



2021

Climate-related
Financial Disclosures

TCFD provides a framework for FirstRand's climate reporting

This report represents disclosure in line with the recommendations and requirements of the Task Force on Climate-related Financial Disclosures (TCFD).

This report covers the activities of FirstRand Limited (FirstRand or the group).

PAGE REFERENCES
Refers readers to information elsewhere in this report or to the FirstRand group's 2021 annual integrated report

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NAVIGATING THIS REPORT
Navigation tools are provided at the top of every page:

Contents page
 Back
 Previous page
 Next page

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This interactive PDF is best viewed in Adobe Acrobat for desktop, mobile or tablet*.
* Functionality may differ according to device and app version used.

[SEE FULL CONTENTS PAGE](#)
[SEE FIRSTRAND'S COMMITMENTS](#)

1 Introduction – FirstRand and climate change

The chairman and CEO explain why climate change is an imperative for the group. This section summarises the group's climate change approach, and provides updated ambitions and commitments.

4 Strategy

Explains the actual and potential impacts of climate-related risks and opportunities on the group's businesses, strategy and financial planning.

7 Climate roadmap

Tracks the group's progress against its five-year roadmap.

2 Context

Provides context for the group's operating jurisdictions and climate pathways.

5 Risk management

Explains how the group identifies, assesses and manages climate-related risks.

8 Moving forward

The Chief Risk Officer provides insight into FirstRand's future focus areas for climate change.

3 Governance

Explains how the group governs climate-related risks and opportunities.

6 Metrics and targets

Provides the metrics and targets used to assess and manage relevant climate-related risks and opportunities.

9 Alignment to TCFD recommendations

Maps the group's alignment with the TCFD framework.

Contents



1 Introduction – FirstRand and climate change

Message from the Chairman	02
Message from the Group Chief Executive Officer	03
Background	04
FirstRand's climate change approach	05
FirstRand's updated climate ambitions and commitments	07
Progress highlights	09

2 Context

Portfolio of operations	11
South African context	12
Other operating jurisdictions	15
Industry forums and pilots	19

3 Governance

Governance structure	22
Incorporation of climate change considerations into remuneration practices	24

4 Strategy

Overview	26
Client solutions	27
Incorporating climate factors into financial resource management	32
Risks to the strategy	33

5 Risk management

FirstRand's approach to climate risk management	35
Climate-sensitive sectors	42

6 Metrics and targets

Financed emissions	48
Own emissions	50

7 Climate roadmap

Climate roadmap	52
-----------------	----

8 Moving forward

Message from group CRO	55
------------------------	----

9 Alignment to TCFD recommendations

Alignment to TCFD recommendations	57
-----------------------------------	----



1

Introduction: FirstRand and climate change

This section summarises the group's climate change approach, and provides updated ambitions and commitments.

- [Message from the Chairman](#)
- [Message from the Group Chief Executive Officer](#)
- [Background](#)
- [FirstRand's climate change approach](#)
- [FirstRand's updated climate ambitions and commitments](#)
- [Progress highlights](#)

Message from the Chairman



FirstRand is pleased to present this TCFD report to all stakeholders. As we refine the disclosure of our climate-related risks, our shareholders and society in general will be better informed on our efforts to mitigate the severe impact of climate change on our planet. The measures that we take today will have profound consequences for future generations.

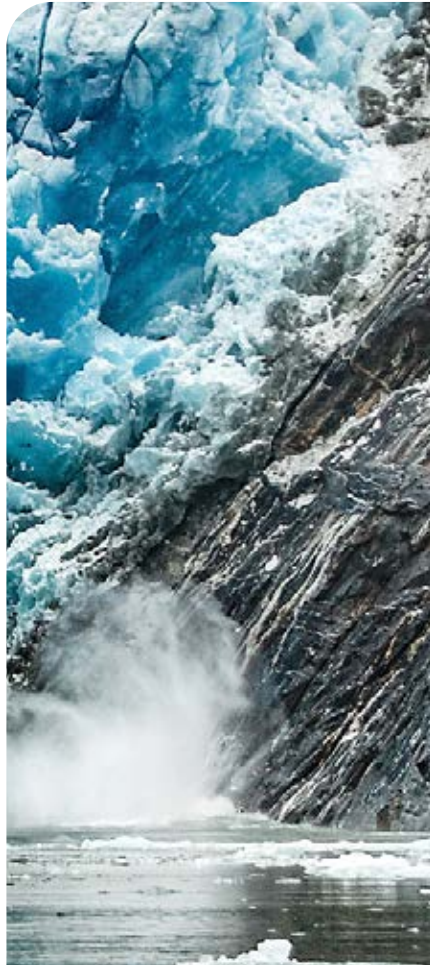
ROGER JARDINE | CHAIRMAN

Message from the Group Chief Executive Officer



The worrying effects of climate change are already evident and the need to arrest the impact of global warming is urgent. Financial institutions such as FirstRand will play their part. In this, our first TCFD report, we have outlined our current commitments on climate change, which we see as both a risk and an opportunity. Our approach is science-based and we continue to make steady progress as we increase our understanding of this challenge. Crucially FirstRand has incorporated climate factors into its capital allocation, risk appetite, portfolio monitoring and reporting. These are the most powerful levers a financial institution has at its disposal to drive a green agenda for itself and its clients.

ALAN PULLINGER | CEO



Background

FirstRand believes that climate change is one of the defining issues of this century. It is a global crisis that has the potential to disrupt business models and markets across all sectors, and to impact the livelihoods and well-being of individuals across the world.

To reduce the risks and impacts of climate change, temperature increases need to be kept to less than 2°C (and preferably below 1.5°C) above pre-industrial levels. In response to this challenge, the Paris Agreement, an international treaty on climate change was globally adopted in 2015. The treaty aims to facilitate a global pathway whereby greenhouse gas (GHG) emissions peak as soon as possible and then rapidly decline thereafter, in accordance with best available science, to achieve net-zero emissions in the second half of the 21st century. FirstRand supports the goals of the Paris Agreement and is committed to channelling financial flows in a manner that supports a low-carbon economy while fostering sustainable development.

In response to the Paris Agreement the TCFD was constituted by the Financial Stability Board (FSB). Through recommendations for clear, comparable and consistent information, it promotes transparent disclosure of climate risks and opportunities. FirstRand is a TCFD signatory, and this report represents the group's first TCFD disclosure. This will enable stakeholders to understand and track FirstRand's progress against its climate roadmap and its approach to climate risks and opportunities, as well as short-, medium- and long-term targets.

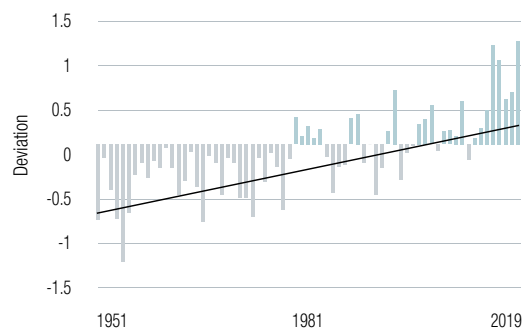
FirstRand acknowledges that climate change is a rapidly evolving area and is committed to publishing annual TCFD reports. The insights provided in these reports will evolve and deepen as the group builds out its climate risk, climate-related product development and scenario analysis capabilities.

FirstRand's climate change approach

1 Foundational belief

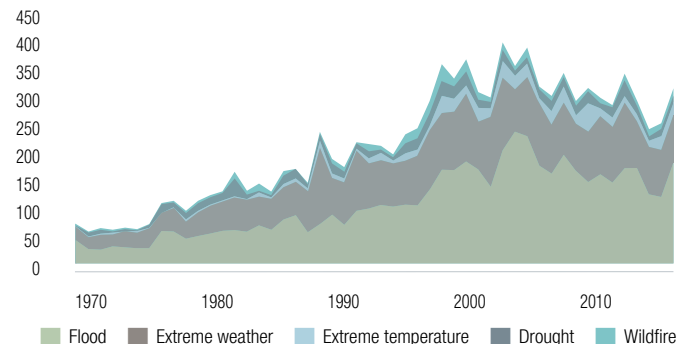
FirstRand believes climate change is a very serious challenge to the well-being of people and societies, and that the group must be part of the solution by supporting climate resilience and a just transition to a low-carbon world.

Average surface temperature deviation in South Africa based on 26 climate stations



Source: South African Weather Service – Annual State of the Climate of South Africa 2019

Five-times increase in global natural disasters



Source: EM-DAT, CRED / UCLouvain, Brussels, Belgium – www.emdat.be (D. Guha-Sapir)

2 Grounded in science

FirstRand's climate change strategy is guided by science and well-researched transition pathways, the South African transition pathway is anchored in the National Business Initiative (NBI) pathway.



3 Climate change impacts

A key focus for FirstRand is on reducing emissions whilst managing the impact of climate risk on the group's portfolios.

The group's impact on climate
OWN EMISSIONS AND FINANCED EMISSIONS



Climate impact on the group
OPPORTUNITIES AND THREATS

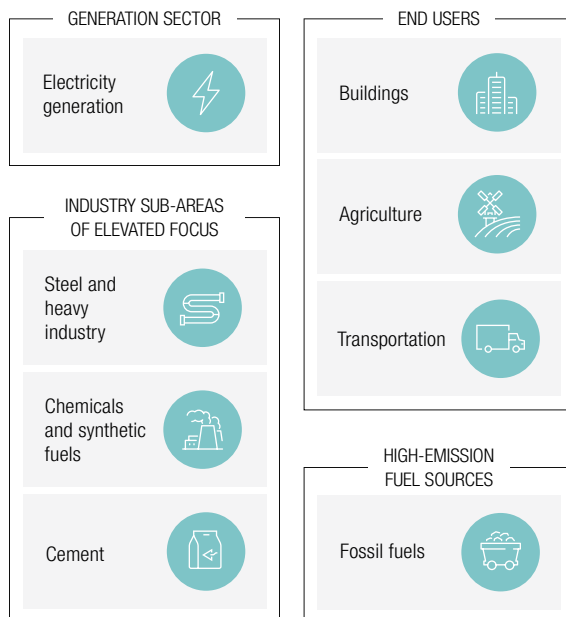


FirstRand's climate change approach *continued*

4

Key sectors

The group is committed to facilitating financial flows in support of a transition, with a focus on **eight key sectors**.



5

Just energy transition

FirstRand believes the transition to a low-carbon economy will result in a net overall gain, however the transition needs to be approached in a measured manner to ensure sustainable livelihoods.

6

FirstRand's strategic mechanisms

- + Business focus through sustainable finance
- + Appropriate capital allocation to climate initiatives through financial resource management (FRM)
- + Effective climate risk management, including credit origination

7

In conclusion

FirstRand is committed to having a positive impact on society through:

- + reducing emissions, both operational and financed;
- + assisting carbon-intensive industries to reduce their carbon footprint;
- + taking guidance from government policy, science and recognised transition paths;
- + advocating for clearer and more ambitious government policy and targets; and
- + setting out climate ambitions and commitments.



FirstRand's updated climate ambitions and commitments

Own emissions

- > **Net zero** by 2030
for South African operations

New thermal coal lending

- > **No financing**
for new coal-fired power stations
- > No direct project finance provided to new coal
mines from 2026

Financed emissions

- > **Net zero** by 2050

Existing thermal coal lending

- > **2% advances limit**
reduced to 1.5% in 2026
- > and **1%** in 2030

*Transition finance facilitation**

- > **R200 billion** by 2026

* Transaction underwriting, arranging, lending or advisory.

Customer engagement

- > **Top 100** corporates over the
next 12 months
- > **3 million** retail clients by 2025

FirstRand's updated climate ambitions and commitments *continued*

FirstRand's long-term emissions ambition is to be net zero by 2050. This includes the group's financed emissions. As articulated in its climate change policy, the group will work towards this ambition through:

- + continuing detailed science- and data-driven research, in collaboration with industry bodies, specialists and relevant government departments on the optimal decarbonisation transition paths for the countries and key industries where the group is active. This will enable FirstRand to develop appropriate scenarios to inform the group's current and future lending and investment flows;
- + facilitating the transition in the real economy through active client engagement, and developing and offering products and services to support clients' transition to a low-carbon world;
- + understanding the societal impacts of the transition to ensure that the group's lending and investment activities are supportive of a just energy transition;
- + proactive and influential engagement with corporate and industry role players (financial and real economy) on their plans, as well as regulators on their public policies, with the aim to support a socially responsible transition of high-impact sectors; and
- + supporting innovation, in particular the near-term deployment of existing viable technologies, and scaling up the financing of credible, safe and high-quality climate solutions that are compatible with other UN Sustainable Development Goals (SDGs).

The following commitments – also set out in the group's climate change policy – are made in support of the group's overall ambition. More granular commitments are covered in the group's energy and fossil fuels financing policy.

1

commitment to work in partnership with relevant government institutions in the jurisdictions in which it operates to develop sustainable financial solutions that promote positive climate outcomes. This takes into account regional contexts, sustainable developmental needs, and the need for a just transition to a low-carbon world;

2

commitment to support clients as they transition to low-carbon outcomes. To this end the group has invested in enhanced capabilities to provide client solutions across both environmental (climate and biodiversity) and social impact dimensions. The group will work with its clients in climate-sensitive sectors to ensure that adequate transition plans are implemented to mitigate adverse climate impacts. An enhanced due diligence will be performed on new financing into these sectors;

3

in a phased manner commit to rebalance its lending portfolios' new origination towards lower-carbon outcomes and increase the proportion of green assets and transition financing of existing assets on its balance sheet;

4

recognising that energy from fossil fuels – and coal in particular – are the biggest contributors to greenhouse gas emissions, the group is committed to managing its transition away from fossil fuels in alignment with its science-backed base case transition path. It has updated its short-, medium- and long-term commitments;

- + the most material updates are that FirstRand will no longer finance new coal-fired power stations with immediate effect, and will no longer provide direct project finance for new coal mines from 2026 onwards. In addition, the group has reduced its short- and medium-term caps on its overall coal exposure and provided insight into the expected long-term trajectory of its fossil fuels pathway;

5

commitment to build out its internal expertise to

- + identify, measure and manage FirstRand's impact on the climate – both direct and financed;
- + inform its ability to perform stress tests to determine the impact of climate change on the group; and
- + ensure that it appropriately manages its in-force portfolio's climate risk profile and new credit origination in line with its overall risk appetite;

6

commitment to continuing the active management and reduction of its own operational carbon emissions in line with science-based targets. FirstRand has materially improved its ability to measure its scope 3 financed emissions across product classes and sectors and will incrementally publish more detailed financed emissions data and assumed transition pathways in its TCFD reports each year; and

7





remains committed to meeting the group's ambitions, as set out in the group's climate change roadmap, and to continuing engagement with stakeholders.





Progress highlights

Last year FirstRand published a roadmap which outlines the programme for managing climate change across the group. Over the course of the 2021 financial year significant progress has been made in delivering phase 2 of the roadmap. Some of the outputs from this process are reported in the subsequent sections of this report. In particular;

-  the **Governance section** outlines climate risk and opportunity responsibilities and mandates (page 21);
-  the **Strategy section** addresses the scenarios used to set climate objectives (page 25);
-  the **Risk management section** provides outputs from the process of identifying and embedding climate risk (page 34); and
-  the **Metrics and targets section** discloses initial financed emissions assessments (page 47).

Enhanced governance

Increased training on climate risk was provided throughout the year to the board and relevant subcommittees. This has enhanced awareness and understanding of the key issues. In addition, the appointment of Dr Sibusiso Sibisi adds technical scientific depth to the board committees.

Page 22

Updated commitments

A climate policy as well as a significantly enhanced energy and fossil fuels policy provides an update to the group's commitments. Both policies have been informed by underlying work conducted to unpack climate pathways and align stakeholder expectations.

Page 07

Articulated pathways

Significant effort has been directed towards understanding and validating credible transition pathways for South Africa in conjunction with the National Business Initiative and leading climate and industry experts. These pathways are crucial to informing the group's strategy.

Page 14

Climate opportunities

Aligned with a focus on assisting clients with their transitions, the group has bolstered its internal customer-facing capabilities with senior hires who possess significant industry experience in sustainable and climate finance. Innovative solutions are also being developed for retail and commercial customers.

Page 28

Stakeholder engagement

The group has facilitated a common understanding of relevant climate scenarios, risks and opportunities through extensive engagement with stakeholders, including institutional investors, non-governmental organisations (NGOs) and select companies with high emission intensities.

Page 19

Risk quantification and stress testing

Financed emissions have been calculated for a significant portion of FirstRand's portfolio. The group has also made significant strides in quantifying, geo-mapping and analysing transition and physical risk. A foundation has been established to facilitate a data-led strategy to manage climate risk effectively and proactively.

Pages 43, 48



2

Climate context for FirstRand's operating jurisdictions

Provides context for the group's
operating jurisdictions and climate
pathways.

