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Acronyms and abbreviations

AF	Adaptation Fund	FSCA	Financial Sector Conduct Authority
AfDB	African Development Bank	GB	Green Bonds
AFOLU	Agriculture, Forestry and Other Land Use	GCF	Green Climate Fund
AIIM	African Infrastructure Investment Managers	GDP	Gross Domestic Product
BASA	Banking Association of South Africa	GEF	Global Environment Facility
BUSA	Business Unity South Africa	GEPF	Government Employees Pension Fund
CBT	Climate Budget Tagging	GFT	Green Finance Taxonomy
CDM	Clean Development Mechanism	GH2	Green Hydrogen
CF	Climate Finance	GHG	Greenhouse Gas
CFA	Climate Finance Accelerator	GS	Gold Standards
City of JHB	City of Johannesburg	IDC	International Data Corporation
COAS	Carbon Offset Administration System	IEP	Integrated Energy Plan
CoCT	City of Cape Town	IFC	International Finance Corporation
COP	Conference of the Parties	IFIs	International Financial Institution
CPI	Climate Policy Institute	IMF	International Monetary Fund
CTF	Clean Technology Fund	IPC	International Partners Group
DBSA	Development Bank of Southern Africa	IPCC	Intergovernmental Panel of Climate Change
DFFE	Department of Forestry Fisheries and the Environment	IPG	International Partners Group
DFIs	Development Financial Institutions	IPPPP	Independent Power Producer Procurement Programme
DMRE	Department of Mineral Resources and Energy	IPPs	Independent Power Producers
DoE	Department of Energy	IPPU	Industrial Processes and Product Use
EGIP	Embedded Generation Investment Programme	IRP	Integrated Resource Plan
EPPF	Eskom Pension and Provident Fund	JSE	Johannesburg Stock Exchange
ESG	Environmental, Social and Governance	JET	Just Energy Transition
EU	European Union	JET IP	Just Energy Transition Investment Plan
EV	Electric Vehicle	LCVs	Light Commercial Vehicles
FIRST	Facility for Investment in Renewable Small Transactions	LEDS	Low Emission Development Strategy
FSB	Financial Services Board	MCSA	Minerals Council South Africa

MFIs	Multilateral Financial institutions	SCF	Supply Chain Finance
MFMA	Municipal Finance Management Act	SCCF	Special Climate Change Fund
MTEF	Medium Term Expenditure Framework	SDGs	Sustainable Development Goals
MTSF	Medium-Term Strategic Framework	SECO	Swiss State Secretariat for Economic Affairs
MW	Megawatts	SIDA	Swedish International Development Cooperation Agency
NBI	National Business Initiative	SMEs	Small and Medium Enterprise
NCCAS	National Climate Change Adaptation Strategy	SMMEs	Small Medium and Micro-Enterprises
NCCRP	National Climate Change Response Policy Paper	SOEs	State-Owned Enterprises
NDC	Nationally Determined Contribution	SP-I4P	Small Projects Independent Power Producer Procurement Programme
NEV	New Energy Vehicles	SWOT	Strengths, Weaknesses, Opportunities and Threats
NGOs	Non-Governmental Organisations	tCO2e	Tonnes of Carbon Dioxide Equivalent
NT	National Treasury	TIPS	Trade Industrial Policy Strategists
OECD	Organisation for Economic Co-operation and Development	UKCI	UK Climate Investments
PCC	Presidential Climate Commission	UN	United Nations
PFM	Public Financial Management	UNDP	United Nations Development Programme
PPPs	Public-Private Partnerships	UNEP	United Nations Environment Programme
PV	Photovoltaic	UNFCCC	United Nations Framework Convention on Climate Change
P4RR	Partnership for Risk & Resilience	VCS	Verified Carbon Standard
REI4P	Renewable Energy Independent Power Procurement Programme	UPRI	University Panel for Responsible Investment
SADC	South African Community	ZAR	South African Rand
SA SME	South Africa Small and Medium Enterprise		
SAAM2035	South Africa Automotive Master Plan 2035		
SAIA	South African Insurance Association		
SAREM	South Africa Renewable Energy Masterplan		

Key Definitions

Adaptation Activities	Activities that target changing processes, practices or structures to moderate potential climate damages or increase the benefit from opportunities associated with current or future climate change impacts. ¹
Blended Finance	Use of Development finance to attract and mobilise additional investment towards sustainable development in emerging economies. It does so by attracting commercial capital into projects that address sustainable development goals, while ensuring financial returns to investors. ²
Climate Finance	South Africa's National Treasury defines climate finance as local, national, or transnational financing drawn from public, private, and alternative sources of funding that are intended to cover the costs of transitioning to a low-carbon global economy and to adapt to, or build resilience against, current and future climate change impacts. While the report focuses on climate finance in the broad sense, encompassing financial resources allocated to support efforts towards reducing greenhouse gas (GHG) emissions (mitigation) and adapting to the adverse impacts of climate change (adaptation), it covers a wide range of activities and sectors that contribute to the global goal of transitioning to a low-carbon and climate-resilient economy. Thus, where transition finance or green finance is mentioned, these typologies form a subset of climate finance given the goals align with the broader environmental and climate goals of reducing greenhouse gas emissions, adapting to climate change, and promoting environmental sustainability.
Dual Benefit Activities	Activities that present both a mitigation and adaptation target or end goal. Currently in Africa representing 12% of the total climate investments are dual benefitting programs or activities. ³
Just Energy Transition (JET)	The JET refers to South Africa's transition in the energy sector as the country moves away from coal into cleaner energy sources. It is a central pillar of work for the country aiming to ensure that communities tied to high emitting energy industries are not left behind in the shift to renewable energy. Therefore, the JET in South Africa focuses on being a driver for fair and better jobs, including social justice and alleviating poverty ^{4,5}
Low Carbon Activities	Economic Activities that provide goods and services that generate a significantly reduced amount of emissions of greenhouse gases, mainly carbon dioxide ⁶
Mitigation Activities	Activities that aim to reduce or prevent emission of GHG. This includes the use of new technologies and renewable energies, utilising older technologies in a more energy efficient manner, or changing management and behavioural practices. ⁷
Transition Finance	Finance raised from corporates aimed to support net-zero transition projects or activities. Projects that are in line with the goal from the Paris Agreement and based on robust and quantifiable corporate climate transition plans. ⁸

¹UNFCCC, 2023. Adaptation and Resilience. Available: <https://unfccc.int/topics/adaptation-and-resilience/the-big-picture/introduction#:~:text=It%20refers%20to%20changes%20in,and%20future%20climate%20change%20impacts>. Accessed September 2023

²OECD, 2023. Blended Finance. Available: <https://www.oecd.org/dac/financing-sustainable-development/blended-finance-principles/> Accessed September 2023

³Meattle et al., 2022. Landscape of Climate Finance in Africa. Available: <https://www.climatepolicyinitiative.org/publication/landscape-of-climate-finance-in-africa/> Accessed September 2023

⁴ Presidential Climate Commission, 2023. Achieving a Just Energy Transition. Available: <https://www.climatecommission.org.za/just-energy-transition> Accessed September 2023

⁵Presidential Climate Commission Report, 2022. A Framework for a Just Transition in South Africa. Available: <https://pccommissionfloimgix.net/uploads/images/A-Just-Transition-Framework-for-South-Africa-2022.pdf> Accessed September 2023

⁶Office for National Statistics, 2019. Low Carbon and Renewable Energy Economy. Available: <https://www.ons.gov.uk/economy/environmentalaccounts/bulletins/finalesimates/2017#:~:text=The%20low%20carbon%20economy%20is,greenhouse%20gases%3B%20predominantly%20carbon%20dioxide>. Accessed September 2023

⁷UNEP, 2023. Mitigation. Available: <https://www.unep.org/explore-topics/climate-action/what-we-do/mitigation#:~:text=Climate%20Change%20Mitigation%20refers%20to,management%20practices%20or%20consumer%20behavior>. Accessed September 2023

⁸OECD, 2022. OECD Guidance on Transition Finance Ensuring Credibility of Corporate Climate Transition Plans. Available: <https://www.oecd-ilibrary.org/sites/b0d62d2b-en/index.html?itemId=/content/component/b0d62d2b-en> Accessed October 2023

Purpose of the report

Climate Arc, in collaboration with the African Climate Foundation, is considering a Conversation Tour in South Africa. The tour's goal is to bring together stakeholders from South Africa's financial sector to promote climate-aligned finance. This initiative involves hosting events and workshops to engage private financial institutions, regulators, policymakers, and non-profit organisations.

The objective of this report is to conduct a thorough survey in South Africa to assess the challenges and opportunities in advancing large-scale financing for a Net Zero economy. The study will identify sectors in need of funding, examine the roles of different financing types, assess the engagement of development institutions, analyse climate-related policies and commitments, and explore international support for climate action.

Executive summary

South Africa is actively addressing climate change, with a strategic vision that prioritises emission reduction and resilience enhancement. This report delves into the multifaceted climate finance landscape of South Africa, highlighting the intricate interplay of challenges, opportunities, and prevailing finance gaps to financing the transition to Net Zero.

Policies and sectors towards net-zero

South Africa has established multiple national commitments related to environmental and climate change, which serve as guiding principles for both the public and private sectors. Notable policy documents include the National Climate Change Response Policy Paper, the Renewable Energy Independent Power Producer Procurement Programme, and the Carbon Tax Act. Each of these documents is detailed in terms of its relevance and implications for the private sector. Furthermore, the updated Nationally Determined Contributions (NDC) to the United Nations Framework Convention on Climate Change (UNFCCC) sets out South Africa's goals from 2021 to 2030, with a significant emphasis on adaptation. This includes spotlighting priority sectors such as water, agriculture, health, and biodiversity, each backed by specific policies. South Africa's Just Energy Transition Investment Plan (JET IP) further accentuates the energy domain, focusing on areas like electricity, green hydrogen, and the shift towards New Energy Vehicles.⁹ Additionally, the approach to achieving net-zero emissions is explored across various key economic sectors, including mining, tourism, agriculture, manufacturing, energy, and transport.

Climate finance landscape overview

Between 2017 and 2018, an average of ZAR 70 billion was allocated annually for these activities, with a total of ZAR 431 billion tracked from 2017 to 2021. Mitigation efforts, particularly clean energy generation, received the lion's share, averaging ZAR 62.5 billion annually. In contrast, adaptation initiatives were allocated an average of R4.3 billion per year, with the majority coming from public sources and a noticeable absence of private sector investments. Dual-benefit activities garnered R7.8 billion annually, with 78% originating from public sources.¹⁰

⁹ Note: New Energy Vehicles include battery, plug-in hybrid and fuel cell electric vehicles.

¹⁰ NBI. 2022. Financing South Africa's Just Transition.

Figure 1.

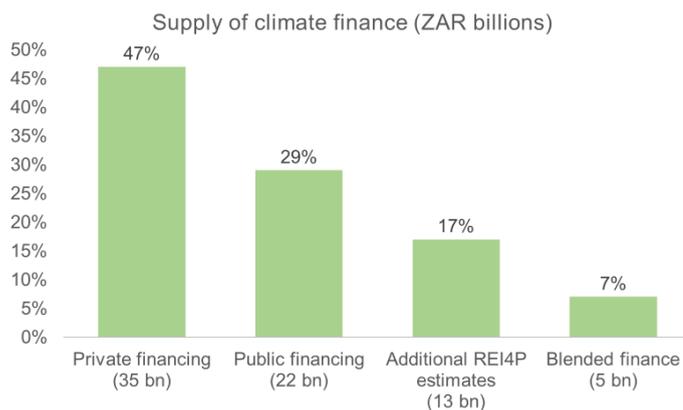


Figure 2.

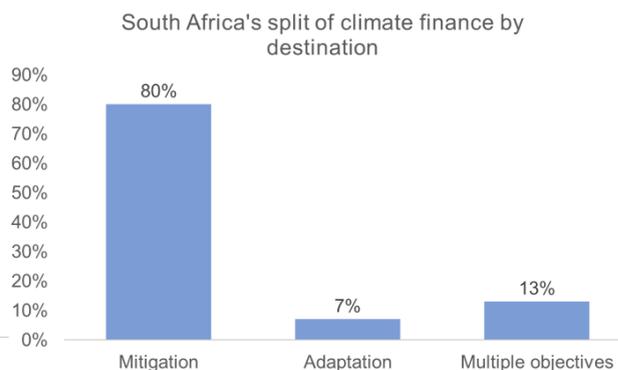


Figure 3.

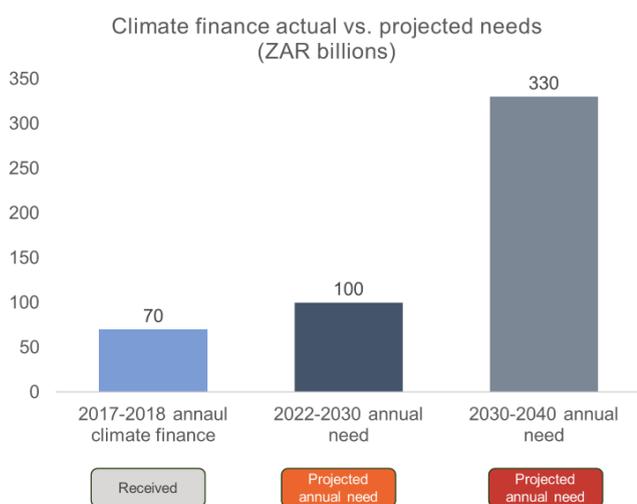
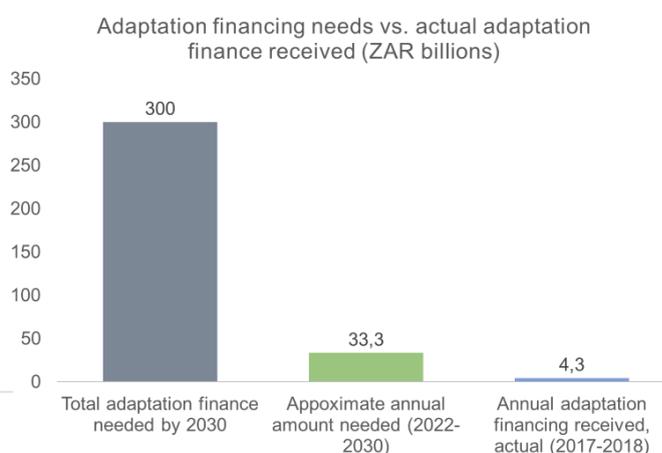


Figure 4.



Source: Adapted from National Business Initiative, 2022 Financing South Africa's Just Transition

The private sector predominantly invested in clean energy and energy efficiency (Figure 1, 2), while traditional financial mechanisms leaned heavily towards debt financing. Blended finance remains underutilised (Figure 1), even though it holds promise for boosting private sector participation in climate-related activities. Attracting investments remains a challenge (Figure 3), especially for adaptation projects (Figure 4), as the financial landscape favours profit-driven projects, sidelining those without clear market returns.

Financial sector developments

South Africa is actively reshaping its financial strategies to address climate change and achieve its developmental objectives. This involves reallocating capital, sourcing new financial means, and optimising existing resources. While South Africa has a robust local financial market, it needs clear governmental directives, regulatory interventions, and a conducive legislative backdrop to foster innovation. South Africa's sustainable finance endeavours are steered by governmental bodies, regulators, and industry stakeholders. Introduced in 2017, the 'Twin-Peaks' model¹¹ emphasises the stability and conduct of financial institutions. The Carbon Tax Act, initiated in 2019, is pivotal for South Africa's NDC commitments through incentivising the increase in pace of decarbonisation. However, the low carbon price set (below international benchmarks), coupled with a delay in full implementation of the Act may slow down the pace of achieving decarbonisation and attracting the necessary investments to realise the climate objectives of South Africa's NDC. Energy-intensive sectors have expressed concerns over this tax,

¹¹ Note: The 'twin peaks' model restructures the oversight of financial services entities such as banks, insurance firms, and pension administrators, with regulatory authority divided between two distinct and independent bodies: the Prudential Authority (PA), which operates within the administrative framework of the South African Reserve Bank, and the Financial Sector Conduct Authority (FSCA), which is a successor to the previous Financial Services Board.

emphasising the need for incentives for transitioning to renewables. South Africa's Green Finance Taxonomy (SA GFT) Project aims to steer the financial sector towards green investments, drawing inspiration from the European Union (EU) Taxonomy which could ultimately help foster seamless green financial flows between the EU and SA. However, its adoption faces challenges like governance issues, fossil fuel dependencies, implementation complexity and related costs, raised by the market stakeholders. Lastly, Climate Budget Tagging (CBT) in South Africa, initiated in 2020, seeks to monitor climate related government expenditures, aiming for budget alignment with climate priorities and ensuring accountability. If extended to all governmental levels, it is set to be a promising way to comprehensively identify and track public spending on mitigation and adaptation activities but also to accurately determine the climate finance gap.

Public sector

Between 2017-2018, South African public finance entities allocated approximately ZAR 22 billion annually to climate finance, constituting a quarter of the total climate finance.¹² Despite this, many financial tools remain underexploited. Enhancing their utilisation requires improved coordination, capacity building, streamlined processes, and a conducive environment for private sector involvement and improved capital markets. The government employs instruments like the Green Fund and Green Bonds to back climate adaptation efforts. Development Finance Institutions (DFIs), such as the Development Bank of Southern Africa (DBSA), are instrumental in championing climate-resilient initiatives as well as collaborations with global entities like the World Bank Civil society actors such as non-governmental organisations (NGOs) play an advocacy role in ensuring effective resource utilisation, accountability and bring awareness of locally relevant solutions. Overall, while progress has been made in public climate finance, there's a need for better coordination, transparency, and multi-stakeholder engagement to optimise climate finance endeavours.

Private sector

Between 2017 and 2018, South Africa's private sector allocated an average of ZAR 35.3 billion annually to climate mitigation, primarily in clean energy and energy efficiency.¹³ This was ZAR 13.5 billion more than the public sector contribution to climate finance in total. Commercial entities, such as banks and venture capitalists, were the leading contributors, providing ZAR 19.3 billion exclusively for clean energy.¹⁴ The rest came from corporations, NGOs, and households. This concentration on clean energy indicates potential gaps in recognising diverse climate-related investment opportunities. Major banks, including First National Bank, Standard Bank Group, and Nedbank, have launched green bonds and loans for renewable projects. **A review of reporting and commitments made by commercial banks and other FIs in South Africa shows that only the largest¹⁵ report to the TCFD and report Scope 1, 2, and operational Scope 3 emissions. Few report the climate risks of their portfolios and fewer report financed emissions and total climate finance disbursements.** As for commitments, many aim to reach net zero by 2050. However, in the meantime, there are leaders and laggards, at least from an operational perspective.

Institutional investors like pension funds and insurance companies have also ventured into climate finance activities. The venture capital industry, while still nascent in South Africa, is also starting to invest in green initiatives. SA GFT encourages environmental, social, and corporate governance (ESG) considerations, with the Johannesburg Stock Exchange (JSE) requiring listed companies to include ESG practices in their reports. However, **challenges like inconsistent ESG reporting, unfavourable ESG ratings affected by economic and political factors and a complicated landscape remain, making it difficult to navigate.** The JSE climate disclosure requirements are also seen as cumbersome and disincentivizing. A streamlined approach is needed to increase uptake and consistency in reporting as well as moving away from voluntary reporting. Finally, exploring and encouraging innovative funding strategies is needed to mobilise the needed climate finance.

¹²Cassim et al., 2021. South African Climate Finance Landscape 2020.

¹³Ibid

¹⁴Ibid

¹⁵ Statista. Leading banks in South Africa as of 2023, by assets. 2023. Available: <https://www.statista.com/statistics/1346961/leading-banks-in-south-africa-by-assets/>

Key Challenges:

1. **Liquidity and Macroeconomic Risks:** South Africa's small capital markets are hindered by a lack of liquidity coupled with macroeconomic risks, limiting the availability of long-term financing. The financial markets are characterised by the dominance of short-term lending, with nearly 70% of loans maturing in under five years.¹⁶
2. **Macroeconomic Concerns:** Rising debt-to-GDP ratios over time deteriorates financial flow quality. This, coupled with a volatile exchange rate, low GDP and GDP per capita growth, high interest rates and increasing debt-servicing costs, raise concerns about South Africa's fiscal space.¹⁷ These factors affect South Africa's access to domestic and international capital markets increasing project risk premiums.
3. **Regulatory and Political Risks:** The investment climate in South Africa is further complicated by regulatory issues, political risks, and off-taker risks which create an uncondusive financial and business environment as well as unfavourable ESG ratings in the global landscape.

Opportunities:

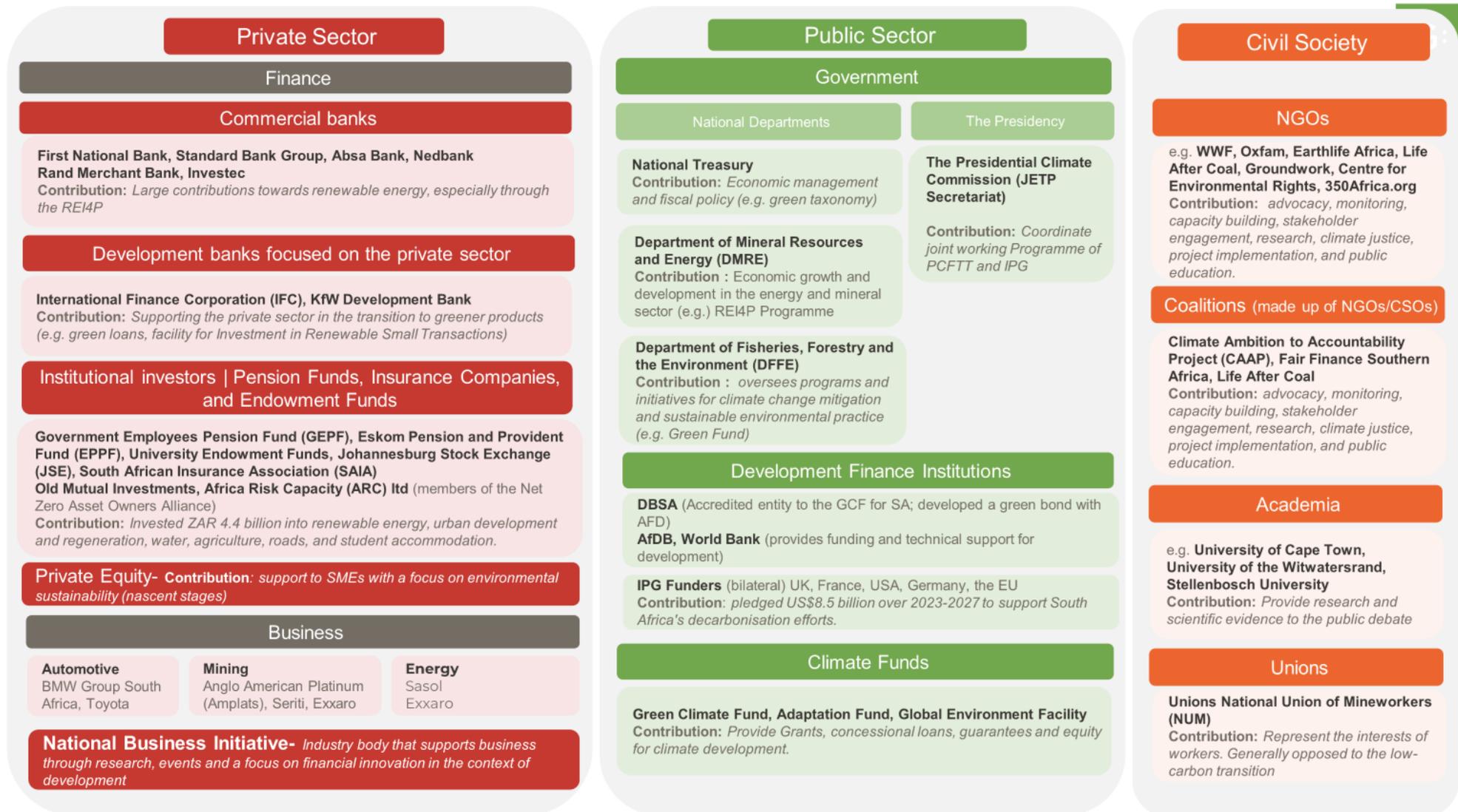
1. **Private Sector Involvement:** The private sector, especially impact investors, is increasingly focusing on projects that are socially, environmentally, and economically beneficial. Sectors like energy, infrastructure, agriculture, and water management are particularly attractive due to their commercial maturity.
2. **Reallocating Public Resources:** Exploring new financing mechanisms and enhancing revenue collection through municipal rates, tariffs, and taxes (e.g., Carbon Tax) could help bridge the climate-funding gap.
3. **Technical Capacity and Policy Interventions:** Improving grassroots technical capacity and implementing targeted policy interventions can address adaptation funding gaps, positioning South Africa for climate finance innovation and a sustainable future. Civil society actors are uniquely placed to provide detailed knowledge of South Africa's local context and climate vulnerabilities.
4. **Financial Instruments:** The adoption and expansion of financial instruments like green bonds and blended finance can attract more private investments and bridge the financing gap.

In conclusion, while South Africa faces significant challenges in the realm of climate finance, there are also substantial opportunities, especially with the increasing involvement of the private sector. Addressing the climate finance gaps, particularly in adaptation, will be crucial for the country's sustainable development.

¹⁶Intellidex. 2022. Financing South Africa's Just Energy Transition. Available: <https://www.intellidex.co.za/reports/financing-south-africas-just-energy-transition/> Accessed September 2023

¹⁷De Swardt. 2022. Determining the risks of a sovereign debt default in South Africa, and the consequences thereof; an international overview. Stellenbosch University. Available: <https://www.ekon.sun.ac.za/blog/2022-3-23-stellenbosch-students-win-priz/tiaan-de-swardt---budget-speech-pdf> Accessed October 2023

Figure 1 | Key players in the climate finance landscape in South Africa



Source: Author

Introduction

South Africa faces a complex landscape of challenges, characterised by profound inequality, persistent poverty, and high unemployment rates. Climate change is a threat multiplier and only amplifies these existing socio-economic issues. The goal of climate finance, as per the UNFCCC, is to provide financial resources to help countries mitigate (reduce) greenhouse gas (GHG) emissions and adapt to the adverse effects of climate change.¹⁸ This financial support is intended to assist countries, particularly developing nations, in taking action to combat climate change, transition to low-carbon economies, and build resilience to climate impacts.

The estimates to fulfil South Africa's NDC range from ZAR 1.0 trillion (NBI estimates) to ZAR 2.4 trillion (World Bank estimates) for the period up to 2030.¹⁹ However, only ZAR 431 billion was invested towards climate finance between 2017 and 2021, which is approximately 43% of the NBI's estimated required funding and approximately 18% according to the World Bank estimates.²⁰ This underscores the magnitude of the challenge. Given the country's constrained fiscal resources, it becomes apparent that relying solely on the public sector is insufficient to meet the NDC's objectives. Consequently, there is a growing need to envision innovative solutions and financing mechanisms to bridge the financing gap and galvanise the necessary scale of development, enhancing South Africa's resilience in the face of climate change. However, securing climate finance is a challenging undertaking, given the numerous conditions and prerequisites that must be met to access these funds, both locally and internationally. Effectively leveraging climate financing requires a robust combination of capacity, knowledge, and technical expertise.

Despite climate finance being underfunded both in South Africa and globally, new commitments to climate finance were made at the Conference of the Parties (COP) 27, most notably a pledge to double adaptation finance, a noteworthy milestone for developing nations. Further pledges, such as a substantial contribution of US\$230 million (approximately ZAR 4.4 billion) to the Adaptation Fund (AF) and the European Union's strengthened commitment of €1 billion for adaptation initiatives in African countries, have been made.²¹ Despite the contentious discussions during the United Nations (UN) intersessional climate negotiations held in Bonn, Germany, in June 2023, a key report was published that underscored the determination of developed nations to collectively mobilise US\$100 billion (approximately ZAR 20 billion) annually in climate finance until 2025.²² The report further emphasised their pledge to strike a more equitable balance between funding for adaptation, which strengthens resilience against the unavoidable effects of climate change, and mitigation, aimed at reducing greenhouse gas emissions.

Translating these commitments into tangible climate finance flows is a challenging endeavour. The upcoming COP28 in Dubai and the inaugural Global Stocktake are poised to be critical junctures, where the global community, especially developing nations, hopes to witness significant progress in converting promised funds into action. South Africa needs to ensure that it has a strategy to be able to attract climate finance and equally important, be able to absorb it.

This report provides an analysis of the current climate finance landscape in South Africa, focusing on the financing mechanisms and sources utilised for climate adaptation and mitigation projects.

The rest of the report reads as follows:

- **Section 1** outlines the climate finance landscape in South Africa, looking at the various policy, strategic sectors and current financial flows by actor and financing mechanism.
- **Section 2** provides the regulatory and policy developments that are shaping the flow and tracking of climate finance in South Africa.

