



Africa
Sustainable
Finance Hub



Nature Financial Disclosure Readiness: Policy and Institutional Review

Summary Report

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1 Preamble

Over the last three to five years there has been a rapidly emerging narrative around the materiality of nature-related risks and impacts globally. In support of this narrative, which together with climate change, is seen as ‘two-sides of the same coin’, robust nature-related risk management and disclosure frameworks such as the Taskforce on Nature-related Financial Disclosures (TNFD) have been launched to support a shift towards more nature-positive business practices and outcomes (TNFD, 2022).

Such frameworks are intended to provide a practical guideline that can be applied broadly in a variety of sectors and business activities. This report provides a perspective of the general institutional readiness of the South African financial sector in responding voluntarily, or mandatory, to the emerging nature risk narrative; and

- To assess institutional, policy and regulatory gaps and opportunities for readiness of disclosure of nature-related financial disclosures in South Africa;
- Assessment of the institutional arrangements and readiness, capacity, and competency of national and local economic agents for nature-related reporting; and
- Provide recommendations on nature-related reporting integration into the South African finance sector.





2 Introduction

More than 50% of the global economy relies on biodiversity, about USD 44 trillion, is moderately or highly dependent on nature and its services¹. The Global Futures Initiative estimates that a business-as-usual scenario will see biodiversity loss cause financial losses of USD 10 trillion between 2011 and 2050.

The Millennium Ecosystem Assessment (MEA) (IPBES, 2005) establishes the framework in the way we think about ecosystems and the natural capital assets which underpin and support them. A significant portion of all nations gross domestic product (GDP) is dependent on primary production in natural systems.

Constanza et al (2014), calculate the sum of these ecosystem services to be worth approximately US \$125 trillion annually (calculated in 2011 using 2007 US \$). Despite this, the material risks to these ecosystem services are not considered as internal material economic costs by companies, and mostly directly and indirectly externalized to a diverse variety of stakeholders.

The Nature Risks Rising Report by the World Economic Forum (WEF, 2020) indicates that in Africa, 23% of the GDP generated in the average national economy is highly dependent on nature, with a further 39% with a medium dependence directly on nature. The same report notes that even in larger economies generating a lower proportional amount of highly dependent GDP, the absolute amounts of GDP dependent on nature are significant, highlighting the critical importance of biodiversity and natural capital.

Biodiversity loss poses significant risks to financial markets. In its 2021 Global Risks report, the WEF ranks biodiversity loss and ecosystem collapse as one of the top five risks to the global economy in the next 10 years².

Reinforcing this is the PWC and WWF Switzerland's Nature is Too Big To Fail report which states that financial actors will need to act swiftly on **biodiversity which is emerging as the next frontier in financial risk management**.³

The loss of biodiversity, goes hand-in with climate change which is both driven by and exacerbates nature loss in a vicious circle. Despite slow progress, there are renewed hopes and expectations that the commitments set at COP 15 on biodiversity in December 2022 will lead to renewed national pledges on biodiversity that could trigger more policy and regulatory intervention.

One of the most significant recent developments in furthering the mainstreaming of biodiversity in business, was the September 2020 launch of the Task Force on Nature-related Financial Disclosures (TNFD)⁴ to tackle biodiversity related financial disclosures. In a similar vein to the Task Force on Climate-related Financial Disclosures (TCFD), the TNFD aims to redirect flows of finance at scale towards nature-positive out-comes.

1 World Economic Forum (2020) Nature Risks Rising

2 NCFA (2021) ENCORE Online Tool
3 <https://wwf.panda.org/7358290/Nature-is-too-big-to-fail>
4 <https://tnfd.info/why-a-task-force-is-needed/>

An aerial photograph of a terraced rice field. The terraces are arranged in a grid-like pattern, with a central water channel running vertically through the middle. The rice plants are a vibrant green color, and the water in the channels is a darker shade of green. The overall scene is a beautiful example of agricultural engineering and landscape design.

3 Institutional Review

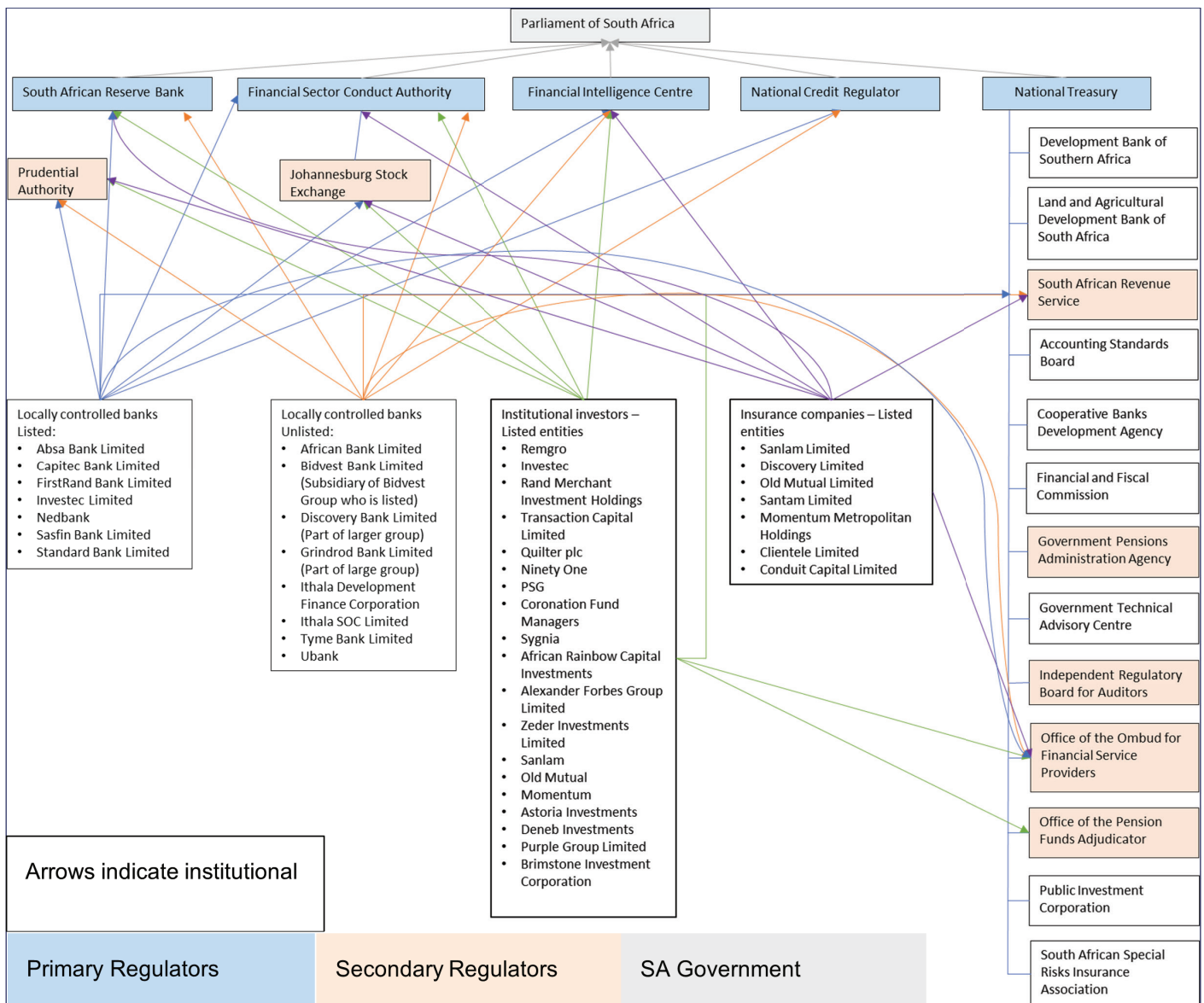
The institutional review considers all financial authorities and regulators that operate within South African jurisdiction with a view to understanding the mandate of these entities.

Arrows in Figure 1 indicate the direction of reporting lines, as well as the authorities regulating financial entities in the South African economy

3.1 Financial Authorities in South Africa

The relationship amongst all the relevant financial authorities and domestic finance institutions in South Africa illustrates a high-level of maturity in governance and oversight.

Not all bond dealers are presented in Figure 1; this is due to the fact that no specific climate and nature related reporting is associated with national bonds and bond dealers.



3.2 Roles and mandates of financial authorities in terms of nature-related disclosures

3.2.1 South African Reserve Bank (SARB)

SARB's statutory mandate, according to the Financial Sector Regulation Act 9 of 2017 (FSR Act), is to protect and enhance the financial stability of South Africa. In performing this mandate, the SARB continuously monitors the strengths and weaknesses of the financial system, including the nature and extent of any risks to financial stability. The SARB is a key regulator for all financial institutions in the country.

The Act further requires the SARB to publish a six-monthly review of the financial system; in which the SARB must set out its identification and assessment of the risks to financial stability for the next 12 months. The "Second Edition 2022 Financial Stability Review", climate change is addressed in the risk assessment, particularly how the increasing severity of climate-change could impact the insurance sector in terms of increased claims and more expensive product offerings (SARB, 2022b).

Further the SARB has stated the importance of their role in adapting to and mitigating climate change risks, by improving information flows within financial markets so that climate change considerations can inform investment decisions and maintain financial and price stability in the face of rising climate risks (SARB, 2022a). The SARB closely coordinates its work with NT and other regulators through the Intergovernmental Sustainable Finance Group.