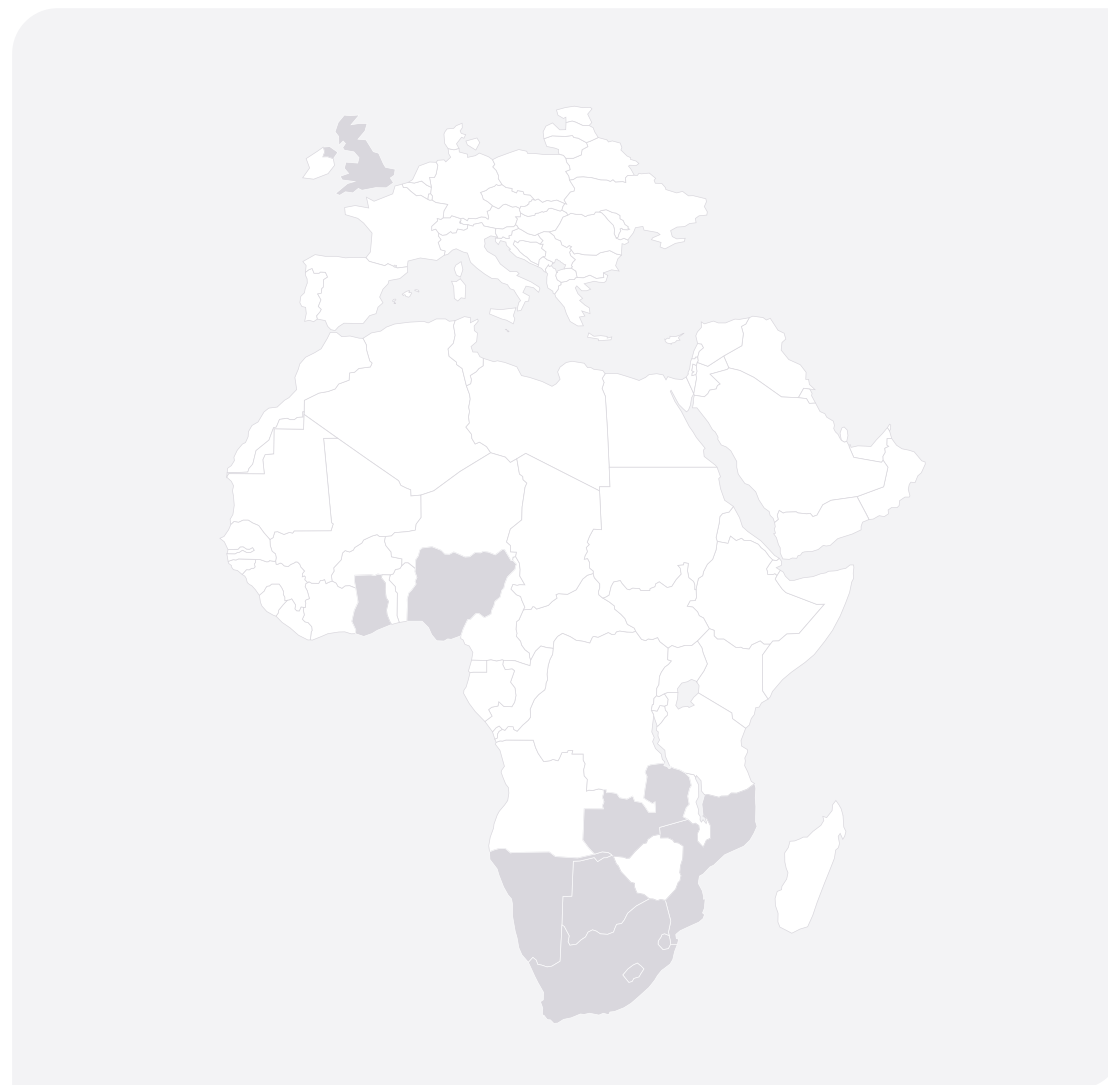
- Portfolio of operations
- South African context
- Other operating jurisdictions
- Industry forums and pilots

FirstRand's portfolio of operations

The group has operations in ten jurisdictions, all of which are signatories to the Paris Agreement. The impact of climate change and possible transition pathways are being considered for each country, taking into account their emissions' baseline and their developmental and adaptation requirements.

A breakdown of group total advances per jurisdiction is depicted below.

	Advances (June 2021 R million)	% Composition
South Africa	837 912	66
Rest of Africa	89 937	7
– Botswana		
– Namibia		
– Lesotho		
– Eswatini		
– Mozambique		
– Zambia		
– Nigeria		
– Ghana		
Rest of the world	346 203	27
– United Kingdom	323 861	25
– Other	22 342	2



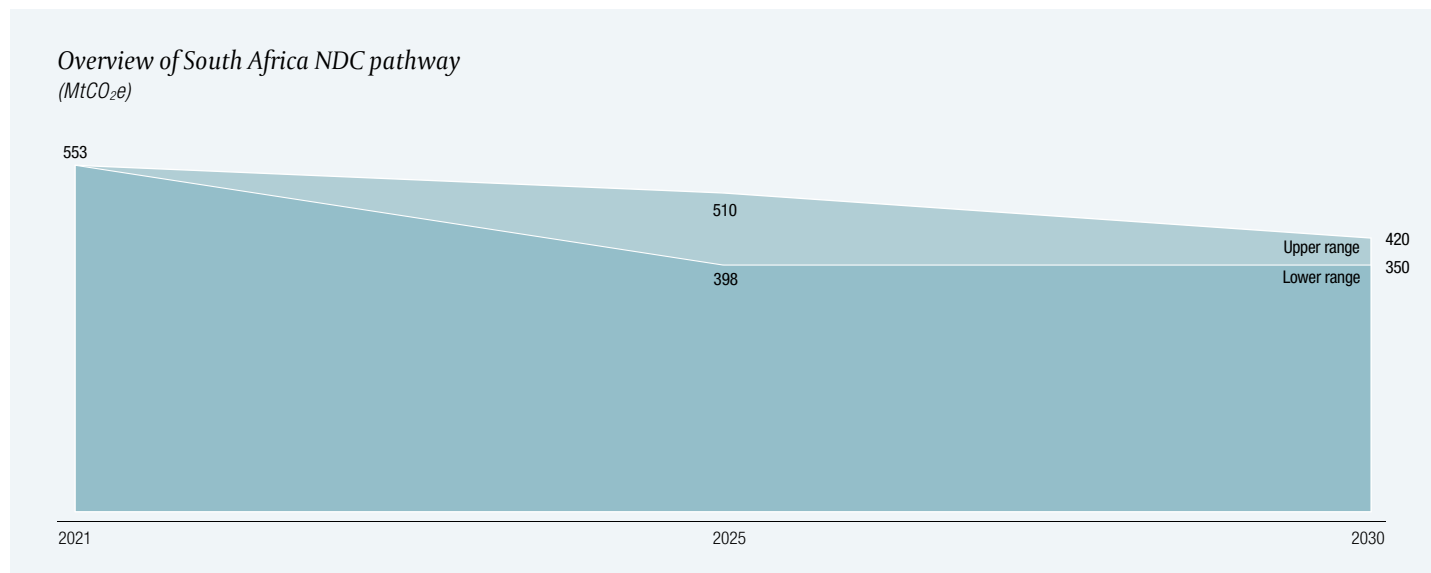
South African context

The majority of FirstRand's assets are located in South Africa, consequently the South African policy and regulatory landscape is the main anchor for the group's climate change approach. South Africa's transition will be implemented in a context in which significant developmental challenges need to be addressed. Low economic growth over the last decade has been accompanied by high levels of unemployment and persistent poverty and inequality.

South Africa is already experiencing the impacts of climate change and is likely to face multiple climate change-related challenges over the coming decades. Since 1990, the national average temperature has increased at a rate of more than twice that of global temperature increases, which is already resulting in more frequent droughts and extreme weather events.

South Africa's economy is extremely GHG emission-intensive, and the energy system is mainly coal dependent, featuring a large stock of high-carbon infrastructure. Fortunately, the country has abundant renewable energy resources and developments in the economics of renewable energy technologies favour low-carbon development. However, a well-resourced just transition strategy is needed to shift to low-carbon technologies in order to maximise benefits and minimise adverse impacts on communities, workers and the economy.

The graph below provides an overview of the NDC emissions pathway to 2030.



In South Africa's 2016 Nationally Determined Contribution (NDC), the GHG emissions trajectory takes the form of peak, plateau and decline. The country updated its emissions targets in 2021. Guided by recommendations from the presidential climate commission (PCC) the target range for 2030 emissions has been lowered to 350 – 420 Mt CO₂-eq. In addition, the PCC recommended that the NDC should formally indicate South Africa's long-term emissions target to achieve net-zero carbon emissions by 2050, as set out in the country's low-emission development strategy (LEDS). FirstRand is contributing to several industry efforts, including the NBI, which is studying a range of national scenarios that will enable a just transition to net zero.



South African context *continued*

Several studies have recently been conducted to assess possible transition pathways for South Africa, including:

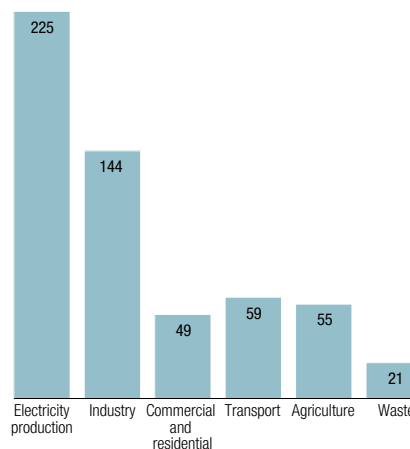
Study	Scope	Research question
NBI Just transition and climate pathways study for South Africa: Decarbonising South Africa's power system (August 2021)	Entire energy sector and economy	In achieving net zero by 2050, what are optimal sector end points and pathways?
Meridian Economics/CSIR ambitions (July 2020)	Power sector	What is the cost of mitigating power sector emissions to 2050?
UCT I Alt IRP (Feb 2019)	Entire energy sector and economy	What would the integrated resource plan (IRP) look like if it was based on a cost optimal mitigation policy?
UCT I NDC/PCC submission (May 2021)	Entire energy sector and economy	How can South Africa increase its (2025, 2030) NDC ambition? What is the socio-economic consequence?

These studies indicate that:

- + South Africa needs to immediately invest heavily in renewable energy;
- + an early and large investment in increased renewables capacity will result in significant net positive job creation;
- + no new coal-fired power stations should be built;
- + coal plants should be phased out in the 2040s; and
- + significant investment needs to take place in:
 - » flexible generation capacity (gas, hydrogen or diesel) for peaking purposes in the 2030s and 2040s; and
 - » green hydrogen and battery storage as key elements of the future energy system.

The group's expectation of South Africa's transition pathways is specifically informed by the NBI's low-emissions scenario. The NBI, in conjunction with industry experts, academics and scientists, interrogated the energy, liquid fuels, mining, chemicals, agriculture, forestry and land-use, transport and heavy industrial sectors to determine whether there are decarbonisation trajectories that would move the country to net zero by 2050. These pathways form boundary conditions and indicate the minimum required changes for the South African energy sector to be aligned with the Paris goals based on allocated carbon budgets. As can be seen from the graph below, the primary sectoral contributor to emissions in South Africa is electricity production and industry. It follows that the country's priority area is to decarbonise the electricity sector.

Overview of emissions in South Africa
MtCO₂e



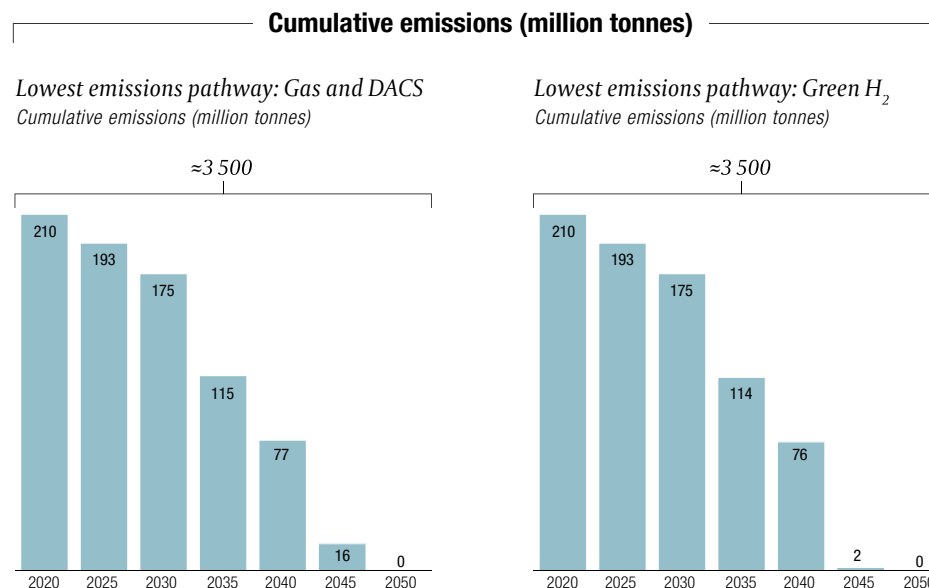
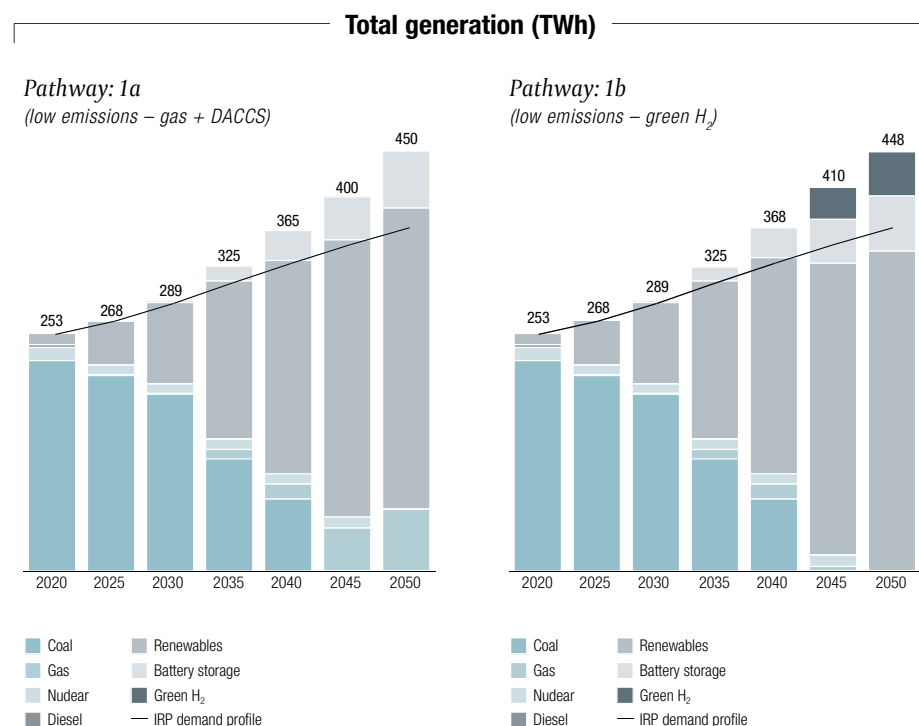
Source: NBI, Just transition and climate pathways study for South Africa: Decarbonising South Africa's power system, August 2021

The NBI's research, which included extensive input from the electricity sector and high energy users, indicates that it is possible for these elements to be fully decarbonised by 2050.



South African context *continued*

LOWEST EMISSIONS PATHWAY



Against this backdrop, aligned with the anticipated multi-year transition horizon for South Africa, the group remains committed to a longer-term divestment strategy for carbon-intensive assets, in a sustainable manner, that also takes account of economic growth and job creation.

A just energy transition is at the core of implementing climate action in South Africa. The country will need to plan for workforce reskilling and job creation, social protection and livelihood creation. This requires incentivising new green sectors of the economy, diversifying coal-dependent regional economies, and developing labour and social plans when ageing coal-fired power plants and associated coal production infrastructure are decommissioned.



Further detail on FirstRand's approach, risk appetite, risk limits and lending policy towards energy and fossil fuels is available in the group's energy and fossil fuels policy on the **group's website**.



Additional detail can also be found in the **Strategy section** of this report.

Other operating jurisdictions

UK



The UK is a signatory to the Paris Agreement and was the first country to make a legally binding commitment to reach net-zero emissions by 2050. The UK's Climate Change Act of 2008 provides the framework for the reduction of GHG emissions and sets the foundation for enhanced climate change adaption and resilience capacity.

The UK is already experiencing changes in its climate (e.g. record-breaking summer temperatures and increased occurrence of heat waves and flood events). This is expected to continue over the coming decades. Predicted changes include warmer and wetter winters that increase the risk of flooding and subsidence; hotter and drier summers resulting in intense heat waves and a higher risk of water shortages; and continued rising sea-levels, estimated to be on average 10–30cm higher by 2050 than the levels of 1981 to 2000.

The UK's transition to net zero will involve largely eliminating carbon emissions from the entire energy system by 2050, including those from gas. However, demand for oil and natural gas will continue in the medium term to play a key role in powering and heating homes.

THE FOLLOWING PATHWAY IS PROJECTED FOR THE ENERGY SECTOR

- + **End of coal in the electricity mix** by no later than 2025.
- + **Clean electricity** generated from wind farms, nuclear power plants and green hydrogen gradually becoming the predominant form of energy in the UK by 2050.
- + Carbon capture and storage – it is the UK's ambition to **capture 10Mt of CO₂ per year by 2030**.