¹⁸ UNFCCC.2023. Introduction to Climate Finance. Available: <https://unfccc.int/topics/introduction-to-climate-finance> Accessed October 2023

¹⁹ Intellidex. 2022. Financing South Africa's Just Energy Transition. Available: <https://www.intellidex.co.za/reports/financing-south-africas-just-energy-transition/> Accessed September 2023

²⁰ Email from GreenCape on updated climate Finance estimates, 21 September 2023.

²¹ EU. 2022. COP27: Team Europe steps up support. Available: https://ec.europa.eu/commission/presscorner/detail/en/IP_22_6888 Accessed October 2023

²²UNFCCC. 2023. Governments Commit to Increase Climate Finance through 2025. Available: <https://unfccc.int/news/governments-commit-to-increase-climate-finance-through-2025-0#:~:text=UN%20Climate%20Change%20News%2C%2013,per%20year%20through%20to%202025> . Accessed October 2023

- **Section 3** provides an overview of the key public sector actors and developments relating to climate finance in South Africa
- **Section 4** provides an overview of the key private sector actors and developments relating to climate finance in South Africa
- **Section 5** provides a summary of the key climate finance gaps, challenges and opportunities for the way forward.

The content presented in this report may not introduce groundbreaking or novel information; however, its significance lies in the consolidation of findings accumulated over the past few years from key information sources. Furthermore, it offers the possibility of introducing a distinct perspective on the subject matter.

Methodology and approach

The development of this report employed a two-pronged methodology; firstly, data and information gathering and categorisation and secondly, a deep dive analysis of the South African climate finance landscape in general, private sector-related activities and public sector-related activities.

Desktop research, data and information gathering

Desktop research and information gathering from publicly available resources was conducted. Information was gathered from a variety of sources including government and government departmental websites, national plans, strategies, policies and bills, research papers, funder/donor websites and reports, and articles and documents from other think tanks and consultancy organisations. This information was supplemented and contextualised within the team's existing knowledge and experiences of the South African climate finance landscape. These resources were recorded in an Excel file (see Annex A for a comprehensive list of the data and information sources reviewed) and sources were saved to relevant folders categorised by "general", "public" and "private" to help delineate different sections of this report.

Data analysis and landscape mapping

This step entailed analysing the amassed data to pinpoint ongoing climate finance initiatives, key financial institutions, and their involvement with climate-centric topics. A research grid was utilised to systematically organise and synthesise the acquired information. Furthermore, this phase delineated the regulatory landscape and Net Zero commitments, establishing a robust foundation for the ensuing analysis.

Private Climate Finance and Blended Finance Assessment phase

This step marked a transition towards a deeper examination of private climate finance, with a focus encompassing banks, asset managers, asset owners, insurers, and service providers. It entailed the assessment of investments, policies, and strategies within the climate finance realm. Additionally, an investigation into the potential of blended finance mechanisms was undertaken, specifically highlighting the role of Development Finance Institutions (DFIs) in South Africa (SA).

Public and Transition Finance and Just Transition Analysis

In parallel to the above, a deep dive was conducted for the public sector with a focus on public sources of finance. The Just Energy Transition (JET) program in SA and the broader transition finance landscape form integral parts of the analysis. The methodology entailed evaluating how public climate finance and blended finance mechanisms can bolster the objectives of the JET program. A review of necessary policies and frameworks, either existing or under development (such as SA GFT), was carried out to understand how these can facilitate SA's transition towards a low-carbon economy.

This structured approach allowed for a comprehensive examination across both private and public finance sectors, paving the way for informed recommendations and strategies in the concluding sections of the report.

Limitations in approach

The approach is limited by the significant challenges in climate finance reporting and data collection. The challenges stem from South Africa's nascent climate finance ecosystem which lacks a unified taxonomy, and the reluctance among financiers to share project-specific details due to confidentiality concerns or resource constraints.

The current system for tracking domestic public finance flows, especially in climate adaptation finance, is incomplete. It fails to illustrate the separation of funds specifically earmarked for adaptation, mitigation, and dual benefit. The incorporation of resilience premiums further compounds this challenge into various local government department budgets, with the additional costs associated with adaptation often escaping systematic capture.

Furthermore, research in this space is limited. The Climate Policy Initiative (CPI) Climate Finance Landscape Report for South Africa, written by GreenCape and the Bertha Centre, provides the most comprehensive source of data to date, yet was published in 2021 and covers the period 2017-2018. At the time of this writing, the climate finance landscape report is being updated and is yet to be published. Given the various Non-Disclosure Agreements involved, the team was unable to access this data. Hence, this report is based on existing and somewhat outdated data. Other key reports, such as reports published by the NBI, Trade Industrial Policy Strategists (TIPS) and the Climate Finance Accelerator (CFA) form key inputs into this research. A full list of resources consulted can be found in Annex A.

Section 1 | Climate Finance in South Africa

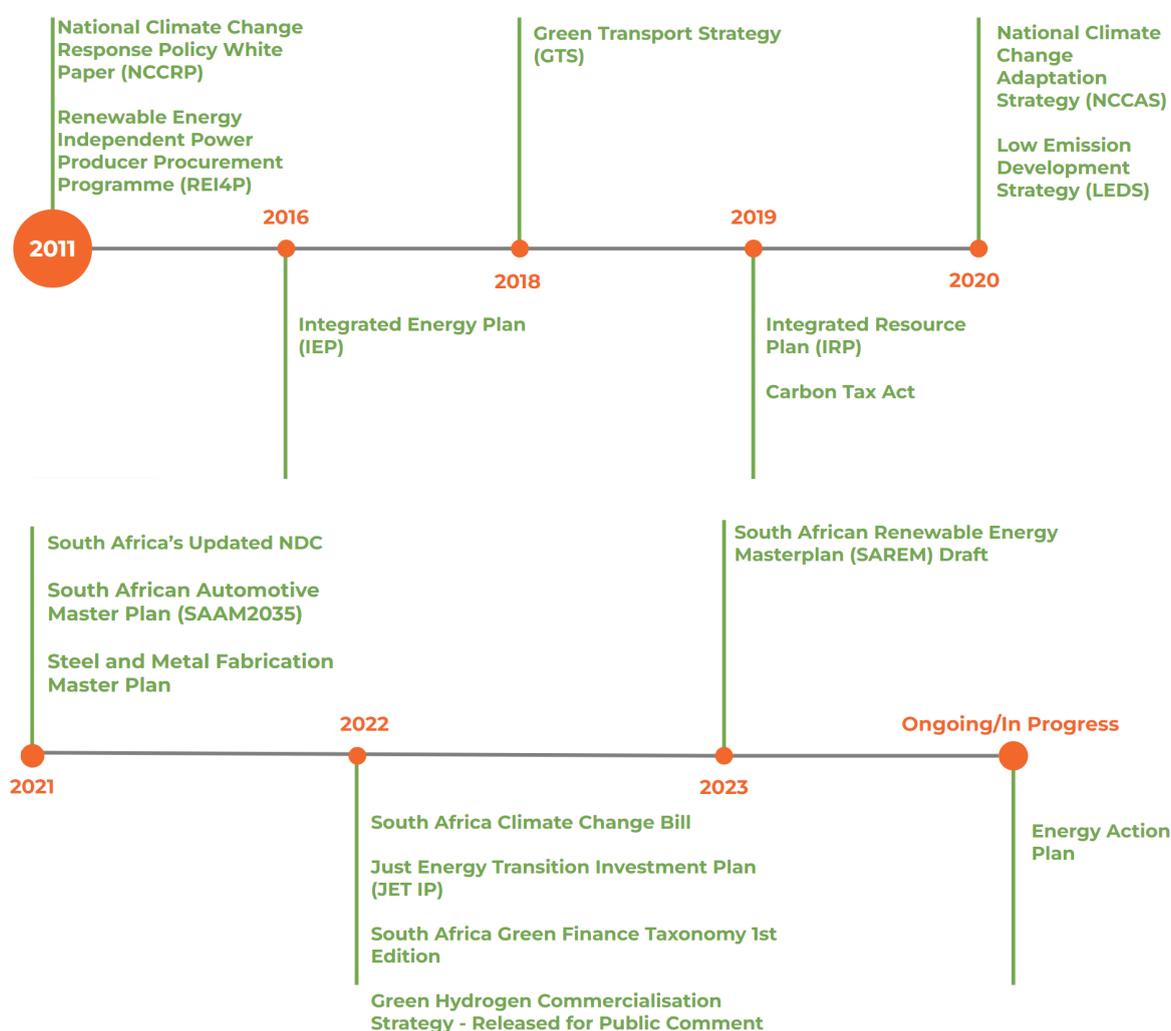
This section provides an overview of the key policies and strategic vision for climate change development in South Africa. It highlights South Africa's key priority sectors in addressing climate change challenges, such as reducing emissions and building resilience by strengthening adaptive capacity. It also provides a high-level overview of climate finance flows in South Africa, as well as the key actors and financial mechanisms involved.

1.1. National Commitments

South Africa has announced several national commitments related to environmental and climate change, strategy, and planning across issues related to adaptation and mitigation. These policies and plans aim to provide guidance to the country, both public and private sector, as to the key priorities and areas of focus.

A timeline of these policies and a table (see annex 1) describing them are detailed below:

Figure 2 | Timeline of policies



Source: Author

1.2. Key sectors towards net-zero

1.2.1. South Africa's Updated NDC and JET IP

As part of South Africa's transition towards net-zero, key sectors of interest have been identified in national documents to help ensure mitigation and adaptation commitments are met.

South Africa's updated NDC²³ (2021) to the UNFCCC details commitments to mitigation and adaptation action over the years 2021-2030. In particular, the identification of key sectors and the specific actions to take in each is constrained mainly to adaptation, which has been identified together with the NCCAS. In the adaptation space, the priority sectors and policies in each are given in the NDC as follows.²⁴

Table 1 | Table of Sectoral Policies

Sector	Policies as highlighted by the updated NDC
Water	Implement policies to enhance water security and ensure that sufficient measures to protect against hydrological hazards such as floods are implemented. Finally, establish hydro-meteorological alert systems as a means of monitoring and warning. Water security is extremely important in South Africa as resources are extremely scarce and the average annual rainfall (450ml) is far below the global average (860ml). ⁴² Furthermore, increases in rainfall variability are expected to further augment incidences of storm rainfall and flooding. ⁴³
Agriculture	Address the lack of early-warning systems for small-scale farmers and for larger hazards to combat yield uncertainty, promote and support the roll-out of climate-smart agriculture, and overall assist the building of capacity in the agricultural sector. These goals are considered important for the sustainability of the sector as rainfall variability and heat intensity are due to increase ⁴⁴ , which in turn will lead to both adverse positive and negative effects for many staple crops, such as maize, wheat, and sugarcane. ⁴⁵
Health	Develop early warning systems for climate-induced diseases, besides monitoring and monitoring. Health is particularly relevant in South Africa's climate change response due to the high levels of economic inequality, which is likely to exacerbate climate-related health outcomes. Changes in temperature will also likely affect the spread of diseases such as dengue fever, malaria ⁴⁶ , and the Zika virus. ⁴⁷
Biodiversity	Improve monitoring of the impact of climate change on biodiversity, and its impact on ecological infrastructure. Understanding these impacts is essential as biodiversity loss is likely to have vast spillover effects on forest ecosystems, coastal livelihoods, and tourism revenues, with estimated losses to that particular sector estimated at EUR 230 million (~ZAR 4 billion) per annum. ⁴⁸
Human Settlements	Integrate climate-smart approaches into all new settlements, especially with building standards and in coastal areas. Adaptation in present and future settlements is required in South Africa owing to the high number of informal settlements in the country and the relative importance of coastal cities such as Cape Town, Durban, and Gqeberha. ⁴⁹
Infrastructure	Ensure that climate-resilient infrastructure is developed and deployed, including an integration of climate information into infrastructural planning. Additionally, make all new projects climate-proof and retrofit older investments. Infrastructural updating is likely to be essential for the country in order to reduce the damages associated with natural disaster events that are likely to increase in frequency and intensity. ⁵⁰

Regarding mitigation, the 2021 NDC update puts forth a more ambitious goal than the previous targets set forth in 2015. These emissions targets are presented in Table 2.

Table 2 | South Africa's NDC Emissions Targets

²³South Africa's updated NDC under the Paris Agreement. 2021. Available: <https://unfccc.int/sites/default/files/NDC/2022-06/South%20Africa%20updated%20first%20NDC%20September%202021.pdf> Accessed September 2023

²⁴ ibid.

NDC Document	2021-2025 Target Emissions	2026-2030 Target Emissions
First NDC: 2015	398-614 MtCO _{2e}	398-614 MtCO _{2e}
First Update: 2021	398-510 MtCO _{2e}	350-420 MtCO _{2e}

The report also makes note of some priority sectors, those being: **Energy, Waste, Industrial Processes and Product Use (IPPU)**, and **Agriculture, Forestry, and other Land Use (AFOLU)**. However, in the 2020s and the 2030s, a priority was placed on the electricity (energy) sector and, to a lesser extent, transport as well. These sectors are critical to the country's mitigation plans. As at 2017, 45% of GHG emissions in the country came from electricity alone whereas transport accounted for an additional 11%.²⁵ Additionally, decarbonising the domestic transport and electricity sectors is of additional importance as the country is a major manufacturer and exporter of vehicles (the industry accounts for 6% of GDP and employs more than 500,000 people).²⁶ This is an area which may come under threat as cross-border carbon pricing is implemented and if no mitigation measures are taken. The document also makes explicit mention of the REI4P, which is South Africa's main mechanism regarding the transition towards renewable energy production.

South Africa's recent JET IP reaffirms the desire for mitigation action in the energy sector. The key actions specified in the JET IP regarding electricity to go along with upscaling renewables generation concern the decommissioning, management and repurposing of coal power plants and mines, and investments in upgrading the transmission and distribution systems within the country, as they have up until now been concentrated in the coal-producing Mpumalanga region. Furthermore, another key energy sub-sector identified by the report is **Green Hydrogen (GH2)**, with plans to conduct feasibility and pilot studies for many aspects of the GH2 industry in the near future. The JET IP also asserts the priority of the **New Energy Vehicles (NEV)** sector in transport, more specifically the transition to NEV manufacturing, and adoption across private vehicles, buses, and Light Commercial Vehicles (LCVs).

Whilst both reports do not explicitly specify the unconditional and conditional commitments for mitigation and adaptation, they both express the important role that it has in ensuring that South Africa meets its upcoming targets. The NDC states that its projections are "premised on continued multilateral support".²⁷ Moreover, in the JET IP it is made clear that what South Africa achieves of its 2030 emissions target is "dependent on the level of support received".²⁸ Additionally, both documents quantify the financial requirements to implement the actions defined in both. The NDP states a desire for a lower bound of ~ZAR 120 billion (US\$ 8 billion) in climate finance by the year 2030, which is a large increase from the average of ~ZAR 31.2 billion (US\$ 2.4 billion) over the years 2018-2019.²⁹ Meanwhile, the JET IP estimates a total cost of implementation for the years 2023-2027 at ~ZAR 1.5 trillion (US\$ 98.7 billion).³⁰ Furthermore, the report quantifies the gap between the total requirement and current commitments, with ZAR 700 billion currently outstanding, with very low support for the GH2 and NEV sectors (89% and 78% outstanding funding respectively).³¹

South Africa's key economic sectors approach to Net Zero is summarised under annex 2.

1.3. Climate Finance landscape overview

This section provides a high-level overview of South Africa's existing climate finance flows. It provides an overview of the amount of finance tracked in mitigation, adaptation and dual-benefit activities, and the funding and delivery mechanisms commonly used. Key trends are observed in public and private sector financing however, more granular detail is provided in sections 3 and 4 of this report.

²⁵ South Africa's Just Energy Transition Investment Plan (JET IP) for the initial period 2023–2027. 2022.

²⁶ Ibid.

²⁷ South Africa's updated NDC under the Paris Agreement. 2021:28.

²⁸ South Africa's Just Energy Transition Investment Plan (JET IP) for the initial period 2023–2027. 2022:31.

²⁹ South Africa's updated NDC under the Paris Agreement. 2021:29.

³⁰ South Africa's Just Energy Transition Investment Plan (JET IP) for the initial period 2023–2027. 2022:8.

³¹ Ibid.

Climate Finance allocation

The South African Climate Finance Landscape Report for 2017 - 2018 reveals that the average annual tracked adaptation and mitigation activities during this period amounted to ZAR 62.2 billion.³² More recent data that has yet to be published puts the number at approximately ZAR 431 billion tracked between 2017 and 2021³³.

From the 2017-2018 climate finance landscape report, the total annually tracked finance has mitigation efforts predominantly in focus, averaging ZAR 50 billion annually, constituting 81% of the climate finance tracked in that period.³⁴ Clean energy generation, representing 95% of mitigation funding, claimed the lion's share of resources during these years. Energy efficiency and demand-side management received 3%, while the circular economy sector received 2%.³⁵ Other categories each received less than 2% of the total allocation. In contrast, adaptation initiatives were allocated an average of R4.3 billion per year, making up 7% of the tracked climate finance. Notably, around 90% of this annual adaptation funding originated from public sources, with the remaining 10% supported by blended finance mechanisms. Private sector investments were channelled solely into mitigation sectors.³⁶

During the same timeframe, dual benefit activities received substantial attention, averaging R7.8 billion per year, or 13% of the tracked climate finance during the same period.³⁷ These dual-benefit projects aim to simultaneously address both mitigation and adaptation goals. Similar to adaptation-focused efforts, the majority of dual benefit funding, 78%, came from public sources, while 22% received support from blended finance instruments. As with adaptation, private sector investments were absent in the dual-benefit sectors. This underscores the emerging recognition that a holistic approach is essential to effectively tackle climate change, bridging the gap between mitigation and adaptation efforts.

³² Cassim et al., 2021. South African Climate Finance Landscape 2020.

³³ GreenCape. 2023. Confidential email.

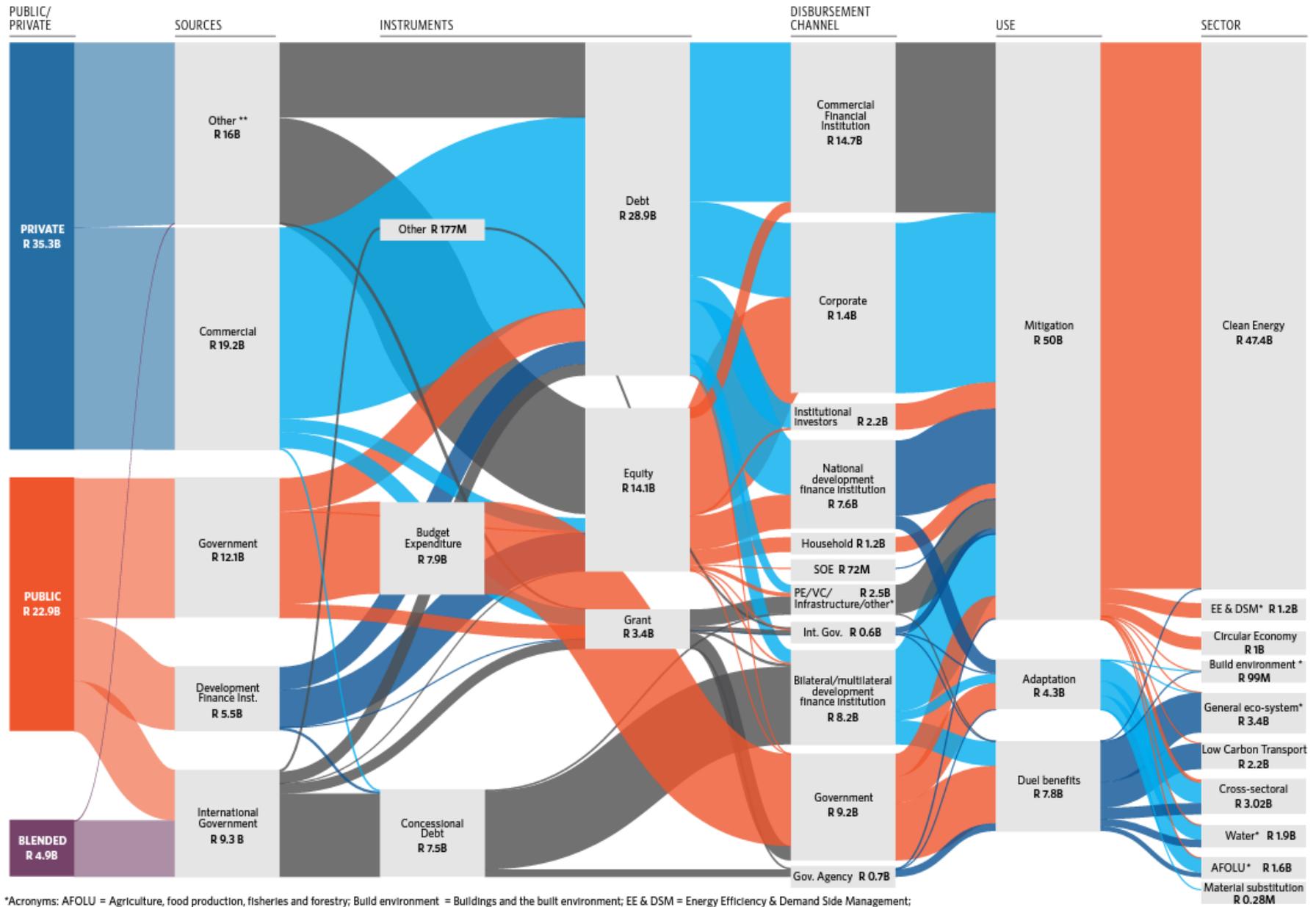
³⁴ Cassim et al., 2021. South African Climate Finance Landscape 2020.

³⁵ Ibid.

³⁶ Ibid.

³⁷ Ibid.

Figure 3 | Climate Finance flows in South Africa 2017-2018



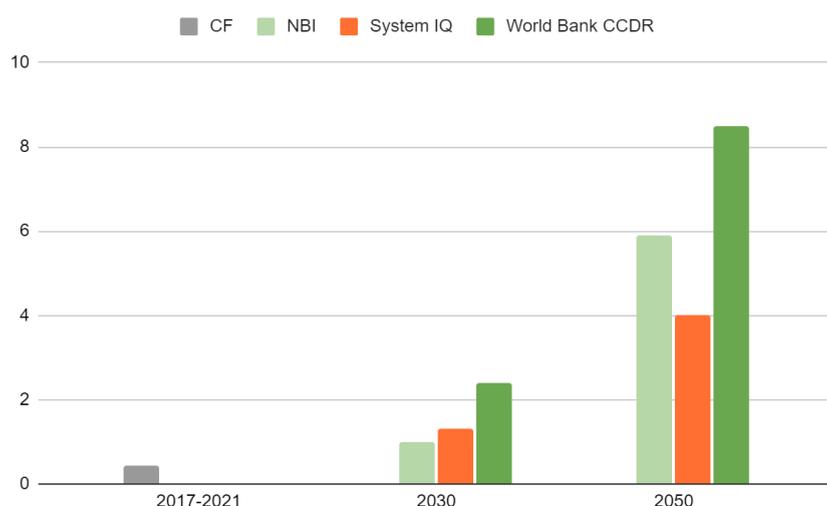
Source: Adapted from Cassim et al., 2020 South African Finance Landscape 2020

It is worth noting that the NBI report on Financing South Africa's Just Transition³⁸, adjusted the annual supply of climate finance for mitigation, adaptation, and dual-purpose climate investments in South Africa to be around ZAR 70 billion for the 2017-2018 period. This estimate takes the data from the 'Climate Policy Initiative report' adjusted to include an additional ZAR 12.5 billion to account for the REI4P initiative, which had not yet been announced at the time of the original report.

According to the NBI, to achieve a complete transition to net-zero emissions by 2050, South Africa will need an average annual investment of approximately ZAR 100 billion until 2030 at minimum.³⁹ This requirement is projected to increase substantially to around ZAR 330 billion annually in the 2040s to reach net zero by 2050. When compared to the currently mobilised ZAR 70 billion per year, this means an additional ZAR 60 billion must be secured annually up until 2030 followed by an additional ZAR 260 billion from 2040-2050 to reach the targets set.

Various institutions provide different estimates for the funding required for a Just Energy Transition (JET) in South Africa. These estimates range from ZAR 1.0 trillion to ZAR 2.4 trillion for the period up to 2030 and between ZAR 4.0 trillion to as much as ZAR 8.5 trillion up to 2050.⁴⁰ According to the World Bank, the total cost of South Africa's JET is estimated at ZAR 8.5 trillion, with the funding allocation as follows: ZAR 4.2 trillion for mitigation, ZAR 2.2 trillion for adaptation, and ZAR 2.0 trillion for a just transition. Eskom, on the other hand, suggests that ZAR 1.2 trillion in infrastructure investment is needed by 2030 to achieve a successful JET in the power sector. This includes ZAR 990 billion for generation capacity, ZAR 130 billion for transmission capacity, and ZAR 56 billion for distribution capacity.⁴¹ The table below shows these estimates alongside the ZAR 431 billion tracked between 2017 and 2021 that South Africa has raised to date, highlighting the significant gap that persists.

Figure 4 | JET financing requirements estimates versus actual finance raised to date, in trillion ZAR (2021)



Source: Author

In the coming decade, there is a crucial need for increased annual investments, particularly in key decarbonization areas such as renewable energy generation, grid expansion, and electric vehicle (EV) charging infrastructure, and building the resilience of the country to increase adaptive capacity and reduce vulnerability. These investments are vital to ensure alignment with South Africa's NDCs and to drive progress toward meeting climate goals.

³⁸ NBI. 2022. Financing South Africa's Just Transition.

³⁹ Ibid.

⁴⁰ Intellidex. 2022. Financing South Africa's Just Energy Transition. Available: <https://www.intellidex.co.za/reports/financing-south-africas-just-energy-transition/> Accessed September 2023

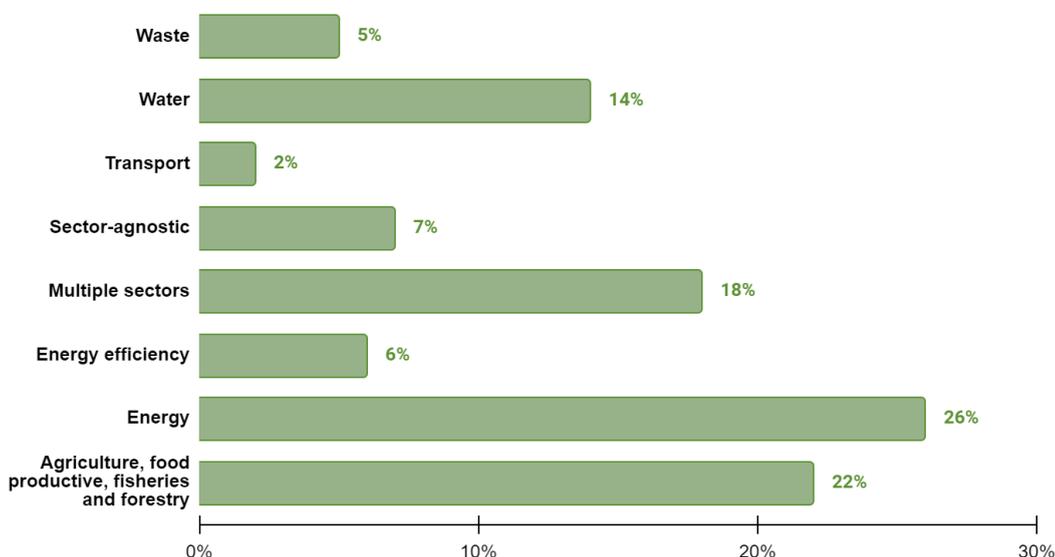
⁴¹ Ibid.

Finance by sector

The CFA Programme for South Africa, tracked 257 different financial flows in South Africa amounting to ZAR 35.8 billion from both the public and private sectors (time period not specified).⁴² This is significantly less than the Climate Finance Landscape Report for 2017 - 2018 which tracked approximately ZAR 62.2 billion and the NBI report which estimates a flow of approximately ZAR 70 billion per annum in 2022.⁴³ These differing statistics highlight the lack of harmonisation within the climate finance tracking space. While the CFA programme report on South Africa included stakeholder consultations and desktop analysis to track climate finance supply, the methodology is less clear and comprehensive compared to the CPIs Climate Finance Landscape Report and the NBI report (which adds to the CPIs numbers). In the CPI Climate Finance Landscape report, a detailed methodology is provided, and an extensive breakdown of funders and sources is tracked according to typology. In South Africa, this is viewed as the comprehensive flagship report on this matter as is evident by the cross-referencing that occurs in other similar themed reports.⁴⁴

Nonetheless, the CFA report is still useful in understanding the trends across the public and private sectors of the breakdown in the distribution of finance across key priority sectors.