3.2.2 Prudential Authority (PA)

The FSR Act established the PA as a juristic person operating within the administration of the SARB. In exercising its mandate, the PA regulates and supervises, in accordance with financial sector laws, the financial institutions that provide financial products or securities services; and the market financial infrastructures, within the South African jurisdiction.

In terms of Section 47 of the FSR Act, the PA is required to publish a regulatory strategy. The Act does not specify what must be included, only that the strategy should state the regulatory and supervisory priorities for the next three years, intended key outcomes, as well as guiding principles on the performance of the PA's regulatory and supervisory functions. If nature-related risks are deemed material it will be the responsibility of the PA to prioritise such risk.

The PA's main focus is a fair and efficient financial system; the regulator is starting to address nature-related concerns as evidenced in recent reports from the SARB (SARB, 2021). Leading from the PA Regulatory Strategy 2021-2024, the PA has made progress in respect to sustainable finance and climate change risk issues. The PA has established a Prudential Authority Climate Think Tank (PACTT) to promote, develop and coordinate the PA's regulatory and supervisory response to climate risks that will impact entities regulated and supervised by the PA (SARB, 2021).

3.2.3 Financial Sector Conduct Authority (FSCA)

Section 56 of the FSR Act established the FSCA. The objective of the FSCA is to:

- Enhance the integrity and efficiency of financial markets;
- Promote the fair treatment of financial customers through a robust regulatory framework;
- Assist in maintaining financial stability; and
- Provide financial education and literacy in order to inform customers.

Section 70 of the FSR Act requires the FSCA to publish a strategy that states the regulatory and supervisory objectives of the FSCA for the next three years; key outcomes of the strategy and the guiding principles for the FSCA. The FSR Act does not specify the collation of nature-related disclosure by the FSCA. The FSCA Regulatory Strategy 2021-2025 has no objectives for the enhancement of nature-related financial disclosure. The FSCA could however play a future role in collating nature-related financial disclosures especially with regards to monitoring the investment practices of financial institutions.

3.2.4 Financial Intelligence Centre (FIC)

The Financial Intelligence Centre Act 38 of 2001 established the FIC. The FIC's mandate is to identify proceeds of unlawful activities, combat money laundering and combat terrorist financing. The FIC is also required to share information with the necessary authorities such as the National Prosecuting Authority (NPA), in their investigations and applications for forfeiture of assets. Currently, the FIC does not play a key role in collating nature-related financial disclosure.

3.2.5 National Credit Regulator (NCR)

The National Credit Act (Act 34 of 2005) established the NCR to promote and support the development of a fair, transparent, competitive, financially sustainable, responsible, efficient, effective, and accessible credit market and industry. The NCR reports to the Minister annually on:

- credit availability, price, and market conditions, conduct and trends;
- market share, market conduct and competition within the consumer credit industry and the credit industry structure;
- access to consumer credit by small businesses;
- levels of consumer indebtedness and the incidence and social effects of over-indebtedness; and
- any other matter relating to the credit industry.

In terms of Regulation 63 of the National Credit Act, a credit provider must complete and submit a Compliance Report to the NCR on an annual basis. There is no section in the compliance report on nature-related disclosure from credit providers. It is not envisaged that there is any specific risk associated with the lack of nature-related reporting under the NCR.

3.3 Natural capital and ecosystem accounting in South Africa

Integral to the SEEA methodology are the concept of stocks and flows (UN, 2014). Stocks are the balance of ecosystem assets and liabilities at a particular point in time, while flows include the creation, transformation, exchange, transfer, or extinction of ecosystem services arising from stocks. It is the change in the stocks and flows of ecosystem assets and services that indicate the trends in South Africa’s natural capital, and the ecosystem services associated with these assets (UNSD, 1993). These are published by Stats SA in the Environmental Economic Accounts Compendium, which includes data up to 2015, and was published in March 2017.

Ecosystem accounting falls within the administrative ambit of Statistics South Africa (Stats SA) in collaboration with the South African National Biodiversity Institute (SANBI) and supported by several other government agencies. These agencies are responsible for the provision of data and information to facilitate the compilation of the set of accounts, are the compilers of the accounts, and/or are users of the accounts (Stats SA, 2021).

The United Nations’ Statistics Divisions (UNSD) SEEA system has been adopted by the NCA Strategic Advisory Group for the compilation of the NCA in South Africa.

While Stats SA and SANBI are not financial authorities themselves, these two organisations have overseen the establishment of the Natural Capital Accounting (NCA) Strategic Advisory Group, which includes South Africa’s NT. The Strategic Advisory Group has been constituted with the purpose of providing guidance for role players involved in the compilation of the diverse suite of NCA projects.

The Environmental Economic Accounts Compendium was preceded by several NCA projects in South Africa. The first of these was the Advancing Natural Capital Accounting (ANCA) Project that was conducted during 2014 and 2015. This first phase of NCA adoption in South Africa saw the compilation of two accounts: the National River Ecosystem Accounts, and the Land and Ecosystem Accounting in KwaZulu-Natal (KZN). The project was concluded in 2021, with the following pertinent aspects of the NCA’s being carried out:

Table 1. Components of the NCAVES project

ACCOUNT	PERIOD COVERED	PUBLICATION DATE
Land and Terrestrial Ecosystem Accounts	1990 – 2014	2020
Accounts for Protected Areas	1900 – 2020	2021
Accounts for Species: Cycads	1970 – 2010	To be determined
Accounts for Species: Rhinos	1970 – 2017	To be determined
Land Accounts for Metropolitan Municipalities	1990 – 2014	To be determined

Ongoing work in the field of NCA in South Africa includes the Ecological Infrastructure for Water Security (EI4WS) Project, entailing the following aspects:

Table 3. EI4WS projects

ACCOUNT
Strategic Water Source Areas Accounts
EI4WS Project – Accounts for ecological infrastructure assets for the two demonstration catchments (Berg-Breede and the Greater uMngeni)
EI4WS Project – Catchment water resource accounts (Berg-Breede and Greater uMngeni)

Further work in the realm of ecosystem accounts, also supported by SANBI includes the experimental work by the CSIR on accounts for South Africa’s estuarine environments and SANBI’s marine environment accounts.

3.4 Collating data on nature-related financial disclosures by government institutions

Currently very limited nature-related specific financial data is collected relevant to domestic financial sector disclosures. Other non-financial data within the ESG disclosure environment is collected and collated across various institutional arrangements.

3.4.1 Department of Forestry, Fisheries, and the Environment (DFFE)

The South African Greenhouse Gas Emissions Reporting System (SAGERS) is an information system maintained by the DFFE. It is the Greenhouse Gas (GHG) Reporting Module of the National Emissions Inventory System. The web-based platform holds GHG emissions data provided by Category A data providers in terms of GHG Reporting Regulations 3 of April 2017 as amended and promulgated under the NEMAQA (Act No.39 of 2004). The application of the GHG Reporting Regulations as the statutory supporting framework for the Industry Carbon Tax is significant with respect to 'nature-related' statutory disclosure requirements. The emergent emphasis and importance that is being placed on the targets and outcomes of the Global Biodiversity Framework – 2020 cannot be underestimated. Target 15: Business and Biodiversity has been identified by DFFE as a priority target for South Africa by the minister. The work of the DFFE is further supported by:

- South African National Biodiversity Institute (SANBI)
SANBI established a South African Biodiversity Information Facility to mobilise primary biodiversity information to make it freely available for policy makers, managers, and researchers. SANBI as a support function to DFFE and other government institutions, provides biodiversity-related raw (unprocessed) and applied (processes and analysed) information and data for further institutional applications, such as the NCA analysis work, E14WS, amongst others. SANBI have similarly, following from the NCA work, engaged widely with the South African Sustainable Finance institutional community.

3.4.2 Department of Trade, Industry and Competition (DTIC)

The DTIC's mission, inter alia, is to provide a competitive, equitable and socially responsible trade environment, conducive to investment, trading, and enterprise development. The DTIC entities reporting to the department, and most relevant for this review are:

- Companies and Intellectual Property Commission (CIPC)
The Companies Act of 2008 (Companies Act) established the CIPC. One of the objectives of the CIPC is the maintenance of accurate, up-to-date, and relevant information concerning companies, foreign companies, and other juristic persons. The CIPC is also responsible for monitoring compliance with and contraventions of financial reporting standards and making recommendations to the Financial Reporting Standards Council. CIPC plays a pivotal role in the promotion of the "G" governance aspect in the ESG disclosure environment; by endorsing the King Code of Responsible Governance, and the South African move towards Integrated Reporting disclosure adoption.

- The Financial Reporting Standards Council (FRSC)
The FRSC is established by the finance minister under an obligation imposed by the Companies Act. The FRSC has the responsibility to:

- Receive and consider any relevant information relating to the reliability of, and compliance with, financial reporting standards and adapt international reporting standards for local circumstances;
- Advise the Minister of Trade and Industry on financial reporting standards matters; and
- Consult with the Minister on regulations establishing financial reporting standards.