THE FOLLOWING PATHWAY IS PROJECTED FOR THE TRANSPORT AND REAL ESTATE SECTOR

The transport sector accounted for most of the UK's territorial emissions and is a key sector for decarbonisation. The UK's decarbonisation pathway is reliant on the energy sector, with electric vehicle charging adding substantial demand to the electricity grid.

- + **A gradual and consistent reduction in emissions from the transport sector to 2050**, driven by a ban on the sale of new petrol and diesel (internal combustion engine (ICE)) cars and vans from 2030. The sale of hybrid vehicles that can drive a significant distance with no carbon emissions continues up until 2035, when it will be banned.
- + **Significant deployment of public charging infrastructure to be delivered** in the 2020s and 2030s.

Emissions from homes and commercial and public sector buildings are the second largest source of emissions in the UK. The transition for buildings focuses on the wide-scale improvement of energy performance over the course of the 2020s and 2030s.

The group's operations in the UK are focused on mitigating risk and capturing opportunities in vehicle finance and mortgages, which constitute a material portion of lending activities and balance sheet.



Other operating jurisdictions *continued*

NAMIBIA

Namibia's climate is one of the driest in sub-Saharan Africa, with high climatic variability in the form of persistent droughts, unpredictable and variable rainfall patterns, high temperature variability and scarcity of water. This situation will become worse as a result of climate change. The country is highly dependent on climate-sensitive natural resource-based sectors such as agriculture, fisheries and mining.

Rainfall projections across Namibia point to decreasing precipitation in the second half of the century. Air temperature is projected to be between 1.5°C and 4°C higher by the 2050s, climbing to increases of 4°C to 7°C by 2100. Drought and floods have historically resulted in natural disasters in Namibia, and these are expected to increase as a result of climate change.

Namibia contributes less than **1% of global emissions**

Aims to **decrease GHG emissions by 91%** by 2030

A 75% reduction in the deforestation rate is targeted by 2030



Namibia is a signatory to the Paris Agreement and has ambitious plans to reduce its GHG emissions. The country, which contributes less than 1% of global emissions, aims to decrease GHG emissions by 91% by 2030, as compared to business-as-usual (BAU) scenarios. The cost of climate mitigation and adaptation measures is estimated at around US\$5.33billion. Mitigation will be driven by changes in the agriculture, forestry and other land use (AFOLU) sector, which is the highest-emitting sector in the country. Emissions emanate from the use of fuel wood, production of charcoal and deforestation for construction and other purposes, especially in the rural areas. A 75% reduction in the deforestation rate is targeted by 2030, and this, coupled with a reforestation programme and other initiatives, has the potential to result in net-negative contributions from Namibia's AFOLU sector by 2030.

In the energy sector, Namibia's national renewable energy policy encourages emerging technologies that reduce emissions and support cleaner practices. Namibia's efforts in renewables will contribute to a 30% reduction equivalent in the quantity of electricity imported.

Against this backdrop FNB Namibia is identifying climate risks and opportunities in its portfolio. In line with the national backdrop, the agriculture sector (which forms 20% of the bank's commercial exposures) is a focus area. In addition, FNB Namibia is assessing transition and sustainability financing solutions for the real estate and energy sectors.

Other operating jurisdictions *continued*

The group is currently formulating climate change strategies for the following subsidiaries. These strategies will be shaped by assessing the physical and transition impacts of climate change on their economies.



BOTSWANA

NDC date
1st – 2015

Geography

Botswana is a semi-arid country, highly vulnerable to the impacts of climate change. Droughts are most common in northern Botswana, and severe droughts are most common in eastern Botswana. High rainfall events and flooding are most likely in the north-east of Botswana. Current climate change impacts include constrained agricultural production, increasing food insecurity and water stress.

Primary source of emissions

Energy, transport, agriculture (livestock)



Government commitment

Baseline emissions are estimated at 8.31 Mt CO₂e. An overall emissions reduction of 15% is targeted by 2030, with 2010 as baseline year. This reduction will cost an estimated US\$18.4 billion.



GHANA

NDC date
1st – 2015

Geography

Historical data for Ghana shows a progressive rise in temperature and a decrease in mean annual rainfall in all of the country's ecological zones. Climate change is manifested in Ghana through rising temperatures, declining and highly variable rainfall, rising sea levels and a high incidence of extreme weather.

Primary source of emissions

Energy, industry, waste, AFOLU



Government commitment

Ghana's emission trajectory for 2020 to 2030 is projected as follows:

- + Under BAU conditions emissions are expected to rise from 37.81 Mt CO₂e in 2020 to 53.5 Mt CO₂e in 2025 and 73.95 Mt CO₂e in 2030.
- + Under the unconditional emission reduction goal, emissions are expected to decrease by 12% and 15% relative to the BAU emission levels in 2025 and 2030 respectively.
- + A further 30% reduction is conditional on international support.

The estimated cost of the unconditional emission reduction goal is US\$22.6 billion.



NIGERIA

NDC date
2nd – 2021

Geography

The northern parts of Nigeria are highly vulnerable to drought. In some parts the decline in yield in rain-fed agriculture could be as much as 50%. A considerable portion of the population is also at risk of water stress with less than 40% having direct access to potable water. Areas in the south of the country have experienced higher humidity and greater rain variability, with flooding in some parts. Nigeria's coastline is already experiencing sea surges and tidal waves. Accelerated rising sea levels are expected to be 0.5 to 1.0 m in this century, exacerbating the already poor conditions of the country's coastline. Overall damages and irrecoverable effects on infrastructure, food production and water supplies are a source of concern for the country.

Primary source of emissions

Energy, oil and gas, agriculture, waste, and industrial processes and product use (IPPU).



Government commitment

Nigeria has great potential for climate innovation, conditional on support for implementation from the international community. Baseline emissions are estimated at 2018's 347 Mt CO₂e increasing to 453 Mt CO₂e in 2030. This represents a 50% decrease relative to business-as-usual projections.

Other operating jurisdictions *continued*



ESWATINI
NDC date
1st – 2016

Geography

Eswatini is a landlocked country with a population of 1.25 million people of whom 69% are living below the poverty line. Eswatini is already facing severe climate change impacts. Variable precipitation patterns, droughts, desertification, higher temperatures, and increased storm intensities have already affected the country's key economic sectors.

Primary source of emissions

Energy and transport sectors



Government commitment

Eswatini's 2010 emission inventory was 0.8 Mt CO₂e, meaning that the country's emissions represent less than 0.002% of global emissions. Although some mitigation actions targeting renewable energy and the transport sector are being assessed, the focus is on adaptation actions. These include integrated water resource management, climate-smart agriculture, energy efficiency and security, biodiversity conservation and sustainable land management.



LESOTHO
NDC date
1st – 2017

Geography

Lesotho's mountainous topography and socio-economic conditions make it highly vulnerable to the adverse impacts of climate change. The country faces challenges such as pasture degradation and desertification, shrinkage of habitats and a decrease in the number of plant species and wildlife, as well as increased frequency and intensification of drought. Floods and droughts have already resulted in severe loss of agricultural crop and livestock, leading to food security implications.

Primary source of emissions

Energy, industrial processes, AFOLU, waste



Government commitment

Similar to Eswatini, due to the country's minimal contribution to GHG emissions, emphasis is being placed on adaptation measures. These include improving the resilience of livestock production systems and promoting sustainable crop-based livelihood systems. From a mitigation perspective, the country aims to reach 3 886 kt CO₂eq in 2020 and 4 332 kt CO₂eq in 2025, decreasing by 5.2% and 10.2% compared to BAU emission predictions. This reduction is estimated to cost US\$0.59 billion.



ZAMBIA
NDC date
2nd – 2020

Geography

Climate variability and change has become a major threat to sustainable development in Zambia. The country is already experiencing climate-induced hazards which include drought, seasonal and flash floods, and extreme temperatures.

Primary source of emissions

Energy, transport, IPPU, AFOLU, waste



Government commitment

Zambia's conditional pledge is to reduce GHG emissions by 25% (20 Mt CO₂e) by 2030 against a base year of 2010 under the BAU scenario, or by 47% (38 Mt CO₂e) with substantial international support. Adaptation measures were identified based on a vulnerability assessment of seven key economic sectors (agriculture, water, forestry, energy, wildlife, infrastructure and health) comprise three goals/programmes. These programmes are: adaptation of strategic productive systems (agriculture, forests, wildlife and water); adaptation of strategic infrastructure and health systems; and enhanced capacity building, research, technology transfer and finance.



MOZAMBIQUE
NDC date
1st – 2018

Geography

The country is extremely vulnerable to climate change occurring through alterations in the precipitation and temperature patterns and increased intensity and frequency of the occurrence of extreme weather events like floods, droughts and storms, including cyclones, and a rising sea level. According to climate projections temperature is expected to increase between 1.5 and 3.0°C between 2046 and 2065 and sea level to rise 15 cm, 30 cm and 45 cm as a consequence of thermic expansion from ice melting.

Primary source of emissions

Energy, transport, AFOLU, waste



Government commitment

The country targets, on a preliminary basis, a total reduction of about 76,5 Mt CO₂e in the period from 2020 to 2030, with 23,0 Mt CO₂e by 2024 and 53,4 Mt CO₂e from 2025 to 2030.

Industry forums and pilots

FirstRand is committed to participating in local and global industry forums to ensure that new research is considered and incorporated into the group's climate change programme. Participation allows the group to learn from global peers and contribute to the development of new methodologies and frameworks. Key organisations that the group engages with on an ongoing basis include:



The Financial Stability Board established the TCFD to develop recommendations for more effective climate-related disclosures that could promote more informed investment, credit and insurance underwriting decisions and, in turn, enable stakeholders to understand better the concentrations of carbon-related assets in the financial sector and the financial system's exposures to climate-related risks.

FirstRand involvement

FirstRand is a signatory to the TCFD.



The Partnership for Carbon Accounting Financials (PCAF) is a global partnership of financial institutions developing a global GHG accounting and reporting standard for the financial industry.

FirstRand involvement

FirstRand is a member of the core team of PCAF and the regional lead for Africa. Phase 2 of the project is focused on sovereign bonds, green bonds and emission removals. The PCAF second report will be launched at COP26 in Glasgow.



UNEP FI United Nations Environment Programme Finance Initiative is a partnership between the United Nations Environment Programme (UNEP) and the global finance sector. UNEP FI works with more than 400 financial institutions and over 100 supporting organisations. Various focus areas are covered by work teams, for example the work done by the TCFD task group.

FirstRand involvement

FirstRand participated in phase 2 and is currently participating in phase 3 of the TCFD project work. This includes a focus on climate stress tests, sectoral climate risk, economics of climate change, and real estate assessment best practice.



The Principles for Responsible Banking is a unique framework for signatory banks to commit to strategy and practise alignment to the UN SDGs and the Paris Climate Agreement.

FirstRand involvement

FirstRand was a founding member of the Principles for Responsible Banking and is a signatory. Climate change is a material focus area for FirstRand in terms of these principles.



The Principles for Responsible Investment reflect the increasing relevance of environmental, social and corporate governance (ESG) issues to investment practices and help to better align investors with the broader objectives of society.

FirstRand involvement

Ashburton Investments signed the Principles for Responsible Investment in 2015. As prudent stewards of capital, Ashburton considers a wide range of factors that may affect the risk and return profile of its investments, now and in the future. ESG factors form a part of this process.

Industry forums and pilots *continued*



CDP is a not-for-profit charity that runs the global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts. This information is made available to investors.

FirstRand involvement

FirstRand submits annual disclosure to the CDP covering climate strategy, own emissions and associated reduction targets and an analysis of climate risks and opportunities.



Following the issuance of the *Financing a Sustainable Economy* technical paper by the Department of National Treasury and the Department of Environmental Affairs in April 2020 various work streams were formed to do further work.

FirstRand involvement

FirstRand is a member of:

- + The climate steering committee
- + The taxonomy working group
- + The sustainable finance working group
- + The TCFD working group



Business Unity South Africa (BUSA) is a non-profit company representing cross-cutting organised business interests in South Africa.

FirstRand involvement

FirstRand participates in the environmental steering committee. The group participated in comprehensive feedback regarding South Africa's updated NDC. FirstRand is a member of the gas working group.



The NBI is a voluntary coalition of South African and multinational companies working towards sustainable growth and development in South Africa. A particularly important focus area is the climate change pathways and just transition work that is in progress. The NBI aims to create an analytical fact base to support decision-making and support coordinated effort. It estimates the cost of inaction and determines actions that need to be taken to get SA to net zero, as well as the social and economic impacts of net-zero emissions by 2050.

FirstRand involvement

- + Climate pathways and a just transition
- + FirstRand CEO: Member of the CEO committee
- + FirstRand: Member of the steering committee
- + FirstRand: Member of the advisory committee on environment and society



The Banking Association South Africa (BASA) advances the interests of the industry with its regulators, legislators and stakeholders to make banking sustainable, profitable and better able contribute to the social and economic development and transformation of the country.

The Sustainable Finance Forum members comply with the BASA principles for managing environmental and social risk.

FirstRand involvement

FirstRand is a member of the following committees:

- + Sustainable finance committee
- + Climate change committee



Intellidex aims to improve investor insight into Africa's capital markets through high-quality research and publications.

FirstRand involvement

FirstRand supports thought leadership on just transition and funded research conducted by Intellidex into the role of community ownership in South Africa's renewable energy independent power producer procurement programme (REIPPPP).





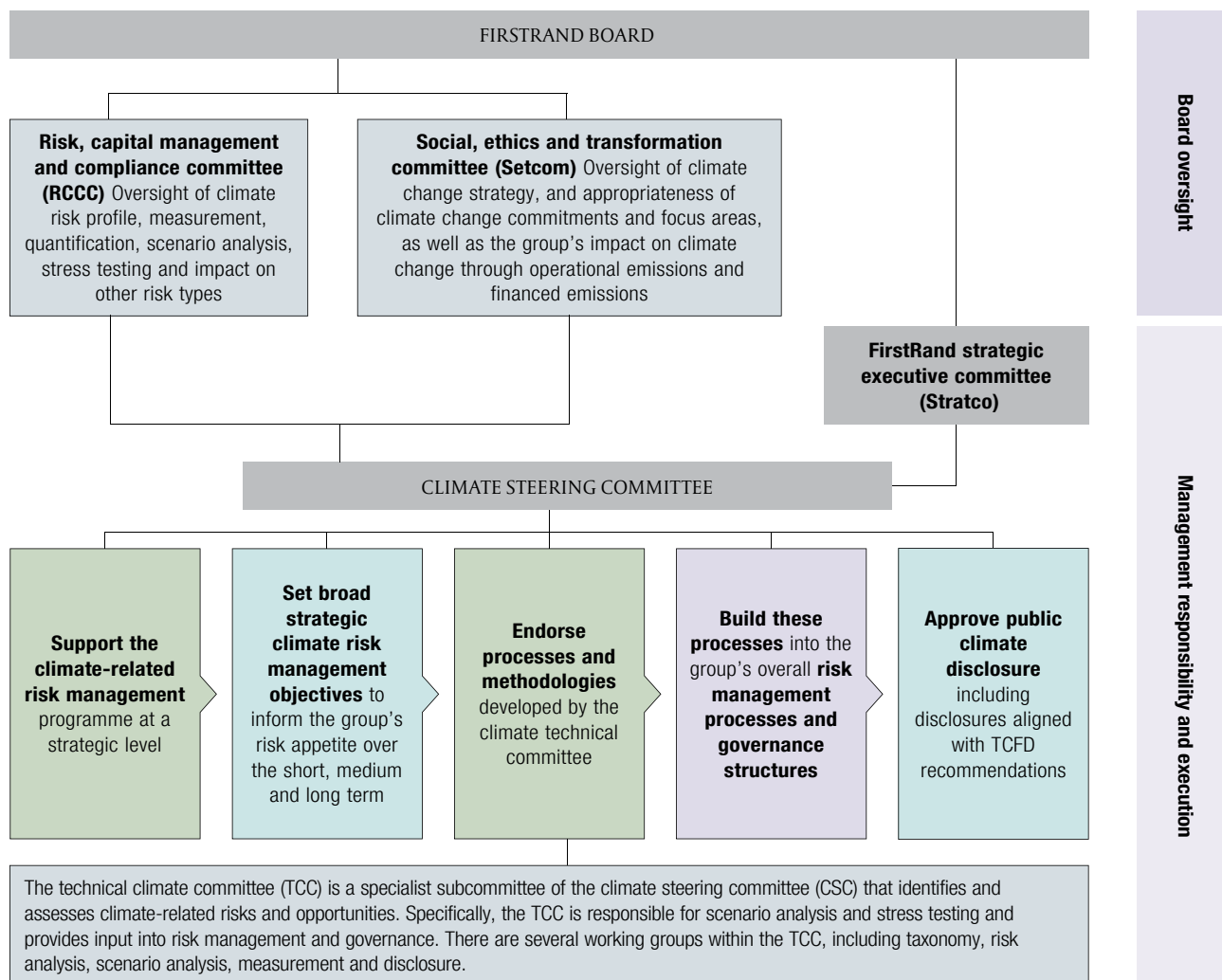
3

Governance

Explains how the group governs climate-related risks and opportunities.