Figure 5 | Breakdown of climate finance allocation by sectoral focus⁴⁵



Source: Adapted from National Business Initiative, 2023 Climate Finance Landscape, South Africa

Clean energy was the primary focus, accounting for more than 33% of all investments tracked, including energy efficiency and demand-side management with renewable energy investments coming predominantly from the private sector (corporate investors and commercial banks) and DFIs.⁴⁶ The exclusive allocation of private sector investment to clean energy and energy efficiency, with no participation in other climate sectors, indicates that South African investors may view these sectors as economically viable. Alternatively, it may suggest that they lack the necessary knowledge and tools to identify opportunities for investments in other climate-related sectors accurately. However, this funding is still insufficient. The International Energy Agency (IEA) estimates a financial need of ZAR 1.14 (USD 74 billion) in 2018 for renewables while the CPI report indicates that only ZAR 47.4 billion was tracked during 2017-2018.⁴⁷ **This represents a financing gap of approximately 58%.**

⁴² CFA. 2022. Climate Finance Landscape in South Africa.

⁴³ NBI. 2022. Financing South Africa's Just Transition.

⁴⁴ From discussions with various stakeholders throughout our work and the fact that it is this CPI document that is always referenced in other climate finance reports for South Africa.

⁴⁵ The table is taken from the CFA Climate Finance Landscape Report, South Africa

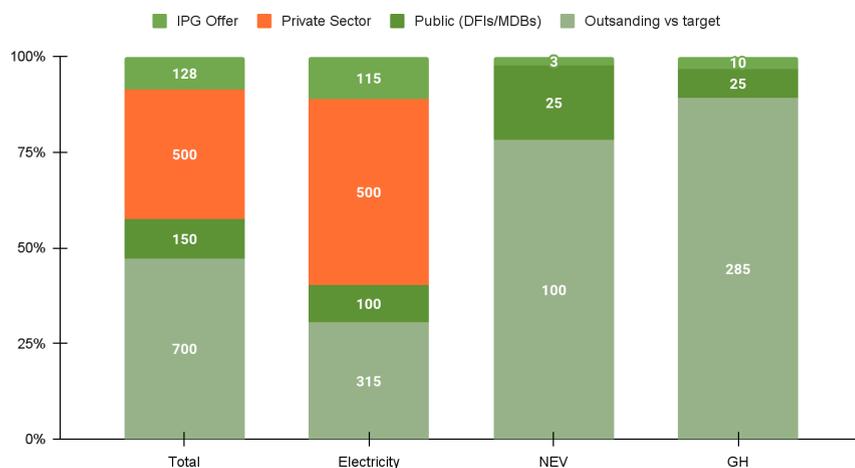
⁴⁶ Ibid.

⁴⁷ IEA. 2019. South Africa Energy Outlook. Available: <https://www.iea.org/articles/south-africa-energy-outlook>. Accessed October 2023

South Africa does not provide specific financial targets per sector which makes it difficult to understand the sectoral financing gaps. However, given the national focus on the “Just Energy Transition”, the JET Investment Plan, while still lacking in granularity, does provide estimated funding required versus the funding availability for the key focus areas of South Africa’s JET Investment Plan (IP) for the period 2023-2027. These sectors include the electricity sector, new energy vehicle (NEV) sector and green hydrogen (GH₂) sector.⁴⁸

Figure 6 | Projected funding needs and estimated availability by source for JET-IP priority sectors

Project funding needs and estimated availability by source (in billion ZAR)



Source: The Presidency, 2022. South Africa’s Just Energy Transition Investment Plan

Sectors like water conservation, smart agriculture, and the circular economy are heavily reliant on public and philanthropic capital.⁴⁹ Investments in low-carbon transport were dominated by climate facilities and government departments/agencies, primarily using grant instruments while sectors like agriculture and food production have an established business case, with private climate funds and development finance institutions accounting for 94% of the total value invested through commercial debt and unlisted equity.⁵⁰

Certain sectors do not attract private sector investments, primarily because they are perceived as unprofitable public goods.⁵¹ Examples of such sectors include water infrastructure, flood protection, social safety nets, and disaster management. In these cases, the responsibility for investment primarily falls on the public sector.⁵² Bilateral development partners and government departments/agencies played a significant role, contributing 83% of the total investments in water conservation and demand. Among these investments, 83% were made using grant-based financing, while 13% were facilitated through concessional debt instruments.⁵³

Traditional Financial Mechanisms for Climate Finance

The primary traditional financial mechanisms currently deployed to finance climate adaptation, mitigation and dual-benefit activities in South Africa are debt (~59%), equity (~23%), and grants (~5%).⁵⁴ These mechanisms play a pivotal role in enabling climate change efforts across various sectors in the country.

Of the tracked climate finance, 59% (ZAR 36.5 billion) was obtained through debt financing. Within this debt category, ZAR 28 billion was provided at market rates, while ZAR 7.6 billion was marked as concessional debt. Market-related debt constituted 46% of the total climate finance tracked. This significant amount of raised debt reflects the confidence and feasibility of climate mitigation projects in South Africa, with a substantial ZAR 27.9 billion invested in clean energy.⁵⁵

⁴⁸ The Presidency Republic of South Africa. 2022. South Africa’s Just Energy Transition Investment Plan 2023-2027.

⁴⁹ Cassim et al., 2021. South African Climate Finance Landscape 2020

⁵⁰ NBI. 2022. Financing South Africa’s Just Transition

⁵¹ Cassim et al., 2021. South African Climate Finance Landscape 2020

⁵² Ibid.; Interview with Tlou Ramaru, Department of Forestry Fisheries and Environment, October 17th 2023.

⁵³ Ibid.

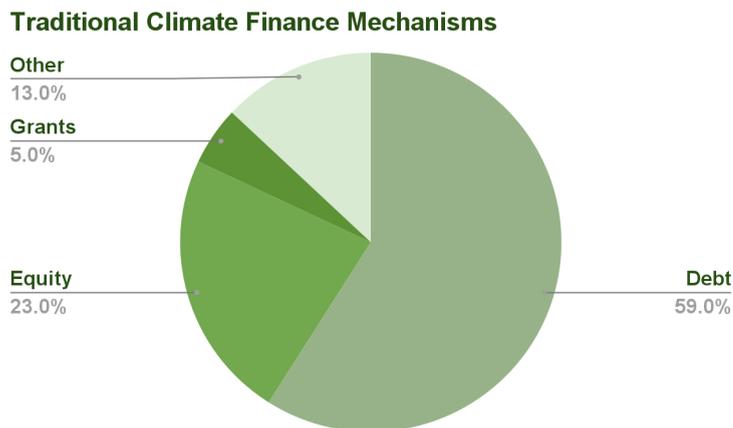
⁵⁴ Cassim et al., 2021. South African Climate Finance Landscape 2020.

⁵⁵ Ibid.

Additionally, 23% (ZAR 14.2 billion) of the tracked climate finance was raised as equity. Notably, 95% of this equity was structured as ownership stakes in clean energy projects, with 76% of the funding coming from private sector investors, including commercial entities and corporates, and the remaining 24% originating from public sector DFIs, both local and international.⁵⁶

Specifically, grants and government budget spending emerge as the mainstay financial instruments for climate adaptation in sectors such as low-carbon transport projects, circular economy initiatives, waste management, and water conservation and demand projects.

Figure 7 | Traditional Climate Finance Mechanisms Utilised in South Africa

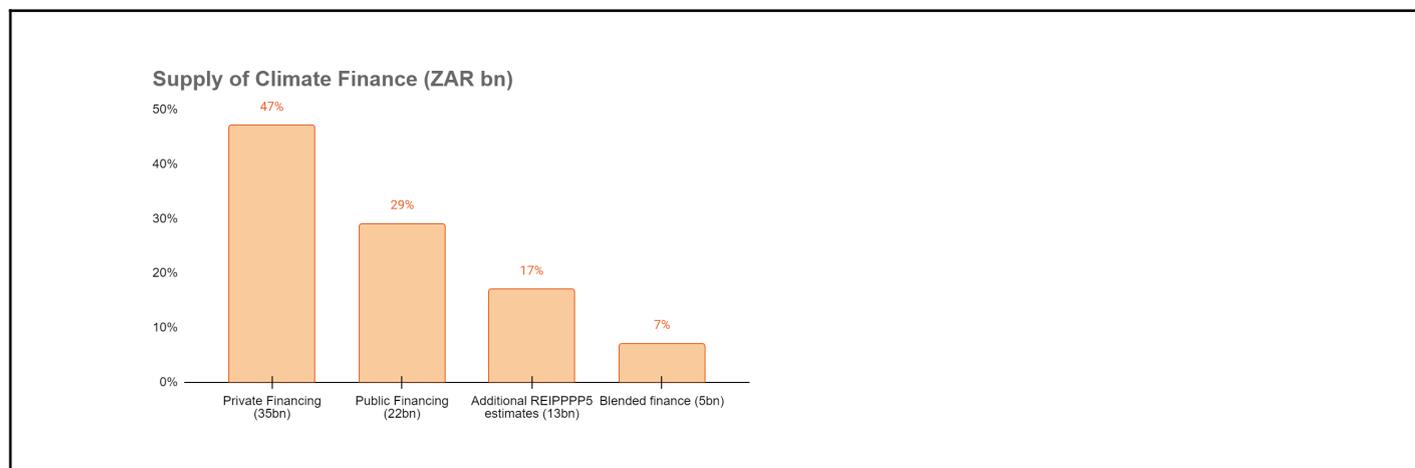


Source: Adapted from Cassim et al., 2020 South African Finance Landscape 2020

Delivery Vehicle

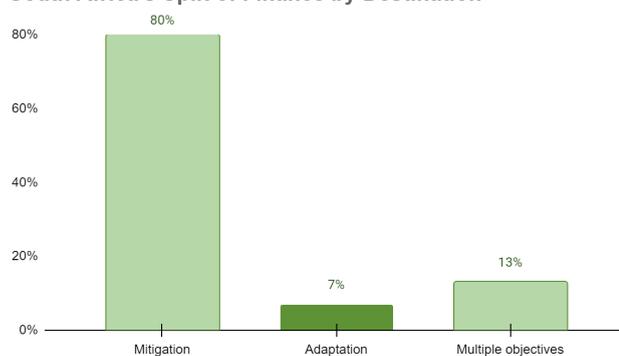
Figure 4 provides a clear depiction of the insufficient utilisation of blended finance within the South African climate finance landscape.^{57,58} This underutilisation is noteworthy given the acknowledged potential of blended finance to stimulate private sector involvement in climate adaptation efforts by helping to unlock greater concessional funding.⁵⁹ Approximately 40% of the required investments by 2030, equivalent to around ZAR 50 billion annually, cannot attain commercial viability without the essential support of blended finance.⁶⁰ By utilising concessional funding along with commercial financing, blended finance can attract commercial investments at significantly increased rates, with multipliers ranging from 3 times to as high as 9 times. These multipliers depend on the project's specific attributes and the concessional funding involved.

Figure 8 | Blended Finance Utilisation in South Africa



⁵⁶ Ibid.
⁵⁷ NBI. 2022. Financing South Africa's Just Transition.
⁵⁸ The Presidency Republic of South Africa. 2022. South Africa's Just Energy Transition Investment Plan 2023-2027.
⁵⁹ Ibid.
⁶⁰ NBI. 2022. Financing South Africa's Just Transition.

South Africa's Split of Finance by Destination



Source: Adapted from National Business Initiative, 2022 Financing South Africa's Just Transition

South Africa's National Adaptation Strategy estimates approximately ZAR 300 billion needed by 2030 for adaptation activities.⁶¹ However, given that adaptation needs are difficult to measure (as noted under Section 2, Climate Budget Tagging), this figure is likely to be substantially higher. Taking the CPIs tracked adaptation finance flows of approximately ZAR 4.3 billion annually between 2017-2018, this accounts for only 1.4% of total adaptation financing needs by 2030.⁶²

Creating governance arrangements that enable greater use of blended instruments, has the potential to unlock additional investment opportunities, particularly in key sectors such as agriculture, water and tourism which often rely on public sector financing.⁶³ In 2018, only 10% of adaptation projects received funding through blended finance mechanisms, reflecting a scarcity of blended finance initiatives in South Africa.⁶⁴ While there is currently no estimated need for blended finance, this shortage implies a lack of strong collaboration between the private and public sectors in adopting blended finance approaches, which are particularly essential for investments in social and adaptation endeavours.⁶⁵

Challenges in Attracting Investment

The prevailing financial landscape appears to favour interventions that promise direct profits within a timeframe attractive to investors hence why clean energy projects (mitigation activities) are predominately financed.

However, despite these quantifiable outcomes and the bankability of mitigation-related projects, funding remains insufficient as evidenced by Figure 4 above. Furthermore, the financing required for achieving a net-zero transition faces several limitations, including a lack of alignment with policies and strategies, a perception of high investment risk, inadequate blended financing options, and inconsistencies in green standards.^{66, 67, 68}

For adaptation projects, these challenges are compounded given the lack of an existing pipeline of bankable adaptation projects, coupled with a lack of clear market benefits and returns.^{69, 70} As highlighted, the three principal traditional financial mechanisms employed to finance climate adaptation in South Africa encompass debt (including loans), equity, and grants. Given that a significant portion of this finance comes in the form of loans requiring repayment, the need to demonstrate potential returns on investment becomes imperative.⁷¹ It's noteworthy that DFIs and climate funds can offer highly concessional loans and blended finance solutions to accommodate the longer-term and indirect benefits associated with certain adaptation investments.

⁶¹ NBI. 2022. Financing South Africa's Just Transition.

⁶² Cassim et al., 2021. South African Climate Finance Landscape 2020.

⁶³ Interview with Tlou Ramaru, Department of Forestry Fisheries and Environment, October 17th 2023

⁶⁴ NBI. 2022. Financing South Africa's Just Transition.

⁶⁵ Ibid.

⁶⁶ Interview with Shameela Soobramoney, National Business Institute, 10 October 2023.

⁶⁷ Cassim et al., 2021. South African Climate Finance Landscape 2020.

⁶⁸ NBI. 2022. Financing South Africa's Just Transition.

⁶⁹ Interview with Saliem Fakir, Africa Climate Foundation, 10 October, 2023.

⁷⁰ Interview with Paul Currie, Development Bank of Southern Africa, 9 October, 2023.

⁷¹ Interview with Tlou Ramaru, Department of Forestry Fisheries and Environment, October 17th 2023

Section 2 | Financial Sector Developments

To address both climate change and South Africa's development objectives, it will be necessary to undertake a multifaceted approach involving the reallocation of capital, the mobilisation of new financial resources, and the strategic reconfiguration of existing resources. This effort will encompass both public and private sector resources, including blended finance options.

In TIPS's "Financing a Just Transition in South Africa" report, local financial ecosystem players indicate that South Africa has a dynamic and sophisticated local market that could efficiently develop innovative instruments in response to mandatory policy requirements or attractive risk-related return opportunities with minimal external guidance. However, to foster such development, clear government signalling, increased regulatory pressure akin to ESG standards concerning climate finance, and an enabling regulatory and legislative environment are crucial. Direct and indirect financial support measures like de-risking (e.g., loan guarantees and first loss positions), credit enhancements (e.g. risk buy-down schemes, state-backed guarantees, first loss provision, political risk insurance, subordinated debt or the creation of risk pooling facilities.), and possibly financial incentives (e.g., tax exemptions, reduced transaction costs and preferential procurement) may be necessary to transition the ecosystem.⁷²

Recent data highlights a need for better climate change funding in South Africa to meet the NDC requirements, with challenges amplifying when aiming for a just transition as per the National Development Plan.⁷³ Projects that have modest just transition goals, corresponding to standard practices, managerial changes, or market-driven scenarios, are more readily financed within the current financial framework than those with more ambitious just transition objectives, which align with structural and transformative changes.⁷⁴ This suggests that projects with lesser transformative aspirations can be effectively funded by the current financial system, especially if there are only slight innovations in instruments, mechanisms, and transactions. However, to finance projects with a higher transformative vision, aligned with South Africa's JET-IP and NDC, mere adjustments to the existing policy system won't suffice. All these efforts will be in vain without introducing a new set of Key Performance Indicators (KPIs) and an incentive system in the just transition financial ecosystem.⁷⁵ It's essential for bankers and fund managers to have incentives to boost the allocation of funds towards just transition initiatives. Moreover, unless institutions consistently report their progress in these investments as a regular part of their operations, no significant shift will occur.⁷⁶

Thus, green financial sector reforms are relevant to improve financial sector resilience and crowd in private sector climate finance, and account for the "just" benefits needed in South Africa's transition.⁷⁷ To achieve this, the government can significantly contribute by fostering an enabling environment, reducing the risk associated with green investments, and removing critical legal and commercial barriers. The section below presents some of the key framing policies and regulations in the climate finance landscape.

2.1. Policy and regulatory landscape overview

In South Africa, sustainable finance initiatives are driven either by government and regulators or industry players. The transformation from a fragmented regulatory landscape to the 'Twin-Peaks' model, introduced by the Financial Sector Regulation Act 9 of 2017, has been pivotal. This model, operational since April 2018, established the Prudential Authority within the South African Reserve Bank (SARB) for financial institutions' stability, and the Financial Sector Conduct Authority for overseeing market conduct. Expected to enhance investor confidence by

⁷²Lowitt, S. 2023. Finance and the Just Transition. TIPS Working Paper. Available: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.tips.org.za/images/Working_Paper_PCC_Finance_and_the_Just_Transition_2021.pdf Accessed October 2023

⁷³ Interview with Sandy Lowitt, Research Fellow. TIPS. 20th September.

⁷⁴Lowitt, S. 2023. Finance and the Just Transition. TIPS Working Paper. Available: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.tips.org.za/images/Working_Paper_PCC_Finance_and_the_Just_Transition_2021.pdf Accessed October 2023

⁷⁵ Ibid.

⁷⁶ Ibid.

⁷⁷ IMF. 2023. South Africa. 2023 Article IV Consultation-Press Release. IMF Country Report No. 23/194

promoting efficiency, transparency, and accountability, this model could potentially attract more climate-focused investments, although the actual impact on climate finance flows is yet to be determined.⁷⁸

The implementation of climate-related financial policies and disclosures is introduced on the premise of identifying and managing climate risk stemming from climate change and emissions, targeting financial institutions, regulators, and stakeholders, to enhance financial stability. While this is important, this scope needs to broaden to include wider environmental factors and eventually social and governance matters, aligning with international standards like those from the Financial Stability Board's Task Force on Climate-related Financial Disclosure (TCFD).⁷⁹ Adopting a triple dividends approach to managing risk will contribute to building resilience through 1) Avoiding losses during disasters; 2) Stimulating economic activity through reduced disaster risk; and 3) Development co-benefits from investments. While the first dividend is a common motivation for resilience investment, the latter two are often overlooked.⁸⁰

2.2. South Africa Carbon Tax and Offset Framework

South Africa's NDC aims for a "peak, plateau, and decline" in GHG emissions, targeting 398 to 614 million tCO₂e emissions from 2025-2035, with a decline post-2036.⁸¹ The carbon tax, based on the "polluter pays" principle, aims to reflect the true cost of emissions to the environment and society, supporting NDC commitments and potentially fostering sustainable development.

2.2.1. Carbon Tax

South Africa is the only African country with an operational carbon tax, which was implemented in June 2019.⁸² This is the only local compliance market in the continent.

During the first phase of the carbon tax (currently ongoing), companies may offset 5% or 10% of their taxable emissions using carbon credits issued by three international standards; namely: the Clean Development Mechanism (CDM), Verified Carbon Standard (VCS), and Gold Standard (GS).⁸³ These offsets must be cancelled in the originating registry before transfer and registration in South Africa's Carbon Offset Administration System (COAS). This system issues retirement certificates for carbon tax offsets, ensuring accountability and transparency. Specific eligibility criteria must be met, and only offsets derived from projects within South Africa, not benefiting from other government incentives like the Renewable Energy Independent Power Producer Procurement Programme or the energy efficiency tax incentive, are eligible for use.⁸⁴

The carbon tax started at ZAR 120/tCO₂e, increasing annually by 2% plus inflation, and it is expected to be inflation-linked post-2022. As of 2022, the tax rate was R144 (~US\$8-9/tCO₂e),⁸⁵ well below international standards (between USD 40 - USD 80).⁸⁶ This is recommended to reach at least USD 75/tCO₂e by 2030 to be effective.⁸⁷

In 2020, eligible offset credits traded at about 80-85% of the tax rate.⁸⁸ Phase 1 of the tax, extended till December 31, 2025, introduced transitional tax-free levels and allowances for specific sectors to address competitiveness concerns and impacts on low-income households. The second phase, delayed to post-2025, will continue sizable tax-free allowances and exemptions for some sectors like agriculture, forestry, and waste sectors in addition to Eskom, the state-owned power utility.

⁷⁸ National Treasury. 2021. Financing a Sustainable Economy. Technical Paper.

⁷⁹ Ibid.
⁸⁰ Tanner et al., 2015. The Triple Dividend of Resilience. Available: https://www.gfdrr.org/sites/default/files/publication/The_Triple_Dividend_of_Resilience.pdf Accessed September 2023

⁸¹ Department of Mineral Resources and Energy. 2022. South African Carbon Offsets Programme: Draft Framework for approval of Domestic Standards for Public Comment

⁸² UNDP. 2022. Global Climate Public Finance Review.

⁸³ IETA. 2022. Carbon Market Business Brief South Africa.

⁸⁴ Ibid.
⁸⁵ Africa Carbon Markets Initiative. 2022. Africa Carbon Markets Initiative (ACMI) Roadmap Report. Available: https://www.seforall.org/system/files/2022-11/acmi_roadmap_report_2022.pdf Accessed October 2023

⁸⁶ Steenkamp. 2022. South Africa's carbon tax rate goes up but emitters get more time to clean up. Available: <https://theconversation.com/south-africas-carbon-tax-rate-goes-up-but-emitters-get-more-time-to-clean-up-177834> Accessed September 2023

⁸⁷ IMF (2022). More Countries Are Pricing Carbon, but Emissions Are Still Too Cheap. Available: <https://www.imf.org/en/Blogs/Articles/2022/07/21/blog-more-countries-are-pricing-carbon-but-emissions-are-still-too-cheap>. Accessed October 2023.

⁸⁸ Steenkamp. 2022. South Africa's carbon tax rate goes up but emitters get more time to clean up. Available: <https://theconversation.com/south-africas-carbon-tax-rate-goes-up-but-emitters-get-more-time-to-clean-up-177834> Accessed September 2023

The Treasury has recognised the admittedly low carbon price set on the basis of allowing enough time for large emitters to transition to greener technologies.⁸⁹ However, the National Budget Speech on February 2022 communicated that the carbon tax rate had only been raised to ZAR 144 (approximately USD 8) starting from 1 January 2022, with an annual increase of at least USD 1, eventually reaching USD 20 and aiming to attain at least USD 30 by 2030 and USD 120 beyond 2050.⁹⁰

The policy implementation delay hinders entities' incentive to decarbonize, possibly deterring private sector investment due to the lack of a clear regulatory framework. This could also lead to less transparency in carbon emissions management, affecting accountability and progress towards a low-carbon economy. The delay as well as the low effectiveness of the carbon price set may slow down the pace of achieving decarbonization and attracting necessary investments, thereby impacting the realisation of climate objectives and South Africa's Just Transition. Not to mention the 1.5°C target set by the Paris Climate Agreement; South Africa NDC targets are still insufficient to keep global warming to 2°C.⁹¹

2.2.2. Industry Impact

Energy-intensive industries in South Africa oppose the carbon tax, advocating for further financial incentives to ease the transition to renewable energy.^{92,93} The country's substantial tax-free thresholds have resulted in a low effective carbon tax rate, a situation expected to continue due to the extension of the carbon tax transition phase to the end of 2025.⁹⁴ Even so, there has been negative advocacy towards the tax aiming to secure additional tax allowances, reduce tax rates, and extend the implementation timeline. Notably, chemicals firm Sasol and industry associations such as Business Unity South Africa (BUSA), Minerals Council South Africa (MCSA), and the South African Petroleum Industry Association have emerged as formidable adversaries of this tax initiative.⁹⁵

The extension of the transition phase, along with significant government transfers to carbon-intensive sectors, particularly benefits the state utility monopoly, Eskom, which relies heavily on coal. Eskom now has no financial incentive to transition away from coal as it benefits from an offset from the energy levy and doesn't expect to pay the carbon tax until 2026, due to the unclear timeline on when it would be subject to the carbon levy.

The revenue from the carbon tax, like other environmental taxes, is not earmarked, providing budgeting flexibility but also creating uncertainty regarding its impact.⁹⁶ Even so, carbon tax funds can create the fiscal space to hasten the decarbonization process. For example, in the past, some of the revenue from the electricity generation levy was allocated to energy-saving initiatives and road repairs linked to coal transportation for electricity generation. Thus, there is an opportunity to channel revenues collected from this tax towards decarbonisation initiatives.

While approximately 75% of the industry in South Africa expresses support for the development of renewable energy,⁹⁷ specific sectors persistently emphasise the ongoing role of coal and fossil gas within the energy mix. Notably, the mining industry, with prominent players such as Anglo American, South32, and Exxaro Resources, stands out as a robust advocate for the continued utilisation of coal as an energy source in the country.⁹⁸

Energy-intensive industries in South Africa are now also exposed to the European Union's Carbon Border Adjustment Mechanism (CBAM), a central policy instrument within the European Green Deal (EGD) aimed at

⁸⁹National Treasury. 2019. MEDIA STATEMENT PUBLICATION OF THE 2019 CARBON TAX ACT. Available: https://www.treasury.gov.za/comm_media/press/2019/2019052701%20Media%20statement%20-%20Carbon%20Tax%20Act.pdf. Accessed: September 2023.

⁹⁰ Steenkamp. 2022. South Africa's carbon tax rate goes up but emitters get more time to clean up. Available: <https://theconversation.com/south-africas-carbon-tax-rate-goes-up-but-emitters-get-more-time-to-clean-up-177834>. Accessed September 2023

⁹¹ Climate Action Tracker. 2022. South Africa. Available: <https://climateactiontracker.org/countries/south-africa/>. Accessed October 2023

⁹²Subban et al., 2022. South Africa: Carbon tax – Impact on carbon-intensive businesses and the way forward. Available: <https://www.globalcompliancenesews.com/2022/09/16/south-africa-carbon-tax-impact-on-carbon-intensive-businesses-and-the-way-forward/>. Accessed September 2023

⁹³Cullen, S. 2023. Industry Lobbying Imbalance Putting South Africa's Climate Goals at Risk. Available: <https://influencemap.org/pressrelease/Industry-Lobbying-Imbalance-Putting-South-Africa-s-Climate-Goals-At-Risk-21162>. Accessed October 2023

⁹⁴IMF. 2023. South Africa Carbon Pricing and Climate Mitigation Policy. Available: <https://www.elibrary.imf.org/view/journals/002/2023/195/article-A003-en.xml>. Accessed September 2023

⁹⁵Cullen, S. 2023. Industry Lobbying Imbalance Putting South Africa's Climate Goals at Risk. Available: <https://influencemap.org/pressrelease/Industry-Lobbying-Imbalance-Putting-South-Africa-s-Climate-Goals-At-Risk-21162>. Accessed October 2023

⁹⁶ Ibid.

⁹⁷Cullen, S. 2023. Industry Lobbying Imbalance Putting South Africa's Climate Goals at Risk. Available: <https://influencemap.org/pressrelease/Industry-Lobbying-Imbalance-Putting-South-Africa-s-Climate-Goals-At-Risk-21162>. Accessed October 2023

⁹⁸Ibid.

reducing net GHG emissions both within Europe and beyond. It works as a carbon border tax applied to embedded GHG emissions in carbon-intensive products imported into the EU. Currently, the CBAM encompasses sectors such as cement, aluminium, fertilisers, electric energy production, hydrogen, iron and steel, as well as specific precursors (such as input materials like iron ore) and a limited range of downstream products, but its coverage is expected to be expanded. This means that approximately ZAR 52.4 billion of South African exports are immediately at risk, and this figure is expected to rise as CBAM's coverage expands. The iron and steel (including iron ore) and aluminium industries are particularly susceptible in the short term.⁹⁹ Within this context, businesses may find indirect motivation to proactively shift towards low-carbon energy sources and adjust their manufacturing processes to mitigate the impact of CBAM and similar carbon border taxes on their export performance. A boost in intra-African trade could also be an alternative to compensate for the expected number of exports to the EU at risk.

2.3. South Africa's Green Finance Taxonomy Project

Under South Africa's Sustainable Finance Initiative spearheaded by the National Treasury, the Taxonomy Working Group developed the country's Green Finance Taxonomy¹⁰⁰. SA GFT aims to provide several benefits:¹⁰¹

1. Aid the financial sector in making well-informed green investment decisions, aligning them with both international standards and South Africa's national policies, thus ensuring clarity and certainty.
2. Improve the management of environmental and social performance to mitigate risks within the financial sector.
3. Lower the costs related to labelling and issuing green financial instruments.
4. Unveil substantial investment opportunities in South Africa across a broad array of green and climate-friendly assets.
5. Ease regulatory and supervisory oversight within the financial sector.
6. Serve as a foundation for regulators to align or reference green financial products.

