure-based targets contained in the March 2022 group climate policy against performance ■ Rebase the exposure-based targets to set financed emissions targets ■ Obtain management and board approval of financed emissions targets

Financed emissions are the indirect GHG emissions attributable to the group from its financing of clients' assets and activities that generate emissions. Not every loan to an energy company results in GHG emissions as many loans support climate mitigating activities. For example, project-specific lending for carbon capture, utilisation, and storage can result in the removal of carbon from the atmosphere. This emissions removal can be quantified and reported, demonstrating a positive contribution to decarbonisation.

Our ambition is to measure our financed emissions across our business, subject to the availability of credible data and methodologies. Measuring financed emissions will allow us to improve our climate-related financial disclosures and to assess our contribution to climate mitigation and decarbonisation against the goals of the Paris Agreement. Investing in the capabilities needed to properly measure financed emissions will also improve our offerings to clients as it will assist with the identification of carbon-intensive hotspots that could benefit from more efficient energy solutions.

Summary of progress against TCFD recommendations

The recommendations published by the Task Force for Climate-Related Financial Disclosures (TCFD) has become a benchmark for financial institutions globally. We have used this voluntary reporting framework for this report.

While we have made strides in our climate journey, we recognise that there are still some gaps in our climate-related disclosures when assessed against the latest TCFD guidance. We have received feedback from many of our shareholders about the importance they place on these disclosures, and we continue to work to improve them. Enhancing our climate-related data is the focal point of this work. The table below provides an overview of how we believe we are progressing in applying the TCFD recommendations for banks.

TCFD Recommendation	Progress made
	Governance
Describe the board's oversight of climate-related risks and opportunities	We have reported on the role of Group social and ethics committee and Group risk and capital management committee in: ▪ Setting climate targets and commitments for group ▪ Monitoring progress in meeting these commitments and targets ▪ Monitoring climate risks that may impact the group's risk profile and approving and monitoring risk appetite
Describe management's role in assessing and managing climate-related risks and opportunities	We have described the evolving operating model for management's assessment and management of climate-related risks and opportunities, including the role of the: ▪ Group leadership committee, which oversees implementation of the climate policy and targets and reports to board on progress, supported by: – Group risk oversight committee (GROC), which oversees climate risk management, including client and transaction screening and due diligence and climate risk appetite – Group social and ethics management committee, which oversees SEE impacts, including climate related impacts

TCFD Recommendation	Progress made
	Strategy
Describe the climate-related risks and opportunities the organisation has identified over the short, medium and long term	▪ We have defined our time horizons and outlined the material climate-related opportunities for the group in the short and medium term have taken a phased approach to setting sector-based targets, based on the materiality of each sector to our climate risk and impact. ▪ We are working to reduce our exposure to high-emissions sectors in the short, medium and long term, in line with our climate policy and the need for a just energy transition that recognises Africa's energy poverty and historically small contribution to carbon emissions.
Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning	We have described our understanding of how climate-related opportunities and risks intersect with value creation for stakeholders. ▪ Our climate policy sets targets/limits for sectors with high levels of risk exposure and excludes and restricts finance for specific activities. It also sets targets to increase our sustainable finance activities, including finance for renewable energy. ▪ We are introducing new products and services and engaging with our clients to explore opportunities for new business development.
Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2 degree or lower scenario	▪ We have begun to quantify our exposure to climate risk and risk of stranded assets in key sectors, using the NGFS climate scenarios. We found large variation in transition risk across the portfolio.

TCFD Recommendation	Progress made
	Risk management
Describe the organisation's processes for identifying and assessing climate-related risks	▪ We have described the group climate risk management framework, including how climate risk relates to other risk types and the group's enterprise-wide risk management approach. ▪ We have listed the climate-related policy and regulatory developments considered by the group in its climate risk management. ▪ We have described the emerging climate scenario analysis and stress testing work underway in the group. ▪ We have a qualitative climate risk appetite statement aligned with our climate policy ▪ We have begun to develop enhanced due diligence of transactions at origination for sectors exposed to high transition and physical risk ▪ We have updated our group credit risk governance standard to include climate-related financial risk
Describe the organisation's processes for managing climate-related risks	
Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management	

TCFD Recommendation	Progress made
	Metrics and targets
Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management processes	▪ We have described the metrics we currently use (lending exposure to high-emissions sectors as a proxy indicator) ▪ We are working toward the disclosure of scope 3 financed emissions data, with an initial focus on oil and gas. ▪ We are using the Partnership for Carbon Accounting Financials (PCAF) methodology.
Disclose scope 1, scope 2, and if appropriate scope 3 GHG emissions, and the related risks	▪ We disclosed scope 1 and 2 emissions, and scope 3 emissions for direct operations (related to employee travel, waste disposal and paper use), for our operations in South Africa, in our annual ESG report. ▪ We are working toward disclosure of scope 1 and 2 emissions for other countries of operation, focusing on the countries where we have the largest operational footprint. ▪ We are currently unable to accurately measure scope 3 financed emissions due to lack of availability of client level emissions data in key sectors.
Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets	▪ Our climate policy provides commitments and targets for material sectors, specifically: sustainable finance, renewable energy, thermal coal, coal-fired power generation, oil, natural gas, agriculture and direct operational footprint. ▪ These targets are included in the KPIs of relevant executives.

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