- Governance structure
- Incorporation of climate change considerations into remuneration practices

Governance structure



The FirstRand Limited board is ultimately accountable for climate change governance. Board oversight rests with two board subcommittees, these being Setcom and RCCC.

- ✦ Setcom focuses on ensuring that FirstRand's impact on the climate, both operational and financed, is appropriately considered, and supported with clear policies against the backdrop of its societal commitments and its broader ESG policy.
- ✦ RCCC focuses on risk management and measurement oversight of the impact of climate change on the group's risk profile.

Feedback on climate-related topics is provided to these board committees at least quarterly. A key area of engagement during the financial year was board training, which covered the background to climate change, unpacked relevant transition scenarios, provided an overview of climate risks and opportunities and discussed the impact of climate risk on credit risk for the group. Other focus areas for the 2021 financial year are highlighted below.

Committee	Key focus	Frequency during 2021 financial year
FirstRand board	Board training on climate risks and opportunities	Semi-annually
RCCC	Climate risk profile	Quarterly
Setcom	Climate change policy and energy and fossil fuels policy Progress against climate roadmap	Quarterly

Governance structure *continued*

Responsibility for execution of strategic focus areas that relate to climate change lies with the FirstRand strategic executive committee (Stratco) which is chaired by the group CEO and is the most senior executive forum of the group. The Stratco member tasked with driving the overall climate change approach is the group chief risk officer (CRO) who reports back periodically to Stratco on progress. The group CRO chairs the CSC, which supports the coordination of climate-related risks and opportunities. The committee comprises senior representation from risk management, capital management, group finance, business and investor relations.

The group has developed and published specific climate related policies that guide activity, namely:

The FirstRand climate change policy

 See FirstRand's **climate change policy**

The FirstRand environmental sustainability policy statement

 See FirstRand's **environmental sustainability policy statement**

The FirstRand policy on energy and fossil fuels financing

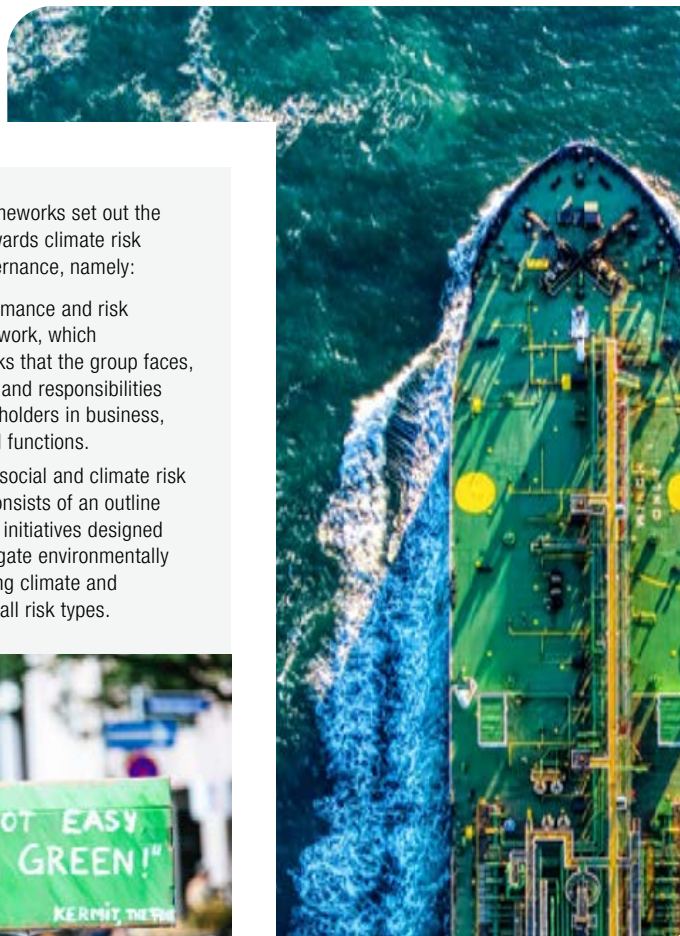
 See FirstRand's **energy and fossil fuels financing policy**

FirstRand policy statements relating to restrictions on the financing of certain sectors/activities

 See FirstRand's **policy statements relating to restrictions on financing**

Additional internal frameworks set out the strategic approach towards climate risk management and governance, namely:

- ✚ The business performance and risk management framework, which incorporates the risks that the group faces, as well as the roles and responsibilities of the various stakeholders in business, support, and control functions.
- ✚ The environmental, social and climate risk framework which consists of an outline of programmes and initiatives designed to manage and mitigate environmentally related risk (including climate and biodiversity) across all risk types.



As a material cross-cutting risk, the identification, monitoring, management and mitigation of environmental and climate risks are fully integrated as part of enterprise risk management (ERM). The group CRO is functionally supported by a specialist central climate risk team within the ERM function, and by climate risk champions in each business segment. The dedicated team of climate specialists in ERM provides technical input and advice on risk quantification matters, climate risk policy, transaction due diligence and group-wide training. Implementation of the climate strategy is owned and driven by each client segment and subsidiary through dedicated climate working groups and business development forums.

Incorporation of climate change considerations into remuneration practices

The following teams and individuals have climate change-related objectives that affect their variable remuneration.

The remuneration committee (Remco) is a board subcommittee that oversees group remuneration and ensures that practices align employees and shareholders. The group's remuneration philosophy supports FirstRand in executing on strategy and delivering on the promises made to stakeholders. Delivery against climate risk and opportunity management objectives has been incorporated into the remuneration scorecards for executive directors and prescribed officers, key environmental and social risk (ESR) teams and sustainable finance-focused teams.

EXECUTIVE DIRECTORS

(CEO, CFO, COO)

- + Manage approach to climate risks and opportunities
- + Manage delivery against the group's climate change roadmap
- + Facilitate board and external stakeholder engagement

PRESCRIBED OFFICERS

(CEOs OF RMB AND FNB)

- + Development of client segment-specific climate strategies
- + Optimisation of business activity relative to climate transition pathways
- + Fostering broad-based awareness of climate risks and opportunities and associated strategies

SUSTAINABILITY AND CLIMATE FINANCE TEAMS

- + Client engagement and education on climate change and transition plans
- + Product development to facilitate climate opportunities
- + Delivery on advances growth and revenue targets for sustainable and transition finance offerings

RISK TEAMS

(INCLUDING GROUP, RMB AND FNB CROS)

- + Overall coordination of climate risk programme
- + Building climate risk internal capacity
- + Development and deployment of tools and methodologies for climate risk identification, quantification, management, monitoring and reporting; and building capacity



4

Strategy

Explains the actual and potential impacts of climate-related risks and opportunities on the group's businesses, strategy and financial planning.

- ④ Overview
- ④ Client solutions
- ④ Incorporating climate factors into financial resource management
- ④ Risks to the strategy

Overview

The group's approach to climate strategy focuses on three main areas.

Further details are provided in these sections below.



BUSINESS FOCUS

(Client solutions)

Developing financial
products to assist
clients with their climate
transition journey



FINANCIAL RESOURCE MANAGEMENT FOCUS

Adequately pricing for
climate externalities
and benefits, to
appropriately channel
financial flows



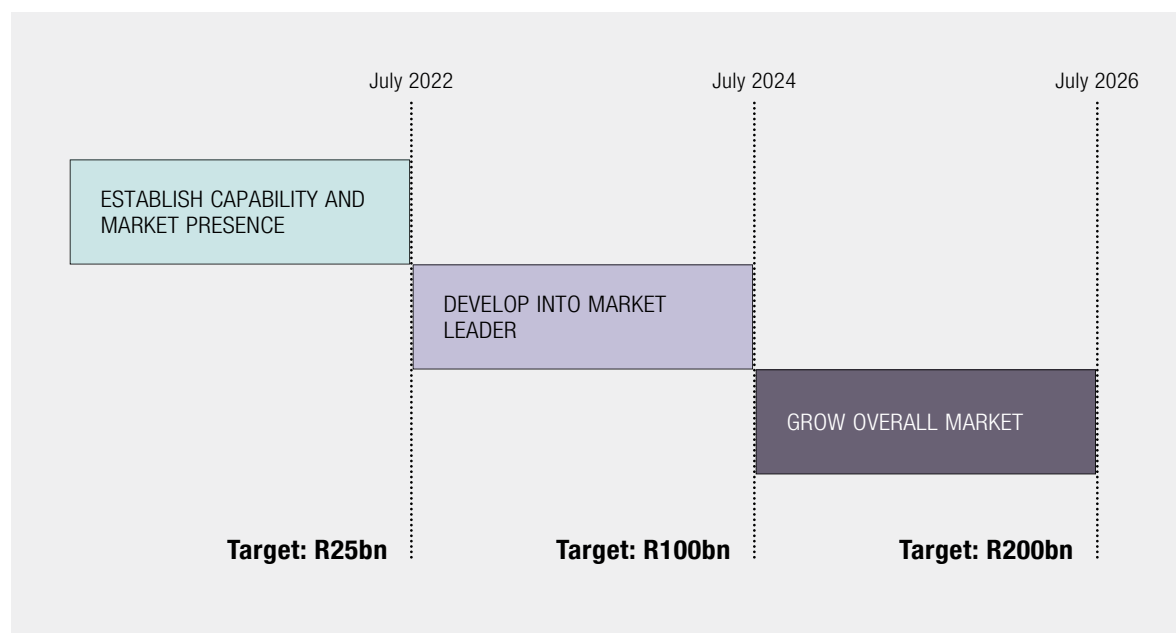
RISK MANAGEMENT FOCUS

[> Read more](#)

Ensuring that the group's
balance sheet is resilient
against the impact of
physical and transition
climate risks

Client solutions

Through transaction underwriting, arranging, lending or advisory activities, the group aims to facilitate more than R200 billion cumulatively over the next five years to address climate change and social development needs. This will be deployed in three stages as depicted below.



Client solutions *continued*



THREE KEY FOCUS AREAS ARE TARGETED:

Financial solutions

Aim to facilitate R200bn in sustainable finance by 2025 to help address climate change

Stakeholder engagement

Engage 100 top corporates on transition plans during the 2022 financial year; engage 3 million retail clients by 2025 on reducing carbon emissions and water usage

Ecosystem mobilisation

Development and deepening of a financial and physical green marketplace

The group believes that there is a clear commercial imperative for better climate change management. This will be delivered through the development of sustainable financing and funding solutions, and the integration of climate impacts into capital allocation, origination strategies, portfolio diversification and reporting. FirstRand is therefore focused on formulating growth strategies, building appropriate capabilities and integrating climate change considerations into existing business plans and processes. This will ensure that FirstRand can actively participate in the financing of the green economy, pursuing significant opportunities for innovation as well as new technologies and markets to help society adapt.

Retail	Residential mortgage solutions to facilitate energy-efficient homes	Development and implementation of a carbon footprint calculator on platform to assist with climate awareness	Using FirstRand’s platform to create a marketplace in renewable products and technology that connects clients across the group’s ecosystem
Commercial	Innovative grant, equity, partnership and funding structures for end-to-end green agriculture	Partnering with clients to understand their approach to climate change, water security and sustainability	
Corporate	<ul style="list-style-type: none">+ Transitional and renewable energy finance+ Green loans+ Green bond facilitation	Working with corporates to understand their climate risks, opportunities and transition pathways	
Invest	Launch of climate-related investment products, including Exchange Traded Notes (ETNs) tracking water and clean energy indices	Enhanced client and investee company engagement with a focus on those in climate-sensitive sectors	

Client solutions *continued*

FOCUS AREA | APPROACH TO RENEWABLES

FirstRand's corporate and investment bank RMB has an established track record in facilitating and providing renewable energy financing, supporting projects across South Africa generating over 1.5GW. The group's renewable energy portfolio is long dated with an average maturity of seven years.

Sector R'm	June 2021			June 2020	
	Drawn exposure	% of total group loans	Total project capacity MW*	Drawn exposure	% of total group loans
Solar	10 342	0.8	925	10 042	0.8
Wind**	4 933	0.4	564	7 396	0.5
Hydro	162	0.0	8	166	0.0
Diversified Portfolios and operations	123	0.0	12	—	—
Total renewable energy	15 560	1.2	1 509	17 604	1.3

* Reflects total generation capacity of projects (i.e. capacity has not been attributed based on FirstRand's share of financing).

** The decrease in exposure is primarily due to a portfolio sale facilitated for an investment fund.

As companies across a range of sectors increasingly look to access the ESG debt markets, the group has added integrated offerings that aim to translate corporates' UN Sustainable Development Goals (including renewable energy requirements) into concrete, measurable actions. During the 2021 financial year RMB arranged R1.2 billion in sustainability-linked bonds for South African water utility Rand Water. The transaction marks several African firsts, including becoming the largest South African rand-denominated sustainability bond issued. The coupon of the bond is linked to the achievement by Rand Water of ESG targets, including additional installed solar energy capacity and an increased number of people with access to safe and clean water.

FOCUS AREA | APPROACH TO REAL ESTATE

The demand for green certified buildings for rental and ownership is projected to sharply increase, as South African corporates strategically align themselves to the green economy by committing to carbon neutral and net-zero emissions. Green buildings can play a pivotal role in spurring the move to clean energy and securing a transition to low-carbon economy outcomes for companies and governments.

This shift is expected to be a source of growth for the commercial real estate market in South Africa, which needs to transform in order to attract green-minded tenants or risk becoming vacant – resulting in stranded assets. Real estate investment trusts (REITs) globally are still struggling with declining demand for office space.

The question remains how the transformation of existing buildings could be funded, given that it is a costly process at a time when REITs face falling rentals and higher vacancies. There are similar financing and sustainability challenges for real estate developers.

As the demand for sustainable buildings increases, there will be a growing market for green finance from issuers, building buyers and renters. Several climate and green bonds and loans issued by large corporates and REITs in South Africa are anticipated in the coming years, which will radically transform the commercial property stock.

Green bonds effectively link sustainable development and green buildings with capital markets. Green buildings have many benefits for investors, from lower long-term operating and maintenance costs to potentially higher returns on investment. Green bonds also provide verified environmental impact evaluations.

The RMB sustainable finance and ESG advisory team is working closely with an increasing number of real estate clients on sustainable products, including facilitating prospective green bond issuances and providing transition finance for the transformation of existing buildings. As a large and liquid green and climate bond market develops, it will drive down the cost of capital for climate projects.

DURING THE 2021 FINANCIAL YEAR, RMB ASSISTED SEVERAL REAL ESTATE SECTOR CLIENTS WITH THEIR ESG AND CLIMATE FINANCING REQUIREMENTS, INCLUDING:

Redefine Properties is a trusted partner in the property market, with a focus on owning, developing and managing quality properties. The company is considered an ESG market leader. RMB was appointed as arranger and sustainability agent for Redefine's inaugural R1bn sustainability-linked bond. The bank worked to ensure the integration of ESG in the form of sustainability performance targets linked to renewable energy, greenhouse gas emissions and water efficiency. Achievement of the sustainability performance targets, which will be independently verified, will result in a reduction in interest rates on the bond.

Emira Property Fund (Emira) is a diversified REIT with a property portfolio of predominantly South African assets and a growing component of offshore assets. Emira aims to reduce its environmental impact by engaging in projects that reduce its carbon footprint and by focusing on investments into solar power. RMB was appointed as sole arranger and sustainability agent for a R200m sustainability-linked loan. The bank worked with Emira to determine the ESG performance targets for the loan, in line with its strategic objectives.

Equites Property Fund (Equites) is the only specialist logistics REIT listed on the JSE. As part of its goals to improve the sustainability profile of its buildings, it required a green loan for two high-specification International Finance Corporation (IFC) EDGE-certified green buildings in attractive industrial nodes. RMB was appointed as sole arranger for the R225 million green loan. The bank worked to structure a funding benefit through an IFC facility to unlock a first-in-the-market transaction for Equites. The green loan is aligned to Equites' long-term strategy and commitment to ESG. By obtaining preliminary and final certification on these two buildings, Equites can now certify many of its new industrial facilities using the EDGE rating. The certified green buildings are also beneficial for tenants, providing long-term utilities savings.



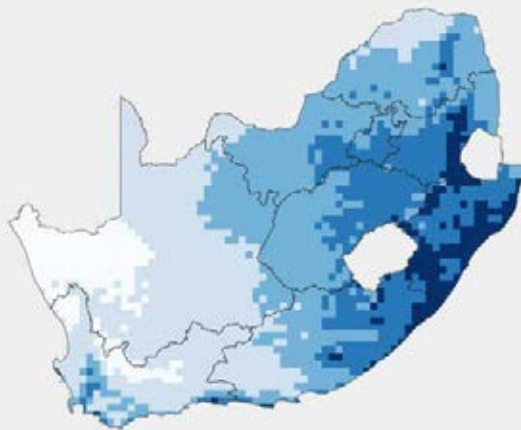
Client solutions *continued*

FOCUS AREA | APPROACH TO AGRICULTURE

Without material global emissions reductions, over and above existing pledges, temperatures in South Africa are forecast to increase by 2°C to 4°C by 2100, resulting in more extreme weather such as erratic rainfall patterns. This will negatively impact the agriculture sector. For example drought, especially in the Northern and Western Cape, and floods in Mpumalanga and KwaZulu-Natal, may affect crop yields and returns in the agriculture value chain. The following heat map highlights these agriculture risk areas through an assessment of projected changes in rainfall to 2030 generated using downscaled climate models from the Agricultural Research Council.