2.3.1. Similarities with EU Taxonomy and Implications

The EU Taxonomy served as a basis for developing the SA GFT, both being science-based systems defining criteria for environmentally sustainable economic activities. Their similarities and differences are outlined in Table 3.¹⁰²

Table 3 | Similarities and differences¹⁰³

Similarities	Differences
Core climate ambition of a net-zero economy by 2050 .	<p>SA: allows 5 or 10 years for activities to meet the thresholds within an investment plan.</p> <p>EU: only focuses on current green activities and doesn't include investment planning.¹⁰⁴ The EU Taxonomy is intended to boost investment in green projects that are necessary to implement</p>

⁹⁹Trade and Industrial Policy Strategies (TIPS). 2023. Sustainable Growth. Available: <https://www.tips.org.za/research-archive/sustainable-growth/green-economy-2/item/4590-responding-to-the-european-union-s-carbon-border-adjustment-mechanism-cbam-south-africa-s-vulnerability-and-responses> Accessed October 2023.

¹⁰⁰ A Green Finance Taxonomy (GFT) is a classification system defining a core set of assets, projects, activities, and sectors deemed "green" based on national priorities and global best practices. It serves as a tool for investors, issuers, and other financial industry players to assess, monitor, and showcase their green endeavours effectively.

¹⁰¹ National Treasury. 2022. South African Green Finance Taxonomy 1st EDITION

¹⁰²National Treasury. 2022. Media Statement. Available: https://www.treasury.gov.za/comm_media/press/2022/11/101%20Media%20statement%20-%20Green%20Finance%20Taxonomy%20Treasury.pdf Accessed September 2023

¹⁰³ Cojoianu, T.; Hoepner,A; Vu, A. 2022. A Comparison Between the EU Green Taxonomy and South Africa's Green Taxonomy. Available: https://sustainablefinanceinitiative.org.za/wp-content/uploads/2022/11/EU-SA_green_taxonomy_2022.pdf Accessed October 2023

¹⁰⁴ However, it does include two classification categories that refer to the direct or indirect impact on sustainability (enabling activities and transitional activities). 'Enabling activities' allow other activities to make a substantial contribution to one or more of the Taxonomy's objectives while 'transitional activities' contribute to mitigation and allow to keep global warming in line with Paris Agreement commitments.

Doyle, D. 2021. A Short Guide to the EU's Taxonomy Regulation. Available: <https://www.spglobal.com/esg/insights/a-short-guide-to-the-eu-s-taxonomy-regulation>. Accessed October 2023 This indicates that the 'transition' referred to in the EU Taxonomy is with reference to mitigation actions (transitioning to low/zero carbon emission sources), while the SA Taxonomy refers to having a transitional phase for activities to reach the set threshold.

Similarities	Differences
	the European Green Deal, which includes the European Green Deal Investment Plan (EGDIP). ¹⁰⁵
Similar criteria concerning substantial contribution to climate change mitigation and adaptation.	SA: outlines three eligibility levels for green buildings (top-level akin to net-zero, middle, and entry-level), EU: outlines only one level of eligibility for green buildings.
Similar number of requirements and similar thresholds with reference to respective local laws to international standards or industry standards.	SA: disclosure is voluntary , though efforts to integrate it into formal regulatory instruments are underway. EU: mandates disclosures via its regulation.
Similar focus areas: climate change mitigation, adaptation, water, pollution, biodiversity and the circular economy.	SA: excludes nuclear and gas, though they may be considered in future iterations. EU: inclusion of nuclear and gas under certain criteria and timelines.

Source: Author based on footnote

The high degree of similarity between the criteria specified at the level of individual economic activities in the EU and SA GFT could ultimately help foster seamless green financial flows between the EU and SA. However, there is a lack of formal recognition of SA GFT by the EU.¹⁰⁶ Achieving formal recognition from the EU Commission and negotiating its acceptance by the South African government would be an ideal step to foster the wider acknowledgment and utilisation of the GFT.

2.3.2. Case Studies

With the introduction of SA GFT, a strategic focus has emerged on its assimilation within the financial market landscape.¹⁰⁷ This integration is being driven through efforts to boost market awareness and the release of case studies. These case studies, along with accessible knowledge products, are expected to enhance comprehension of the taxonomy's practical applications. The main insights from two of them are presented in tables 4 and 5 below. Key South African regulators, particularly the Prudential Authority and the Financial Sector Conduct Authority, are poised to offer essential guidance and undertake evaluations that will provide insightful inputs, shaping the development of upcoming regulatory instruments.

Table 4 | Case Study Results ¹⁰⁸

Case Study	<i>Embedding the Green Finance Taxonomy into Sustainable Finance Frameworks</i>
Participants	Commercial banks; industry; market exchanges; debt investors; municipalities.
Results	<ul style="list-style-type: none"> Context: There is an increasing trend among thematic debt issuers to establish sustainable issuance and finance frameworks to guide their investment and financing activities. These frameworks are designed to align with the issuer's objectives, priorities, and market requirements, with a particular focus on ESG performance criteria. There is a growing emphasis on external taxonomies set by international standards and principles. The study distinguishes between the SA GFT as a definitional tool and broader frameworks that govern the entire transactional process. The SA GFT primarily focuses on identifying and selecting project types, eligibility criteria, and environmental and social risk management for financial instruments, primarily bonds. Implementing the SA GFT is noted to impose more stringent technical performance requirements compared to general practices. To achieve GFT alignment, issuers need to adhere to three key principles: Making a Significant

¹⁰⁵ European Commission. 2022. FAQ: What is the EU Taxonomy and how will it work in practice? Available: https://finance.ec.europa.eu/system/files/2021-04/sustainable-finance-taxonomy-faq_en.pdf Accessed October 2023

¹⁰⁶Arnoldi, M. 2023. Research institute explains why SA's Green Finance Taxonomy is not being used. Available: <https://www.engineeringnews.co.za/article/research-institute-explains-why-sas-green-finance-taxonomy-is-not-being-used-2023-08-03> Accessed October 2023

¹⁰⁷National Treasury. 2022. Media Statement. Available: https://www.treasury.gov.za/comm_media/press/2022/2022111101%20Media%20statement%20-%20Green%20Finance%20Taxonomy%20Treasury.pdf

¹⁰⁸Department of National Treasury. 2022. Embedding the Green Finance Taxonomy into Sustainable Finance Frameworks. Available: https://sustainablefinanceinitiative.org.za/wp-content/uploads/2022/11/GFTCaseStudy_3_SFFrameworks.pdf October 2023

	<p>Contribution (MSC), Do No Significant Harm (DNSH) and Minimum Social Safeguard (MSS).</p> <ul style="list-style-type: none"> ● Opportunities identified: <ul style="list-style-type: none"> ○ The study suggests that if issuers and borrowers incorporate the SA GFT and declare instrument compatibility, a new asset class may emerge. This could attract investors seeking robust processes and impact performance. As this asset class grows, it may lead to the development of further financial products, thereby expanding the implementation of the SA GFT. ○ Although the JSE does not currently require SA GFT alignment, the study mentions that South Africa could follow the European Union's lead in voluntary taxonomic alignment reporting for green bonds, potentially leading to widespread voluntary reporting of green bonds on the JSE sustainability segment. ○ Ultimately, the integration of the SA GFT into early-stage due diligence processes within internal issuance frameworks has the potential to enhance the quality of sustainable debt issuances and promote green investments both domestically and internationally, with competitiveness potentially accelerating the adoption of GFT reporting in the market.
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Table 5 | Case Study Results II¹⁰⁹

Case Study	<i>Embedding the Green Finance Taxonomy into Asset Management Investment Decision-Making</i>
Participants	Asset managers; private equity investors; fund managers; venture capitalists; securities exchanges; listed companies; financial instrument issuers.
Results	<ul style="list-style-type: none"> ● The study revealed significant challenges in aligning assets with taxonomic requirements in the context of Do No Significant Harm (DNSH) reviews. No tested assets achieved full taxonomic alignment, with most only partially aligned due to data gaps, particularly related to environmental and social impact and performance. These data gaps hindered the ability to demonstrate compliance with DNSH criteria, posing risks to informed decision-making and risk management. The study emphasised the importance of addressing data issues and building readiness for assessment and decision-making. ● The findings underscored the need for improved data availability and alignment readiness to effectively implement the SA GFT and enhance ESG management in the financial sector. ● The SA GFT pressures organisational reporting by requiring detailed economic activity-level data collection. This poses a challenge for investments such as listed equity and general listed debt (excluding use of proceeds), which typically lack granularity. Without upfront disclosure of such data from investees, asset managers would need to conduct an additional taxonomic alignment assessment. In the absence of regulatory mandates, the pressure for investees should come from within the market. If investors exert this pressure through more detailed and effective ESG engagement, it is likely to prompt a shift in how listed organisations report. ● Recommendations for addressing these challenges fell into two categories: <ul style="list-style-type: none"> ○ Easy-to-implement solutions: eligibility screening to assess taxonomic requirements; taxonomic alignment readiness reviews; data gap analysis; due diligence integration with existing standards; involvement during the project design phase; and internal capacity building for sustainability teams. ○ Transformational change interventions: increased resource capacity for sustainability teams; pressure on organisational reporting to meet taxonomic requirements; consideration of materiality thresholds; and reporting and strategy integration.

2.3.3. Industry Impact¹¹⁰

According to Intellindex (2022), the challenge associated with the SA GFT lies in the potential for unintended consequences. The report highlights the outcome of interviews with industry stakeholders:

- **Financiers** have expressed frustration with the taxonomy's one-size-fits-all approach to green projects, which fails to account for the unique conditions in South Africa.

¹⁰⁹Department of National Treasury. 2022. Embedding the Green Finance Taxonomy into Sustainable Finance Frameworks. Available: https://sustainablefinanceinitiative.org.za/wp-content/uploads/2022/11/GFTCaseStudy_3_SFFrameworks.pdf October 2023

¹¹⁰Intellindex. 2022. Financing South Africa's Just Energy Transition. Available: <https://www.intellindex.co.za/reports/financing-south-africas-just-energy-transition/> Accessed September 2023

- **Issuers**, on the other hand, have expressed caution regarding the reputational risks associated with labelling instruments as green or aligned with the taxonomy, citing the complexity of the taxonomy and concerns related to the DNSH requirements.
- **Asset managers** have described the disclosure process as cumbersome and of questionable importance, emphasising that the taxonomy remains more theoretical than practically implementable.

Moreover, **certification requirements** introduce added complexity and cost to green finance instruments, with some interviewees highlighting that an accumulation of standards could hinder the country's ability to achieve desired outcomes. The **EU GFT is also perceived as a hindrance** for similar reasons, as the reporting requirements may prevent several capital sources from participating in funding transition projects.

2.3.4. Adoption Challenges¹¹¹

The SA GFT was meant to create a shared language for financial markets, enhance transparency in sustainable investments, and combat greenwashing. However, a study conducted by the German Institute of Development and Sustainability (IDOS) identified key challenges to its adoption. These challenges include **usability, governance, fossil path dependencies, and its relationship with the EU taxonomy**.

- **Governance:** the GFT was introduced as a voluntary tool, facing competition from multiple parallel classification systems, leading to potential slowdowns in its implementation. To address this, IDOS recommended sending clear signals to stakeholders assuring them that the taxonomy will genuinely establish a shared financial market language, while also encouraging policymakers to engage in international forums to exchange best implementation practices. In this sense, the lack of formal recognition of SA GFT by the EU is not advantageous, and it would be highly beneficial if the EU Commission and the South African government could officially acknowledge the GFT.
- **Usability:** adopting the GFT requires expertise and often involves costs. The complexity of taxonomies should not be oversimplified; instead, knowledgeable stakeholders can provide guidance, training, and support to users.
- **Fossil path dependencies:** the financial sector remains heavily invested in carbon-intensive industries. To make a meaningful contribution, the GFT needs to be part of a comprehensive policy package aimed at transitioning to cleaner energy sources. While the GFT may not single-handedly redirect capital flows to support a just transition, it could increase funding for climate mitigation and adaptation projects.

Despite these challenges, the GFT has the potential to play a crucial role in providing clarity and certainty for green investments, reducing financial sector risks, cutting costs associated with green financial instruments, and serving as a reference for regulators in aligning with green financial products.

2.4. Climate Budget Tagging in South Africa

Climate Budget Tagging (CBT) in South Africa, initiated in 2020 with World Bank funding, tracks government spending on climate change adaptation and mitigation.¹¹² It aims to:

- I. Align budget and policy with climate concerns;
- II. Enhance the effectiveness of climate-related choices; and
- III. Establish accountability for climate responsibilities and reporting.

Driven by the National Treasury's interest in evaluating public spending efficiency, this initiative also explores the comparative value of achieving climate goals versus routine developmental benefits.¹¹³

¹¹¹Arnoldi, M. 2023. Research institute explains why SA's Green Finance Taxonomy is not being used. Available: <https://www.engineeringnews.co.za/article/research-institute-explains-why-sas-green-finance-taxonomy-is-not-being-used-2023-08-03> Accessed October 2023

¹¹² National Treasury. 2023. Medium Term Expenditure Framework. Available : [https://www.treasury.gov.za/publications/guidelines/Medium%20Term%20Expenditure%20Framework%20-%20Technical%20Guidelines%20\(2023%20MTEF\).pdf](https://www.treasury.gov.za/publications/guidelines/Medium%20Term%20Expenditure%20Framework%20-%20Technical%20Guidelines%20(2023%20MTEF).pdf) Accessed September 2023

¹¹³ UNDP. 2022. Global Climate Public Finance Review.

One of the key challenges in developing the budget tagging exercise has been the lack of government spending data. This has made it difficult to track spending over time, and it has also made it difficult to compare spending across different departments and agencies. Moreover, the lack of data measuring the impacts of climate change has made it difficult to assess the effectiveness of adaptation spending. It has also made it difficult to prioritise adaptation investments.

The system is planned for implementation across all government levels and selected public entities.¹¹⁴ A recent CBT pilot by the National Treasury across 11 sites at national, provincial, and local levels will inform a framework for tracking climate-relevant public expenditure. Additionally, capacity assessments and stress testing are being conducted to gauge system readiness, human capability, and support needs for integrating CBT into the Public Financial Management (PFM) system.

Current fiscal policy lacks sufficient support for environmental sustainability in government initiatives.¹¹⁵ Extending CBT initiatives across the entire budget is crucial to better address climate adaptation challenges by identifying areas for increased or redirected government spending and building an evidence base through data collection. There's a notable need for improved assessment and monitoring of climate-focused projects, distribution of transfers to State-Owned Enterprises (SOEs) and provinces, and advancements in green procurement.

¹¹⁴Keen, S., Lorimer, E., Vincent, K. 2022. Finance for adaptation at the level of local government in South Africa. https://kulima.com/wp-content/uploads/2022/10/220907_Report_South_Africa.pdf Accessed September 2023

¹¹⁵ The World Bank Group, 2022. Country climate and development report.

Section 3 | Public sector climate finance

This section outlines the instruments and financial flows within the public sector space, and the key actors involved and their respective roles.

Between 2017-2018, public finance entities collectively committed an average annual amount of approximately ZAR 22 billion, representing a quarter of the total climate finance recorded.¹¹⁶ Table 6 below provides an overview of the existing financial mechanisms in South Africa, some of which are currently underutilized. To enhance their utilisation, it is essential to improve coordination, bolster capacity, simplify procedures, and establish a conducive environment for private sector participation.

Table 6 | Table of existing funding in South Africa and utilisation of financial mechanisms

Actor	Type	Preferred financial instruments	Current funding and utilisation
Government agencies and funds	National Treasury National departments Municipalities	Grant, concessional loans, guarantees, equity investments, tax incentives/subsidies, bonds, public-private partnerships (PPPs)	Resilience premiums tend to be integrated within the budgets of different local government departments, and the adaptation 'additionality' cost is not captured. National Treasury: allocates grants for disaster relief and reconstruction, but lacks grants for risk mitigation, leading to insufficient funding for adaptation efforts across government departments. National departments: Finance, primarily channelled through national departments, often diminishes by the time it reaches local governments due to intergovernmental transfers like conditional grants . Municipalities: while municipalities have the option of green bonds for adaptation activities, financial distress in 174 out of 278 municipalities in South Africa significantly hampers debt finance raising efforts, with only Cape Town's bond specifically targeting adaptation ¹¹⁷ . Overall, there is a lack of tax incentives, subsidies and an enabling business environment for crowding in the private sector.
Development Finance Institutions (DFIs)	National Bilateral Multilateral	Debt, equity or mezzanine finance and guarantees and political risk insurance.	Underutilised: regional coordination and strategies to crowd in adaptation finance. Regional funds/ insurance mechanisms can help diversify risk while providing scale for investors. E.g., the Southern African Power Pool is an example that can be used.
Climate Funds	Green Climate Fund Global Environment Facility Adaptation Fund	Grants, concessional loans, guarantees and equity.	Currently utilised at a national level. Highly concessional loans and/or blended finance are used to crowd in additional investment for scale. Lack of project funding at the sub-national level. There is an opportunity for "grouping" municipal projects for scale.

Source: Author based on footnote sources

¹¹⁶ Cassim et al., 2021. Climate Finance Landscape South Africa.

¹¹⁷ Keen, S., Lorimer, E., Vincent, K. 2022. Finance for adaptation at the level of local government in South Africa. https://kulima.com/wp-content/uploads/2022/10/220907_Report_South_Africa.pdf Accessed September 2023

3.1. Key public-sector stakeholders and initiatives

Climate finance across South Africa stems from various sources and is not always earmarked as climate finance given the climate budgeting tagging process is complex and ongoing. The primary funding for climate change activities in South Africa is via the national budget through the Medium-Term Expenditure Framework (MTEF), including the support for research activities that contribute towards resilience. The other principal sources of public finance are public intermediaries and include the Global Environment Facility (GEF), Development Finance Institutions (World Bank, AfDB, and the DBSA), and official Development Institutions such as the Climate Fund, the GF, the GCF and the AF.

The key roles played by these actors and significant developments in the climate finance landscape in the public sector are outlined below.

3.1.1. Government

Nationally, South Africa employs various financial mechanisms, notably the Green Fund and Green Bonds, to support climate change adaptation efforts. The Green Fund directly finances projects promoting sustainable development, while Green Bonds are used to raise capital for environmentally beneficial endeavours, including those related to climate adaptation.

The South African Green Fund, established in collaboration with the DBSA, mobilises resources for green projects contributing to a low-carbon, climate-resilient economy. The DBSA manages the fund, implementing investment strategies, project evaluations, and monitoring. Additionally, the DBSA offers technical expertise, financial management, and project development support, maximising the Green Fund's impact.

Green bonds, aligned with corporate social responsibility, provide opportunities for investments in green and climate initiatives. In 2017, the City of Cape Town (CoCT) issued a \$1 billion green bond (approximately ZAR 13 billion) for water and sanitation projects, enhancing infrastructure and sanitation access. Johannesburg introduced a municipal "Green Bond" valued at ZAR 1.5 billion (approximately US\$143 million) for climate change mitigation and resource management.^{118,119} South Africa should explore the issuance of green bonds to finance adaptation activities.

The Technical Handbook on the Issuance of Sustainable Municipal Bonds, launched in 2022, supports decision-making regarding bonds. South Africa should leverage this instrument for funding adaptation activities and consider establishing or strengthening a national climate fund to support adaptation projects. A transparent, accessible, and well-governed fund can encourage its utilisation.

The key public sector actors that help to drive and shape the flow of climate finance in South Africa are outlined in Annex 3.

3.1.2. DFIs and Climate Funds

Development finance institutions (DFIs) like the Development Bank of Southern Africa (DBSA) and others are crucial for promoting climate-resilient development, notably by strengthening infrastructure, innovating financing mechanisms, adopting sustainable technologies, and spurring economic growth through enterprise development and job creation. Additionally, they enhance technical expertise and foster knowledge-sharing, mobilising proactive climate measures across regional, provincial, and local levels.¹²⁰

DFIs and climate funds provide concessional loans and/or blended finance for long-term adaptation investments. Climate funds, from various international and regional entities, complement domestic resources to bridge the climate action financing gap in South Africa, covering a range of projects from infrastructure resilience to community climate resilience enhancement. They can also attract additional financing by reducing investment risks

¹¹⁸ Global Infrastructure Hub. 2021. Cape Town Green Bond. Available: <https://www.gihub.org/innovative-funding-and-financing/case-studies/cape-town-green-bond/> Accessed September 2023

¹¹⁹ C40 Cities. 2016. C40 Good Practice Guides: Johannesburg Green Bond. Available: <https://www.c40.org/case-studies/c40-good-practice-guides-johannesburg-green-bond/> Accessed September 2023

¹²⁰ Ebrahim. 2018. A study on the potential private sector investment priorities that support South Africa's climate change outcomes. Available: www.renmere.co.za Accessed September 2023

and encouraging private sector involvement. While South Africa has accessed funds from entities like the GCF, AF, and GEF, the complex and time-consuming process of accessing and utilising these funds can limit the number of projects submitted for funding.

Less than 10% of international public climate finance from international climate funds reaches the local level.

Multilateral entities and national governments manage most climate finance, with only a small portion channelled to the local level.¹²¹ For example, the Green Climate Fund (GCF) has a complex incremental cost approach to financing climate adaptation, which acts as a barrier to local access. This perpetuates existing inequalities within the country.

Furthermore, in accordance with Ebrahim (2018), data from Climate Funds Update reveals that South Africa received ~ZAR 5.9 billion multilateral support from 2007 to 2017. However, only ~ZAR 1.83 billion, equivalent to 31% of the allocated funds, was effectively disbursed. This disbursement rate underscores the persistent and substantial hurdles related to project implementation, hindering the prompt allocation of financial resources.¹²²

Strengthening institutional capacities and streamlining procedures can enhance the utilisation of this available financing mechanism.

3.1.2. Multilateral and Regional Collaboration

South Africa has partnered with multilateral and regional development banks like the World Bank, African Development Bank, and DBSA for climate finance. In 2021, DBSA, through a private arrangement with the French Development Agency, initiated a green bond mobilising EUR 200 million (approximately ZAR 3.5 billion) for climate adaptation in South Africa.¹²³ DBSA also offers advisory, investment, and implementation support to access climate funds. DBSA plays a crucial role in facilitating climate finance access and allocation, like its involvement with the GCF. These banks provide technical assistance and help develop feasibility studies for investment justification.

Recently, the International Partners Group (IPG) pledged around US\$8.5 billion (approximately ZAR 163 billion exchange rate dependent), over 2023-2027 to support South Africa's decarbonization efforts, targeting energy, green hydrogen, and electric vehicles sectors. A significant focus has been on aiding Eskom to transition from coal-fired power stations and enhancing the transmission and distribution networks. This partnership aims to accelerate the decarbonization of the electricity system, ensuring a just transition for vulnerable workers and communities.

However, there have been concerns raised regarding the terms and conditions of funding and their impact on the fiscal space. Substantial inflows in the form of loans (even at 0% interest), or deals requiring government guarantees, will decrease domestic fiscal space. However, substantial grants from IFIs can expand the fiscal space, especially if they catalyse higher GDP growth, resulting in increased taxation revenue

Substantial grants from International Financial Institutions (IFIs) can broaden fiscal space, potentially catalysing GDP growth and increasing tax revenue. Further fiscal expansion could occur if government-financed social or economic diversification projects are funded by separate IFI grant monies instead.

3.1.3. Civil Society Organisations

Civil Society Organisations (CSOs) play a multifaceted role in climate finance, encompassing advocacy, monitoring, capacity building, stakeholder engagement, research, climate justice, project implementation, and public education. Their efforts contribute to the effective allocation and utilisation of climate finance resources and help South Africa address the challenges posed by climate change.

Considering South Africa's emphasis on a "Just Transition", a number of campaigns and coalitions have been launched with the objective of making sure that civil society is included throughout the process.

¹²¹Keen, S., Lorimer, E., Vincent, K. 2022. Finance for adaptation at the level of local government in South Africa. https://kulima.com/wp-content/uploads/2022/10/220907_Report_South_Africa.pdf Accessed September 2023

¹²²Ebrahim. 2018. A study on the potential private sector investment priorities that support South Africa's climate change outcomes. Available: www.renmore.co.za Accessed September 2023

¹²³ DBSA. 2021. DBSA Launches Green Bond. Available: <https://www.dbsa.org/press-releases/dbsa-launches-green-bond> Accessed September 2023

Table 7 | List of NGOs/CSOs initiatives and projects

Name	Partners/members	About
Climate Ambition to Accountability Project (CAAP) ¹²⁴	WWF South Africa (project lead); South African Climate Action Network (SACAN) and Institute for Economic Justice (IEJ) (implementing partners); funding from the European Union as part of its Climate Change Champions programme.	The Climate Ambition to Accountability Project (CAAP) has been launched with the goal of strengthening civil society engagement in South Africa's climate governance. The CAAP focuses on three main objectives: building a robust cross-sectoral civil society network to bolster climate ambition, implementation, and accountability; nurturing a group of youth climate champions through various training initiatives; and promoting the integration of gender, climate equity, and rights-based perspectives into national climate policies, encompassing both mitigation and adaptation efforts.
Fair Finance Southern Africa ¹²⁵	Coalition partners: 350Africa.org, Centre for Environmental Rights, African Climate Reality Project, Centre for Applied Legal Studies, Oxfam South Africa, Earthlife Africa, Friends of the Earth Mozambique	Focuses on promoting socially and environmentally responsible investments by DFIs in South Africa and Africa, with a specific emphasis on climate change and transparency. South African DFIs face criticism for lacking transparency and international policy alignment. The Fair Finance Coalition unites various civil society organisations with the aim of improving transparency and accountability in DFI financing practices.
Life After Coal ¹²⁶	Joint campaign by Earthlife Africa, groundWork, and the Centre for Environmental Rights.	The Life After Coal/Impilo Ngaphandle Kwamalahle campaign, launched in 2016 by Earthlife Africa Johannesburg, groundWork, and the Centre for Environmental Rights, aims to dissuade new investments in coal-fired power and mines, expedite the phase-out of South Africa's coal infrastructure, and facilitate a fair transition to renewable energy systems.

Source: Author based on footnote sources

CSOs are crucial in the just energy transition, but they face challenges like limited funding and difficulties in engaging with resistant policymakers.¹²⁷ Yet, the government's acknowledgement of the need for a just transition and opportunities for partnerships with the private sector and international organisations create an enabling environment for civil society to have a more impactful role in advocating for change in the energy sector.

The PCC has sought civil society input in developing the Just Transition Framework, addressing issues like jobs, local economies, skills, and governance.¹²⁸ In June 2022, the COP26 Presidency released an updated report outlining the next steps for the JETP. However, concerns about limited information and input opportunities had been previously raised in a February 2022 letter from the Centre for Environmental Rights, the Life After Coal Campaign, and the Fair Finance Southern Africa Coalition to the Presidential Climate Finance and Technical Team (PCFTT). The letter highlighted the complexity of South Africa's energy sector, including social and ecological issues, and questioned how the JETP would address them.^{129,130} A follow up letter published in September 2022, requesting commitment from the Presidency and the PCFTT for transparency in the negotiation process, including disclosing any obligations and conditions proposed for South Africa in agreements with the IPG and other institutions participating in the Just Energy Transition Partnership (JETP) or other climate finance deals.¹³¹

¹²⁴WWF. 2023. Climate Ambition to Accountability Project. Available: https://www.wwf.org.za/our_work/initiatives/climate_ambition_to_accountability_project/ Accessed 2023

¹²⁵Fair Finance Southern Africa. 2023. Working for Development Finance Institutions that operate Transparently and for Climate Justice. Available: <https://www.fairfinancesouthernafrica.org/> Accessed October 2023

¹²⁶Life After Coal. 2023. About. Available: <https://lifeaftercoal.org.za/> Accessed October 2023

¹²⁷ Amansure, R. 2022. The Role of Civil Society in the Just Energy Transition in South Africa. The Institute for Justice and Reconciliation. Available: <https://www.ijr.org.za/2023/10/10/the-role-of-civil-society-in-the-just-energy-transition-in-south-africa/> Accessed October 2023

¹²⁸Petrie, B., Allen, J., Notoane, J., & Maimela, S. 2022. Community Consultations on a Just Transition. Presidential Climate Commission. <https://pcccommissionflow.imgix.net/uploads/images/CommunityConsultations-on-a-Just-Transition-May-2022.pdf> Accessed October 2023

¹²⁹Life After Coal and Fair Finance. 2022. Civil Society Letter to Head of the Presidential Climate Finance Task Team. Available: <https://350africa.org/civil-society-letter-to-head-of-the-presidential-climate-finance-task-team/> Accessed October 2023

¹³⁰ Wemanya, A., and Adow, M. 2022. Implementation of the Just Energy Transition Partnership in South Africa VER. 08.08.2022 | COLLECTIVE RESEARCH Lessons Learnt for Civil Society Organisations. Policy Brief. Available: https://www.germanwatch.org/sites/default/files/g7-g20_track-2_just_energy_africa_policy_brief_rev-1_met_1.pdf Accessed October 2023.