The FRSC considers information provided by the CIPC and may possibly review public disclosures made by listed companies in assessing compliance with IFRS. The FRSC will also assess newly issued IFRS guidance and interpretations and determine its applicability to the South African context. Thus, the recent efforts to align disparate sustainability standards within the IFRS Foundation should be the subject of dialogue between the FRSC and the Minister of NT, in order that the FRSC can provide clarity on any changes to reporting requirements that have, and will arise in the future. The International Sustainability Standards Board (ISSB) under the IFRS has recently launched the IFRS S1 Sustainability Standard which provides a set of disclosure requirements designed to enable companies to communicate to investors about the sustainability-related risks and opportunities they face over the short, medium and long term. Released simultaneously the IFRS S2 standard sets out specific climate-related disclosures and is designed to be used with IFRS S1. Both fully incorporate the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

3.4.3 Department of Mineral Resources and Energy (DMRE)

The DMRE's mission is to regulate the mining and energy sector, provide sustainable and affordable energy for South Africa and ensure that all South Africans benefit from the country's mineral resources. The department is responsible for the administration of and monitoring compliance with the Mineral and Petroleum Resources Development Act 28 of 2002, including environmental management. The department approves environmental management programmes for mines and monitors mine performance. The DME within its legal mandate collects information, and maintains a register of mining post-closure financial provisions with regards to rehabilitation provisions required.

3.4.4 Statistics South Africa (Stats SA)

Stats SA is a government department regulated by the Statistics Act (Act No. 6 of 1999), which ensures independence from political interference in the production and dissemination of official statistics. The department collects data from businesses, households, and the government. The department has active involvement in collecting and producing nature-related disclosures. Stats SA has played a role in publishing various nature-related accounts such as water, mineral, energy, and

fisheries accounts under the Environmental Economic Accounts Compendium reports. Stats SA, together with SANBI, have undertaken ecosystem accounting and NCA (see 3.3 above).

3.4.5 Department of Planning, Monitoring and Evaluation (DPME)

The DPME have been considered as the statutory institution to monitor the country progress towards meeting the targets of the SGDs, and the National Development Plan (NDP). As a result they collate all national data pertaining to short, medium and long-term planning in South Africa. The DPME is responsible for the coordination, coherence and alignment of strategic plans and hosts the National Planning Commission which is represented by industry sector and subject specialists.

3.5 Capacity, competency and suitability of government entities collecting company nature-related disclosures

Following the review it is evident that none of the government institutional arrangements have a specific mandate for the collection of nature-related financial disclosures. Attributed largely to the fact that the environment in South Africa is regulated in 'boxes'. Poor integration, or cross-sectoral alignment and convergence takes place. However following the climate crisis, and the novel emerging nature-related crisis, the 'Twin Emergency' of both climate and nature risk, there has been a greater response by key government actors to align efforts institutionally.

Exacerbating the misalignment is the separation of nature-related information and financial information. 'Nature'-related information is collected mainly by the DFFE who already have multiple systems set up for the collation of information from multiple-data sources.

DFFE does not however collect substantive financial information, and the combination of nature-related financial disclosures might prove challenging in terms of capacity and competency. As the national custodian of statistical data, Stats SA collects a myriad of data, spanning economic to nature-related information.

There has been a focus from the department on developing nature-related statistics, as evidenced by the Environmental Economic Accounts Compendium reports and the NCA strategy, in conjunction with SANBI. SA could function as an agnostic repository of disclosure data. Alternatively, a combined approach may be more suitable for the collection of company nature-based financial disclosures. This is in line with Stats SA's strategy on NCA and the partnering with SANBI and the involvement of other government entities with a financial risk focus, such as the SARB and PA.

Who should be mandated to collate nature-related financial information?

The capacity, competency and suitability to act as the repository for nature-related financial disclosures largely depends on the mandate of the organisation collating the data, and what the end application or analysis of the data would be. It is similarly important to understand what the rationale is behind why commercial entities are reporting on financially material nature-related aspects. This understanding is key in aligning the data collected with the relevant institutional mandate, and the intended institutional use.

Financial information is however collated by the suite of financial authorities operating under the auspices of NT and the SARB. The two entities have also implemented programmes to increase their ability to collect nature-related disclosures from financial institutions. SARB has made the SARB Academy department responsible for building climate change-related capacity and capabilities, which includes disclosure, although little to no mention has been made of specific nature-related disclosure to date (SARB, 2022a). One of the focus areas for the PA over the next few years is to build internal capacity to deal with climate risk and sustainable finance as well as enhancing related disclosure requirements (SARB, 2021). Notwithstanding these both the SARB and the PA have the necessary competency to collect and collate financial nature-related disclosures. Both entities have advanced competencies and interest in understanding the exposure of the financial system to nature-related shocks and surprise, and what this would mean for the stability of the financial system. Further the SARB / PA have already built climate change related capacity, collating and analysing domestic finance market exposure in this regard (SARB, 2021).

Why would a statutory institution be interested in specifically finance related nature-disclosures?

Nature is the next frontier in financial risk management. Like climate change risks, emerging nature-related risks manifest and translate into financial risks. The stability of global and local financial systems are either directly, or indirectly dependent and impacted upon by nature loss. It is becoming more evident that disclosure of these risk are becoming increasingly relevant and important to central banks and supervisors in managing and mitigating nature-related shocks and surprise to financial system stability.

Considering that the PA is the most competent in collecting financial information and that the DFFE is the most competent in terms of nature-related information, there should be consideration given by government to formalising the relationship amongst these entities, and seeking their input on nature-based disclosures in the future. This could be the mandate for a cross-sectoral Sustainable Finance Institutional working group.

3.6 Legal requirements for disclosure of nature-related risks

South Africa has a long history of nature-related reporting, both in terms of statutory and voluntary reporting. Under the Environment Conservation Act (ECA), Act 73 of 1989, provision was made for mandatory reporting on environmental impacts on a specified list of activities which may have a detrimental impact or affect on the environment EIA regulations (GN R 1182, and GN 1183, 1997). In 1998, South Africa enacted the National Environmental Management Act (NEMA - Act 107 of 1998), NEMA is considered as an overarching statute which is applicable not only to private sector operations, but to all organs of state as well. NEMA expanded on the provisions for conducting mandatory EIAs for listed activities. Further, NEMA introduced the Principles of NEMA, which can be considered as the precursor for the further embedment of the broader sustainability and ESG notion into framework policy.

Industry specific climate and nature-related financial disclosures requirements have not yet been mandated in any form (see voluntary disclosures below). The suite of legislative guidance for environment-related reporting that is in force in South Africa is illustrated in Annexure 1. Few gaps exist in the legislation with respect to assessing and addressing environmental risks in development applications and regulated activities.

Notwithstanding the above there are significant gaps at a statutory reporting level with regards to specifically corporate non-financial information, mandatory disclosure requirements. The emerging disclosure requirements around climate related impacts (GHG Reporting Regulations – see Annexure 1) is the policy primer for further development in this area.

Further, there is an emerging contestation with regards to corporate nature-related non-financial disclosures where allegations of ‘green washing’ are prevalent – irrespective of the public submission of ‘transparent’ ESG data. The validity, accuracy and completeness of information and data submitted into the ‘public’ realm is often questioned. Currently there are no local or national mandatory standards or enforceable statutes which can be relied upon. Corporates largely face reputational risk for misstating ESG data.

3.7 Voluntary disclosure requirements in economic sectors

South Africa has long been a leader in voluntary non-financial reporting sphere, specifically with regards to corporate governance and social reporting. Listed companies in South Africa are required to compile integrated annual reports that specifically address matters of the environment, social issues and governance matters (ESG). This requirement was adopted by JSE listed companies initially in 2010.

The nature and ESG-related reporting frameworks and disclosures

discussed above represent the suite of available options that South African entities may choose from to disclose material ESG-related financial information (Annexure 2). It is notable that recent developments in this field are moving towards converged frameworks, an issue that has long stalled the uptake of suitable frameworks across the globe. Annexure 2 of this review provides information on which of these voluntary standards and guidelines have been adopted for reporting by listed entities in South Africa. Nationally the Johannesburg Stock Exchange (JSE) dictates the listing requirements for corporates, which includes reporting on ESG and sustainability matters according to the JSE Sustainability Disclosure Guidance of June 2022.

‘Nature-related’ financial disclosures required for all sectors

The JSE Listing Requirements set out minimum contents for annual financial statements, thereby implying that companies can voluntarily include more information. The JSE requires annual financial statements to:

- Be drawn up in accordance with the national law applicable to a listed company;
- Be prepared in accordance with IFRS and the South African Institute of Chartered Accountants (SAICA) Financial Reporting guides;
- Be audited in accordance with applicable auditing standards;
- Be in consolidated form if the company has subsidiaries; and
- Fairly present the financial position, changes in equity, results of operations and cash flows of the company or group of companies.

In addition to complying with IFRS, companies are required to disclose, in the annual report and in the annual financial statements, on the implementation of the King IV Code of Good Corporate Governance. King IV requires the publication of an annual integrated report, which includes material aspects relating to how an organisation uses the six capitals in its value creation process. The six capitals refer to financial, manufactured, intellectual, natural, social and relationship, and human capital. Therefore, environmental aspects are required to be addressed in an integrated report of a listed company under natural assets.

Financial sector

Banks or other financial institutions need to produce certain nature-related disclosures in relation to green or sustainability bond issues. Green bond issues are growing exponentially and so too will the disclosure in relation to those bond issues.

The JSE already has a Sustainability Bond segment with disclosure requirements. The Green Bond Principles, Social Bond Principles, and the Sustainability Bond Guidelines, governed by the International Capital Market Association, were used as a benchmark standard (National Treasury, 2021c).