Very dry
 Normal
 Very wet

Dry
 Wet



In addition, the agriculture sector impacts climate through carbon emissions from fertiliser usage (high emissions intensity associated with the chemical processes underlying the manufacture of fertiliser), livestock methane emissions, water usage and energy usage.

Helping clients in the agriculture sector to manage climate risks

FirstRand's retail and commercial bank FNB is committed to working with agriculture sector clients to mitigate their risks and to provide transition solutions. There are several opportunities for climate adaptation and mitigation in this sector, and the group is developing products to finance sustainable agricultural solutions, including:

- + Smart water solutions
- + Smart energy solutions
- + Green equipment finance
- + Financing across the supply chain
- + Smart agriculture
- + Blended finance solutions with development financial institutions (DFIs)
- + Price protection/insurance to reduce uncertainty for farmers exposed to commodity price fluctuations

Supporting clients with climate change and sustainability solutions

- + Providing subsistence, emerging and commercial agriculture with tailor-made products based on their needs and level of sophistication
- + Assisting the emerging agriculture segment through a transformation strategy, using innovative structures executed through pricing mandates, bank partnerships and grant and other funding
- + Employment creation through partnership models
- + Facilitating end-to-end responsible production through the supply chain funding model
- + Enabling corporate and institutional segment clients to support inclusive economic growth
- + Increasing exposure to horticulture and irrigation (sustainable water management) and decreasing exposure to livestock
- + Using long-term climate projections to understand physical climate risk impacts and incorporating them into the identification of opportunities

Managing lending risks

The agriculture segment within FNB commercial and the group's environmental, social and climate risk team are working together to identify climate risks – physical and transition – for the group and assess how to manage these.

Currently, the work undertaken includes geo-mapping the loan book, performing drought stress testing, and piloting a project to map the maize book against future expected climate conditions. The results of the analysis will be incorporated into credit policies.

Client solutions *continued*

FOCUS AREA | APPROACH TO MORTGAGES AND MOTOR FINANCE IN THE UK

Key areas of transition for FirstRand's UK business Aldermore are the mortgages portfolio and the motor finance portfolio. UK regulations pertaining to residential housing energy efficiency and zero-emissions vehicles are likely to accelerate the rate of change. The business is actively working with clients to facilitate the journey towards a low-carbon economy.

Aldermore real estate solutions

CITU is a leading Yorkshire-based sustainable developer founded 16 years ago in response to the growing climate emergency. It aims to create beautiful homes that make it easy to live a sustainable life while still providing "all the ingredients to create a great place" to live.

As a growing business, CITU is continually investing in its capital equipment (e.g. factories where it builds its pioneering timber-framed houses), developing new projects and creating an investment portfolio. As the UK begins to emerge from the pandemic, CITU recognises that scaling up its work is vital. Currently CITU produces 200 homes a year, but is already working to increase this output. Its partnership with Aldermore has made this possible, providing funding for a part of Kelham Central, a new project of 114 homes in Kelham Island, Sheffield. The financing enables every stage of the development, from construction through to sale. CITU sees the relationship with Aldermore as a "change in how banking works", with swift decision-making and a flexible approach informed by the bank's commitment to getting to know it as a business.



Aldermore motor finance solutions

The electric vehicle market is growing rapidly with increasing demand from customers to operate cleaner vehicles in their fleets. Aldermore partnered with NRG Fleet Services and Electra to deliver one of the first fleets of zero-emission heavy trucks in the UK.

Aldermore provided a £2.25 million asset finance facility to a returning customer, NRG Fleet Services, a fully integrated fleet solutions provider. The finance will provide Riverside Truck Rental, a trading subsidiary of NRG, with specialist funding for seven new electric compact refuse collection vehicles (eRCVs).

The environmentally friendly vehicles have been manufactured at a factory in Blackburn, Lancashire by Electra Commercial Vehicles, a strategic partner of NRG. The vehicles will be operated by a global waste and energy management services group that provides the City of London Corporation's recycling and waste collections services and will help the corporation's drive to cut down pollution in the city.





Incorporating climate factors into financial resource management

FirstRand aims to ensure the group's FRM practices enable positive and mitigate negative climate outcomes.

This includes:

- + the development and incorporation of a sustainable bond issuance framework into the overall funding strategy;
- + partnering with DFIs where appropriate;
- + targeting prudent ESG rating levels for the group; and
- + transmitting the price of financial resources, taking account of positive outcomes and negative externalities.

Consequently, the group's FRM framework recognises the following ESG and climate principles:

- + Changing investor demands and requirements are having a profound effect on asset allocation and assets that are able to attract financing. This demand exerts an important price tension.
- + The group must be able to categorise activities and capital into different segments, depending on externalities, (i.e. impact on environment and broad society) so that it continues to promote appropriate capital transmission.
- + Externalities should be considered when pricing resources.

In giving effect to these principles, criteria have been established whereby preferential funding rates and consequently enhanced client pricing are provided to deals that meet predefined impact thresholds, such as:

- + generating renewable energy for private or public use;
- + contributing to materially improved energy or water efficiency relative to benchmarks;
- + contributing to a reduction in GHG emissions; and
- + utilising hybrid or green vehicles or contributing to material reductions in fuel usage.

FirstRand's sustainable bond issuance framework identifies a number of sectors and activities that will assist with climate adaptation and mitigation, including renewable energy, energy efficiency, green building, clean and sustainable transportation, and climate-smart agriculture.

Risks to the strategy

The group's climate strategy is based on forecasts and assumptions about future transition pathways. Although these assumptions are science based, real-world complexity means that over long time horizons, technological and policy changes may result in a material divergence of outcomes from the currently contemplated scenarios.

Prudent changes in the management of the group's activities, based on macroeconomic factors, regulatory change, shifts in customer demand and alterations in the competitive landscape, may also result in a change in the group's balance sheet and product mix.

Risks to the strategy may also arise due to a slower than anticipated transition in South Africa and other jurisdictions, slow adoption of technology to mitigate climate change, a lack of the necessary breakthroughs required in hard-to-abate sectors, policy friction, and legal risk. Exposures to the fossil fuels sector have a heightened sensitivity to the pace of transition.

FOCUS AREA | APPROACH TO FOSSIL FUELS

FirstRand recognises that fossil fuels are the biggest contributor to GHG emissions and a priority area for global decarbonisation pathways. The group is committed to managing its transition away from fossil fuels in alignment with a science-based transition path and taking account of social impacts, i.e. a "just transition".

The group references the NBI low-emissions pathway (see pages 13 to 14) as a base case scenario for the transition away from fossil fuels in South Africa. The pathway assumes the end of coal as the core energy source between 2042 and 2049. Gas is seen as a possible enabler for shorter-term emissions reductions, and a source of energy for peak power needs, however a transition away from gas will be necessary over the long term. FirstRand is cognizant of the material risk that a long-term gas lock-in may pose to the South African economy and the group is developing a strategy with this in mind.

All the group's current oil and gas exposures are located outside of South Africa, predominantly in Mozambique (gas only), and also in countries in West Africa, mainly Nigeria and Ghana. In determining the oil and gas strategy in the rest of Africa, the group considers the stage of transition that each country is in to determine its loan and underwriting approach. FirstRand's exposure to fossil fuels (excluding natural gas) is short dated with an average maturity of less than three years.

Sector R'm	June 2021		June 2020	
	Drawn exposure	% of total group loans	Drawn exposure	% of total group loans
Upstream oil and gas*	2 883	0.2	7 651	0.6
Down and midstream oil and gas*	5 757	0.5	9 843	0.8
Thermal coal mines**	2 009	0.2	1 756	0.1
Fossil fuels excl natural gas	10 649	0.9	19 250	1.5
Natural gas	933	0.1	783	0.1
Total fossil fuels	11 582	1.0	20 033	1.6
Electric utilities	5 870	0.5	8 723	0.7

* The decline in exposures is primarily driven by settlements and pre-payments of several large client facilities

**Defined as companies where the consolidated revenue derived from thermal coal mining exceeds 30% of total revenues. Changes in exposure reflect movements in the general liquidity needs of clients as well as industry consolidation activity.

KEY COMMITMENTS

2021

- + No new coal-fired power stations
- + **2% of total group loans cap** on coal financing drawn advances

2030

- 1% of total group loans cap** on coal financing drawn advances

2026

- + **1.5% of total group loans cap** on coal financing drawn advances
- + No direct project financing for new coal mines

2040 onwards

- Accelerated transition away from fossil fuels



5

Risk management

Explains how the group identifies, assesses, and manages climate-related risks.

- FirstRand's approach to climate risk management
- Climate-sensitive sectors

Risk management

Climate change risks do not necessarily represent an exclusively new risk category, but can rather be an amplifying factor for other risk types

Climate change presents a complex set of interconnected outcomes, with financial and operational risks emanating from two primary channels: **physical risks** and **transitional risks**.

PHYSICAL RISK

Over the long term, climate change will result in both acute events (e.g. increased severity and frequency of extreme weather phenomena) and chronic environmental changes (e.g. sustained higher temperatures). Resultant risks may manifest as:

- + **operational risk** (e.g. fines and penalties due to non-compliance) resulting in one-off losses or broader sustainability challenges (e.g. workforce absenteeism and illness due to extreme weather events) for the group or for clients; or
- + **credit risk** for the group due to damage to physical property and infrastructure resulting in productivity losses or supply chain disruptions which impact customers' cash flows and ability to service existing debt.

SHORT-TERM TRANSITION RISKS

In the short term, changes in client behaviour and investor preferences for less carbon-intensive assets and products may result in market, reputational or legal risks for the group. The market risk arises from changes in asset prices and market spreads given investor capital allocation changes. Reputational or legal risks may arise if clients or funders perceive the group's operational and financing activities to be aggravating climate change.

LONGER-TERM TRANSITION RISKS

In the long term, transitioning to a less carbon-intensive economy will likely entail significant legal, technology and policy changes, which may be disruptive to established business models. If appropriate climate adoption interventions are not implemented, this could result in unexpected financial losses for the group and clients.

FirstRand's approach to climate risk management

IDENTIFICATION OF CLIMATE-RELATED RISKS

The group anticipates the following transmission paths for physical and transition risks into other risk types:

RISK TYPE

PHYSICAL RISK IMPACT

TRANSITION RISK IMPACT

Credit and equity investment risk

Disruption of client operations and supply chains impacting clients' cash flows and ability to service debt. Physical property or infrastructure damage resulting in decreased asset collateral values leading to higher probability of default (PDs) and loss given default (LGDs) for impacted assets. Physical risks are expected to be more material in certain retail portfolios such as home loans as well as commercial agriculture.

Lower client cash flows due to higher transition costs and shifting customer demand as well as the potential for stranded assets leading to higher PDs and LGDs for impacted assets. The transition risks are expected to be more material in the group's corporate and institutional portfolios, particularly in energy-intensive sectors.

Sovereign risk

Transmitted through general macroeconomic policies and mechanisms, where sovereigns need to provide additional support to address acute or chronic events.

Changes in trade flows, international demand for exports or the pricing of imports may negatively impact sovereign credit ratings.

Market risk

Transmitted through general macroeconomic or sector-specific impact.

Differentiated asset and instrument pricing based on climate characteristics of the underlying security or issuer which may lead to market dislocations, loss of trading liquidity or sudden pricing shifts.

Counterparty credit risk

Reduced ability by counterparts to honour obligations due to disruption of their operations or supply chains.

Reduced ability of counterparties to honour obligations due to the impacts of market dislocations as a result of transition risk shocks on their portfolios, collateral values and ultimately their credit quality.

Operational risk

Disruption of own operations through damage to physical assets, supply chain interruptions or occupational health and safety events.

Higher costs and possible operational disruptions due to the transition of own operations to lower carbon infrastructure. Legal risk due to changing regulations. Third-party and outsourced risks should these parties' practices not meet set industry standards.

Funding and liquidity risk

Transmitted through general macroeconomic or sector-specific impact.

Higher funding rates and selective availability of liquidity based on the climate characteristics of assets funded.

Other risks

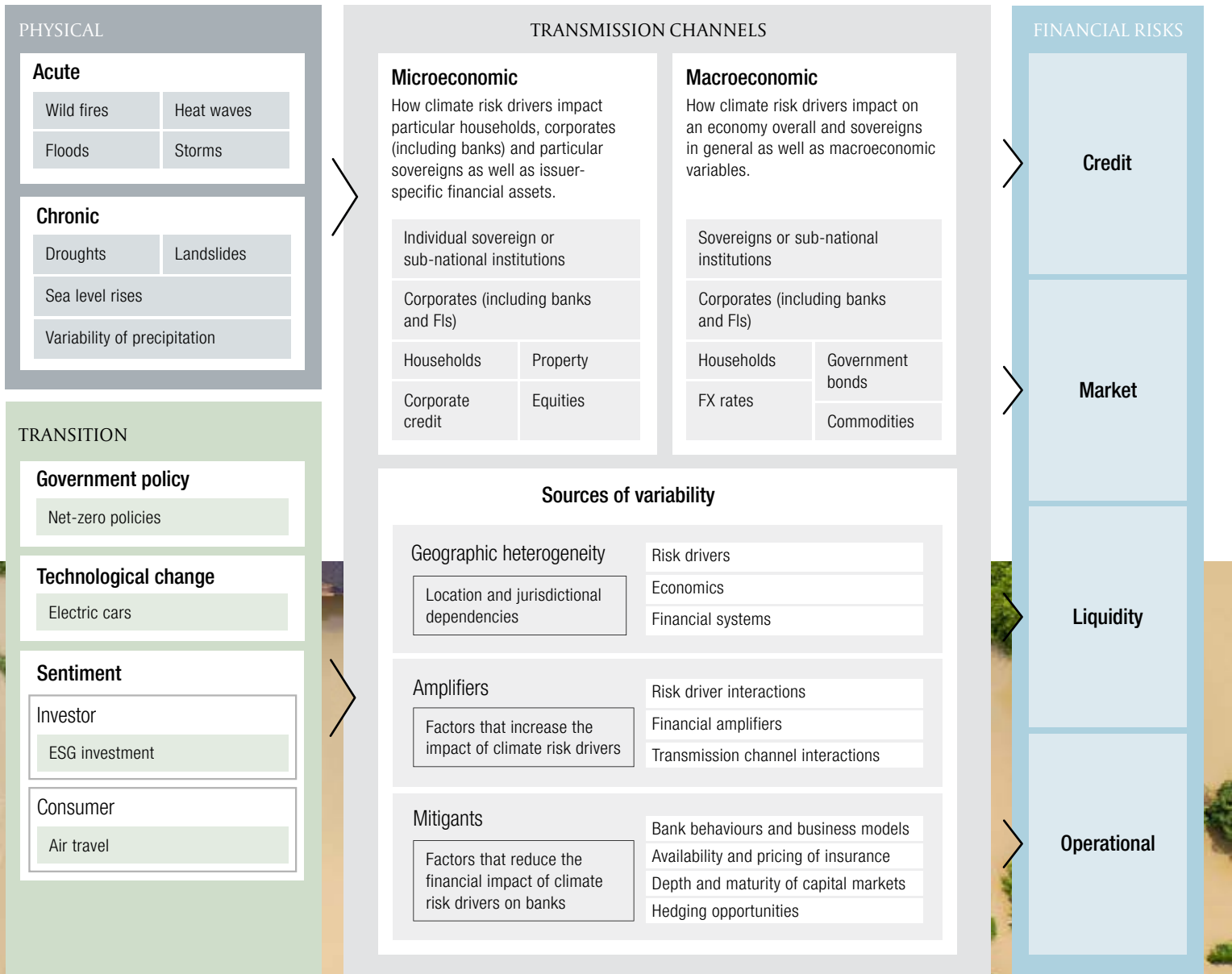
Business risks transmitted through general macroeconomic impact.

Reputational and business risks due to changes in customer sentiment or legal challenges.

FirstRand's approach to climate risk management *continued*

FIRSTRAND'S APPROACH TO PORTFOLIO CLIMATE RISK QUANTIFICATION

FirstRand measures the impact of climate risk on the portfolio through stress testing, scenario analysis and sensitivity analysis. The group has adopted a multi-step stress testing process based on the Basel Committee on Banking Supervision's articulation of climate-related risk drivers and their transmission channels, as depicted on this page. This methodology allows for the assessment of both the general macroeconomic impact of climate change on exposures as well as portfolio-specific sector or regional impacts.



FirstRand's approach to climate risk management *continued*



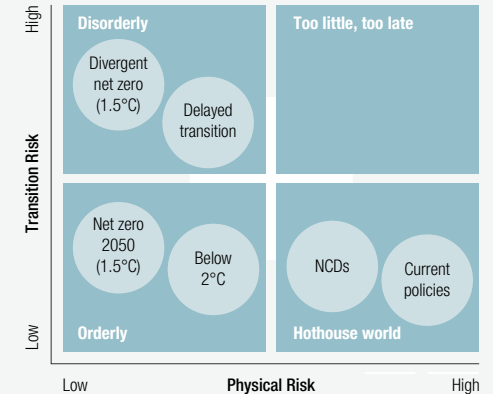
The identification of climate risks requires the incorporation of climate data (including forecast models of the probability and severity of physical risks) and new portfolio parameters (e.g. geo-mapped exposures) into established macro- and microeconomic models as well as into existing credit and other risk type assessment models. This area is still developing globally and best practice standards for emissions data and the translation of climate scenarios into financial impacts are still evolving. The group will continue to invest in relevant skills and technology to better identify climate risk.