¹³¹Life After Coal and Fair Finance. 2022. Civil Society Letter to Head of the Presidential Climate Finance Task Team. Available: <https://350africa.org/civil-society-letter-to-head-of-the-presidential-climate-finance-task-team/> Accessed October 2023

The lack of transparency has raised concerns and distrust between civil society and the government, exacerbated by differing views on renewables and fossil fuels.¹³² GroundWork also released a report in 2022 which highlighted some of the other concerns of civil society regarding the Just Transition Process. These include:¹³³

- **Civil society voices strong opposition to the misinformation campaigns orchestrated by Big Oil.** They condemn these campaigns for contributing to a climate of bad politics and hampering progress towards achieving a just transition.
- Civil society acknowledges the PCCs work and its role in advancing the just transition agenda. Nevertheless, they **emphasise the imperative of greater community and worker engagement within the PCC's process.**
- **Concerns arise around contrasting visions for the just transition.** Major business forums, particularly the National Business Initiative (NBI), advocate for an expanded power system centred on privatised renewables and green technologies, often framed as ecological modernization. Civil society remains cautious, suspecting that this vision may perpetuate existing power structures, sidelining justice considerations.
- The report delves into discussions about climate finance, particularly the Just Energy Transition Partnership (JETP) and the Just Energy Transition Investment Plan (JET IP). It **highlights anxieties about diminishing JETP contributions and broader climate finance issues.**
- Civil society underscores the pivotal role of government in facilitating the just transition. However, they **express concerns about the government's close ties to capital, corruption, and its inability to tackle pressing energy and economic crises.** They stress the need for open democracy and a reevaluation of existing power structures.

In conclusion, civil society acknowledges the urgency of a just transition while recognising the multifaceted challenges posed by environmental, economic, and political complexities. They emphasise the imperative of democratic decision-making and active community engagement to ensure the realisation of a fair and sustainable transition.

¹³² Petrie, B., Allen, J., Notoane, J., & Maimela, S. 2022. Community Consultations on a Just Transition. Presidential Climate Commission. <https://pcccommissionflow.imgix.net/uploads/images/CommunityConsultations-on-a-Just-Transition-May-2022.pdf> Accessed October 2023

¹³³ GroundWork. 2023. The (Un)Just Transition: Calls for a shared vision for a different future. Available: <https://groundwork.org.za/wp-content/uploads/2023/03/2023-March-for-Web.pdf> Accessed October 2023

3.2. SWOT assessment of public sector finance

By identifying the strengths and weaknesses, such as efficient resource mobilisation or bureaucratic hurdles, we can better leverage available financial resources.

Simultaneously, recognizing opportunities, like innovative financing mechanisms or global partnerships, enables us to maximise the impact of public climate finance. Furthermore, by acknowledging potential threats, such as policy shifts or fiscal constraints, we can proactively address challenges to ensure the continued effectiveness of climate finance initiatives in combating one of the most pressing global issues of our time. Thus, Box 1 presents a summary of public climate finance via a Strengths, Weaknesses, Opportunities, and Threats (SWOT) matrix.

Box 1 | SWOT assessment of public climate finance

Strength - positive internal factors

- **Establishment of South Africa's Green fund** to mobilise resources for projects contributing to a low-carbon, climate-resilient economy.
- **Issuances of green bonds at municipal level** - CoCT US\$1 billion green bond for water and sanitation projects, and Johannesburg ZAR 1.5 billion (approximately US\$143 million) green bond for climate change mitigation and resource management
- **DBSA's crucial role in facilitating climate finance access** and allocation from IFIs.
- **IPG pledged support** towards South Africa's decarbonization efforts
- **Civil society is active** in South Africa with strong networks and knowledge on climate change issues.

Opportunities - positive external developments

- **Enhancing local institutions' ability to develop viable projects** can improve fund access and management.
- Implementing **clear and supportive policy frameworks can incentivize investments in climate change projects, for example** offering tax incentives for Green Bond issuance and expediting approval processes for Green Fund projects. Policy should aim to stimulate private

Weakness - limiting internal constraints

- Public sector fiscal constraints from budgetary limitations, hindering the execution of climate-related projects.^{134, 135, 136, 137, 138}
- **Bureaucratic obstacles and excessive paperwork** impede decision-making processes. Further, inadequate coordination between commercial banks, DFIs and government agencies hampers project initiation and causes delays.¹³⁹
- **Shortage of skilled personnel and technical expertise** coupled with limited information on accessing financing for low-carbon projects complicates implementation.¹⁴⁰
- **Outdated or restrictive policies and regulations** hinder innovation and the adoption of climate-related projects. The NBI posits that funding for the net-zero transition is limited by lack of policy and strategic alignment, high perceived investment risk, limited shovel-ready project pipeline, insufficient blended finance, and inconsistent green standards.¹⁴¹
- Both the public and private finance sectors face capacity and knowledge limitations, impacting the implementation of climate-related projects. These projects **demand a high level of transparency and accountability**, which may be lacking.¹⁴²
- **Public engagement and skill shortages in project development hinder responsive policy-making.** The multifaceted tracking systems, involving various stakeholders and funding channels, further complicate climate project implementation due to the necessity for public involvement, lack of expertise, and complex tracking mechanism.¹⁴³
- **CBT challenges:** Need for improved assessment and monitoring of climate-focused projects, distribution of transfers to SOEs and provinces, and advancements in green procurement.

Threats - external threats and barriers

- Lack of a dedicated national climate fund to support adaptation initiatives and enhance the transparency, accessibility, and governance of such funds.
- Adaptation projects have smaller investment sizes compared to mitigation and other investments, resulting in **higher due diligence and transaction costs** as a proportion of overall project costs. This is a deterrent for investors.

¹³⁴ Intellidex. 2022. Capital Market developments to scale private sector mobilisation.

¹³⁵ Climate Policy Initiative. 2021. South African Climate Finance Landscape 2020

¹³⁶ NDC. 2023. Investment Planning Guide: Best Practice. Available: Confidential

¹³⁷ Frankfurt School. 2023. Development Finance Course- Module 6

¹³⁸ NBI. 2022. Financing South Africa's Just Transition

¹³⁹ Ibid.

¹⁴⁰ Ibid.

¹⁴¹ Ibid.

¹⁴² Ibid.

¹⁴³ Ibid.

capital from private equity and venture capital, attracting greater levels of finance available to state entities.

- Promoting public-private partnerships (PPPs) can attract additional financing for adaptation projects, combining public oversight with private-sector efficiency.
- Ensuring transparency and accountability in climate fund utilisation is crucial, achieved through regular audits and public reporting.
- **Raising awareness among potential investors about sustainable investment** opportunities in climate change can attract more funding, possibly through marketing campaigns or showcasing successful projects.
- **Enhanced coordination and partnerships** among government agencies and climate stakeholders in the region (e.g., multilateral, and regional development banks) can facilitate larger-scale identification, financing, and implementation of adaptation initiatives. For example, the DBSA's green bond initiative with the AFD in 2021 illustrates the potential for mobilising funds to finance climate change adaptation in the country.

- The EUs CBAM which will have a negative impact on industry, labour and exports in South Africa
- Power dynamics and political tension (hidden and invisible) between (and amongst) government, the private sector and civil society.

Source: Author

Section 4 | Private sector climate finance

Private sector climate finance entails the allocation of financial resources by private individuals and companies, free from state control. The South African Climate Finance Landscape 2020 (2021) reports that, in the years 2017 and 2018, private actors contributed an average of ZAR 35.3 billion annually (57% of the total climate finance) towards climate mitigation sectors, encompassing clean energy, energy efficiency, and demand-side management. It is sustained that the prospect of substantial profits, reduced technical and project risks, along with declining technology costs, has consistently drawn financial players to South Africa's clean energy sector.¹⁴⁴

Among these private climate investors, commercial actors, which include non-state-controlled financial entities such as banks, institutional investors, fund managers, and venture capital investors, took the lead with a contribution of ZAR 19.3 billion.¹⁴⁵ Notably, all their investments were channelled into the clean energy sector. The remaining 45% of tracked private sector investments in this context were attributed to corporations, philanthropists/donors, non-governmental organisations (NGOs), and households.¹⁴⁶

The exclusive allocation of private sector investment to clean energy, energy efficiency, and demand-side management sectors in South Africa suggests that investors may either view other climate sectors as economically unviable or lack the necessary knowledge and tools for correctly identifying and categorising climate-related investments. While sectors like water conservation and the circular economy still heavily rely on public and philanthropic capital, areas like agriculture and food production present well-established business cases, making them ripe for investment. Once again, these findings¹⁴⁷ underscore the urgent need for improved tools and capacity building for private sector investors.

The subsections below introduce the key private-sector stakeholders and climate finance related initiatives scoped in our research, delve into sustainable bonds as feasible instruments to access CF, the context and challenges in the Just Transition, and a final SWOT assessment for the private sector climate finance in South Africa. Where information was available, we introduced industry perspectives on the issues discussed.

4.1. Key private-sector stakeholders and initiatives

This subsection introduces the key private-sector stakeholders and climate finance related initiatives scoped in our research. We grouped stakeholders in three: Banking Sector: Commercial and Development Banks and Microfinance Institutions (MFIs); Institutional Investors: Pension Funds, Insurance Companies, and Endowment Funds; and Private Equity Investors: Angel Investors, Venture Capital Funds and Private Equity Funds.

4.1.1. Banking Sector: Commercial and Development Banks and Microfinance Institutions (MFIs)

Table 8 | Table of Banking sector investors

Sector Overview	<p>Globally, there is a growing preference for utilising bonds and loans as a primary avenue to secure sustainable funding. However, this preference is contingent upon adhering to specific criteria for classification and ensuring the responsible allocation of funds to maintain credibility.¹⁴⁸</p> <p>Members of Banking Association South Africa (BASA) have successfully issued green bonds worth over ZAR 18 billion for renewable energy projects and have established green credit lines. Nevertheless, there is currently limited transparency in publicly disclosing the terms and impact of distributed funds.</p> <p>As per SA GFT, there is currently no mandatory obligation for bond issuers, borrowers, investors, or lenders/financiers to disclose their alignment with taxonomy criteria. It is only advised for both green</p>
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¹⁴⁴ Cassim et al., 2021. South African Climate Finance Landscape 2020

¹⁴⁵ Ibid

¹⁴⁶ Ibid

¹⁴⁷ Ibid

¹⁴⁸ Ebrahim. 2018. A study on the potential private sector investment priorities that support South Africa's climate change outcomes. Available online: www.renmere.co.za Accessed September 2023

	<p>bond issuers and green loan financiers to consider implementing a verification process to confirm the "green credentials", such as the Green Bond Principles (GBP), of their respective transactions or offerings.</p> <p>Mobilisation in the banking sector for climate finance has been best evidenced to date by the REI4P project. However, there remains a large gap in JET financing. In order for this to occur, more investments need to be passed off to institutional investors in the form of green bonds, beyond what has even been issued to date¹⁴⁹.</p>
<p>Key actors</p>	<ul style="list-style-type: none"> ● First National Bank ● Standard Bank Group ● Absa Bank ● Nedbank ● Rand Merchant Bank ● Investec
<p>Initiatives around climate finance</p>	<p>The IFC, a member of the World Bank Group, has teamed up with Nedbank Limited-Africa's first carbon-neutral bank-to boost funding for renewable energy projects. They aim to support South Africa's transition to cleaner energy sources, reduce GHG emissions, and create jobs in the renewable energy sector. IFC will provide Nedbank Limited with a loan of up to ~ZAR 3.2 billion (US\$200 million) to expand its green finance operations and finance renewable energy projects. This partnership aligns with IFC's broader goal of developing South Africa's climate finance market and supporting the government's plan to shift towards a lower carbon economy.¹⁵⁰</p> <p>The IFC has also announced Africa's first certified green loan, which has been provided to Absa Bank Ltd. This loan, totaling up to ~ZAR 2.4 billion (US\$150 million), will support renewable energy projects in South Africa. It's the first certified loan in Africa complying with Green Loan Principles, promoting transparency in Absa's green project financing, and potentially serving as encouragement for other banks to follow suit. IFC will also provide guidance to help Absa develop a framework for green, social, and sustainable bonds and loans.¹⁵¹</p> <p>In 2017, the Rand Merchant Bank collaborated with KfW Development Bank to set up the FIRST (Facility for Investment in Renewable Small Transactions) fund. In total, ZAR 1.3 billion was pledged to the fund which aims to finance projects requiring greater than ZAR 50 million in support and has currently invested in solar, biogas, hydro, and energy efficiency projects, with a view to expanding this to wind energy and renewable energy projects integrated with energy storage.¹⁵²</p> <p>The First National Bank of South Africa has also set up the Business ecoEnergy Loan aimed at improving energy efficiency in established businesses, with a maximum loan value of ZAR 1 million.¹⁵³ The fund also has an Alternative Energy Solutions loan of up to ZAR 50 million to help established energy companies expand their renewable energy operations.¹⁵⁴</p> <p>Investec has concluded several initiatives concerning climate finance. They have previously issued two ZAR 9 billion (USD 600 million) sustainability-linked loans as well as a ZAR 15 billion (USD 1 billion) Green Bond. The company also adheres to emissions reporting initiatives and has reported to the Carbon Disclosure Project (CDP) since 2009 and the Task Force on Climate-Related Financial Disclosures (TCFD) since 2019. Furthermore, the company is a member of the Net Zero Banking Alliance (NZBA), the UNEP Finance Initiative (UNEP FI), among others¹⁵⁵.</p> <p>The Standard Bank Group has set ambitious targets of mobilising between ZAR 250-300 billion in sustainable finance by 2026 and aims to provide up to 3 times more finance for renewable energy as opposed to fossil fuels by the end of 2024. The group has also issued green and sustainable bonds. Moreover, the bank has produced a climate policy document identifying sectoral targets for climate</p>

¹⁴⁹Intellidex, 2022. Financing South Africa's Just Energy Transition. Available: <https://www.intellidex.co.za/reports/financing-south-africas-just-energy-transition/> Accessed September 2023

¹⁵⁰Nedbank, 2021. IFC, Nedbank partner to increase green financing. Available: <https://www.nedbank.co.za/content/nedbank/desktop/gt/en/news/corporate-and-investment-banking-news/press-releases/2021/ifc-nedbank-partner-to-increase-green-financing.html> Accessed September 2023

¹⁵¹Maylie, 2021. IFC and Absa Bank Partner on Africa's First Certified Green Loan to Support Green Energy Project. Available: <https://pressroom.ifc.org/all/pages/PressDetail.aspx?ID=26334#:~:text=IFC%2C%20a%20member%20of%20the,its%20greenhouse%20gas%20reduction%20targets> Accessed September 2023

¹⁵²First, 2023. Simple and efficient funding for small renewable energy projects. Available: <https://firstfund.co.za/> Accessed September 2023

¹⁵³First National Bank, 2023. FNB Business ecoEnergy Loan. Available: <https://www.fnb.co.za/commercial-banking/finance/business-loans/ecoEnergyLoan.html> Accessed September 2023

¹⁵⁴First National Bank, 2023. Alternative Energy Solutions. Available: <https://www.fnb.co.za/business-banking/industry-expertise/alternative-energy-solutions/index.html> Accessed September 2023

¹⁵⁵Investec. 2022. Built on strong foundations. Climate-related financial disclosures 2022. Available: <https://www.investec.com/content/dam/international/corporate-responsibility/corporate-sustainability-report/investec-climate-report-2022.pdf> Accessed October 2023

	<p>finance.¹⁵⁶ Furthermore, the bank has created a strategy for climate smart agriculture, as well as introducing financing restrictions for deforestation, oil, gas, and coal within the bank's operations¹⁵⁷. Across the industry, there have been likewise commitments to 'coal exclusion' as part of their lending policy. Other South African Banks that have adopted such a strategy include Absa Bank, Investec, Rand Merchant Bank, and Nedbank¹⁵⁸.</p>
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4.1.2. Institutional Investors: Pension Funds, Insurance Companies, and Endowment Funds

Table 9| Table of Institutional Investors

Sector Overview	<p>Pension funds form a large part of long-term investment in South Africa, being more than 5000 total funds in the country who collectively control assets worth 110% of GDP.¹⁵⁹ On the whole, they have, as of 2021, invested ZAR 4.4 billion into renewable energy, urban development and regeneration, water, agriculture, roads, and student accommodation.¹⁶⁰</p> <p>Insurance Companies also make up a substantial number of long-term investments made in South Africa with the life insurance industry alone holding more than ZAR 3.5 trillion¹⁶¹. There is also reason to be hopeful that climate investments will increase into the future, with 30% of life insurance CEOs planning to spend >10% of their revenue in efforts to become more sustainable¹⁶².</p>
Key actors	<ul style="list-style-type: none"> • Government Employees Pension Fund (GEPF) • Eskom Pension and Provident Fund (EPPF) • University Endowment Funds • Johannesburg Stock Exchange (JSE) • South African Insurance Association (SAIA) • Old Mutual Investments • Africa Risk Capacity (ARC) Ltd (members of the Net Zero Asset Owners Alliance)¹⁶³
Initiatives around climate finance	<p>The GEPF is South Africa's largest pension fund and holds assets worth more than ZAR 1.61 trillion.¹⁶⁴ The Isibaya Fund, which manages the GEPF assets, holds the Developmental Infrastructure Investments South Africa Portfolio, which invests in, among other areas, environmental infrastructure that aims to mitigate climate change. The portfolio contains investments in renewable energy, clean technology, recycling, and practices that positively augment energy efficiency.¹⁶⁵</p> <p>The EPPF has recently announced its membership of the Net-Zero Asset Owner Alliance (NZAOA) formed by the United Nations Environment Programme (UNEP)¹⁶⁶. In addition, the EPPF has provided start-up capital for the green private equity firm Revego.</p> <p>In the non-life insurance industry, the SAIA follows the Principles for Sustainable Insurance Initiative set up by UNEP and has created various partnerships related to mitigation and adaptation to climate change, among which is the Partnership for Risk & Resilience (P4RR). This partnership has until now invested more than ZAR 100 million in helping 82 municipalities respond to the risks posed by natural disasters such as fires and floods. The purpose of the program is to emphasise the importance of early warning systems and risk management.¹⁶⁷</p>

¹⁵⁶Standard Bank Group, 2022. Standard Bank Group Climate Policy. Available: https://www.standardbank.com/static_file/StandardBankGroup/filedownloads/Climate%20Strategy/SBGClimatePolicy_March2022.pdf Accessed September 2023

¹⁵⁷Standard Bank Group. 2022. Standard Bank Group climate policy summary. Available: https://www.standardbank.com/static_file/StandardBankGroup/filedownloads/Climate%20Strategy/SBG_Climate%20Policy%20Summary_FN_March2022.pdf Accessed October 2023

¹⁵⁸Trivedi, S. & Srivastava, S. 2023. 200 and counting: Global financial institutions are exiting coal. Available: <https://ieefa.org/resources/200-and-counting-global-financial-institutions-are-exiting-coal> Accessed October 2023.

¹⁵⁹National Treasury, 2021. Financing a Sustainable Economy. Available: https://www.treasury.gov.za/comm_media/press/2021/2021101501%20Financing%20a%20Sustainable%20Economy.pdf Accessed September 2023

¹⁶⁰ Ibid.

¹⁶¹Intellidex, 2022. Financing South Africa's Just Energy Transition. Available: <https://www.intellidex.co.za/reports/financing-south-africas-just-energy-transition/> Accessed September 2023

¹⁶² Ibid.

¹⁶³UNEP. 2023. Finance Initiative. Members. Net-Zero Asset Owner Alliance. Available: <https://www.unepfi.org/net-zero-alliance/alliance-members/> Accessed October 2023

¹⁶⁴ Government Employees Pension Fund, 2023. GEPF. Available: <https://www.gepf.co.za/> Accessed September 2023

¹⁶⁵Public Investment Corporation, 2022. Isibaya. Available: <https://www.pic.gov.za/apply-for-funding/isibaya> Accessed September 2023

¹⁶⁶Ramnarain, S. & Ramos, E. 2023. Media Release: EPPF leads industry through its net-zero commitment. Available: <https://www.eppf.co.za/newsroom/announcement/media-release-eppf-leads-industry-through-its-net-zero-commitment> Accessed October 2023.

¹⁶⁷ Santam, 2023. Santam helps communities manage risk. Available: <https://www.santam.co.za/campaign-pages/p4rr/> Accessed September 2023

	<p>Old Mutual Investments are a member of the NZAOA, report to the TCFD, and have been subscribed to the PRI since 2012. The group has made a commitment to not fund any new coal production or new coal-fired power plants, with a view to investing more in renewable energy and low-carbon technologies¹⁶⁸.</p> <p>The University of Cape Town has set up a University Panel for Responsible Investment (UPRI) committee to ensure that controlled assets increasingly come from climate-healthy sources. However, this may not be realised soon, with UPRI reporting that only 1.8% of investments are in renewable energy as of May 2021, whilst at the same time 2.5% of assets are linked to fossil fuels.¹⁶⁹</p> <p>Recently, progress has been made towards the introduction of an African Credit Rating Agency. The goal of this agency, which is planned to be introduced in the upcoming year,¹⁷⁰ is that more objective credit ratings will be awarded, and as a result climate-related finance inflows will flow into countries such as South Africa as a truer representation of the risk will be available.¹⁷¹</p> <p>The JSE has introduced several initiatives to support and promote private sector climate finance in recent years. In addition to the introduction of the Green Bond Platform (See Section 4.2), it has recently introduced sustainability-linked bonds, and a transition segment.¹⁷² This segment is considered a powerful innovation as it incorporates just transition considerations into the climate finance sphere and given that its added relevance for South Africa.</p>
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4.1.3. Private Equity Investors: Angel Investors, Venture Capital Funds and Private Equity Funds

Table 10 | Table of Private Equity Investors

<p>Sector Overview</p>	<p>The venture capital industry in South Africa is quite small and nascent. As of 2021, only ZAR 206 billion was held under management by private equity firms in South Africa¹⁷³. This results in very limited funds available to invest 'at-risk' in early-stage projects or companies.¹⁷⁴ However, there are a number of funds that aim to provide investments for small and medium-sized enterprises (SMEs) whilst recognising the need for environmental sustainability. The non-exhaustive list below details some of the funds/initiatives that are in place.</p> <p>Many private equity firms in South Africa are taking an active approach to impact investing, with almost half of firms included in a 2022 survey indicating that they have an impact mandate. In addition, only 6% of surveyed firms do not consider ESG when making investment decisions. However, this may also prove to be a drawback for providing transition investments if their mandate excludes them from investing in fossil fuel companies or related projects¹⁷⁵.</p>
<p>Key actors</p>	<ul style="list-style-type: none"> • African Infrastructure Investment Managers (AIIM) • Business Partners Limited • Revego Energy • Metier • Terrain • Infra Impact • Broadreach Energy <p>Other funds indirectly supporting green initiatives or supporting them at a smaller scale:</p>

¹⁶⁸Old Mutual. 2022. Asset owner responsible investment climate change action statement. Available: https://www.oldmutual.com/v3/assets/blt566c98aeccc1c8b/blt20af19a1d96c716e/621f14ae93e3a07bc281519/Asset_Owner_Responsible_Investment_Climate_Change_Action_Statement.pdf Accessed October 2023

¹⁶⁹University of Cape Town, 2023. Sustainability noticeboard. Available: <https://uct.ac.za/explore-uct-sustainability/sustainability-noticeboard> Accessed September 2023

¹⁷⁰George, L. 2023. African Union plans to launch its own credit ratings agency. Available: <https://www.reuters.com/world/africa/african-union-plans-launch-its-own-credit-ratings-agency-2023-09-12/> Accessed October 2023

¹⁷¹AfDB. 2023. Private sector financing for climate action and green growth in Africa. Available: https://www.afdb.org/sites/default/files/aeo_2023-chap2-en.pdf Accessed October 2023

¹⁷²Johannesburg Stock Exchange. 2023. Transition Segment. Available: <https://www.jse.co.za/raise-capital/debt-market/transition-segment> Accessed October 2023

¹⁷³Intellidex, 2022. Financing South Africa's Just Energy Transition. Available: <https://www.intellidex.co.za/reports/financing-south-africas-just-energy-transition/> Accessed September 2023

¹⁷⁴National Business Initiative, 2023. Climate Finance Landscape, South Africa Summary. Available at: <https://www.nbi.org.za/wp-content/uploads/2022/02/Climate-Finance-Accelerator-South-Africa-Climate-Finance-Landscape-Summary-Report.pdf> Accessed September 2023

¹⁷⁵Intellidex, 2022. Financing South Africa's Just Energy Transition. Available: <https://www.intellidex.co.za/reports/financing-south-africas-just-energy-transition/> Accessed September 2023

	<ul style="list-style-type: none"> • Zimele • SA SME Fund • Identity Development Fund • Enablis • Angel Investment Network • GreenTec Capital • Persistent
<p>Initiatives around climate finance</p>	<p>AIIM has provided vast funds to renewable energy projects in South Africa, including much of the ZAR 22.8 billion IDEAS Fund which has been used to invest in many large-scale wind and solar farms, in addition to hydroelectric and thermal energy projects. Furthermore, the ZAR 842 million APOLLO Investment Partnership was utilised to acquire interest in a 139 MW wind farm in the country. The company is also a member of the Africa Solar Industry Association (AFSIA), Global Impact Investing Network (GIIN), South African Photovoltaic Industry Association (SAPVIA), and the South African Wind Energy Association (SAWEA).</p> <p>Business Partners Limited is an investment company that provides dedicated finance to small businesses of between ZAR 500k-ZAR 50m.¹⁷⁶ There are also some specialist funds for climate-related projects, with the company offering loans specifically under a ‘Green Buildings Finance Programme’, and under an ‘Energy Fund for SMEs’ (of which the loans offering range for the latter is ZAR 250 thousand - ZAR 2 million¹⁷⁷).</p> <p>Revego Africa Energy Limited - a South African based private equity fund - has been formed as a partnership between Investec Bank Limited, UK Climate Investments (UKCI) and the Eskom Pension and Provident Fund (EPPF) to set up the Revego Energy Fund, with a fund size of ZAR 2 billion¹⁷⁸. It is one of the first renewable energy focused funds on the continent and whilst its current portfolio solely consists of solar and wind projects, it also aims to provide equity to biomass and hydro projects as well, across generation, transmission, and distribution. The fund is committed to delivering SDGs 7,8,9,10, and 13 and is also a signatory of the UN Principles of Responsible Investment (PRI). The PRI is also partnered to the UNEP FI and the Net Zero Asset Managers Initiative (NZAM).</p> <p>The sustainable capital practice operated by Metier currently controls assets worth ZAR 1.4 billion and has invested in several projects covering renewable energy in South Africa, in addition to a company that aims to achieve sustainable waste management and is also looking to invest in energy efficiency and water management in the future. The practice is a signatory of the 2X Challenge and the Dutch Entrepreneurial Development Bank’s (FMO) Green Label Framework¹⁷⁹.</p> <p>Terrain bridges the gap between investors and agribusinesses in the SADC and looks to integrate technological practices into their investment projects to mitigate against and even reverse environmental damages¹⁸⁰. The fund also subscribes to the PRI.</p> <p>Infra Impact’s Mid-Market Infrastructure Fund has a total target fund size of ZAR 1.5 billion and aims to invest in clean energy, waste management, water and sanitation, and telecommunications with a primary objective of reducing CO2 emissions¹⁸¹.</p> <p>Broadreach Energy provides renewable energy financial solutions in Southern Africa and currently have more than 100 operational projects providing 1.48 GwH of energy per month¹⁸².</p>

4.2 ESG Reporting in South Africa

SA GFT is a key step towards embedding Environmental, Social, and Governance (ESG) considerations in the financial sector. It aligns with global standards while addressing national priorities. Taxonomy and ESG reporting reinforce each other. The former provides clear guidelines enhancing reporting consistency, while ESG reporting offers data that can refine the taxonomy. This synergy promotes a sustainable financial sector in South Africa, aligning financial practices with broader environmental and societal goals.

¹⁷⁶ Business Partners, 2022. The Entrepreneur’s Financier, Home. Available: <https://www.businesspartners.co.za/> Accessed September 2023.

¹⁷⁷ Business Partners, 2022. SME Finance Solutions, Energy Fund for SMEs. Available: <https://www.businesspartners.co.za/services-energy-fund/> Accessed September 2023.