3.7.1 Voluntary reporting uptake

A contributing factor to increased voluntary reporting uptake is listing on the various global stock exchanges. There is generally a higher uptake of voluntary disclosures by listed entities in

their reporting suite as opposed to non-listed companies. Listed companies are required to produce integrated reports in accordance with the IRF as mandated by the listing requirements.

These entities can more easily navigate the complexities of reporting and already have systems in place for collection of data, structuring and producing reports. It is therefore easier for listed entities to adopt additional voluntary reporting. Also, companies in the highly-regulated banking sector, due to global IFRS and SEC compliance requirements, particularly around Basel III, place a much higher emphasis on non-financial reporting metrics, than non-financial listed entities. Finance institutions with higher enterprise values appear to be applying more voluntary

sustainability frameworks than other banks, in response to material global stakeholder requirement.

3.8 Voluntary disclosures by finance sector actors

3.8.1 Banking sector

There are 15 banks defined as “Locally Controlled Banks” in South Africa, of which 10 are listed on the JSE, who are required to disclose financial as well as non-financial disclosures. Grindrod Bank Limited and Bidvest Bank Limited belong to larger diversified parent organisations. Discovery Bank Limited is part of the Discovery Group which has a large stake in the insurance sector. The market capitalisation and enterprise value of the remaining seven banks listed on the JSE are illustrated in the table below:

Table 3. Market capitalisation and enterprise value of listed South African banks

	Absa Bank Ltd	Nedbank Ltd	FirstRand Bank	Standard Bank	Capitec Bank Holdings Ltd	Investec Ltd	Sasfin Bank Ltd
	R'm	R'm	R'm	R'm	R'm	R'm	R'm
No. of outstanding shares (m)	448	28	2	60	116	924	360
Share price (25/09/2022)	179	203	62	145	1,630	74	32
Market capitalisation	80,457	5,706	116	8,701	188,508	68,810	11,340
Add: Debt	1,249,279	1,045,834	1,302,650	1,606,106	126,592	462,947	9,818
Less: Cash	33,751	34,056	99,646	32,255	49,318	9,653	1,165
Enterprise value - 2021	1,295,985	1,017,484	1,203,120	1,582,552	265,781	522,104	19,993

The five largest banks in South Africa collectively own 90% of the total banking sector assets as of 31 March 2021 (South African Reserve Bank, 2021). These banks are ABSA Bank Limited (ABSA), Nedbank Limited (Nedbank), FirstRand Limited (FirstRand), Standard Bank Limited (SB) and Capitec Bank Limited (Capitec).

Companies operating in the banking sector disclose several reports that address nature-related information. By their nature, financial institutions such as banks maintain a stronger focus on matters of corporate governance and responsible investment with

respect to the framework selections for voluntary reporting (see 4).

As required by the JSE listing requirements, all the listed (and some unlisted) banks disclose annual integrated reports that comply with the IRF. Also, Basel III⁵ reports are disclosed in response to a directive issued by the PA and strictly speaking are not voluntary.

⁵ Basel III is a set of internationally agreed set of measures developed by the Basel Committee on Banking Supervision in response to the banking crisis of 2007 – 2009.

Table 4. Percentage adoption of voluntary reporting standards by JSE-listed banks (n=14), ranked by ubiquity across banks

Framework	% Adoption in sample
King Code IV – Institute of Directors in South Africa (IODSA)	93%
Integrated Reporting Framework	93%
UN Sustainable Development Goals (SDGs)	71%
Carbon Disclosure Project (CDP) – Climate	57%
Task Force on Climate-related Disclosures (TCFD)	57%
JSE FTSE Russell/Responsible Investment Index	50%
Equator Principles	36%
International Finance Corporation (IFC) Performance Standards (PS)	36%
UN Global Compact	36%
UN Principles for Responsible Investment (PRI)	36%
Global Reporting Initiative (GRI)	29%
Code for Responsible Investing in South Africa (CRISA)	21%
International Sustainability Standards Board (ISSB)	7%
Sustainability Accounting Standards Board (SASB)	7%
Carbon Disclosure Project (CDP) - Water	7%
IFC General and Sector Environmental, Health and Safety (EHS) Standards (applicable to developmental projects)	0%
Natural Capital Accounting (NCA)	0%
Task Force on Nature-related Disclosures (TNFD)	0%

Table 5. Percentage adoption of voluntary reporting standards by JSE-listed insurance firms (n=8), ranked by ubiquity across insurers

Framework	% Adoption in sample
King Code IV – Institute of Directors in South Africa (IODSA)	100%
Integrated Reporting Framework	100%
Task Force on Climate-related Disclosures (TCFD)	75%
Carbon Disclosure Project (CDP) – Climate	75%
UN Sustainable Development Goals (SDGs)	63%
UN Global Compact	50%
JSE FTSE Russell/Responsible Investment Index	38%
UN Principles for Responsible Investment (PRI)	38%
Code for Responsible Investing in South Africa (CRISA)	25%
International Sustainability Standards Board (ISSB)	13%
Sustainability Accounting Standards Board (SASB)	13%
Carbon Disclosure Project (CDP) - Water	13%
Natural Capital Accounting (NCA)	0%
Global Reporting Initiative (GRI)	0%
Task Force on Nature-related Disclosures (TNFD)	0%
Equator Principles	0%
International Finance Corporation (IFC) Performance Standards (PS)	0%
IFC General and Sector Environmental, Health and Safety (EHS) Standards	0%

In terms of voluntary disclosure, the reporting suite favoured by banks include ESG reports and climate related reports (CDP and TCFD).

The TNFD framework is currently not applied at scale by finance institutions. This is attributed to the fact that the framework is in beta format and still being developed and piloted (piloted by two South African Banks), with official release in September 2023.

The finance sector is currently still grappling with climate change disclosures and TCFD. The singular carbon equivalent metric used in TCFD makes implementation simpler than the TNFD framework, as reporting on nature is multifaceted and complex.

The comparative uptake of TCFD (57%) provides a natural entry point for introducing the TNFD concepts to client organisations utilising TCFD. It is however important for these entities to understand that the human resource capacity and competency requirements for TNFD reporting⁶ will differ substantially from those employees tasked with TCFD reporting⁷.

3.8.2 Other financial institutions

⁶ The types of individuals that are best suited to conducting TNFD reporting are likely to have formal training in disciplines such as ecology, environmental studies, botany, and zoology.

⁷ The types of individuals that are best suited to conducting TCFD reporting are likely to have formal training in disciplines such as atmospheric science, meteorology, and geography. It is important to acknowledge that the guidance above should be considered against the specific tertiary education pathway and project experience of the individual in question rather than as a specific rule.

Other financial institutions include insurance companies and investment managers. There are 158 insurance companies and 108 institutional investors registered and regulated by the PA and SARB. Of these financial entities, 59 are listed on JSE and are required to produce integrated annual reports in compliance with the IRF. The integrated annual reports of all eight listed insurance firms were reviewed to understand the material issues facing the insurance sub-sector, and the voluntary reporting frameworks used (see Table 5).

In addition to King IV and the framework for integrated annual reports, insurance companies place a greater emphasis on climate related disclosures compared with banks, due to greater long-term down-side climate risk exposure. Most insurance companies include a sustainability or ESG report, and a TCFD report. More than 100 non-insurance institutional investors are listed on the JSE. Of these, a sample of the top ten institutional investors by market capitalisation were selected for further analysis of the voluntary frameworks that these entities utilise (see Table 6). TCFD reports, carbon footprint and sustainability and/or ESG reports appear to be most disclosed by institutional investors.

Table 6. Percentage adoption of voluntary reporting standards by JSE-listed institutional investors (n=10), ranked by ubiquity across investor

Framework	% Adoption in sample
King Code IV – Institute of Directors in South Africa (IODSA)	90%
Task Force on Climate-related Disclosures (TCFD)	90%
Integrated Reporting Framework	80%
UN Principles for Responsible Investment (PRI)	70%
Carbon Disclosure Project (CDP) – Climate	70%
UN Sustainable Development Goals (SDGs)	60%
UN Global Compact	50%
Global Reporting Initiative (GRI)	40%
International Sustainability Standards Board (ISSB)	40%
Code for Responsible Investing in South Africa (CRISA)	30%
JSE FTSE Russell/Responsible Investment Index	30%
International Finance Corporation (IFC) Performance Standards (PS)	20%
Sustainability Accounting Standards Board (SASB)	20%
Equator Principles	10%
Carbon Disclosure Project (CDP) - Water	10%
Natural Capital Accounting (NCA)	0%
Task Force on Nature-related Disclosures (TNFD)	0%
IFC General and Sector Environmental, Health and Safety (EHS) Standards	0%