The process to fully assess the impact of climate change on all the group's portfolios is ongoing. As part of this process FirstRand has been referencing the NBI and Network for Greening the Financial System (NGFS) scenarios. These provide a credible basis to explore possible impacts on the economy and financial systems. The recent update to the NGFS scenarios with more granular data will allow the group to better understand the differentiated impact on individual jurisdictions.

NGFS transition scenarios

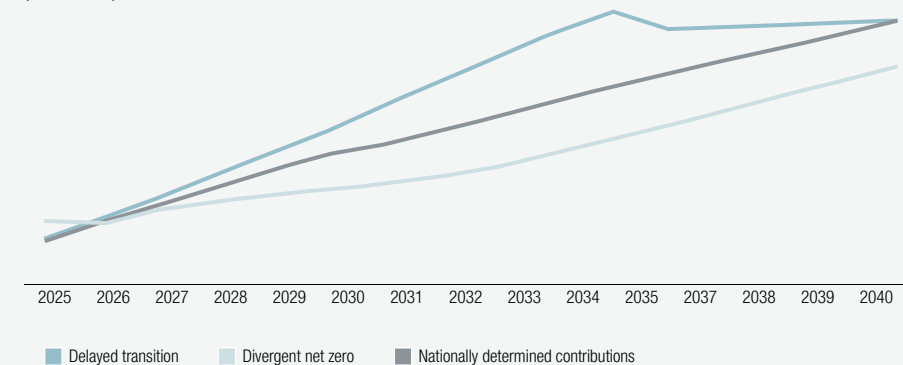
The NGFS is a group of 66 central banks and supervisors and 13 observers committed to sharing best practices, contributing to the development of climate- and environment-related risk management in the financial sector. The NGFS climate scenarios have been developed to provide a common starting point for analysing climate risks to the economy and financial system. The scenarios were chosen to show a range of lower- and higher-risk outcomes across the physical and transition risk spectrum.

NGFS scenarios framework



The NGFS scenarios form part of a suite of scenarios used by the group for macroeconomic forecasts that form the basis for climate stress testing and scenario analysis. The graph below illustrates this process for two NGFS disorderly scenarios (divergent and delayed). The divergent scenario would have an immediate negative impact on South Africa's GDP due to the rapid implementation of stringent but divergent policies across sectors and geographies in an effort to achieve net zero by 2050. The delayed transition scenario, in contrast, assumes that strong policies are only enacted after 2030, delaying the economic impact, but requiring a more significant policy adjustment.

Real GDP (level, R'm)



FirstRand's approach to climate risk management *continued*



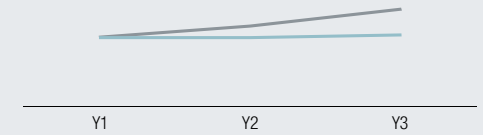
SARB 2021 common scenario stress test

As part of the South African Reserve Bank (SARB) 2021 common scenario stress test (CSST) the group assessed the impact of a drought scenario in South Africa on the performance of credit exposures to certain sectors.

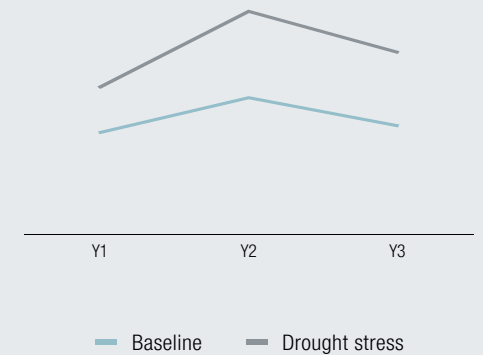
For the large corporate segment, focus was placed on the chronic impact across the economy. Based on the drought scenario a bespoke set of macroeconomic forecasts were developed that allowed for an assessment of the systemic impact on corporates by utilising existing credit stress testing models.

For the commercial segment, first order portfolio-specific impacts were tested within the agriculture sector utilising modelling based on historical data. Second order impacts on other sectors were assessed by utilising correlation matrices to model the transmission pathways of the agricultural value and supply chain to other sectors.

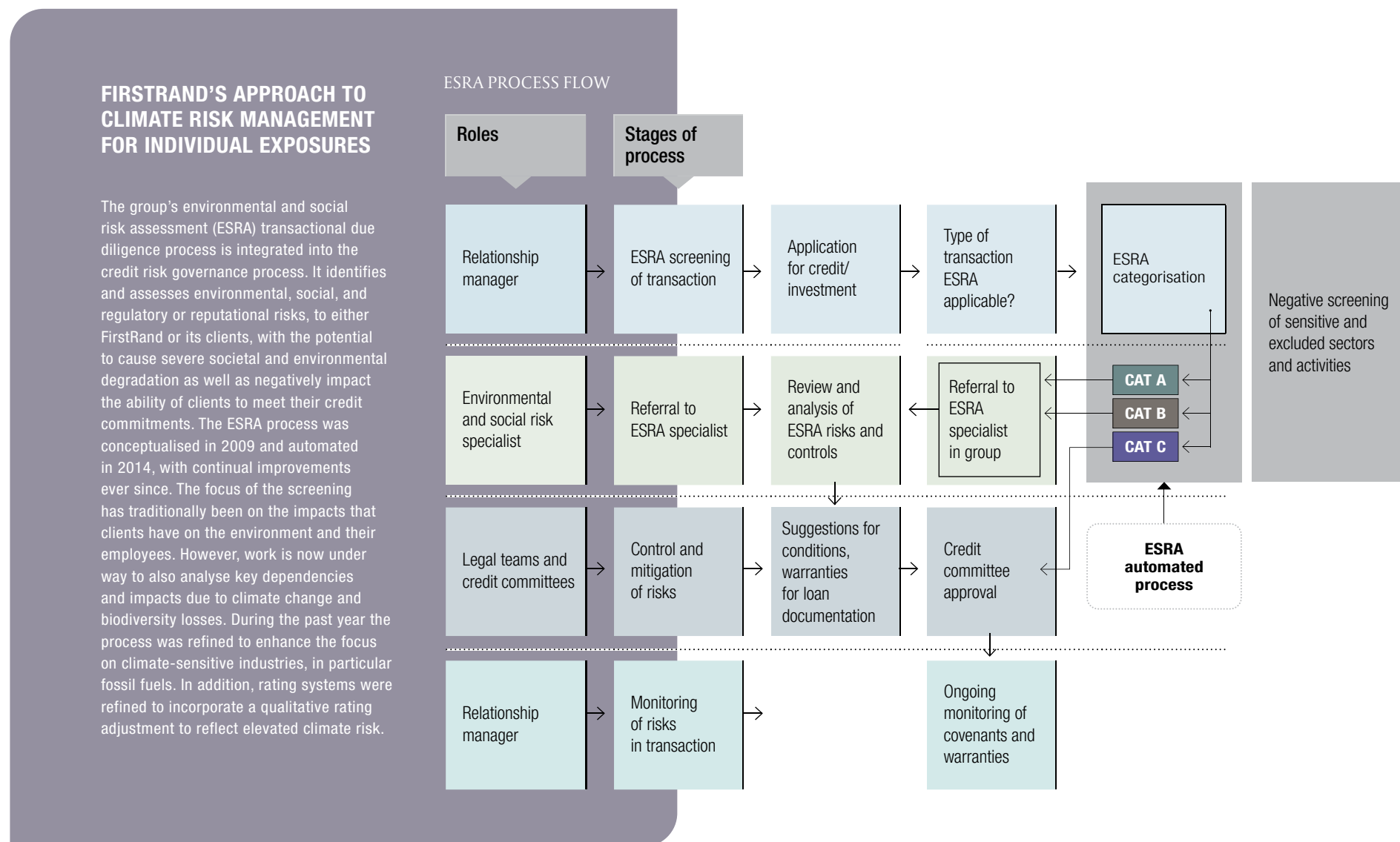
Impact on corporate expected defaults



Impact on commercial expected defaults

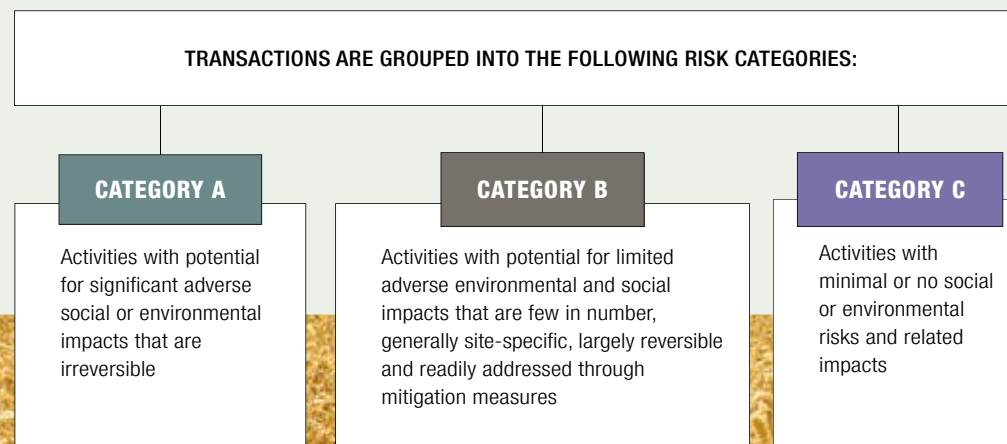


FirstRand's approach to climate risk management *continued*



FirstRand's approach to climate risk management *continued*

The data collected on the ESRA system provides a view on systemic risk and not just risk per transaction type. It also makes it possible to create awareness with customers about climate-related challenges. The information can be used to build tailor-made solutions to improve customers' climate resilience and assist them to transition to a low-carbon economy. As highlighted in the diagram to the right, transactions are categorised in terms of the environmental and social risk impact and subjected to additional review and enhanced approval levels if deemed to be high risk from either an environmental, social, governance or reputational risk point of view.



Climate-sensitive sectors

The group defines climate-sensitive sectors as those that FirstRand has material exposure to and which either contribute disproportionately towards climate change and are therefore subject to high-transition risk, or sectors where climate change is expected to have a severe impact on the portfolio through physical risk events. Additional focus is placed on measuring and managing the group's exposure to these sectors.

The group references time horizons to better assess the climate-related outcomes of these sensitive sectors:

- + Short-term horizon (ST): Three to five years, in line with the group's average behavioural book length and financial planning horizon.

- + Medium-term horizon (MT): Period to 2030, in line with South Africa's planned carbon trajectory, contained in the low emissions development strategy.
- + Long-term horizon (LT): Period to 2050, in line with the Paris Agreement timeframes.

In assessing transition risk FirstRand also considers emerging legislation and the possible impacts on the group's operations and its clients. This includes:

- + The Carbon Tax Act and carbon budgets, which may impact the profitability of some of the group's clients either through direct taxes, indirectly through additional costs, or through operational limits and constraints. Examples of sectors which may be impacted include steel manufacturing and chemical production.

- + The Climate Change Bill, which seeks to put South Africa on a low-carbon trajectory and is due to be finalised soon, aims to compel businesses and individuals to reduce their GHG emissions. This will have implications for both the group's portfolios and operations.
- + Changes to South Africa's IRP and updates to subsequent NDCs may alter anticipated transition pathways and result in unforeseen transition risk within the portfolio.

TRANSITION RISK

Rationale for high transition risk sectors

		Horizon
Coal	Due to its very high emissions intensity, reduced demand and investor appetite is already apparent. Policy shifts are likely to accelerate this trend.	ST
Electrical utilities	The shift in generation capacity from fossil fuels to renewable energy will require significant capital expenditure costs.	MT
Oil	Policy pressure to reduce emissions, exposure to carbon taxes and declining demand for fossil fuels will negatively impact the sector.	MT
Synthetic fuels, steel and cement	These sectors have a high emissions intensity due to their underlying industrial processes which will require technological advances to abate.	MT-LT

Rationale for elevated transition risk sectors

		Horizon
Transport, aviation and vehicle finance	High levels of capital expenditure will be needed to transition away from fossil fuel powered transport in response to more stringent emissions regulations.	MT-LT
Real estate (vulnerable to transition risk)	Real estate valuations in regions dependent on high transition risk industries such as coal are likely to decline, while default rates are also likely to increase.	MT-LT
Natural gas	In the short to medium term natural gas is likely to play a role as a transition fuel, however in the long term demand will fall due to its emissions profile.	LT

Climate-sensitive sectors *continued*

The table below provides an analysis of FirstRand's exposure to sectors that face high and elevated levels of transition risk.

Sector R'm	June 2021				June 2020	
	Drawn exposure	% of total group loans	Average rating	Average maturity (yrs)	Drawn exposure	% of total group loans
High transition risk						
Upstream oil and gas*	2 883	0.2	BB-	3.0	7 651	0.6
Down and midstream oil and gas*	5 757	0.5	BB-	1.0	9 843	0.8
Thermal coal mines**	2 009	0.2	B+ (upper)	2.8	1 756	0.1
Fossil fuels excl natural gas	10 649	0.9	BB-	1.9	19 250	1.5
Coal-fired electricity generation	2 999	0.2			5 016	0.4
Gas-fired electricity generation	2 277	0.2			3 070	0.2
Fuel-powered generation	594	0.1			637	0.1
Total electric utilities	5 870	0.5	B	5.6	8 723	0.7
Chemicals and synthetic fuels	503	0.0	BB (upper)		4 004	0.3
Steel – primary manufacturers	215	0.0	B- (upper)		310	0.0
Cement	2 575	0.2	B		2 998	0.2
Total high transition risk	19 812	1.6	B+	3.0	35 285	2.7
Elevated transition risk						
Natural gas	933	0.1	BBB+	11.9	783	0.1
Transport and aviation	3 539	0.3	B- (upper)	3.3	4 227	0.3
Vehicle finance	127 088	10.0			131 128	10.0
Vulnerable residential real estate	6 477	0.5			6 664	0.5
Total elevated transition risk (excluding Aldermore)	138 037	10.9			142 802	10.9

* The decline in exposures is primarily driven by settlements and pre-payments of several large client facilities.

** Defined as companies where the consolidated revenue derived from thermal coal mining exceeds 30% of total revenues. Changes in exposure reflect movements in the general liquidity needs of clients as well as industry consolidation activity.

The identification and categorisation of climate exposures have been refined, including the reclassification of certain diversified counterparts based on a reassessment of their underlying operations. Comparative periods have been updated accordingly.

PHYSICAL RISK

Rationale for high and elevated physical risk sectors

Sector	Rationale	Horizon
		MT-LT
Agriculture	Changes to rainfall patterns (causing increased flooding or water shortages) as well as rising temperatures will affect crop yields.	MT-LT
Real estate (VULNERABLE TO PHYSICAL RISK)	An increase in the frequency of natural disasters, in particular wildfires and flooding, will negatively impact real estate valuations in vulnerable areas.	MT-LT

The table below provides an analysis of FirstRand's South African exposure to sectors that face high and elevated levels of physical risk.

Sector R'm	June 2021	
	Drawn exposure	% of total group loans
High physical risk		
Corporate agriculture	4 362	0.3
Commercial agriculture	33 088	2.6
High flood risk residential real estate	1 670	0.1
High fire risk residential real estate	81	0.0
Total high physical risk	39 201	3.0
Elevated physical risk		
Elevated flood risk residential real estate	16 903	1.3
Elevated fire risk residential real estate	383	0.0
Total elevated physical risk	17 286	1.3

Climate-sensitive sectors *continued*

The following case studies provide detailed views of physical risks in South Africa based on portfolio geo-mapping and an assessment of climate hazards.