¹⁷⁸ Revego Africa Energy Limited. 2023. Home. Available: <https://revegoenergy.com/> Accessed October 2023

¹⁷⁹ Metier. 2023. Responsible Investment Policy. Available: https://www.metier.co.za/wp-content/uploads/2023/04/Metier-Responsible-Investment-Policy_31032023_fv.pdf Accessed October 2023

¹⁸⁰ Terrain. 2023. Shape the future by growing it. Available: <https://terrain.africa/>. Accessed October 2023

¹⁸¹ Infra Impact. 2023. Investment Strategy. Available: <https://infraimpact.co.za/>. Accessed October 2023

¹⁸² BroadReach Energy. 2023. Renewable Energy Finance Specialists. Available: <https://broadreach.energy/>. Accessed October 2023

In South Africa, the prominence of ESG reporting has been growing, underpinned by a strong regulatory framework led by the King Reports, particularly King IV which focuses on Corporate Governance for South Africa, advocating for integrated reporting encompassing ESG practices.¹⁸³ The Johannesburg Stock Exchange (JSE) mandates listed companies to annually produce an integrated report, aligned with the King IV, positioning South Africa as a forerunner in intertwining financial and ESG reporting.¹⁸⁴ This progressive stance towards ESG reporting reflects a broader recognition of the importance of sustainability and responsible business practices among South African companies and regulatory bodies.

Despite the progressive regulatory framework, challenges remain. The quality and consistency of ESG reporting vary among companies. Some firms may view ESG reporting as a compliance exercise rather than an opportunity to enhance corporate sustainability and stakeholder engagement. There's also a need for more standardised ESG metrics and benchmarks to allow for better comparability across companies and sectors. From the team's experience working in South Africa, while policy has always been progressive, the challenges lie in implementation.

Additional challenges are posed on the external front.¹⁸⁵ Apart from the climate-related exclusions, institutional investors' ESG investment strategies have the potential to redirect capital away from emerging and frontier markets. These regions typically lack comprehensive data and tend to receive unfavourable ESG ratings in their current form. This diversion of capital often occurs due to screening criteria that eliminate regions based on factors like corruption, policy instability, and energy security. **In the case of South Africa, the Renewable Independent Power Producer Programme (REIPPP)¹⁸⁶ has been significantly impacted by policy uncertainties.**

¹⁸³Greenstone. 2023. ESG Reporting in South Africa – preparing for regulation. Available: <https://www.greenstoneplus.com/blog/esg-reporting-in-south-africa-preparing-for-regulation> Accessed September 2023

¹⁸⁴David and Kitcat. 2023. Environmental, Social and Governance Law. Available: <https://iclg.com/practice-areas/environmental-social-and-governance-law/south-africa> Accessed September 2023

¹⁸⁵Intellidex. 2022. Financing South Africa's Just Energy Transition. Available: <https://www.intellidex.co.za/reports/financing-south-africas-just-energy-transition/> Accessed September 2023

¹⁸⁶ The REIPPPP is an established competitive bidding process intended to encourage private sector investments in grid-connected renewable energy generation within South Africa.

Government of South Africa. 2023. Renewable Independent Power Producer Programme. Available: <https://www.gov.za/about-government/government-programmes/renewable-independent-power-producer-programme> Accessed October 2023

4.2.1 ESG Initiatives - Financial Institutions in South Africa

This subsection elaborates on the ESG reporting of the most prominent actors in the financial sector in South Africa, introduced earlier.

Table 11 | Key ESG reporting actors

Financial Institution	Are Scope 1/2/3 ¹⁸⁷ (operational) emissions reported?	Does the FI report to the TCFD?	Are the climate risks of investments disclosed?	Are climate finance disbursements reported?	Are Scope 3 financed emissions reported?	What is the FI's timeline for net-zero financed emissions?	Comments
Banking Sector: Commercial Banks							
First Rand Bank ^{188 189}	✓	✓	✓	✓	✓	By 2050	The group plans to be net zero in operational emissions by 2030. It also has a shadow carbon price (currently ZAR (347/tCO ₂ e)
Standard Bank ¹⁹⁰	✓	✓	✓	✓	Oil and Gas in 2024	By 2050	Net zero operational emissions by 2040
Nedbank ¹⁹¹	✓	✓	✗	For Renewable Energy Only	Oil and Gas	By 2050	The company has set a target of 0 Scope 2 emissions by 2030. The company is already net zero in its operational emissions.
Investec ¹⁹²	✓	✓	✓	✗	✓	While the FI is committed to Net-Zero, no timeline (whether 2030 or 2040) has been expressly declared ¹⁹³	The company is net zero in its operational emissions
Absa Bank ¹⁹⁴	✓	✓	High risk projects are	✗	Baselining began in 2022	By 2050	The bank aims to be completely net zero by 2050.

¹⁸⁷ Scope 1 emissions refer to emissions from company vehicles, from fuel combustion, or fugitive emissions. Scope 2 emissions relate to indirect emissions from purchased electricity, heat, and steam. Finally, Scope 3 operational emissions concern the emissions of purchased products, business travel (air travel and employee commuting), and emissions from energy transmission or distribution losses ([Carbon Trust](#)).

¹⁸⁸ First Rand. 2023. FirstRand's ESG approach. Available: <https://www.firstrand.co.za/investors/esg-resource-hub/firstrand-esg-approach/> Accessed October 2023

¹⁸⁹ First Rand. 2022. Report to Society. Available: <https://www.firstrand.co.za/media/investors/reports/FirstRand-report-to-society-2022.pdf> Accessed October 2023

¹⁹⁰ Standard Bank Group. 2022. Environmental, social and governance report 2022. Available: https://www.standardbank.com/static_file/StandardBankGroup/filedownloads/RTS/2022/ESGReport2022.pdf Accessed October 2023

¹⁹¹ Nedbank Group. 2022. Using financial expertise to do good. Climate Report for the year ended 31 December 2022. Available: https://www.nedbank.co.za/content/dam/nedbank/site-assets/AboutUs/Information%20Hub/Integrated%20Report/2023/2022%20Nedbank%20Group%20Climate%20Report_.pdf Accessed October 2023

¹⁹² Investec. 2022. Built on strong foundations. Climate-related financial disclosures 2022. Available: <https://www.investec.com/content/dam/international/corporate-responsibility/corporate-sustainability-report/Investec-Climates-report-2022.pdf> Accessed October 2023

¹⁹³ Investec highlights commitment to net-zero emissions future. (n.d.). Investec. https://www.investec.com/en_int/welcome-to-investec/press/investec-highlights-commitment-to-a-net-zero-emissions-future.html Accessed November 2023

¹⁹⁴ Absa Group Limited. 2022. 2022 Environmental, Social and Governance Report. Available: <https://www.absa.africa/wp-content/uploads/2023/04/2022-Absa-Group-Limited-Environmental-Social-and-Governance-Report.pdf> Accessed October 2023

Financial Institution	Are Scope 1/2/3 ¹⁸⁷ (operational) emissions reported?	Does the FI report to the TCFD?	Are the climate risks of investments disclosed?	Are climate finance disbursements reported?	Are Scope 3 financed emissions reported?	What is the FI's timeline for net-zero financed emissions?	Comments
			reported				
Capitec Group ¹⁹⁵	✓	✓	Overall risk profile reported	✗	Aiming to report in 2024	Will be established within next 3 years	The group is seeking to align completely with TCFD recommendations in the next 2-3 years.
Bidvest ¹⁹⁶	Scope 1 and 2	✗	✗	✗	✗	No commitment for banking arm	The group as a whole aims to reduce emissions intensity by 25% by 2025.
Discovery Bank ¹⁹⁷	Scope 1 and 2	✓	✗	✗	In progress	By 2050	The bank aims to be net zero in scope 1 and 2 emissions by 2025.
African Bank Group ¹⁹⁸	✗	✗	✗	✗	✗	No current commitment	The group does have an aim to reduce carbon emissions by 30% by FY'25 (likely just operational emissions)
Banking Sector: Development Banks and MFIs Specific information on development banks or MFIs with ESG related reporting was not found via desk reviews, except for 1 development bank							
Development Bank of South Africa ¹⁹⁹	Unknown	Not explicitly mentioned	✓	✓	Unknown	By 2050	DBSA has an approved Integrated Just Transition Investment Framework, that has incorporated the Bank's net zero pathway, as well as details of the DBSA's net zero GHG emissions targets across their total investment and loan portfolios ²⁰⁰
Institutional Investors: Pension Funds, Insurance Companies, and Endowment Funds Minimal information via desk reviews was found on institutional investors. However, according to a 2023 Investor survey, 52% of institutional investors said they consider ESG issues in their decisions. ²⁰¹							
Old Mutual	✓	✓	✓	✗	Aiming for 2023	By 2050	
Private Equity Investors: Angel Investors, Venture Capital Funds and Private Equity Funds No information found.							

¹⁹⁵ Capitec Bank. Climate-related Financial Disclosure 2023: Our planet, our future. 2023. Available: <https://www.capitecbank.co.za/globalassets/pages/esg/annual-published-reports/2023/climate-related-financial-disclosure-2023.pdf>

¹⁹⁶ Bidvest. Environmental, Social, and Governance Report. 2023. Available: <https://www.bidvest-reports.co.za/integrated-reports/2023/pdf/bidvest-esg-report.pdf>

¹⁹⁷ Discovery. Sustainability Report. 2023. Available: <https://www.discovery.co.za/assets/discoverycoza/corporate/investor-relations/2023/discovery-sustainability-report.pdf>

¹⁹⁸ African Bank Group. Environmental, Social, and Governance Report. 2022. Available: <https://africanbank.co.za/media/hvij2wpe/abhl-group-esg-report-2022-single-page-print-friendly-november-2022.pdf>

¹⁹⁹ <https://www.dbsa.org/solutions/climate-financing>

²⁰⁰ Burger, S. (2021, November 3). DBSA commits to playing its part in a just transition to net-zero emissions by 2050. Engineering News. <https://www.engineeringnews.co.za/article/dbsa-commits-to-playing-its-part-in-a-just-transition-to-net-zero-emissions-by-2050-2021-11-03> Accessed November 2023

²⁰¹ Daily Investor. 2023 South African Investor Report. https://3a%2F%2Fassets.bbbhub.io%2Fcompany%2Fsites%2F60%2F2023%2F02%2F2023-Survey-for-Asset-Owners_Insurance-Companies.pdf Accessed November 2023

4.3 Market Instruments to Access CF: Sustainable Bonds

Broadly, there are two domestic market instruments identified for accessing climate finance in South Africa.²⁰² The Carbon Tax, as discussed in Section 2, and **Sustainable Bonds**.

The global sustainable bond market has experienced significant growth. Early adopters of these instruments include governments, utilities, and financial services sectors. Sustainable bonds, including green, social, and sustainability bonds, are linked to specific key performance indicators (KPIs), while sustainability linked bonds (SLBs) are tied to sustainability performance targets (SPTs) with a step-up clause if not achieved. However, South Africa has been slow to adopt these instruments due to stringent disclosure requirements and a lack of investible projects, leading to an underdeveloped domestic sustainable bond market.²⁰³

The **JSE Green Bond platform** was launched in 2017 as a way for 'companies to raise debt for green, social and sustainable initiatives on a trusted, global marketplace'.²⁰⁴ The JSE's sustainability bond standards require issuers to disclose the use of proceeds, obtain external verification or certification, and provide post-issuance reporting.

While these requirements aim to prevent greenwashing and align with international standards, they are seen as cumbersome by market practitioners.²⁰⁵ Despite robust demand for these instruments, key hurdles include a lack of local expertise, higher issuance costs due to third-party assurance, and the absence of a green government bond curve. The JSE's climate disclosure requirements have disincentivized issuers, leading to a stalled adoption of sustainable instruments, potentially hampering the scaling up of finance for climate purposes.²⁰⁶

Table 12 below presents highlights on green bond issuing by private and public sector actors in South Africa.

Table 12 | Table of Green Bonds Issuance by Private and Public Sector Actors

	Name	Amount issued	Purpose
Public Sector Actors	Industrial Development Corporation	ZAR 5 billion	To finance infrastructure related to renewable energy and clean energy within the country. ²⁰⁷
	City of Johannesburg	ZAR 1.5 billion	To finance the Solar Geyser Initiative in addition to biogas programmes, ²⁰⁸ such as the conversion of 30 buses to biogas and the introduction of 150 new 'dual fuel' buses. ²⁰⁹
	CoCT	ZAR 1 billion	To fund the municipality's Climate Change Strategy. ²¹⁰
	DBSA		~ZAR 3.8 billion (EUR 200 million) ²¹¹
		ZAR 3 billion ²¹²	Issued with private placement to PIMCO - to refinance renewable energy generation and transmission projects.

²⁰² Ebrahim. 2018. A study on the potential private sector investment priorities that support South Africa's climate change outcomes.

²⁰³ Intellidex. 2022. Financing South Africa's Just Energy Transition. Available: <https://www.intellidex.co.za/reports/financing-south-africas-just-energy-transition/> Accessed September 2023

²⁰⁴ Johannesburg Stock Exchange, 2023. Green Bonds. Available: <https://www.jse.co.za/raise-capital/debt-market/green-bonds> Accessed September 2023

²⁰⁵ Ibid.

²⁰⁶ Ibid.

²⁰⁷ Ebrahim. 2018. A study on the potential private sector investment priorities that support South Africa's climate change outcomes.

²⁰⁸ Ebrahim. 2018. A study on the potential private sector investment priorities that support South Africa's climate change outcomes.

²⁰⁹ Input Paper: V-LED Africa Workshop, 23-25 April, 2018, Climate Finance in South Africa. OneWorld Sustainable Investments. 2018. Available from: https://oneworldgroup.co.za/wp-content/uploads/2022/07/input_paper_v-led_africa_workshop_climate_finance_in_south_africa.pdf Accessed September 2023

²¹⁰ Ebrahim. 2018. A study on the potential private sector investment priorities that support South Africa's climate change outcomes.

²¹¹ DBSA. 2021. DBSA Launches Green Bond. Available: <https://www.dbsa.org/press-releases/dbsa-launches-green-bond> Accessed September 2023

²¹² DBSA. 2021. DBSA Launches a Second Green Bond. Available: <https://www.dbsa.org/press-releases/dbsa-launches-second-green-bond> Accessed October 2023

	Name	Amount issued	Purpose
Private Sector Actors	Growthpoint Properties	ZAR 1.1 billion ²¹³	First company to issue a green bond on the JSE
	Standard Bank	~ZAR 3.2 billion (US\$ 200 million)	Issued via private placement and in cooperation with the IFC with a view to funding green assets in alignment with the Sustainable Bond Framework. ²¹⁴
		R 1.4 billion	Renewable energy focused green bonds issued on the JSE platform. ²¹⁵
	Nedbank	ZAR 8.6 billion (ZAR 5.6 billion outstanding as of the end of 2022.) ²¹⁶	Renewable Energy Bond
			Tier 2 SDG linked bonds
			Green Additional Tier 1 instrument
Green Housing Bond			
First Rand Bank	ZAR 2 billion ²¹⁷	Issued two green bonds on the JSE worth a total of ZAR 2 billion and aims to finance the bank's sustainability projects.	
	Redefine Properties	ZAR 1.5 billion ²¹⁸	Bond aimed at improving the environmental sustainability of buildings in the company's portfolio.
	Investec	ZAR 1 billion ²¹⁹	Bond aimed at solar and wind projects (477MW in total).

Source: Author

4.3.1 Co-financing, Enabling Policies and Innovative Financial Tools

In 2017, a study²²⁰ conducted by TIPS in collaboration with the OECD (Organization for Economic Co-operation and Development), as documented in Ebrahim (2018), examined the mobilisation of private finance in support of climate action initiatives within South Africa spanning the period from 2010 to 2015. The study's findings revealed a significant role played by South African **public co-finance**, which successfully catalysed 64% of a total funding pool amounting to ~ZAR 101 billion.²²¹ Notably, this capital was primarily obtained via loans. While international entities also contributed, their involvement was comparatively modest in scale.

The research underscored the imperative for conducting a comprehensive assessment of public finance's impact across the entire financial value chain. It also shed light on the **efficacy of domestic policies**, such as tax incentives, which were shown to be particularly influential in attracting private investment. Remarkably, these incentives were found to be more effective than public co-finance in both the renewable energy and energy

²¹³ Growthpoint becomes the first company to issue a green bond on the JSE. Available: <https://www.growthpoint.co.za/growthpoint-becomes-the-first-company-to-issue-a-green-bond-on-the-jse/>. Accessed September 2023.

²¹⁴ Standard Bank Group, 2022. Standard Bank Excels in Sustainable Finance. Available: <https://corporateandinvestment.standardbank.com/cib/global/about-us/news/standard-bank-excels-in-sustainability-finance>. Accessed September 2023

²¹⁵ Ibid.
²¹⁶ Nedbank, 2022. Annual Green Bond Impact Report. Available: <https://www.nedbank.co.za/content/dam/nedbank/site-assets/AboutUs/Investor%20Centre/Debt%20Investor/SDGIssuances/Nedbank%20Green%20Bond%20Impact%20Report%202022.pdf>. Accessed September 2023

²¹⁷ Johannesburg Stock Exchange. FirstRand Bank lists two sustainability bonds. Available: <https://www.jse.co.za/news/news/firstrand-bank-lists-two-sustainability-bonds>. Accessed September 2023.

²¹⁸ Intellidex, 2022. Financing South Africa's Just Energy Transition. Available: <https://www.intellidex.co.za/reports/financing-south-africas-just-energy-transition/>. Accessed September 2023

²¹⁹ Intellidex, 2022. Financing South Africa's Just Energy Transition. Available: <https://www.intellidex.co.za/reports/financing-south-africas-just-energy-transition/>. Accessed September 2023

²²⁰ OECD 2017, Estimating Publicly-Mobilised Private Finance For Climate Action: A South African Case Study - Environment Working Paper No. 125 by Lauren McNicoll and Raphaël Jachnik (OECD), and Gaylor Montmasson-Clair and Shakespear Mudombi, Trade & Industrial Policy Strategies (TIPS)

²²¹ 2010-2015 average FX rate, USD-ZAR.

efficiency sectors, thus signalling the importance of aligning policy frameworks with sustainable investment objectives.²²²

The study highlights that the South African case underscores the importance of shifting focus towards mobilising private finance beyond energy-related projects. One way this could be achieved is by empowering subnational actors. With renewable energy projects becoming increasingly economically viable due to domestic policies and technology cost reductions, public co-financing could gradually be redirected to play a more prominent role in mitigating risks in other climate-related sectors. In South Africa, investments aimed at addressing the water-related impacts of climate change could be facilitated by integrating climate change considerations more extensively into national water policies. Furthermore, financial incentives could be extended to provinces or municipalities, encouraging households and businesses to make private investments in water conservation and demand management.

Support for innovative financial tools is crucial to attract the needed funding for climate projects.²²³ Government-backed instruments should be designed to reduce barriers, manage risks, and prevent market failures, drawing in private sector capital. Additionally, establishing more **project preparation centres** using **blended finance** is essential to increase viable project pools, especially in sectors traditionally dependent on grants and concessional funding.

4.4. Financing the Just Transition: Context and Challenges²²⁴

To fund its just energy transition, South Africa needs to tap into a significant amount of funding from many domestic and international sources. Although the country has set a good example in renewable energy development over the past decade through initiatives like the procurement of independent power producers in the renewable energy sector, the additional electricity generation capacity during this period falls significantly short of the future requirements. To address this, significant funding will be required, especially for the expansion of transmission assets.

To ensure that South Africa's shift from a highly constrained, carbon-intensive market to a thriving, low-carbon economy is achieved fairly, financial decision-makers must explore innovative funding strategies to bridge the gap between conventional philanthropic support, development aid, and public sector financing on one end of the spectrum, and commercial investors on the other. It is estimated that between R4tn and R8.5tn need to be mobilised for the just energy transition, which poses a considerable challenge.

There are multiple obstacles within the current capital market landscape that hinder stakeholders in the financial sector from fully engaging with and participating in this equitable transition. Many of these challenges are also present for climate finance access more broadly, beyond the just transition. The below is a summary from the stakeholder's research introduced in the Intellindex (2022) report.

- **Investment pipeline:** Many practitioners have not encountered serious investment opportunities, despite extensive discussions about energy finance. Most green projects require some form of de-risking to become viable, with historical reliance on sovereign guarantees questioned due to South Africa's credit rating loss in 2020. The public sector's poor track record in developing funding opportunities and managing projects, constrained by capacity shortages and procurement challenges, inhibits financial innovation. Some argue²²⁵ that the lack of an investable pipeline might be an excuse by investors, emphasising the need for a demonstration case involving multiple stakeholders to outline JET transaction structures, likely requiring concessional financing.
- **Conceptualization of the JET:** There is ambiguity among market stakeholders about the concept of JET, which is generally seen as a transition to clean energy that's inclusive. However, there's a lack of a clear strategic vision, speed, and roles for stakeholders. The focus on the initial ~ZAR 147bn JETP-IP funding

²²²Ebrahim. 2018. A study on the potential private sector investment priorities that support South Africa's climate change outcomes. Available online: www.renmere.co.za. Accessed September 2023

²²³ Cassim et al., 2021. South African Climate Finance Landscape 2020.

²²⁴Intellindex. 2022. Financing South Africa's Just Energy Transition. Available:

<https://www.intellindex.co.za/reports/financing-south-africas-just-energy-transition/> Accessed September 2023

²²⁵Ibid.

earmarked for South Africa overlooks the broader funding needs (at least ~ZAR 4tn over three decades). This misunderstanding and lack of consensus on JET, funding scale, and stakeholder roles are major barriers to capital market participation.

- **Insufficient National Leadership:** This is seen as a potential cause of confusion in the JET efforts, regardless of the existing governance structures, such as the PMO, PCC, and PCFTT. It has been suggested that the government should integrate JET strategically into both the budget and the broader development agenda, as capacity limitations prevent these structures from operating independently. Collaboration between government, business, and labour is essential to align on the pathway and market channels for scaling up JET financing.
- **Limited integration of JET into businesses strategies:** While JET is frequently viewed as an external issue, it is, in fact, a predominant macro theme that will significantly shape South Africa's local market over the next three decades. The financial services sector necessitates resolute executive leadership to mobilise substantial financing.
- **Liquidity and deal size:** Liquidity is a critical concern. The absence of pooled risk green bond markets and the low uptake²²⁶ JSE transition segments pose challenges. To fund the just element of the transition, there's a need for more widespread use of sustainable finance instruments like social bonds and sustainability-linked loans. Creating liquid, standardised instruments is essential to fit into various portfolios, and banks are expected to play a pivotal role in providing this liquidity. Additionally, local DFI liquidity constraints hinder investments in renewable projects, with illiquid instruments requiring extensive due diligence, elongating the investment timeline, and increasing costs.
- **Insufficient financial innovation:** The local market has been slow in adopting new funding instruments for the JET,²²⁷ potentially due to regulatory adjustments and a lack of proactive innovation. Institutional investors, mainly focused on listed instruments, need accessible transition financing options. Bundling renewable energy projects in operational phases and pooling projects, particularly for offshore investors with large investment requirements, can enhance scale. The lack of innovation is linked to insufficient pipeline, limited demand, and an inadequate understanding of the JET approach.
- **Skills shortages in the local market** hinders development of a pipeline for low-carbon and green projects. This problem is not unique to South Africa but the resurgence of REIPPP rounds, and the expanding embedded generation market have exacerbated this problem in the country. Unfortunately, South Africa currently lacks a concrete plan to resolve this skills gap,²²⁸ with no clear coordination or strategy among government departments. A successful transition will necessitate a combination of commercial investment capital, public-private partnerships, concessional capital, and funding from philanthropists and multilateral development financiers.
- **Information, data and reporting standards:** The demanding nature of ESG data requirements is a significant deterrent for investments in emerging and frontier markets.²²⁹ The resource-intensive process of collecting, organising, and presenting ESG data, coupled with the need for technical expertise to ensure data quality, poses challenges for many companies lacking the necessary capacity and skills.

Other challenges mentioned include **foreign exchange risks**, given the ZAR volatility, and concerns over the country's macroeconomic **fundamentals**, which still dominate as conditioning factors for investors decisions. Additional challenges identified around **ESG integration**, the **GFT** and **JSE Sustainability Bonds Disclosure** have been developed in their respective sections of this report.

Polymakers and the private sector should collaborate to address the challenges identified. Partnerships involving capital providers across the entire spectrum, from philanthropic backers to commercial investors, could also lead to progress in mobilising substantial funding. Banks are expected to serve as mass intermediaries, not just capital allocators on their balance sheets. Local fund managers should consider prioritising JET assets over others,

²²⁶Ibid.

²²⁷Intellidex. 2022. Financing South Africa's Just Energy Transition. Available: <https://www.intellidex.co.za/reports/financing-south-africas-just-energy-transition/> Accessed September 2023

²²⁸Ibid.

²²⁹Ibid.

while international fund managers, including consultants and trustees, need to recognise that South Africa is initially dealing with carbon-intensive assets in its transition process.

4.5. SWOT Assessment of Private Sector Finance

Strengths - positive internal factors

- **Green Bonds** as a viable means of raising sustainable finance. As of 2020, South Africa was also the clear continental leader in green bond issuances.
- **Prospect of extending CBT across the entire budget is crucial to better address climate adaptation challenges** and building an evidence base through data collection.
- **Partnerships between DFIs, such as the IFC and KfW**, and domestic Commercial Banks to expand climate finance and expand their ability to offer products such as green bonds and loans.
- **South Africa has a strong ESG regulatory environment.** In addition to this, some large FIs are addressing ESG-related issues proactively and have set ambitious goals to reach net-zero.

Opportunities - positive external developments

- **Blended finance and public co-financing** are promising for attracting private investment in climate projects beyond energy, with **public co-financing** mitigating perceived risks.
- **SA GFT and Carbon Tax as guiding examples** for other African countries.
- **SA GFT may lead to the development of new asset classes** thereby attracting investors seeking robust processes and impact performance.
- **SA GFT integration into due diligence processes** within internal issuance frameworks to enhance the quality of sustainable debt issuances.
- **SA GFT potential** to attract green financial flows.
- **SA GFT potential** to overcome the tracking and regulatory challenges aligning green investment decisions with international standards and reducing the cost of labelling and issuing green financial instruments.
- **SA GFT potential** to improve the management of environmental and social performance to mitigate risks within the financial sector.
- **Carbon Tax potential** to provide incentives for decarbonisation across industries.
- **Renewable Energy and Conservation Agriculture** as sectors offering investment opportunities.
- **Government support for innovative financial tools is crucial to attract needed funding.** These should be designed to reduce barriers, manage risks, and prevent market failures to draw private sector capital.
- **Potential for collaboration between private and public sector to mobilise CF.**
- **Potential for transparency in ESG data** as well as alignment of corresponding frameworks

Weakness - limiting internal constraints

- **Ineffectiveness of Carbon Tax pricing**, negatively affecting incentives to decarbonise and **implementation delays** from coal energy and mineral sectors.
- **Voluntary nature of SA GFT reporting** weakens its effectiveness across the financial system.
- **Prevalence of the Energy sector** as recipient of climate finance flows and investors preferred asset, overshadowing other sectors, perceived riskier.
- **Venture Capital Industry being small and nascent** results in very limited funds available for seed funding to develop concepts for climate projects.
- **Demanding nature of ESG reporting** standards for companies, and **limited integration of JET into business strategies**
- **JSE's sustainability bond standards** perceived disincentivizing given identified hurdles: lack of local expertise, high issuance costs, absence of a green government bond curve.
- **Limited availability of a pipeline of bankable projects** limiting green investment options
- **JET conceptualisation and governmental leadership** are questioned by capital market stakeholders (see section 4.4)
- **Insufficient financial innovation and de-risking strategies**
- **Different data sources on financing gaps providing unclear market signals to investors**

Threats - external threats and barriers

- **Market failure:** There is a mismatch between finance available for climate projects and the availability of a pipeline of bankable projects.
- **Tracking climate finance at the country level is challenging** due to the complex network of stakeholders, funding channels, and currencies. This could be overcome by the SA GFT.
- **Limited financing available**, particularly for early-stage and high-risk projects.
- **High transaction costs** hinder financial support as expenses for transactions and due diligence may outweigh the project's size.
- **SA GFT faces a governance challenge** (lack of formal recognition by the EU), a **usability challenge** (requires expertise to navigate its complexity) and South Africa's **fossil fuels dependency**.
- **SA GFT has been deemed poorly applicable to the South Africa** context due to its one-size-fits-all approach to green projects.
- **ESG ratings may discourage global investors preference for emerging markets** due to political risks concerns, in addition to foreign exchange and macroeconomic volatility

Source: Author

Section 5 | A way forward

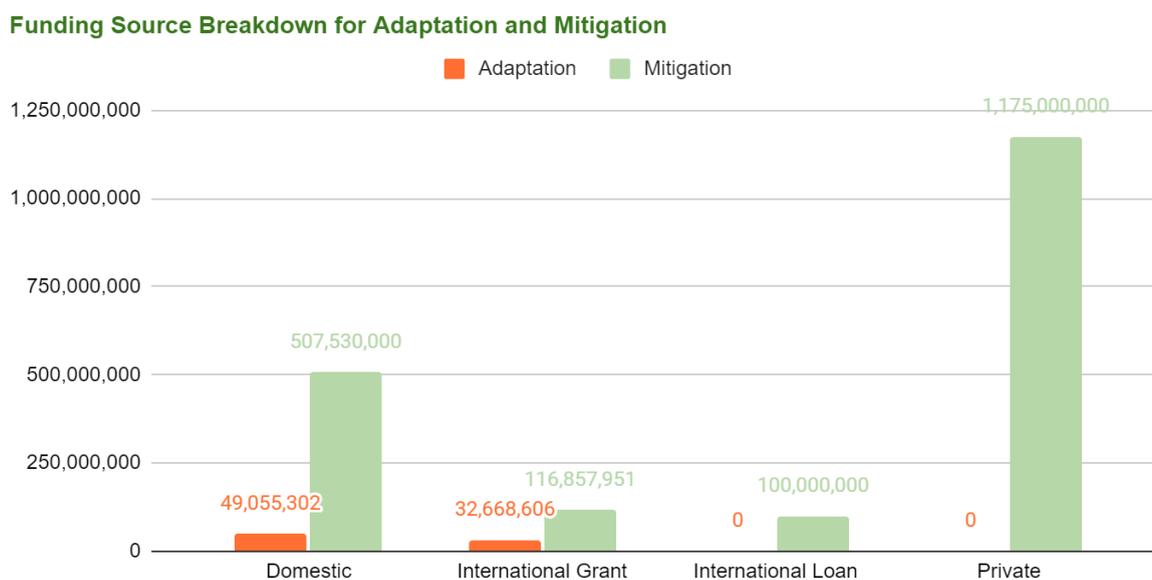
This section provides an overview of the climate finance gap, highlighting key underfunded sectors in South Africa. It presents a summary SWOT matrix of the overall challenges and opportunities that exist across the public and private sectors. It then highlights the need for innovative financing mechanisms and provides concluding key recommendations.