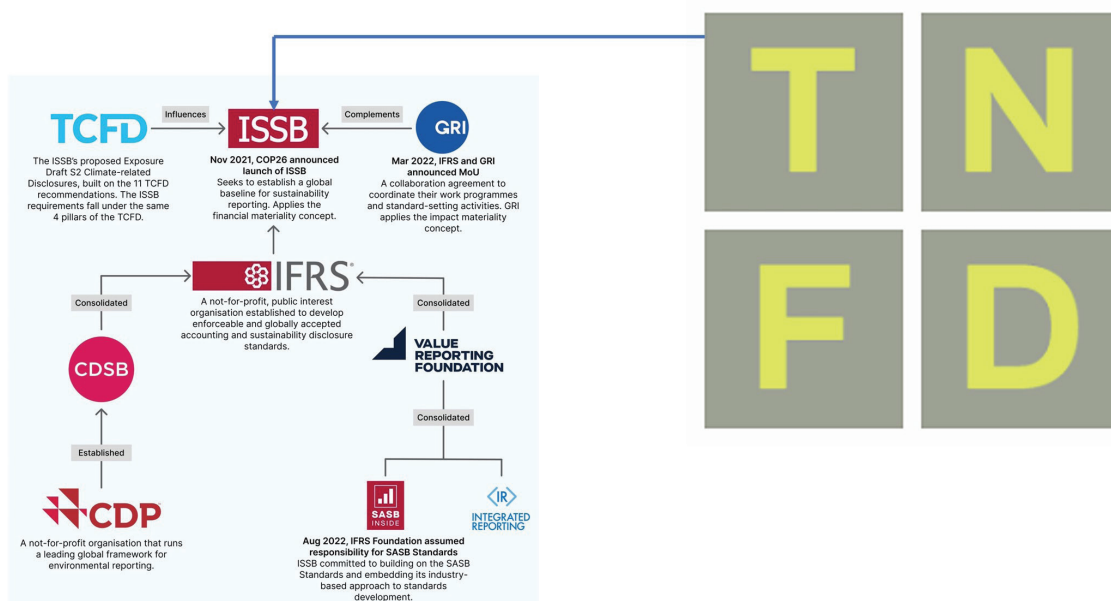
3.9 Climate and nature-related financial disclosure framework adoption

3.9.1 Global disclosure framework positioning

Within the emergent global climate and nature-related disclosure ecosystem significant progress has been made with regards to the

convergence and inter-operability of various mainstream non-financial information frameworks.

Figure 2 below illustrates the relationship between the most applied and recognised mainstream sustainability-related frameworks.



Current corporate disclosures as per JSE listings, and reporting to stakeholders follow the requirements and frameworks of Figure 2 above. It is imperative that the domestic national disclosure environment follows suit. Industry bodies such as SAICA are actively involved in aligning and participating in the development of these international sustainability standards such as the IFRS S1 and S2 standards developed under the ISSB.

By adopting the TCFD and TNFD frameworks as the most logical entry points in aligning local disclosures with emerging global requirements, the domestic South African market will be aligned with global disclosure and reporting requirements.

3.9.2 Broader framework application in South Africa

Notwithstanding the above, there are broader underpinning global frameworks within which the framework relationship of figure 2 fall, which include:

- UN SDGs as the broader underpinning global sustainability reporting framework. The SDG framework considers both environmental and social matters in a manner consistent with government requirements, and to an appropriate level in terms of social issues, as well as environmental, including matters of climate risk reporting. Many entities have aligned their respective sustainability and report to society disclosures to respond to the SDGs. There are entities which have aligned their SDG targets with those of the NDP – local to global alignment.
- Most listed entities integrated reports are aligned to the IRF and the King IV Code of Good Governance.

The goals of the SDGs are easily communicated, and management systems can be designed that can operationalize these goals at varying scales, thus facilitating appeal to a broad and large suite of stakeholders. The recommendation would be for the SDG's to serve as a suitable common language to facilitate wide-scale adoption of voluntary reporting and understanding of nature (and social) voluntary reporting, and to further adopt scientifically robust frameworks (such as TNFD) which are universally standardised.

3.10 SARB Sustainable finance roadmap imperatives

3.10.1 The SARB and green finance imperatives

The SARB's website hosts no publications or information associated with sustainability and green loans, and no information on sustainable or green loan guidelines for commercial banks appears to be available at present. Sustainability bond frameworks of commercial banks follow guidance from the International Capital Market Association (ICMA), namely the:

- Green Bond Principles
- Social Bond Principles; and
- Sustainable Bond Guidelines.

These are also the principles adopted by the JSE for its Sustainability Bond segment. The SARB is planning to work with commercial banks issuing these sustainability bonds specifically

over the market development for these types of financial instruments (SARB Research Agenda 2021-2023).

The areas being investigated include:

- Improving market liquidity and reducing transaction costs for these financial instruments;
- Developing green certification systems and issuers' accountability for the use of funds raised;
- Putting in place mechanisms to improve agents' risk-return calculations; and
- Investigating appropriate market regulation for the market in green instruments.

Further to the above⁸, a recently released PA Guidance Note indicates that "Flavour of the Year" themes for 2023 will cover two topics, namely organisational resilience, and climate related risks (Prudential Authority, 2023). The PA has stated that the climate related risk topic will only be covered with selected financial institutions. Engagements will entail comprehensive coverage of climate related risks spanning general views, through to challenges in reporting disclosure. Selected sub-topics include the following:

- Internal reporting of climate-related risks to appropriate structures and/or committees;
- Contents of internal disclosure reporting;
- The selection of frameworks for climate-related financial disclosures;
- Instruments and allocations for green finance;
- Policy, advocacy, and stewardship to guide reporting; and
- Challenges and/or concerns related to reporting and disclosure.

Further the main guidelines currently adopted by commercial banks for sustainability linked loans or green bonds is that of the ICMA. The PA as the responsible entity within the SARB, is still in the process of engaging commercial lenders on sustainability issues such as climate risk.

3.10.2 SARB Biodiversity criteria and reporting requirements

There is no integration or consideration of biodiversity criteria in the Monetary Policy Implementation Framework of the SARB as well as consideration in the Monetary Policy Committee's method for setting the repo rate. Biodiversity is similarly not considered in the SARB's Investment Policy for gold and foreign exchange reserves management. There are no biodiversity criteria in the policy and the only reporting requirements imposed by the policy is for the Financial Markets Department within the SARB to submit monthly and quarterly risk reports to the Reserve Management Committee (SARB, 2020).

SARB's credit risk guideline similarly does not address nature-related risks however it is notable that the document describes the fact that only ratings issued by the rating agencies Standard and Poor's, Fitch Ratings and Moody's shall apply to securities and

issuers (SARB, 2020). All three of these ratings agencies have fairly well-developed understanding of biodiversity linkages to business, and appear to be making active progress in furthering the integration of nature-related considerations in credit-worthiness of the entities they assess (S&P Global, 2023; Sustainable Fitch, 2021).

As such, the SARB will, by proxy, include biodiversity criteria in the assessment of creditworthiness in relation to securities and issuers. There is however a much stronger focus from the SARB on climate change and its impact on South Africa’s financial stability. The periodic Working Paper releases from SARB indicates that the SARB is working on a climate change modelling framework for financial stress testing in Southern Africa (Anvari et al., 2022).

3.11 Nature-related risk evaluation processes used by banks and credit institutions

Nature-related risk evaluation in domestic finance institutions are at various levels of maturity, and is similarly influenced by the internal institutional structure and arrangement of each entity. Overarching strategies and global compliance disclosure requirements such as responding to rating agencies, international and local stakeholders, usually resides institutionally at various corporate levels. Credit risk and portfolio exposure is again addressed at the various risk management functionaries, while business banking and transaction level decision-making considers individual applications at a very nuanced environmental and social risk management (ESRM) level.

3.11.1 Uptake of nature-related risk evaluation and ESG reporting in the banking sector

The King Code and IRF are the most commonly adopted frameworks in the banking sector, even amongst unlisted banks. Traditional understanding of risk in the sector does not emphasise nature-related risks, and to a lesser extent social risks too, and therefore guidance in terms of governance risk is the most prominent. Most FIs report against the targets of the SDGs.

3.11.2 Project and transaction level environment and social risk management in the banking sector

Project level nature-related risks are considered during investment and transaction processes, and form part of a broader risk assessment that also covers financial risks (i.e., solvency of the proposed investment), legal risks (i.e., illegal activities that the proposed investment may be involved in), technical risks (i.e., viability of the operations of the company, including its scalability and/or replicability). The degree to which environmental risks are considered depends on the nature of the proposed investment and will determine the level or detail that the risk assessment will entail. The method by which the environmental and social-related risks are assessed is an applied due diligence process.

For example, the environmental and social-related risk assessment for a company providing short-term micro-loans will be light touch, while long-term investment in an agriculture company will require an in-depth analysis and understanding of the

Table 7. Nature-related risk and reporting frameworks in use at locally controlled banks in SA, out of a total of 14

Framework	No. of banks adopting	% Adoption
Integrated Reporting Framework	13	93%
King Code IV – Institute of Directors in South Africa (IODSA)	13	93%
UN Sustainable Development Goals (SDGs)	10	71%
Carbon Disclosure Project (CDP) – Climate	8	57%
Task Force on Climate-related Disclosures (TCFD)	8	57%
JSE FTSE Russell/Responsible Investment Index	7	50%
Equator Principles	5	36%
International Finance Corporation (IFC) Performance Standards (PS)	5	36%
UN Global Compact	5	36%
UN Principles for Responsible Investment (PRI)	5	36%
Global Reporting Initiative (GRI)	4	29%
Code for Responsible Investing in South Africa (CRISA)	3	21%
Carbon Disclosure Project (CDP) – Water	1	7%
International Sustainability Standards Board (ISSB)	1	7%
Sustainability Accounting Standards Board (SASB)	1	7%
IFC General and Sector Environmental, Health and Safety (EHS) Standards	0	0%
Natural Capital Accounting (NCA)	0	0%
Task Force on Nature-related Disclosures (TNFD)	0	0%

environmental and social-related risks facing (and caused by) the company.