CASE STUDY

Home-loans flood risk

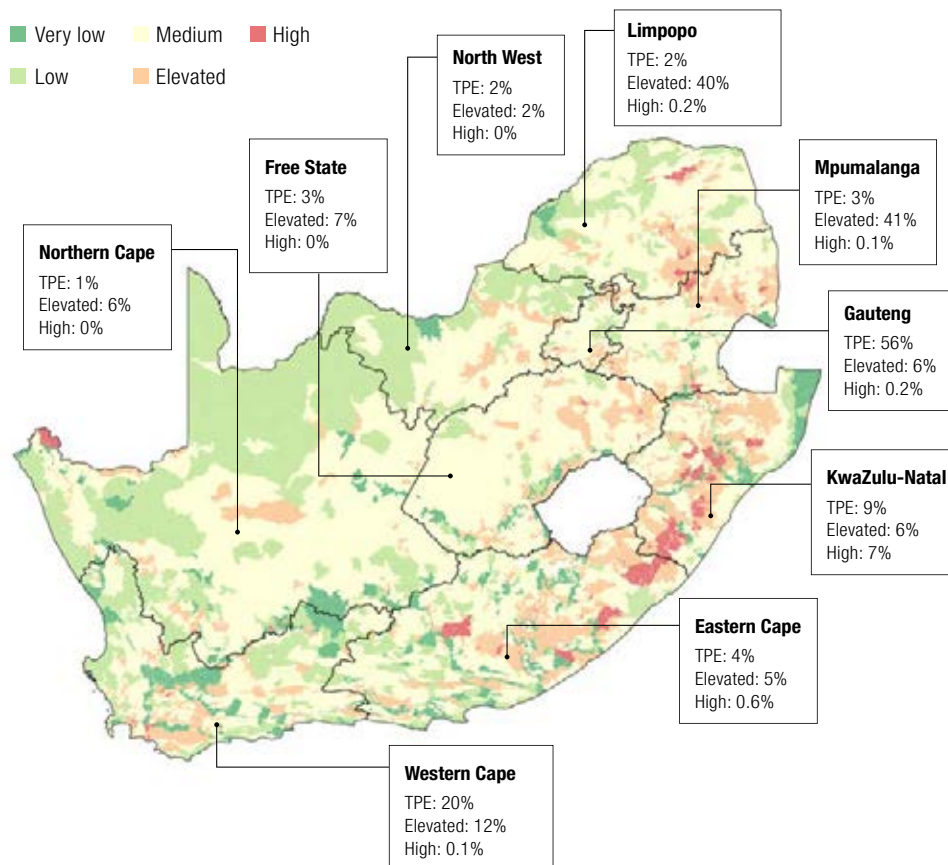
The map overlays FirstRand's South African residential mortgages exposures onto an assessment of flood risk. The flood risk hazard index developed by the Council for Scientific and Industrial Research (CSIR) combines topographic data, catchment characteristics and rainfall data to determine the risk of flooding. The CSIR data indicates that whilst climate change is likely to cause the western and south-western areas of the country to experience a decrease in rainfall, extreme daily rainfall will increase in many parts of the country, particularly over the Highveld and northern Drakensberg, and in a broad belt along the south-eastern and eastern coast. Of the total home-loans book, 1% is exposed to high flood risk and 8% to elevated flood risk. The group is currently assessing the impact of flood events on portfolio default rates and collateral values.

Key:

TPE: Total provincial exposure relative to the country exposure for the mortgages loan book

Elevated: Financial exposure (%) to elevated flood risk within province

High: Financial exposure (%) to high flood risk within province



Climate-sensitive sectors *continued*



CASE STUDY

Home-loans fire risk

The map overlays FirstRand's South African residential mortgages exposures onto an assessment of future fire risk till 2030. Fire risk is determined relative to the number of fire danger days generated using downscaled climate models from the Agricultural Research Council. A low mitigation forecast is used as it is the most likely scenario in the medium term (i.e. significant mitigation is not expected by 2030).

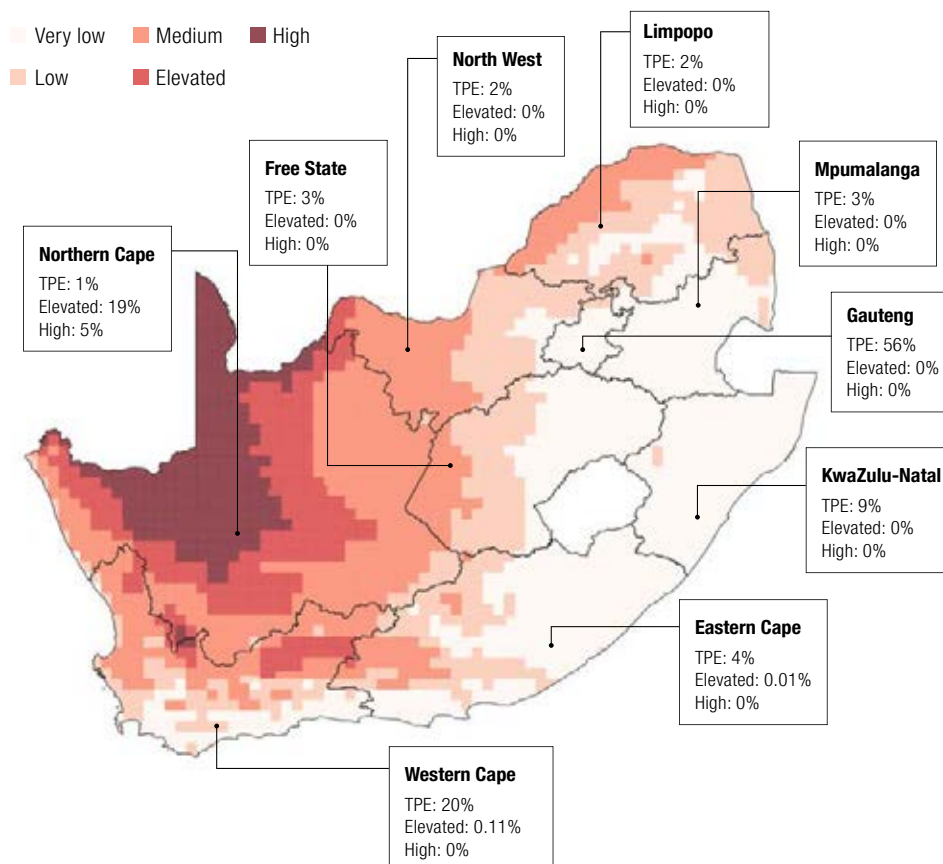
Climate change is likely to result in longer warmer and drier periods and the CSIR data indicates that fire risks will increase over time. The group is currently assessing the impact of historical fire events on portfolio default rates and collateral values.

Key:

TPE: Total provincial exposure relative to the country exposure for the mortgages loan book

Elevated: Financial exposure (%) to elevated fire risk within the province

High: Financial exposure (%) to high fire risk within the province



Climate-sensitive sectors *continued*



CASE STUDY

Agriculture drought risk

The map overlays FirstRand's South African commercial agricultural exposures onto an assessment of projected changes in rainfall to 2030 generated using downscaled climate models from the Agricultural Research Council. The data projects that the north-east of South Africa is likely to experience higher levels of rainfall, whilst the south-west is likely to be significantly drier. In total 16% of the agriculture portfolio is exposed to future drier conditions and 1% to significant decreases in rainfall by 2030.

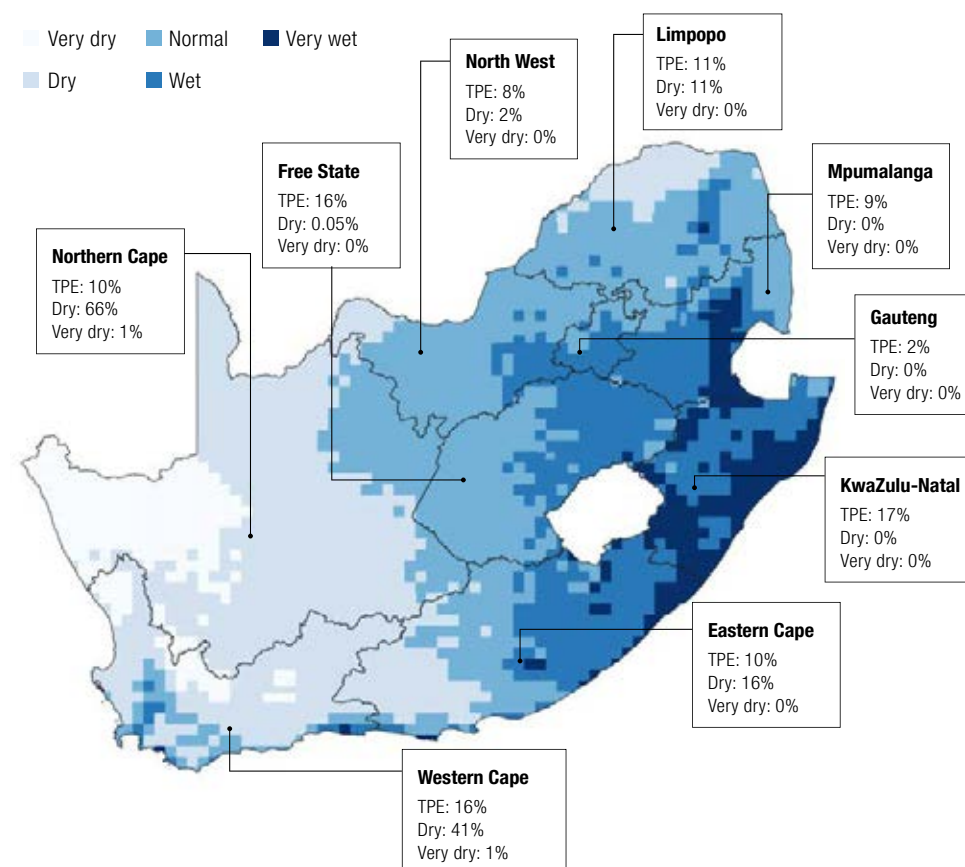
The business is working to fully assess the impact and incorporate the results into origination strategies and new product development.

Key:

TPE: Total provincial exposure relative to the country exposure for the agricultural portfolio

Dry: Financial exposure (%) to decreased rainfall areas within province

Very dry: Financial exposure (%) to significantly decreased rainfall within province





6

Metrics and targets

Provides the metrics and targets used to assess and manage relevant climate-related risks and opportunities.

- ④ Financed emissions
- ④ Own emissions

Financed emissions

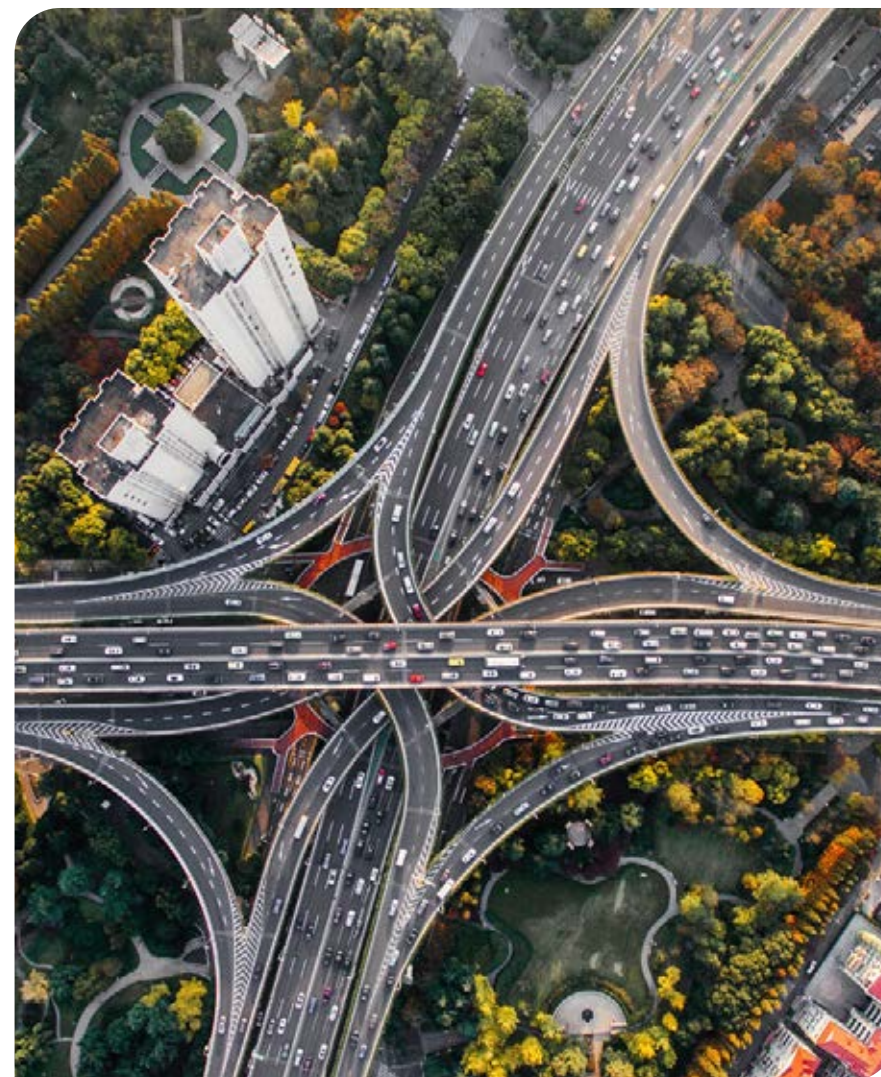
FirstRand is a member of PCAF and has used its methodologies for calculating financed emissions in high-impact or material asset classes, including the corporate and commercial loan portfolio, motor vehicle loans and mortgages. PCAF is a global partnership of financial institutions working together to develop and implement a harmonised approach to assess and disclose the GHG emissions associated with loans and investments. The development of this methodology is ongoing, and the indicated ranges reflect estimated uncertainties which will be refined in future disclosures.

FirstRand utilises these estimates to assess whether its financed emissions are aligned with its intended role in the South African financial marketplace and to track the contribution of high emission intensity sectors.

The table below provides a view of emissions (scope 1 and 2) attributable to the South African advances portfolio, based on the proportional amount of funding provided by the group relative to the total asset or company value. The portfolios assessed make up R756 billion of FirstRand's total R930 billion advances in South Africa.

June 2021 (Mt CO ₂ e)	
└─ Attributable to FirstRand ─┐	
Retail mortgages	3.2 – 4.7
Vehicle finance	1.9 – 2.8
Corporate and commercial loans	5.8 – 13.4

The group finances a low share of the total assets in high emission intensity industries in South Africa, such as thermal coal mining, electricity generation from fossil fuels, chemical and synthetic fuel production and oil and gas. In many cases these assets are financed directly by the debt capital and equity markets. As a result, FirstRand's overall share of South Africa's emissions is lower than the group's share of financing in the country.



Financed emissions *continued*

METHODOLOGY NOTE

The methodologies used to quantify financed emissions are in their early stages. This means that there are several limitations with data availability. For some sections of the portfolio, for example, large listed corporates which disclose their own emissions it is somewhat simpler to derive FirstRand's share of their emissions, for other asset classes proxies and alternative methodologies are used. This impacts the coverage level of the calculation.

The following approaches have been utilised across the portfolio to estimate gross emissions. Only scope 1 and 2 emissions are considered to minimise complexity in aggregation across sectors and asset types:

- + Corporate and commercial loans – two data sources are used to derive the estimated attributable range:
 - i. **MSCI company emissions metrics:** This covers most South African listed corporates. For the rest of the portfolio, sector-based emissions intensity factors relative to assets were derived from the listed universe, and where not available an average intensity factor was applied.
 - ii. **PCAF emissions factors:** Intensity factors relative to a company's assets are used to estimate emissions. These factors are sector specific, differentiating between high-intensity sectors like energy generation from thermal coal and lower-intensity sectors. The factors are also region specific.
- + **Residential mortgages:** South Africa does not

have an energy efficiency ratings categorisation in residential buildings or requirements to measure this. To overcome this data gap the group developed an internal classification system to differentiate between property types (see case study for additional detail).

- + **Vehicles:** Emissions are estimated based on an analysis of vehicle types and average distance travelled.

For mortgages and vehicle finance, net emissions were calculated from gross emissions based on the group's share of financing using a loan to value (LTV) adjustment.

While the above methodology provides a baseline, going forward focus will be placed on calculating and disclosing financed emissions intensity relative to advances for sectors within the portfolio. This metric allows for better comparison across various portfolio sizes and across different time periods.

Although not disclosed, the group has also adopted a weighted average carbon intensity methodology to measuring the footprint of its sovereign debt portfolio. This calculates emissions (on a production basis) relative to GDP and weighted by the relative size of assets held. This metric is useful as it allows for comparisons between similar types of assets and portfolios, regardless of portfolio size. The weighted intensity is compared to a suitable benchmark that incorporates the regulatory minimum investment weights and is tracked over time.

CASE STUDY

Residential mortgages

South Africa does not have a residential building energy efficiency ratings system or regulatory requirements to measure this. One of the data challenges for the group is that the recording of energy-saving equipment (solar geysers, etc.) in the mortgage book is not complete or consistent.

To overcome some of these data challenges, existing data fields were used to estimate an energy efficiency score for each home. These fields included building age, location and presence of energy-efficient technologies such as solar geysers and solar panels.

These estimated energy efficiency scores were compared and correlated to the European energy efficiency system for residential properties and the associated average energy consumption. The outcome was a categorisation of all portfolio mortgages into high, medium and low energy efficiency with projected annual energy per m².

Financed emissions in the mortgage portfolio were calculated as follows:

- + **For scope 1 emissions,** a South African-specific emissions factor from the PCAF database was used.

- + **For scope 2 emissions,** a South African-specific electricity emissions factor (kg CO₂/kWh) from the national energy provider was used.

The initial financed emissions figure for the mortgage portfolio will be used as a baseline to understand and track the emissions trend over time, and to develop finance solutions for customers to assist in reducing their emissions.

Going forward, these calculations will be refined by improved data capturing processes and systems at loan origination, and through further research into observable drivers of household energy consumption and emissions.