5.1. Climate finance gap

Information obtained from the DFFE's National Climate Change Response Database²³⁰, which covers both public and private sector projects, reinforces the previously established conclusion that South Africa faces a substantial climate finance deficit. Within this dataset, Figure 5 presents an intricate breakdown of the funding sources allocated to both mitigation and adaptation initiatives in South Africa. These tables corroborate the conclusions drawn from the existing literature above, shedding light on a significant underfunding of adaptation endeavours in comparison to mitigation efforts. Furthermore, the private sector funds a significant amount of mitigation (given the REI4P programme and move towards a low-carbon economy) whilst private sector funding for adaptation is non-existent.

This notable discrepancy is frequently attributed to the inherent challenges associated with quantifying the outcomes and impacts of adaptation projects compared to mitigation projects. Furthermore, it is worth emphasising that a substantial portion of adaptation funding originates from public sector budgets and international financial sources.

Figure 9 | Funding Source Breakdown for Adaptation and Mitigation (in ZAR million)



Source: Adapted from DFFE, 2023 National Climate Change Response Database. Figures accurate as of 10/11/2023.

Sectors that attract adaptation financing often relate to food security, water resources, disaster risk management, and agriculture. Private investment can find entry points in these areas, especially when sectors like healthcare and sanitation primarily rely on public funding due to the absence of a compelling business case for investors.

The section below speaks to the key financing gaps in South Africa's key priority sectors towards net zero.

²³⁰ The DFFE's National Climate Change Response Database is a comprehensive, public database, that serves as a tracking and monitoring system for climate change actions and interventions, encompassing both adaptation and mitigation efforts in the past, present, and future. It encompasses a wide range of elements, including policies, plans, strategies, projects, and research activities spanning across South Africa. Data for this database is collected from diverse sources, including industrial entities, research institutions, non-governmental organisations, and various government institutions and entities.

Energy | South Africa faces significant climate and energy risks, including electricity shortages, inadequate investment in the electricity system, and various physical, social, and transition-related challenges.²³¹ South Africa's JET-IP outlines the country's ambitions and targets towards an energy transition that moves the country towards a low-carbon economy while tackling the key issues of poverty, unemployment, and inequality. Within this investment plan, the key energy sectors highlighted are the electricity sector and green hydrogen sectors.

In the electricity sector, the primary infrastructure investment focuses on several key priorities. Firstly, it entails effectively managing the decommissioning of the retiring coal generation fleet, aligning with the updated Integrated Resource Plan (IRP), while simultaneously advancing the development of large-scale renewable energy generation. Secondly, there is a crucial need to promptly reinforce the transmission grid infrastructure to accommodate the transition towards renewable energy sources. Lastly, modernising the electricity distribution system is another significant priority within this context. **The estimated financing need is ZAR 1,480 billion with currently only 64% of the target providing, leaving a gap of 44%.**²³² However, it is important to note that this financing gap is not clear given that diverse sources (e.g., Eskom, the JET-IP and the Minister of Electricity) mention different figures. This makes it difficult for investors, especially DFIs, to implement financing solutions.²³³

However, as mentioned in Section 1.2.2, there is staunch support against this process of decarbonisation. In discussions surrounding South Africa's Climate Change Bill, a pivotal piece of climate legislation currently undergoing public hearings, a minimum of four entities, including South Africa's own Eskom, sought to diminish penalties for polluters.²³⁴ This information comes from a report by the climate-focused think tank InfluenceMap. Notably, the mining industry exhibited robust support for coal, with multinational corporations like Anglo American and South32 actively engaging in efforts to dilute climate-related legislation in South Africa.²³⁵

Green hydrogen is another key area of focus for the country with a funding gap of approximately 89% (of the total ZAR 319 billion envisaged). However, while green hydrogen holds promise as a decarbonisation solution for various industries, experts urge caution regarding its potential and the hype surrounding it.²³⁶ Green hydrogen is produced by splitting water into hydrogen and oxygen using renewable electricity. South Africa and other countries have embraced green hydrogen as a key player in the transition to clean energy. However, the challenges include the limited current production volume, high capital costs for mega-production plants, hydrogen leakage, and the need for a surplus supply of renewable energy.²³⁷

Prominent South African companies, including Anglo American Platinum (Amplats), BMW Group South Africa, and Sasol, have initiated a pilot project aimed at introducing hydrogen fuel cell electric vehicles (FCEVs) and establishing the necessary hydrogen refuelling infrastructure in the country. BMW is supplying the FCEVs, while Sasol is responsible for producing green hydrogen and mobile refuelling equipment. This fleet, which includes the BMW iX5 Hydrogen model, will undergo real-world testing on South African roads as part of a global evaluation of its performance.²³⁸

The renewed focus on green hydrogen raises questions about who benefits and the potential consequences of hasty decision-making and poor investment choices, especially for South Africa. Major stakeholders, including the oil and gas industry, have vested interests in promoting green hydrogen to ensure their survival.²³⁹ H2 Watch SA, which includes Earthlife Africa, the Economic Justice Network, Kuthala Environmental Care Movement, Green Connection, groundWork, Mining Affected Communities United in Action (MACUA-WAMUA), Southern African Faith Communities Environment Institute (SAFCEI), Natural Justice, WoMIN, and Vaal Environmental Justice Alliance

²³¹ The Presidency Republic of South Africa. 2022. South Africa's Just Energy Transition Investment Plan 2023-2027.

²³² Ibid.

²³³ Interview with Ntumba Katabua, Energy Expert, ADB. 18th October 2023.

²³⁴ Molekwa, T. 2023. South Africa's coal lobby is resisting a green transition. Available: <https://www.climatechangenews.com/2023/06/19/south-africa-coal-energy-fossil-fuels-climate-lobby/> Accessed October 2023

²³⁵ InfluenceMap. 2023. Industry Lobbying Imbalance Putting South Africa's Climate Goals At Risk. Available: <https://influencemap.org/pressrelease/Industry-Lobbying-Imbalance-Putting-South-Africa-s-Climate-Goals-At-Risk-21162> Accessed October 2023

²³⁶ Ho, U. 2023. The Red Flags in Green Hydrogen. The University of the Witwatersrand. Available: <https://www.wits.ac.za/news/latest-news/research-news/2023/2023-05/the-red-flags-in-green-hydrogen.html> Accessed October 2023

²³⁷ Chege, K. 2021. Part Three: Challenges to the Large-scale Production of Green Hydrogen in South Africa. University of Cape Town. Available: <https://law.uct.ac.za/mineral-law/articles/2021-11-03-part-three-challenges-large-scale-production-green-hydrogen-south-africa> Accessed October 2023

²³⁸ Rondgange, L. 2023. South Africa commits to a Green Hydrogen future, but environmental lobby groups are gearing up for a fight. IOL. Available: <https://www.iol.co.za/news/south-africa/south-africa-commits-to-a-green-hydrogen-future-but-environmental-lobby-groups-are-gearing-up-for-a-fight-0abbf052-1095-4a61-b408-b2929e42ee96> Accessed October 2023

²³⁹ Ho, U. 2023. The Red Flags in Green Hydrogen. The University of the Witwatersrand. Available: <https://www.wits.ac.za/news/latest-news/research-news/2023/2023-05/the-red-flags-in-green-hydrogen.html> Accessed October 2023

(VEJA), has raised concerns regarding the potential impact of green hydrogen (GH₂) production on South Africa's land, water, and electricity resources. These concerns encompass several key issues:²⁴⁰

- **Water Resources:** There is apprehension about the strain GH₂ production could place on the country's already water constrained resources.
- **Electricity Pricing and Availability:** Uncertainty surrounds the pricing and availability of electricity for South Africa's GH₂ projects.
- **Land Conflicts and Marine Life:** GH₂ production involving desalination processes carries the risk of land conflicts and potential harm to marine life.

It is emphasised that appropriate applications for green hydrogen should be considered, as alternatives may exist for certain uses. Vigilance is needed to ensure alignment with the public interest, as major stakeholders may have conflicting incentives. In South Africa, the focus should remain on renewable energy to achieve a sustainable energy transition. Overinvestment in hydrogen could divert resources from other renewable energy innovations, such as recycling technologies. It is essential to make informed, sensible choices to ensure energy supply matches demand and that no one is left behind in the transition.²⁴¹

Manufacturing | Industrialisation in the country has historically centred around the minerals-energy complex, emphasising cheap electricity for processing minerals, which led to high energy consumption per unit of output. This focus on energy-intensive methods, like smelting, has created long-standing challenges. While the government has introduced policies for green growth and climate resilience, there has been a lack of policy coherence, particularly between industrial and environmental policies, hindering the modernization of industry. Consequently, South Africa has been slow in adopting more energy-efficient production methods due to unclear policy signals.²⁴²

The JET-IP targets a “just” manufacturing transition primarily through investment in supply chains to preserve and expand jobs within the automotive sector during its shift to NEVs.²⁴³ These jobs encompass assembly and component supply chain roles, both in established and emerging product lines. Additionally, this sector presents valuable connections to the energy industry for the localisation of energy storage components like batteries and fuel cells. **The sector typically allocates nearly ZAR11.5 billion annually to investments, with expectations of considerably higher investments for NEVs, exceeding 40%. Therefore, it may require grant assistance covering up to 50% of the capital investment.**²⁴⁴

South African policymakers must take note of the EU's carbon border adjustment mechanism. Delaying greener initiatives poses a risk of trade penalties when the EU enforces it.²⁴⁵ South Africa must prioritise both green growth and industrialisation to secure its growth and avoid significant socio-economic consequences.

Mining | Mining has long been the backbone of South Africa's economy, with well-known resources like gold, diamonds, PGMs, and coal, as well as deposits of chrome, rare earth elements, manganese, chromium, vanadium, and titanium. The nation boasts strong infrastructure compared to its African counterparts and is the world's top manganese producer, positioning it favourably to produce batteries essential for a low-carbon future, supporting energy storage and electric vehicles.²⁴⁶

South African mining faces growing pressure due to environmental concerns and carbon emissions, with approximately ZAR 264 billion in annual mining sales at risk due to trade partners' carbon reduction

²⁴⁰Rondgange, L. 2023. South Africa commits to a Green Hydrogen future, but environmental lobby groups are gearing up for a fight. IOL. Available: <https://www.iol.co.za/news/south-africa/south-africa-commits-to-a-green-hydrogen-future-but-environmental-lobby-groups-are-gearing-up-for-a-fight-0abbf052-1095-4a61-b408-b2929e42ee96> Accessed October 2023

²⁴¹Chege, K. 2021. Part Three: Challenges to the Large-scale Production of Green Hydrogen in South Africa. University of Cape Town. Available: <https://law.uct.ac.za/mineral-law/articles/2021-11-03-part-three-challenges-large-scale-production-green-hydrogen-south-africa> Accessed October 2023

²⁴²Gwatidzo, T., and Simbanegavi, W. 2023. Greening Opportunities in Unlocking growth prospects in post-pandemic South Africa. Available: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/<https://www.resbank.co.za/content/dam/sarb/what-we-do/research/UNLOCKING%20GROWTH%20PROSPECTS%20FINAL%20050423.pdf> Accessed October 2023

²⁴³The Presidency Republic of South Africa. 2022. South Africa's Just Energy Transition Investment Plan 2023-2027.

²⁴⁴Ibid.

²⁴⁵Gwatidzo, T., and Simbanegavi, W. 2023. Greening Opportunities in Unlocking growth prospects in post-pandemic South Africa. Available: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/<https://www.resbank.co.za/content/dam/sarb/what-we-do/research/UNLOCKING%20GROWTH%20PROSPECTS%20FINAL%20050423.pdf> Accessed October 2023

²⁴⁶AfDB. 2023. Country Focus Report: South Africa. Available: https://www.afdb.org/sites/default/files/documents/publications/south_africa_cfr_2023.pdf Accessed October 2023

commitments (e.g., policies such as CBAM) and decreased local demand.²⁴⁷ South Africa's carbon-intensive mining sector and climate-related vulnerabilities pose unique risks and opportunities for mining companies. While individual companies are addressing these issues, through the adoption of sustainable strategies like Anglo American's hydrogen technology and marine carbon neutrality initiatives, as well as Exxaro and Seriti Green's investments in solar and wind energy, these firms are playing a substantial role in advancing decarbonization efforts.^{248, 249}

South African mining firms can adapt their operations, adjust portfolios, and climate-proof their businesses to seize opportunities in both the short and long term. While the costs of these endeavours are not explicit given that many mines are privately owned and thus information is not always public, recommendations call for a collective and targeted strategy is needed to combat climate disruptions effectively given the high costs of doing so.²⁵⁰ In addition, South Africa's NAS proposes the development of a Flagship Programme co-funded by the public-private sector to help increase resilience in the mining sector.²⁵¹

Transport | The South African government has not yet fully integrated climate change adaptation into its transport planning and decision-making processes, primarily due to financial constraints and a short-term perspective. Instead, there has been a strong focus on decarbonisation of the sector overall.²⁵² However, climate change disruptions could significantly impact the country's supply chain configuration and overall economy. To enhance the resilience of South Africa's road infrastructure, an average investment of around 0.35% of GDP per year or approximately ZAR 678 billion in net present value will be required from 2022 to 2050.²⁵³ The final cost will vary based on whether the government chooses to retrofit existing infrastructure or embark on new projects. Over the long term, taking an initiative-taking approach to road infrastructure adaptation is expected to yield benefits, including reduced maintenance expenses and improved resilience to climate change impacts.

Furthermore, the NEVs are a key priority for the country's JET IP which aims to encourage investments in NEV charging infrastructure and the conversion of both public and private transportation to NEVs can expedite the decarbonization of the transport sector.²⁵⁴ **According to the five-year investment requirement for the NEV sector, an estimated ZAR 128 billion is needed with a current gap of ZAR 100 billion (78%).**²⁵⁵

Tourism | South Africa's Tourism Climate Change Communication Strategy (SATCCCS) acknowledges the vulnerability of the sector to climate change impacts and sets out to provide guidance, education and training efforts for mitigation and adaptation in the tourism sector.²⁵⁶ However, the plan does not specify financial targets or baselines. While it identifies funding avenues and percentages in contributions, no numerical numbers support this assessment.²⁵⁷

Agriculture | Despite contributing only 2.9 % to South Africa's GDP and employing around 5% of the workforce, agriculture plays a pivotal role in poverty reduction and inclusive development²⁵⁸. Regions like the Eastern Cape, Limpopo, and KwaZulu-Natal provinces, home to a substantial number of smallholder farmers, offer significant potential for expanding and diversifying agricultural activities. These opportunities can uplift the livelihoods of the country's most impoverished communities. **Approximately 0.2% of GDP or ZAR 453 billion in net present value**

²⁴⁷Bour, A. et al., 2022. How South African Mining Can Address Climate Change Challenges. Boston Consulting Group. Available: <https://www.bcg.com/publications/2022/how-south-african-mining-can-address-climate-change-challenges> Accessed October 2023

²⁴⁸Motaung, H. 2023. Digging for change: South African industry addresses climate change. Available: <https://www.miningreview.com/battery-metals/digging-for-change-south-african-industry-climate-change/> Accessed October 2023

²⁴⁹Bour, A. et al., 2022. How South African Mining Can Address Climate Change Challenges. Boston Consulting Group. Available: <https://www.bcg.com/publications/2022/how-south-african-mining-can-address-climate-change-challenges> Accessed October 2023

²⁵⁰AfDB. 2023. Country Focus Report: South Africa. Available: https://www.afdb.org/sites/default/files/documents/publications/south_africa_cfr_2023.pdf Accessed October 2023

²⁵¹Ebrahim, M.A. 2018. A study on the potential private sector investment priorities that support South Africa's climate change outcomes. Renmere Corporate Finance.

²⁵²Naamsa. 2023. South Africa's New Energy Vehicle Roadmap. <https://naamsa.net/wp-content/uploads/2023/02/20230220-naamsa-NEV-Thought-Leadership-Discussion-Documents-1.pdf> Accessed October 2023

²⁵³Ibid.

²⁵⁴The Presidency Republic of South Africa. 2022. South Africa's Just Energy Transition Investment Plan 2023-2027.

²⁵⁵Ibid.

²⁵⁶Department of Tourism. 2021. South African Tourism Climate Change Communication Strategy, Available: <chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.tourism.gov.za/CurrentProjects/Documents/South%20African%20Tourism%20Climate%20Change%20Communication%20Strategy.pdf> Accessed October 2023

²⁵⁷Ibid.

²⁵⁸DFFE's National Climate Change Response Database

from 2022 to 2050 is estimated to be needed for adaptation measures in agriculture.²⁵⁹ Around 50% of this allocation will be directed to irrigation programs, while the remainder will be split between retrofitting and new investments in transport infrastructure (45%) and research and development (5%).²⁶⁰

Considering South Africa's limited fiscal budget and the public sector's primary responsibility for essential services like housing, healthcare, and water, the availability of funding remains inadequate. However, there are promising opportunities to attract private sector investment, particularly in sectors like agriculture and transportation, where tangible benefits such as improved crop yields and increased adoption of electric vehicles can be realised.

²⁵⁹Ibid.
²⁶⁰Ibid.

5.2. Challenges and opportunities

The overall challenges and opportunities are framed through a SWOT matrix.

Box 3 | SWOT Assessment of Climate Finance flows in South Africa overall

Strengths - positive internal factors

Private sector's growing involvement, especially impact investors focused on socially, environmentally, and economically beneficial projects.

The IPCC Working Group II notes a consensus that **private finance for climate investments may be best suited for the energy, infrastructure, agriculture, and water management sectors**, given their relative commercial maturity.

Weakness - limiting internal constraints

Lack of liquidity and macroeconomic risks hinder South Africa's small capital markets, affecting long-term financing availability. The dominance of short-term lending, with 70% of loans maturing in under five years, further characterises these financial markets.²⁶¹

Macroeconomic concerns and rising debt-to-GDP ratios over time prevail, with deteriorating financial flow quality to countries. This, coupled with volatile exchange rates, slow economic growth, high interest rates, and rising debt-servicing costs impact South Africa's access to capital markets, increasing project risk premiums.²⁶²

Regulatory issues, political risks, and off-taker risks further compound the complex investment climate.

Lack of knowledge of financing gaps by sectors as well as different data sources

Opportunities - positive external developments

Reallocating public resources, exploring new financing mechanisms, and enhancing revenue collection through municipal rates, tariffs, and taxes (e.g., Carbon Tax) could bridge the climate-funding gap.

Improving technical capacity at grassroots and targeted policy interventions could address adaptation funding gaps, positioning South Africa for climate finance innovation and a resilient, sustainable future.

Adopting and expanding financial instruments like green bonds can attract more private investments and bridge the financing gap (see section 5.2.1 for more detail).

Threats - external threats and barriers

Limited fund accessibility for local governments and subnational actors due to systemic barriers and complex global fund requirements.

CBAM and the global shift towards stricter environmental trade regulations which will affect local industry and jobs.

Source: Author

²⁶¹ Intellidex. 2022. Financing South Africa's Just Energy Transition. Available: <https://www.intellidex.co.za/reports/financing-south-africas-just-energy-transition/> Accessed September 2023

²⁶² De Swardt. 2022. Determining the risks of a sovereign debt default in South Africa, and the consequences thereof; an international overview. Stellenbosch University. Available: <https://www.ekon.sun.ac.za/blog/2022-3-23-stellenbosch-students-win-priz/tiaan-de-swardt---budget-speech-.pdf> Accessed October 2023

5.2.1. Innovative climate finance mechanisms²⁶³

To stimulate private sector investments in adaptation activities, it is imperative to address these macroeconomic risks and cultivate a conducive investment environment. Prioritising mechanisms that facilitate access to institutional finance, including pension funds, sovereign wealth funds, and insurance companies, can provide long-term financing opportunities.²⁶⁴ Furthermore, addressing concerns surrounding debt sustainability and establishing frameworks for debt relief will help alleviate financial burdens and attract investments to support South Africa's adaptation initiatives.

Examining innovative climate finance mechanisms and emerging trends, we have identified promising avenues to stimulate and expand private sector investment. These include:

1. Blended Finance: An effective strategy to attract increased investment involves harnessing public financial resources to mitigate investment risks. This can be achieved through the application of blended finance, a technique that combines various forms of capital, including concessional funding, with diverse return expectations within a single investment framework. By amalgamating these resources, the risk-return profile of an investment can be enhanced. This approach serves to alleviate concerns related to financial uncertainty and knowledge gaps, thereby rendering projects more appealing to private investors who may otherwise be hesitant to participate. Blended finance, by de-risking investments and offering additional incentives, has the capacity to mobilise private capital that might otherwise remain untapped, thus contributing to the funding required for sustainable development initiatives.²⁶⁵

- **Presently, blended finance holds a modest role in South Africa, accounting for approximately 8% of climate finance.**²⁶⁶ Furthermore, most blended finance sources originate from foreign entities, indicating a potential reliance on external funding for sustainable projects. Addressing these challenges and unlocking private investment necessitates the utilisation of innovative blended finance mechanisms. By leveraging concessional funding as a catalyst, these mechanisms can diminish investment risks and attract commercial capital to bridge the financing gap.
- **Globally, several examples exist, such as the World Bank's Blended Finance Facility, targeting developing countries.** Additionally, specific projects under the GEF and GCF employ a blend of grants, loans, equity investments, and guarantees to incentivize project financiers or developers to engage in financing adaptation projects. Some notable examples of such initiatives implemented in South Africa include the GCF's Embedded Generation Investment Programme (EGIP) and the SCF Capital Solutions Project.^{267, 268} These initiatives exemplify the potential of blended finance to facilitate private sector engagement and drive sustainable development efforts.

2. Green Bonds: Green bonds represent a substantial opportunity, especially at the provincial and municipal levels, for mobilising substantial private capital designated for low-carbon and climate-resilient investments. The introduction of the JSE sustainability segment for green bonds and the expansion of commercial bank green bond issuance via trusted private placement partners such as the AFD and the IFC suggest that this instrument can continue to be useful in mobilising private sector climate finance. The establishment of South Africa's GTF should also help in this matter, as investors will now have greater certainty about what type of projects their finance contributes to within the country.²⁶⁹

- There are also some alternative but similar bond types that may be useful for use in mobilising climate finance in South Africa. For example, specific Climate (Resilient) Bonds may prove useful for DFIs or

²⁶³Ebrahim. 2018. A study on the potential private sector investment priorities that support South Africa's climate change outcomes. Available online: www.renmere.co.za Accessed September 2023

²⁶⁴Ibid.

²⁶⁵WRI. 2023. What It Takes to Attract Private Investment to Climate Adaptation. Available: <https://www.wri.org/insights/private-sector-climate-adaptation-finance> Accessed September 2023

²⁶⁶NBI. 2023. Financing South Africa's Just Transition: Just Transition and Financing pathways Study for South Africa. Available: <https://web-assets.bcg.com/d9/22/d2cb5db648c79c3ac5408db526aa/nbi-financing-south-africas-just-transition-dec-22.pdf> Accessed September 2023

²⁶⁷GCF. 2019. Projects and Programmes. Available: <https://www.greenclimate.fund/project/fp106#investment> Accessed October 2023

²⁶⁸GCF. 2016. Projects and Programmes. Available: <https://www.greenclimate.fund/project/fp029> Accessed October 2023

²⁶⁹Johannesburg Stock Exchange, 2023. Green Bonds. Available: <https://www.jse.co.za/raise-capital/debt-market/green-bonds> Accessed September 2023

Governments that are looking to provide financial backing for project areas or sectors, especially ones that are currently left unaddressed with existing incentives, such as waste and water management solutions, or forest management. Blue Bonds may also offer a similar solution if projects that address marine-based solutions are too sparse²⁷⁰.

- Additionally, Environmental Impact Bonds, which offer ‘pay-for-success’ returns to private investors on a climate project using a predefined metric of outcomes. In this sense, the Government or similar agencies can ensure that specific targets are met before they reward investors for achieving them. However, producing these metrics can be tricky if there are many differing interests when they are being formulated²⁷¹.

3. Performance-Based Grant Funds: The introduction of performance-based grant funds oriented toward green outcomes presents an opportunity for private sector institutional investors to increase their engagement with green Small Medium and Micro-Enterprises (SMMEs). These funds would allocate resources based on predetermined green objectives, such as green job creation, climate change mitigation, and enhanced water and waste management, contingent upon matching private sector contributions.

4. Adaptation Benefits Mechanisms: The development of the AfDB’s adaptation benefits mechanism could prove extremely useful to South Africa. It involves the AfDB certifying the viability and the benefits of climate-related projects. This certification can then be taken as collateral to private investors to increase the attractiveness of the related project/schemes, given that information on it has been provided by a reputable organisation. While this instrument is likely to be more useful for less developed countries in Africa, it may help South Africa to receive support for riskier investments.²⁷²

6. Green Loans: Loans such as the ones issued by IFC for Nedbank and Absa Bank will be essential to establish the pipeline of finance from commercial banks to green projects in the country. As green loans are upscaled, they can help to provide swathes of finance for high-return projects, such as the REI4P.

5.3. Key recommendations

Key recommendations to address some of the challenges outlined in this report include:

- **Regulatory Framework:** Revisiting the regulatory framework is vital. Aligning existing regulations with the evolving climate finance landscape can eliminate obstacles and create a conducive environment for climate-focused investments and initiatives.
- **Climate Planning and Budgeting:** Enhancing existing structures for climate planning and budgeting is necessary. This ensures that climate considerations are seamlessly integrated into governmental decision-making processes. Strengthening the SA GFT and Climate Budget Tagging Process will contribute to this goal.
- **Tracking and Monitoring Mechanisms:** Strengthening the tracking and monitoring of climate finance is crucial. Comprehensive insight into the allocation, disbursement, and utilisation of climate finance is essential to achieve climate change objectives effectively.
- **Alternative Municipal Revenue Models:** Local governments play a pivotal role in climate action, and innovative financing approaches can bolster their capacity to implement climate projects. It is imperative to consider alternative revenue models to support these efforts.
- **Restructuring Intergovernmental Grants:** There is a call for a reconsideration of the structure of intergovernmental grants allocated to enhance climate resilience and promote low-carbon development. The aim is to ensure that these grants not only possess adequate funding but are also strategically directed to address areas of critical need.
- **Blended Finance:** Blended finance, combining concessional funding with commercial capital, is a potential growth area. It can attract private investment in innovative sectors like low-carbon transport, contributing to

²⁷⁰IISD. 2023. Innovative Financial Instruments for Climate Adaptation. Available: <https://www.iisd.org/innovative-financing/#:~:text=The%20constant%20evolution%20of%20project.social%2C%20gender%2C%20and%20sustainability> Accessed October 2023

²⁷¹ibid.
²⁷²IISD. 2023. Innovative Financial Instruments for Climate Adaptation. Available: <https://www.iisd.org/innovative-financing/#:~:text=The%20constant%20evolution%20of%20project.social%2C%20gender%2C%20and%20sustainability> Accessed October 2023

sustainable development. The DBSA Infrastructure fund is a good example of how public sector funding can be used as a catalytic vehicle to de-risk investments into climate change investments, through a blended finance (see Box 4).

- **Innovative financial mechanisms:** South Africa has underutilised existing financial mechanisms (such as blended finance) and has the potential to strengthen other existing financial mechanisms to crowd in private sector investment in the country.