The risks of underestimating nature-related risks in the banking sector are mostly evident at two different scales; the portfolio-level risk, and risks inherent to each investment in the portfolio. Some risks are evident at portfolio and company level:

3.11.2.1 Portfolio-level risks

Underestimating risks at the portfolio level could mean that a portfolio may be comprised of a large amount of collective unquantified environmental risks. This type of risk is usually assessed using generic frameworks captured in an Environmental and Social Management System (ESMS), which can be used to assess risks in an agnostic manner (i.e., broad-scale risks facing multiple companies operating in several sectors

Another example is long tenor investments (such as those in pension funds) that do not assess climate risks associated with their investments, or the resilience of their investments to climate risks such as flood, drought, and other extreme weather events. These portfolio companies face increased operating costs, or even closure as a result of climate/weather events of unusually large magnitude or increasing frequency.

3.11.2.2 Investment-level risks

This type of risk is evident at a finer scale than the portfolio-level risk and pertains to an individual investment company's exposure to nature-related risks. This type of risk is usually detected during due diligence investigations, which are intended to assess specific risks inherent to the operations of the proposed investment. This type of risk may manifest as physical risks to the business from nature-related phenomena, as occurs at portfolio level.

3.12 Nature-related expenditure in the SA National Budget

3.12.1 South African methodology for nature-related expenditure tagging

South Africa has adopted expenditure tagging as a public finance management mechanism (National Treasury, 2021a). Expenditure tagging is used as a tool to identify, clarify, weight and mark relevant expenditures in the NT's budget system. This is to enable the estimation, monitoring and tracking of those expenditures by providing data on government's allocations or existing spending.

The intention is for the information gathered through the tagging process to inform policy discussions, monitor implementation of policy imperatives, and enhance future budget allocations. In terms of nature-related expenditure tagging, South Africa has, through the World Bank, commissioned a Climate Budget Tagging (CBT) system for South Africa.

Critical reference groups for the design of the CBT system includes, inter alia, the DFFE's Intergovernmental Climate Change Coordination Committee and the NT Climate Change Working Group (National Treasury, 2022a).

3.12.2 Status of expenditure tagging in the national budget

The tagging exercise described above was introduced in previous budget cycles and to date, has not been fruitful (National Treasury, 2021a). The Medium-Term Expenditure Framework (MTEF) Guidelines of 2022 stated that NT was undertaking a process to refine the objectives, assess capacity needs and raise awareness within government departments and entities to re-implement the tags in the 2023 Budget.

3.12.3 The role of science-based approaches in budget tagging

No information on science-based tagging is described in the methodology contained in the MTEF Guidelines (National Treasury, 2021a), and there is currently a paucity of information on the process used to define budget line items as positive, neutral, or negative. In due course, it is expected that more information will be revealed when publication of the outcomes of the NT's CBT pilot project is completed. The pilot study was concluded in May of 2022, with the outcomes intended to serve as the indicative framework for public expenditure going forward (National Treasury, 2021c; 2022a). It is expected that SA's recently adopted Green Finance Taxonomy will assist in creating a common language for finance and investment, and facilitate investment into green investments, and simultaneously ease some of the implementation burden that has been experienced to date (National Treasury, 2022c).

3.13 The use of fiscal instruments, penalties and industry incentives to discourage degradation of natural assets

Various fiscal instruments and financial mechanisms are available to discourage environmental degradation; which include levies, taxes and penalties at a national level.

3.13.1 Levies imposed by SARS

Environmental levies are imposed by SARS on certain locally manufactured goods as well as on some of their imported equivalents in terms of Schedule No. 1 Part 3 of the Customs and Excise Act of 1964. The purpose of the levy is to influence people's and companies' behaviour towards the environment by making it more costly to produce goods that are harmful to nature, which include:

- Carbon tax;
- Electric filament lamps;
- Electricity generation;
- Motor vehicle CO₂ emissions;
- Plastic bags; and
- Tyres.

3.13.2 Levies imposed by industry bodies

The extended producer responsibility regulations of 2021 are an extension of the NEMWA. The regulations compel producer organisations in the electrical and electronic equipment, lighting, paper and packaging to levy charges on registrants (member organisations). These levies are used to facilitate the reuse, collection and recycling of their products. The regulations set

targets for the reuse, collection and recycling of these products that are based on the volume of the products manufactured or imported into South Africa, and seek to improve the management of the afore-mentioned products waste stream at the end of their useful life.

3.13.3 Tax incentives for disclosure

A taxpayer can reduce their carbon tax liability by participating in the carbon budget system during the tax period. If a taxpayer participating in the system discloses their required carbon budget information, they may receive an allowance of 5% of the total emissions in a tax period, thus decreasing their tax liability. There is also a tax incentive for biodiversity in South Africa. In 2015 Section 37D was included into the Income Tax Act No. 58 of 1962.

Section 37D allows landowners to deduct from taxable income the value of their land declared as a protected area in terms of NEMPAA. This encourages landowners to disclose the value of their natural asset i.e., the protected area in their tax returns.

3.13.4 Taxes on pollution and non-sustainable business

The major tax on pollution is the Carbon Tax, which is based on the polluter-pays-principle. Large carbon emitters are charged based on their emissions, and this helps to ensure that companies and even consumers take the additional costs into account in their future production, consumption, and investment decisions. High emitting companies are therefore incentivized to adopt cleaner technologies. Emissions subject to the levy are determined in accordance with a reporting methodology approved by the DFFE.

3.13.5 Fiscal incentives for nature-related risk and financial disclosures

In the Insurance sector the integration of environmental and social risks is still seen as a specialist activity which is costly. Reporting requirements with incentives to adopt a sustainable approach do not yet exist, which is a further hindrance to the integration of these risks and to the reporting of progress in working with clients to reduce the risks. However, it has been noted that some progressive entities in the insurance industry are finding novel ways to price environmental and social risks, and as such are making advances into insuring environmental and social risks. Further to this, some insurers and brokers are offering incentives to their clients based on specific environmental and social performance being maintained.

3.14.6 Prosecution of illegal resource usage

Illegal resource use in South Africa is dominated by the illegal wildlife trade. This trade is predominantly comprised of rhino horn, pangolin, abalone, and ivory, which is exported around the world (SAMLIT, 2021). Locally and regionally, there is also illegal trade in leopard and vulture (Warchol et al., 2003). The components of the international trade value chain that are present in South Africa mainly consist of poaching activities, transport and logistics, and intermediaries and buyers.

3.14 The role of the finance sector representative bodies in building capacity for nature-related disclosures

The Banking Association of South Africa (BASA) represents the domestic finance institutions as the sector industry body. BASA has been instrumental in facilitating the discourse concerning the adoption of sustainability practises into banking in South Africa. The most recent annual report indicates that BASA sees much value in integrating ESG principles in banking in order to mainstream sustainability thinking into the business practises of banks. All major banks in South Africa are BASA members, with some of these banks holding BASA board seats. BASA is ideally positioned to facilitate dialogue between the commercial banking sector and the regulator / supervisor with regards to nature-related disclosure requirements.

Within the financial sector, two statutory bodies which should be active in building capacity for nature-related disclosures are the FSCA and PA. The two entities have complementary functions with the FSCA serving as the market conduct regulator, and the PA regulating the operational entities within these markets. The FSCA mandate requires the FSCA to contribute to financial stability in South Africa and ensure that markets operate in an efficient manner. The FSCA provides sustainability guidance only in a very narrow component of its mandate. Specifically, the afore-mentioned guidance is directed at the boards of retirement fund managers on the compliance with the Pensions Fund Act of 1956 (IFC, 2020). As such, the FSCA does not provide any guidance on climate and nature-related disclosures and reporting.

The activities and mandate of the PA are centred around enhancing the safety and soundness of financial institutions and market infrastructure. This serves to protect the interests of customers of financial products. These activities support the SARB. The PA Regulatory Strategy for 2021 – 2024 (SARB, 2021) highlights the fact that the PA needs to develop initiatives to identify regulatory and supervisory interventions for climate change and sustainable finance and has acknowledged that many of the institutions that the PA oversees have adopted or are in the process of adopting TCFD reporting standards. The PA intends on undertaking a gap analysis of its regulatory frameworks with a specific focus on climate risk solvency assessments, as well as enhance its reporting frameworks to improve disclosure requirements (SARB, 2021).

Finding the appropriate means to ensure that the recommendations are adopted will require robust engagement and collaboration amongst the relevant finance sector actors across domestic and regulatory institutional arrangements. The importance of setting guidance and providing policy direction is emphasised, within the context of alignment with emergent global nature-related disclosure architectures.

An aerial photograph of a coastline. The top half of the image shows deep turquoise ocean water. In the middle, white, frothy waves are crashing against a dark, rocky shore. The bottom left corner shows the jagged, brownish rocks of the coastline. A dark blue rectangular box with a white border is positioned in the upper right quadrant, containing white text.