Own emissions

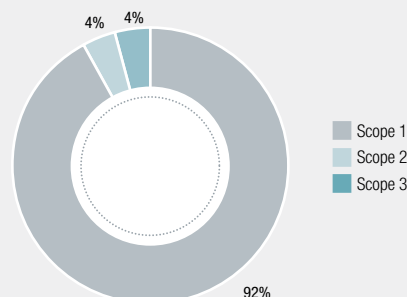
FirstRand has committed to ensuring that climate change risks (physical and transition risks) are prudently considered, understood and managed in its own operations.

This includes the impact of the group's operations on the environment and on climate change. FirstRand is mitigating these impacts by measuring its operational greenhouse gas emissions and taking steps to reduce emissions, build climate resilience, and increase the efficient use of resources. The group's emissions are calculated in line with GHG protocol standards.

(Metric tonnes of CO ₂ equivalents)	2021	2020	% change
Scope 1 emissions			
Fuel use in generators	744.57	2 634.38	-72
Business fleet travel	4 463.11	5 101.84	-13
Refrigerants	1 299.92	564.80	130
Scope 1 TOTAL	6 507.60	8 301.02	-22
Scope 2 emissions			
Electricity – buildings	145 608.75	163 370.66	-11
Electricity – ATMs	7 658.95	7 690.47	–
Scope 2 TOTAL	153 267.70	171 061.13	-10
Scope 3 emissions			
Paper use	795.96	1 347.62	-41
Business road travel	1 708.46	4 114.44	-58
Business air travel	457.14	9 231.50	-95
Fuel well to tank emissions	1 279.94	1 884.86	-32
Electricity transmission losses	2 947.46	3 227.57	-9
Scope 3 TOTAL	7 188.95	19 805.99	-64
Total carbon emissions South African operations	166 964.25	199 168.14	-16
Total CO₂-e emissions per full-time employee (FTE)	4.76		

Scope 1, 2 and 3 emissions to be disclosed in the report to society are subjected to assurance by PwC.

*FirstRand carbon footprint
2021 financial year
(South African operations)*



There is 16% year-on-year decrease in emissions for South African operations, with a 10% reduction in emissions from electricity consumption. This reduction can be attributed to ongoing improvements in energy efficiencies and the additional use of renewable energy in campus buildings, as well as the effect of Covid-19 pandemic work-from-home arrangements.

Despite the decrease in electricity consumption in South African operations, scope 2 emissions now make up 92% of the total emissions from South African operations (compared to 86% in the previous financial year). This is due to the significant reduction in scope 1 and scope 3 emissions compared to the previous financial year (a 22% and 64% reduction respectively). Lockdown travel restrictions and work-from-home arrangements resulted in a reduction in all business-related travel as well as paper usage.

The group aspires to be net zero by 2030 in its South African operations and is assessing innovative and effective solutions to reach this goal. The operations strategy is currently being redefined to align with this goal.

As a first step, the group has set an internal shadow carbon price that will be used to consider carbon costs during the evaluation of new projects and infrastructure for the group's operations. This will help incentivise and prioritise low-carbon projects and support emission reductions.

+ A shadow carbon price is a hypothetical monetary value for a tonne of CO₂ that accounts for the external social, environmental and economic costs of carbon emissions and climate change. This price incorporates the value of carbon (GHG emissions) into investment or project decisions (research and development), infrastructure and financial assets to cost for climate change impacts and drive emissions reductions.

+ FirstRand's shadow carbon price has been determined in line with international best practice in carbon pricing and what is needed to drive emissions reductions to meet the Paris Agreement targets of preventing a 2°C temperature change.

In addition, suppliers to the group sign a code of conduct to minimise their impact on the environment and comply with all regulations.



7

Climate roadmap

Tracks the group's progress against its five-year roadmap.

Climate roadmap

Delivery against the group's climate roadmap has remained on track. The schematic provides a full view of the roadmap. It is worth noting that for several deliverables, the group recognises that additional depth and ongoing improvement is necessary to keep pace with the evolving climate risk and opportunity landscape. These items are indicated by the ongoing icon, and FirstRand will continue to work on enhancing the outputs and processes that have been established over the 2021 financial year. In addition, the group remains committed to building capacity. Focus in the coming financial year will be placed on phase 3 ambitions. These objectives build on and deepen the progress already made to date.

	Phase 1	Phase 2	Phase 3	Phase 4
	High-level design and analysis	Analysis of portfolio exposure and risk prioritisation	Ongoing scenario analysis, measurement and incremental analysis of all portfolio exposures	Ongoing reinforcement and long-term strategy development
	FY 2020	FY 2021	FY 2022 – 2023	FY 2024 – 2025
GOVERNANCE	<ul style="list-style-type: none"> Established climate change specialist committees. Integration of climate risk into existing board governance structures. Ongoing board training on relevant climate-related risks and opportunities. 	<ul style="list-style-type: none"> Cascade climate change considerations (risk and opportunity management) into segment committees. Develop strategies for climate change adaptation and mitigation specific to segments. Define roles, responsibilities and mandates. Ongoing policy development. 	<ul style="list-style-type: none"> Measure progress. Internal audit of climate change management processes. Ongoing board and management oversight. 	<ul style="list-style-type: none"> External assurance of climate-related finance disclosure in the annual financial statements.
STRATEGY	<ul style="list-style-type: none"> Elevate climate change as a strategic risk and opportunity, and a long-term driver of financial and non-financial risk. Stakeholder engagement and establishment of the relevant technical partnerships, e.g. UNEP-FI* and PCAF**. Benchmarking – global and local peer gap analysis, emerging green taxonomies from different regulators, climate disclosure and sustainable finance. The group's strategy includes supporting climate resilience and transition to a lower-carbon economy. 	<ul style="list-style-type: none"> Define strategic climate objectives and risk appetite. Develop climate change policy. Assess climate risk within agriculture and commercial property portfolios. Further embed climate change considerations – incorporating externalities – into the pricing of financial resources and performance measurement. Build capacity and train risk professionals on climate change. Integrate group climate change strategy into investment and insurance activities. 	<ul style="list-style-type: none"> Define climate metrics and targets. Align origination strategies with the group's understanding of climate change considerations. Ensure that performance measurement and remuneration promote and reward sustainable value creation. Integrate climate targets and/or goals into remuneration models. Build capacity and train risk professionals on climate change. Board-level agreement through Stratco that the level of climate-related disclosure is proportionate to the materiality of climate-related risks and opportunities and complies with mandatory reporting requirements. Consideration of mandatory climate-related reporting in other jurisdictions in which FirstRand operates. 	<ul style="list-style-type: none"> Ongoing assessment of the group's climate strategy and alignment with desired climate outcomes.

* The United Nations Environment Programme Finance Initiative.
** Partnership for Carbon Accounting Financials.

Climate roadmap *continued*



	Phase 1	Phase 2	Phase 3	Phase 4
	High-level design and analysis	Analysis of portfolio exposure and risk prioritisation	Ongoing scenario analysis, measurement and incremental analysis of all portfolio exposures	Ongoing reinforcement and long-term strategy development
	FY 2020	FY 2021	FY 2022 – 2023	FY 2024 – 2025
RISK MANAGEMENT	<ul style="list-style-type: none"> ✓ Clarify climate terminology, incorporate climate change with other enterprise risk types. ✓ Identify processes to determine which climate risks and opportunities could have a material financial impact on the group. ✓ Identify climate scenarios to inform the group's assessment of climate change materiality. ✓ Start development of transition and physical risk impact measurement methodology. 	<ul style="list-style-type: none"> ✓ Describe relevant short-, medium- and long-term time horizons, considering the useful life of the group's assets and infrastructure. ✓ Define and embed the process for identifying, prioritising and managing climate-related risks. ⚙ Incorporate climate risk into the group's environmental and social risk assessment (ESRA) due diligence process, materiality assessment and credit modelling. ✓ Risk prioritisation and heat mapping (geographical location, sector-specific vulnerability assessment). 	<ul style="list-style-type: none"> + Continue to improve data systems and reporting. + Understand and prepare for future prudential or regulatory reporting requirements. + Review and improve climate assessment within ESRA due diligence process. + Develop integrated assessment models, portfolio carbon accounting, stress testing, sector analysis and internal capital adequacy assessment processes to model the impact of the transition to a low-carbon economy on the group's lending, investment and insurance portfolios. 	<ul style="list-style-type: none"> + Continue to improve data systems and reporting. + Effectively embed climate considerations into relevant business processes, including risk management, monitoring and reporting. + Ongoing awareness and capacity building.
RISK METRICS AND TARGETS	<ul style="list-style-type: none"> ✓ Publication of a thermal coal financing policy. ✓ Set a science-based emissions reduction target for group's own operations scope (1 and 2). ✓ Disclose group's operational carbon footprint. 	<ul style="list-style-type: none"> ✓ Publication of energy financing policy. ✓ Initial assessment of carbon emissions in the group's portfolio. ⚙ Define metrics to assess the impact of (transition and physical) climate-related risks on the group's lending and other financial intermediary business activities in the short, medium and long term. 	<ul style="list-style-type: none"> + Ongoing policy review. + Ongoing assessment of carbon emissions in the group's portfolio. 	<ul style="list-style-type: none"> + Sectoral metrics and targets. + Set a science-based emissions reduction target for the group's financed emissions. + Consider appropriate decarbonisation targets.
CLIMATE FINANCE/ INNOVATION	<ul style="list-style-type: none"> ✓ Raise awareness about sustainable development opportunities (including climate mitigation and adaptation). ✓ Work with investors and funding partners to develop and support sustainable finance. 	<ul style="list-style-type: none"> ⚙ Develop a group climate change taxonomy (including green, brown and blue asset definitions) for incorporation into ESRA and origination process. ✓ Develop a sustainable finance debt issuance framework, with a focus on innovation for climate adaptation and mitigation. ⚙ Consumer engagement. 	<ul style="list-style-type: none"> + Measure social and environmental impact of climate financing activities. + Identify investors with climate finance objectives and align to opportunities. + Refine assessment, approval and data management processes for climate finance. 	<ul style="list-style-type: none"> + Define climate finance targets. + Ongoing measurement of success. + Ongoing stakeholder engagement.

Complete
 Ongoing



8

Moving forward

The Chief Risk Officer provides insight into FirstRand's future focus areas for climate change.

➤ Message from the group CRO

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FirstRand's first standalone TCFD report is an important milestone in the group's climate change management journey which is part of the group's broader focus on environmental challenges including biodiversity and water security.

GERT KRUGER | CRO



This report is the culmination of extensive internal research, analysis and engagement at employee, management and board level.

IT HAS ALSO BEEN SHAPED BY ONGOING ACTIVE ENGAGEMENT WITH A RANGE OF STAKEHOLDERS, INCLUDING:

- + the group's large corporate and state-owned enterprise (SOE) clients on their transition plans;
- + FirstRand's local and foreign institutional shareholders to understand their mandates regarding climate change;
- + NGOs active in the climate change movement to understand their focus areas;
- + industry experts and think-tanks such as the National Business Initiative to understand the nuances of the overall transition process, and
- + government departments and regulators on envisaged policy approaches.

This engagement has allowed the group to better inform its approach. Resulting in more granular and objective data-driven base case scenarios for the climate change transition of South Africa, where the majority of the group's financed emissions are located. These scenarios represent an important reference point for client discussions and engagement with other internal and external stakeholders.

The group has made good progress over the past year, including issuing climate policies, articulating its climate commitments, designing climate solutions for its clients and enhancing its financial resource management practices to include climate change and climate risk modelling. Despite all these achievements, there is still a long journey ahead.

- + From a technical perspective the most complex area in which to make further progress is to expand the coverage of the group's financed emissions baseline and to resolve complexities inherent in asset classes, such as financial institutions and sovereign exposures. This will aid more granular target setting.
- + The group is actively working with its clients to better understand their transition plans and needs. The group is also encouraging clients to adopt the TCFD framework and to increase their public disclosure of climate strategies and metrics (including scope 1, 2 and 3 emissions). This increased market transparency will allow for better product design to support the transition. It will also improve the accuracy of reported emissions by corporate clients and reduce the reliance on modelled emissions.
- + The group will also continue to improve scenario analysis and stress testing sophistication, to better inform the group's understanding of physical and transition risks.
- + There has been a great deal of progress on the scientific assessment and practical thinking on just energy transition considerations. The group expects that these areas will remain active discussion points going forward.

The COP26 conference will give additional impetus to climate change activities across the globe and the group's strategy will dynamically be adjusted to take cognizance of these developments. FirstRand commits to continue its active focus on climate change and through ongoing engagement refine its approach to ensure it can play a meaningful role in the overall transition to a low-carbon economy. The group also remains committed to addressing broader environmental challenges, such as biodiversity loss and water scarcity.



9

Alignment to TCFD recommendations

Maps the group's alignment with the TCFD framework.

Alignment to TCFD recommendations

Recommendation	FirstRand approach	Pages
Governance		
a. Describe the board's oversight of climate-related risks and opportunities.	FirstRand's board and board level committees provide robust and regular oversight of climate-related risks and opportunities.	21 – 24
b. Describe management's role in assessing and managing climate-related risks and opportunities.	Management of climate-related risks and opportunities resides with FirstRand's strategic executive committee and is driven by the group CRO.	21 – 24
Strategy		
a. Describe the climate-related risks and opportunities the organisation has identified over the short, medium and long term.	The group has identified the key climate-related opportunities and risks and quantified exposures to climate-sensitive sectors. Significant progress has been made in analysing the energy pathway for South Africa (the sector with the highest transition risk in FirstRand's biggest operating jurisdiction). This foundation is being enhanced by expanding the detailed analysis to other sectors and operating jurisdictions.	25 – 33 34 – 46
b. Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning.	The impact of climate change on FirstRand has been assessed through the lenses of loan origination and credit risk (which make up a significant part of the group's activities). The group is in the process of assessing the impact on other asset classes and risk types.	42 – 46
c. Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	The group is building out its climate scenario analysis capabilities and embedding it into the internal capital adequacy assessment process (ICAAP). Future disclosures will expand on how resilient the group's strategies are to climate risks.	38 – 39

Recommendation	FirstRand approach	Pages
Risk management		
a. Describe the organisation's processes for identifying and assessing climate-related risks.	FirstRand views climate risk as an amplifying factor in other risk types. As a material cross-cutting risk, the identification, monitoring, management and mitigation of environmental and climate risks are fully integrated as part of ERM. The group's ESRA transactional due diligence process was refined to provide enhanced focus and review on climate-sensitive industries and in particular fossil fuels. In addition, rating systems were refined to incorporate a qualitative rating adjustment to reflect elevated climate risk.	34 – 46
b. Describe the organisation's processes for managing climate-related risks.		
c. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.		
Metrics and targets		
a. Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.	FirstRand utilises a wide range of metrics to assess climate risks and opportunities. The group is working to enhance the sophistication of these metrics to allow for a more nuanced assessment of the group's portfolios and activities relative to Paris-compliant pathways.	27 – 28 34 – 46 47 – 50
b. Disclose scope 1, scope 2 and, if appropriate, scope 3 GHG emissions, and the related risks.	Significant progress has been made on measuring own emissions and financed emissions. Ongoing work is focused on additional granularity for financed emissions as well as methodologies for sectors such as sovereigns and financial institutions that are hard to aggregate.	47 – 50
c. Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.	The group's targets are anchored in the ambition to be net zero by 2050. These are supported by subtargets throughout the document that aim to increasingly channel financing towards a low-carbon economy.	7, 27, 28, 33

Alignment to TCFD recommendations *continued*

IMPORTANT NOTICE – BASIS OF PREPARATION:

1. The preparation of this report requires the application of a number of key judgements and also requires assumptions and estimates to be made. The key areas involving a higher degree of judgement or complexity, or where assumptions and estimates are significant to this report, include: measurement of financed emissions, future physical risk assessments, transition risk scenarios and the classification of clients to climate-sensitive sectors. There is a risk that the judgement exercised, or the estimates or assumptions used, may subsequently turn out to be incorrect. These judgements and resulting data presented in this report are not a substitute for judgements and analysis made independently by the reader.
2. Reported numbers reflect best estimates and judgements at the given point in time.
3. This report uses models, external data and other sources/methodologies, each of which are subject to ongoing adjustment and modifications beyond our control.
4. The outputs of these models, external data and other sources/methodologies can be materially affected by the quality of the underlying data used. They may be subject to uncertainties affecting the accuracy of their outputs. There is a risk that the outputs may be misinterpreted or misused when dealing with developing themes, such as climate-related disclosures, due to the lack of market standards, historical reference points and benchmark data, as well as the inability to rely on historical data as a strong indicator of future trajectories, in the case of climate change and its evolution.
5. In general, the quality of the data relied upon in climate reporting is often not yet of the same standard as more traditional financial reporting and therefore presents an inherent limitation to the performance reported in this report.
6. Climate reporting across the industry as a whole is not yet subject to the same accounting rigour or globally accepted principles and rules as financial reporting. Accordingly, there is a lack of commonly accepted reporting practices for the group to follow or align to. We will continue to review available data sources and enhance our methodology and processes to improve the robustness of the performance disclosed over time.
7. This report and the information contained within it are unaudited.
8. Further development of accounting and/or reporting standards could materially impact the performance metrics, data points and targets contained in this report.
9. As standards and practices continue to evolve, it may mean subsequent reports do not allow the reader to compare performance metrics, data points or targets from one reporting period to another, on a direct like-by-like basis.