Box 4 | DBSA Infrastructure Fund

The Development Bank of Southern Africa (DBSA) Infrastructure Fund was established with the primary purpose of accelerating investment in the development and upgrading of infrastructure in South Africa. The Fund aims to leverage private sector expertise and capital to supplement public sector resources, thus addressing the country's vast infrastructure needs. This includes sectors such as transportation, utilities, and housing, among others.

Crucially, the DBSA Infrastructure Fund plays a significant role in fostering climate change adaptation activities. With the increasing recognition of the need to build climate-resilient infrastructure, the Fund serves as a catalytic funding vehicle, bridging the gap between public policy goals and private sector implementation. It achieves this by financing projects that have clear adaptation benefits, such as resilient urban development, sustainable water management, and renewable energy infrastructure. By mobilizing public and private resources towards these projects, the Fund not only helps to reduce the vulnerability of communities to climate impacts but also stimulates innovation and builds capacity within the infrastructure sector to address the challenges of climate change. Through this multi-pronged approach, the DBSA Infrastructure Fund embodies an integral component of South Africa's broader strategy to adapt to a changing climate.

Source: Author

5.4. Conclusion

To unlock South Africa's climate finance potential, it is essential to align policies, strengthen capacity, and create an environment conducive to both public and private sector engagement in climate action. This comprehensive approach will contribute significantly to the country's sustainable and climate-resilient future. **Furthermore, this cannot be done without a level of transparency not only on climate finance transactions and funding but also on measurement metrics used by industry players.**

By leveraging climate finance effectively with standard monitoring, reporting and verification processes, the country can foster an equitable transition towards a low-carbon and climate-resilient economy. This transition not only addresses climate-related challenges but also holds the potential to alleviate poverty, reduce inequality, and create meaningful employment opportunities, thus contributing to a more sustainable and prosperous future for all.

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ANNEXES

Annex 1: | Table of Policy Documents

Policy Document	Description	Private Sector Involvement
National Climate Change Response Policy Paper (NCCRP) ²⁷³	A government policy outlining South Africa's climate change approach and response strategy. It addresses mitigation and adaptation and some other strategic priorities such as technology research and resource mobilisation. Concerning adaptation, the paper identifies priority sectors and short- and medium-term policies for individual sectors and issues that require cooperation across sectors. As for mitigation, the paper sets out the country's overall approach to tackling mitigation challenges and establishes the context under which South Africa will address mitigation.	The importance of the private sector in achieving targets and in addressing specific actions are noted.
Renewable Energy Independent Power Producer Procurement Programme (REI4P)	A large private sector-based investment programme aimed at increasing the capacity of renewable energy in South Africa. It has led to an increased generation capacity of over 6000 Megawatts (MW). ²⁷⁴ The 6th bid window for awarding contracts aims to increase generation by a further 5200 MW. ²⁷⁵	Private sector investment and procurement is paramount for REI4P.
Integrated Energy Plan (IEP) ²⁷⁶	The paper reviews and analyses the future supply and demand of energy in South Africa under several scenarios, among which some scenarios place a strong importance on the environmental transition. In addition to this, it provides recommendations for renewable energy sectors.	Private sector involvement is not referenced.
Green Transport Strategy (GTS) ²⁷⁷	This strategy paper, which covers the period 2018-2050, addresses mitigation and adaptation options and initiatives for the transportation sector to bring the sector in line with the climate change agenda. It also makes some mention of costs and suggests options for financing the strategy, apart from public sector taxation, fees, and subsidies.	Private sector participation is considered integral to the strategy. Lowering barriers and securing long-term investment is crucial.
Integrated Resource Plan (IRP) ²⁷⁸	This plan details the transition of the energy sector until 2030 under rather generous emissions allowances for the sector. It also makes note of likely tariffs that will be passed on to consumers due to the changing electricity mix.	Private sector involvement is not referenced.

²⁷³National Climate Change Response White Paper. South African Government. 2011. Available: https://www.gov.za/sites/default/files/gcis_document/201409/nationalclimatechangeresponsewhitepaper0.pdf Accessed September 2023

²⁷⁴South Africa's updated NDC under the Paris Agreement. 2021.

²⁷⁵South Africa's Just Energy Transition Investment Plan (JET IP) for the initial period 2023–2027. 2022:47. Available: <https://www.thepresidency.gov.za/content/south-africa%27s-just-energy-transition-investment-plan-iet-ip-2023-2027> Accessed September 2023

²⁷⁶Integrated Energy Plan. South African Department of Energy. 2016. Available: <https://www.energy.gov.za/files/IEP/2016/Integrated-Energy-Plan-Report.pdf> Accessed September 2023

²⁷⁷Green Transport Strategy for South Africa (2018-2050). South African Department of Transport. 2018. Available: https://www.transport.gov.za/documents/11623/89294/Green_Transport_Strategy_2018_2050_onlineversion.pdf/71e19f1d-259e-4c55-9b27-30db418f105a Accessed September 2023

²⁷⁸Integrated Resource Plan. South African Department of Mineral Resources and Energy. 2019. Available: https://www.energy.gov.za/irp/2019/IRP_2019.pdf Accessed September 2023

Carbon Tax Act ²⁷⁹	This government document sets out the carbon pricing strategy of the country, with an initial level of ZAR 120 which has since risen to ZAR 134 per ton CO₂e emitted . The document also sets out the emissions factors of various sources of pollutants and the allowances given to emitters. However, according to the IMF, these allowances have led to a low effective carbon tax rate of less than ZAR 7 for FY 2021-22 ²⁸⁰ .	Private sector involvement is not referenced.
Low Emission Development Strategy (LEDS) ²⁸¹	This comprehensive mitigation-focused document, which is aimed to be replicated every five years, collates sectoral documents and presents the national strategy for mitigation and existing policies and strategies to further reduce emissions. The strategy also details the likely cost of the country's transition and indicates the role of climate finance, both internationally and from the domestic private sector.	The need to support and collaborate with the private sector is mentioned in the strategy. The importance of private sector finance is also noted.
National Climate Change Adaptation Strategy (NCCAS) ²⁸²	The NCCAS is a government document that outlines South Africa's adaptation priorities for adaptation planning and to inform policy through the identification of nine key strategic interventions. Challenges for adaptation financing and general action-based responses are established as part of the outcome framework however some of these actions lack specificity.	Involvement and interaction with the private sector are extensively considered in the strategy.
South Africa's updated NDC	Communicated to the UNFCCC secretariat in September 2021, it addresses the country's climate change ambitions on mitigation, adaptation, and a just transition in a comprehensive way. While estimated costs are given at a high level per action for adaptation measures, there is a lack of specificity and a detailed action plan. Meanwhile, for mitigation, costing is not given. However, requirements for international support are provided including a quantification of climate finance needs.	The issue of private sector adaptation finance is noted.
South African Automotive Master Plan (SAAM2035) ²⁸³	While this document generally details the action plan for the automotive industry in South Africa through to 2035, it additionally emphasises the country's need to transition to the production and use of more environmentally friendly and energy-efficient vehicles across the strategy period.	The uptake of the plan by the private sector is considered necessary to its implementation
Steel and Metal Fabrication Masterplan ²⁸⁴	This sectoral document calls for the greening of the steel industry with an aim of reaching carbon neutrality by 2050, with the green hydrogen industry suggested to have a large role in this transition. The document also suggests that assistance with initial switchover costs may be required to incentivise the industry.	The private sector is mentioned by the masterplan as potentially hesitant to adopt carbon neutral practices without assistance.

²⁷⁹Government Gazette. 2019. Act No. 15 of 2019: Carbon Tax Act, 2019. Available: https://www.gov.za/sites/default/files/gcis_document/201905/4248323-5act15of2019carbontaxact.pdf. Accessed October 2023.

²⁸⁰International Monetary Fund. African Dept. 2023. South Africa Carbon Pricing and Climate Mitigation Policy. Available: <https://www.elibrary.imf.org/view/journals/002/2023/195/article-A003-en.xml>. Accessed September 2023

²⁸¹South Africa's Low-Emissions Development Strategy 2050. 2020. Available: <https://faolex.fao.org/docs/pdf/saf211401.pdf>. Accessed September 2023

²⁸²National Climate Change Adaptation Strategy. South African Department for Forestry, Fisheries, & the Environment. 2020. Available: https://climate.laws.org/documents/national-climate-change-adaptation-strategy-2020_f0ec?id=the-national-strategy-for-climate-change-adaptation_d823. Accessed September 2023

²⁸³Geared for Growth: South Africa's Automotive Industry Master Plan to 2035. South African Department for Trade, Industry, and Competition. 2021. Available: <http://www.thedtic.gov.za/wp-content/uploads/Masterplan-Automotive-Industry.pdf>. Accessed September 2023

²⁸⁴The South African Steel and Metal Fabrication Master Plan 1.0. South African Department for Trade, Industry, and Competition. 2022. Available: <http://www.thedtic.gov.za/wp-content/uploads/Steel-Industry-Master-Plan.pdf>. Accessed October 2023.

<p>Just Energy Transition Investment Plan (JET IP)</p>	<p>Identifies key sectors and activities for prioritisation in mitigation, highlights areas of interest for adaptation and provides high-level costing of financing South Africa's Just Transition, yet lacks concrete actions, the granularity of financing needs and actors and financial mechanisms for implementation.</p>	<p>The private sector as a funding source is crucial to the implementation of the JET IP.</p>
<p>South Africa's Green Finance Taxonomy²⁸⁵</p>	<p>Based on the European Union's (EU) Green Taxonomy but tailored to South Africa's specific circumstances and will be used as a system for classifying economic activities that contribute to climate change mitigation and adaptation. While this remains under development, over time, it could prove increasingly important in making a business and financial case for investing in adaptation and mitigation as a result of the general and technical criteria established for various sectors that will ensure certainty for investors and finance as a whole (see section 2 in this report for more detail).</p>	<p>Private sector involvement is not referenced.</p>
<p>South African Climate Change Bill²⁸⁶</p>	<p>The Bill aims to enable the development of an effective climate change response and a long-term, just transition to a low-carbon and climate resilient economy and society in South Africa in the context of sustainable development. The Department of Forestry, Fisheries and the Environment (DFFE) introduced it to Parliament on 18 February 2022. The strategy includes a number of objectives and obligations for adaptation, including the publishing of both national and sectoral adaptation plans. The bill also sets forth plans for national and sectoral emissions targets (see section 2 in this report for more detail).</p>	<p>Private sector involvement should be considered for the management of adaptation measures where necessary.</p>
<p>Green Hydrogen Commercialisation Strategy²⁸⁷</p>	<p>This strategy paper sets out South Africa's vision to become a major producer and exporter of green hydrogen in the coming years. Within the paper, there is an analysis of the current environment and regulatory frameworks, in addition to an estimation of the financing requirements for upcoming projects. It also notes South Africa's available funding opportunities from various sources. As of the 19th October 2023, the GCHS has been approved for implementation²⁸⁸.</p>	<p>The strategy impresses the private sector's role in ensuring implementation and competition in international markets.</p>
<p>South African Renewable Energy Masterplan (SAREM) Draft²⁸⁹</p>	<p>This document constitutes a comprehensive and detailed action plan for renewable energy in South Africa, with a particular focus given to solar energy, wind energy, lithium-ion batteries, and vanadium-based batteries. However, very little attention is given to financing.</p>	<p>The document notes the important contributions of the private sector up to that point and its continued importance into the future.</p>
<p>Energy Action Plan²⁹⁰</p>	<p>This recurrently updated plan primarily focuses on South Africa's strategy to transition away from load shedding, however as part of that plan renewable electricity generation, renewable energy storage, and commercial rooftop solar play a large role in helping to achieve that aim.</p>	<p>In the latest iteration of the plan in August 2023, the need to build private sector collaboration is considered paramount and the</p>

²⁸⁵South African Green Finance Taxonomy. 1st Edition.South African Department for Trade, Industry, and Competition. 2022. Available: https://www.treasury.gov.za/comm_media/press/2022/SA%20Green%20Finance%20Taxonomy%20-%201st%20Edition.pdf Accessed September 2023

²⁸⁶Climate Change Bill. South African Department of Forestry, Fisheries and the Environment. 2022. Available: https://www.parliament.gov.za/storage/app/media/Bills/2022/B9_2022_Climate_Change_Bill/B9_2022_Climate_Change_Bill.pdf Accessed September 2023

²⁸⁷Green Hydrogen Commercialisation Strategy for South Africa. South African Department for Trade, Industry, and Competition. 2021. Available: <http://www.thedtic.gov.za/wp-content/uploads/Full-Report-Green-Hydrogen-Commercialisation-Strategy.pdf> Accessed September 2023

²⁸⁸Cremer, T., 2023. Cabinet approves Green Hydrogen Commercialisation Strategy. Available: <https://www.miningweekly.com/article/cabinet-approves-green-hydrogen-commercialisation-strategy-2023-10-19>. Accessed October 2023.

²⁸⁹South African Renewable Energy Masterplan (Draft Version). South African Department for Mineral Resources & Energy. 2023. Available: [https://www.dmr.gov.za/Portals/0/Resources/Renewable%20Energy%20Masterplan%20\(SAREM\)/South%20African%20Renewable%20Energy%20Masterplan%20\(SAREM\)%20Draft%20III.pdf?ver=2023-07-17-141604-137×tamp=1689596128318](https://www.dmr.gov.za/Portals/0/Resources/Renewable%20Energy%20Masterplan%20(SAREM)/South%20African%20Renewable%20Energy%20Masterplan%20(SAREM)%20Draft%20III.pdf?ver=2023-07-17-141604-137×tamp=1689596128318) Accessed September 2023

²⁹⁰Republic of South Africa. 2023. Energy Action Plan. One year progress report: August 2023. Available: https://www.stateofthenation.gov.za/assets/downloads/Update_on_energy_action_plan_AUG23.pdf Accessed October 2023.

		current partnerships in place are championed.
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Annex 2: | Economic Sectors Approach to Net Zero

Sector	Key Climate-Related Sectoral Documents	Approach to Net Zero
Mining	DMRE (2020-2025) strategic plan ²⁹¹ Exploration Strategy ²⁹² JET IP	<p>The JET IP has highlighted the importance of providing an equitable transition to coal mining workers in the country as well as to repurpose coal mining land. The document estimates the total costs of repurposing this land and attending to coal worker transition needs at ZAR 19 billion. While the purpose of this rehabilitation is for public and private use, the financing for these policies is expected to come from the government and DFIs.</p> <p>An additional aspect of net zero for the mining sector is the extraction of commodities that will be essential for the net zero global economy, such as lithium, copper, nickel etc. Whilst the current known deposits of these commodities are low²⁹³. The DMRE exploration strategy aims to increase the country's share of global exploration expenditure to 5%.</p> <p>Another note of interest concerning the mining industry in South Africa and net-zero considerations is the exclusion of artisanal or small scale (ASM) miners from the Just Transition, as the group is not mentioned once in the JET IP. When these mines inevitably have to shut down due to declining use in coal power, there may be environmental concerns due to improper closure in addition to socio-economic considerations, including a rise in illegal activity within the sector²⁹⁴.</p>
Tourism	South African Tourism Climate Change Communication Strategy (SATCCCS) ²⁹⁵	<p>The tourism sector approach to net-zero is heavily incentive led, however many of these incentives also rely heavily on private financing. There is also the belief among stakeholders that the private sector should play a primary role in ensuring that the sector's climate change transition is financed.</p> <p>Potential incentives proposed by the strategy include green accreditation and grading, tax rebates for tourism businesses that are leading the net zero transition, and government funding for water and energy efficient technologies to be implemented in the tourism sector.</p>
Agriculture	Climate Smart Agriculture Strategic Framework NCCAS	<p>The CSA strategic framework indicates the future steps for South Africa in agriculture in a world with climate change through six outputs which are centred around an enabling policy environment, partnerships, and innovation.</p> <p>The strategy indicates that initially the private sector and CSOs will need a lot of support and insurance against the climate and innovation risks, however this is a catalytic process after which organisations will become self-sufficient.</p>
Manufacturing	SAAM2035 Steel and Metal Fabrication Masterplan	<i>SAAM2035 and Steel and Metal Fabrication Plan described in Table 1 of Section 1.1</i>

²⁹¹Department of Mineral Resources and Energy. 2020. Strategic Plan 2020-2025. South African Department for Mineral Resources and Energy. 2020. Available: <https://www.energy.gov.za/files/aboutus/DMRE-Strategic-Plan-2020-2025.pdf> Accessed October 2023

²⁹² Department of Mineral Resources and Energy. 2022. The exploration Strategy of the mining industry of South Africa. Available: https://www.gov.za/sites/default/files/gcis_document/202204/46246gon2026.pdf Accessed October 2023

²⁹³ National Business Initiative. 2022. Chapter 4. Decarbonising the South African Mining Sector. Just transition and climate pathways study for South Africa. Available: <https://www.nbi.org.za/wp-content/uploads/2023/09/NBI-Chapter-4-Decarbonising-the-South-African-Mining-Sector.pdf> Accessed October 2023

²⁹⁴VUKA. 2022. Analysis: Coal communities and the Just Energy Transition Investment Plan. Available: <https://www.miningreview.com/coal/coal-communities-and-the-just-energy-transition-investment-plan/> Accessed October 2023

²⁹⁵South African Department of Tourism. 2021. South African Tourism Climate Change Communication Strategy (SATCCCS). Available: <https://www.tourism.gov.za/CurrentProjects/Documents/South%20African%20Tourism%20Climate%20Change%20Communication%20Strategy.pdf> Accessed October 2023

Sector	Key Climate-Related Sectoral Documents	Approach to Net Zero
Energy	Energy Action Plan JET IP SAREM Draft GH2 Commercialisation Strategy Climate Change Bill Carbon Tax Act	<p>While the sectoral energy documents set out a clear approach to the net-zero transition, there has been some pushback from stakeholders.</p> <p>The Minister for the DMRE, Gwede Mantashe, has recently called for the net-zero transition to focus on 'high- to low-carbon' as opposed to 'coal to renewables'²⁹⁶. More recently, the minister has also called for an intensification in natural resource exploration within the country²⁹⁷, and for engagement with the private sector to look at extending the life of coal-powered plants, including the previously decommissioned Komasi power plant²⁹⁸. This sentiment has been reiterated by the minister for electricity Kgosientsho Ramokgopa who has referred to the JET as an 'injustice' and a consequence of external influence as opposed to what is best for South Africa²⁹⁹.</p> <p>Additionally, political lobbying emerging from the Minerals Energy Complex (MEC) has offered significant resistance to the progress of the Just Transition. Research by InfluenceMap shows that many of the major energy companies in South Africa have engaged in a negative manner with energy policy in the country³⁰⁰.</p> <p>While trade unions acknowledge the damaging effects of the MEC in South Africa³⁰¹, unions such as the National Union of Mineworkers (NUM) have called for a delay to the enactment of the Just Transition plan for further consultations and current beliefs that the equality of workers in the sector is not adequately being considered³⁰².</p> <p>Finally, Nkateko Chauke, programme director of Oxfam South Africa, has argued that there are international injustices in the JET, as only 4% of the ~ ZAR 131.75 billion (USD 8.5 billion) IPG funding is given as grants. Furthermore, she warns that private sector involvement in the plan, especially in the provision of renewable energy, constitutes a socialisation of the risks, yet a privatisation of the profits, implying that the outcomes of the JET IP may be unjust as well³⁰³.</p> <p>Equally, in order to fulfil Green Hydrogen take up in South Africa, there is an issue associated with water scarcity, not only in the production of GH2 itself but also in the mining of Platinum Group Metals (PGMs) that are essential in electrolysis³⁰⁴. At the recent Green Hydrogen Summit for South Africa held in Cape town, the coalition H2 Watch SA, which consists of CSOs and small NGOs, critiqued certain aspects of the approach to GH2 in the country, including the possibility that it may: open the door for prolonging fossil fuel use; harm marine life if large-scale desalination is required; and give rise to land disputes³⁰⁵.</p>
Transport	SAAM2035	SAAM2035 and Just Energy Transition Investment Plan described in Table 1 of Section 1.1

²⁹⁶Green Building Africa. 2023. South Africa's energy minister advocates for a just transition from high to low carbon emissions, instead of a transition from coal to renewables. Available: <https://www.greenbuildingafrica.co.za/south-africas-energy-minister-advocates-for-a-just-transition-from-high-to-low-carbon-emissions-instead-of-a-transition-from-coal-to-renewables/> Accessed October 2023

²⁹⁷Department of Mineral Resources and Energy. 2023. Remarks by the honourable minister of mineral resources and energy Mr Gwede Mantashe (MP) African Energy Week. Available: <https://www.dmr.gov.za/news-room/post/2124/remarks-by-the-honourable-minister-of-mineral-resources-and-energy-mr-gwede-mantashe-mp-african-energy-week> Accessed October 2023.

²⁹⁸Venter, I. 2023. Mantashe seeks to extend the life of Eskom's coal-fired power stations. Available: <https://www.miningweekly.com/article/mantashe-seeks-to-extend-the-life-of-eskoms-coal-fired-power-stations-2023-10-18> Accessed October 2023

²⁹⁹African Business. 2023. Minister attacks South Africa's climate finance deal. Available: <https://african.business/2023/07/energy-resources/minister-attacks-south-africas-climate-finance-deal> Accessed October 2023

³⁰⁰Cullen, S. 2023. Industry Lobbying Imbalance Putting South Africa's Climate Goals at Risk. Available: <https://influencemap.org/pressrelease/Industry-Lobbying-Imbalance-Putting-South-Africa-s-Climate-Goals-At-Risk-21162> Accessed October 2023

³⁰¹COSATU. 2022. Blueprint for workers. Available: <https://mediadon.co.za/wp-content/uploads/2022/04/COSATU-Just-Transition-Blueprint-Full-version.pdf> Accessed October 2023

³⁰²IndustriALL. 2023. Unions want a just energy transition for workers in South Africa. Available: <https://www.industrial-union.org/unions-want-a-just-energy-transition-for-workers-in-south-africa> Accessed October 2023

³⁰³African Business. 2023. Minister attacks South Africa's climate finance deal. Available: <https://african.business/2023/07/energy-resources/minister-attacks-south-africas-climate-finance-deal> Accessed October 2023

³⁰⁴Matsabu, T. 2022. The "Fuel of the Future" and Water Insecurity in South Africa's Platinum Belt. Available: <https://www.newsecuritybeat.org/2022/05/fuel-future-water-insecurity-water-africas-platinum-belt/> Accessed October 2023

³⁰⁵Rondganger, L. 2023. South Africa commits to a Green Hydrogen future, but environmental lobby groups are gearing up for a fight. Available: <https://www.iol.co.za/news/south-africa/south-africa-commits-to-a-green-hydrogen-future-but-environmental-lobby-groups-are-gearing-up-for-a-fight-0abbf052-1095-4a61-b408-b2929e42ee96> Accessed October 2023.

Sector	Key Climate-Related Sectoral Documents	Approach to Net Zero
	JET IP	

Annex 3 | Key public sector actors

<p>National Treasury</p>	<p>The South African National Treasury, central to economic management and fiscal policy, aims to bolster sustainable growth and green investments through various initiatives. Key among these are the implementation of Budget Tagging and the development of a Green Taxonomy, enhancing transparency in climate finance and aiding the distinction between green and non-green investments. The climate budget tagging system tracks public fund allocation to climate-related projects, ensuring support for renewable energy, adaptation, and emissions reduction efforts. The SA GFT facilitates investors and financial institutions in identifying environmentally responsible projects, promoting green finance.³⁰⁶</p> <p>Additionally, the Green Outcomes Fund, established in partnership with GreenCape, incentivizes investments in green businesses, particularly supporting Small, Medium, and Micro-sized Enterprises (SMMEs) in sectors like waste management, water, sustainable agriculture, and clean energy.³⁰⁷ This initiative, backed by the RMB Fund, showcases how grant funding can spur private sector investment in otherwise unviable areas.</p> <p>Moreover, the National Treasury allocates Medium-Term Strategic Framework (MTSF) budgets to government departments for mandate implementation under the National Development Plan "Vision 2030." In February 2023, a solar panel incentive was introduced, offering households a rebate for investing in solar photovoltaic (PV) panels, encouraging clean electricity generation.³⁰⁸</p> <p>Through these measures, the National Treasury is pivotal in shaping a conducive environment for green investments and sustainable economic growth in South Africa.</p>
<p>Department of Mineral Resources and Energy (DMRE)</p>	<p>The REI4P programme, introduced by the Department of Energy (DoE)³⁰⁹, in 2010, has been instrumental in increasing the flow of climate finance in the country. The DoE of South Africa initiated the Independent Power Producer Procurement Programme (IPPPP) as a response to the pressing need for diversified electricity generation and the persistent power shortages that had plagued the country since 2008³¹⁰. The program, in essence, served as a platform to showcase South Africa's firm commitment to introducing renewable energy solutions, a commitment initially demonstrated by President Zuma at the 15th UN COP 15.</p> <p>The REI4P and the Small Projects Independent Power Producer Procurement Programme (SP-I4P), which are both components of the IPPPP, were established with the explicit purpose of procuring renewable energy capacity from private sector entities.³¹¹</p> <p>Despite various implementation obstacles in recent years, the program has successfully attracted a significant influx of investment, totaling R209.7 billion, of which R41.8 billion (equivalent to 20%) originates from foreign investors.³¹² This marks a noteworthy achievement, surpassing GEF the total investment in Independent Power Producers (IPPs) seen across the entire sub-Saharan African region over the past two decades.</p> <p>Furthermore, the programme has significantly contributed to economic development in the country. It has facilitated the creation of 60,517 job years for South African citizens, along with substantial economic and enterprise development, amounting to R484.1 million.³¹³ Additionally, it has</p>

³⁰⁶National Treasury. 2022. Media Statement. Available: https://www.treasury.gov.za/comm_media/press/2022/2022040101%20Media%20statement%20-%20Green%20Finance%20Taxonomy.pdf Accessed September 2023

³⁰⁷ Cassim et al., 2021. South African Climate Finance Landscape 2020

³⁰⁸National Treasury. 2023. Solar Panel Tax Incentives for Individuals. Available: <https://www.treasury.gov.za/documents/national%20budget/2023/2023%20budget%20fags%20-%20solar%20panel%20tax%20incentive.pdf> Accessed September 2023

³⁰⁹ The Department of Energy (DoE) was merged with the Department of Mineral Resources in June 2019. The new name is now the Department of Mineral Resources and Energy (DMRE).

³¹⁰Filipova et al., 2019. South Africa Country Report. Available: https://www.energyeconomicgrowth.org/sites/default/files/2020-06/South%20Africa%20Country%20Report_EEG.pdf Accessed September 2023

³¹¹ Ibid.

³¹²GreenCape. 2022. 2022 Large-scale Renewable Energy Market Intelligence Report. Available: https://greencape.co.za/wp-content/uploads/2022/10/RE_MIR_29_3_22_FINAL-3.pdf Accessed September 2023

³¹³ Ibid.

	made substantial strides in socioeconomic development, with contributions totaling R1.6 billion as of the end of March 2021. ³¹⁴
Department of Fisheries, Forestry and the Environment (DFFE)	<p>The Department of Forestry, Fisheries and Environment (DFFE) in South Africa significantly contributes to climate finance through overseeing programs and initiatives for climate change mitigation and sustainable environmental practices. Key activities include managing international climate finance from sources like the Green Climate Fund (GCF) for renewable energy and climate resilience projects and partnering with DBSA to manage the South African Green Fund, which finances green projects aiding the transition to a low-carbon economy.</p> <p>DFFE also handles the National Climate Change Response Database to track climate actions, supports the issuance of sustainable municipal bonds for environmentally beneficial projects, and leads climate policy development to guide the country's climate efforts and attract climate finance. Through these activities, DFFE crucially facilitates climate finance management and direction towards climate change adaptation and mitigation in South Africa.</p>
The Presidential Climate Commission	<p>In December 2020, President Cyril Ramaphosa initiated the Presidential Climate Commission (PCC) to guide South Africa (SA) towards a fair transition to a low-carbon, climate-resilient economy, a decision stemming from the 2018 Presidential Jobs Summit.³¹⁵ The Climate Change Bill passed in September 2021 formalised the PCC's role, mandating it to provide expert advice on SA's climate response with a goal of achieving a net-zero, climate-resilient economy by 2050.³¹⁶ The PCC is central in mobilising climate finance for SA's Just Transition, including coordinating the US\$8.5 billion Just Energy Transition Partnership.³¹⁷ While acting as a crucial liaison between the public and private sectors, time is needed to cement its legitimacy, especially in influencing the private sector in financing climate change. The private sector needs to be brought in early and involved in developing policies and regulations to garner their support and increased commitment towards the climate agenda in South Africa.</p>

³¹⁴ Ibid.³¹⁵ Presidential Climate Commission 2021. First Annual Review. Available: <https://www.thepresidency.gov.za/sites/default/files/Presidential%20Climate%20Commission%20Annual%20Report%202021-22.pdf> Accessed September 2023³¹⁶ Ibid.³¹⁷ Ibid.



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