4 Conclusions and Recommendations

4.1 Conclusions

- Nature-related disclosures is a globally fast-paced emerging thematic area.
- Climate change risks, impacts, dependencies and opportunities, and the specific disclosure requirements responding to the climate-crisis has dominated the non-financial disclosure environment.
- The Task Force on Climate-Related Financial Disclosures (TCFD) has been voluntarily, widely adopted by global and domestic financial institutions, as they have responded to climate related risks, shocks and surprise.
- The emergence of nature and biodiversity-related risks, impacts and dependencies over the past 3-5 years has been emphasised by the interacting relationship with climate change. Climate change is both an impact and driver of biodiversity loss.
- The nature-related disclosure environment is cross-cutting, and straddles the competencies, jurisdictions, and mandates of multiple-institutional actors, which had historically competing agendas and mandates; which now require alignment and collaboration to effectively understand and approach the complexities and uncertainties presented by climate and nature-related risks; to ensure market and financial stability.
- There is an increasing awareness that environmental risks manifest and translate into financial risk, namely physical and transition risks.
- There is poor guidance and clarity with regards to institutional responsibility for collating / collecting specifically nature-related financial disclosure information at government institutional level.
- There are primarily two areas of disclosure – voluntary and mandatory disclosure. It is important to distinguish between institutional arrangements for statutory and voluntary reporting / disclosure. This is because the sourcing, processing, collation, maintenance, and publication of disclosure related data will differ substantially across these two types of disclosures.
- There is a global convergence and integration of ESG-related reporting frameworks and disclosures.
- Certain global north jurisdictions are rapidly mandating the latest Sustainability reporting standards developed by the IFRS, forcing their local companies to push their environmental maturity forward while South African regulation in this regard lags⁹.
- It is notable that several countries and jurisdictions, including Canada, the United Kingdom (UK), United States of America (USA), European Union (EU), Singapore, New Zealand, and Australia are currently in the process of co-opting the TCFD framework for national reporting purposes.
- Over the last three to five years, robust nature-related risk management and disclosure frameworks such as the Taskforce on Nature-related Financial Disclosures (TNFD) have been launched to support a shift towards more nature-

positive business practices and outcomes (TNFD, 2022).

4.2 Recommendations

- It is recommended the PA and the SARB collaborate on developing guidelines for the collection of nature-related disclosures.
- The position of finance sector industry bodies need to be strengthened with regards to capacity and understanding of nature-related risks to enable the associations to best guide, inform and support their respective membership.
- The FSCA should play a role in the future, in collecting nature-related financial disclosure, especially with regards to monitoring the investment practices of financial institutions.
- Nature-related reporting should strike a balance between useful and necessary reporting requirements and not being too onerous to complete.
- Officially constituted fora for cross-departmental engagement should be arranged, as well as officially constituted communications protocols (with concomitant training on engagement for employees using the protocol) between project-level employees of the different departments.
- It is recommended that existing and emerging global disclosure frameworks are adopted and regionalised for the South African context.
- It is recommended that the adoption of nature-related disclosures specifically consider alignment with the IFRS suite of guidance development taking place; which includes the reporting architecture of the ISSB. This includes the TCFD and now specifically the TNFD around nature-related risks, impacts, dependencies and opportunities.
- Data integrity (and lack of data) is one of the key constraints in the reliability, credibility and completeness of nature-related disclosures. The data landscape requires careful analysis and review, with a focus on metrics and indicators for data standardisation and accuracy, which is key for comparability between disclosing entities.

4.3 The UNDP and Nature-related disclosures

The UNDP is part of the global Accelerator team bringing together the TNFD – as part of four founding partners Global Canopy, UNEP FI and WWF.

In providing implementation and capacity support the UNDP welcomes the opportunity to convene visionary governments, regulators, central banks, and multilaterals to expand the value and use of TNFD's disclosure framework, and incentivize the global shift of financial flows to nature-positive outcomes. Further, the TNFD is an important element of the green transition that all countries have committed to via the Sustainable Development Goals.

Annexures

Annexure 1 :

<N-R> Statutory Arrangements in South Africa

Other auxiliary statutory reporting prevails in South Africa, and relates specifically to reporting against the requirements of the following legislation:

- Dumping at Sea Control Act, 1980 (Act 73 of 1980);
- Marine Living Resources Act, 1998 (Act 18 of 1998);
- National Environmental Management and Laws Acts (and all amendments thereto);
- National Environmental Management: Air Quality Act (NEMAQA), 2004 (Act 39 of 2004), including National Greenhouse Gas Emissions Reporting Regulations;
- National Environmental Management: Biodiversity Act (NEMBA), 2004 (Act 10 of 2004);
- National Environmental Management: Integrated Coastal Management Act (NEMICMA), 2008 (Act 24 of 2008);
- National Environmental Management: Protected Areas Act (NEMPAA), 2003 (Act 57 of 2003) and subsequent amendment acts (Act 15 of 2009 and Act 31 of 2004);
- National Environmental Management: Waste Act (NEMWA), 2008 (Act 59 of 2008) and subsequent amendment act (Act 449 of 2014), as well as the Extended Producer Responsibility Regulations;
- National Forests Act, 1998 (Act 84 of 1998);
- National Water Act (Act 36 of 1998 and subsequent amendments);
- South African Weather Service (SAWS) Act, 2001 (Act 8 of 2001); and
- World Heritage Convention Act, 1999 (Act 49 of 1999).

Further to the Acts listed above falling under the ambit of the Department of Forestry, Fisheries, and the Environment (DFFE), the following acts also require some form of reporting in terms of environmental and/or nature-related risks and impacts under other State agencies in South Africa:

- Consumer Protection Act (Act 68 of 2008);
- Pension Funds Act (Act 24 of 1956); and
- A Companies Act (Act 71 of 2008).

Annexure 2 :

The State of <N-R> Voluntary Reporting in South Africa

While some other Acts may require reporting of specific nature-based aspects of sectoral operations, these do not pertain explicitly to financial disclosures (for example, the National Veld and Forest Fire Act, 1998 requires that fire protection officers report on compliance with the Act).

Voluntary non-financial information disclosure standards and frameworks include the following:

- Code for Responsible Investing in South Africa (CRISA) – Launched in 2011 and with a recent update adopted in 2020, with revised principles and practices, the code seeks to assist the investment sector in reporting on environmental, social and governance (ESG) in the investment process;
- South African National Treasury (NT) –
 - Draft Technical Paper, “Financing a Sustainable Economy” – The draft paper proposes minimum standards and practices for the management of climate change and environmental and social risks;
 - Green Finance Taxonomy – adopted in March 2022, this document assists in the identification of assets, projects, activities, and sectors that are officially defined as “green”, and also provides guidance for stakeholders in tracking, monitoring, and reporting on the credentials of their “green” activities. The Green Taxonomy will also facilitate the decarbonisation of the South African economy in this way, and aligns with global decarbonisation and nature positive economic activity;
- The Johannesburg Stock Exchange (multiple sources of guidance for nature-related reporting) –
 - Listing Rules – Listing requirements require that in the case of mining companies listings, the annual reporting for these companies to the Johannesburg Stock Exchange (JSE) must include at minimum, descriptions of key environmental issues associated with company operations, as well as environmental management plans and funds available for environmental management;
 - FTSE Russell ESG Ratings – The JSE has adopted the FTSE Russell ESG Ratings process for the purpose of integrating awareness of ESG issues into investment strategies and evaluations, managing ESG risk exposure, and assisting in ESG analysis for securities and investment portfolios; and
 - Sustainability and Climate Disclosure Guidance – These recently released documents aim to provide JSE-listed entities with guidance on effective and material sustainability and climate reporting in the annual reporting process;
- Financial Services Conduct Authority’s (FSCA) Guidance on the Sustainability of investments and assets in the context of a retirement fund’s investment policy statement – indicates guidance on meeting specific aspects of the Pension Funds Act;
- Institute of Directors of Southern Africa’s (IODSA) –
 - Governance in Small and Medium Enterprises (SME’s) – provides guidance on which aspects of the King Report on Corporate Governance are relevant to SME’s;
 - King Codes – specific guidance on environmental disclosures is presented within the King Codes, presently in its fourth iteration which was adopted in 2016. Several voluntary organisations in South Africa require compliance with the King Codes;
- The South African DFFE’s National Climate Change Adaptation Strategy (current voluntary but likely to become statutory in some future form) – the strategy provides guidance on cross-sectoral resilience implementation planning and reporting;
- SA Government’s (multi-departmental) Low Emissions Development Strategy 2050 (will become statutory within a defined time period in relation to the Nationally Determined Contributions set by government) – guidance on reporting climate-related information to authorities, based on sectoral requirements; and
- Statistics South Africa’s (Stats SA) and the South African National Biodiversity Institute (SANBI) Natural Capital Accounting (NCA)

Strategy (feeding into the South African NDP) – the strategy employs the international standard UN System of Environmental-Economic Accounting (SEEA) for the purpose of NCA in South Africa. The system enables the use of a reputable system to report on stocks and flows on elements of natural capital at a national level. Natural capital in this context is both biotic and abiotic, and includes the ecosystem assets and services described in Section 2.1.

Some globally recognized relevant voluntary reporting frameworks that have found traction in South Africa include the following:

- Global Reporting Initiative (GRI) – The 300 series of the GRI framework provides comprehensive guidance on the following aspects for nature and environmental related reporting:
 - GRI 301: Materials (2016)
 - GRI 302: Energy (2016)
 - GRI 303: Water and Effluents (2018)
 - GRI 304: Biodiversity (2016)
 - GRI 305: Emissions (2016)
 - GRI 306: Effluents and Waste (2016)
 - GRI 306: Waste (2020)
 - GRI 307: Environmental compliance (2016)
 - GRI 308: Supplier Environmental Assessment (2016)

The GRI provides both Universal and Sector Standards and include the specific sectors of interest for this project, namely financial (banking and insurance), agriculture and food (inclusive of fishing), forestry and forest products, mining, and infrastructure.

- Capitals Coalition – The Natural Capital Protocol can be used to assist companies in understanding how their operations are directly and indirectly reliant on natural capital. The tool appears to be used as a means to understand nature-relationships, which can then be reported on within an Integrated Reporting Framework (IRF).
- The United Nations has several initiatives that cover nature-related disclosure reporting. These include the following:
 - Sustainable Development Goals (SDGs) – The seventeen goals aim to alleviate pressure on the environment and facilitate global-scale social upliftment of the most impoverished peoples, especially those directly reliant on natural resources and ecosystem services. Sub-goals define specific and measurable targets and indicators primarily designed to be reported against at national level. Specifically, direct nature-related reporting guidance on national level and finer scale disclosures is provided by several SDG's, namely:
 - SDG 2 – Zero Hunger (specifically, agricultural productivity and resource use, ecosystems maintenance)
 - SDG 6 – Clean Water and Sanitation (reduction of pollution of natural waterways)
 - SDG 8 – Decent Work and Economic Growth (improve resource efficiency in order to decouple economic growth from environmental degradation)
 - SDG 12 – Responsible Consumption and Production (sustainable and efficient use of natural resources)
 - SDG 13 – Climate Action (greenhouse gas emissions)
 - SDG 14 – Life Below Water (reduction of marine pollution, protection of marine ecosystems, regulation to prevent overharvesting, conservation)
 - SDG 15 – Life on Land (forested land area, protection of terrestrial and freshwater biodiversity, SEEA implementation, increase in financial resources for sustainable biodiversity and ecosystem use)
 - United Nations Development Programme's (UNDP) Impact Standards – these standards have been developed to guide business and investors across four spheres of the economic ecosystem (to date, with more to follow). The purpose of the standards is to assist economic players in embedding sustainability and positive impact within their operations, using measurable targets based on the UN SDGs. To date, standards have been compiled for the following economic spheres:
 - SDG Impact Standards for Enterprise (aimed at publicly listed, public, or private entities, or not-for profits);
 - SDG Impact Standards for Private Equity Funds;
 - SDG Impact Standards for Bond Issuers; and
 - Organisation for Economic Co-operation and Development (OECD)-UNDP Impact Standards for Financing Sustainable Development (aimed at donors, development finance institutions, and private sector partners of these organisations).
 - UN Global Compact (UN GC) – Signatories of the UN GC are required to produce an annual Communication on Progress (CoP) that details the work that the signatory is doing in terms of embedding the GC principles into operational strategies. The GC is concerned with broader, high-level commitments as opposed to finer-scale, direct linkages to financial disclosures, but is nevertheless an important framework in terms of underpinning signatory approaches to nature-related disclosures.
 - Principles for Responsible Investment (PRI) – The UN PRI is an association of investors that have committed to incorporating sustainability issues into the investment decision-making process. The reporting framework is designed around six fundamental albeit high-level aspirational principles. PRI requires annual reporting on investment activities of signatories.

- Task Force on Climate-Related Financial Disclosures (TCFD) – The TCFD provides strong climate-related disclosures and has done so since 2017. The TCFD is aimed at supporting capital allocation in a manner that is cognizant of the effects of climate change on investments over the long term. As such, the target audience for the standards is financial institutions, especially those with long tenor investments such as pension funds.
- ISSB Sustainability Standards – IFRS S1 and IFRS S2.
- Task Force on Nature-Related Financial Disclosures (TNFD) – The TNFD is aimed at a broader base than TCFD, including corporates and investors, and is currently in its fourth beta (pilot testing) phase. The TNFD was launched in 2021 and has now released the third Beta Framework¹⁰ in November 2022. The TNFD final recommendations for market adoption are expected to be published in September 2023. The framework covers risk management and disclosure guidance to support a shift in financial flows away from nature-negative to nature-positive outcomes. Due to the nascent state of the TNFD, guidance on disclosures appears to be fairly broad at present, but the project has acknowledged the need for sector-based guidance on material nature-based reporting. As a method of addressing the issue of refining guidance at finer scales, the current Beta framework maintains an auxiliary publication indicating template examples of specific risk and opportunities in the form of a register. This will likely form part of future updates, within the assessment phase of the Locate, Evaluate, Assess and Prepare (LEAP) approach.
- Equator Principles – This risk management framework is designed for use in the financial industry for the purpose of managing and reporting on environmental and social risks in projects. The current, fourth iteration was adopted during July of 2020, and requires annual reporting against ten principles. For specific higher risk projects, the reporting must be undertaken by independent parties.
- International Finance Corporation Performance Standards (IFC PS) and the World Bank Environmental and Social Framework (WB ESF) – The IFC PS applies to all private sector projects seeking finance from the IFC (the organisation within the WB tasked with fostering private sector enterprise in developing countries), while the WB ESF applies to non-commercial (investment project financing) lending to countries borrowing funds from the WB. The two frameworks are similar in effect and provide guidance on the nature of environmental and social risks associated with projects. These frameworks are designed to assist project proponents in assessing and understanding the suite of sector-agnostic general environmental and social risks, generally at the start of a project. Reporting in this regard takes the form of description of gaps between actual performance and the requirements of the standard in the form of an Action Plan (AP). The AP defines timeframes in which performance gaps must be closed. Periodic reporting on performance maintenance is voluntary, or governed by agreements that are made on a case by case basis.
- IFC General Environment, Health, and Safety (EHS) Guidelines and Industry Sector Guidelines – The IFC EHS guidelines assist companies in managing and reporting on broad, cross-cutting environmental and social risks and impacts for all industry sectors. The sector guidelines are to be used in conjunction with the General EHS guidelines and assist companies in benchmarking performance against Good International Industry Practice (GIIP) in the sector of choice. As with the GRI standards, sectoral-level environmental performance disclosure guidance is provided for the financial sector (primarily investment management), agriculture and food production, forest products, extractives and mining, and infrastructure).
- ISO14000 family – The ISO14000 is an international standard for compilation of Environmental Management Systems. The system can be applied in a broad variety of sectors, and equips user organisations to identify, manage, monitor, and manage environmental issues associated with their operations. The system focuses on resource efficiency and waste reduction.

Recent developments in the sustainability reporting space have seen the consolidation of several entities under the umbrella of the International Financial Reporting Standards (IFRS) Foundation. The IFRS Foundation seeks to align several disparate sustainability standards and guidelines in order to streamline guidance for users of these disclosure standards. The entities described below have merged, or have merger plans in place for joining the IFRS Foundation.

- International Sustainability Standards Board (ISSB) Disclosure Standards, incorporating the former Climate Disclosure Standards Board (CDSB) requirements as part of the IFRS Foundation – CDSB was consolidated under the IFRS Foundation during January 2022. Going forward, CDSB disclosures will be issued under the banner of the ISSB reporting framework. The framework assists reporting agencies in the compilation of material environmental and social reporting in their annual and integrated reports.
- Sustainability Accounting Standards Board (SASB) Standards (also recently integrated into the IFRS Foundation) – SASB's approach is to guide companies in disclosing financially material sustainability information. The target of this reporting is a fairly narrow stakeholder base, namely company investors.
- CDP (formerly the Carbon Disclosure Project) Disclosures – the CDP disclosures cover the reporting of risks and opportunities in relation to climate change, water security and deforestation. The project supports a diverse suite of reporting agencies from private enterprise to a variety of state entities. CDP has also recently (January 2022) consolidated with the IFRS Foundation.
- Integrated Reporting Framework (IRF) – The IRF announced a merger with the IFRS Foundation in May of 2022. The IRF was developed by the International Integrated Reporting Council (IIRC), a global coalition of regulators, investors, companies, accounting agencies, academics, and Non-Governmental Organisations (NGO's). The IRF provides guidance for public and private companies in understanding environmental and social risks, impacts and opportunities that face not only the reporting entity, but also the effects for which the reporting entity is responsible beyond the factory gate and amongst material stakeholders.

10 <https://framework.tnfd.global/>

Beyond the afore-mentioned voluntary reporting frameworks, there exists another source of reporting tools provided by ratings agencies and research houses. These tools consider nature-related reporting from the perspective of the consumer or fund investor, as opposed to assessing nature-related aspects of an entity at the behest of the management of that entity. The reporting tools often take the form of sector based ESG risk ratings, or company ratings that are based on both inherent ESG risks in the sector, combined with comparative performance analysis against industry peers. Of these reporting tools, the most widely known and used include the following:

- Morgan Stanley Capital International (MSCI) ESG Ratings – US-headquartered company with a presence in South Africa, providing various nature-related reporting products including climate and ESG investing ratings and indices, and analytics.
- Standard and Poors (S&P) Global Ratings – US-headquartered company with an office in South Africa. S&P sells a product called ESG Evaluation, which assesses a company’s ESG strategy and ability to prepare for future ESG risks and opportunities. The company also provides sector-based reports.
- Sustainalytics – this is a specialist ESG ratings firm that covers sustainability issues affecting listed companies.
- Vigeo Eiris (subsidiary of Moody’s) – since acquisition by Moody’s in 2019, Vigeo Eiris operates as the ESG ratings wing of the company.



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